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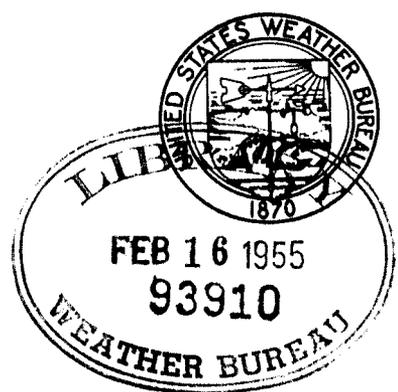
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# National Oceanic and Atmospheric Administration Weather Bureau Topics and Personnel

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WEATHER BUREAU TOPICS is published monthly to inform all employees about newsworthy operations and work programs of the Bureau; to give background on instructions; to carry news of new personnel assignments, retirements, deaths, and similar information about employees; and to serve as a medium through which ideas and views may be exchanged to promote efficiency and teamwork in attaining our common goals. While the contents, unless otherwise specified, reflect the Central Office viewpoint, they are not instructions but are presented for information. Opinions, discussions or comments by readers are invited; they should be marked for the attention of the Editor, TOPICS. WEATHER BUREAU TOPICS is distributed for official use only.

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## *Development of State Forecast Centers*

**D**URING the past few years steps have been taken to establish several new State forecast centers. In August of 1953 Raleigh assumed responsibility for State forecasting functions in North Carolina. Plans were developed during the summer of 1954 for the transfer of State forecasting for New Mexico to the office at Albuquerque and this change was made effective in October 1954.

While these new forecast offices were being established a plan was being developed based on the idea of using a mapped forecast from several district forecast centers to supply guidance information to additional State forecast offices. A trial of the mapped forecasts was carried out in the Washington forecast district during August, 1954, to determine whether or not technical forecast guidance could be furnished State forecast offices in this form. Subsequent to this trial, Circular Letter 35-54 was issued authorizing State forecast offices at Albany, Buffalo and Baltimore.

It is expected that additional State forecast offices will be set up in Pennsylvania and perhaps in other States comprising the Washington forecast district. At the same time plans are being developed for the inauguration of a mapped forecast program from the forecast center at Kansas City. In this connection several

State forecast offices will probably be established in the mid-West during 1955 to handle public forecasts for the States in which they are located. If the programs in the East and mid-West demon-

strate that this form of forecast organization results in more effective forecasts, the Bureau will continue the present trend toward establishment of more State forecast centers.

TOUCHY SUBJECT

## *Comments on Weather Control*

**I**N the first paragraph of Circular Letter No. 75-47, August 28, 1947, "Artificial Inducement of Precipitation," is a provision that all official statements by the Weather Bureau on this subject must be coordinated through the Central Office. This Circular Letter is still in effect.

Many aspects of artificial cloud nucleation and "rainmaking" are still in experimental stages. Premature statements or public releases made independently can give rise to serious difficulties in relationships of the Bureau with local authorities and industrial interests.

While the Bureau does not restrict the personal conclusions and views of its employees on this subject, each employee should realize that it is practically im-

possible for him to make a statement regarding any subject pertaining to weather to anyone knowing his connection with the Weather Bureau without that statement's being construed to be the Bureau's official position. The responsibility of the Bureau for pronouncements made in public or to press, radio, or television by Bureau personnel is thus obvious.

To avoid difficulties and involvement in questions beyond its jurisdiction, the Central Office therefore must coordinate all official statements from all Bureau sources on such controversial subjects as artificial cloud nucleation and kindred topics. Bureau officials should continue to clear drafts of such statements before issuance as provided for in CL 75-47.

## Bureau To Make Raobs on Naval Transport

**P**LANs are going forward for an experimental program in cooperation with the Department of the Navy, wherein raobs will be taken aboard the U. S. Navy transport vessel, GENERAL GAFFEY, beginning about February 18, 1955. The program is planned to be of a year's duration. The route of the GAFFEY is San Francisco to Yokosuka, Japan, with stops at various Pacific Islands, but usually passing north of the Hawaiian Islands.

Lightweight radiosondes of Finnish design and manufacture, and accompanying ground equipment, also Finnish, will be used. The equipment, facilities, and passage are being furnished by the Navy. The Weather Bureau is furnishing the personnel and management of the program.

The program will be under the immediate supervision of Mr. Roger Nichols, Supervisor, PWP, San Francisco; two observers for duty on the USNS GAFFEY will be drawn from the PWP staff on a rotating basis.

The objectives of the program are twofold; (1) to see whether relatively economical means can be found for obtaining upper-air data over the oceans and (2) to evaluate the performance of the lightweight radiosonde equipment in terms of compatibility of data and adaptability to the purpose. Because the Finnish radiosonde weighs less than a pound, complete with battery, it is planned initially to carry the instruments on 100-gram balloons to minimize the cost of balloons and helium and the need for expensive and complicated inflation and release facilities. As a consequence, it is expected that the heights ob-

tained will be lower than with conventional 500-gram balloons. The goal with the smaller balloons is 30-35,000 feet (300 mb.). If the goal cannot be met with 100-gram balloons, slightly larger balloons will be used. Rawins will not be taken because of the lack of proper radar equipment on the vessel, and because several additional observers would be needed. However, during the

course of the experiment, the possibility of the use of other electronic methods for wind finding will be explored. It is also possible that arrangements may be made for the taking of raobals.

Four synoptic observations will also be taken each day. The weather messages will be transmitted and handled in the same fashion as commercial ship reports. The designator "US" will be prefixed to the raob messages and they will be transmitted in the surface synoptic collectives.

Comments by forecast centers on the usefulness of these observations are solicited.

## Nautical Mile

Numerous suggestions and requests have been received for a table for converting the sum of 24 hourly wind speeds (daily wind movement equivalent) in nautical miles directly to daily average wind speed in statute miles per hour, such as for entry on WB Form 733-1. A table for this

purpose will be provided in the near future, probably as a part of instructions revised to replace chapter A17 of the Addendum to Circular N, 6th Edition.

Corrections for minor errors in conversion tables in the Manual for Synoptic Code, 1955, will also be provided as soon as practicable.

## Fair Employment Practice

**The** REGULATIONS of the Civil Service Commission require that at least annually the procedures adopted by the Department and Bureau for handling complaints and appeals under Executive Order 9980 which deals with fair employment practices in the Federal establishment be brought to the attention of all employees. The Department's policy with respect to fair employment practices is as follows:

"It is a long-standing policy of the Department that all employees shall be given fair and equitable treatment and that all appointments, transfers, promotions or other personnel actions which affect an individual's employment status shall be made

solely on the basis of merit and qualifications. No discrimination in any form shall be exercised because of race, color, religion or national origin. It is a responsibility of every official, supervisor and employee of the Department to make this policy effective."

The Bureau's regulations for handling fair employment practice complaints are found in Chapter D-65 of the Weather Bureau Manual and should be reviewed by all employees. Carlton Hayward, Director of Personnel, is the Department Fair Employment Officer and C. Garton Swain, Chief, Division of Personnel, is Deputy Fair Employment Officer for the Bureau.

## How Far Is Local?

**F**ORECASTERS making direct broadcasts should always remember that their forecasts may be heard somewhat beyond the area to which they apply.

This is borne out by two letters the MIC at Flagstaff has received from listeners outside his service area. Both letters came from Auckland, New Zealand, and told of hearing the Flagstaff broadcast direct.

MIC Reid B. Gardner suggests that this may be the farthest a weather broadcast has been heard. We have no way of checking this, but it is certainly about as far away as a listener can get.

We trust the New Zealanders did not confuse the Flagstaff forecast with their local one.

## Mailing Tube Sun Shield

**O**NE of our observers has suggested that longer pibals are possible when the balloon is near the sun if a nine-inch section is cut from a standard two-inch mailing tube and this section is then slipped over the present sun shield. This serves to reduce the field of view and make it possible to follow the balloon nearer the sun. If any observers are having difficulty using the technique outlined in Paragraph 1342 of Circular O, they might try using a mailing tube as described above. However, it is necessary to point out that even when such an auxiliary shield is used, there are times when the balloon will pass so near the sun that the method described in Circular O should be used in order to avoid damage to the observer's eye.

## More Local Weather Circuits

**I**N the past few weeks local weather teletypewriter circuits were placed in operation in six more cities bringing the total number of circuits in operation to 30. The most recent installations were at St. Louis on October 1, Cleveland on October 27, Shreveport on November 10, Peoria on November 12, Minneapolis on November 22 and Des Moines on

December 10.

In discussing possible installations several local offices have requested a complete listing of cities where the service is available. To meet this request the following table is reproduced giving details as to the cities involved, date the circuit was inaugurated and communications company furnishing the equipment.

Local Public Service Weather Teletypewriter Circuit		
Station	Date Began	Equipment
1. New York, N.Y. (WBO)	12/16/47	AT&T
2. Baltimore, Md. (WBAS)	1/10/48	AT&T
3. Los Angeles, Calif. (WBAS)	7/7/48	AT&T
4. Houston, Texas (WBO)	6/29/49	AT&T
5. San Francisco, Calif. (WBAS)	11/49	AT&T
6. Pittsburgh, Pa. (WBO)	4/10/50	AT&T
7. Cincinnati, Ohio (WBO)	1/28/52	AT&T
8. Boston, Mass. (WBAS)	8/29/52	AT&T
9. Chicago, Ill. (WBO)	11/20/52	AT&T
10. Kansas City, Mo. (WBAS)	10/19/53	WU
11. Corpus Christi (WBAS)	10/20/53	AT&T
12. Omaha, Nebraska (WBAS)	10/30/53	WU
13. Buffalo, N. Y. (WBAS)	11/23/53	AT&T
14. Sacramento, Calif. (WBO)	1/4/54	AT&T
15. Wichita, Kans. (WBAS)	1/27/54	AT&T
16. Hartford, Conn. (WBAS)	2/8/54	AT&T
17. Washington, D. C. (WBAS)	2/16/54	WU
18. Harrisburg, Pa. (WBAS)	4/1/54	WU
19. Akron, Ohio (WBAS)	/ /52	AT&T
20. Detroit, Mich. (WBAS)	5/1/54	AT&T
21. Miami, Fla. (WBO)	6/26/54	AT&T
22. Denver, Colo. (WBAS)	8/20/54	AT&T
23. Philadelphia, Pa. (WBO)	9/24/54	AT&T
24. St. Louis, Mo. (WBO)	10/1/54	WU
25. South Bend, Ind. (WBAS)	10/18/54	AT&T
26. Cleveland, Ohio (WBAS)	10/27/54	AT&T
27. Shreveport, La. (WBAS)	11/10/54	WU
28. Peoria, Ill. (WBAS)	11/12/54	AT&T
29. Minneapolis, Minn. (WBAS)	11/22/54	AT&T
30. Des Moines, Iowa (WBAS)	12/10/54	AT&T

## Weather Service Cafeteria Style

**A**S we all know, the problem of providing normal weather services has become considerably more difficult in recent years, due to increasing demands for service coupled with general staff reductions. The "self-help" method offers one way of meeting the problem, particularly in the field of pilot briefing. The following extract from a recent Weather Bureau letter to a national aviation organization is offered as guidance relative to points that may be raised locally on this subject.

At many of its field stations the Weather Bureau has only one person on duty at a time. He must allot his time in such a manner that the work of highest priority is accomplished first. At certain periods during the hour he is engaged in observing and reporting local weather conditions and cannot take time to answer the telephone or to brief pilots. At stations taking pilot balloon observations the observer may be away from the office as much as an hour and thus unable to supply information to anyone who may call at the station either by telephone or in person.

A pilot visiting a Weather Bureau station and finding the observer occupied in taking an observation should feel at liberty to go through the sequence material on display to find the desired information. In case he is unable to find all the necessary material he is welcome in the office until the person on duty is free to give him assistance. When observing and reporting local weather conditions the observer is serving many pilots in the area as well as the weather forecasters and briefers who are responsible for disseminating weather information to thousands of people. For this reason, if there are conflicting duties the observer should perform first that which serves a large number rather than the individual.

In the early days of aviation the Weather Bureau was able in most cases to meet the pilot as he entered the office and if necessary spend ten or fifteen

minutes briefing him on the weather. The expansion of aviation makes this practice impossible today and pilots should inform themselves of alternate ways of obtaining necessary weather information. They should become familiar with the style used in sequence reports, forecasts, outlooks, etc. Pilots should also become familiar with the Flight Information Manual as the means of obtaining the most advantageous tele-

phone number to be used in calling the Weather Bureau.

The Weather Bureau is doing all it possibly can to serve the aviation industry and will give individual briefings whenever possible but situations may arise when the pilot can be served only if he will brief himself.

Standard briefing displays, now in use at over 100 Weather Bureau Airport Stations, are designed to facilitate self-help pilot briefing, and the "self-help" cards recently distributed to Airport Stations are to encourage pilots and others in this direction.

## Fellowships Available

The Department of Meteorology and Oceanography of the New York University College of Engineering supports two fellowships for which applications are now being taken. They will be awarded to properly qualified candidates who will have the bachelor's degree by September 1955, with courses in mathematics through differential equations and at least twelve semester hours of physics. The candidates need not have taken any courses in meteorology or oceanography.

Recipients of the fellowships will be expected to pursue a full-time program of study leading to an advanced degree in meteorology or oceanography. The recipients may, however, elect to take one course less than a full-time program in order to supplement their income by work on sponsored research projects in the Department of Meteorology and Oceanography, up to twelve hours per week at an hourly rate of \$1.85.

The benefits of the two fellowships are, respectively, as follows:

1. Full tuition and fees for nine months and an additional cash award of \$2,500, payable in ten monthly installments.
2. Full tuition and fees for nine months.

A number of assistantships on sponsored research projects will be available in 1955-1956. An assistant may work from ten to twenty hours per week, depending on how many courses he is taking. The rate of pay varies from \$1.85 per hour (Graduate Student Assistant) up to a maximum of about \$2.30 (Research Assistant).

For application forms, write to Assistant Dean in charge of the Graduate Division, College of Engineering, New York University, New York 53, N.Y. Completed forms and supporting material should be in the hands of the Assistant Dean by April 1, 1955.

## Bureau Has 12,591 Substations

**A** VITAL part of the overall Weather Bureau program, and one which brings the greatest return per Weather Bureau dollar spent, is made possible by the small, unostentatious substations of whose existence most persons—including many Bureau personnel—are unaware. Frequently a request is received from a person who desires to become a cooperative observer and is surprised to learn that such a substation is already in operation within his own community.

A substation is defined as a station at which observations are taken, or other services rendered, by part-time, non-classified Weather Bureau personnel who are not certificated for aviation and synoptic observations. (See TOPICS for Nov.-Dec. 1950)

Depending upon the exigencies of the individual station and type of work, some substation observers are paid and some are not; the actual services rendered may consist of taking instrumental or visual observations or performing duties such as displaying storm warnings or disseminating weather forecasts and information.

The equipment may be owned by either the Weather Bureau, the observer, or partly by each. Where the equipment is entirely owned by the cooperator, the substation is classed as "associate". Although these associate substations are not completely under the control of the Weather Bureau, they are usually subject to the same inspections and the data from them are usually processed in the same manner as those for regular substations.

These substations render over twenty specific types of

services for climatologic, hydrologic, and local service purposes. Several of these services may be performed at the station, and the administration of these multiple-purpose substations may become rather involved. As a classic example, the substation at Morgan City, Louisiana, where Climato-

logical, River and Rainfall Reporting, Crop Reporting, Hurricane Reporting, Hourly Precipitation Recording, Storm Warning Displays, and a cover-all of Special Meteorological Services are performed. Although most substation observers serve without compensation, the observer at

SUBSTATIONS			
	Continental United States	Outside Continental United States	Total
Paid Stations	3,151	1	3,152
Unpaid Stations	7,287	339	7,626
Associate Stations	1,850	183	1,833
Totals	12,088	523	12,591
SUBSTATION SERVICES			
Temperature and Precipitation	4,649	196	4,845
Precipitation only - daily	3,883	247	4,130
Precipitation only - storage	301	59	360
Hourly Precipitation Stations (Recording Precipitation Gages)			
Supported by S&E *	190	4	194
Supported by transfer of funds from other government agencies †	2,496	-	2,496
Associate Stations ‡	392	9	401
Totals	3,078	13	3,091
Crop Reporting Stations	293	1	294
River-Rainfall Reporting Stations			
River Reports only	314	-	314
Rainfall reports only	1,719	-	1,719
River and Rainfall reports	835	-	835
Totals	2,868	-	2,868
Evaporation Stations †	335	5	340
Storm Warning (Including Coast Guard Station)			
Daytime Displays	239	24	263
Day and Night Displays	195	-	195
No Displays - Distribute Warnings	15	-	15
Totals	449	24	473
Special Reporting Stations	274	-	274
Miscellaneous (such as Flood Warning Distribution, Snow Density, etc.)	155	3	158

\* Does not include S&E recorders at first and second order stations.  
† This figure includes recorders at first and second order stations supported by Corps of Engineers.  
‡ This figure includes recorders owned by TVA and the state of Pennsylvania.  
† This figure includes first and second order stations making evaporation measurements.

Morgan City receives a nominal fee.

Several years ago, substations serving a particular project were administered separately; presently, the Substation Unit of SF&MO Division administers practically all substations, and an effort is made to have one substation perform all the neces-

sary services in an area insofar as possible.

Because of the large number and the overlapping services, it has been difficult even to count these substations or services. About three years ago, the Substation Unit undertook a project to code pertinent information for punch card accounting. This

entailed ferreting out, checking, and rechecking the services rendered by each substation. With the excellent assistance from the WRPC's a current Substation Service Accountability program has been set up.

The table opposite, showing the substations and services as of November 1, 1954, was prepared as one result of this program.

### *Meteorologist Vacancy*

**A**S a part of the Bureau's continuing investigation into the problems associated with reporting terminal weather under conditions of low ceiling and visibility, a field evaluation of some newly-developed observing and reporting techniques is to be conducted at the Newark Airport, beginning early this summer and terminating around January 1, 1957. There will be an opening on the project for a GS-11 Meteorologist who has a good theoretical background in

meteorology, physics and statistics.

A discussion of the general problems and some of the previous work accomplished can be found in the Progress Reports of the "Final Approach Visibility Studies," copies of which were supplied to all stations.

The assignment offers opportunity for demonstrating initiative and ability in developing methods of observing critical terminal weather conditions and in deriving

probability factors through application of statistical and graphical methods.

Applications are invited from interested employees who believe they are qualified for this assignment. Letters including a resume of experience, technical training and education should be submitted to the Central Office, Attention Personnel Division. Letters should be sent through channels, bearing recommendations of supervisors, MIC's and Regional Directors, as appropriate.

### *Incentive Award Program Revised*

**The** EMPLOYEE incentive awards program was revised throughout the Federal Government on December 1, 1954, in accordance with legislation passed by the last Congress.

Greater employee participation in improving Government operations is the key objective.

A major feature of the new program is that the Civil Service Commission has responsibility for the over-all direction of the program. Its first Director, Bernard Rosen, will be on the immediate staff of the Executive Director, which is an indication of the importance attached to the program by the Commission. Mr. Rosen was formerly Deputy Director of the Commission's Sixth Region.

During fiscal year 1953 the

Federal Government saved \$44,000,000 by adopting employee suggestions. For this, the employees received approximately \$1,400,000 in cash awards. If the Government had done as well as private industry in the same period, which is a hope under the new program, the saving to the taxpayers could have been around \$200,000,000 and the amount paid employees approximately \$6,000,000.

Some improvements under the new program are:

1. The old legislation gave no special recognition to contributions which benefited the whole Government or more than one of its agencies. The new law makes it possible for all benefiting agencies to reward employees according to benefits received.

2. Under the old system, most agencies could not pay more than \$1,000 for a single suggestion regardless of its value; nor could they exceed \$25,000 a year in total amount of awards granted. These ceilings are now removed, although an individual award of over \$5,000 must be approved in advance by the Civil Service Commission.

3. The new program wipes out salary increase awards, substituting cash payments. Thus the size of the award is determined by the value of the contribution, rather than by the rank of the employee.

4. Additional recognition through Presidential award to Federal employees who render superior service is also authorized by the new law.

## *Eight Rewarded for Superior Accomplishment*

Department of Commerce Superior Accomplishment Awards went to eight Weather Bureau employees recently. In addition to Certificates of Award, the recipients received salary step increases.

### *Edwin W. Adkins*

Edwin W. Adkins, Electronic Technician at St. Cloud, Minn., received his award for outstanding work during the past several years.

In spite of having one of the largest and most difficult areas to cover Mr. Adkins has managed to make his maintenance trips on schedule regardless of inclement weather and hazardous road conditions.

In addition to being a superior technician he had displayed unusual consideration for his fellow workers. He arranges to service equipment when most convenient to the station with a complete disregard for his personal convenience, and is always considerate of the rights and feelings of his fellow workers.

Mr. Adkins was born at Coulee, North Dakota, on June 23, 1906. He graduated from the Kimball, Minnesota High school in 1924 and assisted his father in the operation of the family farm until March, 1941, when he moved to California and went to work for the Douglas Aircraft Company. In May, 1942, he entered the Army and served until October, 1945. During this period he became an expert radio and electronic weather equipment repair man as the result of training at the Radio School at Camp Crowder, Missouri, followed by assignment to the

Weather Equipment School at Eatontown, New Jersey.

After his discharge from the Army he returned to Kimball, Minnesota, and on April 15, 1947, went to work for the Weather Bureau as Radiosonde Technician, working out of the Chicago Regional Office. In October, 1949, his headquarters station was changed to St. Cloud, Minnesota.

### *George Hatzenbuhler, Jr.*

George Hatzenbuhler, Jr., MIC at Greenville, South Carolina, was selected in recognition of his outstanding performance on his job.

In managing his station he exhibited great foresight and planning ability and with the cooperation of an able staff was able to achieve Greenville's programs (including a larger volume of work) beyond normal expectations.

Born on October 10, 1918, at Bloomington, Illinois, Mr. Hatzenbuhler graduated from the St. Johns Military Academy in 1937 and then entered Carleton College at Northfield, Minnesota, from which he received his AB degree in the spring of 1941. That fall he entered the Army as a private and was assigned to the Chemical Warfare Service. In March, 1942, he returned to school to study Meteorology at M.I.T. under the sponsorship of the Army Air Force. Upon completion of his meteorology training he was assigned to Waller Field, on the Island of Trinidad, as a Weather Officer. From August, 1944, through March, 1946, he was in charge of the Weather Station at Morrison Field, West

Palm Beach, Florida. Here he received several written commendations for his excellent service which included a treatise, "Report of an Atlantic Storm". In March, 1946, he was transferred in charge of the Weather Station at Barenquen Field, Puerto Rico, where he remained until his discharge in 1947.

Between his discharge from the Air Force and his employment by the Weather Bureau he was manager of Mexican Operations for the Fish and Shrimp Corporation of America for a year and then started to learn the paint business with the United States Gypsum Company at Chicago.

He entered the Weather Bureau as a FAWS Forecaster at Boston on May 19, 1949. In February 1950 he was transferred to WBAS Newark, New Jersey, as first assistant. After a little over two years of excellent performance in this assignment he was selected for the position of Meteorologist in Charge of the Weather Bureau Office at Greenville, South Carolina, where he has served in an exemplary manner since August, 1952.

### *Donald B. Hoffman*

Donald B. Hoffman, Supervisory Scientific Illustrator in the Central Office Drafting Section, was cited for his outstanding ability to translate ideas and crude sketches into neat accurate drawings. Since he came to the Weather Bureau in 1942, as an Engineering Draftsman, he has received a number of commendations for his superior work. Typical is this excerpt from a memorandum written by the Chief

of the SR&F Division in 1949, commenting on Mr. Hoffman's preparation of the International Weather and Cloud Symbols which are still in current use today: "The set of international weather and cloud symbols on which you recently completed the drafting work are to the best of our knowledge the most accurate and most carefully drafted set of these symbols ever produced." Other of his specialized drafting and illustrating jobs have drawn similar comments. The most recent concerned the preparation of drawings for the new quarters for the National Weather Analysis Center and other Bureau operations at Suitland, Maryland, which elicited favorable comments not only from Weather Bureau officials but from General Services Administration as well.

Mr. Hoffman was born on July 30, 1908, at Allentown, Pa. After completing an International Correspondence School course in Electrical Engineering plus two years of night school at Pennsylvania State University studying the same subject he got his first drafting and designing job in 1929 with the Mack Motor Corporation at Allentown. During the next ten years he worked at various jobs including several years as a Parts Superintendent for Allentown Brake and Wheel Company followed by a similar job with the Weil Bros. Incorporated, Hagerstown, Maryland. He then moved to Washington as Assistant Manager for an automotive concern and in June, 1939, he became a Safety Inspector for the District of Columbia, Department of Vehicles and Traffic, and came from that job to the Weather Bureau in August, 1942, to accept employment as Engineering Draftsman.

#### *Audrey D. Husted*

Aubrey D. Husted, Principal Assistant at Norfolk, Virginia,

won his recognition by outstanding public service during the period August 30-31, 1954, in connection with Hurricane Carol, and by his unusual competence on previous occasions. It was his alertness in recognizing significant information indicating a change in direction and in bringing it to the attention of the Washington Forecast Office that was largely responsible for the issuance of warnings concerning the approach of the hurricane to Long Island and the New England coast in time for residents to take necessary precautionary measures. His performance on this occasion was typical of his performance during past emergencies. In commenting on the award recommendation his Regional Director had this to say: "Mr. Husted has, in every instance, placed the needs of the Bureau and the public welfare above his own personal aims and desires."

Mr. Husted was born in Pittsburgh, Pennsylvania, on June 11, 1903. After graduation from the Schenley High School in 1923 he moved to New York City to work for the American Aniline Company as a laboratory assistant. A few months later he changed his employment to the Bell Telephone Company and continued with them until the summer of 1924 when he became an American Railway Express Messenger. He left this job to accept a probational appointment as Junior Observer at WBO New York on August 29, 1927. During the next few years he served at Hadley Field, New Brunswick, New Jersey, Bellefonte, Pennsylvania, Toledo, Ohio, and the Central Office; increased his formal education by taking courses in meteorology at New York University; and progressed steadily upward through the observer grades to Junior Meteorologist when he was transferred on July 16, 1936, from the Central Office to Mt. Washington as Official in

Charge. After two years at Mt. Washington he transferred to Pittsburgh as assistant and then to Portland, Maine, as Official in Charge. He left there in April, 1941, to accept transfer to Norfolk, Virginia, where he continues to serve in an outstanding manner.

#### *Lynn L. Means*

Lynn L. Means, Research Forecaster at WBO, Chicago received the award for his research paper, "On Thunderstorm Forecasting in the Central United States" which was published in the Monthly Weather Review for October 1952. Many favorable comments have been received concerning this paper and another recent contribution by Mr. Means: "A Study of the Mean Southerly Wind Maximum in Low Levels Associated with a Period of Summer Precipitation in the Middle West" which was published in the Bulletin of the American Meteorological Society for April 1954. The following is typical of these comments: "A brief survey of these two papers will clearly show the ability to think clearly, to ably organize material, and to make and interpret realistic statistical treatments. His early recognition of two important parameters in the processes leading to severe local storms makes him an extremely valuable man in the Bureau's research program". It was the consensus of meteorologists who reviewed the thunderstorm paper that it was an important contribution to the solution of the problem of forecasting thunderstorms.

Mr. Means was born in Kansas City, Missouri in 1914, graduating from the Northeast High School in 1930, and from the Kansas City Junior College in 1933.

Prior to entering the Weather Bureau as Junior Observer at St. Louis on October 11, 1937, he worked for two years as student

engineer in Kansas City. In 1938 he transferred to Centerville, Ind., and in 1940 to Chicago, where he started taking part-time courses at the University of Chicago. In August, 1941, he was granted leave-without-pay to enable him to accept a research associate position at the University of Chicago to work on a research project on thunderstorms. This position also enabled him to add to his formal education and he received his B.S. degree in Meteorology in 1942 and his Masters degree in 1944.

He returned to the Weather Bureau July 1, 1945, and was immediately promoted to Junior Meteorologist. Other promotions followed in relatively short order as his ability became known and on August 24, 1947, he was promoted to his present position at Chicago.

#### **George G. Rabbitt**

George G. Rabbitt, Procurement and Supply Assistant in charge of the Boston office of the Arctic Project was rewarded for the outstanding manner in which he has handled the procurement and distribution of supplies.

A logistics specialist, Mr. Rabbitt is the Arctic Project representative in Boston, from which point he monitors the flow of all Weather Bureau equipment and supplies from procurement sources in the United States to the Joint Canadian-U.S. Arctic Weather Stations. In this position he has the full technical responsibility for arranging for procurement and shipment of innumerable items required in the support of these remote weather stations and for the arranging for repair of equipment returned from the Arctic. In addition, he is responsible for providing liaison with the Boston offices of the U.S. Navy, U.S. Air Force, Coast Guard, General Services Administration and other agencies in

matters relating to the Project.

A large part of the supplies and equipment which funnel through his warehouse are transported to the Arctic by U. S. Navy or Coast Guard ships. Mr. Rabbitt works directly with ships' officers in arranging for the cargo loading on board ship. His cooperation, diplomacy, and efficiency have earned him high praise from these officers. At the conclusion of the loading Mr. Rabbitt is usually detailed to accompany the Task Group on the voyage into the Arctic to assist with the distribution. He has, through his intimate knowledge of arctic logistics, been able to effect many improvements to the logistic support of the northern weather outposts.

Mr. Rabbitt was born in Takoma Park, Maryland, on November 23, 1911. He grew up in this area, attended the local schools, and entered the Government service as a Jr. Messenger for the Bureau of Agricultural Economics on March 30, 1928. He transferred to the Weather Bureau with a promotion on January 16, 1929. He was assigned to the Central Office in Washington where he remained until World War II came along and he joined the Marine Corps. His administrative experience gained in the Weather Bureau served him well and he was given an assignment to Naval Air Station, San Juan, Puerto Rico where he was responsible for procurement of materiel and supplies. He later served in a similar capacity at Naval Air Station, Miami, Florida and Bougainville, A.M.I. He returned to the Weather Bureau in February, 1946, and was assigned to the Radiosonde Reconditioning Center at Joliet, Illinois. He remained in this position until March, 1949, when he transferred to the Arctic Project as General Supply Assistant and Warehouse Supervisor at Boston.

#### **Glen Sachse**

Glen Sachse's outstanding performance as Meteorologist in Charge at Norfolk, Virginia, during the 12-month period ending October 12, 1954, resulted in his certificate and salary increase.

In addition to managing all routine phases of his station's activities in a highly satisfactory manner, his performance on October 30-31, 1954, during the approach and passage of Hurricane Carol was considered worthy of commendation.

In recommending Mr. Sachse for the position of Meteorologist in Charge at Norfolk his former MIC at San Juan stated "Probably the two outstanding traits of Mr. Sachse are his conscientiousness and thoroughness" .... "I believe that public relations will prove to be one of his strong points" .... "I am sure that Mr. Sachse will make a better than average MIC and if I were Director of the First Region, I would be pleased to have him assigned to Norfolk." Mr. Sachse's performance at Norfolk has not only verified this prediction but has made it appear to be on the conservative side.

Mr. Sachse was born September 2, 1915, at Jackson, Mississippi. He graduated from the Jackson High School in 1933 and entered Southeast Missouri State Teachers College. The following spring he dropped out to accept a job in the International Shoe Company factory at Jackson but returned two years later to continue his interrupted education. After completing three years of college work he entered the Weather Bureau in February, 1938, as a Junior Observer at Kansas City, Missouri. He later earned additional credits in physics and mathematics at Tulane University and New York University.

Following a short period at Kansas City he transferred to Sault Ste. Marie, Michigan, and

again, in 1940, he transferred to St. Louis. He left the Bureau by transfer to the Reconstruction Finance Corporation in March, 1943, but transferred back in November, 1944, as Observer at Lake Charles, Louisiana. In October, 1945, he was transferred to New Orleans and promoted to professional status. A year later he transferred to New York where he first served in the FAWS Unit and later in the Airway Forecast Unit before transferring in January, 1949, to San Juan, Puerto Rico, as Aviation Forecaster where he remained until his transfer to Norfolk in October, 1953.

#### *Michael Sunray*

Michael Sunray, General Maintenance Mechanic assigned to the Pacific Supervisory Office at Honolulu, was given the award for his outstanding work throughout the Pacific area.

Mr. Sunray was born in Satoralja-Ulyhey, Hungary, on September 17, 1920. He accompanied his parents to the United States at an early age and settled in Port Chester, New York. After graduating from the Port Chester High School he entered the Army Air Force in the summer of 1939 where he served for the next six years. During this period he was a weather observer at Hickam Field on Oahu, Hawaii, and at other Air Force installations in the Pacific and advanced to the rank of Master Sergeant. Upon his discharge in 1945 he returned to Port Chester to manage the family-owned jewelry store, Sunray Jewelers.

In April, 1947, he returned to Honolulu to start a clock repair business for himself which he operated until September, 1949, when he entered the Weather Bureau as a Meteorological Aid at the Honolulu Airport. Three weeks later he resigned because of a sudden illness which required

his hospitalization for an indefinite period of time. After his recovery he again applied for Weather Bureau employment and was appointed as Meteorological Aid at the Weather Bureau Office at Lihue, Kauai.

When the Navy transferred the Weather Service in the Trust Territory of the Pacific to the Weather Bureau in the summer of 1951, Mr. Sunray was selected as Official in Charge of the station at Koror in the Eastern Caroline Islands. Upon completion of his agreed-upon tour he returned to Hawaii and was assigned to an observer position at the Weather Bureau Office at Hilo. Here his ability as a clockmaker came in handy when he assisted with the modification and installation of weather recording instruments on top of Mauna Loa, an active volcano and Hawaii's highest mountain (see TOPICS, January, 1952). In December, 1952, he returned to Honolulu to fill the position of Laboratory General Mechanic for the Pacific area.

His work in this position has been outstanding and he has displayed unusual ingenuity in solving the unique problems encountered in establishing and maintaining weather stations at remote Pacific Islands. In accomplishing his mission he has had to use all types of transportation including native outrigger canoes; he has had to remodel and adapt equipment and in some instances even fabricate on the spot such items as instrument shelters using native labor and materials. He has had to train observers utilizing in some instances primitive natives with no education and only a limited grasp of the English language.

As a result of the outstanding manner in which he has carried out these responsibilities he was given an Outstanding Performance Rating for the year ending March 31, 1954, and recommended for the Department's Superior Accomplishment Award which was approved effective October 24, 1954, and carries a within grade salary increase.

## NEW METEOROLOGISTS IN CHARGE

### *WBO Chicago*

Mr. Joe R. Fulks, now Research Meteorologist in the Scientific Services Division of the Central Office, has been selected for the position of Meteorologist in Charge at Chicago, succeeding Mr. Gordon E. Dunn, who will transfer to Miami next spring.

Mr. Fulks is 47 years of age, entered the Weather Bureau July 1, 1929, and served at Winnemucca, Portland, Seattle, Salt Lake City and Kansas City until March, 1942, when he was transferred to the Central Office to head the WBAN Analysis Center. In 1952 he was awarded a Weather Bureau scholarship in Meteorology at the University of Stockholm in Sweden.

On returning to the United States a year later he was assigned to special projects relating to the Bureau's forecast program.

### *WBAS Kansas City*

Henry L. Jacobson, now Supervising District Forecaster at Kansas City, has been selected for the position of Meteorologist in Charge at that station. He is 52 years of age, entered the Weather Bureau November 1, 1927, and served at Chicago in various assignments until September, 1948, when he transferred to Kansas City. He has been Acting Meteorologist in Charge since the death of Mr. Joseph R. Lloyd in August, 1952.

## **WBAS San Francisco**

R. Corday Counts, Jr., now Supervising District Forecaster at San Francisco, has been selected for the position of Meteorologist in Charge at that station, succeeding Mr. Edward M. Vernon who has come to Washington as Chief of S.R.&F Division (TOPICS, October-November, 1954). Mr. Counts is 52 years of age, entered the Weather Bureau November 1, 1923, and served at Columbia, S.C., Wilmington, N. C., Miami, Trenton and Denver until February, 1932, when he was transferred to San Francisco. He has been Supervising District Forecaster since 1946.

## **WBAS Tampa**

W. E. Maughan has been selected as the new Meteorologist in Charge at WBAS Tampa, to succeed William W. Talbott. (See RETIREMENTS.)

Mr. Maughan for the past eleven years has been MIC of WBO in Oklahoma City, and Section Director for the State of Oklahoma.

Since joining the Weather Bureau in September 1913, Mr. Maughan has successively served at Los Angeles, Phoenix, Davenport, Washington, Ellendale, Des Moines, Helena, and Oklahoma City. During World War I he served as Aviation Meteorologist for U.S. Navy flying boats operating out of bases in Ireland.

Mr. Maughan also has had much experience in the field of organizing storm warning networks to provide added protection against tornadoes and thunderstorms. He has served on several technical committees of national scientific societies, and is a member of the American Statistical Association.

Mr. Maughan expects to start his new assignment on February 1, 1955.

We wish to thank all those employees who applied for this position when the prospective vacancy was announced in the October-November TOPICS.

Since the number of applicants was large, individual acknowledgments will not be made.

## **RETIREMENTS**

### **William D. Cooper**

After completing over 33 years of service William D. Cooper, Meteorological Aid at Trenton, N. J., retired at the termination of June 30, 1954.

Mr. Cooper was born and raised in Trenton and his entire Government civilian service was at the Weather Bureau Office there. He was born in 1907, attended the local public schools and worked for several months as a shipfitter's helper before going to work as a Messenger Boy for the Weather Bureau on November 1, 1920.

From December, 1942, through September, 1945, he served his country as an Air Force Weather Observer in North Africa and Italy. He attained the rank of Sergeant prior to his return to the Weather Bureau at Trenton. He continued to serve there until his retirement.

Mr. Cooper may be reached at the following address: 250

Hanover Street, Trenton, N. J.

### **Carl E. Hodson**

Mr. Carl E. Hodson, Meteorologist at Houston, Texas retired because of disability effective November 30, 1954.

He was born on December 23, 1894, at Gaylord, Kansas, and graduated from the Agra, Kansas, High School in 1914 and from Fort Hays State College in 1925. Following this he took graduate courses at Chicago University and Kansas State Teachers College. He served during World War I as a private in the Army from May, 1918, through July, 1919.

After graduating from college he taught for a number of years until he entered the Weather Bureau in 1941. He was Superintendent of Schools at Kackley and Courtland, Kansas, and Principal of the Cassoday, Kansas, High School during this period.

He began his Government career as Junior Observer at

Houston, Texas, on May 12, 1941, where he remained until his retirement. After several promotions he attained professional status in October, 1947. In February, 1949, he was presented with the Department's Meritorious Service Medal for the unusual competence which he displayed on August 23, 1947, in recognizing from a single ship's observation the existence of a dangerous storm in the Gulf of Mexico and for taking prompt action to advise the general public of the impending danger.

Mr. Hodson can be reached at 1707 Waugh Drive, Houston 6, Texas.

### **Walter J. Hoffman**

Walter J. Hoffman, Photographer-Platemaker-Pressman at Chattanooga, Tenn. retired effective November 30, 1954 under the Optional Retirement Section of the Retirement Act. He had completed slightly over 30 years of civilian and military service.

Mr. Hoffman was born in San Francisco on August 26, 1894. He served in the Infantry during World War I.

After his return to civilian life he worked as a printer for the Palace Hotel at San Francisco from June, 1921, through May, 1925. During the latter part of this period he also attended the International Typographical School at San Francisco from which he graduated in 1925.

He entered the Weather Bureau on May 22, 1925, as a Printer in the San Francisco Printing Plant. He advanced to the position of Supervisor and remained at that station until the San Francisco Weather Bureau Printing Plant was closed in 1948. At that time he transferred to the Fort Worth Printing Plant as Lithographic Pressman. When the activities of the Fort Worth Printing Plant were transferred to Chattanooga, early in 1950, Mr. Hoffman transferred along with them. He remained in Chattanooga until his retirement on November 30, 1954.

He may be reached at 408 1/2 Sweetbriar Avenue, Chattanooga, Tennessee.

#### *Fred Holmes*

Mr. Fred Holmes, Photographer-Platemaker-Pressman at the Weather Bureau Printing Plant at Kansas City retired on account of disability on November 1, 1954. Mr. Holmes came to the Weather Bureau in October, 1946, as Hand Compositor in the Fort Worth WRPC by transfer from the Government Printing Office.

He was born on December 10, 1889, at Trenton, Texas, entering the printing industry at an early age and by the time he began his Government career with the Department of Agriculture in 1941 he had already accumulated thirty-three years of printing experience in private industry.

He remained with Department of Agriculture for only a short time, transferring to Government Printing Office in May, 1942, and to the Weather Bureau printing plant at Fort Worth in October, 1946. When the WRPC's at Fort Worth and Kansas City were combined at Kansas City early in 1950 Mr. Holmes transferred to Kansas City where he remained until his retirement.

#### *Ernest E. Kreamer*

Ernest E. Kreamer, Instrument Maker at the Weather Bureau Instrument Division in the Central Office, retired at the termination of November 30, 1954, after over thirty-seven years of Government service which included Military service with the Navy and civilian service with the Census and Weather Bureaus.

Known as "Ernie" to his friends, Mr. Kreamer was born on March 12, 1893, in what is known as Old Georgetown, now, of course, a part of the District of Columbia.

"Ernie" started to work at the age of eighteen with the Tabulating Machine Company in Georgetown. The Tabulating Machine Company moved the major portion of its activity to Binghamton, New York, about 1914. This portion of the company later became known as the International Business Machine Company with which almost everyone is familiar today. Mr. Kreamer continued his work with the old company until he went into the Navy during World War I. After serving almost two years, he went to work with the Census Bureau until January, 1943, when he transferred to the Instrument Division of the Weather Bureau. He has served as an instrument maker in this division until the present time.

Mr. Kreamer constructed the new photoelectric sunshine switch which is replacing the old mercury

and glass type switch used for so many years. He assisted materially in the maintenance of the SCR-658 through the fabrication of intricate parts not otherwise available. He has also contributed considerably in the modification work of the Weather Bureau type radar.

"Ernie" may be reached by his friends at 4513 Windom Place, N. W., Washington 16, D. C.

#### *Harlan H. Smith*

Harlan H. Smith, Observational Supervisor, WBAS Pocatello, Idaho, retires at the termination of January 29, 1955, after completing thirty years in the civilian and military branches of the Government service.

Mr. Smith was born in Odebolt, Iowa, November 2, 1896, where he grew up and attended the public schools. Following high school training he completed a bookkeeping course at the Capitol City Commercial College in Des Moines, which led to his employment in 1917 with the International Harvester Company as a bookkeeper. The following year he joined the Navy and served during World War I as an Aviation Machinist. Prior to entering the Weather Bureau in 1925 he was employed for three years as a general construction worker at Denver, Colorado. He entered the Bureau as Junior Observer at Helena, Montana, and was transferred to Denver eight months later with advancement to the position of Assistant Observer. In July, 1928, he was promoted to Senior Observer and placed in charge of the one man station at Baker, Oregon. During his assignment at Baker illness resulting from overwork necessitated extended absence from duty for slightly over a year. Upon recovery in June, 1932, he was restored to duty at Pocatello, where he served for the remainder of his Weather

Bureau career.

Mr. Smith's outside interests include the growth and sale of ornamental trees, shrubs, etc., and after retirement he plans to devote his full time to the operation of a nursery business in Pocatello. His address is 11 Rosewood Avenue, Pocatello, Idaho.

#### **William W. Talbott**

William W. Talbott, Meteorologist in Charge at Tampa, Florida retires at the termination of January 31, 1955 after having completed 47 years of Government service consisting of three years with Post Office Department followed by 44 years with the Weather Bureau.

The son of a mid-western

farmer, he was born January 3, 1885 at Tuscola, Illinois. At an early age the family moved to Springfield, Missouri, where he graduated from high school in 1902 and from the Springfield Normal School in 1905. He continued his education by taking part-time courses at SW Missouri Teachers College through 1914. Following his graduation from normal school he taught in the Missouri rural schools from 1905 through February, 1908, when he accepted a job as Postal Clerk in the Springfield Post Office. He left this job on March 14, 1911, to accept a probational appointment as Assistant Observer at the Weather Bureau Office in Springfield. After eleven and a half years and several promotions in the observer grades he was promoted to Meteorologist

on August 15, 1922, and placed in charge of the station. He continued in charge at Springfield until October, 1932, when he transferred to Tampa as Meteorologist in Charge, a position he continued to hold until his retirement.

Mr. Talbott was one of the pioneers in direct radio broadcasts of weather information, inaugurating this service at Springfield and continuing it at Tampa. He was one of the best-known public figures in the Tampa area and did much to enhance the Weather Bureau's reputation for efficient public service.

He will continue his residence in Tampa where in addition to his other activities he will continue his interest in weather. His address is: 2810 Parkland Boulevard, Tampa 9, Florida.

## DEATHS

#### **Thomas B. Canaday, Jr.**

Thomas B. Canaday, Jr., Technical Assistant at WBAS Denver, Colorado, died suddenly December 30, 1954, at the age of 48.

Mr. Canaday was born August 8, 1906, at Cottageville, South Carolina. He grew up there on his father's farm and graduated from the Cottageville High School in 1923. In 1924 he accepted a job as Special Delivery Messenger for the Post Office in Charleston which he left in August, 1926, to accept a temporary appointment with the Weather Bureau as Junior Observer at New Orleans. He resigned from this job the following March, only to return to the Bureau three months later in the same capacity but with a regular classified appointment.

In November 1931 he was promoted to professional status as Junior Meteorologist. In April,

1939, failing health prompted his resignation. After a period of rest and some private employment he was reinstated in the Bureau as Observer at New Orleans in November, 1940.

In 1942, after being advised by his doctor to seek a drier climate, Mr. Canaday was transferred to Denver, where after several years he was again promoted to Meteorologist and assigned to the position of Technical Assistant at the Airport Station on April 21, 1946.

In April 1947 he was awarded the Department of Commerce Superior Accomplishment Award in recognition of his superior performance as Technical Assistant. He was directly responsible for improvements in office and communications procedures which saved the Bureau several thousands of dollars annually. His interest in improving Bureau efficiency

was again recognized in February, 1949, when he received a \$25.00 award for a suggestion for reducing communications costs.

#### **Ray L. Fisher**

Ray L. Fisher, who retired from the position of climatological assistant at Portland, Oregon, in June, 1948, died October 26, 1954, in Los Angeles. Mr. Fisher would have been 72 in December.

His service with the Weather Bureau began in 1904, and included assignments at Sacramento, Winnemucca (where he was OIC), Boise, and Los Angeles. He went to Portland in 1941.

Mr. Fisher's retirement was noted in TOPICS, August, 1948, page 296.

#### **Sterling R. Hatch**

Sterling R. Hatch, former

Meteorological Aid at WBAS Lincoln, Nebraska, died November 8 at Lincoln, two months after he had retired on a discontinued service annuity plan.

Mr. Hatch was born at Davenport, Iowa, in 1895. After graduating from West High School in Des Moines, he followed in his father's footsteps by accepting employment with the Bell Telephone Company. His employment with this firm was interrupted by military duty with the Motor Transport Corps during World War I. Following his Army discharge, he acquired a BS degree in commerce from Washington University at St. Louis, and worked as an auditor with an insurance company at Des Moines.

Mr. Hatch joined the Weather Bureau at Des Moines, August 22, 1929, and served there until transferred to Burlington, Iowa, in 1937 as Observer in Charge. About three years later he transferred to Springfield, Missouri, where he remained until 1944, when, as a result of an eye injury suffered in World War I, he was unable to continue in observational work. He then transferred to the Section Center at Lincoln and continued there until August 31, 1954, when reorganization of the climatological networks resulted in discontinuance of this position. For personal reasons he declined offers of transfer so that he could continue his residency in Lincoln.

At the time of his death, Mr. Hatch was employed by a power company at Lincoln.

#### ***Mrs. Rebecca C. Hill***

Mrs. Rebecca C. Hill, Scientific Illustrator in the Central Office

Drafting Section, died December 9, 1954. Mrs. Hill had been on leave without pay because of illness for nearly a year.

Mrs. Hill, a native of Washington, D. C., was 30 years old. She had worked for the Government a total of seven years, the last five of which were with the Bureau. During World War II she worked as an engineering draftsman for the Department of Agriculture.

#### ***Joseph L. Kamber***

Joseph L. Kamber, a member of the Central Office Placement Section staff for the past three years, passed away on January 8, after a brief illness. He is survived by his wife, Pearl, who is employed in the Extended Forecast Section, and an eight year old son, Glenn.

Mr. Kamber was born in Manchester, Vermont, March 23, 1920. He attended the University of Vermont and the American University in Washington, D. C. He entered the Bureau on May 16, 1941, as a Junior Observer in Pensacola, Florida. A year later he began a three year assignment as observer in the Atlantic Weather Patrol, with headquarters first in Washington and then in Boston. From there he went to El Paso as radiosonde supervisor for a year; then back to Boston as assistant supervisor in the Atlantic Weather Patrol for the following five years. In December, 1951, he came to the Central Office as a Placement Officer.

Throughout his Bureau career Mr. Kamber won official recognition for the quality of his work. He was an active contributor to the suggestion program and won

several awards for adopted suggestions, including one of \$100 for improvements in Atlantic Weather Patrol procedures. In the early period of the Arctic Project employees of the Atlantic Weather Patrol assisted in the preparing and shipping of supplies from Boston. Mr. Kamber was highly commended by the Chief of the Arctic Project for his part in this work and later the Department of Commerce awarded him a Meritorious Service Award (Silver Medal) for his competence on this assignment and in his other duties in the Atlantic Weather Patrol. He continued this high level of performance in his Central Office assignment, representing the Bureau on several Department of Commerce committees and originating a number of ideas for improved personnel work.

#### ***Robert C. Nall***

Robert C. Nall, 28, Assistant Librarian in the Weather Bureau Library since March, 1954, died January 10, 1955.

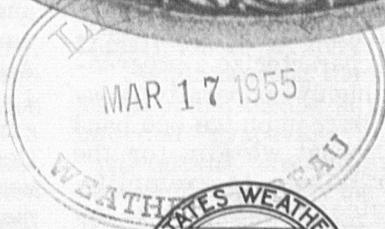
Mr. Nall was born in Clay, Kentucky. He served as a radio operator in the U.S. Navy from 1944 to 1946, and attended Western Kentucky State College at Bowling Green from 1946 to 1950, obtaining an AB degree in English. After this he taught English and managed the library in his home town high school for part of a term, and entered the Government Service in January, 1951, when he accepted a position in Washington with the library of the Department of Agriculture. He transferred to the Bureau Library three years later.



WEATHER BUREAU

# TOPICS

FEBRUARY  
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Number 2

WEATHER BUREAU TOPICS is published monthly to inform all employees about newsworthy operations and work programs of the Bureau; to give background on instructions; to carry news of new personnel assignments, retirements, deaths, and similar information about employees; and to serve as a medium through which ideas and views may be exchanged to promote efficiency and teamwork in attaining our common goals. While the contents, unless otherwise specified, reflect the Central Office viewpoint, they are not instructions but are presented for information. Opinions, discussions or comments by readers are invited; they should be marked for the attention of the Editor, TOPICS. WEATHER BUREAU TOPICS is distributed for official use only.

*Attention of all Employees*

**C O N T E N T S**

**A**LL employees are requested to review Circular Letter 6-55 issued February 21, 1955 with reference to the policy of the Federal Government with respect to relationship between government activities and private business. This Circular Letter was made necessary because of recent cases of interference with private business.

While the policy appears to be well understood by the great majority of employees who have kept in mind the provisions of Circular Letters 22-48, 13-54, the pertinent paragraphs of the Weather Bureau Manual and other issuances, there are a few instances in which the rights of private enterprise in the United States seem to have been misunderstood by employees in their relationships to these matters. It is appreciated that some of these instances have had as their motivations a high sense of public welfare and professional integrity but it must be emphasized that the government has certain agencies whose functions are to regulate against abuses by private enterprise and to "police" enforcement of the statutes, and this policing function is NOT a responsibility of the Weather Bureau, nor do employees have any authority to exercise policing functions in relation to private enterprise.

In Circular Letter 6-55 examples are given of actions that are considered by the administration as unauthorized interfer-

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ence with private enterprise. The policies in this matter are strict and the Bureau has no choice but to take required administrative action in event there are instances of willful disregard of this policy by an official or employee of the Bureau acting in their capacities as such.

The Central Office is aware that it is sometimes difficult to draw a distinction between services that characterize a progressive and highly cooperative government bureau on the one hand which is what we aim for the Weather Bureau to exemplify, and services that belong to the field of private enterprise on the other hand. Certainly we do not

wish the Bureau to become indifferent or backward in its legitimate public services. But there should be very few instances of uncertainty about the distinction between these fields if the substance of Circular Letters on this subject is kept in view.

Another recent issuance on another subject of interest to many employees is the Memorandum to All Forecast Centers dated March 1, 1955 pointing out that the organization of State Forecast Centers must necessarily proceed very slowly and that no great number of personnel transfers is expected in the near future. ■

## Communications

**W**E hear much these days about the importance of "communications"—that good communications are essential to the operation of an organization. Observers and forecasters already know how serious a breakdown of communications can be. When the teletypewriter circuits go out, the flow of weather data diminishes to a trickle or comes to a stop and forecasters and briefers find their jobs increasingly difficult. A breakdown of communications in the home also presents a critical situation. How do you keep the children out of trouble when the television receiver fails? And what a catastrophe it is when the phone is out of order or the newsboy forgets you or the wind blows your newspaper away. These are all phases of the important field of communications.

We are concerned here with the place of communications in an organization such as the Weather Bureau. It has been aptly said that "Communications are the lifeblood of an organization." The Weather Bureau cannot effectively meet its responsibilities unless there is a continuous flow of information. We are not thinking now of the rapid flow of weather information that is a requirement peculiar to the Weather Bureau. Rather, we are thinking of the communications needs that are common to all organizations with widespread operations—the exchange of information as to plans, operations and other knowledge necessary to good coordination and sound decisions.

There must be adequate channels for distributing information and instructions from the national headquarters to the field; statements of policy and objectives

must reach and be understood by all employees; instructions that are complete and clear must be available to all employees. Much more is required than a fast mimeograph and prompt mailing. Information must effectively reach all employees who need the information; this means that it must be worded so that the employees can use the information and that the desired results can be achieved. And even more is needed.

Communications cannot be one-way. There must be a return flow. The field must let the national headquarters know if there are questions or constructive suggestions; if a particular policy is applicable to field stations. Questions from field personnel are helpful in bringing out field viewpoints and field procedures. Field responses to questionnaires are extremely useful to headquarters personnel.

Channels and mediums used by the Central Office include printed documents such as the Weather Bureau Manual, Monthly Weather Review and TOPICS, mimeographed material such as circular and multiple address letters, memorandums and letters addressed to individual stations and employees, and telephone calls and visits to stations. For the return flow, the field sends dispatches, letters and memorandums to Washington, and telephones or visits the Central Office, sometimes at Government expense, sometimes at personal expense.

Supplementing these formal and informal means is the highly informal "grapevine." Although "underground" channels are sometimes amazingly fast, the channels are, unfortunately, frequently unreliable—transmissions are sometimes interrupted and sometimes

subject to garbling. Occasionally, an item starts out as fairly reliable news but for one reason or another becomes badly distorted as it passes through the devious channels of the grapevine. Sometimes rumors travel slowly or go only part-way while at other times wild and false rumors spread like wildfire. These weaknesses of the grapevine make it all the more important that our more formal communications mediums be as effective as possible so that both the field and the Central Office get the correct view of "how the other half lives."

The Central Office is very interested in improving communications in both directions. Suggestions will be greatly appreciated. Answers to such questions as the following would be particularly helpful: Does the Central Office distribute too many documents? Is distribution of material on such programs as climatology, hydrology, forecast research and upper air observations too limited? Should all stations receive all MAL's? Are instructions clear? How can the field more effectively advise the Central Office on questions dealing with such subjects as staff-workload ratios, space and facilities, work schedules, employee grievances, etc.?

### Questionnaires

From time to time the Central Office distributes questionnaires dealing with particular problems but the response to such questionnaires is sometimes disappointing. For example, a memorandum on the subject, "Request for Comments on Certain Recommendations of the Advisory Committee on Weather Services," dated January 21, 1955, requested that

comments and suggestions reach the Central Office by February 15. Although the memorandum should have reached all continental stations by January 25, replies had been received from only ten percent of the stations and less than one percent of the employees by mid-February.

Replies to questionnaires of this type are completely voluntary and formal acknowledgments are not desired. But ideas from all interested employees—as well as from MIC's—are desired and needed. Although the number of replies to this particular memorandum was disappointingly small, a number of useful suggestions and several highly interesting

proposals were received. Some gripes were included—but if you have gripes we would like to hear about them to see if anything can be done. We are sure that there are many more employees who have thought about the problems and who have ideas for solving the problems. We need those ideas. Comments, suggestions, gripes if you wish, may be forwarded through channels, direct to the Central Office, or without signature if you prefer.

Replies to the January 21 memorandum are still coming in and we hope that we will soon have a good cross-section of Weather Bureau opinion. If you have not sent in comments, re-read the

memorandum, jot down your ideas and send them in. February 15 was not intended to be a cut-off date; the date was cited in the memorandum so that we might receive a number of replies within a short period of time.

#### *Discussion of "Gripes" in TOPICS*

From time to time someone suggests that we should have a section in TOPICS devoted to presentations of gripes and questions from the field and discussions of answers to these problems. We are including such a section in this issue of TOPICS under the heading "Suggestion Box," as an experiment. Is it worthwhile to continue this type of material in TOPICS?

■

### *Suggestion Box*

**I**N response to a questionnaire distributed to about 40 stations last spring, a number of interesting comments and suggestions were received. Two of the comments seem particularly interesting.

Mr. A suggests, "Central Office assignments except for Division heads should be limited to about four or five years. This would help keep the Central Office from getting 'out of touch' with everyday operational problems."

Mr. B (at another station) observes that, "Too many of the 'plum' positions in the field service go to Central Office employees."

Most of us would probably agree with Mr. A, at least in principle, that rotation of employees from the field to the Central Office and back to the field is desirable. In fact, this policy has long been followed in a few cases. A broader program of this type would be very helpful to the Central Office and would

also be beneficial to the field. However, full benefits would not be obtained from such rotation unless well-qualified and experienced employees were brought into the Central Office. After completion of four or five years in the Central Office, these men would be ready for reassignment to the field. Assuming that the original selections were from the middle or upper grades, that good men were selected, and that these men benefited from the Central Office tour, then these men should be qualified for and entitled to important field jobs. In other words, a rotation program, such as described by Mr. A, would mean that at least some of the "plum" jobs mentioned by Mr. B would have to go to men leaving the Central Office.

Carrying out a rotational program is difficult. First of all, selection of personnel is not easy, and only a limited number of people could be selected. Also, many employees are reluctant to

leave their present homes, or they dislike moving to Washington. There is no way of assuring an employee four or five years in advance that he can return to a particular city or state when his Central Office tour is finished. The problem is further complicated by the fact that some who come to Washington for limited tours find that they have learned to like the place and are reluctant to return to the field.

Although a system of rotation cannot be applied to all desirable jobs, there are a number of transfers from the field to the Central Office and from the Central Office to the field each year for purposes of rotation. For example, during a recent two-year period, 1953-54, 18 men GS-11 and higher moved from the field to Washington, while 14 men GS-11 and higher were transferred from the Central Office to the field.

We have not attempted to determine how many men have come into the Central Office from

the field, stayed four or five years, and then returned to the field but there have been a number during the last ten years or so. A couple of examples are Mr. Charles B. Carney who moved from a forecasting job at WBAS LaGuardia Field, New York, to the Central Office (SR&F Division) in 1946, stayed until 1951, and then transferred to Raleigh, North Carolina as MIC; similarly, Mr. Jack Thompson transferred from fruit-frost work in California to the Central Office (Scientific Services Division) in 1950, stayed until 1953 and then moved to Los Angeles as MIC. We could cite many examples that would show that there is some rotation, probably more than is realized. However, we know that more rotation would be helpful.

We shall be glad to receive further comments from employees, both in the field and in the Central Office, on this.

Is it true that too many field "plums" go to Central Office employees? There is no way of arriving at a yes or no answer to this question. First of all, what is a "plum" job? And how many is "too many"? But let's look at some of the facts. A job as MIC of a major station, GS-12 to GS-14, would probably be regarded as a plum by most of us. During the past couple of years new MIC's and CAM's, GS-12 and higher, have been selected for the following stations: Chicago, Cleveland, Great Falls, Honolulu WBO, Honolulu WBAS, Kansas City WBAS, Los Angeles, Miami WBO, Minneapolis WBAS, Norfolk, Va., Oklahoma City, San Francisco WBAS, San Juan, Puerto Rico, St. Louis WBAS, Tampa and Wake Island (Pacific).

Of these 16 top field jobs, four (Chicago, Honolulu WBAS, Los Angeles and San Juan) were filled by men from the Central Office and one (Cleveland) was filled by

reassignment from a regional office. The other eleven were filled by reassignment of field personnel: 5 by transfers from one MIC or CAM job to another; 2 by promotion of supervising forecasters already at the stations; 4 by transfer and promotion of forecasters from other field stations.

Perhaps there are other field jobs that might be considered "plums." We have not checked on any other groups of jobs but

we doubt if even 25% of other jobs were filled from Central Office staffs. Although Mr. B did not mention Central Office jobs, there are a few jobs in the Central Office that might be called "plums." During the last couple of years four such jobs (GS-13 to GS-15) have become vacant and all were filled by bringing in field personnel: Chief SR&F Division, Chief SF&MO Division, Chief Analysis Center, and Assistant Budget Officer.

## Brotherhood Week

**B**ROTHERHOOD WEEK was again observed during the week of February 20-27, 1955. The Honorable Sinclair Weeks, Secretary of Commerce, was in charge of government observance and as usual the Department of Commerce conducted a special observance meeting.

Brotherhood Week was established to promote unity, understanding and cooperation among Protestants, Catholics and Jews and the movement has since grown from a national to an international one. The following letter from President Dwight D. Eisenhower to Mr. Ben Duffy, Chairman, Brotherhood Week, expresses in a very impressive way the sentiment behind the observance of Brotherhood Week:

"The spirit which lies behind our observance of Brotherhood Week is as old as our civilization. It goes back to the answer given to the first man who asked, 'Am I my brother's keeper?'"

"Through thousands of years there have been many noble answers to this same question,

answers which bravely affirm that all men—of all religions, of all colors, of all languages—are in fact brothers, that no man can live alone. But in every age the question is asked, and in every age it must be answered anew.

"We live in a period in which the question has a new sharpness and a new edge, because there are new forces in the world which divide and threaten men, forces which work to lock each man within the prison of his own mind, which make friend distrust friend, nation distrust nation. In the face of these forces it is imperative that we heroically by word and deed give voice to our faith: that every man is indeed his brother's keeper, that no human being in the world can escape his spiritual involvement in what happens to any other human being, that no man, in the troubled sea of mankind, can be an island.

"It is the purpose of Brotherhood Week to inspire us to give that answer for our time, with an eloquence never before heard."

## *Faster Action on Employee Suggestions*

**I**N September, 1953, Commerce Department Form CD-36, Employee Suggestion Blank, was revised to provide a better description of the procedure in use, the inadequacies or problems of that procedure, and the solution which the suggester recommends for solving the problem. The use of this revised form should give Central Office representatives better information as to the reasons behind each suggestion and will therefore lead to faster decisions. All stations should discard suggestion blanks with a printing date earlier than September 23, 1953, and obtain a new supply.

While suggestions may be sent direct to the awards committee, in many cases an endorsement by the MIC on the success of the

trial use of the suggested idea at the station would be very helpful in deciding whether or not to adopt the idea for Bureauwide use. In other cases a suggestion seems to contain only partial development of an idea, with the result that its full merit is not appreciated and it is not adopted. If such ideas were discussed with the MIC or other employees for the purpose of improving the basic ideas as much as possible before submission as suggestions, more of them would probably be adopted.

In a few cases suggestions are not adopted for reasons which are probably already known to MICs or to other senior employees at stations. These reasons would probably be easily explained to the suggester if the MIC had known

the suggestion was being submitted, thereby saving the employee the time of writing up the suggestion.

For these reasons much faster and better results and a greater chance of adoption would be obtained if most suggestions were first discussed with the MIC and then forwarded through him, and in many cases through the Regional Office, to the Central Office awards committee.

There will undoubtedly be suggestions which for one reason or another employees will want to forward direct to the awards committee. The above discussion is not intended to prevent an employee from forwarding his suggestions in whatever way he believes will most likely lead to adoption. ■

## *Fellowships and Assistantships at Texas A. & M.*

DR. DALE F. LEIPPER, head of the Department of Oceanography at Texas A & M, has informed us that fellowships and research assistantships in oceanography and meteorology are available to qualified graduates in physics, chemistry, geology, meteorology, biology, and engineering for 1955-56. The fellowships include the United Gas Fellowship in Engineering Oceanography, \$3000, and the Dow Fellowship in Chemical Oceanography, \$2000. Graduate assistantships in these fields, in meteorology and in physical, biological, geological and meteorological oceanography provide

as much as \$2400 each.

Fellows and assistants take standard curricula leading to graduate degrees in oceanography or meteorology. They also take additional graduate work in basic science or in engineering. Duties with the Department consist of aiding in the program of oceanographic research sponsored by various government agencies and by industry.

Fields of emphasis include ocean waves and wave forces, interaction between ocean and atmosphere, diseases of marine organisms, marine meteorology, ocean thermal structure, radar

meteorology, agricultural meteorology, micro-meteorology, and weather analysis.

A \$500 scholarship and student assistantships are also available for undergraduates working toward the B. S. in meteorology.

Applications should be submitted by March 30, 1955. Most awards will be announced April 15, although additional openings are expected to occur after that date. Further information may be obtained by writing to the Head of the Department of Oceanography, College Station, Texas. ■

## WMO to Elect New Secretary General

**A**N announcement has been made that the Second Congress of the World Meteorological Organization which is to be held in April-May, 1955, at Geneva, Switzerland, will appoint a Secretary General for the Organization, as the incumbent, Dr. G. Swoboda, has reached retirement age.

The Congress will welcome any suggestions of persons believed to be qualified for appointment and willing to apply for the post. Letters of application should be addressed by the applicant to The Secretary General, World Mete-

orological Organization, 1 Avenue de la Paix, Geneva, Switzerland, as soon as possible.

The Secretary General is the executive head of the Organization and his main duty is to direct the work of the Secretariat, which consists of a specialized international staff working mainly in the field of meteorology but also in administrative and financial matters and in formal relations with national governments and other international organizations.

During the past several years the salary of the Secretary General

has been \$10,000 net. He has also received a representation allowance of \$500 per year. Leave, other allowances, pension and other privileges are as prescribed in the Internal Staff Rules of the Organization and the United Nations Pension Plan Regulations.

The contract of the Secretary General normally expires either four years after the date of entry into force or on the date on which the Secretary General reaches the age of 60 years, whichever is the earlier. ■

## For Retired Employees Only

**S**EVERAL months ago, a retired Weather Bureau employee visited a regional office and advised that he would like to "keep his finger in the pie" and would be receptive to accepting relief work at some of our one-man stations on a fee basis, without expense to the Bureau for travel or per diem.

This appeared to be an economical way of furnishing relief for our employees at one-man stations, enabling them to take extended periods of annual leave; it also relieved the retired employee of some of the time on his hands. Since his pay for taking observations will be a "fee" rather than salary he will continue to receive his retirement annuity

and it will not be reduced in amount.

Accordingly, the regional office requested and received Central Office approval to establish an Aviation-Observer position to relieve Weather Bureau employees at three locations, at a rate not to exceed \$190 per month. This resulted in economy to the Bureau for travel expenses, per diem and overtime by eliminating the detail of an employee from a nearby station or a MOBEU employee from the regional office.

The following standard "fee basis" rates were established for accomplishing duties at all three of the stations:

Observations (all types) .....  
..... \$0.60 each  
Record and maintain Climato-

logical records - For each daily recording ..... \$1.00 each

Receive and distribute forecasts and warnings to press, radio and aviation interests ...\$1.30 per list

Hoist and/or lower storm warnings, as required ...\$1.50 each

Total for all services not to exceed \$190.00 per month.

This arrangement has worked to entire satisfaction and other regional offices may desire to explore the possibility of offering similar fee-basis employment to retired Weather Bureau employees. Retired employees may also be interested in furnishing emergency assistance on a fee basis during periods of hurricanes or other severe weather. ■

## Ex-MIC at Tampa Gets New Job

**H**OW to fill your day though retired is not a problem for W. W. Talbott, whose retirement as MIC at Tampa, was reported in our January issue.

Mr. Talbott immediately went

to work for the Tampa Times as its official weather man. He will write a daily column for the newspaper, and be heard nightly over the paper's radio station, WDAE.

His first column was printed

on February 2, 1955—a date which Mr. Talbott says, will now have a double significance for him—groundhog day and the first day of a new career. ■

## FOSDIC to the Rescue

**W**ILL FOSDIC revolutionize the National Weather Records Center's techniques for data storage and processing?

This is a question whose answer is being sought at the Bureau of Standards under the joint sponsorship of the Weather Bureau, the Air Weather Service, and the Navy Office of Aerology.

FOSDIC is not the detective of comic-strip fame, but is an acronym for Film Optical Sensing Device for Input to Computers. It is now on the drawing boards of the Bureau of Standards, and will probably be ready for testing by the end of 1955.

Built around an automatic electronic cathode ray scanner for reading digital values and codes from microfilms of punched cards, FOSDIC is expected to enable the data on the films to be fed into other machines to repunch cards, create magnetic tape records, or as direct input to computers.

But the biggest nightmare that will be solved if FOSDIC works as anticipated is in the field of data storage. Development and use of punched card techniques have enormously expanded our capabilities for processing and analyzing weather data, but the mountain of perishable punched cards is growing at an almost unbelievable rate.

In fifteen years we have jammed 30,000 square feet of floor space with 250 million cards, which would fill twenty stories of a building thirty by fifty feet. By 1965 this volume will have been doubled.

Worse yet, by 1965 the paper stock in the earlier card decks will have deteriorated with age to the point of uselessness for machine processing; to forestall this waste of valuable climato-

logical machine records we would have to spend as much as \$50,000 per year in salvaging old decks by reproducing them.

If FOSDIC proves successful, it will be possible to solve these problems effectively with microfilm techniques. As punched card decks begin to wear out or become less active, they will be microfilmed at a rate which will relieve completely any future need for expansion of filing space and facilities (our entire present card library in microfilm form would fill less than 500 square feet of space!).

In time, the microfilm library will become the basic permanent machine records library, on a film medium with a life-expectancy of perhaps 75 to 100 years, and costing less than 40 cents per thousand frames to copy (corresponding

punch card costs are \$3 per thousand). Whenever required by data-processing needs, the microfilm record will be run through the appropriate FOSDIC film-reader at rates up to 600 frames per minute to produce punched cards or magnetic tape as desired for input to data processing machines, or for direct reading from the microfilm into computers. Punched cards and magnetic tapes thus produced will be retained as temporary working libraries only as long as the need for the data in these forms remains active.

FOSDIC will not only solve the space problem for the machine records library and materially reduce library maintenance costs, but will also permit NWRC to protect this valuable data source from destruction through disaster by establishing and storing a duplicate file in a reserve location at very low cost. ■

## Paid Travel for Stateside Vacations

**P**UBLIC Law 737, 83rd Congress, approved August 31, 1954, authorizes payment of travel expenses for return of overseas employees and their dependents to their places of actual residence, for leave purposes at the expiration of their minimum tour of duty; provided the employees agree to serve another tour of overseas duty. We feel that these provisions will improve recruitment possibilities for employees and be an encouragement for them to accept overseas assignments as a means of gaining important meteorologist experience. It remains the policy of the Bureau to work out stateside reassignments as expeditiously as possible when we are informed of the employees'

preferences; however, transfers back to the States will necessarily continue to depend upon the existence of suitable vacancies in the States.

For convenience we are listing the minimum tours of duty required by the Department of Commerce at the following stations:

Stations	Minimum Tour of Duty
Honolulu	3 years
Hilo	3 years
Lihue	3 years
Canton Island	1 year
Guam	1 year
Wake	1 year
Swan Island	6 months
San Juan	2 years
Trust Territory	1 year
Alaska	2 years

## *In-Flight Assistance Service and Soliciting PIREPS*

The following is quoted from a report submitted by the MIC at Yakutat, Alaska:

"During the first part of December this station received COMAL 92-54 concerning in-flight assistance service and the solicitation of pilot reports. This station immediately started sending weather advisories and reminders to the CAA Communications Station so that they might volunteer information to pilots in flight within their informational area concerning freezing level, icing, turbulence, and any other weather data considered potentially hazardous to aircraft. We have also asked that they request pilot reports whenever possible.

"These advisories and reminders are made up of information obtained from hourly sequence weather, forecasts and warnings issued from Anchorage, pilot reports, surface synoptic charts and prognostic charts issued from Anchorage. Since this was initiated at this station pilots of scheduled airlines have dropped into the office to pick up a copy of the current advisory just to have it in the cockpit with them. Before, they seldom got outside the airplane. The pilots seem to be pleased and we are happy with the increase in pilot reports.

"The number of pilot reports received at this station has increased from 39 and 34 in October and November respectively, to 105 in December, and we expect an increase in January."

The MIC at Wichita, Kansas, took a different course of action—one we believe will also result in obtaining more PIREPS. He drew up a memorandum quoting the narrative report on the heavy icing incident given in MAL 92-54 and adding a constructive note on

how effective pilot weather reporting is accomplished in another area. This memorandum was distributed to airports in the Wichita area for posting.

These two methods of approach are cited merely to illustrate how a common problem can be effectively dealt with in different ways, depending on local circumstances. The first method is quite elaborate and possibly only a few stations could apply it in its entirety. The second method, of course, deals only with the PIREP problem. In both cases, however, the local

station has acted in such a way as to bring a system-wide problem into focus as it applies to the local phase of the problem. So often when large groups of people are asked in a general way to help with a problem, most individuals of the group are willing to let the other fellow do it. But when the problem is brought to the attention of small groups, outlining what can be done in the individual's own area as Yakutat and Wichita have done, the individual pilot in these cases can only conclude—"He needs PIREPS from me."



## *Cooperation on Fire-Weather Research*

PERSONNEL of Scientific Services Division were assigned to two projects in the West during the past summer in line with the Bureau's policy of encouraging cooperative studies with other agencies and organizations.

De Ver Colson was detailed to "Operation FIRESTOP" in the Camp Pendleton area of southern California from June to October as a meteorological advisor and as supervisor of the wind survey phase of the project. Federal, state and local fire protection organizations, research agencies, civil defense agencies, military agencies and private companies cooperated on the project to explore certain aspects of mass-fire build-up and behavior and to provide the fire services with some new aids to mass-fire prevention and control. The wind survey was undertaken to develop methods and techniques required to provide information useful in

fire control and fire weather forecasting on the behavior of wind in mountainous topography under various synoptic weather conditions.

Mr. Kenneth Nagler was detailed to WBAS Missoula, where, along with the Missoula staff, he worked closely with "Project SKYFIRE". This project was conducted in the western Montana—northern Idaho area by the U. S. Forest Service and the MOUNTAIN FOUNDATION, with the cooperation of the U. S. Weather Bureau and other agencies. Among the items investigated were the relationship of thunderstorm occurrence to terrain in the area and the possible effects of the jet stream on weather conditions important in fire control operations.

The information gained as a result of these two projects should be very helpful in improving our service to the forest fire protection organizations of the Nation. ■

## MIC Goes on Havana Flight

**I**N recent years, the flight activity generally known as the AIR TOUR has enjoyed a large measure of popularity. In practice, the members of a flying organization get together and fly in a group to a planned destination and then return to their home airport. Some of the national aviation groups sponsor one or more long-distance tours each year, with an itinerary requiring several weeks to complete, while local groups may conduct a one-day tour every month or so. As many as several hundred aircraft, usually small single-engined types, participate in the longer tours.

Because of the large number of planes and individuals involved and the general requirement of flying VFR imposed by the class of aircraft, as well as the experience level of most of the pilots, accurate weather information is of major importance to these flights. Thus, when plans for an air tour are known in advance the Bureau tries to arrange for personal briefings and pick-up of the pertinent forecasts with the group leader, both at the point of origination and also en route if the tour is an extended one.

Although it is rare for a Weather Bureau meteorologist to go along on an extended air tour, V.V. (Vic) Phillips, MIC of the WBAS at Wichita, who is the Liaison Meteorologist for the National Flying Farmers Association, was invited by the Flying Farmers to accompany them on their Air Tour through southeastern United States to Havana, Cuba, and return, in December, 1954. Mr. Phillips flew the entire round trip from Wichita to Havana with this group. Over 200 persons, including Flying Farmers and

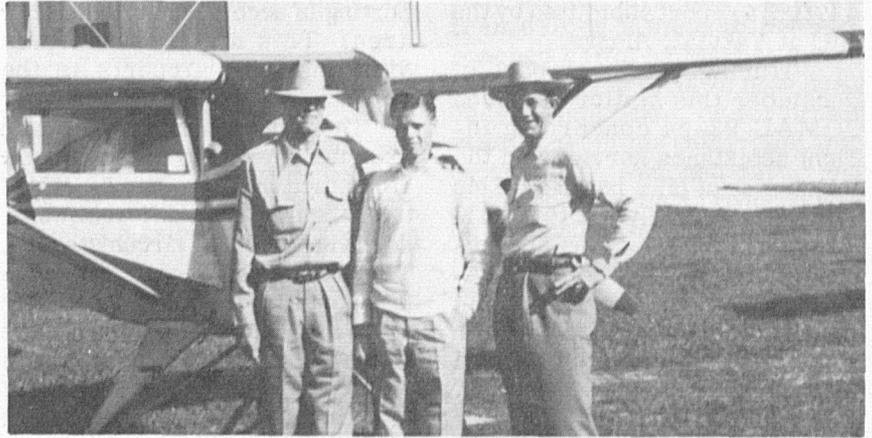


Photo shows Mr. V. V. Phillips right, at Havana, with Flying Farmer Roland Jones and son Richard, the pilot.

their families, participated, using 85 small aircraft.

In addition to providing the group with current weather information, Mr. Phillips was able to carry on an effective liaison with those on the flight, learning of their weather problems and

pointing out how Weather Bureau services and facilities could be best used to meet these problems. From all reports, "Vic" did a fine job of strengthening the already good relations between the Weather Bureau and the Flying Farmers. ■

## Coordination of Press Releases on MIC Transfers

**A**TENTION of all Weather Bureau officials is invited to the importance of the above subject and the need for coordination of press releases announcing changes in MIC assignments. Frequently such changes involve relationships between the Central Office or the Department of Commerce and the National Press Associations who may have asked for information. In order to avoid false reports that may prove embarrassing and to prevent misunderstandings about dates, it is obvious that press releases on transfers should logically emanate from the office which has the

responsibility for authorizing the assignment. This is true in every case of assignment of an MIC but it is particularly true in interstate or inter-regional assignments where the local office is not in position to coordinate with others concerned.

There should be no exceptions to the provision that public announcements and press releases regarding appointments or transfers to positions as MIC of Weather Bureau offices shall originate from the Central Office unless specific authorization otherwise has been issued in the particular case. ■

## Solar Radiation Network to Aid Phone Company

**T**he sun's energy is so basically a part of man's every-day existence that the data from the Weather Bureau's solar radiation network have found application in a wide variety of interests:

These interests range from agriculture to zoology. A few examples of studies for which our data have been requested include: Agriculture—the utilization of solar radiation to produce vegetable crops in Alaska, and the influence of radiation on the growth of fruit; Medicine—the deterioration of tuberculosis vaccine under the influence of solar energy and role of the sun's rays as a cause of cancer; Transportation—design of refrigerator railroad cars; Zoology—the correlation between solar radiation and the occurrence of abnormal insect populations—these and many other uses have been made of the records from the Weather Bureau's solar radiation network.

In many of these cases man is either trying to overcome the harmful effects of solar radiation, or to understand the role of the solar energy which penetrates his environment. A more positive approach arises from man's search for cheap and abundant power. The sun's energy arrives at the Earth's surface in enormous quantities; but, unfortunately, it has been too expensive to harness it directly for many useful purposes.

Recently, however, a telephone laboratory has announced that they are building a solar battery to supply small amounts of power to telephone lines in isolated areas. For this purpose, as was the case with the design of a solar house, data concerning the consecutive number of days during which the solar energy received at the ground falls below specified a-

mounts were necessary so that the proper energy storage capacity could be built into the apparatus. The required data were

furnished from our solar radiation network. If this experiment to utilize solar power is successful, the demands for solar radiation data are sure to increase in the future. ■

## Weather 1212 Sets New Records

**I**N the ten cities where recorded weather forecasts are made available by the telephone companies to those who dial the correct Weather number, over 152 million calls were recorded in 1954. This is an increase of more than 18 million calls over the previous year, and averages over 289 people using the automatic telephone weather forecast service every minute.

For the year Detroit, Michigan, reached a new all-time high with a total of 29,600,586 calls, an increase of more than 3 million

calls over 1953; New York City was second high with 23,904,944 calls. The highest day recorded for the year was established by New York City on September 10 with 361,392 calls as Hurricane "Edna" threatened the city; Washington, D. C. was second high with 273,320 calls on October 15 as Hurricane "Hazel" came along. A new high one-day total for all 10 cities was established as Hurricane "Hazel" swept northward and 1,212,955 calls for the latest forecast were recorded on October 15, 1954.

City	Annual Total	High Day	Monthly Average	Daily Average
Baltimore	8,057,800	118,060 (Jan. 22)	671,483	22,076
Boston	5,861,473	108,583 (Jan. 11)	488,456	16,059
Chicago	20,003,784	207,050 (June 25)	1,666,982	54,804
Cleveland	16,898,582	161,863 (March 25)	1,408,215	46,297
Detroit	29,600,586	244,854 (April 7)	2,466,716	81,097
Milwaukee	7,887,881	77,435 (Jan. 17)	657,323	21,611
New York	23,904,944	361,392 (Sept. 10)	1,992,079	68,635
Philadelphia	12,127,973	120,471 (Jan. 11)	1,010,664	33,227
Pittsburgh	5,387,385	41,263 (Jan. 14)	448,949	14,760
Washington, D.C.	22,404,896	273,320 (Oct. 15)	1,867,075	61,383
<b>TOTAL</b>	<b>152,135,304</b>			

## THINGS YOU OUGHT TO KNOW

### *New Tax Deduction*

Under a new provision in income tax regulations for this year wages up to \$100 a week for periods during which you were absent from work on account of personal injuries or sickness may be excluded in figuring your income tax return. If the absence is due to illness not involving hospitalization the exclusion does not apply to the amounts received for the first 7 calendar days and the days must be consecutive to be counted. If you were hospitalized for even one day in a consecutive period of illness or if

your absence was for personal injury all days of absence are counted. The new provision is found on page 6 of the pamphlet, "How to Prepare your Income Tax Return", issued by the Internal Revenue Service.

It is not necessary to have a certified statement of the amount and dates of leave and the information should be obtained orally from your leave clerk or from the station copy of time and attendance records, if needed, rather than from the payroll office. Your rate of pay should be obtained from

your last Notification of Personnel Action, (Form 50), if needed, or from the Regional or Central Office Personnel Office. All of the computations, however, must be made by you rather than by the fiscal or personnel office. To determine the weekly rate of pay, divide the annual rate by 52 and divide the weekly rate by 5 to find the daily rate.

Any additional questions you may have should be referred to your local Internal Revenue Service officials except in the Central Office where they may be referred to Mr. Flocken on Ext. 285. ■

### *Delinquent Income Tax Collections*

There have been a very small number of cases in the Department in which the Internal Revenue Service has had difficulty in collecting overdue income taxes from

employees. In such cases arrangements are made for the Bureau personnel and fiscal offices to assist the employee so he can pay on a cash basis or through payroll

deductions. In cases in which payments are still not made the Internal Revenue Service has the power to seize the employee's entire salary check. ■

### *Employees' Compensation and Voluntary Overtime*

According to a recent letter to the Department of Commerce from the Bureau of Employees' Compensation employees are covered by the Employees' Compensation Act during periods of

voluntary overtime even though such overtime was not specifically authorized provided the employee is performing his usual or related work and no specific instructions are being violated. It will be to

your advantage, therefore, to report all such injuries by use of Forms CA-1 and CA-2 just as you would for injuries received during your assigned duty hours. ■

### *Typewriter Ribbons*

The Central Office has conducted many surveys to ascertain the relative wearing qualities of, and legibility of copy produced by, cotton, silk, and nylon typewriter and teletypewriter ribbons and to balance these factors against the original cost of the ribbons. From the diversity of results we cannot recommend any particular

type of ribbon as being most economical.

While silk or nylon last longer, the greater cost is not commensurate with the increased life span.

The legibility of typewritten work is, however, a factor to be considered, and especially is this true of copy which must be reproduced by photo-offset. We should

like to suggest therefore that the machine which is used for this purpose be equipped with a new ribbon, be it cotton, silk, or nylon, when there is a question as to legibility.

We encourage the use of better grade ribbons on machines, when the importance of good copy will justify the increased cost. ■

## Weather Bureau Personnel to Antarctic

**T**WO Weather Bureau employees are on board the U. S. S. Atka which reached Little America, Antarctica, during January. They are Paul A. Humphrey, Meteorologist of the Scientific Services Division who is representing the U.S. National Committee for the International Geophysical Year on this voyage and George R. Toney, Jr., representing the Antarctic Planning Staff of the Weather Bureau.

The U. S. S. Atka is a Navy ice-breaker which has been sent

to the Antarctic with a party to survey bases for the establishment of stations by the U. S. National Committee for the International Geophysical Year. She is not unknown to TOPICS readers (see cover and page 197, November, 1951). The Atka took with her three helicopters, two LCVP landing craft, two weasels, sleds and a "Greenland Cruiser"—a specially designed launch for hydrographic operations. The expedition left Boston December 1, 1954, traveled to New Zealand via

the Panama Canal and then to the Antarctic. It will return via South America, reaching the United States early in the spring.

During the voyage several types of meteorological observations are being taken. In addition to regular surface observations, twice daily rawinsonde ascents are being made. Sea ice conditions are being observed and special phenomena noted. Samples of air are being collected at regular intervals for later analysis to determine the carbon dioxide content, a measurement which is of value in heat balance studies.

Ten fields of activity have been chosen for intensive study during the International Geophysical Year. These are: meteorology, latitude and longitude determinations, geomagnetism, the ionosphere, aurora and air-glow, solar activity, cosmic rays, glaciology, oceanography, and rocket exploration of the upper atmosphere. The IGY program of special observations will be carried out during the period July, 1957 - December, 1958 although some meteorological observations will be carried out earlier during the preliminary stages of the program.

The Antarctic portion of the United States program includes the establishment of three principal observatories on the Antarctic continent: at Little America, Marie Byrd Land, and the South Polar Plateau. Further information about other phases of the program for the International Geophysical Year will be described in the future.

There will be a requirement for several meteorological aids (rawinsonde observers), cooks, mechanics and other craftsmen to man the Antarctic meteorological stations. Those who are interested and qualified should write the Personnel Division as soon as possible. ■

## News From Selawick

**A**S a bit of "local color" from the Far North we submit the following two letters. The writer of the first is the cooperative observer at Selawick, an Eskimo who, says Climatologist Robert Dale of Anchorage, is a very good observer. About every other month his Form 1001 pad has every page covered, front and back, with notes on phenomena, meteorological and otherwise.

Dear Robert.

Robert where you staying now. I just wondering when you never drops me a letter anymore. Want to Notice you last part of November. I hear the news near Shungnak & Kebuk, many more Caribou's more than ever before. And right now, first part Dec. there's some Caribou's too. between Sel. & Shungnak, but seems like little less. on the minks line, but not so bad. boy boy. before now, We have strong windys from any Direction's. Bob. willyou please read carefully on this Dec. my report. Cause the max. little bit, following to normal some time. I just asking you may know by the written. and alway forgets to tell you back, as you question long ago. Now, the sheltr box from rain gage, to the ESE. but the Ground Surface not so level where the Box is. I mean very little low ground where the box is.

I received the writing Tablets and others but not the inks.

Sincerely  
Ray Skin

P.S. Please answered me sooner.

Dear Ray:

Thank you for your letter dated December 8, 1954. The reason we do not write to you as much as at first is because your observations are much better and we do not have to ask you about them. On your November form we believe the maximum and minimum should be changed around on the 18th to read maximum 10, minimum 8. Also the maximum temperature on the 17, 22, and 28th should be at least as high as the "set max" temperature at the previous day's observation. Ray, if you believe your maximum pointer is following the current temperature we will probably have to replace the dial-type thermometer with the two glass thermometers you used at first. Keep a close check on the dial-type and let us know if you believe your thermometer is wrong. We will then mail you new thermometers.

We are afraid the ink will freeze in shipping, Ray. Can you get along with a pencil till next spring?

Merry Christmas and Happy New Year.

Sincerely,  
Robert F. Dale  
Climatologist

## Department of Commerce Honor Awards

**I**N an impressive Awards ceremony at the Department of Commerce Auditorium, February 23, 1955, the Under Secretary of Commerce, Walter Williams, assisted by Dr. Reichelderfer, Chief of Bureau, and Mr. Delbert M. Little, Deputy Chief of Bureau, awarded gold and silver medals to fifteen Weather Bureau employees for their outstanding achievements. Presentations were part of the Department's seventh annual Awards Ceremony. These Ceremonies are normally held on the 14th of February, the birthday of the Department.

Two Weather Bureau employees received the Gold Medal for Exceptional Service, the highest award given by the Department. One of these was awarded posthumously. Two of the silver medals for Meritorious Service were awarded to storm warning displaymen from North and South Carolina for outstanding work in connection with Hurricane Hazel.

### Grady Norton

Grady Norton was awarded posthumously the Department of Commerce Exceptional Service Gold Medal in recognition of his outstanding contributions to the Weather Bureau's Hurricane Warning Service. Mr. Norton died suddenly last October 9, 1954. On the day immediately preceding he had been very busy tracking Hurricane Hazel which was then in the Caribbean Sea and was to later wreak so much havoc along the Atlantic seaboard. At the time of his death Grady Norton was Meteorologist in Charge of the Joint Hurricane Warning Center at Miami, Florida, a post which

he had filled in an exceptionally competent manner for many years. (See TOPICS July, 1954 and Oct.-November, 1954.) The medal will be presented to Mrs. Norton in the near future.

### Albert K. Showalter

Albert K. Showalter, Meteorologist in Charge of the Weather Bureau-Air Force-Navy Analysis Center in Washington received the Gold medal for Exceptional Service in recognition of his major contribution to the science of Meteorology in developing the Showalter Stability Index. This index helps the forecaster determine areas in which the atmosphere is unstable and where thunderstorms and tornadoes are most likely to develop.



Mr. Showalter has been in the Weather Bureau for 25 years and has served in a number of important positions throughout the United States. He was Meteorologist in Charge of the Weather Bureau Forecast Office at Los Angeles for over seven years

before being brought to Washington to take charge of the WBAN Analysis Center in April of 1953.

Albert K. Showalter, the 9th child of a family of twelve (10 boys and 2 girls), was born at Delmar, Iowa on February 12, 1908. He graduated from the Immaculate Conception Academy at Elma, Iowa in 1924, with a 4 year scholarship to Loras College in Dubuque, Iowa. He received his B.A. degree (cum laude) from this school in 1928 with a major in mathematics. He later attended Massachusetts Institute of Technology at Boston, The George Washington University in Washington, D. C., and the U. S. Department of Agriculture Graduate School in Washington where he obtained advanced training in physics and meteorology.

Mr. Showalter entered the Bureau at the age of 21 as a Junior Observer at La Crosse, Wisconsin on July 1, 1929. In August 1935 he transferred to Boston, Mass. Less than a year later he was transferred to the Central Office and promoted to Junior Meteorologist effective July 18, 1936. When he first arrived in the Central Office he was assigned to the Meteorological Research Section. Following this he was assigned to the River and Flood Division currently known at the Hydrologic Division. He advanced to the position of Chief of the Hydrometeorological Section before transferring to California as Meteorologist in Charge of the Forecast Office for the Los Angeles area at Burbank, California effective January 27, 1946.

Mr. Showalter is a member of the American Meteorological

Society, and the Advisory Council for the Boy Scouts of America.

Mr. Showalter has displayed a keen enthusiasm in the pursuit of meteorological research and has contributed a number of papers on meteorological subjects which have been published in the *Monthly Weather Review* and the *Bulletin of the American Meteorological Society*. A few of the more important ones are:

1. "Further Studies in American Air Mass Properties" *Monthly Weather Review* 1939.
2. "Tornadoes" 1943 War Advisory Council on Meteorology Bulletin.
3. Chapter on Hydrometeorology—*Handbook of Meteorology*, McGraw Hill 1943.
4. "A Stability Index for Thunderstorm Forecasting" *Bulletin American Meteorological Society* 1953.
5. "Relationship of Low Temperatures Aloft to Precipitation" *Transactions of American Geophysical Union* 1939.

#### *Milton F. Barlow*

Milton F. Barlow, Supervising Forecaster at Hartford, Connecticut received the Silver Medal for Meritorious Service in recognition of his unusual competence in an emergency. On the morning of August 31, 1954 while serving as principal assistant in the Weather Bureau Office in Hartford he issued on his own initiative warnings of the approaching Hurricane Carol.

The following quotation from the report submitted by the Meteorologist in Charge of the Hartford Weather Bureau Office tells the story.

"Reporting for duty at 4:00 a.m. EST on August 31st Mr. Barlow quickly analyzed the dangerous impending weather situation and based on his prediction of

the path of Hurricane Carol he recognized the urgency for immediate warning to the public. In view of this urgency it was necessary for him to take full responsibility for such action without benefit of a guidance forecast. By his action and willingness to assume responsibility for a difficult forecast which later verified almost perfectly, the public served by this office was given that additional warning which in many cases was the difference between preparedness and unpreparedness. This outstanding public service was recognized editorially by Hartford, Springfield, Manchester and Middleton newspapers and local radio stations."

Milton F. Barlow was born at Stafford Springs, Connecticut on August 6, 1910. He graduated from Stafford High School in 1929. He later took courses at MIT, Boston and Chicago University. He began his Weather Bureau career as Junior Observer at Hartford, September 1, 1930. He later served at Boston, Mass.; Caribou, Maine and Pittsburgh, Pa. before returning to Hartford in July 1951 where he served until January 29, 1955 when he resigned to accept a meteorologist position in private industry.

#### *George N. Brancato*

George N. Brancato, Meteorologist in Charge of the Weather Bureau Office in Baltimore received the Department's Silver Medal for Meritorious Service in recognition of his outstanding leadership and management of the Weather Bureau's program at Baltimore during the past eight years and for his extremely competent prior service. Under his capable management the Baltimore Office has provided outstanding weather service to the entire state of Maryland.

Prior to being assigned to Baltimore Mr. Brancato was Assistant Chief of the Hydrometeorological Section of the Hydrologic Division of the Central Office for several years.

George N. Brancato was born in Coal City, Illinois on November 13, 1910. He graduated from the Springfield, Ill. High School in 1929 and then completed two years of college work at Bradley Polytechnical School at Peoria, Illinois. Later during the period 1939 through 1946 he added to his formal education through courses in the Department of Agriculture Graduate School in Washington, D. C.

Mr. Brancato entered the Bureau on May 1, 1929 as a Minor Observer at Springfield, Illinois. He later served at Mobile, Alabama and Peoria, Illinois before coming to the Central Office in August 1936 where he was assigned to the Aerological Division. A year later he was transferred back to the field as a Junior Meteorologist at WBAS Chicago. In March 1939 he returned to the Central Office as a Meteorologist in the Hydrometeorological Section. Except for a five month assignment to the Analysis Center early in 1943 he remained with the Hydrometeorological Section until his transfer to Baltimore in October 1946.

#### *Harry E. Brown*

Harry E. Brown, Meteorologist, Prognostic Analyst in the Weather Bureau - Army-Navy Analysis Center received the Department's Silver Medal for Meritorious Service in recognition of his exceptional accuracy in the preparation of prognostic charts used in preparing the weather forecasts throughout the United States. Mr. Brown has established a verification record in the past 30 months which is considerably better than

the record of any other analyst during the past seven years that the present verification system has been in use. Mr. Brown obtained a B.S. degree in Chemistry from the University of Cleveland in 1943, and then entered the Army Air Force as an Aviation Cadet specializing in Meteorology. He served as Station Weather Officer at stations in Africa, Arabia, and Turkey. He completed advanced training in tropical meteorology at the Institute of Tropical Meteorology at the University of Puerto Rico during this period. Upon his return to civilian life he worked as a Meteorologist for Capitol Airlines until the latter part of 1947 when he began his Weather Bureau career with the WBAN Analysis Center in Washington.

*Gordon E. Dunn*

Gordon Dunn, Meteorologist in Charge of the Weather Bureau's Chicago Offices, received the Department's Silver Medal for Meritorious Service in recognition of his valuable contributions to the public service and to the science of Meteorology for many years.

Mr. Dunn entered the Weather Bureau in May 1924 and advanced rapidly to the position of Assistant Forecaster at Jacksonville, Fla. In July 1939 he was transferred to Chicago, Illinois as a district forecaster and in May 1940 was placed in charge of all public and aviation forecasting activities at Chicago which encompassed issuance of forecasts for the several Great Lakes states and the Great Lakes themselves.

During the second World War Mr. Dunn was detailed at the request of the Army Air Forces to a special confidential assignment which took him into the China, Burma, India war theater. There he engaged in making highly spe-

cialized weather analyses and prepared forecasts for certain air operations. For his outstanding service on this assignment, he was highly commended by the Commanding General in charge of operations in that theater. A portion of one report concerning this assignment is quoted: "Mr. Dunn arrived in the Theater at a time when we were in need of his extensive knowledge and experience in weather analysis and forecasting. We were faced with new problems relating to the introduction of VLR bombing in a region where great extremes of temperatures and altitudes exist. Mr. Dunn assumed his new responsibilities with such quiet enthusiasm and assurance as to demand immediately the highest professional respect and confidence of all his associates. Throughout this assignment his efforts have been constant, his technique sound and his results above criticism. Only the most favorable comments regarding his work have been received."

Mr. Dunn has been selected to fill the important post as Meteorologist in Charge of the Weather Bureau's Hurricane Warning Service at Miami which was left vacant by the sudden death of Grady Norton last October 9, 1954.

*Harrie E. Foster, Jr.*

Harrie E. Foster, Radar Meteorologist assigned to the Weather Bureau Severe Local Storm Unit located at Kansas City, Mo., received the Silver Medal for Meritorious Service in recognition of the unusual competence which he displayed in the use of radar during cloud modification experiments and its application to the study of cloud structure and the mechanisms of natural precipitation. Mr. Foster was employed by the Weather Bureau

in November 1953 and was assigned to Hoquiam, Washington as a radar meteorologist to assist with the Weather Bureau Artificial Cloud Nucleation Project which was then being conducted. It was for work on this project that the award for him was approved.

Harrie E. Foster, Jr. was born on September 20, 1930 in Somerville, Mass. He graduated from Whitman High School at Whitman, Mass., in 1938. Following this he worked for a year in a shoe factory at Brockton, Mass., while he continued his education via the correspondence method during his off duty hours.

In December 1939 he enlisted in the Army Air Forces where he served until September 1948. In December 1948 he accepted a research position with the Massachusetts Institute of Technology at Cambridge, Mass. Here he conducted research on the use of radar in meteorology both as a research tool and as an aid to forecasting. He left this position in January of 1953 to accept a Weather Bureau appointment as Radar Meteorologist assigned to the Weather Bureau Artificial Cloud Nucleation Project.

During the 11 years he was with the Air Force he received extensive training in meteorology and served as Weather Officer at widely scattered Air Force Weather Offices. He also taught a course in Weather Observing and served for two years as an analyst and forecaster in the Weather Bureau-Air Force-Navy Analysis Center in Washington.

*W. Ferguson Hall*

W. Ferguson Hall, Research Meteorologist, assigned to the Scientific Services Division of the Weather Bureau Central Office, received the Department's Silver Medal for Meritorious Service in

recognition of his outstanding contribution to the problem of evaluating the effectiveness of cloud seeding through the organization and direction of the Weather Bureau Artificial Cloud Nucleation Project carried on during 1953 and 1954.

Mr. Hall came to the Weather Bureau already possessing considerable standing in the field of meteorological project direction and execution. He was associated with and influenced greatly the meteorological instrument laboratory at the University of California, the operation of Navy sponsored project Tyrnea (Typhoon project in the western Pacific) and was field manager for the mammoth thunderstorm project carried out in Florida and Ohio. He has a Master of Science Degree in Meteorology obtained from the University of Chicago in 1948. Before starting his scientific career he studied law and was admitted to the Iowa Bar in 1936.

His first association with the Weather Bureau was in August 1949 when he was given an accepted appointment as a Consultant to the Scientific Services Division. In November of that year he was given a probational appointment to a full time position of Research Meteorologist in which capacity he continues to serve.

#### *Erle L. Hardy*

Erle L. Hardy, Regional Director of the Weather Bureau's Second Region with headquarters in Fort Worth, received the Silver Medal for Meritorious Service in recognition of his outstanding contribution to the public service in fostering the establishment and operation of the "Texas Radar Project" for the protection of residents of Texas and nearby

states from such storms as tornadoes, hurricanes and flash floods and for his other contributions to the Weather Bureau Service for southern United States. During the spring and summer of 1952 a number of very destructive tornadoes occurred in the State of Texas. The need for intensification of the application of modern electronic techniques to the problem of tornado forecasting was recognized. With Mr. Hardy's enthusiastic support and counsel, the Texas Radar Project was developed and a cooperative agreement was consummated with the Texas A&M Research Foundation whereby the Weather Bureau furnished unmodified radar equipment obtained from surplus military stocks and the Foundation with financial support from municipalities modified the equipment for installation in Weather Bureau Offices in Texas and nearby States.

This cooperative project is the first undertaking of its kind in the United States and represents a rare and outstanding contribution of major significance to the people of the United States. Not only is this the first closely knit network of radar stations set up entirely for storm detection purposes, but it is also the first example of such extensive cooperation between Federal, State and Local agencies in the history of the Weather Bureau. A biographical sketch on Mr. Hardy was published in Topics, May 1952.

#### *Reinhart C. Schmidt*

Reinhart C. Schmidt, Meteorologist in Charge of the Weather Bureau Airport Station at the Washington National Airport, received the Department's Silver Medal for Meritorious Service in recognition of his extremely competent performance during the

past thirty years including his outstanding leadership and important contributions to the science of meteorology.

Mr. Schmidt has been in charge of the Weather Bureau Office at the National Airport since July 1945. Prior to that he was in charge of the Weather Bureau Airport Station at Chicago, Illinois.

Reinhart Schmidt was born October 6, 1907 at Green Bay, Wisconsin. He graduated from the Green Bay High School in 1924. He later attended the Washington University at St. Louis, Mo. and completed the Weather Bureau Air Mass Analysis Class in 1938.

Mr. Schmidt began his Weather Bureau career at the age of seventeen with a temporary appointment to the position of messenger boy at the Weather Bureau Office in Green Bay, Wisconsin on February 4, 1924. After only a few months he was promoted to observer and began his steady advance up through the observer grades to professional status as a meteorologist in July of 1930 when he was placed in charge of the Weather Bureau Airport Station at St. Louis, Mo. He later served at the Kansas City Airport Station and the Washington National Airport as first assistant before being assigned to the Chicago Airport Station in 1938. His assignment to the Washington National Airport in 1945 followed.

#### *Jack C. Thompson*

Jack C. Thompson, Meteorologist in Charge of the Weather Bureau Airport Station, Los Angeles, California received the Silver Medal for his unusually competent performance of official duties. He has not only displayed outstanding leadership in the administration of his station but has made some valuable contributions to meteorological research and development. Prior to his current

assignment to the position of Meteorologist in Charge at Los Angeles, Mr. Thompson was a Research Meteorologist assigned to the Central Office. In this job, in addition to research projects of his own, he travelled from field station to field station assisting the forecast offices in developing research plans and programs. During this assignment he contributed a number of valuable reports and papers including the following:

"A Practical Graph for Computing Height of 700 mb. Surface Over the Ocean" in Bulletin of the American Meteorological Society - June 1948.

"Tables for Computing Height of Standard Pressure Surfaces from Aircraft Reports" in Bulletin of the American Meteorological Society - October 1949.

"Applied Research in Weather Forecasting" in Bulletin of the American Meteorological Society - June 1952.

"On the Operational Deficiencies in Categorical Weather Forecasts" in Bulletin of the American Meteorological Society - June 1952.

"Generalized Study of Precipitation Forecasting: -Pt 1: Computation of Precipitation from Fields of Moisture and Wind." in Monthly Weather Review - April 1953.

Jack C. Thompson was born October 5, 1909 at Norden, California. He graduated from the Sacramento, California High School in 1928. He later attended the Sacramento Junior College, the University of California at Berkeley, the Scripps Institute of Oceanography at La Jolla, California and the American University in Washington, D. C.

Mr. Thompson began his Weather Bureau career on February 1, 1929 as a Minor Observer at Sacramento, California. After

several promotions he transferred to San Francisco in July 1936 where he was assigned to Fire-Weather work. In October 1937 he was promoted to professional status and transferred to the Fruit-Frost Service at Pomona. In February 1944 he transferred to the Los Angeles Forecast Center at Burbank as a forecaster. He served there until August 1950 when he came to the Central Office to assume the position of Research Forecaster which immediately preceded his present assignment.

#### *Wilmer L. Thompson*

Wilmer L. Thompson, Meteorologist in Charge of the Weather Bureau Airport Station in Miami, Florida received the Meritorious Service Silver Medal in recognition of his very valuable service to the public in providing weather services for domestic and international aircraft operations. Mr. Thompson has been in charge of the Weather Bureau Airport Station in Miami since 1947 and in this capacity has been responsible for providing weather service for the many aircraft both domestic and foreign which operate out of Miami Airport. Prior to his current assignment Mr. Thompson served as Aviation Forecaster at the International Aviation Forecast Center at LaGuardia Field, New York and as senior analyst at the Weather Bureau-Air Force-Navy Analysis Center in Washington, D. C.

Wilmer L. Thompson was born on July 11, 1909 at Groesbeck, Texas. He graduated from the Groesbeck High School in 1928. He later attended the Texas Christian University at Fort Worth, the Southern Methodist University at Dallas and the University of Chicago obtaining his B.S. degree in Meteorology from the latter in

1942.

He began his Weather Bureau career as a Junior Observer at Groesbeck, Texas on June 12, 1930. He later served at Tulsa, Oklahoma; Dallas, Texas; Fort Worth, Texas; Chicago, Illinois and the Central Office before being assigned to the Forecast Office at LaGuardia.

#### *Reuben L. Frost*

Reuben L. Frost, Meteorologist in Charge of the Weather Bureau Station at Wilmington, North Carolina received the Department's Silver Medal in recognition of his outstanding work in educating the public to the potential dangers from the occasional hurricanes which move northward along the Atlantic Coast and for his efforts in establishing and maintaining an efficient emergency warning system which early on the morning of October 15, 1954 saved many lives during the passage of Hurricane Hazel.

Mr. Frost is a veteran Weather Bureau employee having started in as a Junior Observer at Portland, Oregon in 1929. His ability soon became apparent and he was promoted to meteorologist and placed in charge of the Weather Bureau Office at Fairbanks, Alaska in 1934. During the ensuing years he was in charge of the Weather Bureau Airport Station at Richmond, Virginia, and the Weather Bureau Office at Key West, Florida before coming to Wilmington in November of 1949 as Meteorologist in Charge.

Hurricane Hazel, the most severe storm to strike the Carolina coast in over a hundred years, first hit the mainland at approximately the border between North and South Carolina. It wreaked terrific havoc in the coastal communities in this area, (Myrtle Beach, Crescent Beach, Little

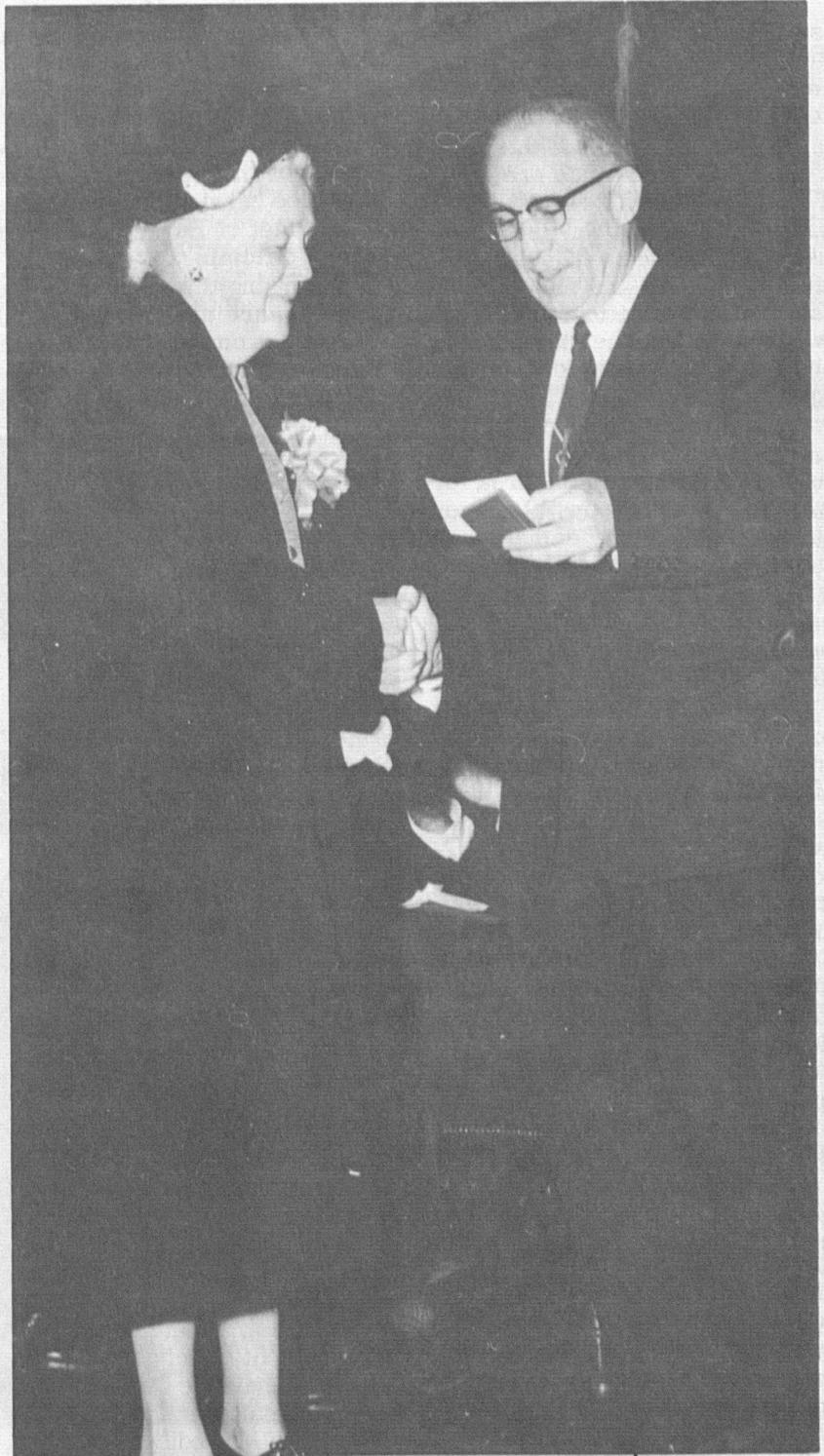
Rover, Calabash, Shallotte, Fort Caswell and Southport) and did millions of dollars worth of damage. Over sixteen hundred homes were completely destroyed and 16,000 damaged. Many small craft and coastal installations were demolished. Nineteen people lost their lives, but if it had not been for the heroic work of the Weather Bureau Storm Warning Displaymen at Myrtle Beach and Southport together with the help of the Red Cross, the Radio Stations, the Telephone Company, local and state police, and other volunteer helpers, such as Mr. F. C. Simmons of Shallotte, the toll of lives could easily have been numbered in the hundreds. A previous storm in 1893 which according to available records was not as intense caused a loss of life of over a thousand in the vicinity of Charleston, S. C.

*Jessie R. Taylor*

Jessie R. Taylor, the Weather Bureau Storm Warning Displaywoman at Southport, North Carolina remained on duty all night October 14 warning people in her locality of the approaching hurricane. Some people had to be persuaded that they should leave and in some instances it was necessary for the police to order them to evacuate. It was reported that when one family refused to leave the police knocked out the father, and then carried him and his wife and two small children off the island thus saving their lives.

Mrs. Taylor took over the task of displaywoman from her father at the time of his death in 1922. Her father had been displayman since 1906 when he took over the job from his son who had served from 1894 so that the job has been in the family for over sixty years.

In addition to her duties as displaywoman, Mrs. Taylor has been the Bureau's official Cooperative Observer at Southport since March 1900.



Mrs. Jessie R. Taylor receiving the Silver Medal from Walter Williams Under Secretary of Commerce.

### Waldo Jones

Dr. Waldo Jones, the Weather Bureau Storm Warning Displayman at Myrtle Beach, was also responsible for saving many lives by his timely and heroic efforts on that fateful night. When he was advised that the hurricane would definitely strike his area he hoisted the hurricane warning flags and then, in spite of an injury incurred when the wind blew him into a dry slough while hoisting the flags, spent the rest of the night making certain that the residents of his area were warned of the approaching danger. Largely as a result of his efforts no lives were lost in the area for which he was responsible, even though the property damage ran into the millions of dollars. Dr. Jones later furnished valuable assistance to the refugees and provided the Weather Bureau with some interesting and valuable information concerning the storm.

Dr. Jones has been the official Storm Warning Displayman at Myrtle Beach since August 1, 1946, but has received no pay for these services.

The Department's Silver Medal for Meritorious Service was awarded to Mrs. Taylor and Dr. Jones for their outstanding work in connection with this storm. They were brought to Washington in order that they might receive in person their awards at the Annual Department of Commerce Awards Ceremony held on February 23, 1955.

Dr. Jones arrived the day before and Mrs. Taylor early in the morning of the 23rd. A special ceremony was held in the Central Office on the morning of the 23rd to enable the various Weather Bureau officials to meet our displaymen and express the Bureau's appreciation for the fine work which they did. The Chief of Bureau presented each of them with a framed weather map of October 15, 1954 showing the location of

the hurricane that morning at 1:30 a.m. These maps were inscribed with the name of the recipients and a statement expressing the appreciation of the Bureau for their services. These maps also carried the signatures of the Chief of Bureau and other Bureau officials.

Following this ceremony the visitors were taken to a special luncheon at one of Washington's historic inns overlooking the Potomac River.

During their short visit our guests were interviewed by many newspaper people and articles of their exploits appeared in many of the Nation's leading newspapers. They also visited their Senators and Representatives on Capitol Hill. Mrs. Taylor had an interview with Senator Erwin of North Carolina, which was recorded on tape for use as a radio broadcast from a number of North Carolina stations. ■



After having received the Silver Medal from Secretary Williams (background) Dr. Waldo Jones is receiving from Dr. Reichelderfer his certificate for Meritorious Service.

## The 50-Year Milestone

Martin R. Hovde, Meteorologist in Charge of the Minneapolis field station and Climatologist for the State of Minnesota completed 50 years of continuous service in the Weather Bureau on September 20, 1954. His various assignments have included assistant at many stations, river, flood, local

forecasting, radio broadcasting, climatological work and Section Director for South Dakota, Wisconsin and Minnesota.

He began his Weather Bureau career as a messenger boy at Minneapolis immediately after graduating from high school. He served as assistant at Minne-

apolis; Sandusky, Ohio; Nashville, Tenn. and Erie, Pa. and was in charge of Devils Lake, N. D.; St. Paul, Minn.; Huron, S.D. and finally at Minneapolis. He assumed charge of the Minnesota Section in 1934 and hopes to serve until he reaches the mandatory retirement age next November. ■

## RETIREMENTS

### *Claude V. Brown*

CLAUDE V. BROWN, Meteorologist in Charge at Juneau, Alaska retired at the termination of February 28, 1955 after over 31 years of Government service all of which was with the Weather Bureau.

Prior to his assignment to Juneau in August 1940, Mr. Brown had been First Assistant at the Los Angeles Forecast Office in Burbank for a number of years.

Claude V. Brown was born in Osborne, Kansas on February 22, 1895. He graduated from Nooksack, Washington High School in 1914 and then after a year at the Washington State Normal School at Bellingham he entered the teaching profession. After two years of teaching he worked for the Carnation Milk Company at Everson, Washington from 1918 through 1922. He then farmed for a year before starting his Weather Bureau career as a Junior Observer at Los Angeles on January 25, 1924.

In February 1929 he was promoted to professional status and assigned to Weather Bureau Office, Red Bluff, California as Meteorologist in Charge.

In July of 1935 he returned to the Los Angeles area as a forecaster at Burbank.

Mr. Brown is returning to the States and will make his home in

Bellingham, Washington. Until he has a new address, he may be contacted at the following:

312 B Sixth Street  
Juneau, Alaska

### *Kathryn E. Cox*

KATHRYN E. COX, File Clerk in the Central Office Records Management Section, retired effective February 28, 1955 after having completed forty-two years and three months of Government service.

Miss Cox was born May 15, 1886 at West Point, New York. She attended the Post Elementary School at West Point and the Highland Falls High School at Highland Falls, New York.

She began her Government career as a postal clerk at the West Point Post Office in February 1911. She continued to work for the Postal Department at West Point until February 1941 when she left the Government service. After nearly two years in private industry during which time she came to Washington and obtained a position with Woodward and Lothrop, one of Washington's large Department stores, she returned to the Government service on December 21, 1942 as a clerk in the Maritime Commission. She

remained with the Maritime Commission in various clerical and fiscal positions until early in 1953 when as the result of reductions in force she transferred to the Weather Bureau on March 9, 1953 and was assigned to the position of File Clerk in the Records Management Section. She remained in this position until her retirement.

Miss Cox can be contacted at: #8 Redoubt Street, Highland Falls, New York

### *Paul J. Dunkle*

PAUL J. DUNKLE, Photo-Platemaker Pressman at the Weather Bureau printing plant at National Weather Records Center, Asheville, N.C. was retired for disability effective January 31, 1955, after more than 32 years of Government service all of which was with the Weather Bureau.

Mr. Dunkle was born on May 9, 1905 at Driftwood, Penna. He attended the local public schools at Olean, New York. While attending high school he started learning the sheet metal trade as a part time helper in a sheet metal plant at Olean.

He began his Government career as a messenger boy at the Weather Bureau Office in New Orleans on October 2, 1922. Two

years later he was promoted to minor observer and assigned duties in the Weather Bureau printing plant at New Orleans. As he became familiar with the printing processes his responsibilities increased and he enrolled in the local Typographical Union as an apprentice printer.

In April 1930 he passed the Civil Service examination for Printer and in September of that year was promoted to the position of Printer. He continued to serve in the New Orleans printing plant until April 1952 when he transferred along with the National Weather Records Center to Asheville, Tenn. where he continued to serve until his retirement.

Mr. Dunkle can be contacted at the following address: 2307 Marengo Street, New Orleans, Louisiana.

#### *George W. Smith*

GEORGE W. SMITH, Meteorological Aid, retired on account of disability effective January 31, 1955 after having completed fourteen years and ten months of Government service, all of which was with the Weather Bureau at Harrisburg, Penna.

Mr. Smith was born on February 6, 1905 at Allentown, Penna. where he grew up and attended the local public schools. He graduated from the Allentown High School in 1921 and received a Ph. B degree from the Muhlenberg College in 1939. He later took additional mathematics courses at Lebanon Valley College and correspondence courses in meteorology at University of Tennessee.

Prior to entering the Bureau he gained thirteen years managerial and administrative experience in a wide range of private business. During this period he worked for the Lehigh Portland Cement Co.

at Allentown, Penna.; The General Electric Co. at Philadelphia; The Allen E. Beers Co.; Allentown, Penna. and the Pennsylvania State Liquor Control Board. During most of 1929 he was a professional musician with a dance band.

He entered the Bureau as Assistant Clerk at Harrisburg, Penna. on March 25, 1940. In August 1943 he was promoted to Senior Observer and made First Assistant. He continued to serve at the Harrisburg station until his retirement.

His address is 110 South 27th Street, Camp Hill, Pennsylvania.

#### *Sara C. Thweatt*

SARA C. THWEATT, Meteorologist at Macon, Georgia, retired on account of disability at the termination of February 28, 1955, after 18 years and 2 months of Government service nearly 15 of which was with the Weather Bureau at Macon.

Sara Carstarphen Thweatt was born in Macon, Georgia on August 31, 1896. She grew up in Macon graduating from the Gresham High School in 1911. She then attended the Randolph Macon Womens College at Lynchburg, Virginia, for two years followed by two years at Wesleyan College, Macon, Georgia. She obtained her B. A. degree from the latter in the spring of 1916. Following a four months business course at a local business college in Macon, she entered private industry as a stenographer for the Security Loan and Abstract Company, Macon, Georgia in August 1917. The next 15 years were spent in similar jobs with local business firms.

She began her Government career with the Federal Emergency Relief Administration on March 11, 1933 as a payroll clerk.

She later worked for Civil Works Administration, Resettlement Administration and the Farm Security Administration before going to work for the Georgia State Employment Service in August 1938. She left this job to enter the Weather Bureau in April 1940 as a Clerk-Stenographer attached to the newly formed Hydrologic Unit of WBO, Macon.

In March 1944 when the Hydroclimatic Unit was transferred to Atlanta she remained at Macon and was promoted to Observer. On April 1, 1953 she was promoted to professional status as a meteorologist. She remained in this position until her retirement.

She may be contacted at the following address:

539 Arlington Place  
Macon, Georgia

## DEATHS

#### *Chester A. Cochran*

CHESTER A. COCHRAN, pioneer, teacher, sportsman, humanitarian, and weather observer, died September 3, 1954, at Six Shooter Canyon, Globe, Arizona.

Mr. Cochran, widely known throughout Arizona, was born in Phillipsburg, Kansas, June 21, 1889, and moved with his parents and three sisters to eastern Colorado at the age of 12. The family moved to the vicinity of Rifle, Colorado, in 1907 where he lived until 1916. He taught school in the vicinity of Grand Valley, Colorado for 5 years before moving to Ouray, Colorado in the fall of 1916 to become superintendent of the Ouray Public Schools. In 1921 he entered Western State College at Gunnison, Colorado and worked his way through a four year course in

three years. He went to Arizona in 1925 and taught for two years at Holbrook High School followed by three years as principal at Concho School in Apache County.

In the fall of 1930 the Cochran family moved to Buckeye, Arizona and Mr. Cochran joined the faculty of Buckeye Union High School where he remained for eight years. In 1939 he went to Young, Arizona as school principal and during summer vacations worked as fire lookout for Tonto National Forest at the Colcord Lookout station on the Mogollon Rim above Young. He moved to Payson in 1945 and served as principal of the Payson School until his retirement from teaching in 1950. During the four years following

his retirement he served as Aviation Observer for the Weather Bureau.

In his younger years he was devoted to scouting and was particularly active as a scout leader in the Roosevelt Council at Phoenix. He was a veteran hiker, hunter, and sportsman in the western tradition and had scaled seven of the fourteen peaks in Colorado over 12,000 feet high. His activities included time for church life—particularly many years of choir and solo singing. He was a member of the Independent Baptist Church in Payson.

Mr. Cochran's philosophy was that he would "rather wear out than rust out" and he devoted most of his life in humanity's

service. He was everybody's friend and usually when someone in the Payson area was in distress they went to Chester Cochran for help.

#### *Oscar L. Bailey*

Oscar L. Bailey, former printer at Weather Bureau Office Raleigh, died at his home in Raleigh, N. C. on February 9, 1955. Mr. Bailey, who was 84 at the time of his death, retired from the Weather Bureau December 31, 1936. An outline of his service was published in TOPICS, December 1936. He is survived by his wife. ■



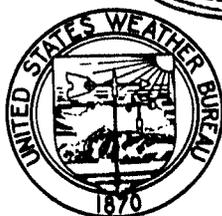
# WEATHER BUREAU

# TOPICS

APRIL  
1955

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WEATHER BUREAU TOPICS is published monthly to inform all employees about newsworthy operations and work programs of the Bureau; to give background on instructions; to carry news of new personnel assignments, retirements, deaths, and similar information about employees; and to serve as a medium through which ideas and views may be exchanged to promote efficiency and teamwork in attaining our common goals. While the contents, unless otherwise specified, reflect the Central Office viewpoint, they are not instructions but are presented for information. Opinions, discussions or comments by readers are invited; they should be marked for the attention of the Editor, TOPICS. WEATHER BUREAU TOPICS is distributed for official use only.

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## *Management-Employee Communications*

**I**N recent years "management," both in industry and government, has spent a great deal of time and money in attempting to build and keep understanding between those who do the work of organizations and those who guide it. Much energy has also gone into evaluating the results of these attempts, and the general consensus seems to be that, by and large, they do not work as well as they should.

It is obvious that, whenever more than one man works at a job, there must be communication between them or they will work at cross purposes — or, at best, in less than perfect synchronization. Until *Homo sapiens* evolves a telepathic sense or invents a machine which will let men look into each other's minds, perfect understanding will probably be impossible; lacking this method, all

communications must be by symbols, either oral, visual, or tactile. And since no two persons learn their symbols under exactly the same circumstances, or have the same set of experiences and memories with which to associate a new symbol, this kind of communication can be tricky.

Consider, for instance, the adjective "rounded." To A, it may suggest a spherical surface; B may visualize a cylinder; C may think of a curved line; and to D the word may merely mean "not sharp." An even more cogent example is taken from a recent article in *Semantics*. The writer tells of an actual case in which a woman worker was insulted — felt she had been called a horse. Her supervisor had told her and her fellow workers he considered them "his team," and this particular woman, whose background included no ex-

perience of team sports, knew the word "team" principally as meaning a team of horses.

Most misunderstandings can be cleared up when the parties to them know they exist; for this reason conversations usually are a very good means of communicating ideas, but when the written word has to be relied upon the problems exemplified by the preceding examples become magnified.

The experts who have studied communication within business and government do not fully agree on the causes for incomplete understanding between the "boss" and the "worker," but they are unanimous in one thing; unless communication is a two way matter it cannot be successful — it may even be worse than no communication at all.

## *Opportunities in Technical Divisions*

**T**HE Central Office is interested in establishing a register of employees having educational background in engineering and/or physics to be used in the selection of candidates for positions in the technical divisions, particularly in the Instrument Division and Station Facilities and Meteorological Observations Division. As time and staffing permits experimental projects

will be undertaken. For example, UHF noise measurements will be made to find out if there are any ways of measuring meteorological factors by radio waves; new instruments will necessarily have to be designed, and a wide variety of studies made to bring about advancements in radar and upper air techniques, etc. Younger men having such training and an aptitude for mechanics, physics, or elec-

tronics, are encouraged to have their names placed on this register for use as openings occur. Grade levels will be based on qualifications of those selected. Applications should be sent through channels to the Personnel Division with endorsements by supervisors, MIC's and Regional Directors, as appropriate.

## Official Attendance at Dedication Ceremonies

QUOTED below is a portion of a reply by the Chief of Bureau to a request for attendance at the dedication ceremonies of a new airport.

"We appreciate the views of field officials in matters of this kind and in your letter I detect a note of disappointment that no representative of the Central Office was present at the dedication. I believe it would be worthwhile for me to write a little about matters of this kind that present a real problem to the Central Office. Certainly, none of the officials here would willingly neglect representation at important field functions. But this is a big country that we live in and there is very much going on these days. Scarcely a week passes without a dedication or an event of this kind at which Central Office representation is urgently requested. Quite naturally each city sees its occasion as a MUST and it is simply a physical impossibility as well as a travel budget incongruity for the Central Office to be represented at all of these events.

"In recent years we have had some criticism from field officials, well intentioned, but based upon a lack of information about what the Central Office is doing. The demands upon every office here were never greater. The United States now is involved in international leadership, whether we like it or not. During the three months ending November 15th it was necessary for me to be on duty outside of Washington more than 50 percent of the time, much of this in Geneva and Rome. These trips are not a pleasure; they are work. While Mr. Little, who was Acting Chief of Bureau during October, might have flown out to

\_\_\_\_\_ Saturday afternoon and returned Sunday night, this would have placed an unreasonable demand upon his time. Other senior officials in the Central Office were working overtime trying to handle the flood of inquiries, hearings and other problems incident to budget review, hurricane investigations (both technical and political) and the multitude of other problems. Recently, we have invited some of the field officials, who have been critical about the inability

of the Central Office to do everything, to spend some time here to help us out. They have expressed amazement at the endless demands and problems which confront the Bureau these days and which the field has little opportunity to see. I am sending a copy of my reply to Mr. \_\_\_\_\_ so that he will know we were confident he could carry out the ceremonies without Central Office representation, much as one of us might wish to have been there".

## Special Weather Stories

UNUSUAL weather is always interesting news to the general public. Frequently, however, the bare facts concerning the occurrence can be highlighted and made much more interesting by the judicious use of historical data. The following article, which was written by Robert E. Lynde of the Baltimore Office for local release on January 2, 1955, is an excellent example. This article represents a fine bit of public relations effort which, if duplicated at other offices as similar occasions arise, will help in gaining prestige for the Weather Bureau not only with the public but specifically with the press and radio with whom we deal.

"If Christopher Columbus rests a wee bit easier in his grave down in the Caribbean tonight it may be because of Hurricane Alice, the first of the 1955 season which is now advancing westward across the Lesser Antilles.

"It all started back in Feb-

ruary 1493 when the good Admiral was returning home to Spain and was set upon by a storm of great violence. This blow was duly logged and early historians noted it as the first record of a hurricane.

"Later on however scholars concluded that true hurricanes do not occur in the West Indies in February and that as a matter of fact the months of January - May were considered hurricane free in that area.

"Today, almost 462 years from the date of Columbus' log entry, Hurricane Alice moved into the eastern Caribbean. Although a small storm which will probably prove of no more importance than many of the winter storms noted locally, Hurricane Alice will go down in history as the first West Indian hurricane noted in the month of January and may indicate that perhaps old Cris knew which way the wind was blowing after all."

## Cross Country on Schedule

ON Saturday, February 26, Messrs. Brotzman and Brewster left Washington in the Weather Bureau airplane for an extensive field trip which included visits to about 35 field stations. They were able to maintain their schedule throughout the entire trip mainly because "Lady Fortune" smiled on them innumerable times. (Some field personnel called this "Brewster luck.")

Examples of weather encountered en route are worth listing here because they illustrate problems faced by the private pilot.

After stops at Bristol and Knoxville, a rain shower reduced visibilities far below minimums when approaching Nashville and it appeared that an alternate airport would have to be used; however, after 30 minutes in a holding pattern conditions improved and clearance into Nashville was obtained.

Low ceilings west of Memphis delayed the Monday morning departure from that point, but a fairly rapid improvement permitted arrival at Oklahoma City almost as planned. After leaving Oklahoma City the ground speed became less and less and before reaching Amarillo they encountered some of the western real estate which the wind was carrying eastward. The take-off from Amarillo was into winds of 40-50 knots and these head winds delayed arrival into Albuquerque until after what has been called "deep twilight." Pleasant weather in New Mexico, Arizona, California and Oregon aided in maintaining scheduled visits to Winslow, Phoenix, Las Vegas, Santa Maria, San Francisco, Sacramento, Medford, Portland, Astoria, Salem and Seattle.

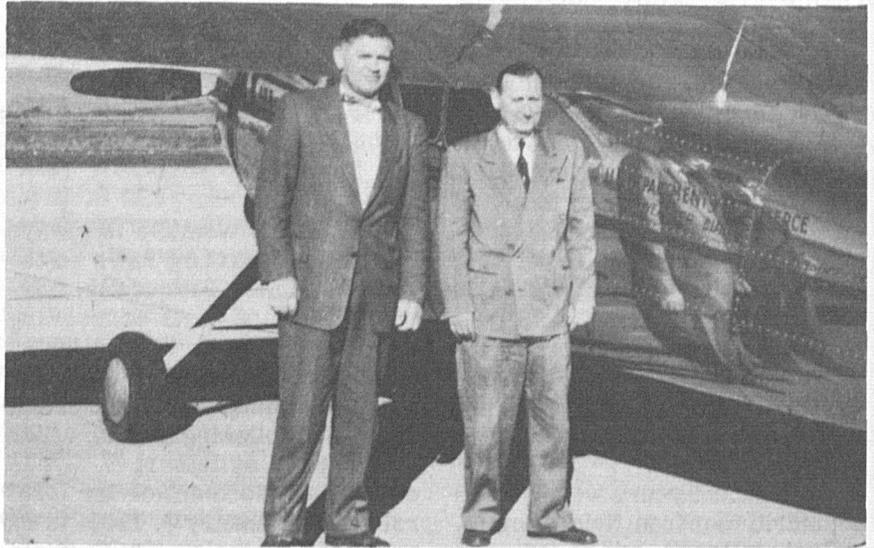
A few minutes before departure from Seattle for Spokane a special Stampede Pass report indicated improving ceilings thus

offering a possibility of taking the direct route to Spokane rather than go by way of Portland. The flight through the canyon to Stampede Pass was similar to flying in a tunnel and upon arrival at the Pass, the ceiling appeared to be zero and a 180° turn was necessary. Broken clouds in the vicinity indicated improvement and after a few minutes the ceiling rose to about 700 feet and safe passage was made from there to Spokane. The following morning Mullan Pass was reporting zero zero and it was necessary to take the alternate route over Pend Oreille Lake

is always a pleasure to flyers of small aircraft. The sudden appearance of snow showers or blowing snow added to the weather picture.

No important weather was encountered on flights from Duluth to Madison, Milwaukee, Columbus and Washington.

This trip required 55 hours of flying time; it covered approximately 7500 miles; and consumed 750 gallons of gasoline. The fastest ground speed checked was 188 miles per hour between Glasgow, Montana and Williston, North Dakota. The slowest ground



G. F. Brewster, L. E. Brotzman and WB Airplane

and down the Clark Fork River. This route also resembled flying in a tunnel and the necessity and importance of the Thompson Falls observations were well demonstrated.

Visits to Kalispell, Helena, Great Falls, Havre, Glasgow, Williston, Bismarck, Devils Lake, International Falls, and Duluth brought out varying flying weather over mountainous areas. On occasion ground speeds of over 185 miles an hour were checked which

speed checked was 45 miles per hour for a period of about 10 minutes while climbing from the Amarillo airport.

Use of the Weather Bureau airplane to visit field offices has many advantages. Mr. Brewster has responsibility for directing the field inspection program now being carried on largely by airway forecasters in their assigned forecast areas. Using his flight experience, he can discuss operational details with aviation forecasters. While

in flight he can check aviation forecasts, monitor CAA radio broadcasts, and encourage the sending of pireps. He visits aviation officials such as state directors of aviation, and his familiarity with Weather Bureau instructions makes him a target for many questions on the surface and upper air observational programs.

Mr. Brotzman or other Bureau officials who travel with Mr. Brewster have the advantage of seeing weather at first-hand and learning how field offices meet their responsibilities under

varying weather conditions. In Mr. Brotzman's case he has responsibility for program coordination which includes staffing of field stations and he is concerned with the efficient and effective operation of all field offices.

Mr. Brotzman and Mr. Brewster both reported that they were highly gratified with the manner in which the Bureau's programs are being carried out by field personnel. There are problems, to be sure, but for the most part station personnel are meeting today's demands for greatly

varying forecasting, climatological and hydrologic services most satisfactorily. There is definite evidence that the Bureau has grown professionally; MICs are alert to the needs of their communities; and personnel are doing their utmost to help the Bureau through rather trying times.

Such reports stimulate Central Office personnel to greater efforts to serve the field. A general feeling of optimism has replaced the pessimism of the past few years and the outlook for the future is most encouraging.

### *A Flying Farmer Speaks*

**T**HE following article is quoted from the Flying Farmer News Letter:

"You might think there would be nothing nice to write about a group of meteorologists, but we have wanted to say something about this for a long time and these guys deserve it even if it does come from me, good and bad. The U. S. Weather Bureau and the staff of highly trained people are constantly sticking their necks out to help the private pilot stay out of trouble. Many of us refuse to stop long enough to figure the angles 'and curves' these fellows have to contend with day and night. Sounds like fun doesn't it? Curves and figures and trying to figure the angle of attack, but these boys are pulling their hair out (did you ever see one of them that wasn't bald

headed?) trying to keep us farmers and pilots happy. The endless study of charts, watching balloons disappear in the clouds, answering hundreds of telephone calls, the constant clatter of the teletype is only a small part of the routine of this madhouse (or is it dog house?). We use the word routine reservedly because actually the only thing you can count on around there is something happening that isn't supposed to. This is where the curves come in, those fronts that were stationary but for no good reason decided to move, and fast. 1500 foot ceilings that dropped to zero just because you were trying to get home, or that beautiful harmless looking thunderhead that turned into an anvil-head and the fighterist demon a pilot ever stuck his nose into. It

seems they will throw you a curve every time. Actually these great guys are one or two jumps ahead of the weather a very large percentage of the time, even though us fly people are constantly getting in a jam with the weather, partly because we forget there is a little device invented by Mr. Marconi (or was it the Russians) that can be used to get the latest weather information, and largely because we don't want to believe what we are told, so on we go to find out the hard way. Look at it this way, why should these fellows worry about us if we don't? We do not think there is a Flying Farmer that doesn't have the deepest respect for the weather bureau, but well, dog-gone it if we couldn't say things about you guys and the weather, there would be no way to start a conversation."

### *New Radiosonde Record*

**T**HE RRC reports that WBAS, Santa Maria, Calif., made 411 consecutive radiosonde releases during the period from

June 18, 1954 through January 9, 1955 without a second release. This is the all-time record for the use of reconditioned radio-

sondes, exceeding by 63 the former record established by WBAS, Grand Junction, Colorado. Congratulations, Santa Maria, for such an excellent attainment!

## Report on C. O. Familiarization

ONE of the requirements of Central Office Familiarization Program is a weekly report giving frank reactions to the mass of information given in an extremely short time. This report seemed to say quite well what most of the participants in the program tell us informally, in one way or another.

"Now that the six-weeks' detail to the Central Office has been completed an evaluation of the program is in order.

"I had expected to learn a lot during the stay and that was the case. Probably the most valuable single aspect of the program had to do with meeting the people who constitute the Central Office. There is no doubt as to the value of knowing the people who are responsible for various Weather Bureau functions. They each have special problems which come to light while discussing their jobs. Knowing the other man's problems usually explains why he acts as he does in discharging his responsibilities.

"Although I do not claim a very deep understanding of the many forces from higher levels of government which come to bear upon the Weather Bureau, it was possible for me to see that the Bureau must operate within a fairly rigid framework. Thus it is possible now for me to understand that the Weather Bureau, or any government agency, is obliged to satisfy many hidden requirements in addition to its primary function. This knowledge in no way lessens my strong belief in the fundamental aspects of meteorology, especially forecasting. However, it makes clear that our agency is indeed part of the United States Government wherein we enjoy certain freedoms but cannot escape being part of

the system. The intelligent Weather Bureau employee should not waste a lot of his time criticizing a system which cannot be quickly changed, but rather should seek ways to do his best in spite of the limitations.

"Another very valuable aspect of the program was the exchange of ideas with a wide range of Central Office people. Naturally, those of us who work in the field develop strong opinions based upon our own field experiences. The reactions obtained by presenting some of those ideas to many people in the Central Office gave me an insight into their aims and attitudes. It is agreed, I am sure, that a superior national weather service is desired by everyone. It can hardly be superior unless the administrators and technicians work together toward the common goal rather than one against the other.

"There may be many good ways of conducting a familiarization program. The procedure followed in this case has been good. First and foremost, Mr. \_\_\_\_\_ and I have been treated as adults capable of a responsible account of ourselves. The program was outlined to us in a general way, but it was also up to us to make something of it. The people we contacted had an interest in making our visit worthwhile. I would like to mention Mr. \_\_\_\_\_ for his help in selecting typical problems in the SR&F Division. Mr. \_\_\_\_\_ steered us into several night meetings of the Society for the Advancement of Management and otherwise took a genuine interest in making the stay worthwhile. Mr. \_\_\_\_\_, of course, was always anxious to help us along. In fact, everyone whom we met was most courteous and helpful.

"It would be desirable for as many field employees as possible to be able to see the Central Office at work. That will help create a better attitude in the Bureau through understanding.

"I wish to express sincere thanks to each and every person who has helped make the program a success. This includes those persons at my home station who had to share the night work which rightfully would have been mine."

This program will be continued, and additional field employees will be brought into the Central Office for familiarization from time to time as funds permit.

## News Releases

MANY suggestions are received from time to time and from various sources regarding ways the Weather Bureau could improve its public relations. One of the ever present suggestions is more and more varied newspaper articles about the Bureau and what it is doing. Mr. E. J. Rebman of WBO Walla Walla, Washington reports how he did something about it. He says, "It took altogether perhaps one hour and a half to adapt the September 1954 article in Topics on 'Ideas for Broadcasts and Speeches' for a form suitable for printing in the local newspaper. Essentially all it meant was writing an introductory paragraph, eliminating 'Announcer', as well as the Messrs. Brown and Black, and proceeding practically verbatim. The varying being largely in the use of simpler language in a few spots". Other material he had used for news releases included special map-back articles, semi-monthly and weekly means data, and monthly climatological summaries highlighted with special seasonal comparisons.

## *Do You Use The W. B. Manual?*

**C**OMMENTS continue to reach the Central Office through questionnaires and Field Trip Reports regarding the adequacy and usefulness of the Weather Bureau Manual. One of the more common criticisms is that the Manual does not give the MIC's sufficient technical guidance. These comments are believed to be directed toward Volume III which deals with the service operations of field stations and is not intended to give technical guidance. A volume on the technical phases of the field service is planned to complete the set of instructional manuals.

A review of the various chapters leaves the impression that Volume III of the Manual is very useful and that MIC's should have little trouble in using it. Should this not be the case, comments, criticisms, and suggestions anyone may have will be appreciated.

During the review a couple of questions that were currently receiving attention were looked up in the Manual for examples as to how it could be used. They are discussed below:

The MIC of a small field station told a Central Office visitor that he was confused about his responsibility for the local forecasts. A look at the table of contents for the Manual lists Chapter B-10 for Basic Forecast Authorities with paragraph B-1001 giving general responsibility and B-1002 the limitations on forecast authorities. Paragraph B-1001 in effect says that it is the responsibility of the MIC to see that the weather service needs of his community are met; and particularly in cases of emergency he must take whatever action appears necessary to protect life and property. Para-

graph B-1002 deals particularly with the management and assignment of personnel whose job descriptions include responsibility for forecasting duties. Chapter III-B-12 follows with a detailed discussion of the local forecast program. The Central Office would appreciate receiving any points or problems that are not covered in this chapter so that they can be included in a revision.

The problem that apparently was bothering the local MIC in the example being cited was the use of guidance material. It has been very difficult to communicate to field personnel the desired perspective on original versus adaptive forecasts and to delineate between the local MIC's responsibility for furnishing (distributing) forecasts to his community and his responsibility for originating those forecasts. It is very definitely the responsibility of the local MIC to develop operational plans that insure distribution of necessary forecasts and warnings to his assigned area and to determine that these forecasts and warnings are adapted to the peculiar requirements of the community; but it is just as definitely expected that he and his staff will make the most effective use possible of the guidance material received from forecast centers and NWAC. In other words, local forecasting is an "adaptive" process and must of necessity be that way. Funds will not permit, and certainly it would not be economically sound, to staff each local office with sufficient personnel to make the original analyses and prognoses for original forecasting.

The second example deals with the clearance for publication of

articles by Bureau employees. This developed from a discussion of the recommendation of the George Committee that personnel of the Weather Bureau should be encouraged to submit papers to the regular scientific and technical journals directly as individuals. Chapter III-D-43 of the Manual deals with clearance of texts for talks, broadcasts and publication. Paragraph D-4301 explains the reasons for requiring official clearance for publication of articles and the mutual benefits of this requirement are believed to be readily apparent. Paragraph D-4302 lists the factors that make clearance desirable and paragraph D-4303 the exceptions. Procedures for obtaining clearance are described in paragraph D-4304. Nothing in these references is intended to discourage or even encumber the submission of papers and articles by Weather Bureau personnel to any media of publication. If there are any points that seem restrictive or objectionable, comments or suggestions would certainly be appreciated.

## *Vacation Schedules*

**A**LL employees and supervisors are reminded that vacation schedules should be planned and scheduled early in the year so that every employee can avoid losing leave at the end of the year and can take a reasonably long and relaxing vacation. (See also Weather Bureau Manual Chapter I-D-55, page 9.)

## Arctic Weather Stations

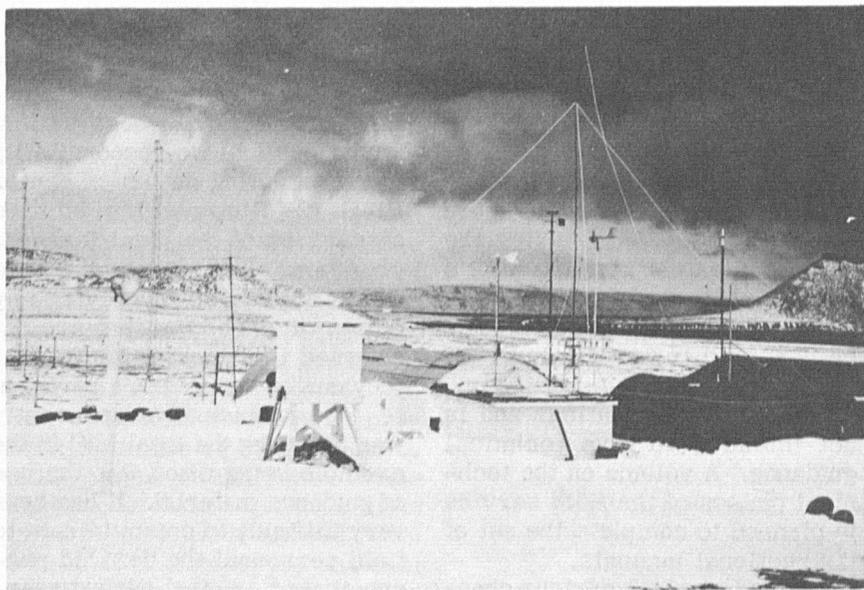
THE following article was prepared by the Arctic Operations Project of the Weather Bureau for the British Royal Meteorological Society Publication, WEATHER. Since it gives some of the background and history of our Arctic Operations, it is reprinted here for general information.

The Arctic regions for many years presented a challenge to meteorologists. All areas of Canada and the United States are affected by weather which originates over the Polar Sea. In the west, cold air masses spill over the Rocky Mountains and reach as far as California, producing dry weather with consequent danger of forest fires. In the eastern United States blizzards and cold waves result from air-mass movements originating in the high Arctic latitudes. Atlantic Ocean shipping and air traffic are also vitally concerned with storm areas which move down from the Arctic.

To provide weather data which would enable forecasters to follow the movements of atmospheric disturbances coming from the Arctic, thus paving the way for more accurate weather predictions in all areas affected by movement of the polar air-masses, Canada and the United States agreed in 1947 to the joint establishment of a chain of weather stations in the remote Arctic regions of Canada. In 1946, a similar agreement had been reached by the United States with the Danish Government for a station at Thule, Greenland.

The first station to be established was at Thule, where Peary fitted out his polar expedition. Installed in 1946 with the aid of the United States Navy, which transported supplies and equipment from America, and the United States Air Force, which built an airstrip near the weather station, Thule has since served as a main station, or staging base, from which supplies are forwarded to two joint Canadian-United States stations, Eureka and Alert.

The second station in the network was Eureka, located on Slidre Fjord, on the west coast of Ellesmere Island in the North West Territories of Canada, just 600 mi from the North Pole. In April 1947, men and supplies were transported by air from Thule and landings were accomplished on approximately 80 in. of bay ice covered with 6 to 8 in. of snow.



Instrument shelters at Thule, Greenland, 1949, prior to the installation of the USAF Air Base. Building behind shelter is Met Office and Communications Center.

The year 1947 also saw the installation, once again by sea, of Resolute Bay on Cornwallis Island, destined to become a second main station supplying the western outposts of the weather network; Isachsen on Ellef Ringnes Island and Mould Bay on Prince Patrick Island, were established in 1948, followed in 1950 by Alert on the northern tip of Ellesmere Island, near the point where Peary wintered prior to his expedition to the Pole.

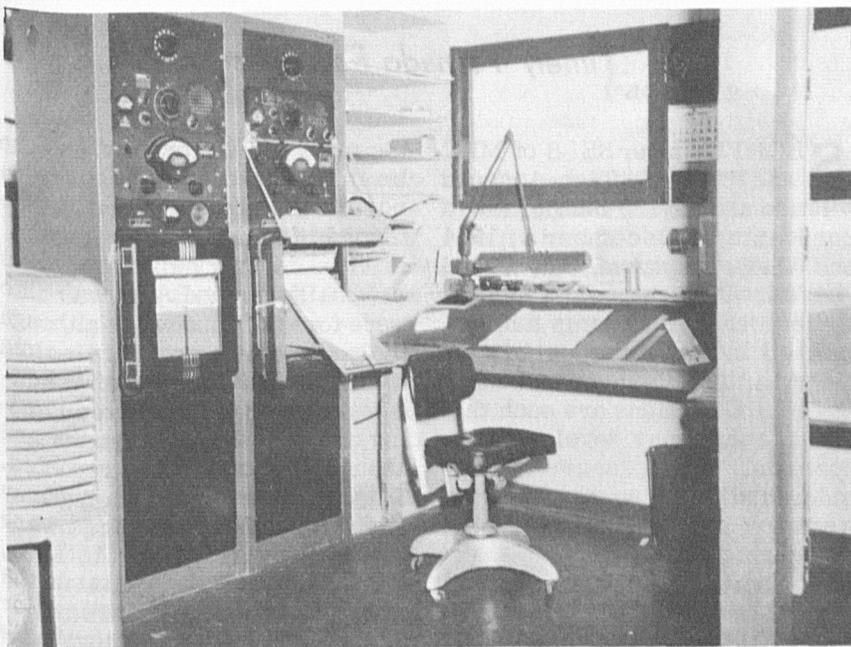
During the spring and summer of 1952, Thule served as a staging centre for a north-east Greenland station, Nord. Although Nord is a Danish weather station, the United States Weather Bureau participated in many phases of its operation.

Each man at these remote stations has a specific duty to perform. There is, for example, a cook, a mechanic, and radio operators and weather observers; station chores are shared by all regardless of rank. During supply periods, all hands are required to assist in the handling of stores in addition to carrying on their normal duties.

Fire and water, two definite opposites, are of prime concern at the Arctic weather outposts; fire, because of the isolation of the stations, and water, because of the difficulty in getting it. The threat of fire is met by mounting a

continuous fire watch, and by having stoves and heaters burning only where there is someone nearby to keep watch. Emergency caches of food, clothing and field-type radios to be used in the event of power failure are put aside. Water is obtained from nearby lakes or, in the case of Eureka, from icebergs which are trapped in the fall when Slidre Fjord freezes. Since the lakes freeze to a depth of up to 7½ ft, holes are cut in the new ice just after freeze-up and long pipes are frozen vertically into place. The pipes are filled with petrol which displaces the water and will not freeze; when water is wanted, the petrol is pumped out of the pipes, and the sled-mounted water tanks are then filled with lake water and towed by tractor to the station.

Data recorded at the various weather stations during a twenty-four hour period consist of two radiosonde or rawinsonde ascents, two pilot balloons, three-hourly surface observations and solar radiation recordings. In addition, ice thickness measurements, atmospheric observations and ice temperature recordings are made. At Resolute, soil temperature readings are taken to a depth of 453 ft (650 ft from August 1953). Occasionally, during the summer months, an archaeologist, a botanist, or an entomologist carries out scientific studies.



Upper air section of Met Office at Mould Bay, 1954.

The record low temperature for all stations was established at Mould Bay in December 1948, when the temperature fell to  $-64.3^{\circ}\text{F}$ . In contrast, a maximum temperature of  $66.8^{\circ}\text{F}$  was reached at Eureka in July 1950. Wind speeds reaching as high as 87 mph have been experienced at Thule, Greenland, during which time significant rises in temperature have been noted in a matter of a few hours. Windstorms of such intensity have been infrequent at the stations located in the Canadian archipelago, but temperatures at those stations are, generally, considerably lower than those at Thule.

Contrary to popular belief, at the latitudes of the weather stations, the Arctic night is not six months long. The sun disappears from the horizon for a period of 3 to  $3\frac{1}{2}$  months, with up to 2 months of Arctic darkness, depending on the latitude of the stations. During the summer, the sun is seen twenty-four hours a day for a like period. The interim periods during the spring and autumn experience usual sunrise and sunset cycles with rather extended twilight conditions.

For supply purposes the year starts in July when a Task Group, usually consisting of two icebreakers, a transport and a small tanker, proceed first to Thule, where supplies for Thule, Eureka and Alert are deposited. During a year when ice conditions are favorable, the Eureka and Alert cargo may be transferred to icebreakers and delivered in

that manner. Upon completion of the Thule supply expedition, units of the Task Group then proceed to Resolute and deliver supplies and equipment for the Isachsen, Mould Bay and Resolute stations, all supplies being stored at Resolute.

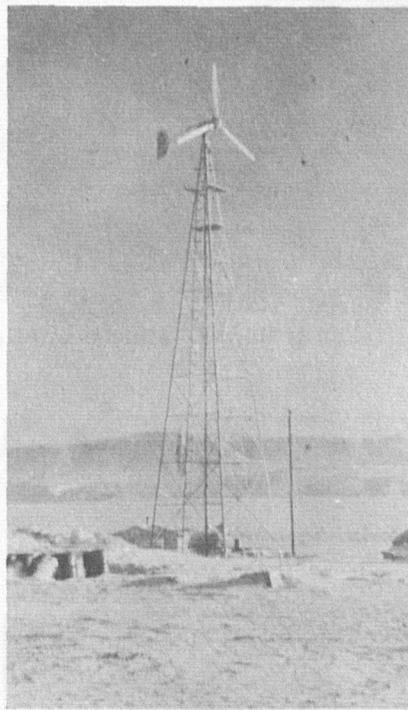
In late September or early October, more cargo is taken by air from Resolute and Thule to the various outpost stations. The Royal Canadian Air Force has the responsibility for the air supply of all the joint Canadian-United States Arctic stations; however, the United States Air Force lends a hand in the case of Eureka and Alert. During this period, personnel who have completed their contracts are relieved and technicians visit those stations which may require their services. After the autumn airlift, the stations settle down for the long winter night. During this period all outside activities are curtailed with the exception of those necessary for the functioning of the stations. Leisure time is spent indoors reading, listening to broadcast radio and gramophone records and amateur radio contacts with families and friends. This is a critical period during which time the good and bad in men come to the surface and men who are not extremely well-balanced may become moody, vindictive, or worse. Amateur radio is considered a blessing by men in these remote areas since it enables them to correspond with friends and loved ones thousands of miles away, during a time when mail deliveries are

months apart.

In contrast to the dark period, the Arctic summer is a time of great activity. Shortly after the return of the sun, preparations for the spring airlift commence. The airstrips are cleared of accumulated snow after days of work, and supplies are packed ready for shipment south.

The final phase of the supply period, spring airlift, usually starts in mid-April. At this time, an outpost station may receive upwards of 100 tons of the supplies and equipment required to maintain the station for a year. Tractors are delivered in packaged units and reassembled under the watchful eyes of factory technicians. Men are exchanged and the airstrip construction workmen, who will spend the summer improving the airstrip, move in and establish their headquarters. During this period, representatives of the weather services' central offices visit the stations.

After the airlift, the stations settle down to routine duty, with spare time devoted to the stowage of stores, installation of new machinery, instruction of newcomers and numerous other duties involved in the general rehabilitation of the camp. The airstrip construction workers, while awaiting the beginning



Eureka weather station in the spring.

of the thaw, get busy preparing their equipment. Buildings have their faces brightened with brilliant coats of international orange, the standard colour used for painting all permanent buildings, and ideas for improvements, formulated during the winter night, are put into being.

During the summer months, wild life is abundant at most of the Arctic stations; white fox, seals, walrus, lemmings, caribou, muskox, wolves and many species of birds can be seen. Arctic hare may also be found in great numbers in some areas; when the Arctic hare is frightened, he will often run erect on his hind legs at great speed. Polar bears have visited the stations on occasion, usually during the winter months when food is not plentiful. Since the North West Territories constitute a tremendous game preserve, the Canadian Government appoints a game warden at each station in Canada whose job it is to uphold the law preventing killing of any animal except in self-defense.

This, then, is the friendly Arctic, the scene of three nations striving toward a common goal. We of the weather services feel proud to have played a part in this successful experiment in international cooperation.



Eureka station, photograph taken from the bay ice.



Mould Bay station.

## Timely Tornado Forecasts

**S**HORTLY after SELS of MKC and FAWS of ATL had issued tornado and severe thunderstorm forecasts on December 5, 1954 the WBAS, Columbus, Ga., issued the following forecast: "Isolated severe thunderstorms are expected in E. Alabama and W. Georgia this afternoon and early tonight. Conditions are such that one of these may develop into a tornado. While danger is considered slight, a watch should be kept for unusually threatening thunderstorm clouds."

Confirmed tornadoes and severe thunderstorms occurred that afternoon throughout the border region of Alabama and Georgia. Two persons were killed; many were injured; houses were demolished. Hail fell, larger than marbles. At Columbus gusts to 70 mph were reported.

Mr. Thomas J. Floyd, MIC, Columbus, reported: "This was

the most timely forecast and the best verified by actual storm occurrence for this area since tornado forecasts were begun."

The February 1, 1955 storms in Mississippi and Arkansas also were forecast in advance although the less intense storms in Alabama were not. The most serious damage occurred at Commerce Landing, Miss., where 23 deaths and about 125 injuries were reported. This storm swept down a highway along which frame dwellings were situated. Mr. Albert L. King, MIC, Memphis, said that if the storm had moved 1/2 mile N or S of the line it took, it is probable no fatalities or injuries would have occurred. However, due to the tornado forecast, highway patrols and the Red Cross were able to rush assistance to the stricken inhabitants much more effectively.

## State-Operated Navigational Facilities

**A**S a part of an extensive plan for State-owned and -operated navigational facilities, the State of Nebraska has recently established new weather-observing stations at Ainsworth and Alliance, Nebraska. Hourly observations from these stations are distributed on a State teletypewriter system, and are also relayed to Service A of the national system. The observers at these stations have been certificated by the Weather Bureau, and Weather Bureau observing equipment is being used. Weather Bureau personnel at Norfolk, Nebraska, are

also participating in the program by operating the air-ground voice communications channel of the State's new omni-range navigational facility at that location. Mr. Stapowich, MIC at Omaha, has been field coordinator for meteorological aspects of the program.

The program is especially noteworthy because it is the most extensive service of its kind to be operated by a State. When the State's plans are fully implemented, a pilot flying in Nebraska will always be within 50 miles of a weather-reporting facility.

## Facsimile

**T**HE long-awaited continuous facsimile recorders are becoming available and beginning with April they will be installed in Weather Bureau offices now having facsimile at the rate of 4 to 6 per month, according to a schedule worked out by the contractor. Spare RG recorders will remain and may be hooked up with continuous recorders in such manner as to permit simultaneous recordings at stations where duplicate copies are required. The automatic start and transfer units will be withdrawn when the new installations are made.

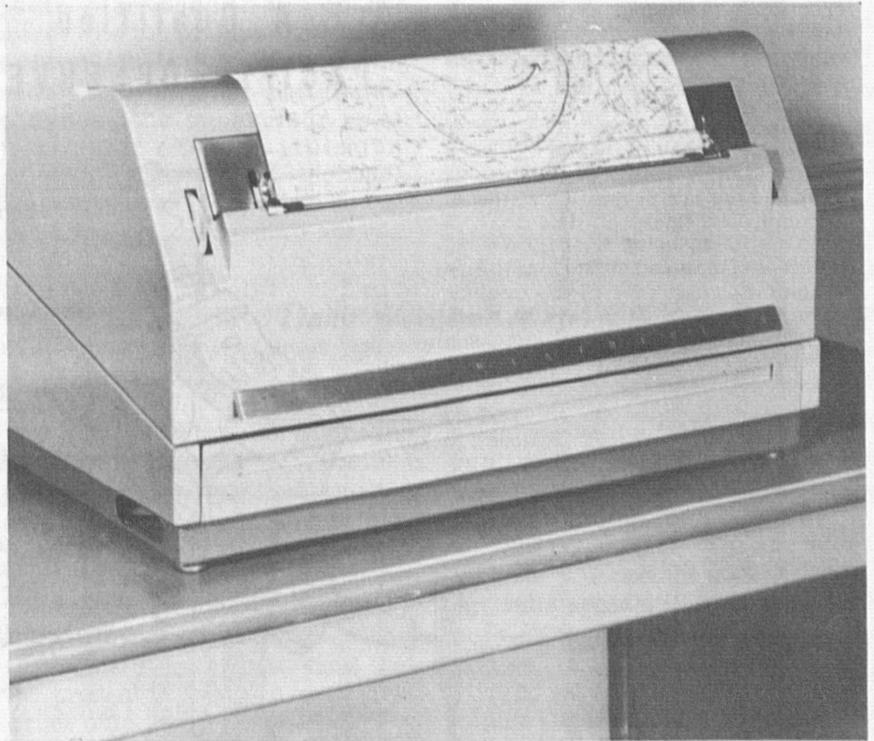
The TFC continuous recorders have been in operation at WBO New York and WBAS Washington for some time and results have been very promising. Recently trial installations of recorders manufactured by the Muirhead Instrument Company of Kent, England, were made at WBAS San Francisco and the Central Office and are now performing satisfactorily. A continuous recorder manufactured by the Alden Electronic and Impulse Recording Equipment Company of Westboro, Mass., is on trial at WBAS Boston. These trial installations are for comparison purposes.

Dimensions of the Times Facsimile Recorder (Model RJ-2) are 29 1/2 x 21 3/4 x 17" high. Its weight is 140 lbs. A suggested installation is to mount the RJ-2 recorder on a table of appropriate size with the RG recorder mounted on the crosspiece beneath. Stations concerned should arrange through their Regional Offices to have suitable tables available in advance of scheduled installation dates. Rack mountings will not be feasible.

Experience at the Central

Office indicates that the continuous recorder will be a distinct help since a stand-by to change sheets at busy periods will no longer be necessary. On the other hand it is expected that stations will limit recordings to those

actually required for forecast or service use so as to avoid any material increase in paper costs. This will involve some stand-by as unfortunately no time clock is presently available for use with these recorders.



RJ-2 Facsimile Recorder

## Supervising Tool

**T**HE Supervising Observer at Santa Maria, California has kept a running graph of raob errors made on the station during each 10-day period over the past two years. He reports that the graph has many uses, the principal one being the early detection of an upward trend in errors. Before

the graph idea was adopted, the raob error letters were initialed and filed, and sometimes an upward trend was not readily apparent. Now, any upward tendency is detected much sooner and corrective action can be initiated at an earlier date.

## Pacific Fashion Parade

WE wonder if there is any connection between the paragraph quoted below, which has been taken from the Wake Island item of the "Pacific Observer", and the cartoon reproduced herewith which was the

only contribution from WBAS, Hilo to the same publication.

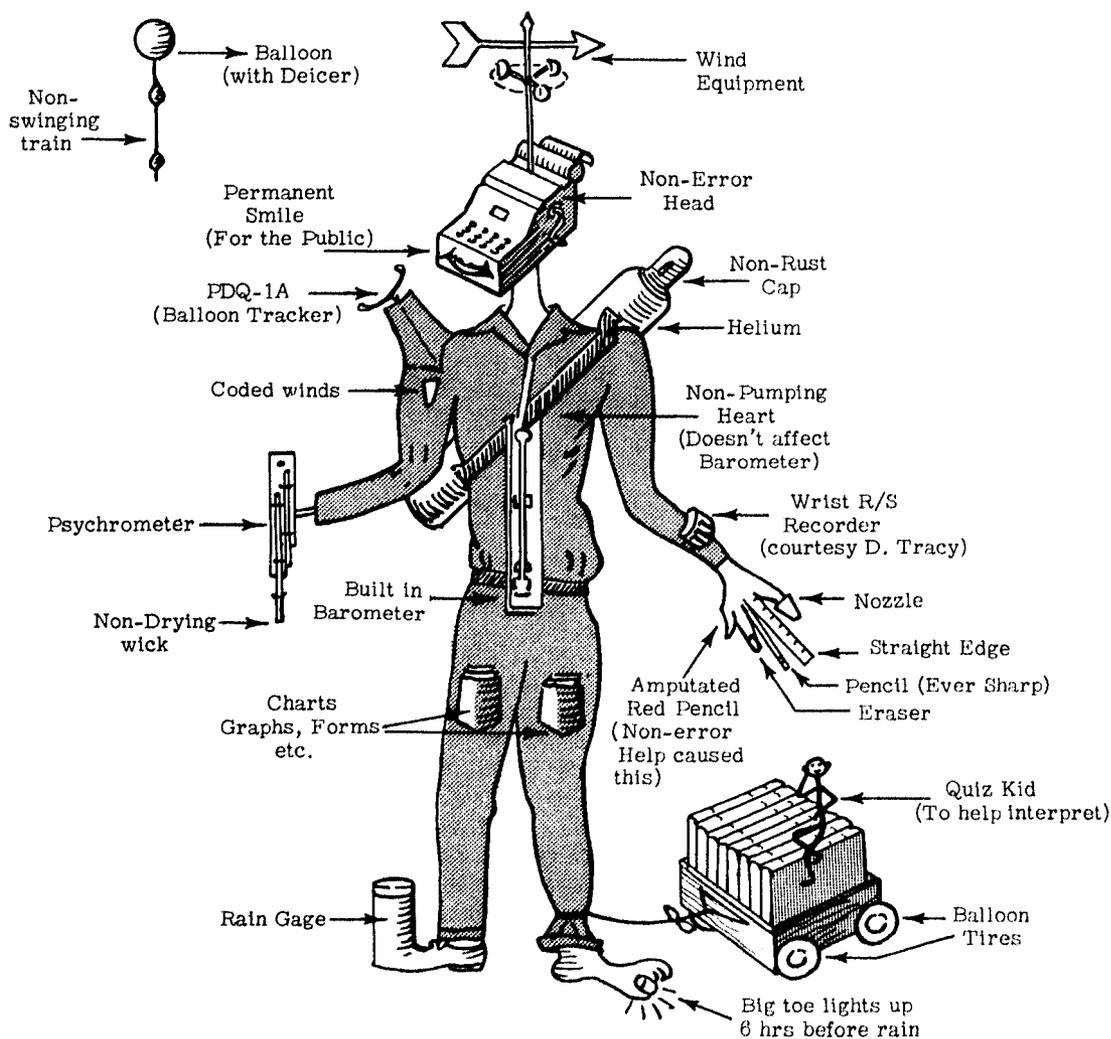
"We are rapidly becoming the best dressed Weather Bureau office in the Pacific. A rash of literature from Hong Kong tailoring establishments has hit the

island and everyone is sending off for tailor-made suits, sports coats and slacks. The irresponsible Moe Burrows is the most, a page out of Esquire, without shoes."

WBAS, Hilo

### A Qualified PACIFIC OBSERVER

By Howard Tatum



## Employees Continue Studies

**T**HE semi-annual report from Pennsylvania State University, listing Weather Bureau personnel currently enrolled in correspondence study, shows a continued desire for increased meteorological education. The total number of registrations is 402 and of this total: 115 have completed one or more courses during the last six months (this includes 92 GS-7's and below, 9 GS-9's, 10 GS-11's, and 4 GS-12's); 287 have completed 1 to 23 lessons during the last six months (this includes 237 GS-7's and below, 27 GS-9's, 19 GS-11's, and 4 GS-12's); 40 have not submitted a lesson during the last six months. The records show further that Dale R. Harris has completed 24 semester hours credit in meteorology since the program began in 1951 and Walter F. Rumbaugh 21 credits. Five employees have earned 18 semester hours, seventeen have earned 15 semester hours and three hundred ninety 3 to 12 semester hours.

Word comes from Region IV that Mr. Roy E. Heissner, WBAS Los Angeles, has completed 15 units of college work in one semester. He did this while being assigned to full-time duty as a meteorological aid and made three A's and two B's. Perhaps there are other cases that are equally commendable, but they have not been brought to our attention.

Mr. Milton L. Blanc of the SR&F Division of the Central Office is taking advantage of the expanded policy on leave without pay mentioned in TOPICS (April 1954). He is enrolled in courses in Agronomy and related subjects at the University of Maryland. Mr. Blanc has earned straight A's in the first semester (six courses).

Congratulations to both gentlemen on their splendid work.

### Course in Supervision

Ten supervisors in the Climatological Services Division completed a twenty-hour course in Basic Supervision on March 4, 1955. The course was given by Mr. Carlin of the Central Office at Dr. Landsberg's request. Subjects discussed in the course were: the job of supervising; the supervisor as a leader; getting along with others; rating employees; the supervisor as an instructor; effective utilization of employees; improving work

methods; conducting meetings; and the supervisor's part in management.

### Advanced Meteorology Course

A correspondence course in Modern Methods of Meteorological Analysis and Prediction is being prepared at the Central Office. If all goes according to schedule, this graduate level course will be ready by the end of this year. This is all we can say about it now, but more news about the course will be printed in TOPICS from time to time.

## Daily Weather Map

**F**ROM time to time, employee suggestions are received proposing to discontinue mailing the Washington Daily Weather Map to those field offices expressing a wish for such discontinuance. This possibility has been rather thoroughly explored at the Central Office and it is the consensus that the present distribution to all first order offices should continue. The following paragraphs give the principal reasons for such thinking.

Present mailing to first order stations uses a master address list which is also used for other mailings. If these suggestions were adopted, a special list of plates would be required for this one purpose, with attendant extra cost of original preparation, maintenance and replacement. Most of the suggestions stress that field offices wish to continue receiving the special map back articles. This would require use of a different list on those days

when map back articles were being run, adding to the difficulty of meeting the very tight deadlines involved in this job.

The potential savings are quite modest. The postage cost at present runs about 1/8 of a cent per copy. The printing cost (for extra copies) is less than 2 cents including paper, etc. Assuming 300 copies per year saving (this allows for mailing special articles) the monetary savings per station would be about \$6.00. This might be substantially reduced, if not entirely cancelled, by the special handling and additional mailing list involved. From a purely business point of view, it appears advisable to continue routine delivery to all stations, even though some of them do not have a strong requirement.

In addition, there are several other rather important reasons for routine delivery to all offices. The map is useful in discussing basic meteorological matters

with visitors, school classes, etc., especially since many offices now plot only limited area maps or use facsimile charts exclusively. It provides a "hand out" to these same groups. New employees find the map helpful (it carries upper air, North American analyses, temperature change and precipitation areas) as a part of their on-station training. Many stations use the charts in preparing case studies for local forecast improvement. These and other uses support a routine distribution and make the printed map an extremely useful item at a very nominal cost.

### *Three-A-Day Forecasts*

FOR several years prior to 1953 a number of Weather Bureau officials had advocated a reduction from four to two forecasts per day. This proposal gained momentum late in 1953 when the Advisory Committee on Weather Services made a similar recommendation. A subsequent survey of the problem indicated that a reduction to two forecasts per day might result in appreciable deterioration of public forecast service. However, since there was such a strong fraction of opinion which favored some reduction it was decided to eliminate the least important of the four daily forecasts, the one then issued at 2304E. Implementation was set for October 1, 1954 but before that date arrived such strong protests were received from the press and other interests that the Department suggested that the Weather Bureau should cancel the plan. Instructions for implementing the reduction to three forecasts per day were therefore cancelled.

Following this a reevaluation of the proposal was made and the decision has been reached to continue four regular forecasts per day indefinitely.

## *Awards*

### *Jerome Namias*

AT the dinner associated with the 35th Annual Business Meeting and 135th Annual Meeting of the American Meteorological Society, held in New York City during January, Jerome Namias, Chief of the Extended Forecast Section, was presented with an award for extraordinary scientific accomplishment "for his contributions to, and stimulation of, research in the principles and application of extended and long-range forecasting techniques."

### *H. B. Wobus*

H. B. WOBUS, formerly a Weather Bureau Meteorologist in the WBAN Analysis Center,

has been chosen for the 1954 Robert M. Losey Award "in recognition of outstanding contributions to the science of meteorology as applied to aeronautics."

The award certificate and an honorarium of \$200 were presented to Mr. Wobus January 24, 1955, at the Institute of Aeronautical Science's Annual Honors Night Dinner in the Sheraton Astor Hotel, New York City.

Mr. Wobus is credited with developing new techniques in weather analysis and new methods of clearly explaining meteorological conditions to flight personnel.

Mr. Wobus transferred from the Weather Bureau to the Navy Department January 5, 1952 and is now Meteorologist of Project AROWA (Applied Research; Operational Weather Analysis) operated by the U. S. Navy Fleet Weather Central at Norfolk, Va.

## **NEW METEOROLOGISTS IN CHARGE**

### *WBAS Oklahoma City*

JOHN W. HAMILTON has been assigned as Meteorologist in Charge of the newly established State Forecast Center at Oklahoma City. He is 47 years of age, entered the Weather Bureau April 16, 1940 and served at Dallas and San Antonio until November 1942 when he was awarded a Weather Bureau scholarship in meteorology at the University of Chicago. After completion of graduate work at the university he was assigned to Fort Worth WBAS as Aviation Forecaster, and in January 1948 was transferred to the War Department as Supervising Forecaster in charge of Office of Military Government U. S., in Munich, Germany. He returned to the Weather Bureau in July 1949 as Meteorologist in Charge of the WBO at Goodland, Kansas. In December 1951 he was transferred to Des Moines as Chief Airport Meteorologist where he served until his recent assign-

ment to Oklahoma City. Mr. Hamilton was selected for this important post because of the outstanding ability he has displayed in leading and developing forecast programs in the various assignments he has held.

### *WBAS Burlington*

ROBERT E. HELBUSH reported for duty at Burlington, Vt. on March 3 to assume the duties of the MIC of the station. After majoring in mathematics in college, Mr. Helbush was assigned to the Air Force Meteorology "A" Course at UCLA and the University of Chicago for one year, after which he served as a Weather Officer. He was appointed by the Weather Bureau in February 1947 and has served in the following assignments: Intern Trainee; Fire-Weather Forecaster, Olympia, Wash.; Extended Forecast Section, WBAN and C&HS Division in Washington; and Principal Assistant, WBO, Asheville, N. C.

## RETIREMENTS

### *James W. Milligan*

JAMES W. MILLIGAN, Principal Assistant at Corpus Christi, Texas, retired on account of disability effective February 1, 1955.

Mr. Milligan has been in poor health since last fall and has been on extended leave since that time.

Mr. Milligan was born on January 8, 1905 at Durant, Oklahoma. He grew up in Oklahoma, graduating from the Shawnee, Oklahoma High School in 1922. He then attended the University of Oklahoma for two and a half years before entering private business. He later added to his formal education at Central State Teachers College, Florida Southern University, The Department of Agriculture Graduate School and the University of Florida.

During the period from 1925 to 1930 he worked in a drugstore, a bank, and in the real estate and insurance business.

He entered the Weather Bureau as a Junior Observer at Brownsville, Texas on July 15, 1930. He later served at Greensboro, Corpus Christi, Jacksonville, Key West, Lakeland and Galveston before being transferred to the Central Office in June 1941 with a promotion to professional status. After a year in the SR&F Division of the Central Office he returned to the field at Lakeland, Florida. In May 1948 he was transferred to Madison, Wisconsin in connection with the establishment of Fruit-Frost service at that station. In May 1950 he returned to Lakeland where he continued to serve until March 1954, when he went to Corpus Christi as First Assistant.

Mr. Milligan is a member of the American Meteorological Society and National Association of Weather Forecasters. He has published a number of papers on

meteorological subjects including the following:

"Radiation and its Effect on Temperature in Lake Okeechobee Region" Bulletin of American Meteorological Society, Vol. 21, February 1940.

"Mathematical Analysis of the Significant Factors in the Hygrometric Forecasting Equation for Florida Minimum Temperatures" Bulletin of American Meteorological Society, Vol. 22, December 1941.

"Freeze Types of Southern Florida" The National Forecaster April 1948.

"The need for More Detailed Climatological Studies in South Florida" The Soil Science Society of Florida, Proceedings April 1947.

He may be contacted at 330 Dartmouth Drive, Lake Worth, Florida.

## DEATHS

### *Thomas Patrick*

THOMAS PATRICK, former employee of the Weather Bureau Printing Section in the Central Office, died on Tuesday, March 22, 1955, at the age of 76. Mr. Patrick retired from the Weather Bureau on December 31, 1948, after more than 40 years of service. TOPICS for February 1949 carried an article on his service.

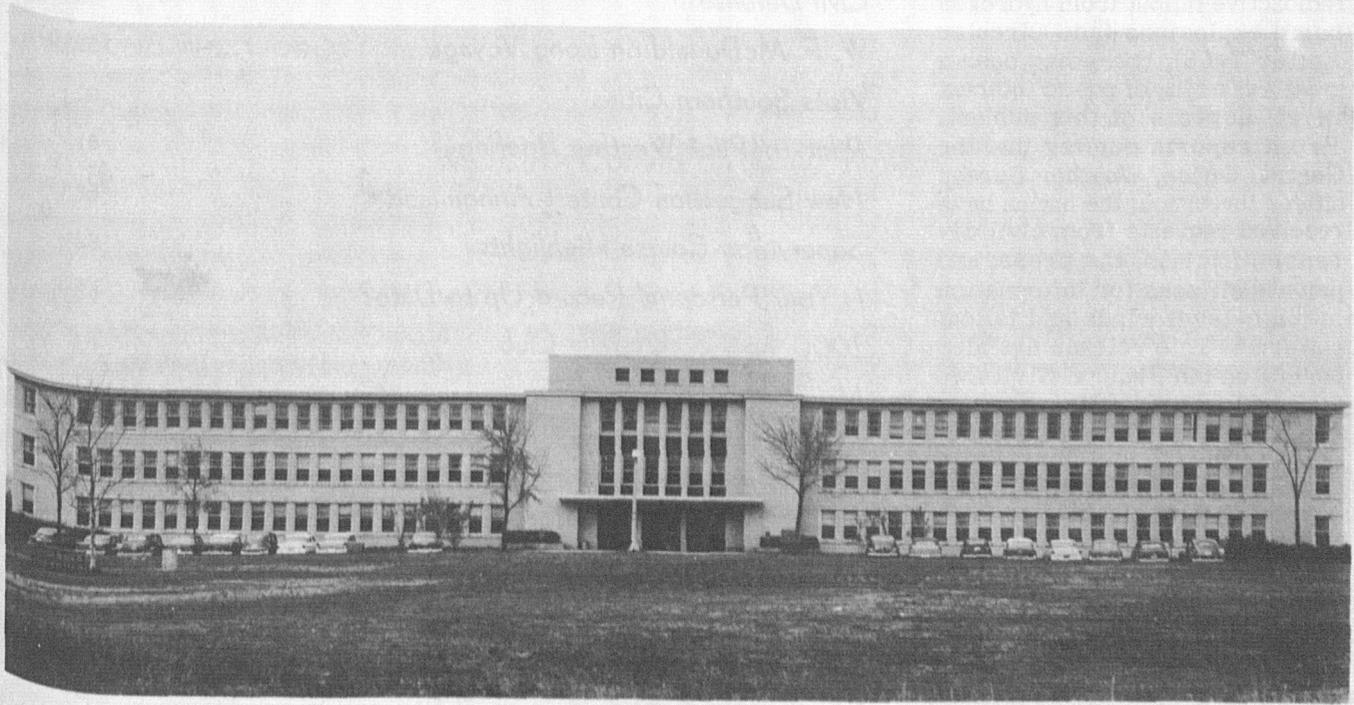


WEATHER BUREAU

# TOPICS

MAY  
1955

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Volume 14

Number 4

WEATHER BUREAU TOPICS is published monthly to inform all employees about newsworthy operations and work programs of the Bureau; to give background on instructions; to carry news of new personnel assignments, retirements, deaths, and similar information about employees; and to serve as a medium through which ideas and views may be exchanged to promote efficiency and teamwork in attaining our common goals. While the contents, unless otherwise specified, reflect the Central Office viewpoint, they are not instructions but are presented for information. Opinions, discussions or comments by readers are invited; they should be marked for the attention of the Editor, TOPICS. WEATHER BUREAU TOPICS is distributed for official use only.

**Civil Defense**

**S**INCE the release on February 15 by the Atomic Energy Commission of information on radioactive fallout from hydrogen bomb explosions (see Circular Letter 7-55), there has been a great awakening of public interest in all aspects of this subject. From reports coming into the Central Office, Weather Bureau offices throughout the nation have received requests from civil defense officials, the press, and private citizens for information on high-level winds and fallout patterns. This release has also permitted the Federal Civil Defense Administration and the Weather Bureau to accelerate their activities aimed at public preparedness for survival under nuclear attack.

For several years prior to the public release of this information, Scientific Services Division has worked closely with the AEC and the military services on fallout in connection with atomic weapons tests. During this period about 100 field stations have participated in a nationwide fallout sampling program. To facilitate the coordination of this increased CD activity the Bureau has assigned a meteorologist to serve as liaison and consultant to the FCDA National Headquarters in Battle Creek, Michigan. In addition as one method of furnishing meteorological data for CD use, the Bureau is planning, at the request of the FCDA, to prepare fallout plots

The Cover shows Federal Office Building 4, (F.O.B. 4) Suitland, Md., the new home of the National Weather Analysis Center (NWAC) and several other Weather Units. (See page 85)

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at selected RAWIN stations and distribute them routinely in coded form on Service C. The details of this program will be announced shortly, and it is hoped that this procedure will alleviate the need for field offices to undertake this work separately. Plans have also been agreed upon for statistical studies of past upper wind data to arrive at probabilities of fallout as they vary with distance and direction from assumed target areas in any part of the nation, and for increased research and

development leading to improved fallout forecasting methods.

As has already been announced certain field officials have been designated to provide liaison with the Regional Offices of the FCDA and with the State Civil Defense directors. In most cases these local contacts between the Bureau and CD people will help strengthen the Bureau's capabilities for storm warning dissemination (see TOPICS, December 1954, p. 111) as well as for distribution of fallout information.

It is essential to the welfare of the nation that all members of the Weather Bureau familiarize themselves with local civil defense arrangements and cooperate as much as possible with federal, state and local groups on this important problem. A national civil defense exercise, "Operation Alert 1955", is scheduled for June 15-16 and many Weather Bureau offices may be called upon for meteorological help and guidance.

## AROUND THE WORLD

### *W. F. McDonald on Long Voyage*



ON March 11th W. F. McDonald (Retired) ended a four-month round-the-world voyage on the Isthmian Line Steamship "Steel Chemist." He left New York November 11th, westward bound through the Panama Canal, and in the course of the four months saw cargo handled in 22 ports—17 of which were in 10 foreign countries.

His trip was scheduled by C. J. McGregor, New York Weather Bureau Office, in line with practices followed in recent years whereby Weather Bureau people have made sea voyages for familiarizing themselves with meteorological problems encountered at sea.

Mr. McDonald carried instruments that would enable him to conduct certain investigations related to his work as a member of the Commission for Maritime Meteorology, World Meteorological Organization. Only part of the original program could be carried

out because of problems associated with the installation of sensing equipment in the ship's hold. He reports, however, that his basic knowledge of the complexities of cargo handling on shipboard was vastly improved by this voyage.

Incidental to the trip were many interesting and delightful experiences in foreign lands including notably a day of entertainment in Manila by Dr. del Rosario, Chief of the Philippine Weather Service and members of his staff, and a similar experience in Bangkok where Admiral Bunnag, Chief of the Thailand Weather Service, and his aides provided sight-seeing and entertainment. In the latter city Mr. McDonald ate the famous shark fin stew and bird nest soup which are traditional parts of a Chinese banquet. The most extensive stops were

made in Singapore, Colombo and Bombay with two short excursions into the interior, one to Kuala Lumpur, the capital of the Malay States and another to Kandy, capital of Ceylon.

The most interesting item of cargo handled was a shipment of 425 live monkeys taken aboard at Bombay en route to the U. S. A. Four of these escaped and created considerable interest on shipboard until they were recaptured. Due to radical changes in environment only about 150 of the monkeys survived the voyage.

Mr. McDonald's movie film and color slides have been a matter of considerable interest to his friends since his return. He has under consideration one or more further trips of this sort in which he hopes to solve the problem of measuring certain meteorological elements in the ship's hold and consequently further his studies of ventilation practice on shipboard.

## *Visits Southern Cities*

ON March 27 I left Washington for a brief trip into the Southeastern United States. The purpose of the trip was to visit the NWRC in Asheville, N. C. and the WRPC in Chattanooga, Tenn., and to attend a meeting on Agricultural Sciences in Atlanta, Ga.

My first stop was at the NWRC in Asheville. The Postal Accounts people have now evacuated the building completely and thanks to fine cooperation from the General Services Administration the place looks a great deal neater and tidier than before. I cannot help but recall Dr. Isaiah Bowman's wise statement about the climatological records being worth more than all the gold in the Klondike. Now we even have a "Fort Knox" to take care of it. However, there are no machine guns or guards and in spite of a universal opinion to the contrary, records and data can be obtained readily and promptly. If people sometimes have to wait for answers it should not be forgotten that at the moment over 80% of the NWRC is geared to serve working fund customers. In fact NWRC can be very proud of its record for furnishing really urgent information overnight. There may exist a problem of how to go about getting the information and we are striving to remedy the lack of knowledge about procedures. In this connection a plan is being formulated to hold perhaps a national meeting of the AMS in Asheville and run a week's workshop either before or after to acquaint our professional colleagues with the inner workings of NWRC.

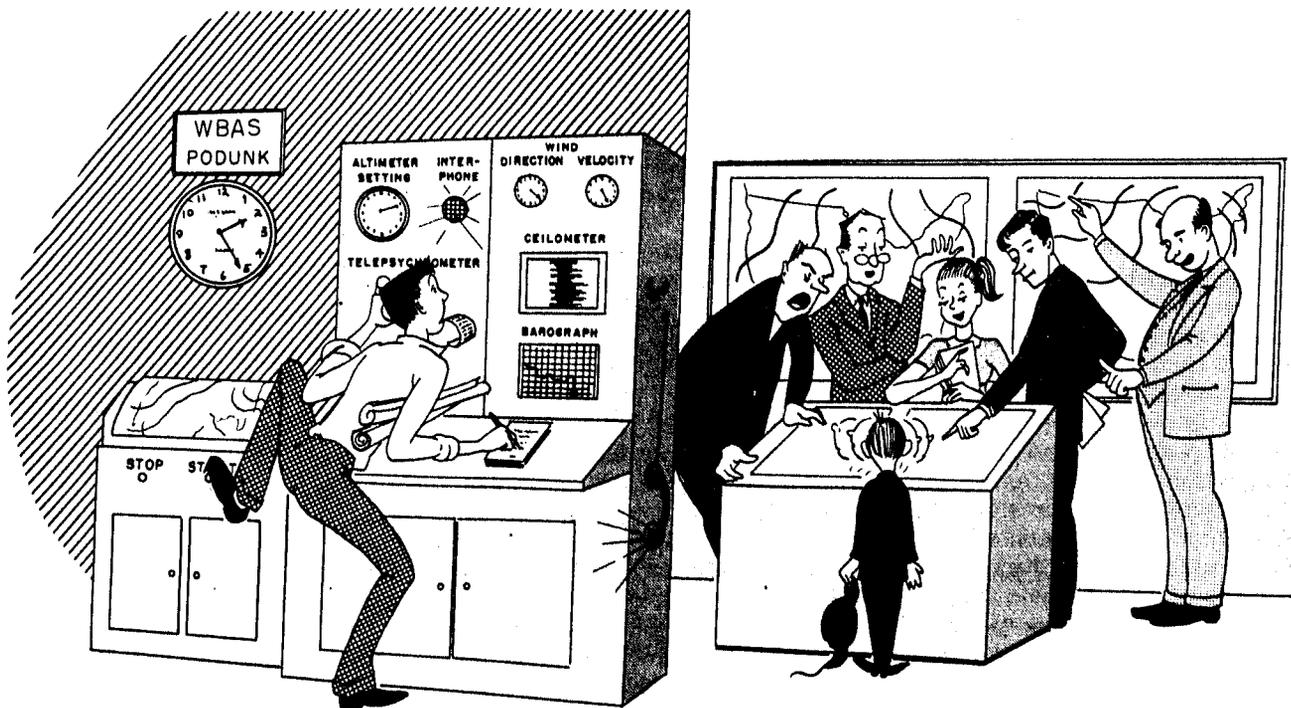
At the WRPC in Chattanooga I tried to assess the magnitude

of the job created by centralizing all our climatological substation processing work in a few localities. The crew there is doing a remarkably fine job and matters begin to shake down to a routine now. This does not mean that we are blind to a few rough spots which still exist in our procedures and some of them will probably have to be revised in order to do the job more efficiently and effectively. In that respect we are continuously aware that we are not doing climatology in order to accumulate data and keep the machines busy but that service to the general public is our first obligation. We are particularly aware of problems arising from the slow distribution of publications. This will have to be remedied.

In Atlanta, aside from a casual visit to the WBAS and the offices of the Meteorological Department of Eastern Airlines, my main purpose was to attend a meeting on Agricultural Sciences sponsored by the Southern Regional Education Board. This meeting was attended by several university presidents, all agricultural deans from the South, all directors of experiment stations, editors of farm publications and representatives of farm industry. A few federal officials were also invited. Among topics of discussion of general interest were the need for advanced education in agricultural and allied fields in order to fill the growing demands of southern agriculture. This included the need for specialized training, such as meteorology and climatology, which at present is offered only in a few southern universi-

ties. It was noted that the agricultural leaders present at the meeting regretted that the Weather Bureau had not been able to cooperate with them in their studies and researches. The requirements for climatological data are tremendous. In many instances this demand cannot be met by existing observations. It is quite obvious that a great deal more specialized data will have to be collected. Temperature and rainfall simply will not do to make progress in studies of agro-climatic relationships: soil temperature, soil moisture, evapotranspiration, wind information, solar and sky radiation are among the elements for which there is a dearth of information. In addition, of course, we heard a great deal about the desirability for more specialized forecasts for farming and the continuing call for extended and long range forecasts. Aside from the usual ribbing received by meteorologists, southern hospitality again left nothing to be desired and I was glad to meet again old friends and make new ones in an important area of the nation.

Climatological risk considerations did not help me very much on this trip. In fact it was entirely unprecedented to have severe freezes in the last week of March. It was definitely best for a weather man to travel incognito in North Carolina, Tennessee and Georgia during that period. Actually it was a very sad sight to see the damaged tobacco fields, the peach trees and all the blighted blossoms instead of the usual lovely spring scenes.



### *Pilot-to-Pilot Weather Briefing*

USUALLY when one pilot briefs another on the weather it is a matter of a pilot just having come in from a certain direction giving another pilot going out in that direction a resume of what he encountered. As a rule this is very effective weather briefing, particularly when the time interval is short. Pilot-to-pilot weather briefing, however, does not always fall into this pattern and sometimes is not as effective as suggested above. An example of this was reported by a Central Office representative after returning from a recent trip, as follows:

"At \_\_\_\_\_, an incident was observed that although relatively unimportant, could have had serious consequences. Similar situations undoubtedly have occurred at our other stations in the past as the contributing circumstances are general in nature.

"We were in \_\_\_\_\_ during a protracted period of marginal flying weather. Both the MIC and

the briefer on duty were kept quite busy handling requests from the public and the eight to ten itinerant pilots in the office. Some pilots would enter the office, obtain information from the self briefing material and leave. Those with limited knowledge of weather codes and symbols would seek assistance from fellow pilots, WB briefers or anyone available. One such individual, a commercial pilot, was having considerable difficulty with the self-briefing material. A second pilot offered assistance and proceeded to give the commercial pilot a comprehensive although faulty briefing between \_\_\_\_\_ and \_\_\_\_\_, (the information was at complete variance with Weather Bureau forecasts which incidentally proved to be correct). Now although there was no attempt at deception the 'briefed' pilot was under the impression that his 'briefer' was a Weather Bureau employee. In this instance both pilots involved were caught before either could

take off and tactfully briefed on expected conditions. The Meteorologist in Charge mentioned later that he and his briefers must constantly be on the alert to prevent such misunderstandings."

This is a hard problem to tackle. The most that can be done on the spur of the moment as such cases come to attention is described above. The problem must be combatted on a much larger scale through the improvement of self-help aids and techniques and through the issuance of pilot training material such as the new Pilots Weather Handbook and the current series of aviation weather articles appearing monthly as map-back articles and reissued by GPO in leaflet form. Every avenue for making weather information uniformly available to the pilot in an understandable form must be explored and those offering practicable ways to improve service must be exploited. Suggestions are welcome.

## *New Suggestion Contest Announced*

**T**HE special suggestion contest being held by the Department of Commerce during the month of May on the subject of paper-work management includes only those suggestions submitted between the first and thirty-first of the month. Some of the suggestions, no doubt, will require study and experimentation so the results of the contest will probably not be available for several months.

"Paper-work" includes all activities of government that are carried out by the use of paper; accounting procedures, methods of paying station and other accounts, personnel actions, reports of experience, education, etc., submitted for personnel record purposes, procurement procedures, inventory reports, mail and file procedures, climatological records and the processes used in connection with them, reports such as those concerning floods, storm damage and special fore-

casts issued, methods used by the Central and Regional Offices for the issuance of information and instructions, the amount of informational or instructional material issued or withheld, the extent to which existing procedures or policies encourage or discourage adequate exchange of information in both directions between employees and supervisors and MIC's or between headquarters offices and field stations, etc. If you have ideas about how to get better results or the same results more efficiently in any of these areas now is the time to write them up and send them in. Just be sure to give a definite solution to the problem rather than a mere general statement.

Your suggestion may be as wide or as narrow in scope as you wish. It may apply to the entire Bureau or Department, or it may only improve a procedure in your own office. The broader the scope the more chance it will have of winning a Department-wide contest; but any suggestion that results in a definite improvement, however small the scope, is awarded at least ten dollars.

## *Is Your Personnel Record Up to Date?*

**R**ECENT Civil Service inspection reports of personnel program activities, including the last one made at the Central Office, have called attention to the fact that the inspectors have difficulty in determining whether employees are qualified for promotions and/or changes in assignment because up-to-date SF 57's or 58's are not maintained in the personnel folder. This does not present a problem insofar as Bureau appointing officers and supervisors are concerned since they are familiar with the duties and responsibilities of the various position assignments as recorded

on the SF 50 in the personnel folder. This, however, is not true with respect to the representatives of the Civil Service Commission who are required periodically to inspect the folders to assure conformance with promotion and qualification regulations.

In order that this deficiency might be remedied eventually the Commission has recommended and the Personnel Office of the Department has directed that if the experience statements recorded on the SF 57 in the folder are not current in cases of employees selected for promotion

## *Supervision Course Highlights*

**T**HE course in supervision (mentioned in the last issue of TOPICS), now being given to supervisors in the Administrative Services Division at the Central Office, is proving quite interesting.

A highlight of the course has included a session of role-playing which dramatized a supervisory problem. Two course members were briefed separately before the whole group according to the roles they were to play. The situation was then acted out as they felt it with subsequent class discussion and criticism. Everyone enjoyed it and at the same time learned a good deal about human relations.

Another interesting feature scheduled during the session is a "brainstorm" on techniques for conducting conferences. This is a special technique useful for group creation of new ideas on specific problems.

The intense group participation in these courses has made them very lively and practical.

they should be brought up to date by submission of a new SF 57 or SF 58 supplementing the information in the SF 57 already in the folder.

In processing personnel actions involving increase in grade it will be the responsibility of the Central Office Personnel Division and the Regional Office Personnel Units to request new SF 57's or 58's when the experience record in the old forms is not current. Employees requested to submit new forms should do so promptly so that these records may be maintained in accordance with Departmental instructions.

## 1000-hour Sick Leave Club

A government employees column in one of the Washington newspapers some months ago started publishing the names of Washington employees of various agencies who have accumulated 1000 hours of sick leave. The lists of names have made interesting reading and the publication in TOPICS of lists from stations throughout the Bureau would probably also be interesting to most of us. If you will send in a list of those at your station who have accumulated that much leave, and additional names as others reach that mark, they will be included in TOPICS.

The following employees who are payrolled from Washington, D. C. now belong to the "1000-hour sick leave" club:

### Ankara, Turkey

Sidney Teweles, Jr.

### Arctic Project

Lloyd N. DeVel

George G. Rabbitt

### Asheville, N. C., NWRC

Lawrence M. Dye  
Raymond L. Joiner  
Charles B. Munch  
Charles B. Nichols  
Robert L. Richardson  
Charles A. Sabine  
Charles Willig

### Central Office

John L. Baldwin  
James M. Beall  
Leslie W. Bosworth  
George F. Brewster  
Lloyd E. Brotzman  
Francisco A. Colon  
Iva B. D'Alpuget  
John J. Davis  
J. Glenn Dyer  
John L. Ford  
Charles S. Gilman  
Louis P. Harrison  
Mary W. Hodge  
Rozell B. Jones, Jr.  
Horace H. Kramer, Jr.  
Paul H. Kutschenreuter  
Edwin T. Lay  
Delbert M. Little  
Marion M. Moses  
William P. Nash

Donald H. Pack  
Benjamin E. Reed  
Francis W. Reichelderfer  
Vaughn D. Rockney  
Charles O. Schick  
Lilburn H. Seamon  
Robert H. Simpson  
Ben Singer

Loyal P. Stark  
David J. Stowell  
C. Garton Swain  
Joseph Vederman  
Chauncey A. Whittelsey  
Edwin D. Weidemann  
Cora B. Williamson

### Silver Hill, Maryland

Harold L. Choate  
Wilson P. Ogden

### Washington National Airport

Wilfred P. Day  
Salvadore Diaz  
Mary E. Earley  
James C. Hunter  
Vera Lewis  
Louis Malkin  
Kenneth S. Norquest  
Ernest M. Rampey  
Reinhart C. Schmidt  
Von M. Summers

## New Career Appointments

EXECUTIVE Order No. 10577, which became effective January 23, 1955, authorized a new career appointment system for the competitive civil service. This new program provides for the resumption of permanent appointments in the federal service and for the conversion of most indefinite appointments to career or career-conditional status.

The principal features of the new system including the action to be taken by personnel offices of the Department of Commerce were explained in a memorandum

to all employees dated December 9, 1954, Subject: New Career Appointment System. It is suggested that all employees who have not had the opportunity to read this memorandum do so. Any employee with indefinite status who has not been contacted by the Regional Office or the Central Office advising him what action is necessary to receive status under the new provisions should bring that fact to the attention of his Regional Office or the Central Office, whichever is appropriate.

## CORRECTION

IN the biographical sketch of Chester A. Cochran in the February-March issue, the statement appeared that Mr. Cochran had scaled seven of the fourteen mountain peaks in Colorado over 12,000 feet high. We have been requested to correct the inference that there are only fourteen peaks in Colorado over 12,000 feet high. The Washington office of the Geological Survey does not have a listing of peaks over 12,000 feet high but furnished a listing of 53 in Colorado 14,000 feet or higher.

## National Weather Analysis Center

THE quarters of the new National Weather Analysis Center are located on the 3rd floor of Federal Office Building 4, (FOB 4) Suitland, Md. FOB 4 is one of several permanent federal buildings in the immediate vicinity. It is located in Maryland about 12 miles southeast of the Central Office of the Weather Bureau. One entire wing of the building is occupied by weather units of the Weather Bureau, Air Force, and Navy. The NWAC together with the Joint Numerical Weather Prediction Unit (JNWP), the AACS facsimile room, and the Communications Section of SR&F Division occupy the third floor of the wing. On the second floor the Hydrometeorological Section and the Northern Hemisphere Map Analysis Project share the space with the Navy Fleet Weather Central and the Air Force Weather Central. The first floor is occupied by the Weather Bureau Library and the Climatological Division.

The space occupied by NWAC comprises 13,215 square ft. This is over 3/10 of an acre or approximately the equivalent floor space of 10 five-room houses of conventional design. Of this space roughly 15% is allocated for offices, 20% for plotting, 15% for communications, 10% for analysis, 10% for prognosis, 5% each for Research, Contact Printing, Ready (lunch) Room, Storage, and Seminar Rooms.

A total of 187 people are employed in the NWAC. These are made up of 104 from the Weather Bureau, 45 from the Air Force, and 38 from the Navy. The apportionment of the professional staff among the three services is 33, 23, and 10 respectively. The charting staff has 93 Weather Bureau and 28 Navy personnel.

Only two major changes were made in the operation of the Analysis Center upon moving to Suitland. These were the change in map scale and the introduction of photographic techniques for converting charts to different scale map bases to meet the needs of other units of the Weather Bureau, Air Force and Navy.

### Communications

The Communications Unit is in the same room with the NWAC teletypewriters. The Communications Unit transmits all coded analyses and progs issued by the Analysis Center. In addition all incoming and outgoing messages transmitted on teletypewriter, telegraph, and radio are channeled through the Communications Unit for Weather Bureau units in the Washington area. Many of the different teletypewriter circuits on Services "A," "C," and "O" as well as Air Force circuits come into the unit. In addition they have special tie-lines to Denver, Montreal, Western Union, Mackay Radio, Navy Communications, to east coast Weather Bureau offices, and to Public Buildings Services.

The several different models of teletypewriters are discernable in the Figure 5 photograph from the different kinds of cabinets associated with them. Some of them print at the rate of 100 words per minute, others at 75 words per minute, and still others at 60 words per minute. The Communications Unit has a total of 33 teletypewriters and 20 reperforators. The NWAC has 17 teletypewriters, mostly receiving-only machines.

### Charting, Analysis, and Prognosis

All of the data used in NWAC comes into the communications room via teletypewriter circuits. From this point the data are distributed to the charting staff. After the charts have been plotted they are given either to the analysts or to the Contact Printing machine operators to make copies of "data only" charts. 142 charts are plotted and analyzed each day. A charting crew of 19 Weather Bureau employees and 7 Navy enlisted personnel are on duty at all times to meet the deadlines for the many charts required.

The charting crew plots a 3 hourly North American map four times daily using about 600 airway and 3 hourly synoptic reports. However, the main charting program is made up of about 2000 land station and about 200 ship synoptic reports each 6 hours. In addition all of the upper air data are plotted. These are composed of about 500 winds aloft reports each 6 hours; 300 radiosonde reports each 12 hours; and 500 aircraft in-flight and 300 aircraft reconnaissance reports each day.

The basic surface analysis for the U.S. area is made on a chart of 1:10 m scale. This is reduced photographically to 1:20 m and traced on a specially plotted chart which is then put through the Contact Printer to provide a copy for transmission on the FAX network. All of the upper level analyses are made on charts of 1:20 m scale. Therefore no reduction of these is necessary for preparing copy for FAX. However, JNWP, AWS, FWC, and Extended Forecast require maps of different scale.

Charting, analysis, and prognosis work of the NWAC is performed in the large room shown

in the Figure 3 photograph. There are 18 of the light tables and four tables of similar construction for work which does not require a light table. These four have "formica" covered tops. The large plotting tables provide working space for as many as four people on each side. There are 6 of these large tables in the Analysis Center. Each of them has 8 large drawers and one or two small pencil drawers at each end. One side has about a quarter of the area equipped so as to provide a light table. The remainder of the desk surface is covered with "formica." The sloping tray on top provides space for the small FAX size charts used for many of our auxiliary charts and other aids to plotting and analysis.

All of the plotting is done on the row of large double desks near the windows (see Figure 3). All of the analyses are done on the square light tables shown in the row in the foreground. Usually the charts and analyses are left on the same light table but the analysts move from table to table as their duties require them to shift their emphasis because of a new deadline occurring about every twenty minutes.

12 mobile map display boards with cork board panels and caster equipped bases are provided for the analysts and are used to keep auxiliary and continuity charts in view for easy reference. The entire display may be moved by pushing the caster equipped pedestal. The panels slide up and down in the frame by means of counter weight arrangement similar to a window sash weight system. Also the frame may be rotated about a vertical axis by releasing a spring latch bolt at the side. The entire NWAC is provided with air conditioning. The several offices and parts of the analysis and prognostic areas as well as the photostat, contact

printing and seminar rooms are provided with outlets on an inter-office communications systems.

The analyses cover the entire northern hemisphere twice each day. The Northern Hemisphere analyses include the sea level, 1000 mb, 700 mb, 500 mb, 300 mb, 200 mb, 150 mb, and the thickness analyses for 1000-500 mb, 1000-700 mb, and 500-300 mb. These comprise a total of 20 Northern Hemisphere analyses each day. In addition many auxiliary and special charts and charts for less extensive areas are prepared for facsimile transmission and for on-the-job use of the analysts and prognostic analysts.

Eleven analysts are scheduled to be on duty at all times. This is accomplished by having three shifts a day. Four crews working 5 or 6 days in a row rotate through the three shifts. Overtime in excess of 40 hours a week is eliminated by having a fifth (or relief) crew to work the sixth day when it falls within the calendar week.

#### *Prognosis*

The prognostic area comprises one large double surface desk surrounded on three sides by 7 display boards. The photograph (Figure 4) shows the desk and five of the display boards. The desk and the display boards provide sufficient surface to have all of the charts needed by the prognostic analysts in preparing the prog charts. Three light tables in the adjoining area provide for the making of practice or in-training progs as well as some auxiliary charts.

Two 30 hour, one 36 hour, and one 48 hour surface progs are made and transmitted each day. In addition two 30 hour progs are made regularly but are not transmitted. Prognostic charts for the 700 mb, 500 mb, 300 mb, 200 mb, and winds at 150 mb are made twice daily for transmission

on FAX.

#### *Facsimile*

The regular schedule on FAX calls for the transmission of about 58 charts during each 24 hour period. Air Weather Service provides two of these and the NWAC provides the others with the exception of three supplied twice a week by Extended Forecast Section (they also supply a 30-day outlook twice each month.) The FAX transmission room is adjacent to the prognostic analysis and analysis areas so that delivery of charts can be made to meet the strict deadlines.

#### *Contact Printing*

The Contact Printing (reproduction) room has three of the largest size machines available (see Figure 2). These machines will take copy up to 54 inches wide and with suitable master copy the machine is capable of running paper through at 30 feet per minute.

The room is provided with tables for lining up the master copy with the sensitized paper and for holding the material waiting to be processed. Cabinets and shelf space for the chemicals and sensitized paper are also located in this room.

The Contact Printer operator has a card file listing the number of copies required of charts with data only, of charts with contours only, and of charts with the final analysis. A total of 650 copies of charts are made each day on these Contact Printing Machines.

The photographic copying and reducing operations are done by means of a large photostat machine. The operation has been speeded up over the time recommended for routine use of this type of equipment. The time usually required for making a copy is about 30 minutes; we have reduced this time to less than 8 minutes. As a result of this em-

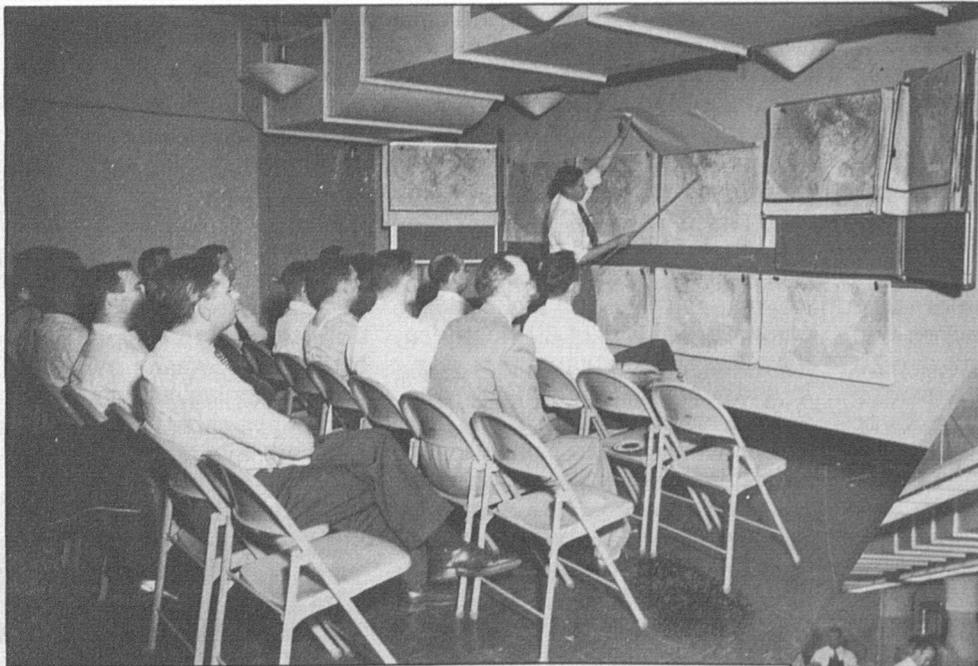


Figure 1. Seminar room. Mr. F. W. Burnett leading map discussion.

NVA C

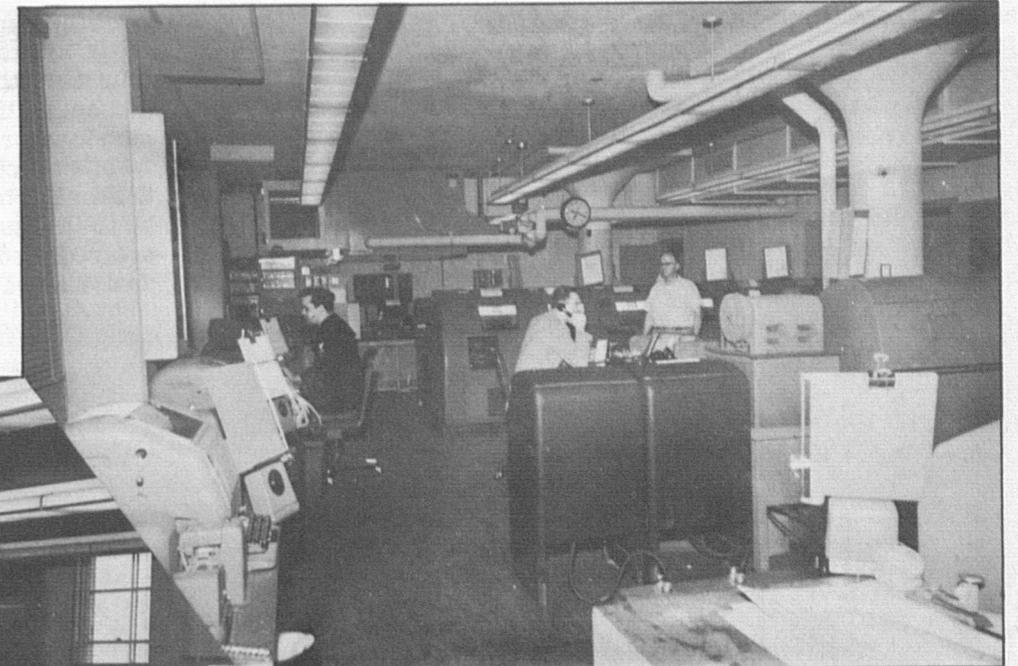


Figure 3. This picture was taken from the far end of the communications room looking toward the Analysis room.

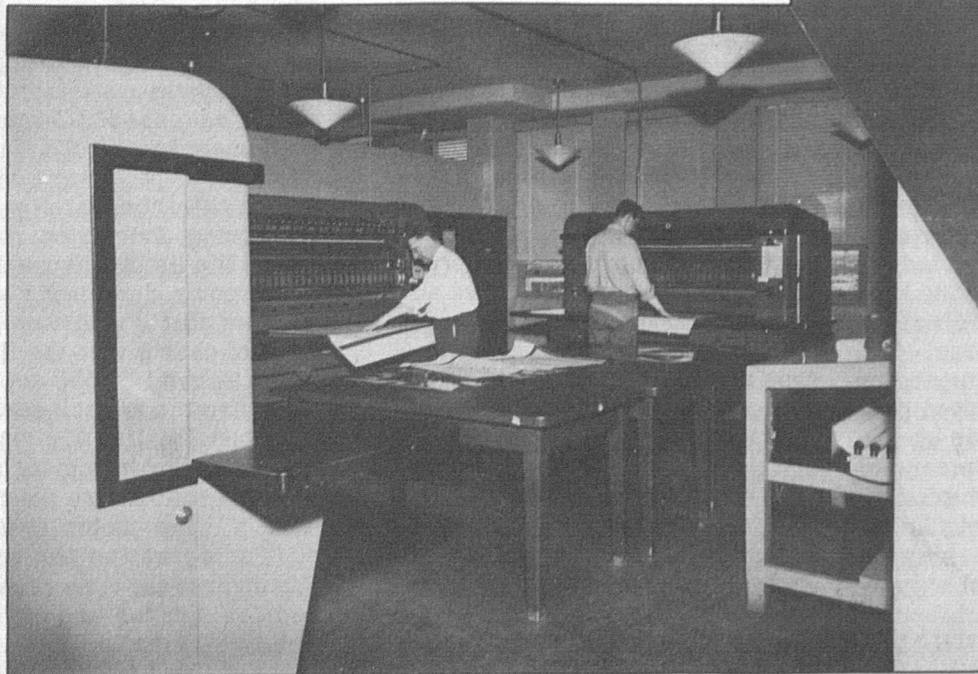


Figure 2. Contact Printing facilities. Maps are being fed into Bruning machines. These are the largest size such machines available.

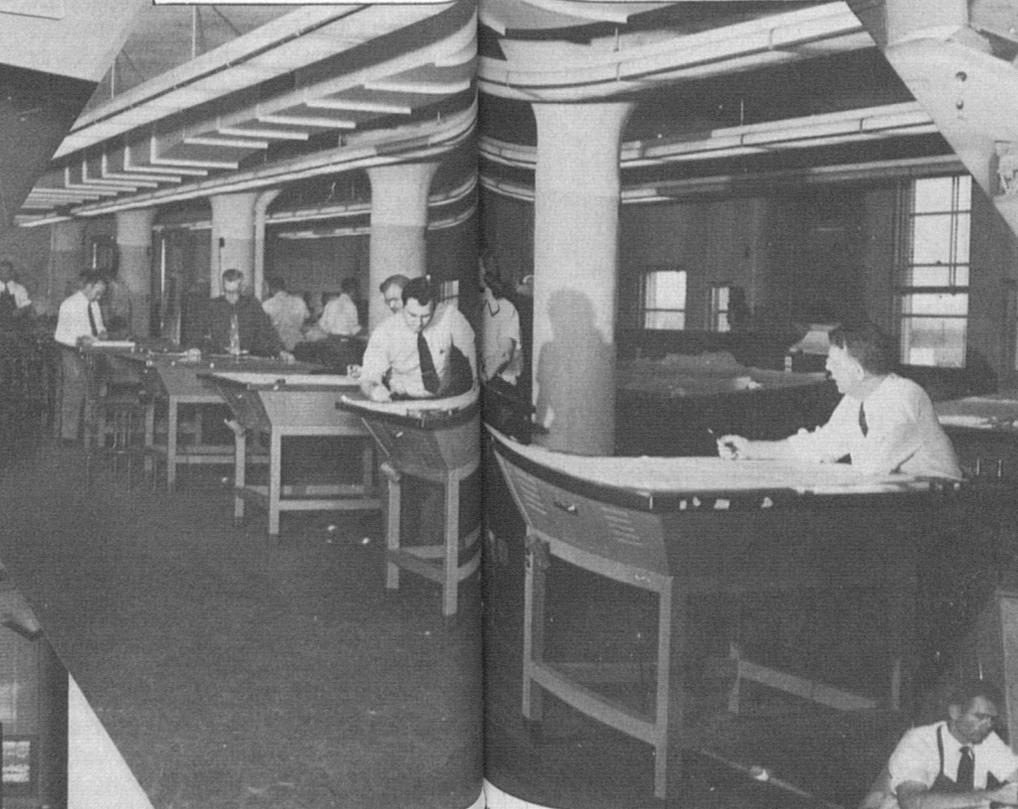


Figure 5. Charts and prognostic area. Light tables, green metal construction, white tops. Plotting tables next to windows, 14' long and 10' wide providing a desk on each side.



Figure 4. Prognostic area. Close up of one of the plotting tables with display boards in background.

phasis on speed the photographic copy produced tends to fade with time but since our use of the print is limited to the few minutes after it is made, permanence of the photographic copy is not required. The finished copy is a positive print rather than the negative ordinarily produced by a photostat machine.

### Seminar

The seminar room (see Figure 1) has a seating capacity of over 60 and is provided with blackboards on two walls of the room, a projection screen, a projection lantern, and pegs on which to display 20 maps in full view. The room is entered directly from

both the analysis and the prognosis areas. The analysts are thus able to finish their duties and be in attendance at map discussions or seminars at a moment's notice. They are also able to remain in the seminar room up to the last minute before they are required to be on duty for an analysis deadline.



Climatological Services Division, Field Services Section

### Comments By Climat

**T**HE first proposal to locate the Climatological Services Division in the Department's Census Bureau space (Federal Office Building No. 4) in Suitland, Maryland, was looked upon with a variety of doubts. Employees living in Virginia, on the opposite side of Washington, foresaw exaggerated inconveniences, difficulties of transportation, loss of time, and strains of various sorts; conscientious officials predicted public and Congressional criticism because of reduced convenience of contacts, and some members of

the Division, well-conditioned to the cramped and badly ventilated quarters they had worked in at (and near) 24th and M Streets, N. W., looked upon the prospect of ample space, fresh air, and clean windows with green grass outside as promises to be feared like sirens' songs.

That's all changed now. The transportation problems are troublesome sometimes, but not half as bad as predicted; no strains or public criticism have developed; and the clean environment and improved working conditions have

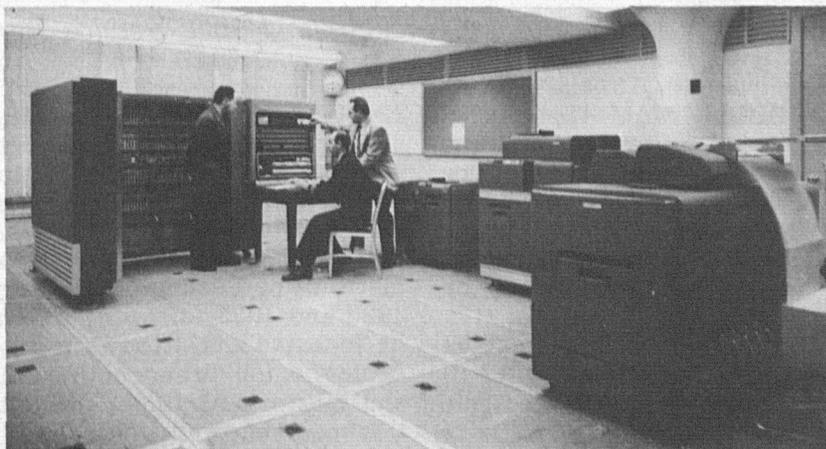
ventilated most of the earlier pessimism out of the Division.

If to these blessings are added certain refreshing aspects of Dr. Landsberg's leadership, the result shapes up as a Division that transferred to Suitland and found there several good things, inside as well as outside itself: better working conditions, more interest in its job, improved facilities for lunch, a view of the sky through the windows, and a growing sense of the importance and respectability of climatology and their friends who work at it.

## The Electronic Brain

A small ceremony to mark the official opening of the Joint Numerical Weather Prediction program was held at 5:00 P.M. on May 6, 1955. It was no grand celebration; only Weather Bureau and Armed Services officials and a few guests participated. After a few dedicatory remarks, the button was pushed to start the electronic computer on its first official forecast. During the first half hour of the machine's operation, the group of officials and guests made a short tour of the facilities. The group then returned to the "Brain" to view the print-out of the 12-hour forecast. The second half hour of operation produced the 24-hour forecast.

In anticipation of interest among Bureau employees in the process of numerical forecasting as accomplished by the electronic computer, an Exercise in Numer-



The computer of the Joint Numerical Weather Prediction Unit, showing the control and input-output unit. Left to right, Colonel Zartner, Lt. Commander Stickles II, Dr. Smagorinsky.

ical Forecasting has been prepared by the Training Section and will be distributed to all meteorologists, GS-7 and above. The Exercise is designed to give an idea of the data that go into the machine and of the calculations the machine must accomplish. Official credit

in the form of a certificate for their personnel folders will be given those employees who complete the Exercise.

Further news on the Joint Numerical Weather Prediction program will be carried in an early issue of TOPICS.

## Timely Weather

A recent issue of the TV Guide describes a unique TV weather program developed by MIC Wayne McDaniel of Peoria, Illinois and Program Director Bob Holben of WTVH-TV, Peoria. Their description of the plan is quoted below:

"WTVH-TV has come up with the answer to the old programing 'bug-a-boo', a television feature for everyone. At least once every hour, throughout their broadcast hours, day and night, the complete

weather picture is offered viewers. The Weather Clock includes not only the time and temperature, but also current weather forecasts. The information is kept up to the second through use of the direct teletype to the United States Weather Bureau, at the Greater Peoria Airport.

"By using the Weather Clock, housewives have the early morning information they need to make plans for laundry, clothing selection for their children, or for

shopping trips. Farmers have the up-to-date weather news which is so important to them in their work. It helps sportsmen plan for outings."

The furnishing of weather information to TV stations for their shows is becoming an important workload item. If you have found effective short-cut methods of meeting this demand, let's pass them on to others through TOPICS.

## Comment on the Suggestion Box

NO "gripe" articles have been received for publication under the Suggestion Box plan but the following comments came from an MIC:

"We believe the Suggestion

Box is very informative and well worth while. In my opinion it will serve two purposes. First, many of us are inclined to harbor fragmentary visions of "gripes" or "criticisms" and when we are

encouraged to place them in writing we find that our imagination has been playing tricks. Second, like the two cases treated in the referenced issue, many real cases of misunderstanding will be resolved."

## Rockefeller Public Service Award

JEROME NAMIAS, Chief of the Extended Forecast Section, had the distinctive honor of being one of the thirteen Federal civilian employees selected by the Rockefeller Foundation as a recipient of Public Service Awards for outstanding public service.

These awards were established by John D. Rockefeller III in order to give special recognition for outstanding public service by providing incentives for the continuance and advancement of civilians in the Federal Government. Individual awards carry with them funds sufficient to enable the recipient to spend from six to twelve months at a college or university of his or her choice in this country or abroad, or in some comparable educational activity.

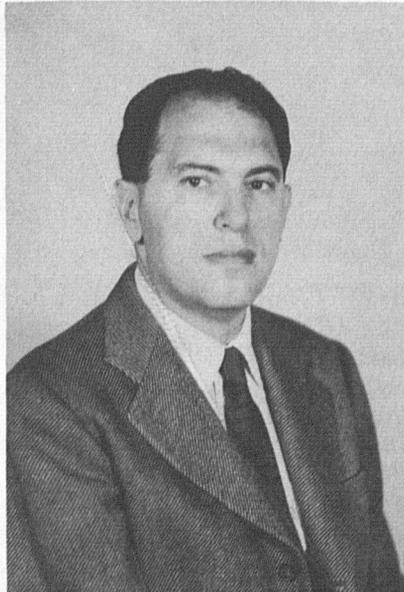
Mr. Namias plans to spend approximately six months at the University of Stockholm and at the Institute for Weather and Climate Research in Oslo, Norway. He will confer with Dr. Rossby and other Scandinavian meteorologists who have played an active role in the development of principles leading to long range weather forecasting.

Mr. Namias' studies will have to do with the possibility of further extension of the time range of extended forecasts and the possibility of using modern high-speed electronic computers in solving the problems associated with long range weather forecasts.

Following his stay in Scandinavian countries Mr. Namias plans to spend several months traveling in Europe visiting European meteorological centers in Germany, France, Holland, Italy and England.

He plans to depart this coming November and will be gone approximately ten months. Mr.

Namias was born on March 19, 1910 in Bridgeport, Conn. He grew up in the Massachusetts area attending the public schools in Fall River, Massachusetts. He attended the Massachusetts Institute of Technology during 1932 and 1933 following which he accepted a position as meteorologist for Transcontinental and Western Airlines. He left this position and returned to school at the University of Michigan where he majored in physics. He then returned to Massachusetts



*Jerome Namias*

where he resumed his studies at the Massachusetts Institute of Technology and also became a Research Assistant at Blue Hill Observatory under Dr. C. F. Brooks. From June 1936 through April 1941 he was affiliated with the Meteorological Department of the Massachusetts Institute of Technology as a Research Associate engaging in teaching and research. He received his Master

of Science Degree there in 1941.

Mr. Namias first became associated with the Weather Bureau in June 1938 when he was given a temporary appointment to assist with a special research project to investigate possibilities of the extended forecasting project being carried on by the Weather Bureau in cooperation with the Massachusetts Institute of Technology. In May 1941 he came to the Central Office as a Meteorologist assigned to the 5-day Forecast Section and shortly thereafter headed this Section.

During World War II he made special forecasts for the U.S. Air Force and the U.S. Navy. He received a citation from the late Frank Knox, Secretary of the Navy, for his forecasts for the North African Invasion. During other periods of his career his outstanding work brought him recognition in the form of the Meisinger Award of the American Meteorological Society in 1938 "in recognition of particularly meritorious and outstanding research in aerology and its application to weather forecasting"; the Department of Commerce Meritorious Service Award in 1950 for "outstanding leadership in the study of extended weather forecasting and distinguished authorship in this field"; and the Award for Extraordinary Scientific Accomplishment from the American Meteorological Society in 1955, "for his contributions to and stimulation of research in the principles and application of extended and long range forecasting techniques".

He was elected in 1939 to Sigma Xi, honorary scientific society; and is a member of the American Meteorological Society; American Geophysical Union;

Royal Meteorological Society of Great Britain; and the Washington Academy of Sciences.

Mr. Namias has written a number of important treatises on meteorological subjects, some of the more important of which are: *An Introduction to the Study of Air Mass and Isentropic Analysis*, published by the American Meteorological Society in several

editions from 1935 to 1940; *Extended Forecasting by Mean Circulation Methods*, published by the Weather Bureau in 1947; *Thirty-Day Forecasting: a review of a ten-year experiment*, published by the American Meteorological Society in 1953. He has also written many research papers and publications in technical journals.

The Department of Commerce was honored by having two of its members selected for Rockefeller Public Service Awards. The other was Dr. Richard E. Trees, Physicist in the National Bureau of Standards. Dr. Trees is engaged in the calculation of matrix elements of atomic interactions. He has been given an award which will enable him to study the theory of atomic spectra.

## *Awards for Superior Accomplishment*

### *Fred Doloresco*

FRED DOLORESCO, Charting Supervisor at WBAS, Kansas City received a cash award of \$250 in recognition of his outstanding work during the past two years. In addition to performing his duties as a Charting Supervisor in an outstanding manner he took an unusual interest in the entire office operation and took the initiative in doing many tasks beyond the specific requirements of his job. In times of emergency he could always be counted upon to step in and assist with practically any phase of the office operation.

Mr. Doloresco has been in his current position since June 1951 when he transferred with promotion from the Analysis Center in Washington.

Fred Doloresco was born on December 1, 1918 in Adena, Ohio. He grew up there graduating from the Adena High School in 1935. After his graduation he worked for coal companies at Piney Fork and Cadiz, Ohio through December 1941. With the entrance of the United States into World War II, he left the coal fields to join the Navy.

During the next six years he served in the Navy at several locations including duty with the U. S. Naval Group in China, as well as sea duty with the Pacific Fleet. In addition, he completed the training offered by the advanced aerographer's school at

Lakehurst, N. J. and at the time of his discharge in November 1947 he was rated as Aerographers Mate, 1st Class.

He entered the Weather Bureau on March 26, 1948 as a chartman assigned to the Analysis Center in Washington. From the very first the quality of his work was high, earning him an "Excellent" for his first efficiency rating. He remained at the Analysis Center until June 1951 when he was transferred to his current job in Kansas City.

### *Loren H. Waite*

LOREN H. WAITE, first assistant at WBO Cairo, Illinois received a cash award of \$250 in recognition of his outstanding performance during the past several years. Last year he operated the station in a highly satisfactory manner as acting Meteorologist in Charge for several months following the retirement of Mr. McGruder in February.

In evaluating Mr. Waite's performance in relation to the award recommendation the Area Engineer reported that Mr. Waite has not had an opportunity to render any spectacular service. The justification would be a job well done with a minimum of assistance. It should be recognized he has filled the MIC position at a lower grade and with a vacancy

in staff. This has been accomplished through devotion to duty, long hours of work and a desire to "carry on" regardless of requirements.

Mr. Waite was born in Marion, Illinois on October 11, 1908. He graduated from the Mounds Illinois High School in 1926.

Prior to his entrance into the Weather Bureau Mr. Waite worked as a carpenter's helper for the U. S. Engineers Office at Louisville, Kentucky and as an apprentice printer for the Pulaski Enterprise at Mound City, Illinois.

Mr. Waite began his Weather Bureau career with a probational appointment to the position of Minor Observer at Cairo on January 2, 1930, the only station to which he has been assigned during his twenty-five years of highly satisfactory service. The high quality of his services is recorded in his personnel folder which shows thirteen Excellent and three Very Good Efficiency Ratings covering the sixteen year period from 1935 through 1950 and a number of letters calling attention to superior performances.

### *Silvio C. Semplicio*

SILVIO C. SIMPLICIO, Aviation Forecaster and Shift Supervisor at WBAS, LaGuardia was awarded a \$200 cash award in recognition of his superior per-

formance at the LaGuardia Forecast Office.

Mr. Simplicio has been stationed at LaGuardia since his release from the Air Force in July 1946 and has been in his present position since March 30, 1952. The quality of his work immediately attracted attention and he has continued a very high level of performance. On March 31, 1954 his superior performance was recognized with an "outstanding" performance rating followed by a recommendation for an employee award.

Mr. Simplicio has a combina-

tion of desirable traits that includes superior leadership ability, an outstanding knowledge of meteorology, and the ability to put this technical knowledge to practical use.

Prior to coming to the Weather Bureau Mr. Simplicio served in the Air Force from October 1940 through June 1946. During this period he was a forecaster; a station weather officer in charge of Air Force Weather Offices at a number of locations; an instructor in meteorology; and a research meteorologist. Immediately prior to his discharge he held the rank

of Lt. Colonel in charge of research in the 102nd Weather Group at Mitchel Field.

Silvio Simplicio was born in Red Bank, New Jersey on September 23, 1920. He grew up in New York graduating from the Theodore Roosevelt High School in 1937. He received his Bachelors Degree in Aeronautical Engineering from the New York University in 1940 and a Masters Degree in Meteorology from the same school in 1941.

He is married and makes his home at 2424 Beaumont Avenue, New York City, N. Y.

### *Awards for Suggestions*

**D**URING the quarter ending March 31, awards were approved for 17 adopted suggestions. Many stations have benefited in some way from these suggestions, either in time saved, convenience, or improved service. The estimated annual saving is \$6400. Some of the employees stated in their suggestions that they were submitting their idea through the suggestion program only because it was an effective way of calling the matter to Central Office attention, and they did not want an award. We hope that they will not mind having been given an award anyway, in accordance with the Department's program.

Mr. Wallace Bertrand, Indianapolis, Indiana, recommended that the required retention period for teletypewriter material be reduced in order to simplify the filing and storage problem at most stations. This idea was approved by the Records Management Section of Administrative Services and by the SR&F Division and was put into effect by an amendment to the Weather Bureau Manual, Volume I, Chapter F-39, page 62, which permits discarding the paper after ten days. Mr.

Bertrand was given an award of \$10.

Miss Hazel Brown of the Instrument Division has been awarded \$10. for her suggestion that the special justification required in connection with requests by Central Office employees for authority to travel be entered on Form CD-29 instead of on a separate memorandum as formerly required.

Mr. Samuel Chambers, Dodge City, Kansas, recommended that the practice of preparing and attaching a shipping tag inside and another one outside the cap of helium cylinders being returned to the Bureau of Mines Helium Plant be discontinued because the upper half of the shipping tag supplied by the Bureau of Mines should be sufficient. The Procurement and Supply Section, Administrative Services Division approved this change and put it into effect by issuance of Circular Letters 37-54 and 19-55.

Approximately 1800 cylinders are returned every month and it is estimated that for all stations using helium the time saved annually will total more than 700 hours. In addition the cost of the

tags and printing will be saved, and employees will be relieved of a job which was troublesome, especially during cold weather. An award of \$75. has been given to Mr. Chambers.

Several other employees have submitted this same suggestion or variations of it back through the years that the suggestion program has been in existence. A provision of the Department's Awards Program is that awards cannot be paid for suggestions that are not adopted within two years of the time they are received and therefore the award went to this suggestor, which was the earliest one that was less than two years old. Nevertheless the efforts of the other employees who submitted the idea are appreciated and it is regretted that some more tangible recognition cannot be given for their having made a worthwhile recommendation.

As a result of a suggestion from Mr. Edwin Congdon, Bismarck, North Dakota, arrangements were made to discontinue the use of an excess amount of gummed tape used to hold the cover on new Raob forms mailing

cartons when first supplied to stations. Mr. Congdon was awarded \$10. for this helpful suggestion.

Mr. Elmer Fisher, Portland, Oregon, was awarded \$10. for a suggestion which led to the use of forms instead of telegrams which had formerly been in use in some parts of the Bureau to report the arrival of employees at a station by appointment or transfer.

Mr. Theodore Gleiter of the SR&F Division was awarded \$10. for his suggestion that a list of the hours of operation of stations open less than 24 hours a day be published. As a result of this suggestion a new chapter of the Weather Bureau manual containing the list is being issued.

Mr. Kirby Hanson of Elko, Nevada at the time he made the suggestion but now of the Central Office suggested that certain 700 mb data from Pacific reports be included in the SLAM WBC on Service C. As a result of the suggestion the Analysis Center and the SR&F Division arranged to have the data included in the transmission. Replies received later from an inquiry sent to stations in the western part of the country indicated that the data was proving to be very helpful and accordingly Mr. Hanson has been given an award of \$25.

As a result of a suggestion from Mr. Kenneth Jenkins, Amarillo, Texas, arrangements were made to distinguish more clearly between transmitted 12- and 24-hour terminal forecasts by an identification in the heading. As an immediate result of the suggestion the 12-hour forecasts were designated as FT-12, and later the same result was accomplished by using the designator FT-1 and FT-2 for 12- and 24-hour forecasts respectively. An award of \$10. was granted to Mr. Jenkins for the adoption of this suggestion.

Mr. David Fordham and Mr.

William Kerchusky, Jacksonville, Florida, collaborated on a suggestion that reference points used in PIREPS always be places known nationally rather than only locally, so that pilots and others will be able to determine more readily where the reported weather phenomena is located. The SR&F Division adopted the idea by improving the instructions in Circular N, and Mr. Fordham and Mr. Williams were each awarded \$10.

Mrs. Iler Martello of the SR&F Division suggested that the typing date of letters prepared in the Central Office which had formerly been put at the bottom of the retained copy, be put in the upper left corner just below the dictator's initials for greater convenience. The idea was approved by the Records Management Section and has been put into effect. Mrs. Martello has been awarded \$10.

Mr. Harold McBirney of the Instrument Division recommended that qualified Central Office employees be given occasional refresher training and detailed to assist at the Washington National Airport when weather emergencies occur which overtax the staff of that office. This plan will not only provide needed extra help but will help Central Office personnel keep in better touch with actual operating problems. The plan has been adopted on an expanded basis to include other nearby places, and Mr. McBirney has been awarded \$75.

Mr. William Morrison, Salt Lake City, pointed out the difficulty often encountered in following a pilot balloon when it is in nearly the same direction as the sun, and suggested the use of a mailing tube as an extension to the theodolite sunshade. This idea was adopted to the extent of publishing it in TOPICS for use by all who find it helpful, and Mr. Morrison has been awarded \$10.

Mr. Jack Norman, Roanoke, Virginia, recommended that weather reports transmitted several times a day from Pikeville be transmitted to Charleston, West Virginia instead of to Lexington, Kentucky to reduce the telephone cost. In taking the matter up with the telephone company, representatives of the SR&F Division learned that by making an additional change and leasing direct teletype service between the two places a much greater saving would be realized. All in all more than \$2000. will be saved annually. Although the change suggested by Mr. Norman would have brought about only part of this saving, the remainder of the saving probably would not have been made if his suggestion had not brought the matter to light. Accordingly he has been awarded \$75.

Mrs. Mildred Profitt, WRPC, Chattanooga, Tennessee, recommended that punched cards shipped at regular intervals from WRPC offices in San Francisco and Kansas City be shipped by motor freight instead of express. The Procurement and Supply Section, Administrative Services Division and the Climatological Services Division authorized the change and the change was actually made quite some time ago. Because of difficulties in determining to just what extent the credit for the change belonged to this suggestor the award has only recently been approved. The annual saving was found to be over \$2000. and accordingly a \$90. award was granted.

Mr. Alexander Sadowski, Syracuse, New York, pointed out in a suggestion that maximum and minimum temperature and precipitation data mailed to Section Centers weekly by card can be obtained by the Section Centers much earlier by taking it daily from the 0135E Synoptic report on Circuit "C", daily, thus doing away with the need for the cards.

The Climatological Services Division approved the idea and in an item in Climatological Services Bulletin No. 46 made its use optional with those stations where it will work satisfactorily. Mr. Sadowski has been awarded \$10.

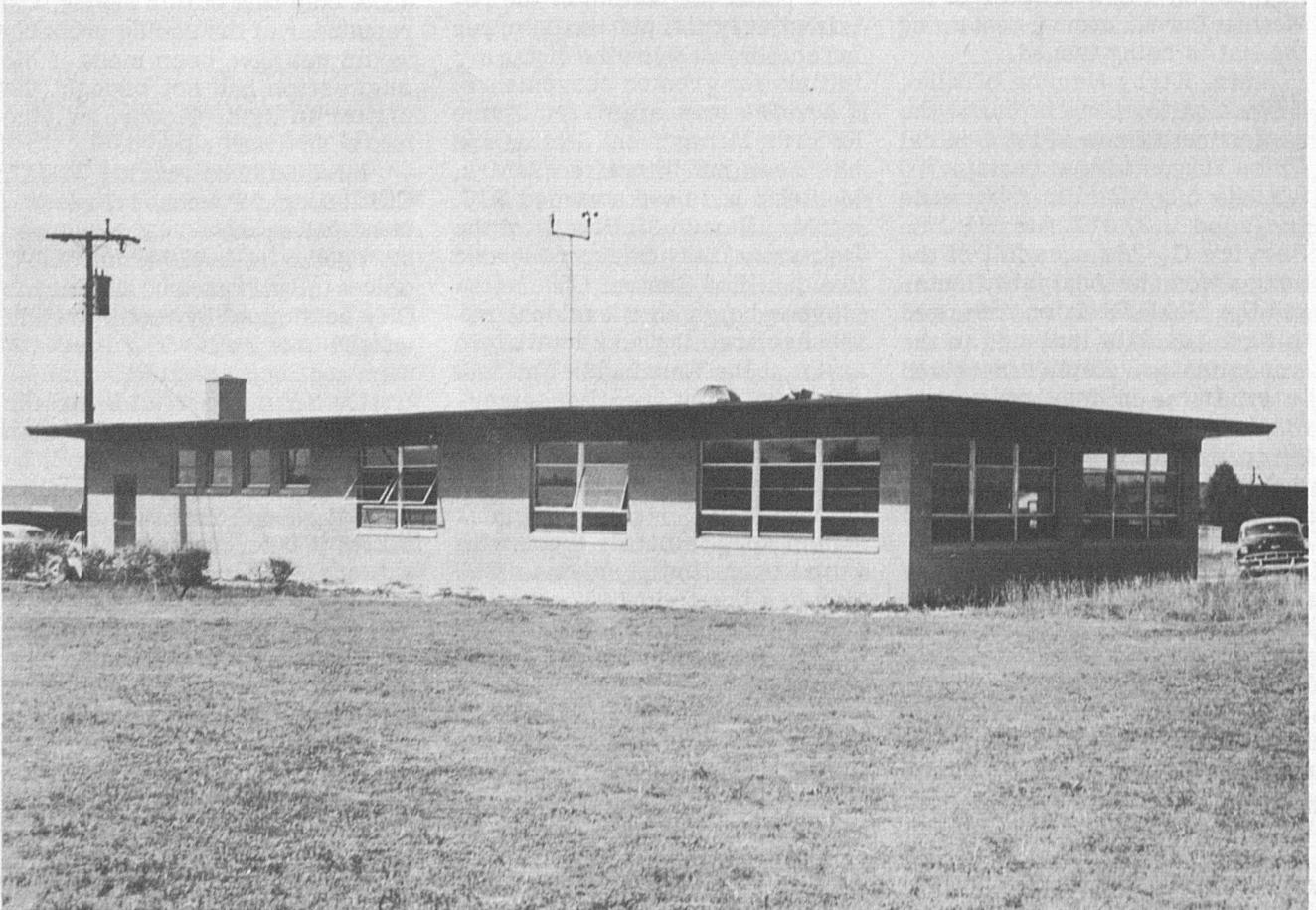
Mr. Carl Sanderson, Bismarck, North Dakota, suggested that the cartons for mailing raob forms be supplied to stations by the National Weather Records Center, Asheville, instead of by the Re-

gional Offices. NWRC would return to each station the same number of cartons as were received from it, thus assuring a constant supply and doing away with the need for periodic requisitions from stations. The time saved in the Regional Offices and stations will far exceed the time required of the NWRC. Mr. Sanderson has been awarded \$10. for the adoption of this suggestion.

Mr. Charles Schick of the

Administrative Services Division suggested that, throughout the Department, the filing of envelopes with correspondence be discontinued to save filing space. It was found that the Records Management Section of the Weather Bureau has not been including envelopes with filed correspondence, so the recommendation had no application within the Bureau, but the Department adopted the suggestion and authorized an award of \$50.

### *WBAS Raleigh-Durham*



The Weather Bureau occupies all of the new, modern building (shown above) which was built by the Raleigh-Durham Airport Authority to house the combined state service center, airport office and climatological services. Special provision was made to permit installation of radar and rawinsonde equipment at a later date.

## First Order Devotion by Second Order Observers

**I**N a recent inspection trip Mr. Byron A. Young, Field Aid, of the Kansas City Regional Office, visited the second-order station at West Plains, Mo., and was amazed at the interest of Mr. and Mrs. Kriegh, second-order observers, in the Weather Bureau program. Since Mr. Young's last visit about a year ago

the city has made some improvements and installed new street lights, one on the corner of the observers' property. The observers persuaded the City to put a switch on the street light so it can be turned off when they make their ceiling and sky observations during hours of darkness. The City recently decided

to remove the fence from around the City Park, and was at work taking down the big gateposts when the observers prevailed upon the City to leave the gatepost by the ceiling light to protect it from possible injury by automobiles that might drive off the road there at the entrance of the park.

Another interesting point—the observers have been trying to purchase a home in another location but will not consider moving to a site unsuitable for weather observations.

This is just one more example of the initiative and resourcefulness of our second-order observers.

### HINTS FOR SERVICE IMPROVEMENT

#### *WB Publications Save Time!*

MR. L. G. PARDUE of the Miami Office passed on to the Central Office some suggestions for the use of Weather Bureau publications in answering requests for climatological information. He points out that there are several occupational groups making wide use of weather data and that by tactfully informing these clients about our publications, most of their needs can be filled by use of publications to which they can subscribe. This would relieve much of the workload now involved in relaying the information over the phone, copying it for mailing, or securing the publication itself for mailing. Of course, supplies of publications should be kept on station to hand to visitors requesting information and for answering intermittent and miscellaneous mail requests.

Suggestions made for educating clients to the use of our publications included tactful reference to a publication that would have given a caller the information requested in conversation after his request had been met; explanations of Weather Bureau publications during talks before civic groups, trade organizations, service clubs, etc., with samples to pass out; and through news

items pointing to the availability of our publications in Chamber of Commerce bulletins, trade journals, and house organs of industrial and professional associations.

### NEW METEOROLOGISTS IN CHARGE

#### *WBO Miami*

GORDON E. DUNN reported for duty in his new assignment as Meteorologist in Charge of the Weather Bureau Office and Hurricane Warning Center at Miami on April 11, 1955, filling the vacancy resulting from the death of Grady Norton on October 9, 1954. During his long career in the Weather Bureau Mr. Dunn has served at Providence, Rhode Island; Tampa, Florida; Washington, D.C.; Jacksonville, Florida; and Chicago, Ill. Except for short details to other assignments, he has for the past fourteen years been responsible for all weather services in the Chicago area, including the furnishing of forecasts and warnings for the numerous air routes extending out of Chicago, for the Great Lakes States and for the Great Lakes themselves. Mr. Dunn has an outstanding record

as a forecaster and is well known among meteorologists for his studies and publications on meteorology. He taught tropical meteorology at the University of Puerto Rico and assisted the Meteorology Department of the University of Chicago in developing hurricane forecasting methods.

#### *WBAS Bridgeport*

ROGER S. FRANTZ, GS-9 Forecaster at Buffalo, N. Y., has been selected to replace Mr. Rheinhard Harms as MIC at Bridgeport, Conn. Mr. Harms recently transferred to Hartford as Principal Assistant.

Mr. Frantz is 42 years of age and has been in the Weather Bureau nearly 19 years. His first assignment was in his home state

at Grand Rapids, Michigan, where he served for a short time as Minor Observer. About six months later he transferred to Detroit, followed by another move, after seven months, to Hartford, Conn. He remained at Hartford about eleven years, serving as Observer, Supervising Observer, Principal Assistant, and acting in charge at times. In the fall of 1948, Mr. Frantz was granted a Weather Bureau scholarship to attend New York University to study meteorology. After completing the nine months course, he was assigned to Buffalo, N. Y., where he has spent the last six years as Briefer and Forecaster.

Mr. Frantz has accepted the offer to return to New England, where he has spent most of his career in the Bureau. He is making preparations to move his family, a wife and three children, and estimates that he can enter on duty at Bridgeport about May 10.

## RETIREMENT

### *Burton W. Smith*

BURTON W. SMITH, Photo-Platemaker Pressman, at the Weather Bureau Printing Plant at the National Weather Records Center at Asheville, North Carolina retired on account of disability at the termination of April 30, 1955, after having completed thirty-four and a half years of service with the Weather Bureau.

Burton W. Smith was born on January 21, 1904 at Adams, Nebraska. His childhood was spent in and around Lincoln, Nebraska and here he began his Weather Bureau career with an appointment to the position of Messenger Boy effective September 10, 1920. He remained in Lincoln for the next twenty-six years during which time he served progressively as Minor Observer, Printer, Observer, Printer, and Hand Compositor.

He left Lincoln in December 1948 to transfer to Denver where he continued to work as a Hand Compositor until the spring of 1949 when it was decided to close most of the Bureau's field printing plants including the one at Denver and open photo-offset printing plants at the Weather Records Processing Centers at Fort Worth, Chattanooga, Albany and Kansas City. With the closing of the Denver plant Mr. Smith moved to Kansas City as Printing Supervisor. He remained in Kansas City until January 1952 when he transferred to the position of Photo-Platemaker Pressman at Asheville where he continued to serve until his retirement.

Mr. Smith may be contacted at the following address:  
30 Swannanoa Avenue,  
Asheville, North Carolina

## DEATH

### *Roy N. Covert*

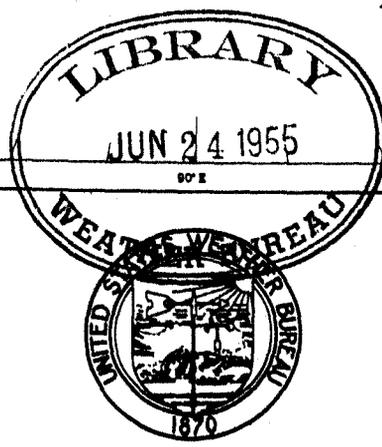
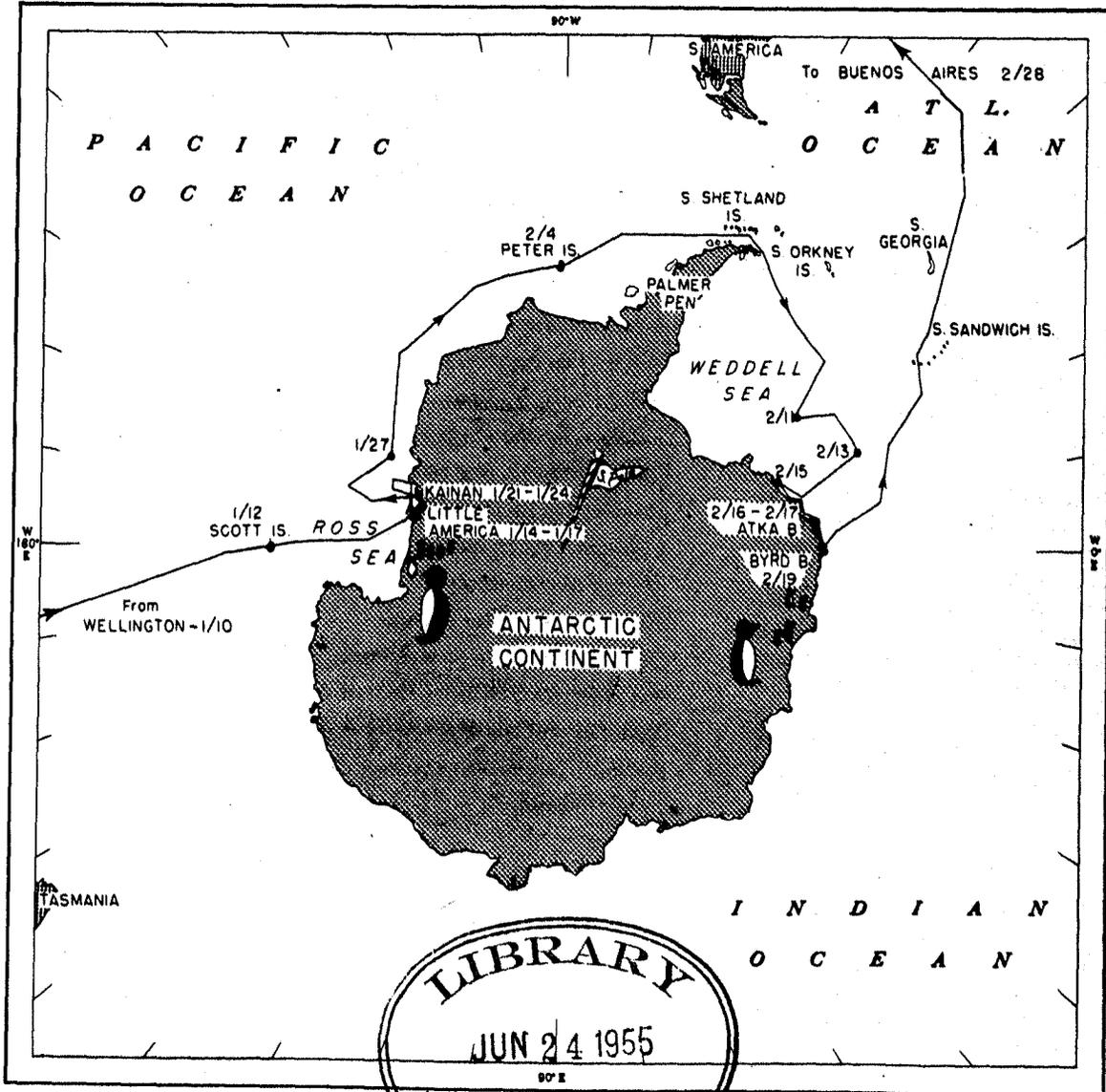
ROY N. COVERT, former employee of the Station Facilities and Meteorological Observations Division in the Central Office, passed away on Wednesday, April 27, 1955, at the age of 75. Mr. Covert retired on August 31, 1949 after more than forty-six years of Weather Bureau service. A brief resume of his service was published in the September, 1949, issue of TOPICS.

Ref. Staff C.2  
MSC  
JFW

# WEATHER BUREAU

# TOPICS

JUNE  
1955



Volume 14

Number 5

WEATHER BUREAU TOPICS is published monthly to inform all employees about newsworthy operations and work programs of the Bureau; to give background on instructions; to carry news of new personnel assignments, retirements, deaths, and similar information about employees; and to serve as a medium through which ideas and views may be exchanged to promote efficiency and teamwork in attaining our common goals. While the contents, unless otherwise specified, reflect the Central Office viewpoint, they are not instructions but are presented for information. Opinions, discussions or comments by readers are invited; they should be marked for the attention of the Editor, TOPICS. WEATHER BUREAU TOPICS is distributed for official use only.

**Civil Defense Briefing  
in Battle Creek**

A unique gathering of Bureau officials convened in Battle Creek, Michigan, last month. Mr. D. M. Little, Deputy Chief of Bureau, together with four Regional Directors and the MIC's from San Francisco, Denver, Fort Worth, Chicago, Boston, New York, Philadelphia, Washington, and Atlanta were guests of the Federal Civil Defense Administration May 16 and 17 for a briefing on civil defense and related meteorological problems. Key Central Office personnel in various phases of the Bureau's civil defense program also participated in the briefing.

Surveys of the civil defense functions carried on by their units were given by top FCDA officials responsible for national emergency operations, tactical operations at local levels, evacuation, attack warning, federal emergency communications, state and local communications and overall organization and coordination. The basic principles and practical methods of fallout computation, high-altitude wind climatology and severe storm warnings were covered by the Bureau project leaders for these activities.

Many searching questions were raised regarding the Bureau's role in support of civil defense, and a substantial "meeting of the minds" was reached. FCDA officials expressed their

ABOUT THE COVER—Route of the U.S.S. ATKA on reconnaissance cruise to the Antarctic. (See Page 85)

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appreciation for the fine cooperation which they have received from the Bureau and emphasized that such cooperation is absolutely essential to orderly planning and operations in the face of the fallout threat.

Since some of the Bureau

officials who were present had been associated earlier in their careers and had not seen each other for decades, it is hardly necessary to add that there was a certain amount of pleasant reminiscence and yarn-swapping at the informal evening sessions.

## The Second WMO Congress

THE Second Congress of the World Meteorological Organization convened in Geneva, Switzerland, on the afternoon of April 14, 1955, and adjourned just one month later on the afternoon of May 13. The Congress is the major constituent body of the WMO, meeting once each financial period (usually about 4 years) to establish the program, organization, and budget and to elect those officers who will direct the activities of the organization for the next four years.

Actual preparation for the Second Congress had begun about a year previous with adoption of a Provisional Agenda and subsequent preparation of working documents by the Secretariat for each of the agenda items. Advance preparation by the U. S. consisted of detailed study of each of the agenda items, scheduled meetings with designated representatives of all interested governmental agencies and Weather Bureau Divisions, selection and discussion of a provisional "U. S. Position" on each item and final adoption of the Position.

Selection of the U. S. delegation was made on the basis of agenda and program items and the need for representation in various committees and working groups. Dr. Reichelderfer, as Permanent U. S. Representative to the WMO, headed the delegation. As President of the Organization, his major task in Geneva would be that of presiding officer at all of the plenary sessions with full responsibility for coordination of committee work and conduct of the session. It accordingly became necessary to designate an alternate to act as U. S. spokesman in plenary meetings. That most interesting assignment fell to my

lot, as did the equally interesting assignment as U. S. spokesman in the Technical Program Committee.

Other members of the U. S. delegation were:

Mr. Paul B. Taylor, U. S. Department of State, assigned as delegation advisor on political, legal, organizational and procedural questions.

Mr. A. W. Johnson, Meteorological Attache to the American Consulate General in Geneva, Switzerland, assigned as spokesman on the working committee on legal and organizational matters.

Mr. Norman A. Matson of the U. S. Weather Bureau International Section in Washington, assigned as spokesman on the working committee on administrative and finance matters.

Major John R. Abbott, U. S. Air Force, assigned as adviser on meteorological requirements of the Air Force, with particular emphasis on technical program and technical regulations.

Mr. Austen H. Nagle, U. S. Weather Bureau and President of the WMO Commission for Aeronautical Meteorology, assigned as adviser on technical program, with particular emphasis on technical regulations, aeronautical meteorology and terms of reference of the Technical Commissions.

Dr. C. W. Thornthwaite, President of the WMO Commission on Climatology, assigned as adviser on climatology, arid zone meteorology, agricultural meteorology and water resources development.

Mr. Henry F. Nichol, of the American Resident Delegation in Geneva, assigned as Secretary of the Delegation.

Five members of the U. S. Delegation, Dr. Reichelderfer,

Major Abbott, Messrs. Johnson, Matson and I made the trip to Europe by boat, sailing from New York harbor on the American Export Liner "Constitution" at noon on March 31st and debarking at Genoa, Italy, on April 8th. During the eight days enroute, delegation meetings were held twice daily—only once on Palm Sunday, to permit attendance at church services aboard ship. These meetings provided a much needed opportunity to make a final review of the position and to discuss strategy with Dr. Reichelderfer. These discussions subsequently paid good dividends as the work of the Congress progressed.

Travel from Genoa to Geneva was by rail through the Italian and Swiss Alps and, fortunately, during daylight hours. For a "first timer" to Europe, this trip afforded a most impressive introduction and was reminiscent of vacation and business trips into our own rugged Rockies. Messrs. Taylor, Thornthwaite and Nagle made the trip from the U. S. to Geneva by air.

The opening plenary session was on the afternoon of April 14th in the Assembly Hall of the European headquarters building of the United Nations with addresses by the WMO President and dignitaries of the United Nations and some of its Specialized Agencies, the Swiss Government and others. Following adoption of the Agenda, a nominating committee and three main working committees (Technical Program, Legal, Administrative and Finance) were formed. Members with sufficiently large delegations named a spokesman to each of the working committees, others with smaller delegations had a delegate, or delegates,



Delegates and representatives of the 82 countries and territories at the Second WMO Congress in Geneva, Switzerland.

move from one committee meeting to another as items of major interest were taken up in each. Small working groups were appointed by each Committee to study major items and to report back to the main committee. Following agreement or compromise in committee, each item was subsequently taken up in plenary meeting for final disposition.

As can be imagined, translation was no small item in such an international gathering composed of over 200 representatives from 82 countries and territories. For plenary meetings, simultaneous translations into English, French, Russian and Spanish were available by earphone and selector switch. Consecutive translation into English and French were available in the working committees. The translator in the working committee listened to the speaker's native tongue, mentally translated into the first language of translation, made shorthand notes in that language, then read and subsequently re-translated from those notes. If, for instance, the speaker spoke Russian, notes were taken

and read in English and then immediately translated and read in French. In the main, members of the smaller working groups were chosen so that one language common to all could be used and no interpretation was necessary.

All documents were available in both English and French. This was no minor item as is evident from the fact that a set of the English documents alone, mimeographed on both sides of each page, finally amounted to a stack nearly a foot high!

A report on work and discussions in any of the three major committees would prove interesting and in most cases enlightening. On the whole, however, those items on the Agenda of the Technical Program Committee are likely to be of most interest to the majority of Weather Bureau personnel. Some of these are summarized in the following paragraphs.

Of major interest to meteorologists the world over was the preparation and final adoption of Technical Regulations. This was the major item on the agenda of the Technical Program Committee.

A draft set of proposed technical regulations, prepared on the basis of recommendations and suggestions by the Technical Commissions, had previously been circulated to all Members for comment. These draft regulations, plus subsequent comments and suggestions, were studied first in a working group and subsequently in committee. Each regulation was questioned, both from the standpoint of its theoretical and practical desirability and from its national and economic implications.

The regulations were prepared in two categories: first, the "standard practices" which are largely common to most meteorological services and which, once adopted, would become obligatory on all Members; second, "recommended practices" which are desirable but not obligatory. Obligatory in this instance means that WMO Members shall comply with the standard practices if at all practicable; if not practicable, the Member shall notify the WMO Secretariat of instances of non-conformity and the reasons therefor. The Secretariat in turn will

publish these differences and distribute them to all Members. The recommended practices are those procedures which, although desirable, are not so uniform in actual practice; as they become standardized and more generally adopted, many of them will doubtless become standards. The net result will be that meteorological practices the world over will achieve greater and greater uniformity; also, WMO Members will have up-to-date lists of variations in the practices of other Members and can make appropriate allowances pending complete adoption of the standards by all.

Chapter XII, the aeronautical portion of the Technical Regulations, will consist of Annex III to the ICAO Convention ("Standards and Recommended Practices—Meteorology") and ICAO "Procedures for Air Navigation Services—Meteorology" ("PANS MET"). These were prepared in Montreal under joint WMO/ICAO agreement and have been adopted in identical form by both Organizations in order to achieve complete uniformity as far as aeronautical meteorological practices are concerned.

Next, from the standpoint of interest to meteorologists in general, was the question of units to be used in coded messages and meteorological observations for international exchange. To those forecasters and map plotters who utilize reports from several countries, some of which use the English system, some the metric system and some a combination of the two, international standardization of units is of considerable importance. The desirability and practical necessity for eventual adoption of one common system of units was unanimously adopted in principle. Since countries using the English system constituted a definitely small minority, and since the metric system does possess advantages over the English system for use in calculations of the physical processes, etc., it was inevitable that the metric system would be proposed and accepted as "the" standard to be eventually adopted.

The economic and social difficulties of suddenly imposing on the general public of a major nation such as the U. S. the adoption of a new system of units was stressed. The difference between the adoption of a completely dif-

ferent system of units and the mere change-over from inches to millibars for barometric pressure several years ago was stressed. Also, the real and very practical difficulties of utilizing a dual system, one for internal domestic use and another for international exchanges, such as would be required by the U. S., Canada and the United Kingdom for instance, were enumerated and discussed. As finally agreed, those nations which do not use the metric system for internal use will study the problem and attempt to set a time limit for the adoption of metric units for international exchange purposes. For internal domestic use and for bilateral exchange of data, such as between the U. S. and Canada, no procedures were either specified or recommended. The English system of units for temperature and precipitation will continue to be used in the U. S. and Canada.

The need for technical assistance in meteorology in many of the lesser developed countries and the form of such assistance was discussed at length. Some assistance is available through the United Nations program of



Opening plenary session, Second WMO Congress, in Assembly Hall of the European headquarters building of the United Nations in Geneva, Switzerland.

Technical Assistance, but falls far short of actual needs. Such assistance ranges from that of sending trained experts to direct and assist in setting up or developing National Meteorological Services, or branches of meteorological services, to that of providing scholarships in meteorology for promising students of the country. Many such scholarships have been provided in the past, and a number of the U. S. Weather Bureau stations have assisted in this work by providing final on-the-job training prior to the return of these students to their native land.

Still another form of technical assistance and one in which the WMO is becoming more active is that of publishing and distributing "how-to-do-it" manuals and guides. These are designed to furnish the less developed countries with practical, readily available guides to bring their meteorological services up to acceptable standards. Among those currently authorized or already in the process of preparation are guides on Climatology, Agricultural Meteorology, Synoptic Meteorology, Aeronautical Meteorology and a manual of Meteorological Observing in Aircraft.

A proposal for WMO publication of a Compendium on Physics of Clouds and Hydrometeors was not supported by Congress. It was agreed instead that this was a type of publication which might more readily be undertaken by a learned society such as the American Meteorological Society or the Royal Meteorological Society. It was agreed that the WMO should, however, continue to exhibit interest in such an undertaking. It was also noted that a supplement to the AMS Compendium of Meteorology is being written and will contain a chapter by Drs. aufm. Kampe and H. K. Weickmann, related in large part to the subject of cloud physics. This chapter

could largely serve the purposes of the suggested Compendium, pending the availability of further definitive results of current research and investigation.

Need for a special operational and technical development program in meteorology was recognized, and as a start, \$10,000 was set aside for this purpose during the next four-year period. This fund is to be utilized for developmental projects designed to overcome serious world-wide or regional deficiencies and for projects outside the regular United Nations Technical Assistance Program.

The need for further international comparisons of instruments and particularly of radiosonde instruments was emphasized. Plans are under way for an international radiosonde comparison to be held at Payerne, Switzerland. A number of countries, including the U. S., have indicated a desire to participate in this comparison. Funds were appropriated for working up, publishing and distributing the results. It was urged that this comparison be undertaken either late in 1955 or early in 1956 in order that the results would be available by the time the International Geophysical Year Program gets under way during 1957 and 1958.

The need for a World Climatological Atlas was discussed at length. Some members were of the opinion that the most practical method for compiling such an atlas would be that of assembling a number of national or regional atlases, all prepared in accordance with a standard format to be developed by the Commission on Climatology. Others pointed out that large ocean areas, particularly in the southern hemisphere, would likely be omitted under such a plan, as would also areas of many countries not having the facilities or funds to compile and publish their portion of such an atlas. It was agreed that for the present,

at least, funds for publication of a world-wide Climatological Atlas were beyond the scope of the WMO budget. Funds were appropriated, however, for a small working group to study the problem, suggest a format and look into the possibility of obtaining funds outside the WMO to finance the publication of such an Atlas.

Other authorized projects for the next four years include: cooperation in the program of the forthcoming International Geophysical Year; the collection, storing, cataloging and dissemination of meteorological data gathered during the International Geophysical Year; preparation and publication of an International Meteorological Vocabulary and an International Meteorological Lexicon; the preparation and publication of additional International Meteorological Tables; the publication of about ten Technical Notes a year; studies of station network densities; cooperation in UN programs on Water Resource Development, Arid Zone Research, Humid Tropics Research and many others.

By way of history and background: the World Meteorological Organization came into being on March 19, 1951, when the former International Meteorological Organization was discontinued and its assets and functions were formally transferred to the WMO. Details of the origin of WMO and disbanding of IMO are contained in the March 1951 issue of TOPICS, on page 44, under the title "Bureau Officials to Paris for Meetings". Dr. F. W. Reichelderfer, Chief of Bureau, was elected the first President of the WMO and has served in that capacity during the four intervening years.

The WMO is one of the Specialized Agencies of the United Nations, as are the International Civil Aviation Organization, World Health Organization, Universal Postal Union and others. WMO's

membership now totals 90 countries and territories, all having meteorological services and with the director of the meteorological service designated as the Members' Permanent Representative to the WMO. Membership in the WMO is open to any State, territory or group of territories maintaining its own Meteorological Service.

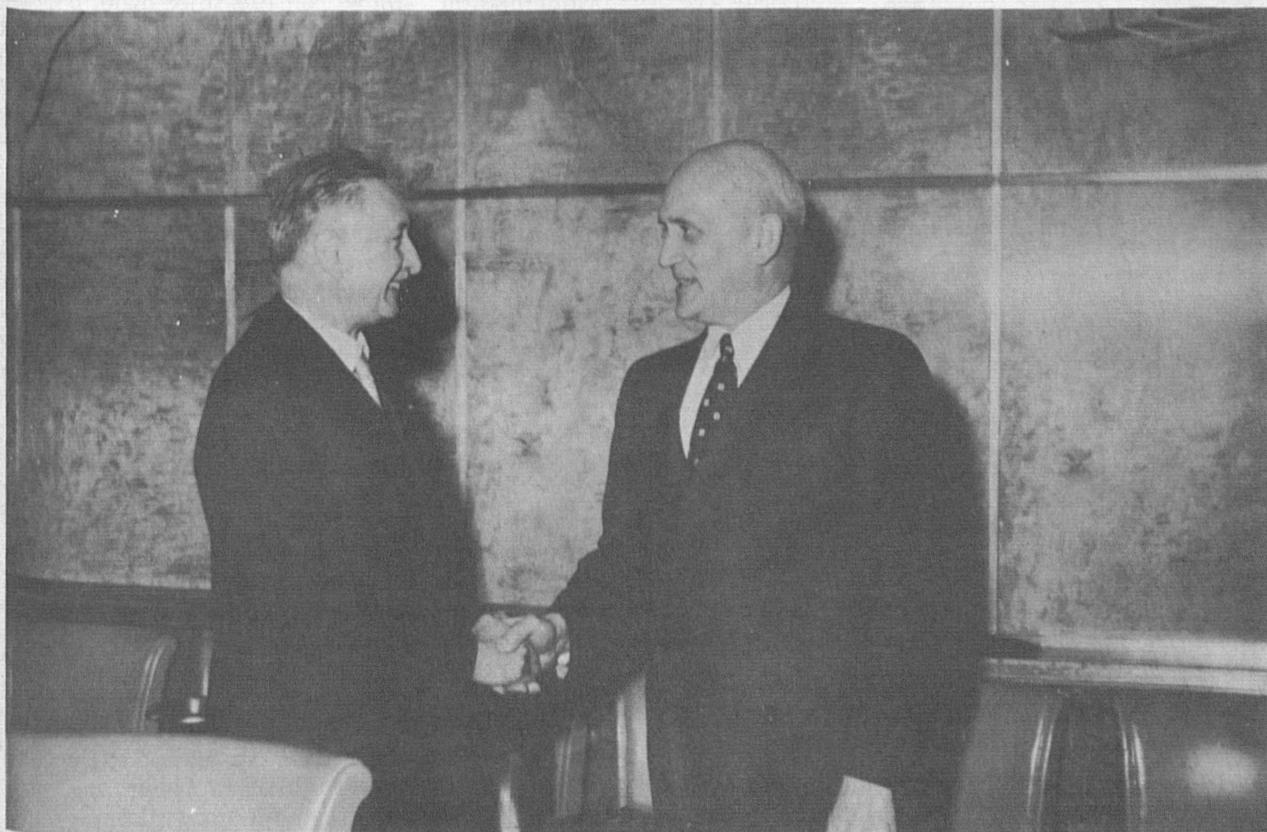
(b) To promote the establishment and maintenance of systems for the rapid exchange of weather information;

(c) To promote standardization of meteorological observations and to ensure the uniform publication of observations and statistics;

(d) To further the application

Geneva. The authorized complement of the Secretariat is 70, including Secretary General, Deputy Secretary General and technical and administrative staff.

The constituent bodies of the Organization, composed of voluntary members, serving the interests of meteorology without pay from the Organization are:



Dr. Reichelderfer, retiring President, congratulates Mr. A. Viaut, Director of the French Meteorological Service, on his election as President of the WMO.

The purposes of the Organization, as stated in Article 2 of its Convention are:

"(a) To facilitate world-wide co-operation in the establishment of networks of stations for the making of meteorological observations or other geophysical observations related to meteorology and to promote the establishment and maintenance of meteorological centres charged with the provision of meteorological services;

of meteorology to aviation, shipping, agriculture, and other human activities; and

(e) To encourage research and training in meteorology and to assist in co-ordinating the international aspects of such research and training."

The day-to-day work of the WMO is coordinated and facilitated by the Secretariat under the guidance of a Secretary General and with permanent headquarters in

1. The Congress, which is the supreme governing body of the Organization and meets at least once every four years. Its membership is composed of delegates of each of the Member states and territories.

2. The Executive Committee, which meets at least once each year. Its functions are to implement the program and activities authorized by Congress and carry on other interim executive func-

tions. Its membership includes the President and 1st and 2nd Vice Presidents of the Organization, the Presidents of the six Regional Associations and six elected members, chosen for their outstanding meteorological ability and knowledge.

3. The Regional Associations, which normally meet at least once every four years to consider meteorological problems and requirements on a regional basis and to make appropriate recommendations to the Executive Committee, to Congress, and to Members within their respective geographical areas. For this purpose, the globe is divided into six regions, with North and Central America, including the Caribbean, comprising Region Four.

4. The Technical Commissions, which meet every four years or in some cases more frequently, to act on problems and questions in that portion of the sphere of meteorology determined by their terms of reference and to make suitable recommendations and resolutions to the Executive Committee and to Congress. The present organization consists of eight Technical Commissions for: Synoptic Meteorology, Aero-

logy, Aeronautical Meteorology, Maritime Meteorology, Bibliography and Publications, Instruments and Methods of Observations, Agricultural Meteorology, and Climatology. Membership in these Commissions ranges from 44 in the Commission for Bibliography and Publications to 92 in the Commission for Synoptic Meteorology. Each Commission has a number of small working groups, organized to work on a specific project, such as, for instance, the IGY, World Climatological Atlas, etc. Each member of a Technical Commission or one of its working groups is an expert in his particular field.

Financial support of the WMO is obtained by the assessment of contributions on its Members according to a scale determined by the WMO Congress. Its total authorized budget for the next four years is \$1,700,000 assessed as a total of 1105 units of approximately \$384.61 a year. Contributions vary from one unit each for many of the smaller Members up to 171 units for the United States and proportionate amounts for other Members. Although the total budget is comparatively small, actual accomplishments,

program-wise, are much greater, due mainly to the voluntary work of the members of the constituent bodies and the additional voluntary work contributed by Member States in connection with many of the larger program projects. Much has already been accomplished during the four years of its existence, but proportionately more remains to be done, particularly in view of current rapid advances in meteorological techniques and increased emphasis on uniformity of reports, reporting network densities and other considerations.

Officers elected for the next four year period were: President—Mr. A. Viout (France); First Vice President—Mr. M. A. F. Barnett (New Zealand); Second Vice President—Prof. Dr. H. A. Ferreira (Portugal). Mr. D. A. Davies (British East Africa) was selected as Secretary General, succeeding Dr. G. Swoboda, who has reached retirement age. Dr. Reichelderfer declined nomination for a second term as President and was immediately and unanimously elected to the first elective position on the Executive Committee, which will supervise the activities of the Organization until the next Congress in 1959.

## Advisory Committee on Climatology

**A**N Advisory Committee on Climatology has been established by the National Research Council, at the request of the Chief of the Weather Bureau. The members of this committee are: Chairman, Dr. Thomas F. Malone, Director of Travelers Insurance Co., Weather Research Center, Hartford, Conn.; Dr. Werner A. Baum, Editor, Journal of Meteorology, Florida State University, Tallahassee, Fla.; Dr. Phillip E. Church, Dept. of Meteorology and Climatology, University of Wash-

ington, Seattle, Wash.; Dr. A. O. Kuhn, Head, Dept. of Agronomy, University of Maryland, College Park, Md.; Dr. J. H. Longwell, Dean, School of Agriculture, University of Missouri, Columbia, Mo.

The first meeting was held in Climatological Services Division on April 28 and 29, 1955. The Bureau's climatological program was outlined in some detail by members of the Division, as shown by the following agenda: (1) Organization of climatological work

in the Weather Bureau; (2) Networks for Climatological Observations; (3) Routine Processing and Storage of Observations; (4) Routine Publications; (5) Special Projects; (6) Development work.

After this presentation of the program the committee made a number of constructive comments and suggestions. The next meeting of the committee will be in Asheville, N. C., during October 1955.

## Reconnaissance Cruise to the Antarctic

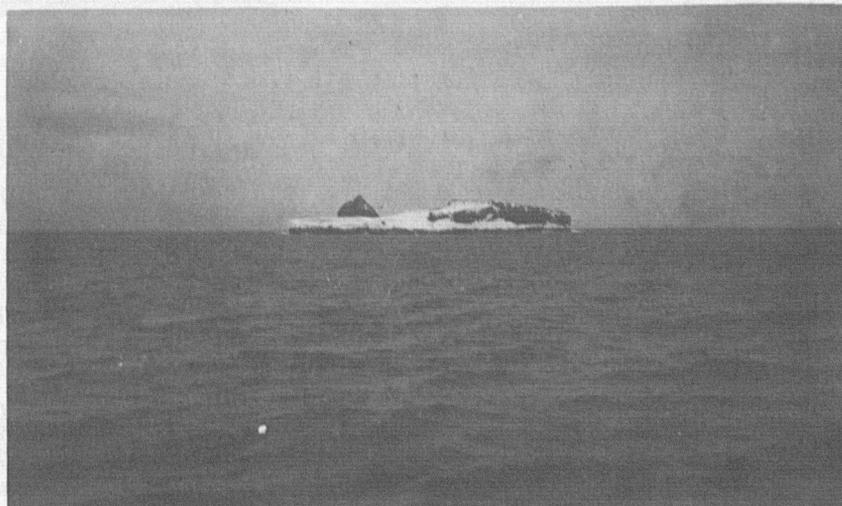
**A**T the Boston Navy Yard on the afternoon of April 12, 1955, the U.S.S. ATKA was welcomed back after her reconnaissance cruise to the Antarctic for the International Geophysical Year 1957-58. Aboard were two representatives of the Weather Bureau (see TOPICS for February-March 1955). Rear Admiral Richard E. Byrd headed the large delegation which greeted the ship. With him were officers of the Navy Operation DEEP FREEZE, planned for departure to the Antarctic late this year, and scientists actively interested in IGY programs, including Mr. D. M. Little, representing the Chief of Bureau, and Dr. Harry Wexler.

In January, soon after the ATKA arrived in the Antarctic, it was discovered that a piece of ice larger than 10 by 70 miles had broken away from the Ross Ice Shelf. Thus, the Bay of Whales (used by the Byrd expeditions) was eliminated; and the major part of the previous Navy camp was gone. The break occurred so that a tent and an oil drum were precariously exposed in the ice front facing the ocean, and much valuable equipment that might have been used by future expeditions was lost. Instead of making a survey of the Little America area as planned, it was necessary to locate an entirely new site on the Ross Sea as a main base for the U. S. operations. Otherwise, the original program of exploration and scientific studies was carried out more or less as planned.

Throughout the entire time the ship was in the Antarctic, which included an exploration voyage covering the eastern portion of the Ross Sea, passing south of Cape Horn, and touching points



The U.S.S. ATKA moored to bay ice in the Antarctic.



Scott Island, famous navigational reference point for Antarctic Expeditions leaving from New Zealand.



New face of ice shelf at the Bay of Whales at the location of the HIGH JUMP camps. The arrow points to a torn tent.

on the coast of the Weddell Sea half-way around the continent from Little America, meteorological conditions were not particularly severe and did not interfere with work as much as was expected. The lowest air temperature observed aboard ship was 7 degrees Fahrenheit, and generally temperatures were in the upper twenties. No storms with strong winds or heavy snows were encountered. As far as the rawinsonde program was concerned, better results were obtained in the Antarctic—where the

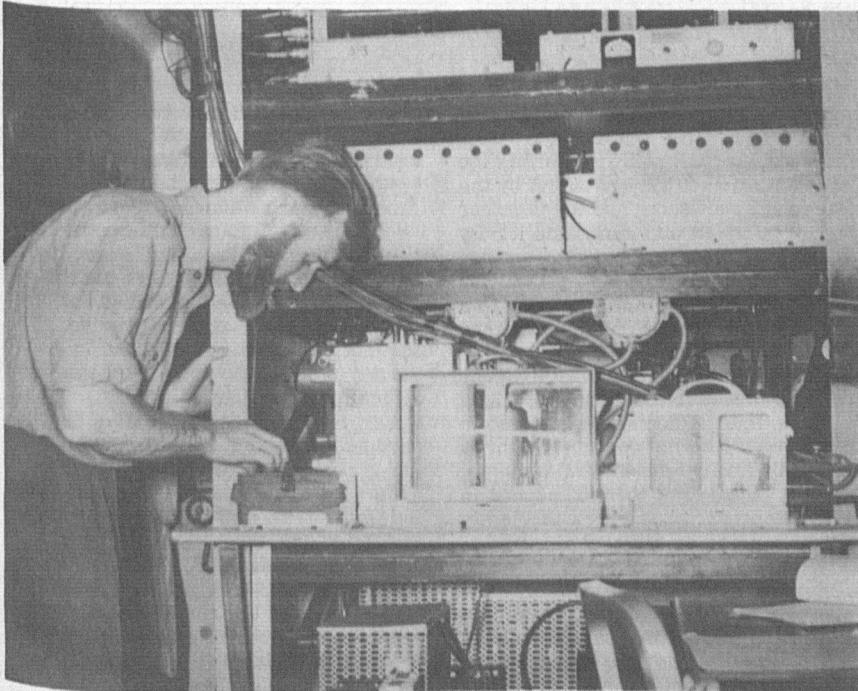
pack ice exerts a calming effect on the sea—than en route. Operational procedures on the ship, including balloon launching from the fantail or helicopter flight deck, were not dissimilar to those at a fixed land station. The major difficulties were local radio interference and the lack of success with the radar for wind soundings. The radar was not well adapted to taking rawinsondes and frequently was needed for navigation or the tracking of the expedition's helicopters.

As representative of the U. S.

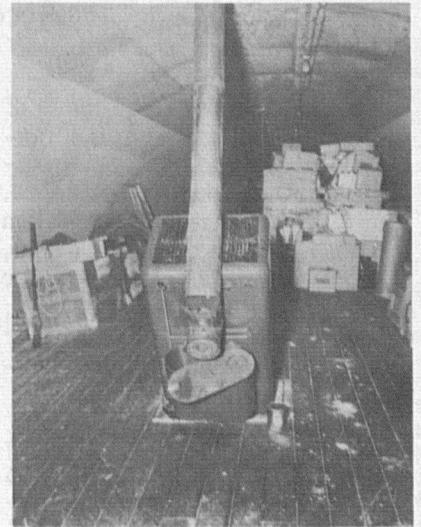
National Committee for the International Geophysical Year, Paul A. Humphrey, meteorologist of the Scientific Services Division, was concerned with more than the regular meteorological observational and forecast program which was conducted by Navy aerographers. He participated in the organization and carrying out of the site surveys and supported as necessary the other scientific programs of the expedition. In one program the variation of cosmic rays with latitude was studied by means of newly developed equipment that measured the neutron component of the radiation. In another program, a little understood type of radio noise known as "whistlers" was studied. Such noise, which actually is an audible whistle as received, is thought to result when a pulse of radio energy from a lightning flash oscillates from one hemisphere of the earth to the other. The "whistlers" are especially interesting because the pulse appears to travel in an arc thousands of miles high—through "outer space".

Humphrey was also responsible for a carbon dioxide sampling program. As helium cylinders were emptied during the trip by the upper air sounding program, they were refilled with air. While in the Antarctic five cylinders were filled every three or four days, one sample being taken at the southernmost point, latitude,  $78^{\circ} 32'$ . In all, 105 cylinders were filled with air under high pressure.

George R. Toney, Jr., representing the Weather Bureau Arctic Operations Project assisted with the overall meteorological program, made snow engineering observations on the ice shelf, and acted as photographer for the Weather Bureau and the U. S. Public Information Service. The snow observations were made in cooperation with the U. S. Army



Dr. K. B. Fenton, cosmic ray Physicist, in his laboratory.



Interior of Quonset hut at Little America III. Tilted stove indicates distortion by weight of snow and ice on hut.

Snow, Ice and Permafrost Research Establishment. Two-meter pits were dug and the density and character of the snow in the vertical were determined.

As a result of the ATKA's explorations it appears that the main base for U. S. operations in the Antarctic will be at or near Kainan Bay, about 25 miles northeast of the Little America camps. From the main base a field party will leave to establish the Marie Byrd Land station at 80°S., 120°W. The South Pole station will be established by personnel and supplies brought in by airplane.

Present planning calls for the staffing of the Antarctic stations with fifteen Weather Bureau personnel about as follows: Main base—two GS-12 meteorologists, one GS-9 technician-observer, three GS-7 rawinsonde observers, and one GS-6 observer-chartman. At both satellites—one GS-11 meteorologist-rawinsonde observer, one GS-9 technician ob-

server, and two rawinsonde observers. Also at these bases will be the scientific personnel who will study the aurora, the ionosphere, cosmic rays, gravity, geomagnetism, glacial ice, etc. The operation of the station is expected to be somewhat the same as at the Weather Bureau Arctic stations. There will probably also be requirements for cooks, mechanics, and other craftsmen. As stated in the previous TOPICS article, those who are interested should write the Personnel Division as soon as possible. Preference will be given to men with outstanding records who have worked under rugged conditions as might be experienced in the Arctic or aboard the ocean weather ships, but no one should hesitate to apply merely because he does not have such experience.

Travel to and from the Antarctic will be by Navy ship, with stops in Panama, C. Z., and New Zealand. Transport to the two

satellites will be by air after suitable shelters and other facilities have been constructed.

Assignment to the Antarctic project will probably be made during mid-1956 to allow for a period of training prior to departure from the United States later in the year. Since the International Geophysical Year is from July 1957 to July 1958, return to the United States will be in early 1959. It is expected that per diem will be paid en route and that a bonus of 1600 to 2000 dollars per annum will be paid for time in the Antarctic. As at the Arctic stations, there will be no charge for food and quarters.

Those who would like for their addresses to be "The South Pole" or "Marie Byrd Land, Antarctica," and to be included in the company of explorers and scientists who have opened new paths for scientific work should apply for available positions.

## Accomplishments of the Weather Bureau

THE September 1954 issue of TOPICS carried some material that could be used by field officials for broadcasts and speeches. The following material was taken from a report to the Department, "Accomplishments of the Weather Bureau, July 1954—May 1955", and may be of use for similar purposes or for answering questions from outside sources:

Progress on Implementation of Certain General Program Items provided in Weather Bureau Estimates: The major items requiring budgetary support are (a) transfer of certain basic meteorological functions from the Armed Forces; (b) improvement of methods and techniques for obtaining weather observations, (c) replacement and development of instrumental equipment, (d) improvement in communications facilities, and (e) research and development in climatology, hydrology, and forecasting, particularly tornadoes, hurricanes and other severe storms. At the present time the prospects are excellent for progress in these program items.

Storm Reporting Networks: One hundred and sixty-seven Weather Bureau offices now have storm reporting networks composed of thousands of volunteers from public and private organizations. Special attention was given to the activation and strengthening of these networks in preparation for the spring and early summer storm season. In addition, hundreds of communities have developed their own storm reporting networks, and Ground Observer Corps, Federal Civil Defense Administration, Red Cross, etc., volunteer personnel report dangerous local storms to the Weather Bureau. Upon receiving information on the development of severe local storms, Bureau personnel warn other communities that may be affected by the storm's passage, thereby reducing the potential loss of life and property damage.

Texas Radar Network—Cooperation with Municipalities: A significant development in the last year has been the completion of the first stage of the "Texas Radar Project," a cooperative endeavor of the Weather Bureau, the Texas A&M Research Foundation, the State of Texas, and various com-

munities therein, whereby the Weather Bureau furnished war-surplus radar equipment, the cities paid for modification and installation of the equipment by the Research Foundation, and the Weather Bureau operates and maintains it. By May 1 of this year radar equipment had been installed under this plan at 12 cities in Texas and Louisiana, bringing to a total of 19 the number of radar weather installations in the two States. In the second phase of the project, installations are programmed for two more locations in Texas, four in Louisiana, and one in Oklahoma. The network in the three States will finally total 27 stations.

This is the first tornado season in which the network has been sufficiently complete as to be effective in the detection and tracking of severe storms such as tornadoes. The observations have proven to be very valuable. On several occasions they have furnished the first tip that severe storms were developing. Such alerts have prompted the issuance of tornado forecasts. In several cases, once tornado forecasts had been issued, local officials, by direct broadcast, have been able to keep the public informed of the exact position of the severe storm by observing and tracking them with radar.

Climatic Studies and Publications: The Climatological Services Division made special efforts to promote conversion of its stores of climatic records to forms of public usefulness. Several of the more important studies are listed below.

a. As a direct aid to air commerce, 3 tabulations of upper-air winds and their aiding and retarding effects on aircraft movement were prepared for levels of 5-, 10-, 20-, 30-, and 40-thousand feet over the United States and the Pacific and Atlantic Oceans. The data are to be published by the Navy.

b. Work on the publication of a Marine Atlas in six volumes, sponsored by the Navy, has advanced so that the first volume will be issued in September 1955. This Atlas, designed to be the climatological Bible for all the oceans of the world, will amount to a compendium of invaluable climatological information for the Navy, the Merchant Marine, and other marine operators.

c. Climatic summaries of five Arctic weather stations, operated jointly by the Governments of Canada and the United States, were resummarized and brought up to date. These summaries, of espe-

cial importance as aids to Arctic aviation, are proving to be increasingly valuable also in studies of weather origins pertaining to the entire North American continent and adjacent oceans.

d. As an aid to agriculture, in connection with the growing season, data for upwards of 3500 weather observing stations have been summarized to show the average last-occurrence dates in spring and first-occurrence dates in autumn of 5 specific temperatures: 32°, 28°, 24°, 20°, and 16°.

e. The Bureau's cooperative punch-card and statistics program with state universities has proved to be quite valuable as a means of helping farmers, industrialists, and other operators of the Nation's business. Every opportunity has been taken to encourage additional universities to participate on a cooperative basis with the result that the total number of universities was increased from 12 to 17 during the past year.

f. Because of the size (225,000,000 punch cards) and continuing growth of the Weather Bureau punched card library of climatic records, and also because of the threat of deterioration of these records vigorous action has been taken to obtain the necessary equipment and institute a system of storage and preservation that will (1) record the cards on relatively permanent microfilm, (2) reduce the need for filing space to 1/30th of the present requirement, and (3) provide for reconversion of the film-record to suitable working card form at speeds well beyond modern computing machine requirements.

Experimental Weather Broadcasts for Aviation: A continuous recorded voice broadcast of the latest available aviation weather information and notices to airmen was sponsored jointly by the Weather Bureau and CAA on October 15, 1954, on an experimental basis. These broadcasts, originating in the forecast office of the Weather Bureau at Washington National Airport contain flying weather forecasts for the area within 250 miles of Washington, radar weather reports, pilot's weather reports when available, hourly and special observations from surrounding weather stations, and notices to airmen concerning field conditions and radio aids. Favorable comments have been received from pilots and operators of small airports within 200 miles of Washington and many are anxious to have this type of broadcast extended to other sections

of the country.

Military Sea Transport Service Ocean Radiosonde Project: In cooperation with the Office of Naval Operations and the Bureau of Aeronautics a program of twice-daily radiosonde observations was inaugurated aboard MSTs vessels in the Pacific Ocean, to obtain observations at high elevations over the ocean at a nominal cost. A light-weight radiosonde instrument of Finnish design is used as a means of reducing the cost of such a program. First reports from the project indicate that entirely satisfactory results are being obtained and it is highly desirable that the experimental program be expanded to vessels in other oceans. Because the observations are taken from a moving vessel and generally confined to shipping lanes, the program cannot be considered as an adequate or complete substitute for the present ocean station network.

International Geophysical Year Program: The Weather Bureau has actively participated in the development of the meteorological program for the International Geophysical Year, 1957-8, which will include establishment of meteorological stations in the Antarctic including one at the South Pole. The Bureau sent two staff members on the Icebreaker *Atka* which visited the Antarctic during the current year in planning for the program of the International Geophysical Year.

Cooperation with Atomic Energy Commission: The Weather Bureau has continued its broad cooperative program with the Atomic Energy Commission. Research on the effects of atomic explosions on the general weather of the country has been investigated and to date, no significant correlation determined. The program of collecting radioactive fallout at some 125 Weather Bureau locations throughout the United States has been maintained and expanded during the current Nevada atomic tests. Special fallout forecasts have also been prepared during these tests. Special research-operational offices have also continued to be operated at various AEC

sites such as Brookhaven National Laboratory, Oak Ridge, Tenn., Idaho National Reactor Testing Station, and Portsmouth, Ohio Gaseous Diffusion Plant. Technical meteorological assistance has also been furnished in the general development of nuclear-powered aircraft and nuclear power plants. The Weather Bureau continues to work with the Atomic Energy Commission on the general dispersal of radioactive effluents from reactors and other nuclear operations.

Cooperation with FCDA: The Weather Bureau has worked closely with the Federal Civil Defense Administration on plans for utilizing meteorological data for predicting areas of fallout in the event of an attack. Arrangements have been made to provide Weather Bureau liaison and consultant service to FCDA National and Regional Offices and to State Civil Defense Directors. The Bureau has undertaken a program of routine daily preparation and dissemination of fallout data at selected upper-air wind observation stations throughout the country. Plans have also been agreed upon with FCDA for research on improved methods of forecasting fallout areas, and for statistical studies of fallout probabilities in the neighborhood of presumed target areas, based on past high-altitude wind records. The role of the Weather Bureau in supporting Civil Defense at the National, State and local levels has been formalized in a delegation of authority to the Commerce Department by the FCDA which is now awaiting Presidential approval.

Weather Modification Research: Within the last year the Weather Bureau completed one phase of a field investigation designed to gather basic information on storm structure in conjunction with tests on the effectiveness of cloud seeding techniques. The large amount of important scientific data obtained by means of aircraft and radar is being evaluated now. This research will bear importantly on the direction of any further experiments into areas that are likely to be most promising.

Fire-Weather Research:

a. OPERATION FIRESTOP: A cooperative project conducted by the U.S. Forest Service, California Division of Forestry, University of California School of Forestry, U.S. Weather Bureau, and Civil Defense at Camp Pendleton, Calif., was designed to study mass fire behavior and control. One phase of this project was a wind survey in a typical rugged canyon to study local surface wind patterns, the diurnal variations in these patterns and their dependence on weather factors. Some preliminary results have already appeared and more will be presented in later Operation Firestop reports.

b. PROJECT SKYFIRE: A cooperative project conducted by the U.S. Forest Service and the Munitalp Foundation, with a Weather Bureau synoptic analyst assisting, in Northern Idaho and Western Montana was designed to study the development, movement, and distribution of thunderstorms and lightning fires in the Northern Rocky Mountain area. Special attention was given to the high level or dry thunderstorms. The association of the occurrences of these thunderstorms and the presence and intensity of the jet stream was investigated. A Project Skyfire Report has been published covering the 1954 activities.

Research on Electrical Properties of Clouds: An experimental and theoretical investigation of the electrical properties of clouds and rain has been carried on in an attempt to determine the relation of electrical effects to the formation and precipitation of rain. The investigations have shown that nearly every cloud droplet is appreciably electrified and that when these droplets associate to form rain, an enhanced electrical state is established within the cloud which may promote rain production. The processes are complex but the investigation already shows that electrical effects may notably increase the rate of rainfall. The results have been summarized in a series of papers that will presently appear in the technical literature.

## Tornado Forecast Verification

THE series of tornadoes during May 25, 26 and 27 throughout Kansas, Oklahoma, Missouri, and Texas included the most devastating ones of the season. There was a total of 86 tornadoes

reported, including funnel clouds, and the verification data shows that 71 of these were forecast by the SELS Center. Among those forecast were the tragic tornadoes on May 25 at Udall, Kansas, where

the town was wiped out and 80 persons killed, and at Blackwell, Oklahoma, where 20 deaths were reported. All of the 13 tornadoes in Oklahoma and Kansas on May 25 fell within the forecast areas.



Mt. Dundas, Thule AFB, Greenland

### *Spring Resupply Circuit*

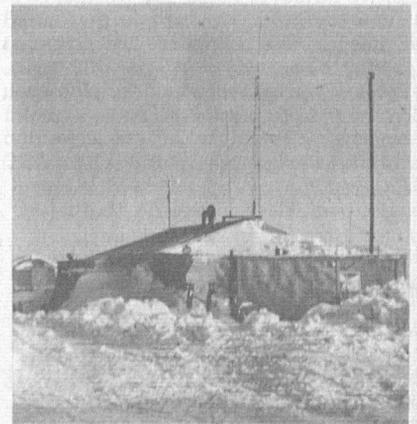
A Group of six replacement personnel shepherded by a Central Office employee of the Arctic Project, left Winnipeg April 4, 1955, enroute to the Arctic weather stations. The group arrived in Churchill on a bright sunny morning after about twenty-four hours on the Canadian National Railway. On the same train was Judd Courtney of the Canadian Meteorological Service, and the Canadian replacement personnel. Though bright and sunny, Churchill was still reporting winter temperatures on the 6th of April, with plenty of snow. The base, which is located about two miles from the town of Churchill appears to be a maze of connected buildings, allowing the opportunity to walk great distances without having to go out of doors. Such an arrangement must be convenient for the mid-winter weather there.

The journey from Churchill to Resolute Bay was made in RCAF C-119 aircraft. The C-119 "Flying Boxcar", affectionately referred to as "a collection of spare parts flying in formation",

has proven very satisfactory for the airlift operations up North. One stop was made enroute at Coral Harbor, located on the south side of Southampton Island. Coral Harbor may bring to mind pounding surf and swaying palms, but a bleaker spot would be hard to find.

The two western satellite stations of Mould Bay and Isachsen are supplied from Resolute Bay, which in turn receives the cargo and materiel during the summer shipping season. The resupply activities began the day after arrival of the group at Resolute, April 8th. With three C-119's flying "around the clock", the operation is a tremendous undertaking, and both air and ground personnel involved deserve a great deal of credit whenever such an activity is completed. Personnel at the satellite stations, who do not have the equipment available at Resolute Bay for aircraft loading and unloading, deserve even more credit, as they must not only be on a twenty-four hour alert during the operation, but must also carry on with

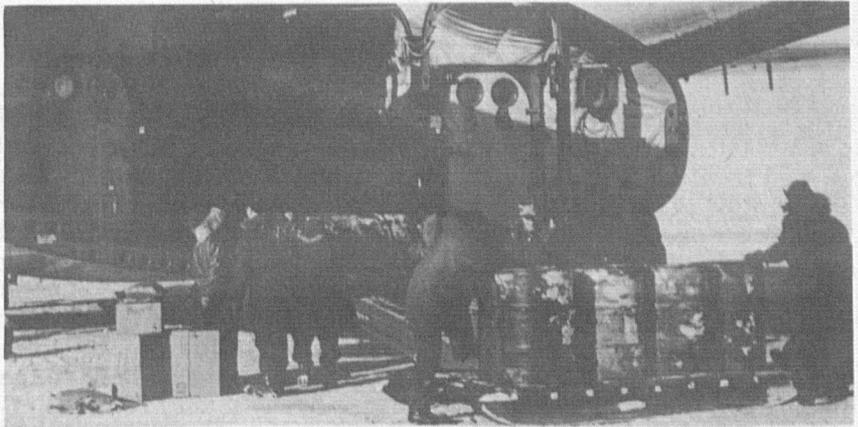
the normal station operation and scientific programs. At the Resolute end, two loading crews worked twelve-hour shifts each, one crew being composed of U. S. personnel and the other of Canadians. Luckily the weather was generally good, with not much wind to drive stinging snow into the faces of the loading crews, as it swept across the loading areas. During the operation, Weather Bureau personnel and their Canadian counterparts made flights to Mould Bay and Isachsen for the purpose of inspecting the stations and discussing personnel matters with the employees. This group included Mr. J. Glenn Dyer, Chief of the Arctic Operations Project, and Mr. Gordon Cartwright, Chief of the SF&MO Division of Central Office and Raymond M. Lumpkin of the Arctic Project. Mr. Cartwright made the trip this year to inspect the observational programs at the stations and obviously enjoyed not only the trip itself, but also meeting some of the "Arctic explorers" first-hand. One such gentleman, who has become somewhat of a legend in the North, is "Blowtorch" Morgan, Station Mechanic at Isachsen. A number of beards



Operations Building at Isachsen, N.W.T., Canada

were in evidence among the employees, from the thin, scraggly type to the thick, luxurious growth—this mark of the “Blue-nose”, however, seems to be disappearing.

With the completion of the Resolute Bay operation, Dick Lumpkin flew east to Thule, Greenland to assist Mr. Robert O. Derrick, of the CO Arctic Operations Project, who was supervising the preparation of cargo for Alert. Normally this station is supplied by icebreaker in the summer, but since they were not able to penetrate the ice last year, it was necessary to prepare for an airlift operation this spring. The resupply of Alert and Eureka, when necessary by air, is a mission of the USAF at Thule, and is carried out by C-119's and C-54's. At this time of the year the base is a beehive of activity, with various scientific parties gathering for assaults on the Arctic. Among these were an expedition to Lake Hazen, which lies between Alert and Eureka, and the T-3 Ice Island expedition which included Cliff Goodall of the Atlantic Weather Patrol. The base presents an “International Airport” appearance with a steady stream of multi-engined aircraft operating



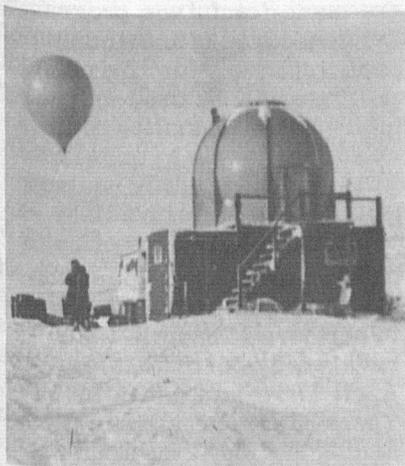
Unloading fuel oil drums at Alert, N.W.T., Canada

in and out and all the while jet fighters roar overhead on constant patrol. It is quite a sight to see these jets sweeping over the snowy terrain in tight formations. As an indication of the calibre of the pilots patrolling this increasingly important outpost, one individual, after making a wheels up landing on the strip, looked disgustedly at the aircraft and muttered, “Sure is hard to taxi that way.”

During the Alert operation, Arctic Project supervising personnel also made flights to that station and also to Eureka. While only a very small amount of cargo was on hand for Eureka, replacement personnel and mail were taken in, with the replacements being ignored while the station employees dove into the mail bags. While no animal life had been seen at the western satellites, outside of the huskies found at each station, numerous birds were seen at Eureka and the station personnel advised that hare were in evidence also. At Alert, quite a number of Arctic foxes were paying the station a visit, and would approach within two or three feet of a person to be fed. Care still had to be taken lest a hand be nipped, since rabies is prevalent among these snowy-white little animals. Since the

establishment of the Alert station, the polar bear has been something only to be talked about and not seen—however, shortly after return to Washington a message was received from the Executive Officer at Alert stating that a small bear had been shot about five feet from the door of the Operations Building, in the act of charging the radio operator.

It is difficult for someone who has not been North to imagine the tremendous effort which has gone into the establishment and operation of these outposts, where any one man may be called upon to direct his efforts to entirely opposite fields. One such example is the fact that the Weather Bureau up North finds itself also in the business of airstrip construction, the success of which is directly connected with the continued operation of the station. For those who have the opportunity, this trip should be a must.



Radiosonde Release  
Mould Bay N.W.T, Canada



The first bear bagged at Alert.

## *Selections for the Practice Forecast Program*

A few letters have been received from the field stating that the limiting of participants in the Practice Forecast Program to approximately 200 employees is a mistake and that the program should be open to all professional personnel. These letters point out that due to the high interest in the program the disappointment felt by employees who applied but were not selected is often strong, and that such employees feel an opportunity to acquaint the Central Office with their ability has been lost. One MIC pointed out that full participation at his station would furnish him with a needed common measuring device that could be used comparatively for his entire staff and therefore all employees doing forecasting work should be included in the program.

These viewpoints are appreciated and we wish the program could be made available to all who wish to participate but the simple fact is that we do not have the facilities to handle more than about 200 participants at the present time and we feel a practice forecast program with 200 participants is much better than no practice forecast program at all.

Experience has shown that even though employees not selected may be disappointed they can nevertheless understand and ap-

preciate selections based on formal training in meteorology. Such training has been emphasized for years. Participants in the present program were selected mainly on the basis of college credits in meteorology, although physics and mathematics credits were also considered in borderline cases. Only a very few participants, most of whom were approaching the minimum required credits, have been admitted on the basis of outstanding service records. Of 212 participants in the program over 200 have 19 hours or more credit in meteorology, and the average for all participants is over 30 credits. The program was large enough to accommodate all GS 7 and 9 applicants who possessed 20 hours in meteorology and all were included except for a very few special cases. A little more than half the GS 7 and 9 employees in the Bureau with 20 meteorology credits or more applied for the program, so while interest is intense in many cases such interest is not shared universally by all employees in all types of jobs.

It is possible that at some future date more facilities may become available and more participants may be accommodated but even if we have to go ahead for an indefinite period with only

about 200 active participants this does not mean that no more than that will get into the picture eventually. It is logical to expect that every so often we can drop those whose grades are persistently low and thus make room for new participants.

But we can not yet say just how long it will take to determine who should be dropped. This will depend on two factors, the difference in performance of the participants and the ability of our system to detect the differences. These are as yet unknown quantities. It should also be noted that there are always a certain number of employees who will drop out voluntarily because of transfers, resignations, promotions, changes in assignment, etc.

Only one-third of the applicants were selected so those not selected form the majority group. We certainly wish to keep the door open for the many excellent employees in this group and we know from correspondence that many will have additional credits in meteorology when selections are made for future programs. Our file cards of information on each applicant for the present program will be used in making future selections.

## *Questionnaire—Severe Storm Warnings*

RADIO Station KMA of Shenandoah, Iowa recently conducted a survey among its listeners to ascertain the value of the Weather Bureau's Severe Storm service. The station serves an area including southwestern Iowa, southwestern Nebraska, northwestern Missouri and northeastern Kansas, with an extensive audience in the

rural areas and in the small towns. There were 400 replies to the survey from 155 communities with 97.2 per cent stating that they considered the Severe Storm warnings among the most important of the services of the U. S. Weather Bureau. Of particular interest was the reaction in the Blanchard area, southern Page

county in Iowa and portions of Atchison and Nodaway counties in northern Missouri—which was ravaged by tornadoes early in April 1954 and again in 1955. There 28 persons signed a petition stating that they thought the warning service of the Bureau to be a fine thing.

## Speeding Up Personnel Placements

**I**TEM No. 3 of Central Office memorandum dated January 21, 1955, Subject: Request for Comments on Certain Recommendations of the Advisory Committee on Weather Services, invited comments from the field concerning the problem of the time consumed in effecting personnel placements. Since the response to this memorandum was rather limited, it is questionable that the results represent a cross-section of Weather Bureau opinion; however, a review of the comments indicates the general feeling that the time required in connection with recruitment, transfers and reassignments is excessive.

The process involved in insuring that qualified employees receive every consideration in the matter of advancement is described in detail in Chapter D-35 of the Weather Bureau Manual, which outlines the Bureau's policy on promotions, reassignments and transfers.

The mechanics of personnel placement are time-consuming, but selection of the best-qualified candidate for any position vacancy cannot be sacrificed merely to expedite action. Sometimes the occurrence of a vacancy makes a review of the work program and staff pattern of the station desirable and coordination of such matters with the proper officials results in some delay. If the position is to be filled by the transfer of an employee from another location, the requirements of the employee must be considered. For this reason the Bureau cannot afford to adopt a hard and fast rule regarding a time-limit in effecting transfers which would cause undue hardship for the employees involved or

for their families. A 30-day period is suggested as ample for allowing the employee to take care of his personal affairs, but in some cases this must be extended.

In recruiting from Civil Service registers there are additional factors which result in unavoidable delays. It is not unusual for the appointing officer to experience difficulty in locating eligibles who will accept a particular location. The time involved averages approximately ten days, and in some cases it may take three to four weeks. Considerable time is required in the process of having eligibles report to the nearest WBO for interview, checking references by correspondence and obtaining medical forms, etc., all of which are necessary prior to notifying the eligible to enter on duty. A person selected usually requests at least two weeks for giving notice to his present employer. He may also have real estate to dispose of, and if he is a family man, he will need time to find living accommodations at his new location.

Suggestions received for speeding up the placement process included the plan to keep Regional Offices furnished with a list of qualified candidates for all positions, so that a selection could be made immediately upon the occurrence of a vacancy. Under the present promotion system the area of consideration is Bureau-wide for positions under the jurisdiction of the Central Office. This gives greater assurance that every qualified employee will receive consideration. Through the use of current information on education and experience maintained on IBM tabulations, plus appraisal information

readily available, the placement section can prepare panels for evaluation and selection of the best-qualified candidates with little loss of time when position vacancies occur. Inasmuch as the factors entering into the selection process are not static, but require constant review and change, a permanent list of eligibles for any given position would not be feasible.

Some of the elements that result in delays have been pointed out. In general, an attempt is made to effect a compromise by giving understanding to the transferring employee's problems and at the same time recognizing the problems of short-staffing at the gaining station. Temporary details and allowance of overtime are resorted to in many cases, based on the merits of the staffing problem at hand.

Employees are encouraged to submit further comments concerning the present policy and to offer any suggestion which they feel will improve the efficiency of the personnel program.

## Fellowship in Climatology

**T**HERE will be a fellowship vacancy for graduate work in agricultural climatology available at Iowa State College at Ames, Iowa in September. The recipient of the fellowship award will receive approximately \$1620 per year if he is working towards the M. S. degree, and about \$1800 per year if he is a candidate for the Ph. D. degree. He will be expected to do 22 hours of research work weekly and about half of this can be on his thesis material. He will be allowed to carry 11 hours' college credit each quarter towards an advanced degree. The full time load is fifteen hours per quarter. Inquiries about this fellowship should be sent to Iowa State College.

## Training Micronesians

ON Wednesday, April 13th, at 8 o'clock in the evening, in the Pacific Islands Central School Auditorium, Truk, East Caroline Islands, the Weather Bureau held its first graduation ceremony of its Micronesian Weather Observers' School. This event was the culmination of a need which arose back in 1950, when the Weather Bureau first took over from the Navy the operation of upper-air stations in the Trust Territory of the Pacific. At that time, a small number of Micronesians were employed by the Navy and were "carried over" on the Weather Bureau rolls. A few of these had learned to do a certain amount of observing work and seemed anxious to improve their capabilities. As a result, a program for recruiting and training on station was organized in 1952. Because of the small staff at each station, the training proceeded very slowly, and there was no clear indication that the Micronesians would ever achieve a very high standard of performance.

Following a long series of discussions with the Trust Territory educational leaders it was

agreed that the Weather Bureau should set up a school in association with the Pacific Islands Central School at Truk to set about in a serious way to make maximum use of its Micronesian employees. In the fall of 1953 John G. Norris, then OIC at Truk was given the task of setting up the school and became its first instructor.

Twelve Micronesians have now completed the first year of training and will be assigned to the various stations in the Trust Territory. New recruits, or those who have been on station, will now be assigned to the second session of the Micronesian Weather Observers' School at Truk.

The results of this training class will be watched carefully not only by the Central Office, but by members of the Trust Territory Administration and other groups. It will be interesting to see to what extent these peoples can make the transition from the simple activities of non-technical society to the complicated work of an upper-air station in the space of only two or three years. The patience and good judgment of the regular station staffs where they are assigned will be a big factor in making this experiment a success.

## Electronic Technician Register

WE were very pleased with the response to Central Office memorandum requesting applications from employees interested in electronic technician trainee assignments.

All applications have been reviewed and qualifications appraised. A few selections have already been made from the register which has been established.

In the light of anticipated appropriations and expansion of the Weather Bureau's electronic equipment program, it is expected that there will be additional openings in the following months.

Employees are encouraged to keep information current by reporting any additional qualifications or changes in station preference.

## Only Official Suggestions

### Rate Awards

HOW many times have you had a good idea and then forgotten about it until one fine day you found that your idea had been adopted?

The chances are you would have received a cash award if you had submitted your idea through the employee suggestion program. You might have received a check which would have bought those "shoes for baby."

Your Incentive Awards Committee would like to pay you for your good ideas but they can't unless you submit your suggestions in writing in the approved manner. This means that you have to write up your idea on the suggestion form (CD-36) and send it in, preferably through supervisory channels.

There are a few other rules which you should bear in mind. For instance, your suggestion must be adopted for use and placed in effect within two years from the date it is received by the Incentive Awards Committee to be eligible for an award.

And another point—if you have made an informal suggestion which has been adopted, you must submit it in writing through suggestion channels, within 6 months from the date it was put in operation to be considered for an award. There have been cases where employees were deprived of awards because of failure to comply with this requirement. Also, if the same suggestion is submitted by more than one person, it's the first one received, of those which are less than 2 years old, which rates the payoff.

## War Agencies Employees Protective Association

**T**HE War Agencies Employees Association was formed to provide financial protection to government employees who are or may be assigned overseas. An employee is eligible for membership if he is (1) a U. S. government employee of American citizenship now outside the continental limits of the United States wherever domiciled, (2) a U. S. government employee located in the United States now in training for duties abroad or awaiting transportation, (3) a supervisory or administrative employee located

in the United States if in the normal course of duty he is required to make trips abroad, or (4) a director of a training program for employees fitting the above descriptions.

This is a non-profit association and its directors are all government officials who serve without compensation. The insurance protection enjoyed by members of the association costs them much less than rates charged by commercial companies for equal protection. This is especially true since coverage includes protection

when flying in all commercial and Government transport planes, including the small plane owned and operated by the Bureau. The group term life insurance plan is underwritten by the Equitable Life Assurance Society, and the accidental death benefit is underwritten by the American Casualty Company of Reading, Pa. The table below shows the amount of protection for which an employee is eligible based upon age and basic salary, and it also shows the premium cost.

Salary Classification determines amount of insurance.     Salary under \$3,200.     Salary \$3,200 and over.

CURRENT  
DIVIDEND ADDITIONS\*\*\*

AGE GROUP	BASIC SALARY	BASIC POLICY	Life Insurance	Accidental Death Benefit	TOTAL COVERAGE	COST PER MO.	QUARTERLY PREMIUM	ANNUAL PREMIUM
Up to 40 incl.	Less than \$3,200 . . . . .	\$ 5,000	\$2,500	\$ 7,500	\$15,000	\$ 4.17	\$12.50	\$ 50.00
	\$3,200 and over . . . . .	10,000	5,000	15,000	30,000	8.33	25.00	100.00
41-50 incl.	Less than \$3,200 . . . . .	\$ 5,000	\$2,500	\$ 7,500	\$15,000	\$ 5.21	\$15.63	\$ 62.50
	\$3,200 and over . . . . .	10,000	5,000	15,000	30,000	10.42	31.25	125.00
51-60	Less than \$3,200 . . . . .	\$ 5,000	\$2,500	\$ 7,500	\$15,000	\$ 6.25	\$18.75	\$ 75.00
	\$3,200 and over . . . . .	10,000	5,000	15,000	30,000	12.50	37.50	150.00

\*\*\*The established policy of the Association has been to liberalize benefits for members as fast as favorable experience warranted. We have followed a conservative policy so that when any action has been taken it seemed reasonably certain that benefits once declared could be maintained indefinitely.

Every applicant is required to make an initial quarterly payment plus a \$2.00 membership fee.

The insurance can be retained upon the employee's return to the continental United States and for the duration of his government employment. The employee may after retirement or upon attaining

age 65 continue one-half of his basic policy (\$10,000 reduces to \$5,000) for the remainder of his life at a cost of \$30.00 per year per \$1,000. This is only about one-third the usual commercial

rate per thousand at age 65. Employees wishing additional information regarding this protection may secure it by writing to the Central Office, attention Personnel Division.

## More Nominations Mean More Awards

**D**URING 1954 eighty-seven Weather Bureau employees were recommended for Incentive Awards. About half of these were finally approved by the Department of Commerce Incentive Awards Board and the awards have been presented.

The value of this recognition in improved employee morale and improved employee supervisor relationship is well recognized so that not too much need be said concerning this aspect of the program.

We are more concerned, however, about those employees who were recommended but who for one reason or another were finally turned down. Did they derive some benefit from being recommended? The answer is definitely yes. In evaluating those recommendations which were not approved it was recognized in practically every case that the employee was surely doing a superior job. Bringing this to the attention of Central Office and Regional Office officials certainly placed the employee in a more advantageous position when consideration was being given for promotions or preferred assignments.

Supervisors who had a recom-

mendation turned down should not feel that it was effort wasted—it definitely was not. Continue to forward your recommendations for deserving employees as their accomplishments come to your attention. Perhaps you will want to again recommend that employee who didn't quite make it last year. If so, go ahead. Maybe the recommendation will go through this year. Actually the decision to turn some of the cases down was an exceedingly difficult one because the performance was so closely bordering on the exceptional.

Under the new awards regulations which went into effect last December, cash awards ranging from \$100 to \$300 were substituted for salary step increases as rewards for superior accomplishments. Also, other cash awards are provided for employee contributions which result in direct cash savings. In these cases the amount of the award is based on the amount of the savings with some consideration being given to the employee's job responsibility and grade. In order to get an award for a contribution directly related to one's job, the contribution must be over and beyond what

would normally be expected for a satisfactory employee in that job. Also, higher grade employees are normally expected to contribute more than lower grade employees.

The Honor Awards Program is virtually unchanged by the new regulations. The requirements for Gold and Silver Medals remain the same except that heroic acts must now be directly related to the employee's job before he can be given an award.

Honor Awards will still be presented once a year but the Awards Board would like to have the recommendations submitted throughout the year as soon as practicable after the occurrence of the accomplishment upon which the award is based.

Cash awards are approved and presented throughout the year. So far this year three such awards, one for \$200 and two for \$250 have been approved.

Now that the annual performance ratings have been taken care of, let's get those award recommendations on the way.

The following table gives a breakdown of the awards handled during 1954.

Type of Award	Recommendations received	Approved	Disapproved		Pending
			By WB	By Dept.	
Salary step increase	37	23	8	6	0
Gold Medals	3	2	0	1	0
Silver Medals	28	13	10	5	0
Cash	17	1	10	0	6
Miscellaneous*	2	0	2	0	0
	87	39	30	12	6

\*Type of award not specified.

## Another Tornado Forecast Pays Off

**D**ES MOINES reports that a tornado which struck farm buildings in southwestern Iowa near Cain on April 23, 1955, recently was in an area for which a tornado forecast had been issued by the SELS Center. Mr. and Mrs. Verner Hart included an

interesting statement in reply to a questionnaire sent out by the Section Center:

"The storm was first seen on a hill in an oat field southwest of the buildings that were demolished. It traveled very fast and due to tornado warnings put on

the radio, we had time to reach the cave just before it struck. By all means urge radio stations to put out tornado warnings."

It is very helpful to the Central Office when such statements are received. The more of them that can be forwarded the better.

## School Warning

**D**URING the heavy snow on April 12 in the northeastern portion of New Mexico, the school children of Clayton were kept in town by the Superintendent of Schools on the recommendation of OIC Thomas F. Bates. The

school route they would have had to travel is very long and it is a great hazard to have the students out in that thinly populated country during a severe storm. Had the children proceeded from school on schedule many of them would

have been stranded on those wind-swept plains during what developed into a very bad storm. No doubt the actions taken by Mr. Bates and Mr. Alvis, the School Superintendent, prevented much suffering and probably saved some lives.

## NEW METEOROLOGISTS IN CHARGE

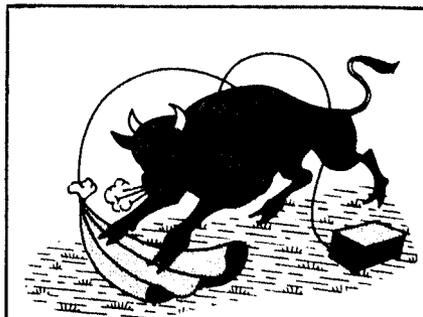
### Springfield, Illinois

LARS C. CHRISTENSEN, who has been Acting Meteorologist in Charge at Springfield since Mr. Sutton's transfer to Urbana several months ago, has been placed permanently in charge of the Springfield station.

Mr. Christensen is 43 years of age and entered the Weather Bureau in January, 1940, at Shreveport, La. In October of that year he was transferred to Lake Charles and in November, 1942, to New Orleans. He remained at that station for nearly 12 years, most of which was in the status of Aviation Forecaster. In August, 1954, he was transferred to Springfield, Ill., as Principal Assistant.

### Juneau, Alaska

LEWIS HAYES has entered on duty as Meteorologist in Charge at Juneau, Alaska. He is 49 years of age and entered the Weather Bureau on July 1, 1930, at Richmond, Virginia. Subsequent assignments included Jacksonville as observer, first assistant and FAWS forecaster. In 1946 he left Jacksonville to accept the position of Meteorologist in Charge, WBAS Greenville, South Carolina. In 1952 Mr. Hayes transferred to Anchorage as aviation forecaster, remaining in this position until his recent selection as Meteorologist in Charge, Juneau.



### Shoot the Bull

**A** badly battered radiosonde was received at WBAS Buffalo with this note:

"The reason the radiosonde is in this condition is that the Bull got after the red parachute."

## 1000-hour Sick Leave Club

**R**EPORTS from field stations have added the following employees to the 1000 hour sick leave club. Only reports received by our deadline date are in this issue of TOPICS.

### Albany, N. Y. (WBAS)

S. Molansky  
K. C. Murray  
P. T. Lynch

### Augusta, Ga.

Ruth D. Cooke  
J. W. Evans  
H. Raynes

### Bismark, N. D.

F. J. Bavendick

### Brownsville, Texas

J. C. Hagan  
O. H. Newton  
A. C. Webb

### Casper, Wyo.

D. R. Pittman

### Chattanooga, Tenn. (WRPC)

A. R. Mulvaney  
V. D. Steves

### Dallas, Texas

M. C. Harrison  
H. A. Rollins  
T. C. Wilson  
J. W. Zimmerman, Jr.

### El Paso, Texas

A. W. Brooks  
D. A. Compton  
W. Irvin  
E. V. Jetton  
R. L. Lamberth  
P. M. Landgren  
J. L. Lightsey  
Ema J. Meredith  
H. A. Sawyer

### Evansville, Ind.

S. W. Rampy  
W. A. Trabits  
C. A. White

### Fort Wayne, Ind.

R. C. Borders  
J. J. Halsey

### Fresno, Calif.

H. L. Bahr  
W. O. Langer  
A. A. Lothman

### Grand Junction, Colo.

S. K. Kerr

### Grand Rapids, Mich. (WBAS)

A. A. Skredd

### Green Bay, Wisc.

H. H. Bomalaski  
R. B. Cowdrick  
D. C. Pray

### Helena, Mont.

R. A. Dightman  
W. F. McKinney  
R. L. Schmidt  
H. C. Slenes  
V. W. Wallace

### Kansas City, Mo. (RO)

M. G. Black  
Rose M. Fries  
J. J. Holstein  
A. L. Lorenz  
R. C. Lyle  
G. E. O'Daniel

J. L. Ripps  
H. D. Wilson  
B. A. Young

### La Crosse, Wisc.

W. W. Figgie  
K. Hunt  
A. D. Santal

### Lakeland, Fla.

H. W. Davis  
R. H. Dean  
J. G. Georg  
W. O. Johnson  
D. C. Russell  
R. T. Sherouse  
C. E. Skillman

### Lincoln, Neb.

W. F. Rumbaugh

### Little Rock, Ark.

M. O. Asp  
N. H. Sharp  
Jewel Wheeler  
Daisy L. Wilson

### Los Angeles, Calif. (WBO)

F. D. Young  
O. R. Wulf

### Louisville, Ky.

B. W. Harlin  
A. A. Lane  
C. B. Lee

### Madison, Wisc.

R. J. Batz  
H. J. Evans  
G. A. Rothfuss  
R. O. Werlein  
W. C. Williamson

### Marquette, Mich.

E. M. Ellingson

### Miami, Fla. (WBAS)

W. C. Cook, Jr.  
E. V. Copeland  
H. S. Lawler  
G. P. Meyer  
R. W. Pinder, Jr.  
E. Roger III

A. M. Samet

P. D. Thomas  
W. L. Thompson  
H. V. Tucker

### Moline, Ill.

L. W. Dick  
E. V. Kinunen

### Newark, N. J.

F. Gemmill

### New York, N. Y. (RO)

M. L. Fenner  
D. J. Gaudioso  
J. A. Lunny  
F. M. Mazza  
W. F. Powell  
S. Smith  
H. Thomas

### Norfolk, Nebr.

H. Alexander

### Oklahoma City, Okla.

Oble O. Lane  
R. J. McClurg  
L. L. Sandy  
J. O. Savage

### Parkersburg, W. Va.

V. T. Horn  
C. L. Wilson

### Phoenix, Ariz.

L. R. Jurwitz  
K. A. Rice  
W. L. Sabine  
W. F. Shultz

### Providence, R. I.

W. A. Galeshaw  
M. P. Mott

Rapid City, S. D.  
F. H. McNally  
E. O. Zeien  
San Antonio, Texas  
G. E. Denney

O. E. Edrington  
B. I. Miller  
E. A. Scott  
C. A. Sutor  
Springfield, Ill.

L. C. Christensen  
Topeka, Kansas  
P. N. Eland  
R. A. Garrett  
G. B. Hummer

## RETIREMENTS

### *Columbus R. Daniels*

COLUMBUS R. DANIELS, Printer at WRPC, Kansas City, retired on May 31, 1955, because of disability. He entered the Weather Bureau as a Printer at Fort Worth, Texas, on June 25, 1945, and transferred to Kansas City in 1948 when the Printing Plants were consolidated with the WRPCs.

He was born in Grandview, Texas, on July 13, 1891. Upon graduation from high school in Waldrip, Texas, he began farming with his father until World War I interrupted this peaceful occupation. After service with the 132nd Field Artillery he returned to farming for a short time and then decided on a career in the printing trade. Prior to entering the Weather Bureau he was employed by various commercial printing firms and newspapers, all in the State of Texas.

Mr. Daniels' home address is 2308 Williams Place, Fort Worth, Texas.

### *Oscar O. Simmons*

OSCAR O. SIMMONS, Administrative Assistant assigned to the General Services Division of

the Central Office, retired on account of disability at the termination of May 31, 1955. He had completed twenty and a half years of civilian service, eleven of which were with the Weather Bureau, plus slightly over four years of military service. His military service included both World War I and World War II.

Mr. Simmons was born on June 10, 1897 in Carroll County, Virginia. After graduating from grade school he entered the Glade Valley, Virginia High School only to have his formal education terminated by World War I. He left high school in April 1916 to join the U.S. Army where he served until July 1920. After receiving his discharge, he moved to North Carolina where he became a farmer. In March, 1923, he came to Washington, D.C. to accept an appointment to the Metropolitan Police Force. In December of that same year he returned to the farm and continued farming until March, 1934, when he again returned to Washington, this time to accept employment with the Procurement Division of the Treasury Department. Between then and June, 1944, when he went

to work for the Weather Bureau, he served successively with the National Park Service, the AAA program of the Department of Agriculture, the Social Security Board and the Bureau of Federal Supply. His service with the Social Security Board was interrupted from June, 1942 until August, 1943, while he served in the U.S. Army Air Corps.

He entered the Weather Bureau by transfer from the Bureau of Federal Supply in June, 1944 and was assigned to the Synoptic Reports and Forecasts Division of the Central Office. He later served in the Administrative Services Division prior to transferring to the Climatological Services Division in August 1950, where for a number of years he served as Chief of the Records Unit. In March, 1954, he returned to the Administrative Services Division as a special assistant to the new Weather Bureau Offices at Suttland, Maryland. He continued in this assignment until his retirement.

He may be reached at the following address: 1617 Garfield St., Arlington, Virginia.

## DEATHS

### *G. Harold Noyes*

G. HAROLD NOYES, former Meteorologist in Charge of the Weather Bureau Office in Boston, died April 11, 1955 at the home of his son Harold in Montclair, New Jersey.

Mr. Noyes retired at the termination of June 30, 1945 after having completed more than 47 years of service. See TOPICS for July 1945 for an account of his Weather Bureau assignments.

### *Everett W. Torrence*

EVERETT W. TORRENCE, Meteorologist in Charge of the Weather Bureau Airport Station, Port Arthur, Texas died suddenly on May 6, 1955 following a heart attack several days earlier.

Mr. Torrence was born in Benton, Kansas on October 12, 1898, but moved to New Mexico at an early age. After graduating from the Santa Fe High School in 1917, he taught grade school for a term before beginning his Weath-

er Bureau career. He entered the Weather Bureau as an Assistant Observer at Santa Fe on May 2, 1918 but four months later tendered his resignation to join the Students Army Training Corps at the University of New Mexico. He returned to the Bureau at Santa Fe in September 1919.

In March 1922 he transferred to Denver and after 19 months was assigned to Wagon Wheel Gap, Colorado where he served with distinction for several years and attained the rank of Senior Observer. His next move was to Los Angeles and into the Fruit Frost Service with promotion to professional status. In January 1928 he transferred to Taylor, Texas as MIC and in October 1935 to Port Arthur where he continued to serve until his death.

Mr. Torrence was one of the old timers who learned his meteorology in the service and in spite of a limited educational background rose to a position of respect

in his chosen field. His personnel records contain commendations from both within and without the Bureau which testify to the excellent quality of his services.

He is survived by his wife Theresa and a son.

### *Mildred B. Richardson*

WORD has been received that Mrs. Mildred B. Richardson, former employee of the Weather Bureau at New York died suddenly on March 17, 1955 as the result of a heart attack. At the time of her death she was employed by the CAA Regional Office in New York.

Mrs. Richardson entered the Weather Bureau on November 27, 1942 as a member of the Personnel Unit of the New York Regional Office. In December, 1953, she was reassigned to the New York Office of the Atlantic Weather Patrol where she served until her transfer to the CAA on August 14, 1954.

WEATHER BUREAU

JULY  
1955

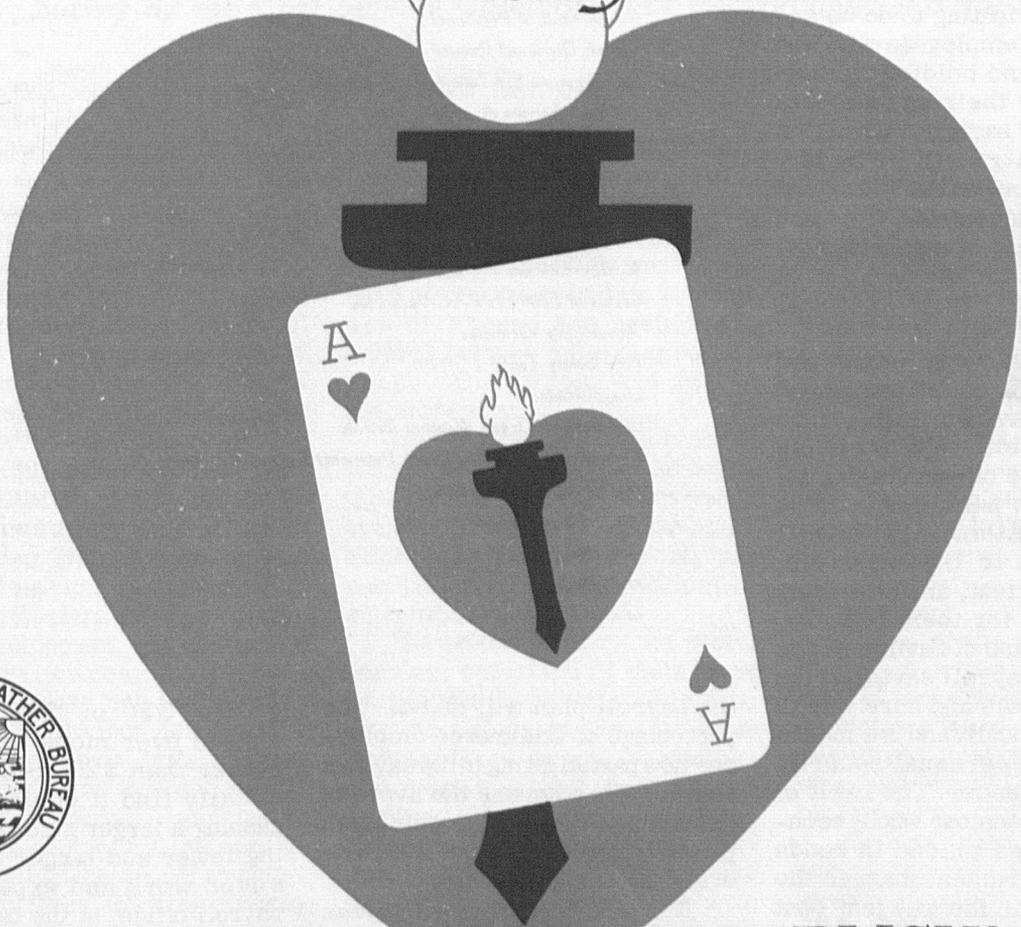
# TOPICS

# ACE OF HEARTS

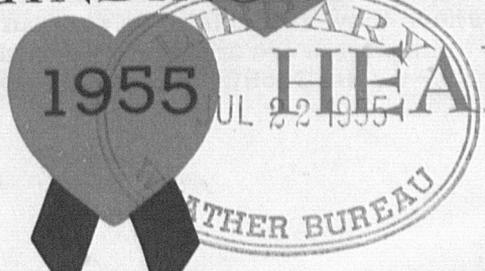
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PRESENTED TO

*Commerce Department*



FOR OUTSTANDING ACCOMPLISHMENT  
IN THE 1955 HEART FUND



Volume 14  
Number 6

WEATHER BUREAU TOPICS is published monthly to inform all employees about newsworthy operations and work programs of the Bureau; to give background on instructions; to carry news of new personnel assignments, retirements, deaths, and similar information about employees; and to serve as a medium through which ideas and views may be exchanged to promote efficiency and teamwork in attaining our common goals. While the contents, unless otherwise specified, reflect the Central Office viewpoint, they are not instructions but are presented for information. Opinions, discussions or comments by readers are invited; they should be marked for the attention of the Editor, TOPICS. WEATHER BUREAU TOPICS is distributed for official use only.

**Savings Bond Program**

**C O N T E N T S**

A personal solicitation payroll savings campaign for the purchase of U. S. Savings Bonds will be conducted the week of July 18th to permit employees who are not now participating to do so and to encourage employees who are now buying and holding Savings Bonds to use their pay raise to increase their savings. Direction of the campaign will be by Mr. L. E. Brotzman of the Plans and Program Management Office and Mr. C. G. Swain of the Personnel Division with the cooperation of the Regional Offices and local stations.

There will be no quotas and employees will not be pressured into buying Savings Bonds. The personal solicitation is simply for the purpose of encouraging all employees to participate in the buying of bonds through the payroll savings plan to the maximum practicable extent, and of making it convenient for them to do so.

The purchase of Savings Bonds through the payroll savings plan is a simple, safe and sure way to save systematically and is a means of achieving personal security and independence. The habit of thrift strengthens our whole economy. Savings placed in bonds help the Government manage the national debt in the way that best protects the buying power of the dollars we earn and the dollars we have saved.

We hope that many employees who are not now participating in

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the payroll plan will do so. The percentage of Commerce employees now participating in the savings plan is 33%, whereas the average percentage of civilian employee participation throughout the Federal Government is 50%.

It is also hoped that employees who are buying and holding Savings Bonds will increase their savings where they are able to do so.

Employees are urged to consider the desirability of signing

up for \$50 or \$100 E bonds, spread over more pay periods, rather than \$25 bonds. People usually find it easier to resist cashing a larger size bond. Issuing fewer and larger bonds also saves work and expense in the payroll office, at the banks and at the Treasury. You can now buy a \$50 bond over 6 pay periods and it will be given the same issue date as the first of two \$25 bonds bought over the same period.

## *Heart Fund Award*

**T**HE Department of Commerce was cited for an Award of Merit for its accomplishment in the 1955 Heart Fund. The Ace of Hearts Certificate, awarded each year to those employee groups

which have given outstanding service, was received by Mr. Carlton Hayward, Chairman of the Commerce Combined Charities Committee at a ceremony on June 21, 1955. The Heart Association

received \$3538.64 through the Combined Charities Campaign, an amount greatly in excess of any previous donation from the employees of the Department.

## *Survey by the Civil Service Commission of Backgrounds and Reported*

### *Training Needs of a Sample of Federal Executives*

**T**HE Department of Commerce recently cooperated in a survey conducted by the U. S. Civil Service Commission in which all career executives at grades GS-15 and above were requested to submit certain data regarding their work experiences, past education and training, and their own personal evaluation of what should be added to make them more effective executives. The information was obtained to assist the Commission in making its plans for the recruitment, development, and utilization of Federal career executives.

Since it was not administratively feasible to include the entire Federal government in the survey, the Commission decided to ask certain "prototype" agencies to participate hoping that the results obtained might be broadly representative of the needs of the government as a whole. Seven agencies were included in the survey. Following is a summary of the general findings.

Eight hundred and three career executives submitted responses

to the questionnaire. The group was truly a career group. Members of the group had an average age of 52 and had been in the federal service an average of 18 years. One in four had served for more than 25 years.

Half of the executives entered the service in grades at or below GS-7. The typical man has a bachelor's degree and some additional graduate work. Forty per cent took some college work after entering the service.

Just before entering the public service, one-third of them were employed in private industry. Around 10% came from private, professional practice, another 10% from local government, and another 10% from university instruction or administration. Only one in five entered the service directly after attending school.

Movement across agency and bureau lines has been rather restricted. Half of the executives have spent their federal careers in one agency and most of them in one bureau. Twenty per cent

have served in only two agencies.

Forty per cent of the group have never had a course in economics; 60% have never had a course in political science or government; and 67% have had no courses in public or business administration.

In apparent recognition of these facts, the respondents voted heavily for formal training in public administration, business administration and personnel management. This was true regardless of the fields in which they were employed. Sixteen per cent of those working in general administration wanted courses in public administration. So, however, did 16% of those working in biological or physical sciences.

Categorically, the group rejected the idea of weekend and evening training in the event a staff college were established. Sixty-four per cent said they could leave their work full time and 47% said they would prefer five weeks of training off the job.

## *Doctor of Science Degree for I. R. Tannehill*

**I**VAN RAY TANNEHILL, who retired on October 31, 1954 was one of three graduates of Denison University who received honorary degrees at the one-hundred and twenty-second annual commencement in Granville, Ohio, on June 13, 1955. The Denisonians so honored were: Mr. Tannehill, Class of 1912, Doctor of Science; David Edward Owen, Class of 1920, head of the Department of History, Harvard University, Doctor of Humane Letters; Raymond Lull Bailey, Class of 1930, pastor of the First Baptist Church, Columbus, Ohio, Doctor of Divinity.

This was the second occasion on which Mr. Tannehill was honored by Denison. At Commencement in 1951 he was given a citation for "distinguished services which reflect credit on the University."

Mr. Tannehill's name was presented for the degree of Doctor of Science by Dr. K. D. Archibald,

President of the Denison Scientific Association. His presentation contained the following:

"As a forward-looking member of the United States Weather Bureau, he has been working on the pioneer fringes of the subject, induced by his monographic studies. The versatility of his talents, especially in the field of writing is outstanding. Not only was he a regular contributor to scientific journals and the author of established books on meteorology, but he has also written short fiction, articles, a booklet on radio, and numerous papers and government booklets on weather. His book, "All About The Weather" (Random House, 1953) makes the technical knowledge of the specialist available even to the school boy. Indeed one of the greatest contributions he has made, especially in his recent writings, is their availability for public consumption.

Excellent written, scientifically sound, they have helped bring about an understanding by the public of the very difficult and often thankless task of the United States Weather Bureau in educating the public on matters concerning the weather."

The President of the University, Dr. A. Blair Knapp, in conferring the degree said: "that Denison University honors herself in honoring today Mr. Ivan Ray Tannehill, alumnus, scientist, scholar, teacher, author extraordinary, foremost meteorologist, friend and Christian gentleman".

It will, of course, be highly gratifying to Mr. Tannehill's many friends in the field service, as it is to us here in the Central Office, to learn of the conferment upon him of these deserved honors. The importance and value of his contributions to and leadership in the Weather Bureau stand high in the appreciation of us all as evidence of the correctness of Dr. Knapp's descriptive words about him: "Scientist...friend, and Christian gentleman." It is an especial pleasure to confirm this estimate and to add our hearty emphasis to it.

## *Recruitment of Personnel*

**T**HE Weather Bureau is actively engaged in a recruitment program in order to meet the personnel demands of new and augmented programs. The military take-over program, the establishment program and strengthening of hurricane and tornado warning services finds the Bureau faced with the immediate need for trained meteorologists to assume more responsible assignments. There is also a demand for meteorological aids, radio-sonde observers, electronic technicians, hydrologists and climato-

logists to fill in and strengthen respective programs.

Recently, a news release went to all first-order stations, requesting the aid of the MIC to make local distribution to radio, newspaper and TV facilities as a means of best advertising our personnel needs. The Central Office is making contacts with military organizations which have trained personnel in meteorology, radio-sonde observing, electronics, etc., from the standpoint of encouraging those with this training, now released, to apply for placement on

appropriate Civil Service registers.

There is a shortage of trained personnel, and we should like to solicit the assistance of every Bureau employee to do his part through personal contacts that might result in increasing the number of applicants. The Regional Offices and the Central Office, when appropriate, will be glad to furnish applicants with information concerning qualification requirements, examinations, registers, etc.

## SR&F Divisional Review

**N**EAR the end of each fiscal year, Central Office Divisions are usually invited to give a review of their activities and accomplishments to the Chief of Bureau and a limited group of other Bureau officials. On June 21 the Synoptic Reports and Forecast Division gave their 1955 review. The items quoted below have been selected from their report:

### Forecast Decentralization and Mapped Forecast Program

Forecast decentralization and a mapped forecast program have already been accomplished in the States of New York, Pennsylvania, Maryland, Delaware and New Jersey. A similar program is in effect experimentally in the Kansas City district with mapped forecasts provided via teletype by Kansas City and public forecasts for Oklahoma and Iowa issued by Oklahoma City and Des Moines, respectively. It is planned to extend this program to other areas as rapidly as circumstances permit.

### Zone Forecasts

The program of preparing forecasts by zones within a state to permit a more localized type of forecast for use by public dissemination channels continues. The zones are set up on the basis of topographic and climatological features and the forecasts as a rule are transmitted by press associations within the state. Such programs, with slight modifications to fit local conditions, are now in effect in 43 states. Extension of this program to other states is going forward.

### National Temperature and Precipitation Bulletin

Arrangements were made for Chicago to prepare and enter on

Service C twice a day (beginning October 10) a tabular bulletin of 50 selected locations. Daily maximum temperatures, twenty-four hour precipitation, and state of weather are included.

### Direct Radio Broadcasts and TV Weather Briefing

The number of Weather Bureau field offices cooperating in direct radio broadcasts over commercial facilities and the number of radio stations have not changed appreciably in the last year. At present, there are about 200 Weather Bureau offices making broadcasts over about 650 commercial radio stations. Each presentation by a Weather Bureau employee results in an average of 3 broadcasts reaching the public. Weekend direct broadcasts from NWAC at Suitland, over facilities of the NBC network, were inaugurated in June 1955.

Apparently as a result of briefing and service by private meteorologists and expansion of local public teletypewriter circuits, requests for weather briefing by TV stations seem to be leveling off. No Weather Bureau employees are authorized to appear regularly on TV weather shows.

### Weather Service for Merchant Shipping

Marine Bulletin broadcast schedules of Radio Station NSS, Washington, D. C. have been revised to become effective on and after 0001Z, June 15, 1955. The new 4-daily broadcast schedules shorten further the time interval between the issue of warnings by the Weather Bureau and dissemination of the information to ships under way at sea. Marine Bulletins as issued for broadcast by Radio Station KTK (San Francisco,

California) twice daily are being expanded to include a surface weather analysis covering eastern North Pacific. Arrangements are also being made for this station to broadcast (via CW) a twice-daily bulletin containing warnings, forecasts and coastal station reports for coastal waters from Point Conception to Cape Blanco.

### Early Morning Bulletins

Emphasis on agricultural weather service continues to center on early-morning farm forecasts distributed via radio and television, issuance of third-day outlooks based on data in the FP-1's and continued close liaison with local agricultural interests. Considerable travel has been done for survey purposes and a great many farm groups contacted.

### Tobacco Curing - Kentucky

An experimental project on issue of special forecasts to assist in the curing of Burley tobacco was carried out in Lexington, Kentucky, through the cooperation of the University of Kentucky. Farmers using the forecasts produced higher quality tobacco. Plans are being drawn up to carry on this valuable service contingent on the availability of funds.

### Remoting Radar Scopes

In order to avoid the loss of detailed information resulting from coding the radar scope pictures and to make radar information available instantaneously to the forecast office, a system of remoting the scopes to the forecast offices is necessary. The use of coaxial lines for this purpose is entirely too expensive. Consideration is being given to the use of "slow motion" television whereby the scope is scanned slowly and the picture transmitted over an ordinary

telephone quality line. Such a project would not only make it possible for the forecaster to "see" all the storms in his district, but it would permit large area summaries to be prepared for Service A transmission and thus relieve that system of a very critical problem. The Synoptic Section is working with Dr. Gunn and others in the investigation of the possibilities of this type of communications.

#### Radio Weather Reports from Ships at Sea

Review of U. S. and foreign vessels authorized to furnish radio messages to the Weather Bureau from U. S. Atlantic and Pacific reporting areas is a continuing project. Frequent changes in the list of authorized reporting ships are made to obtain a daily level of 20 reports from the Gulf of Mexico and by a similar process the daily distribution has been strengthened in the Hatteras - Bermuda - New York triangle.

#### Improved System for Verifying Aviation Forecasts

A new system for evaluating aviation terminal forecasts has been devised and submitted to aviation forecast centers for comment. These comments are now being reviewed and it is expected that a modified and more useful system will be in operation in early 1956.

#### Provision of Temperature Aloft

#### Forecasts for Turbo Powered Aircraft

With turbo-prop powered transport aircraft operation beginning in July 1955, provisions were made for selected FAWS Centers to provide temperature aloft forecasts for selected points. This program will expand as turbo-prop operations spread over the country and will pave the way for meeting temperature requirements for future turbo-jet operations.

To build up a bit of experience in temperature aloft forecasting prior to the initiation of turbo-prop operations, temperature forecast procedures were made effective a couple of months prior to the actual proving flights of the aircraft. A representative sampling of forecasts was made by the airline itself and reported that 91% of the forecasts were verifying within 3° C.

#### Improvement in Pilot Weather Reporting

Further work is needed to increase pilot weather reporting and to disseminate the reports for use by other pilots, briefers and forecasters. An experiment is being started at Fort Worth for collecting pireps from a major airline by means of a local facsimile circuit.

#### Development of a Forecasters' Technical Manual

A technical manual for aviation

forecasters is needed for encouraging the employment of more uniform forecasting techniques at the respective FAWS Centers. The manual would outline in convenient form selected proven techniques for forecasting critical aviation weather phenomena.

#### Restudy of Aviation Forecasting Organization

Some aspects of aviation forecasting may be too centralized for producing the best forecasts, particularly terminal forecasts. A study is being undertaken to reshape aviation forecast areas to conform more to meteorological and geographical criteria rather than air traffic density and to reassign terminal forecast responsibilities to bring better balance in forecasting load.

#### Turbulence Forecasting and Observing

A project is underway in close coordination with the SELS Center and with NACA to develop standard criteria for forecasting and observing aircraft turbulence. The two must complement each other but forecasters and pilots must necessarily approach the problem in different ways. Some headway has been made but further development is needed to objectively forecast and observe the phenomena and to establish a physical relationship between forecasting and observing criteria.

## *Simultaneous Via-Telephone Broadcasts*

**T**HE Meteorologist in Charge at Midland, Texas has brought to the attention of the Central Office a method which he uses to make direct radio broadcasts via telephone over two radio stations at the same time. The so-called "distance answering" telephones have been installed in

the place of the regular telephones. These phones incorporate all the features of the regular hand sets plus a small microphone for talking and a loudspeaker for receipt of calls. The "distance answering" feature may be cut on or off at will by means of a cut-off switch. In making the broadcast, the two

radio stations are dialed on the phones and when contact is made with both, the broadcast bulletin is read into both small microphones simultaneously. In the case of Midland, cost of the special phones, which is quite nominal, is borne by the radio stations.



John A. Cummings, MIC WBAS Charleston, S.C., pins 30-year Service Award on lapel of Forecaster Walter R. Hall. Waiting to receive a 10-year pin is Miss Annie Laraine Gale of the Charleston staff.

### 30-Year Service Awards

**T**HE following Weather Bureau employees completed thirty years of Government service during the calendar year 1954 and have recently been presented with 30-year Length-of-Service Awards:

George Allmendinger, Meteorological Aid—WBO, Memphis, Tenn. (retired)

Jonathan O. Becker, Meteorologist—WBAS, San Diego, Calif.

Arthur W. Brooks, Meteorologist in Charge—WBAS, El Paso, Texas.

Claude V. Brown, Meteorologist in Charge—WBAS, Juneau, Alaska. (retired)

Laurence W. Browne, Meteorologist—WRPC, San Francisco, Calif.

Harold N. Burke, Meteorologist

in Charge—WBAS, Cleveland, Ohio

Thomas B. Canaday, Meteorologist—WBAS, Denver, Colo. (posthumously)

Rolen L. Cornelius, Meteorologist—WBAS, Atlanta, Ga.

Gordon E. Dunn, Meteorologist in Charge—WBO, Miami, Fla.

Walter R. Hall, Meteorologist—WBAS, Charleston, S. C.

Frank C. Hood, Meteorologist in Charge—WBAS, Asheville, N. C.

Maurice F. Kleindienst, Letterpress Pressman—CO, Administrative Services Division.

Loyd L. Knapp, Meteorological Aid—WRPC, Chattanooga, Tenn.

Alvie E. McGrew, Meteorologist in Charge—WBAS, Baton Rouge, La.

J. Harvey Morgan, Telegraphic-Typewriter Operator—WBAS, San

Francisco, Calif.

Charles H. Newton, Meteorologist in Charge—WBAS, Texarkana, Ark.

Donald S. Post, Meteorologist in Charge—WBAS, Sandusky, Ohio.

B. Harold Quattlebaum, Meteorologist—WBAS, Jacksonville, Fla.

Warren J. Rice, Meteorologist—WBAS, Indianapolis, Ind. (retired)

Reinhart C. Schmidt, Meteorologist in Charge—WBAS, Washington, D. C.

Harlan H. Smith, Meteorological Aid—WBAS, Pocatello, Idaho. (retired)

Milton O. Swenson, Fiscal Assistant—WBRO, Salt Lake City, Utah.

C. F. Van Thullenar, Regional Director—WBRO, Kansas City, Mo.

### More Local Weather Circuits

**S**INCE the article that appeared in the January 1955 issue of TOPICS listing the 30 weather teletypewriter circuits in operation, seven additional circuits have been established. The recent installations were at Indianapolis, Indiana on January 18; Richmond,

Virginia on February 1; Seattle, Washington on February 11; Portland, Maine on February 12; Albuquerque, New Mexico on April 22; Milwaukee, Wisconsin on May 16, and Oklahoma City, Okla. on June 9. This brings the total number of circuits in operation

to 37.

Wilmington, Delaware and Louisville, Kentucky are working on the establishment of local circuits and have reported considerable progress.

## Award Winning Essay

THE following essay was presented to the Seventh Annual Personnel Management Conference of the Utah Federal Personnel Council at Salt Lake City, which met on May 9 and 10, 1955, and was selected as the award winner.

### THE INDIVIDUAL EMPLOYEE'S RESPONSIBILITY IN CONTRIBUTING TO PROGRESS IN EFFECTIVE GOVERNMENT SERVICE

By Sherry K. Carr, Farmers Home Administration, Department of  
Agriculture, Richfield, Utah

Hello, Government Employee! Let's have a little chat, you and me. Let's talk about your work and your attitudes, your incentive and your responsibilities. Let's talk about your obligations to yourself--and to me.

I am your boss. I am the small-town banker; I am the president of a large corporation; I am the boy who delivers your morning paper; and I am the young married couple expecting their first baby; I am your congressman and your groceryman, the miner and the carpenter, the businessman, the farmer, the salesman, the housewife. I am the public and I am your boss. You have more bosses and fussier, more-particular, more-complaining bosses than any other group of employees in the world. And that means you have more standards to live up to, more requirements to fulfill, more challenges to accept, and more responsibilities to bear.

You have responsibilities to be to work on time, to do your job the best you can, to represent the Government and your department well, to be congenial and hard working--and to contribute to progress.

Progress is an eternal quality; it isn't a goal that can be reached. It is always the challenge before us, the get up and go of living, the get-out-of-the-rut-and-find-a-better-way vitamin.

We live in a world of progress. There has always been, and God grant there always will be, a quality in man that says, "find a better way." That is the quality that kindles competition in private business. It is what causes automobile manufacturers to put out a new model car each year. It's what makes major league ball players and Abraham Lincolns. It's the thing that made electric lights and automatic washers and atom bombs. It's the quality that developed the Salk polio vaccine. It's the thing that makes Americans healthy, happy, and self-confident. It is an opportunity and a challenge; it is an obligation and a gift. And therein lies a great responsibility for each of us as Government employees. We, too, must find a better way. From the county office to the national office, from the stenographer to the administrator, the challenge is there. Each of us can make a significant contribution towards progress if we but apply ourselves and our abilities. It is the inherent responsibility of a public servant.

Most Federal employees are required to pass an examination in order to qualify for their positions. This method of selection is used to get better-qualified employees in Government service. As important as the skills of an employee, however, is the attitude of the employee. Since there is

no "attitude" test used in selection of personnel, it becomes the personal obligation of each Government employee to develop within himself the right attitudes toward his work and responsibilities, to develop initiative, to recognize need for improvement, and to desire to put his heart into his work without reservation. This is the way toward progress.

Each department of the Government has a program set up whereby the employees can make suggestions toward the betterment of the work for efficiency and economy. It is an opportunity for each of us to put a portion of ourselves into our work and to become a working part of our organizational procedure. Everyone can help. Often the field office employee can see a problem more clearly than can the administrative officials, for the field office will work with the actual problem rather than merely the principle involved. It is certainly a challenge to the incentive of each of us to be alert enough in all phases of our work, even routine work, to seek out shortcomings and through sincere thought and effort to find a better way.

No department can be better than its employees and can progress no further than its employees will lead the way. From filing systems to national policy, no phase has been perfected. A

step forward is progress, be it large or small. The responsibility is an individual one. It is not listed in your job description. There is no penalty for its neglect, but there is indeed reward for those who will accept it, for contribution will breed enthusiasm and interest that can be gained in no other way. When you contribute to the betterment of Government service, you contribute to your personal betterment as well. There is satisfaction in doing what you should in the way that it should be done, but real pleasure comes in doing what only your conscience can require you to do.

The responsibility is great. A man is responsible to himself and his family. A corporation is responsible to its stockholders

and patrons. But a Federal employee is responsible to every American and every future American; a responsibility which is infinite. We must change and develop and initiate; we must visualize new ways to be conservative in operation yet increase production; we must aim towards becoming efficient to the point of maximum result with minimum waste.

The American people have faith in their Government. That is why they are Americans. This faith is manifest at the polls when a citizen casts his vote; at a newspaper office as the editor writes the daily editorial; at the recruiting station when a young man enlists in the service of his country; in the heart of each American

when he files his income tax. Each act is saying, "I have faith in my country, in its leaders, in my Government. My trust will not be violated."

This faith is the responsibility of a Government employee to work for each individual American to carry out his desires--which will be for progress; to serve him honestly and industriously--seeking progress; to continually advance toward more efficient service, more economical operations, better use of abilities, energies, and ideas. A Government employee has no right to violate this trust.

This is the challenge to find a better way. And this is the eternal answer: We are trying. God willing, we will always find a better way.

## *Disaster Warning Network Used*

**T**HE Civil Defense disaster network in Cleveland, which includes the Office of Civil Defense, Red Cross, Police Radio, Weather Bureau, 8 radio stations and 3 TV stations (See TOPICS for December 1954, Page 111) was utilized on April 24 in connection with the dissemination of a severe weather alert which forecast the possibility of a tornado in northern Ohio.

The broadcast facility was used three times during the alert. The radio and TV stations were previously advised to record the messages for use within the hour, or use the message direct at their discretion. The first message at 1740E advised that "severe thunderstorms are developing in northern Ohio and there is a possibility of one or more isolated tornadoes developing. The Weather Bureau suggests that you be on

the alert for radio and television reports and take safety precautions if the weather becomes unusually threatening in your immediate area. Do not call the Weather Bureau for information. Additional bulletins will be issued by the Weather Bureau to keep you advised of the weather situation."

At 1850E, a follow-up bulletin was issued:

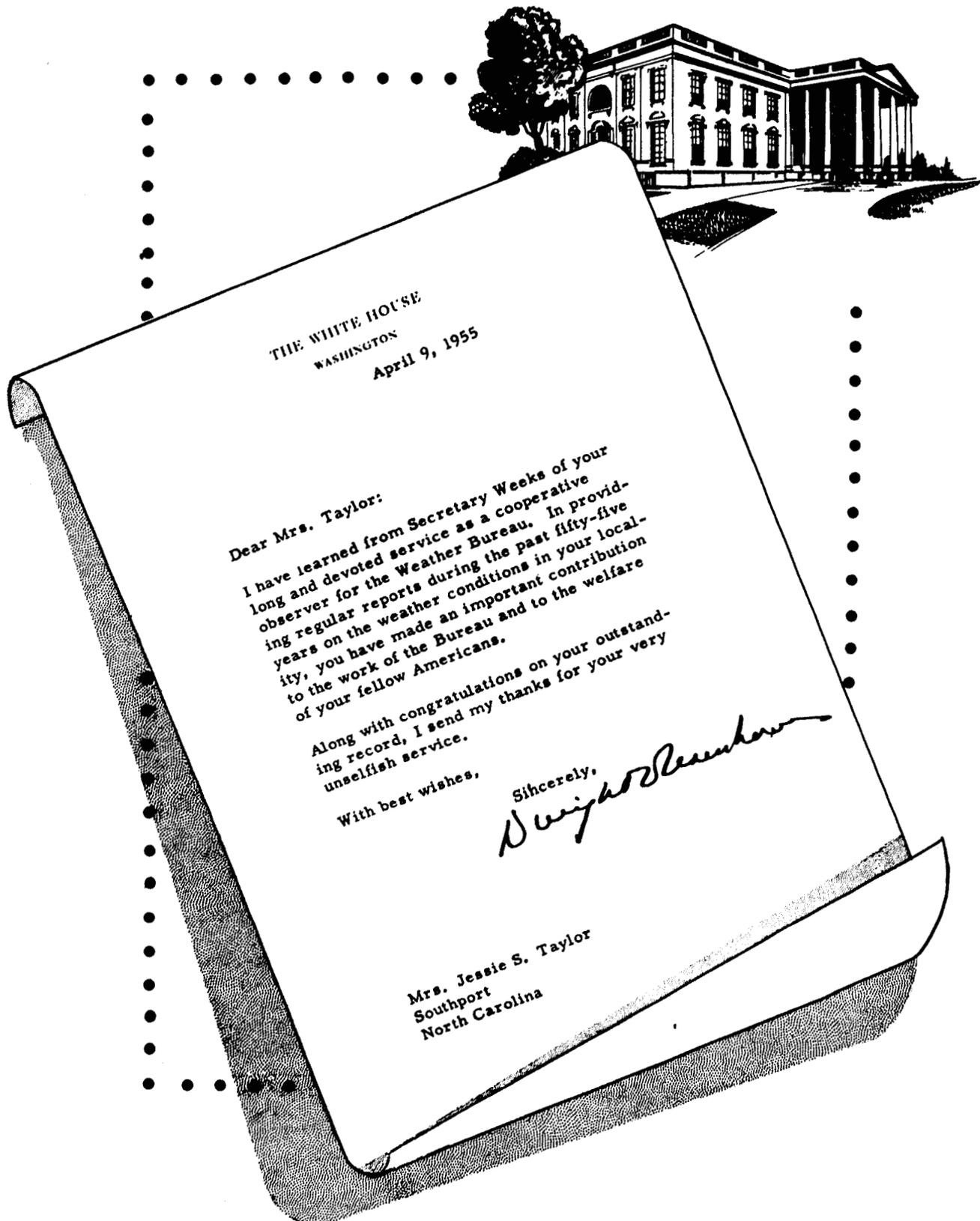
"The threat of isolated tornadoes in northern Ohio has lessened, but there is still the possibility of locally severe thunderstorms until midnight, Daylight Savings Time. The Weather Bureau suggests you be on the alert and take safety precautions if the weather becomes unusually threatening in your immediate vicinity. A bulletin will be issued by the Weather Bureau when all danger has passed."

At 2012E, an all clear was

issued: "The possibilities of tornadoes occurring in northern Ohio have ended. However, scattered showers or thunderstorms are expected to continue tonight...."

During the period of the severe weather alert the routine weather forecast on WE-1-1212 was eliminated in order to disseminate the severe weather forecast information. The three bulletins used on the Disaster Network were also used on WE-1-1212. The all clear bulletin at 2012E and the forecast for "tonight and tomorrow" were combined on WE-1-1212 with the ending of the bulletin blending into the first portion of the regular forecast.

The Office of Civil Defense at Cleveland was well pleased with the results of this first actual test under alert conditions.



THE WHITE HOUSE  
WASHINGTON  
April 9, 1955

Dear Mrs. Taylor:

I have learned from Secretary Weeks of your long and devoted service as a cooperative observer for the Weather Bureau. In providing regular reports during the past fifty-five years on the weather conditions in your locality, you have made an important contribution to the work of the Bureau and to the welfare of your fellow Americans.

Along with congratulations on your outstanding record, I send my thanks for your very unselfish service.

With best wishes,

Sincerely,  
*Dwight D. Eisenhower*

Mrs. Jessie S. Taylor  
Southport  
North Carolina

An account of Mrs. Taylor's outstanding warning services during Hurricane Hazel was carried on page 35 of the February-March issue of TOPICS.

## Weather Service for "Big Days"

**M**OST Weather Bureau stations have at least one "big day" during the year when the excellence of its forecasts is of paramount importance to the public — not that any day's routine forecasts are slighted in the least. At Louisville, Derby Day is the big day. At Los Angeles, New Year's Day with its Tournament of Roses is one of several big days. At Washington, Inauguration Day always heads the list and they also have others, such as the day of the President's Cup Regatta. Many of these special events calling for highly concentrated forecast efforts are associated with aviation activities such as the National Air Races, which in past years have been at Cleveland and Dayton, and this year will be at Philadelphia. Buffalo participates very prominently in rendering service for the days of the National Soaring Contest usually held at Elmira. Los Angeles had the Soaring Contest last year and figures annually in getting the Bendix Air Race off to a good start, and quite often is the starting point of other transcontinental air races, such as the All-Women's Transcontinental Air Race. All these events are of national prominence, causing the nation as a whole to be interested in the local forecast, but whether national or local in scope every Weather Bureau station has one or more big days during the year when the public has a special interest in having the very best forecast. An excellent forecast can make Weather Bureau stock soar. (The converse is also true.)

Each year, Indianapolis is prominent in the news on the occasion of the Memorial Day 500-mile Race and this becomes

Indianapolis' big day in forecasting, not only because of the race, but also because of the large number of private and executive aircraft bringing spectators to the city. This year the two airports handling the bulk of this special traffic had close to 600 aircraft on the ground during the race, and of course the big job was getting them briefed for departure. The following is an account given by the MIC at Indianapolis on this year's activities on their big day:

"Another race day and its attendant influx of airplanes is behind us.

"Service was provided by Messrs. Watson and Powell at Shanks Airport where 342 planes had landed for the race. The two-way amateur radio facilities were not available at Shanks this year and arrangements were made with INSAC to broadcast a little additional weather which was copied by CAA or Weather Bureau personnel at Shanks. This was plotted

on a rough map of Indiana.... The weather was kept up to date and notations posted concerning marginal weather prevailing east of Columbus, Ohio. It seemed to work out pretty well.

"Similar arrangements were made at the tent headquarters at the north end of Weir Cook Airport, Indianapolis where 229 planes were on hand. Mr. Harris took care of the briefing at that location and was supplied with up-to-date charts prepared in our office. The remainder of the office force was on duty briefing pilots by telephone and in person.

"The poor flying weather on the day preceding the race and marginal flying weather to the east in the early morning hours undoubtedly reduced the number of planes. In spite of this, there were more multiple engine planes at Weir Cook than in the previous year. Of the 229 aircraft parked at Weir Cook, 87 were multi-engined. At one time it was noted more than twenty planes were lined up for take-off, including everything from four-engine airplanes to single-engine cubs.

"The forecast for race day verified exceedingly well, except the temperature missed reaching



Photo shows briefing activities at Shanks Airport for fans who flew to the Memorial Day 500-mile Auto Race.

the forecast maximum of 70°, reaching only to 66°. The wind forecast, which we had prepared on the preceding day, of north-westerly winds, 15 knots with gusts to 25 was given considerable publicity and verified almost exactly. This gusty wind caused the race drivers considerable difficulty in the southeast turn.

"Primarily, we did not attempt complete briefings for each pilot. We tried to give them an indication of how far they could go and had them check the weather at some point en route, if additional weather was required. Each year we learn a little more about how to handle the problem and I believe the maps are the best method we have found so far .... This year we gave them the weather for a couple hundred miles radius and advised them where they could pick up weather en route or at their next stop. The briefers had been following the weather closely for several hours before the race and could advise on general conditions in most areas without requiring the sequence reports."

### *Weatherman was Right*

SAN ANTONIO, Tex., June 22 (IP) -- Weather Forecaster Milton Rudd predicted thunderstorms yesterday, then went atop the weather station to check instrument readings. A bolt of lightning knocked him flat, but he was unhurt.



## *Status of Filling NWAC Vacancies*

**I**NITIAL selections have been made for vacancies announced in Central Office Memorandum

dated March 23, 1955. The following acceptances have been received:

	<u>Grade of Position in NWAC</u>
Marvin R. Rogers (Houston)	GS-9
Roy A. Dahl (Nashville)	GS-9
Jack D. Tracy (Mobile)	GS-9
Richard A. Brintzenhofe (Scottsbluff)	GS-9
John B. Fuge (Seattle)	GS-12

## *Advertising Vacancies*

**I**N line with a large number of field requests, the Central Office has been announcing an increasing number of vacancies the past six months. It is not practical to announce all vacancies, but in many cases it is believed the selection and placement process can be improved through the use of this method.

The procedure, however, does not always operate expeditiously. For example, as a result of the announcement of vacancies in the NWAC dated March 23, 1955, over 80 applications were received. Although tentative selections have been made, and offers tendered, only a few acceptances have been received. It is likely to be several weeks before it is known whether additional offers will have to be made. If the procedure is to operate properly applicants must be prompt in their replies when offers are received. The list of applicants will remain active until present vacancies are filled and, as a matter of fact, will continue to serve as a register, supplemented by other qualified candidates, for future vacancies in NWAC. Obviously it becomes difficult to tell every applicant

just where he stands. This will not usually be the case, however, as most announcements will involve only one vacancy.

This much will be done in all cases; as soon as a selection is made and acceptance received, a short item announcing name of selectee will be put in "TOPICS." In the meantime any employee who applies for one or several vacancies should await notification either by formal offer or announcement in TOPICS and govern his personal affairs accordingly. It should be realized that several weeks may elapse between vacancy announcement and TOPICS notification since occasionally an anticipated vacancy does not materialize due to subsequent program modification, or it may be decided to postpone action indefinitely. Again, this will be carried in an appropriate TOPICS article.

Because of the amount of work involved individual notification of applicants is not feasible. The use of TOPICS for this purpose appears to be the best procedure and should not delay notification appreciably.

## New Salary Table

GS grade	Regular steps within grade						Longevity steps			
1.....	\$2,690 (2,500)	\$2,775 (2,580)	\$2,860 (2,660)	\$2,945 (2,740)	\$3,030 (2,820)	\$3,115 (2,900)	\$3,200 (2,980)	\$3,285 (3,060)	\$3,370 (3,140)	\$3,455 (3,220)
2.....	2,960 (2,760)	3,045 (2,830)	3,130 (2,910)	3,215 (2,990)	3,300 (3,070)	3,385 (3,150)	3,470 (3,230)	3,555 (3,310)	3,640 (3,390)	3,725 (3,470)
3.....	3,175 (2,950)	3,260 (3,030)	3,345 (3,110)	3,430 (3,190)	3,515 (3,270)	3,600 (3,350)	3,685 (3,430)	3,770 (3,510)	3,855 (3,590)	3,940 (3,670)
4.....	3,415 (3,175)	3,500 (3,255)	3,585 (3,335)	3,670 (3,415)	3,755 (3,495)	3,840 (3,575)	3,925 (3,655)	4,010 (3,735)	4,095 (3,815)	4,180 (3,895)
5.....	3,670 (3,410)	3,805 (3,535)	3,940 (3,660)	4,075 (3,785)	4,210 (3,910)	4,345 (4,035)	4,480 (4,160)	4,615 (4,285)	4,750 (4,410)	4,885 (4,535)
6.....	4,080 (3,795)	4,215 (3,920)	4,350 (4,045)	4,485 (4,170)	4,620 (4,295)	4,755 (4,420)	4,890 (4,545)	5,025 (4,670)	5,160 (4,795)	5,295 (4,920)
7.....	4,525 (4,205)	4,660 (4,330)	4,795 (4,455)	4,930 (4,580)	5,065 (4,705)	5,200 (4,830)	5,335 (4,955)	5,470 (5,080)	5,605 (5,205)	5,740 (5,330)
8.....	4,970 (4,620)	5,105 (4,745)	5,240 (4,870)	5,375 (4,995)	5,510 (5,120)	5,645 (5,245)	5,780 (5,370)	5,915 (5,495)	6,050 (5,620)	6,185 (5,745)
9.....	5,440 (5,060)	5,575 (5,185)	5,710 (5,310)	5,845 (5,435)	5,980 (5,560)	6,115 (5,685)	6,250 (5,810)	6,385 (5,935)	6,520 (6,060)	6,655 (6,185)
10.....	5,915 (5,500)	6,050 (5,625)	6,185 (5,750)	6,320 (5,875)	6,455 (6,000)	6,590 (6,125)	6,725 (6,250)	6,860 (6,375)	6,995 (6,500)	7,130 (6,625)
11.....	6,390 (5,940)	6,605 (6,140)	6,820 (6,340)	7,035 (6,540)	7,250 (6,740)	7,465 (6,940)		7,680 (7,140)	7,895 (7,340)	8,110 (7,540)
12.....	7,570 (7,040)	7,785 (7,240)	8,000 (7,440)	8,215 (7,640)	8,430 (7,840)	8,645 (8,040)		8,860 (8,240)	9,075 (8,440)	9,290 (8,640)
13.....	8,990 (8,360)	9,205 (8,560)	9,420 (8,760)	9,635 (8,960)	9,850 (9,160)	10,065 (9,360)		10,280 (9,560)	10,495 (9,760)	10,710 (9,960)
14.....	10,320 (9,600)	10,535 (9,800)	10,750 (10,000)	10,965 (10,200)	11,180 (10,400)	11,395 (10,600)		11,610 (10,800)	11,825 (11,000)	12,040 (11,200)
15.....	11,610 (10,800)	11,880 (11,050)	12,150 (11,300)	12,420 (11,550)	12,690 (11,800)			12,905 (12,000)	13,120 (12,200)	13,335 (12,400)
16.....	12,900 (12,000)	13,115 (12,200)	13,330 (12,400)	13,545 (12,600)	13,760 (12,800)					
17.....	13,975 (13,000)	14,190 (13,200)	14,405 (13,400)	14,620 (13,600)	14,820 (13,800)					
18.....	14,800 (14,800)									

The new salary rates will be automatically processed by Fiscal. Personnel actions will not be written.

### Use of Radar

**T**HE usefulness of radar in the tornado and other severe storm warning service is well known. Its use in another field, that of the flood warning service, is illustrated in connection with a severe flood at Waurika, Oklahoma, in May of this year. Mr. Edgar A. Moore, MIC, Wichita

Falls, Texas, reported as follows: "Last night (18th) we were picking up strong echoes over to the northeast of us, in the watershed of Cow and Beaver Creeks. These are the creeks that cause flooding at Waurika. We checked a couple of points in that area, both to verify the amounts of rain

they were getting, also to check on the possibility of tornadoes. Tornado forecasts were out for this area. They were reporting at that time an inch and a half to two inches of rain. The radar showed that the rain area was not moving at all, so I called Shreveport (River Forecast) and told

him that it looked like floods for Waurika. His office issued flood warnings for Waurika and along the two creeks. We made distribution through the local radio and TV stations, plus those at Lawton and Duncan.

"Waurika has the floods this morning, the worst in four or five years. Without our radar, don't believe we would have been able to give them any warning. The fact that we were able to determine the rain area and its persistence, I think was the deciding factor."

Mr. B. P. Hughes, MIC, Shreveport, Louisiana, submitted the following comments:

"Mr. Edgar A. Moore observed by means of radar the extremely heavy precipitation as

it approached the Beaver and Cow Creek areas. He reported this observation, along with rainfall reports from Walters and Temple, to the River District Office at Shreveport. The report from Mr. Moore alerted this office to the occurrence of heavy precipitation in the Beaver-Cow Creek area. Additional information obtained from the precipitation observers at Baird, Comanche and Waurika showed the need of flood warnings. Flood warnings were issued at 8:30 p.m. on the 18th. A revised warning was issued at 10:30 p.m. for crest equal to 1951 flood and a second revised forecast for 6-9 inches above 1951 crest issued at 7:30 a.m. on the 19th. Crest occurred about 3 p.m. of the 20th. It is believed that the warnings

were issued very appropriately and effectively for the flash flood that resulted. Credit is due Mr. Moore for his alertness in reporting the detection by radar of heavy rainfall."

The existence of the heavy rain area in this case was noted also on the radar at Oklahoma City and that office likewise called it to the attention of Shreveport as well as relaying heavy rain warnings to the State Highway Patrol. Other offices are encouraged in the application of radar to flood forecasting and in telephoning appropriate River District Offices or River Forecast Centers when heavy or persistent rain areas are noted on the radar scope.

..... *Outstanding Ocean Weather Patrols* .....

**O**BSERVERS aboard the Coast Guard Cutter Humboldt, which occupied Atlantic Ocean Station "BRAVO" during the period April 29 - May 20, 1955, completed one of the most successful patrols in the history of the ocean station project. Raob data were obtained to the bursting level on 39 of the 42 observations.

The average terminating height, regardless of the reason for termination, was 25,410 meters, the average bursting height was 26,230 meters, and the maximum height was 30,890 meters. Three of the observations extended to heights greater than 30 km. While much of the success might be attributed to the new balloon conditioners

and to the use of reconditioned Weather Bureau instruments, an important factor was probably the fact that the nozzle lift was reduced to as much as 2200 grams. This factor is being investigated further. The observers on this patrol, Messrs. J. N. Bagnell, H. C. Long, J. V. Raftery, and E. H. Gillette, are to be congratulated on a job well done.

The following patrols made during the last three years merit equal recognition:

<u>Cutter</u>	<u>Period on Station</u>	<u>Station</u>	<u>Average raob height (m.)</u>
Escanaba	2/24/52 - 3/18/52	N (PWP)	25,850
Klamath	5/16/52 - 6/7/52	S (PWP)	25,820
Yakutat	6/1/52 - 6/21/52	D (AWP)	25,680
Absecon	6/5/53 - 6/26/53	A (AWP)	27,180
Ingham	7/25/53 - 8/14/53	C (AWP)	26,490
Winona	7/4/54 - 7/25/54	N (PWP)	26,220

Observers who have participated in one or more of these patrols are:

Birse, G. W.	Kuhn, J. A.	Pennell, R. L.
Chadwick, H. E.	Main, J. R. (2)	Schaefer, G. P.
Fain, L. B.	Malphrus, M. L. (2)	Schulz, R.
Fisher, A.	Marchant, R. L.	Shelton, E. R., Jr.
Floe, W.	Marshall, R. A.	Theis, R. C.
Graves, C. H.	McCollum, E. W.	Valente, R. A.
Green, C. A.	Muldoon, W. E.	Wrest, R. A.
Kelly, J. D.	O'Connor, C. A.	

..... *Federal Life Insurance Death Payments Exceed \$10 Million*

**C**IVIL Service Commission Chairman Philip Young announced in a recent press release that from the beginning of the Federal Employee Group Life Insurance program late last summer through February 18, 2,226 life insurance claims amounting to \$10,805,470 have been paid as well as an additional 197 accidental death and dismemberment claims totaling \$874,170.

Mr. Young estimated that approximately another \$15,000,000 in benefits have accrued and will be paid as soon as employees or beneficiaries file the proper claim papers and proofs. The average amount paid for death claims was almost \$5,000 he said.

The average amount paid for accidental death or dismemberment claims was just under \$4,500. The accidental death benefits are in addition to the straight death benefits.

There are approximately 1,800,000 employees participating in the program in this country and overseas. This is about 90 percent of the 2,000,000 employees who are eligible. The insurance coverage is now estimated at \$9 billion as compared to the original estimate of between \$7 billion and \$8 billion.

Mr. Young reported that a total of 162 insurance companies located in 36 states are participating in the Federal program.

In an earlier press release the Commission said that it expects to pay out about \$80,000,000 in benefits to survivors of insured Federal employees during 1955, with an additional \$4,000,000 being paid out under the accidental death or dismemberment provisions of the insurance coverage.

Mr. Young said that the Commission is continuing to urge Federal employees not to drop other life insurance in favor of the Federal program and not to look upon the group life insurance under this program as a substitute for regular life insurance protection purchased from insurance agents.

*Mr. Christie, Take a Bow!* .....

**O**UR MIC of New York City was honored recently by the Maritime Association of the Port of New York by being chosen as the "Personality of the Month". The lead article in their "Maritime Exchange Bulletin" for February 1955 describes some of the many achievements of Ernest Christie since his start in life in Lanesboro, Minnesota.

This personality article mentions that Mr. Christie is known affectionately as "Uncle Weatherbee". He also is a "do-it-yourself" carpenter, sings in his church choir, and is an ardent sportsman. The following paragraphs taken from the Maritime Exchange Bulletin mentions some of the things Mr. Christie has been doing:

"Mr. Christie took up his present post as meteorologist in charge at New York in January 1949. He is constantly on the alert to provide improvements in weather service in the interest of the public at large, and any major segments of the public. During the past six years he has provided his area with extremely accurate forecasts, which result from his thorough scientific and human knowledge of a most difficult assignment....

"Soon after his arrival in New York City, Mr. Christie started a forecast for Long Island Sound, and the Montauk Point area was later added to the Long Island Sound forecast to take care of those interested in activities in that vicinity. A map showing

the location of storm warning display stations from Block Island to the Jersey shore has been distributed to the boating public through yacht clubs for 1953-54. Cooperation of the yacht clubs has been obtained and the number of display stations along the shores of Long Island Sound and the South shore of Long Island to the Jersey shore has been increased to about 60 active ones at the present time....

"The latest improvement for the benefit of the shipping industry is the preparation and distribution of a New York Harbor forecast which contains information on expected weather elements which are of vital concern to the industry."

## 1000-Hour Sick Leave Club

### Abilene, Texas (WBAS)

C. E. Stichter  
S. A. Teal

### Alamosa, Colorado

M. E. Velz

### Albany, N. Y. (WBAS)

A. E. Craft, Jr.

### Albuquerque, N. M. (WBAS)

E. R. Etier  
G. T. Gregg  
Majorie E. McLardie  
R. S. Murray  
H. L. Rhorer  
P. H. Taft  
Mabel G. Tanner

### Alpena, Michigan (WBO)

E. M. Gard  
W. D. Gilmet  
J. P. Maltry

### Anchorage, Alaska (Region V)

N. J. Asbridge  
C. Belcher, Jr.  
B. Bollenbach  
I. H. Borjeson  
D. A. Burt  
M. L. Caldwell  
R. B. Caldwell  
H. C. Carle  
C. E. Cerny  
W. R. Cornell  
C. D. Evanson  
A. T. Gorman  
C. Hanas  
L. Hayes  
J. F. Liddle  
Jesse M. Lippincott  
G. H. Luetkehans  
T. O. McDonald  
G. P. Weber  
D. E. Yager

### Asheville, N. C. (WBO)

F. C. Hood

### Astoria, Oregon (WBAS)

E. A. Brackett  
H. T. Chan  
D. P. Marting

### Atlanta, Ga. (WBAS)

R. S. Allen  
H. Armstrong  
R. L. Cornelius  
M. E. Crawford  
A. E. Elomaa

D. W. Miller

E. H. Miller

### Bakersfield, California

E. Carnahan

### Boise, Idaho (WBAS)

W. F. Selfridge

R. T. Small

### Boston, Mass. (WBAS)

J. H. Bonzagni  
D. M. Bridgham  
J. M. Cohen  
P. J. Divver  
M. J. Finnegan  
A. C. Flahive  
H. U. Lawrence  
C. H. Pierce  
C. H. Rexroad  
L. T. Rodgers

### Bridgeport, Conn. (WBAS)

J. W. Decker

### Caribou, Me. (WBAS)

G. L. Courville

### Chattanooga, Tenn. (WBAS)

S. A. DeLay

### Chicago, Ill. (WBO)

R. E. Lautzenheiser  
LaVerne M. Wermich

### Chicago, Ill. (WBU)

S. M. Bromberg  
J. R. Fulks  
C. D. Hall  
V. F. Hendricks  
J. W. Morgan  
R. O. Reinhold  
C. R. Snider

### Cleveland, Ohio (WBAS)

H. N. Burke  
A. S. Klemetsmo  
H. J. Paul  
R. R. Waldman

### Dayton, Ohio (WBAS)

R. T. Gillam

C. D. Rathfon

### Inkster, Mich. (WBAS)

H. B. Emerson  
J. S. Hill

### Escanaba, Mich. (WBO)

S. E. Decker

### Eugene, Oregon (WBAS)

H. C. Rinard

### Fargo, N. Dak. (WBAS)

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R. W. Shultz

R. A. Wilson

### Fort Myers, Fla. (WBAS)

John W. Hayes

### Ft. Worth, Texas (WBRO)

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E. L. Hardy

J. P. Kurtzweil

C. J. Raven

W. P. Roquemore

V. W. Schaad

Virginia E. Shive

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E. T. Lange

T. A. Mason

A. McFarland

L. E. Richards, Jr.

L. L. Wills, Jr.

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### Great Falls, Mont. (WBAS)

J. W. Cline

W. A. Grimes

V. S. Hommes

T. E. Jermin

R. F. Kernan

L. O. Oliver

O. J. Preikszas

Bonnie M. Richardson

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L. F. Conover

A. W. Ewing

### Havre, Mont. (WBO)

M. P. Monson

### Honolulu, (PSO)

W. F. Feldwisch

M. L. Fields

W. A. Follansbee

M. F. Grace

A. H. Jennings

H. A. Miller

H. D. Parry

A. V. Pierson

D. B. Swinton

R. L. Wolff

W. G. Wylie

### Koror

G. L. Rudolph

### Lihue

N. E. Koski  
Wake Island  
S. R. Miller  
C. E. Sprague  
Huntington, W. Va. (WBO)  
L. C. Stone  
H. L. Suiter  
Huron, S. Dak. (WBO)  
R. N. Cook  
Leah M. Kirby  
Huron, S. Dak. (WBAS)  
J. J. Meyer  
W. H. Wells  
Indianapolis, Ind. (WBAS)  
W. A. Bertrand  
F. R. Maher  
S. J. Peirce  
P. G. Stewart  
International Falls, Minn. (WBAS)  
R. C. Gerald  
Jacksonville, Fla. (WBAS)  
G. R. Davis  
D. G. Fordham  
C. C. Johnson  
J. D. Watson  
Kansas City, Mo. (WRPC)  
J. J. Crubaugh  
L. W. Dye  
F. C. Hobbs  
Kansas City, Mo. (NCAHE)  
V. Alexander  
E. A. Johnson  
LaGuardia Field, N. Y. (WBAS)  
J. Cinex  
S. E. Cravens  
S. O. Grimm  
W. F. Lange  
L. T. Olson  
P. Stone  
C. S. Wagner  
F. Zucker  
Los Angeles, Calif. (WBAS)  
H. W. Douglas  
F. W. Ernst  
D. R. Harris  
E. S. Kurtz  
O. E. Nichols  
R. J. Powers  
I. S. Roberts  
G. C. Shields  
O. R. Wulf  
F. D. Young  
Lubbock, Texas (WBAS)  
H. L. Frost  
H. C. Snyder  
A. E. Walkowiak

Lynchburg, Va. (WBAS)  
H. V. Myers  
Medford, Ore. (WBAS)  
F. R. Bauman  
R. D. Church  
W. L. Lampkin  
O. H. Streimikes  
Memphis, Tenn. (WBO)  
A. L. King  
T. C. Trapp  
Memphis, Tenn. (WBAS)  
W. H. Banks  
C. E. Carney  
W. M. Rowe  
G. T. Stephens  
Midland, Texas (WBAS)  
W. J. Ashcraft  
I. E. Ellis  
Ema J. Meredith  
T. F. Ramsey, Jr.  
Montgomery, Ala. (WBAS)  
A. R. Long  
F. C. Pate  
Mt. Shasta, Calif. (WBO)  
F. M. Asbell  
New Orleans, La. (WBO&WBAS)  
E. A. Aime  
G. L. Allen  
J. C. Appleby  
W. C. Conner  
L. E. Greeson  
R. H. Kraft  
S. Lichtblau  
Omi Loew  
C. T. Prochnow  
J. M. Sharpe, Jr.  
R. J. Waite  
New York, N. Y. (WBO)  
E. J. Christl  
Norfolk, Virginia (WBAS)  
A. D. Hustead  
Ruth E. Owens  
G. V. Sachse  
Orlando, Fla. (WBAS)  
H. F. Murray  
W. F. Pearson  
Pendleton, Oregon (WBAS)  
N. M. Barrey  
G. M. Lee  
Philadelphia, Pa. (WBAS)  
H. P. Adams  
Margaret M. Daly  
Marie D. Fellechner  
D. A. Rigney  
P. S. Rosenbery  
Pittsburgh, Pa. (WBAS)

A. E. Lay  
R. C. Walker  
Pittsburgh, Pa. (WBO)  
H. Rockwood  
Port Arthur, Texas (WBAS)  
A. F. Wolford  
Prescott, Arizona (WBAS)  
W. D. Grafton  
Pueblo, Colo. (WBAS)  
O. R. Foster  
Reading, Pa. (WBO)  
M. I. Peacock  
Richmond, Va. (WBAS)  
F. L. Dix  
S. B. Trotter  
Rochester, Minn. (WBAS)  
C. M. Holmes  
Roseburg, Oregon (WBAS)  
L. J. C. Hedine  
St. Louis, Missouri (WBAS)  
B. Handy, Jr.  
I. A. Koonts  
D. J. Maguire  
J. R. Moeller  
St. Louis, Mo. (WBO)  
A. A. Rausch  
Veal Worland  
Salem, Oregon (WBAS)  
Mary M. Bates  
M. S. Main  
J. A. Schlieski  
Salt Lake City, Utah (WBAS)  
G. R. Bacon  
W. H. Bierbower  
C. D. Clayton  
S. D. Green  
W. Harrell  
E. J. Lager  
E. A. Richardson  
Salt Lake City, Utah (WBRO)  
A. A. Bander  
O. C. Bobbitt  
A. C. Erdahl  
M. Feldheim  
C. E. Hubbard  
L. Krezak, Jr.  
San Angelo, Texas (WBAS)  
G. R. Hopson  
L. C. Walton  
Santa Maria, Calif. (WBAS)  
R. E. Carter  
R. E. Duncan  
W. Kline  
D. I. Wise  
Sault Ste. Marie, Mich. (WBAS)  
V. K. Best

E. S. McLaughlin  
A. J. Myers  
M. F. Planert  
Savannah, Ga. (WBAS)  
H. J. McAleer  
Neoma Ruth Parks  
Seattle-Tacoma Airport,  
Seattle, Washington  
A. Bloom  
H. A. Downs  
H. P. Foltz  
H. D. Lindquist

J. D. Wakefield  
Sheridan, Wyoming (WBAS)  
D. K. Halligan  
C. J. Stephans  
Spartanburg, S. C. (WBAS)  
M. A. Baldwin  
Syracuse, N. Y. (WBAS)  
M. A. Bennis  
L. C. Fields  
A. P. Keller  
Tampa, Fla. (WBAS)  
W. E. Maughan

M. D. Nelson  
Topeka, Kans. (WBO)  
R. T. Tice  
Tucson, Arizona (WBAS)  
Eileen T. De Laurentis  
E. T. Hawkinson  
R. L. King  
Wilmington, Del. (WBAS)  
G. C. Anderson  
R. Appleton  
Yuma, Arizona (WBAS)  
S. T. Baldwin

## NEW METEOROLOGISTS IN CHARGE

### *Port Arthur, Texas*

ARTHUR F. WOLFORD who has been Principal Assistant at Port Arthur for the past one and one-half years has been selected as MIC to succeed Mr. Everett W. Torrance who passed away in May.

Mr. Wolford was born in Baldwin, La. and attended High School in Port Arthur. His first assignment with the Weather Bureau was at Port Arthur beginning October 1, 1930. After some eleven years as an observer at that location he transferred to

Lakeland, Fla., where he served the greater part of his career in the Bureau in the Fruit-Frost Service. During this period there was a break of about 18 months during which he was assigned to Fort Myers, Fla.

While at Lakeland, Mr. Wolford attended Florida Southern College and by hard work and persistence over a number of years completed the requirements for a B.S. degree in 1951.

There were twenty applicants in reply to the vacancy announce-

ment. Additional names were added through the usual method of reviewing preference forms and considering all other employees who had appropriate qualifications for MIC positions. This article will serve as notification to the other applicants for this position, as it would not be practicable to make individual replies to the letters of application. The interest of all who applied is appreciated, and the list will be used in connection with other MIC vacancies in that part of the country.

## RETIREMENTS

### *Ernest L. Felton*

ERNEST L. FELTON, Meteorologist in Charge of Weather Bureau Office San Francisco, retired at the termination of June 30, 1955 after over 45 years of Weather Bureau service.

Mr. Felton was born on September 15, 1889 at Mayville, Michigan. He spent his childhood there graduating from the Mayville High School in 1907. He later supplemented his formal education

with courses from the University of California.

Mr. Felton began his Weather Bureau career on May 1, 1909 as an assistant observer at Vicksburg, Miss. A year later he transferred to Detroit where he remained until December 1917 when he transferred to the Central Office, assigned to the Instrument Division. During the next three years he traveled widely over the United

States installing storm warning stations. In March 1920 he was sent to Del Rio, Texas as Official in Charge where after only a few months he tendered his resignation and returned to Detroit on account of family health reasons. A year later in June 1921 he was reinstated in the Weather Bureau as 1st Assistant at the Detroit Office and almost immediately thereafter transferred to Grand Junction,

Colorado as Official in Charge. He remained in Grand Junction for the next twenty years during which he proved himself to be a most competent official.

In a letter to the Central Office in answer to an inquiry concerning his availability for more important assignments he cheerfully volunteered for any appropriate position in the United States and closed with the following statement: "I shall probably never enjoy a more pleasant assignment than my present one. Our relations with the Public and Press are exceptionally satis-

factory and agreeable."

In October 1941 he was placed in charge of the Weather Bureau Office at Phoenix, Ariz., where in addition to his other duties he was responsible for the Climatological Service for Arizona as well as River Service and Fruit Frost service for the Salt River Valley. In his usual competent manner he handled this assignment in an outstanding fashion and upon the retirement of Mr. Norquest, the Meteorologist in Charge at San Francisco, in 1948, Mr. Felton was selected as his successor. He continued to serve as MIC at

San Francisco until his retirement. As in his previous assignments he proved to be excellent in public relations. He was honored by being elected President of the Federal Business Association in San Francisco for the fiscal year 1953.

Mr. Felton is a member of the American Meteorological Society, the American Geophysical Union and the National Federation of Federal Employees.

He may be contacted at the following address: 851 Kains Avenue, San Bruno, California.

## DEATHS

### *William E. Pfeifer*

WILLIAME. PFEIFER, former employee in the Instrument Division of the Central Office, passed away on Friday, June 10, 1955 at the age of 70. Mr. Pfeifer retired on June 10, 1953 after 30 years of service. A brief resume of his service was published in the June, 1953, issue of TOPICS.

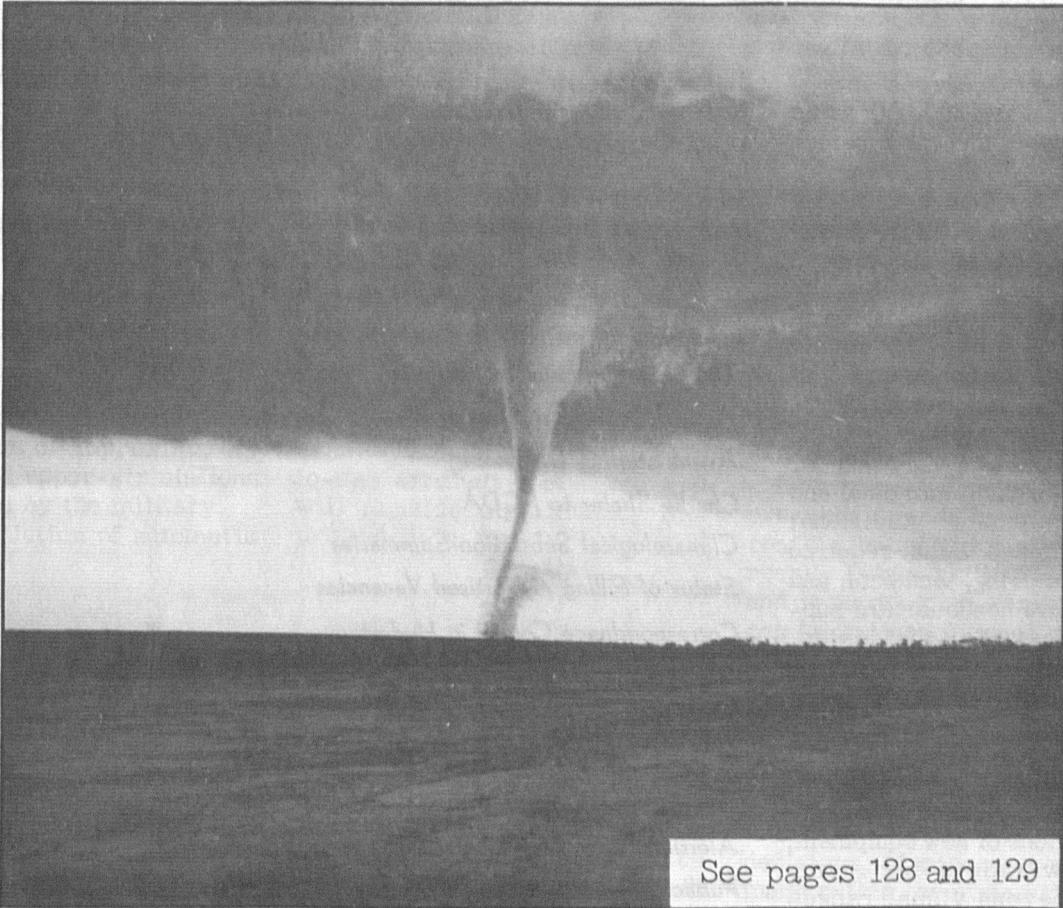


Lab. Staff c.1  
ABW  
P.M.V.  
FBR

WEATHER BUREAU

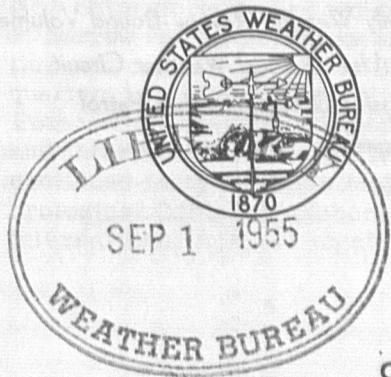
# TOPICS

AUGUST  
1955



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Number 7

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WEATHER BUREAU TOPICS is published monthly to inform all employees about newsworthy operations and work programs of the Bureau; to give background on instructions; to carry news of new personnel assignments, retirements, deaths, and similar information about employees; and to serve as a medium through which ideas and views may be exchanged to promote efficiency and teamwork in attaining our common goals. While the contents, unless otherwise specified, reflect the Central Office viewpoint, they are not instructions but are presented for information. Opinions, discussions or comments by readers are invited; they should be marked for the attention of the Editor, TOPICS. WEATHER BUREAU TOPICS is distributed for official use only.

. . . . *The "Establishment of Facilities" Program* . . . . .

**T**HE current Congress appropriated \$7,500,000 to be available over a four-year period ending Fiscal Year 1959 for Weather Bureau use in the "establishment of facilities." Practically the entire sum is designated to be used for the procurement and installation of new meteorological equipment. Also included the construction of new, or alteration of present structures and buildings as may be required in the program and for the replacement of outmoded and obsolete equipment. Additional staffing is limited to that required for the engineering, technical, and administrative headquarters support necessary for the design, procurement and installation of the equipment involved, including plans for construction of buildings and shelters.

Tentative plans at present contemplate the following principal installations of new equipment:

1. New radars for storm detection beyond visual ranges at 41 locations, either to replace present equipment or to assist in completing the severe storm detection network. Most of them will be located east of the Rocky Mountains where they will be particularly useful in the issuance of warnings, research, etc., because of the high incidence of tornadoes, hurricanes, blizzards, severe thunderstorms, and other

disturbances in those areas. However, several will be located along the Pacific Coast where it is expected that they will be helpful in short-range forecasting of storms and squalls moving land-

ward from the open ocean and also useful in detecting heavy rains which may produce flash floods in the rapid run-off areas existing there.

At least eighteen months will

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elapse before deliveries of the new radar equipment are expected to begin. The program of conversion of the present APS-2 instruments for maximum efficiency at the locations where it is now installed or immediately projected, will be continued.

2. SCR-658-type rawinsonde equipment will be replaced at most Weather Bureau rawinsonde stations now using it by modern automatic tracking radio theodolites. The new equipment will permit obtaining rawin data to considerably greater heights than the SCR-658 because of its ability to receive accurate radio directional signals at lower elevation angles. This will increase the value of the rawin observations to forecasting and aircraft operations.

In addition, it is planned to establish rawinsonde programs at three additional Weather Bureau stations and to take over (under separate appropriation) the operation of approximately 25 GMD-type upper-air stations now operated by the military.

3. Installation of automatic

cloud height and visibility observing equipment on the end of runways will be made at about 45 principal Instrument Landing airports. This equipment continuously observes and transmits instantaneous values of measured ceiling and visibility at the end of the ILS runway to the weather station and control tower, thus significantly aiding in the successful completion of instrument landings during adverse weather. It is expected that improved design will make it possible to measure high ceilings with this equipment, utilizing a second detector on a 1000-foot base line.

4. Wind recording equipment which is electrically connected to an anemometer and wind vane to provide a continuous, instantaneous record of wind direction and wind speed, including gusts, will be installed at about 50 strategic airports and other locations. These instruments will be of considerable assistance in day-to-day aircraft operations and will provide significantly improved data for surface wind

studies and research.

5. About 300 stations will be equipped with telepsychrometers for measuring and recording temperature and dew point, using the infra-red hygrometer and a temperature sensing element located at sites free from the influence of heated buildings, paved runways, etc. This equipment will eliminate the need for hourly or more frequent trips over rather long distances to the instrument shelter - a significant saving in the observer's time.

A number of CAA stations making hourly weather observations for the Weather Bureau will be equipped with ceilometers, telepsychrometers, and direct reading wind equipment.

## *Avoid Staffing Delays*

**I**N implementing new and augmented programs recently authorized by Congress an increasing number of promotions, reassignments and transfers will result. Delays in filling positions, and in working out replacements can be reduced if, when possible, selectees will forward acceptances or declinations within three or four days after receipt of the official offer. This will clear the way to start replacement action much more promptly than is ordinarily the case. Some decisions, of course, cannot be made within the stated time and additional time is automatically granted. Consideration of offers should not exceed one week, however, without some clarification of intentions. This is not meant to establish inflexible limits as there are always exceptional reasons that must be recognized. But in general, the earliest possible notification of decision on an offer will facilitate a number of personnel actions.

## *Annual Report on Alaskan Weather Services*

**T**HE annual report of Weather Bureau operations in Alaska, prepared by the Anchorage Regional Office for inclusion in the Governor's Report to the Secretary of the Interior, is quoted below. While much of the information is well known to older employees, we believe it will be interesting and informative to newer personnel.

"There were no major changes in the Weather Bureau program in Alaska during the Fiscal Year 1955. A limited curtailment of program at Cordova

and Northway was made near the end of the year to partially offset establishment of a complete weather reporting station at Cold Bay, on the Alaskan Peninsula, a refueling stop on the North Pacific air route to the Orient. New office quarters were occupied at Barrow and the Fairbanks station was moved to new office quarters in the Terminal Building. Forecasting service for domestic and international air carriers continued from the Main Meteorological Office at Anchorage International Airport together

with the several types of public service forecasts including General Weather, Marine, Storm Warnings and Advisories, and Seasonal Fire Weather Forecasts.

"Local offices of the Weather Bureau at Annette, Fairbanks, Juneau, and Nome continued to provide flight advisory, pilot consultation and local forecast services to supplement the forecasts issued from Anchorage. Direct broadcasts of weather information and forecasts over commercial radio stations were continued at Anchorage, Annette, Cordova, Fairbanks and Juneau. Weather telecasts were continued on one television station in Anchorage and were inaugurated in Fairbanks on both TV stations last spring. The weathercasts are presented by private meteorologists predicated on data and forecasts furnished by the Weather Bureau.

"Weather Bureau Airport Stations were operated at Anchorage, Annette, Barrow, Bethel, Cordova, Fairbanks, Juneau, Kotzebue, McGrath, Nome, Northway, St. Paul Island and Yakutat where a basic program of hourly aviation weather, 6-hourly synoptics and 6-hourly winds aloft observations was maintained. Hourly aviation weather observations were available from 25 locations where stations were operated on a part-time basis and from 9 cooperative supplementary reporting stations. The Weather Bureau supervised the 24-hourly observational program at 24 C A A Communications stations and limited observational programs at 11 Coast Guard Lighthouse stations. Climatological observations were collected from 57 other stations in the Territory where volunteer observers recorded daily temperatures and precipitation on a cooperative basis without compensation.

"Liaison and coordination

was maintained with the military meteorological services with regard to climatological, meteorological, and operational programs in the Territory.

"Twice-daily radiosonde observations were continued at Bethel, Kotzebue, McGrath, and Northway and rawinsonde observations at Anchorage, Annette, Barrow, Fairbanks, Nome, St. Paul Island and Yakutat during the year. In October 1954 the Kotzebue station was converted from radiosonde to rawinsonde and at the year's end a similar conversion was made at Bethel. Radiosonde observations were discontinued at Northway near the close of the year, and the surface observational programs at Northway and Cordova reduced to 16 hours daily. Operation of ceilometers for automatically recording day and night cloud heights was continued at Anchorage, Annette, Fairbanks, Gustavus, McGrath, Nome and Northway, and ceilometer equipment formerly operated at Barrow was relocated to Yakutat. Solar radiation measurements continued at Annette, Barrow, Bethel and Fairbanks, and in cooperation with the Department of Agriculture at the experimental farm in the Matanuska Valley. At the year's close, end-of-runway ceilometer equipment was being installed at Anchorage International Airport and construction was in progress for the establishment of a Weather Bureau Airport Station at Cold Bay.

"In cooperation with the Corps of Engineers, soil temperature measurements were made at 15 central and northern Alaskan stations.

"The Weather Records Processing Center at San Francisco continued to tabulate and process current observational data by machine methods which are filed at the National Weather Records Center, Asheville, N. C. Micro-

film copies of meteorological and climatological records and machine processed tabulations of essential data are maintained in the Climatological Section Center at Anchorage. Government agencies, engineers, and contractors continued to make extensive use of climatological records and accounted for most of the many requests for data. Routinely published Monthly and Annual Climatological Summaries served to meet most requests for such data.

"Government living quarters for housing employees were maintained at Annette, Barrow, Bethel, Cordova, Kotzebue, McGrath, Nome, Northway, St. Paul Island, and Yakutat and were under construction at Cold Bay. Lack of adequate housing continued to limit field activities of the Weather Bureau in Alaska but at the year's end there were some prospects for extensive modernization of the instrumental equipment and a modest expansion of Weather Bureau activities in the Territory during the ensuing Fiscal Year."

## *Charlie Shafer to FCDA*

CHARLES K. SHAFER has been assigned to Battle Creek, Michigan to serve as a meteorological consultant to the Headquarters of the FCDA. In addition to providing meteorological guidance in support of FCDA plans and operations, his office will provide information about severe weather phenomena over the United States to assist FCDA in carrying out its disaster responsibilities. Another major function will be to provide operational advice on radioactive fallout for major cities.

Mr. Shafer has been on detail to FCDA since April and participated in Operation Alert 1955.



## Highlights of Travel by Deputy Chief as told to the Editor

THE Weather Bureau Cessna, a busy little Bird of late, taxied into takeoff position at Washington National Airport early in the afternoon of June 26. Aboard were Mr. D. M. Little, Deputy Chief of Bureau, Mr. Merwin Shurberg, staff assistant to the Under Secretary of Commerce, and of course, Mr. George Brewster, the pilot. Their mission was to visit a number of Weather Bureau field stations. By the 4th of July when Mr. Shurberg had to leave the party, they had visited 22 Weather Bureau Offices and one SAWRS station, most of which were in the northern part of the Kansas City Region. Many of the stations were purposely "off the beaten path" for Washington officials and the reception therefore had been unusually enthusiastic.

After visiting the SELS Center in Kansas City, the party headed north and almost immediately ran into what seemed to be an effort on the part of that Unit to outperform themselves (could it have been to impress the travelers?). Only a short time after takeoff for Omaha, a tornado warning was issued for the area of destination. Arrival in Omaha was just barely in advance of a severe thunderstorm. This gave an excellent opportunity to observe the Omaha office in operation during the warning period and the demands upon and performance of the staff were very impressive. The storm itself, not to be outdone, put on such a spectacular display of lightening that it will long be remembered. Aircraft began reporting severe turbulence in areas recently flown through by

our travelers who had experienced only slight turbulence. Everything was so impressive that for several minutes a funnel cloud was believed to be seen silhouetted by lightening to the northeast of the station. Telephone calls to the area proved the "funnel" to be scud.

Two days later while the party was stopping overnight in central Minnesota, SELS, as if foiled in its first attempt, covered the area with a forecast of tornadoes. Again a spectacular lightening display was observed but no funnels, real or fancied, were seen. A tornado did strike that night, however, 30 miles southwest of Fargo (100 miles west of our party) and swept a path about three hundred feet wide for a distance of nine miles. The after effects of this storm were observed in flight. Beginning at a point  $9\frac{1}{2}$  miles west-southwest of Walcott, North Dakota, and about one mile south of the Sheyenne River, broken tree tops gave the first signs of the tornado. The path of destruction was oriented west-east with farm homes, buildings, corn cribs, farm machinery and automobiles destroyed in the path. Trees along the fence lines of farms were completely denuded or uprooted and the broken branches together with the scattered debris plainly indicated the cyclonic rotation of the storm. Hundreds of people were observed milling around the destroyed farm homes and turned their faces to the sky to observe the aircraft which was flying low to permit the taking of colored photographs of the damaged area. The path of destruction ended

about one-half mile south of Walcott but a few barns were reported destroyed about ten miles farther east near Wolverton, Minnesota.

Brushes with tornadoes did not end there, however. Upon arrival at Scottsbluff, Nebraska, the Weather Bureau staff was still talking about the tornado that passed on WNW-ESE course within a mile of the airport station a few days before. Six excellent pictures of this tornado were taken by the airport manager and some of the Weather Bureau employees were able to obtain still photographs of the radar echo intermittently for about an hour before abandoning the station. The characteristic figure "6" or "hook" was plainly evident on the photographs in advance of the SW sector of the echo. Fortunately the storm passed about a mile to the south of the station and no damage was done at the WBAS. (See article in this issue on Award for Mr. Dave Grasmich.)

On the way from Cheyenne to Grand Junction, the same day, it was believed the better part of valor to skirt a thunderstorm over the Rockies and even then some hail that had been tossed out of the storm was encountered. The hail was first seen in clear air through the windshield of the airplane as tiny black spots which, due to the speed of the plane, had the appearance of rapidly enlarging to the size of marbles before crashing against the plexiglass.

En route from Grand Junction to Alamosa the old Wagon Wheel Gap station, which the Weather Bureau operated many years ago,

## Employee Suggestion Box

was observed. In circling this area to have a better look, and noting the places where snow-slides had taken out the trees, our travelers could not help wondering whether one of these spots was where Mr. Paul F. Maxwell, son of the former OIC at Baker, Oregon, lost his life in a slide while making snow measurements for the Weather Bureau.

At Hitchcock, Texas, Dr. Gunn's well equipped Laboratory was visited. An appreciation of its size was gained by climbing to the top of the 70-foot sphere and down again. The blow-off of the sphere under 5 pounds of pressure and the subsequent crawl through the valve to reach the inside sure provided a thrill. The cloud observed inside lasted for nearly a half-hour.

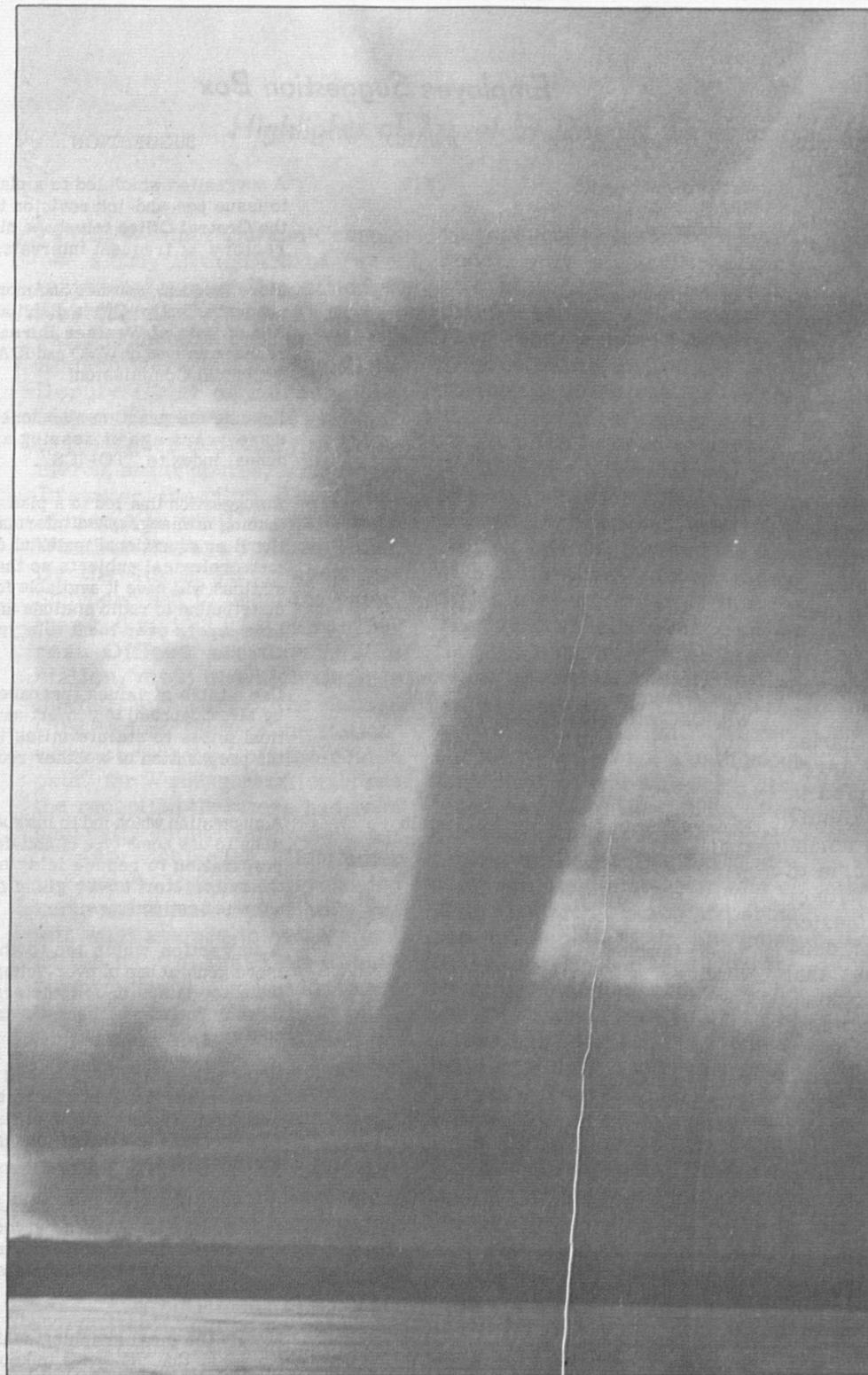
On the trip from Lake Charles to New Orleans, a very large thunderstorm was reported in the vicinity of Lafayette, Louisiana, extending far to the north. A decision to skirt this storm to the south soon placed the path of flight out over the Gulf of Mexico passing oil derrick after oil derrick and with nothing but that single motor to prevent a dunking. Arrival in New Orleans was a half-hour late.

The last leg of the flight from Chattanooga to Washington began as a game of "hide-and-go-see" with rain showers, first over the Great Smokies near Asheville and then over the Appalachians near Bluefield, and ended "on instruments" as smoke to considerable heights obliterated the horizon.

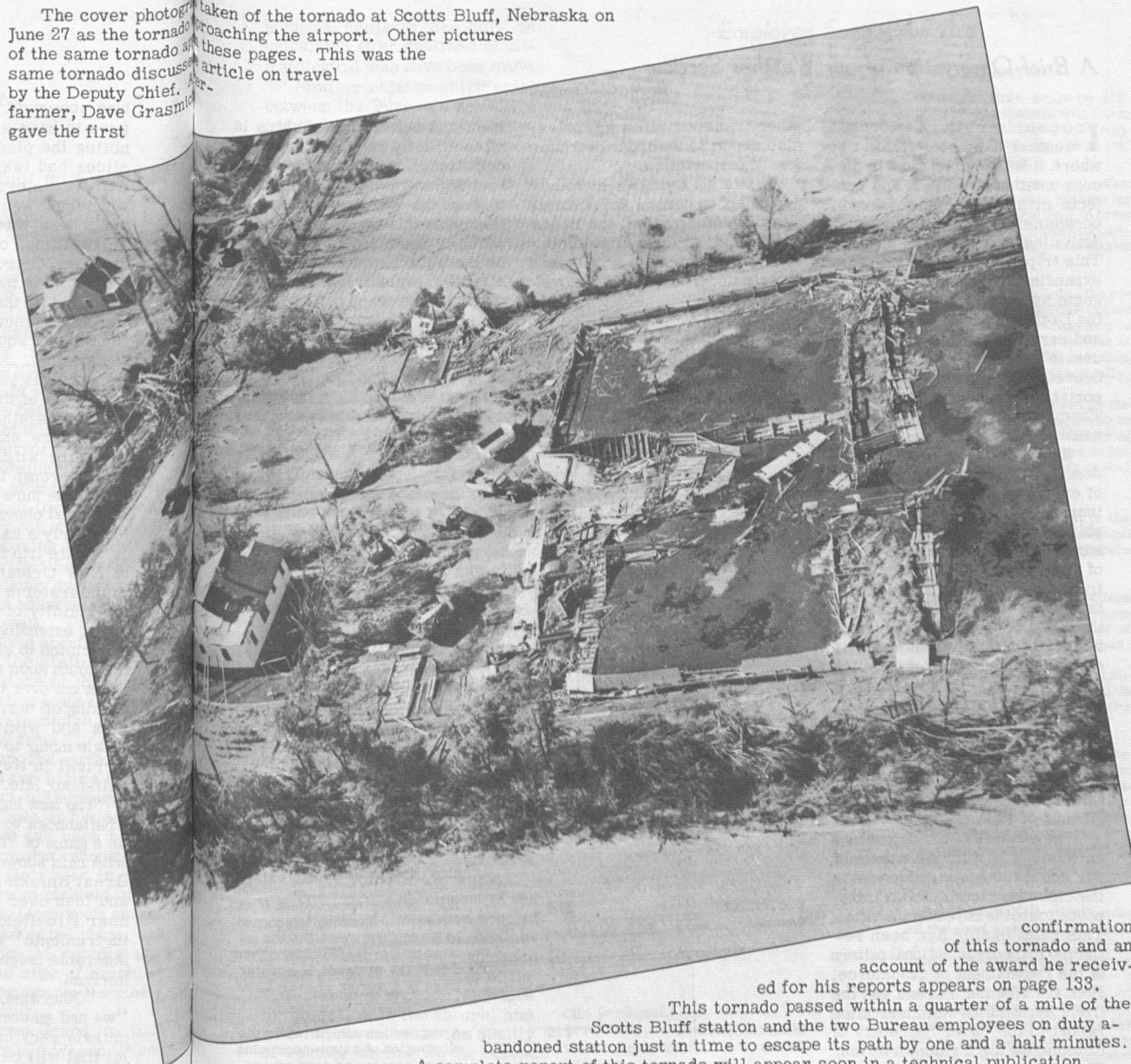
"Otherwise," says Mr. Little, "we had an uneventful trip, found morale very high and learned a lot that will be useful in the expansion program that is now beginning to take shape."

EMPLOYEE	AWARD	SUGGESTION
Santoro Barbagallo SR&F Washington	\$10	A suggestion which led to a plan to issue pen-and-ink revision to the Central Office telephone directory at frequent intervals.
Santoro Barbagallo SR&F Washington	\$15	More frequent issuance and more adequate Central Office distribution of lists of Weather Bureau representatives on WMO and ICAO Technical Commission.
Earl Bates Olympia	\$15	Resume the practice abandoned some years ago of issuing an annual index to "TOPICS".
Ivan Brunk Chicago	\$50	A suggestion that led to a plan of issuing mimeographed informational or educational material on meteorological subjects so that stations will have it available for distribution to radio stations and newspapers over local teletype circuits.
Boyd Chapman WRPC, Chattanooga	\$20	Use a table of values (prepared by Mr. Chapman) to convert nautical miles to statute miles in the preparation of weather records.
Howard Chestnut Moline	\$15	A suggestion which led to instructions to use some type of anti-fog preparation to reduce icing on the ceilometer cover glass of unheated ceilometers.
Robert Corbin Winslow	\$15	A suggestion which led to the more general use of over-voltage indicator lamps in ceilometers, thereby prolonging their life and reducing the cost.
Carl Daubendick a CAA employee of Ogden, Utah	\$25	When one or more levels of a winds-aloft forecast has to be amended, transmit the entire new forecast instead of just the amended levels.
Bernard Dubofsky NWAC Washington	\$15	A suggestion which led to instructions to use an ethelene glycol type of anti-freeze in removing ice or snow from ceilometer scanning devices.
David Fehling Fresno	\$15	Modify the pibal graphing scale No. 22 so that the speed in knots is on the same line and directly above the wind direction in degrees so that wind directions and speeds may be obtained in a single operation.

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The cover photograph taken of the tornado at Scotts Bluff, Nebraska on June 27 as the tornado approached the airport. Other pictures of the same tornado appear on these pages. This was the same tornado discussed in an article on travel by the Deputy Chief, Mr. J. W. Grasmick, a farmer, Dave Grasmick, who gave the first



confirmation of this tornado and an account of the award he received for his reports appears on page 133. This tornado passed within a quarter of a mile of the Scotts Bluff station and the two Bureau employees on duty abandoned station just in time to escape its path by one and a half minutes. A complete report of this tornado will appear soon in a technical publication.

## A Brief Observation of our Weather Services

By Merwin Shurberg

I recently returned from a Weather Bureau field trip where it was my pleasure to discuss weather problems and projects with many of the Bureau personnel and observe varied activities at a number of stations. This trip was made in light of the expanding Federal weather program and the great interest of the Department of Commerce, and particularly that of the Honorable Louis S. Rothschild, Under Secretary of Commerce for Transportation, and his Deputy, General Thomas B. Wilson, in improved weather services.

The Congress too, as evidenced by their recent approval of enlarged appropriations, is increasingly aware of the relationship of weather services to the safety and economic well-being of our people. The former is from time to time dramatically brought to everyone's attention through the devastations caused by tornadoes, hurricanes and other violent acts of nature. The latter, though less spectacular, is becoming more and more important as the science of meteorology advances and our complicated society discovers the relationship of accurate weather information to the successful pursuit of its varied activities.

One example of the dependence on weather of a major aspect of our economic life is evidenced in the close relationship of air transportation to the Bureau's activities. This relationship has been reflected in the organizational pattern of the Department of Commerce. Both the Weather Bureau and the Civil Aeronautics Administration report to the Under Secretary of Commerce for Transportation. The Maritime Administration and the Bureau of Public Roads, the

other transportation agencies, also report to the Under Secretary for Transportation.

While all flying is obviously dependent on current and accurate weather information, the needs of the other transportation elements are sometimes a little less clearly understood. The move-

ment and scheduling of ships is often directly related to weather conditions. In addition, our Federal highway program is executed through the awarding of construction contracts the completion of which is necessarily dependent on the weather. Realistic construction schedules on major

### Employee Suggestion Box

EMPLOYEE	AWARD	SUGGESTION
Monroe Feldheim WBRO, Salt Lake City	\$10	When an endorsement to a letter or memorandum is on a separate sheet repeat the subject and reference heading on that sheet.
Elmer Fisher Portland	\$10	A suggestion which led to the increased use of portions cut from topographic or county maps instead of making ink or pencil sketches or tracings in preparing station location reports on WB Form 4004B-1.
Reid Gardner Flagstaff	\$25	A suggestion which led to increased use of a plan for writing letters and memoranda in such a way that the answer could be made on the lower half of the same sheet or in spaces provided.
Samuel Green WBRO, Salt Lake City	\$15	Use a protractor (devised by Mr. Green) as an aid in plotting station locations on maps in preparing substation histories.
William Haggard CS Washington	\$10	The use on the forward seats of the Weather Bureau aircraft of seat covers with large pocket backs so that charts, sick bags, etc., would be more readily available to passengers.
Don Halligan Sheridan	\$20	Have weather observations from Moorcroft, Wyoming telephoned to Rapid City, South Dakota instead of Sheridan, Wyoming. Even though the distance is greater there is a saving of over \$300 annually.
Malcolm Harrison Dallas	\$25	A suggestion which led to the elimination of a time-consuming report concerning each severe-storm forecast or warning issued, formerly required of stations.

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highway projects can only be calculated after analyses of climatological data have been made.

Similar relationships exist between the Bureau's activities and those of the other branches of the Department of Commerce. In addition, the Department of Agriculture and the interests it represents need an abundance of weather knowledge as do elements of the Department of Defense, among others. This interest on the part of various Federal agencies is to be expected since practically all our activities are in some ways dependent on the Weather Bureau functions.

The practicalities of these relationships were strikingly illustrated during the field trip. For example, in Toledo farmers using the new portable irrigation equipment would directly contact the Bureau for forecasts of anticipated precipitation before moving their equipment from one field to another. In Duluth the ore dock operators call the Bureau office daily for forecasts on wind directions as a guide in their loading operations. In Green Bay a strawberry grower wanted to know how long the rain was apt to continue as he had 500 pickers standing by and he didn't know whether to send them home or to keep them waiting. Also in Green Bay the food processing industries are extensive users of climatological data in order to develop requirements for packages for their products transported, stored and used in different sections of the country and of the world.

The increased interest of the Department of Commerce, coupled with the recent action of the Congress, is undoubtedly an indication of the growing awareness of the importance of weather services to the nation in the future, and with improvement in the quality of weather information the Bureau can look forward to continued growth for many years to come.

## Employee Suggestion Box

EMPLOYEE	AWARD	SUGGESTION
Charles Hopkins RFC, Tulsa	\$ 15	Change the time scale on WB Form 5005 to conform with Form 652.2-5 so that hydrographs may be transferred from one to the other more easily.
Kenneth Jenkins Amarillo	\$ 15	In the future procure metal rather than wooden inflation nozzles for 30- and 100-gram balloons in order to eliminate the occasional replacement necessary with wooden nozzles.
Lothar Joos Madison	\$ 15	A suggestion which led to the use of long distance telephone instead of telegraph for the transmission of certain types of messages at about ten stations, with a resulting saving of over \$200 annually.
Joseph Kermis Columbus	\$ 15	A suggestion which led to the procurement of metal disks to use in repairing the center of plastic pibal protractors in the future with reinforcing metal disks in the center.
Dorothy Kilgore SR&F Washington	\$ 15	A suggestion which led to the greater use of Office Memoranda where letters had formerly been used.
Daniel Maguire St. Louis	\$ 30	Eliminate weather observations at Carbondale, Illinois and save more than \$500 annual cost of transmitting the observations.
Edward McEowen SF&MO Washington	\$ 10	A suggestion which led to improved name-plate cards beside the door of each room in the Central Office.
William Miller Macon	\$ 10	A suggestion which led to the issuance of reminders that Section C-3202 of the Bureau Administrative Manual authorizes stations to forward certified invoices without preparing vouchers, thus relieving stations of the work of preparing a number of vouchers each month.
Herman Mondschein RFC, St. Louis	\$ 10	Print Form 5008-B on both sides of the sheet since, for this particular form, it would result in no less inconvenience and would save paper.
Otto Preikszas Great Falls Paul Streckewald SR&F Washington	\$ 15	Duplicate awards for their suggestions which led to the greater use of indicator marks to show the changed portions of amended pages of manuals.

Cont'd. on page 132

## *Employee Suggestion Box*

EMPLOYEE	AWARD	SUGGESTION
Dwight Rigney Philadelphia	\$ 10	Position the printed address on mailing wrappers used in mailing punched cards to WRPC so that it will be in the lower right quarter of the package so that the card will not obscure it.
Andrew Robb Topeka	\$ 15	In requesting the completion and forwarding of forms always include definite instructions as to number of copies, destination, due date, etc.
Wilton Rodgers Annette Island	\$ 15	Suggestions which contributed to the improvements being made in the "Station Model and Explanation of Weather Code Figures and Symbols."
Ben Trapani Bridgeport	\$ 15	Issue small printed cards to be posted in each WBAS where they will be easily seen reminding pilots to inform the Weather Bureau of any important weather conditions encountered in flight.
Alice Voll Adm. Services Washington	\$ 10	Use 3x5 cards, changed only when a change occurs, to prepare the Bureau telephone directory instead of having each Division and Section prepare and submit a typed list of its employees every time a directory is prepared.
Thomas Weitz Burbank	\$ 15	Discontinue the purchase of 9 1/2" x 4 1/8" envelopes since a slightly larger size is also stocked and will easily serve the same purposes, thereby reducing the storage and supply problem.

### *Emergency Warning Section Established*

A new unit in the Synoptic Reports and Forecasts Division identified as the Emergency Warning Section was established in July of this year. The new Section will deal primarily with matters relating to the issuance and distribution of emergency weather warnings associated with hurricanes, tornadoes, blizzards, cold waves, heavy snowstorms and other types of weather disturbances.

Considerable emphasis has been placed on the establishment of emergency warning centers in

connection with the hurricane warning service and copies of pertinent instructions have been furnished all first order stations. It is expected that the use of the emergency warning center concept will be extended to other types of severe weather conditions such as blizzards and information on this subject will be furnished separately to field offices.

In connection with the operation of the Weather Bureau's warning services, members of the Emergency Warning Section will travel extensively throughout

the United States in order to obtain first-hand information on matters relating to the several warning programs of the Bureau. It is intended that the Emergency Warning Section will assist field officials in strengthening the organization of warning programs, developing improved means for dissemination of warnings, and that the Section will gradually work out methods for determining the effectiveness of the Weather Bureau's warning programs.

### *Alerting Radio Stations for Emergency Broadcasts*

THE Central Office has received an employee suggestion proposing that a special switching device be attached to radio broadcasting equipment located in local Weather Bureau offices. The device would be so arranged that when turned on, it would activate a light or buzzer in the broadcast studio. The suggester proposes to use such a device for notifying the broadcast studio quickly that a special emergency warning has been received and that immediate broadcast is recommended. The Weather Bureau does not provide equipment for radio broadcasting purposes and the proposed switching device cannot therefore be installed at government expense.

However, local officials may wish to discuss with radio stations the possibility of adding such a device at their expense. Under some conditions an arrangement of this type could result in more rapid distribution of emergency weather warnings to the public. The Central Office will appreciate notification in those cases where local officials arrange to have such equipment installed in Weather Bureau offices by local radio stations involved.

## Public Service Award for Rancher-Farmer

**B**ASED upon the recommendation of the Meteorologist in Charge at Scottsbluff, Nebraska, Mr. Dave Grasmich, a rancher-farmer living near Morill, Nebraska, has received the Weather Bureau's Public Service Award issued by the Chief of Bureau. The following is quoted from the citation on the Award: "Mr. Grasmich reported a tornado to the U. S. Weather Bureau on June 27, 1955, which made it possible to localize a

tornado forecast by issuing warnings for the storm's path. The warnings are credited with saving lives in the Scottsbluff, Nebraska area."

All officials are requested to keep in mind that recommendations can be submitted to the Central Office any time that reports from network observers or the public make it possible for warnings to be issued which result in the protection of life or property.

## Thank You

**W**E have had numerous letters of application for meteorological aid and electronic technician positions as a result of recent press releases made through MIC's. This method has proven to be effective on prior occasions and is again most helpful. From the various news clippings and radio scripts sent to us, it is a noteworthy indication of the fine relations that exist between field stations and local information channels. We take this means to thank our MIC's for the assistance given in advertising recruitment needs.

## 1000-Hour Sick Leave Club

### Albany, New York

Harold J. Smith  
Philip H. Stevens

### Allentown, Pa. WBAS

William T. Barch

### Baltimore, Md. WBAS

Herbert L. Alkire

### Binghamton, N. Y. WBAS

W. R. Cornell  
G. Di Lauro, Jr.  
Anna Sass  
C. E. Wilcox

### Boston, Mass., AWP

Burton F. Loveless  
Eliot V. Mathews  
Francis O. McCormick

### Burlington, Iowa, WBAS

C. F. Jespersen  
William A. Muldoon

### Cairo, Illinois

J. L. Alden  
L. H. Waite

### Charleston, W. Va., WBAS

Horace C. Dwelle  
Richard L. Sharpton

### Columbus, Ohio, WBAS

Edward F. Harold  
Joseph R. Kermis

Howard S. Kenny

Harold J. Rothrock  
Franklin K. Stout

### Datona Beach, Fla., WBAS

George A. Clark  
Charles W. Parker

### Denver, Colorado, WBAS

A. W. Cook  
C. G. Gilbert  
F. E. Horning  
H. B. Laird  
R. E. Myers  
C. F. Steffan  
K. C. Tillotson  
A. G. Topil

### Denver Colorado, WBO

Henry S. Huber

### Des Moines, Iowa, WBAS

C. Robert Elford  
C. E. Lamoureux

### Detroit, Michigan, WBO

W. W. Oak

### Detroit, Michigan, WBAS

T. V. Hilkey  
C. J. Doetker  
J. A. Mikina  
F. T. Moser  
P. E. Stry

### Dodge City, Kansas, WBAS

James V. Burchett  
Parker W. Martin  
Welcome B. Orr  
Paul A. Reed

### Eureka, California, WBO

I. E. Anderson  
E. H. Tornroth

### Flagstaff, Arizona

Paul W. Sorenson

### Kansas City, Mo., WBAS

Percy H. Chapman  
Jesse R. Gulick  
Henry L. Jacobson  
Edward L. McGuire  
Edward L. Norris  
Harold A. Pettit  
Edwin G. Provost  
Robert A. Sanders  
Leon Schirn

Walter A. Schroeter  
Walter O. Wade

### Kansas City, Mo., WBRO

Ernest W. Vogt

### Lander, Wyoming, WBAS

Donald D. Howard

### Miami, Fla. WBO

Gordon E. Dunn

Robert C. Gentry  
Paul L. Moore  
Minneapolis, Minn., WBO  
William M. Labovich  
Mobile, Alabama, WBAS  
E. LaMarr Eaton  
Harold E. Lami  
New York, N. Y., WBO  
Emil J. Ruckert  
Oakland, California, WBAS  
Kenneth W. Kemper  
Roger L. Torison  
Olympia, Washington, WBAS  
Charles Hibbard, Jr.  
Pittsburgh, Pa., WBAS  
Edmund J. Manning  
Pamona, California, WBO  
C. C. Allen  
W. B. Allen  
C. A. Cole  
H. B. Hansen  
W. E. Harman  
D. R. Harris  
L. H. Johnson  
E. M. Legg  
J. T. Mihelic  
Rome, Georgia, WBAS  
Juanita W. Lester  
Lucius P. Spicer  
San Diego, California  
Jonathan O. Becker  
Lester Epstein  
John W. Fuller  
Kurt M. Muerdter  
San Francisco, Calif., WRPC  
Robert F. Dale  
Roy A. Wells  
San Francisco, Calif., PWP  
Roger C. Nicholas  
Sam R. Raush

Margarette Richardson  
Raymond A. Valente  
San Juan, Puerto Rico, WBAS  
Emmett E. Baldwin  
Eduardo Dilme  
James R. Hadsock, Jr.  
Harold J. Monroe  
Ruben Peréz  
Savannah, Georgia, WBAS  
Jean Morgan  
Seattle, Wash., WBAS  
Ralph W. Hester  
Eugene H. Larcom  
Shreveport, La., WBAS  
George M. Baird  
Wm. Y. Cobb, Jr.  
R. L. Cox  
H. T. Foreman  
Berne P. Hughes  
Sioux City, Ia., WBAS  
Eugene R. Hiff  
Ivory P. Rennels  
Louis J. Solhein  
Sioux Falls, S. Dak., WBAS  
Kenneth R. Clark  
Springfield, Ill., WBAS  
Frank I. Branthaver  
Tampa, Fla., WBAS  
George A. Hurnham  
Topeka, Kansas, WBO  
Robert K. Douglas  
Tulsa, Okla., WBAS  
Charles C. Self  
Waco, Texas, WBAS  
J. S. Ward  
C. C. Wooden  
Wichita, Kansas, WBAS  
Fred E. Wells  
Ypsilanti, Michigan, WBAS  
Ernest B. Williams

## *Novel Use of Local Weather Circuit*

GORDON DUNN, Meteorologist in Charge at Miami, reports that a Building and Loan Association which recently subscribed to the local teletypewriter circuit is making an interesting new use of the information. The printer is located in a window on a busy street in Miami Beach, supplying temperatures and weather information for a large brightly colored map which is also in the window. Plans are also to create another map to plot hurricane positions from the advisories when the storms are within range.

## *Successful Ocean-Weather Patrol*

SINCE the successful ocean-weather patrol, reported in the July 1955 issue of TOPICS, observers aboard the Cutter Chincoteague, which occupied Atlantic Ocean Station "D" during the period June 24 - July 15, 1955, also attained an average raob height in excess of 25 km. The average height was 25,275 meters, the average bursting height was 26,110 meters, and the maximum height was 31,640 meters. The observers aboard this Cutter were James N. Bagnell, Stuart F. Brown, James H. Dew, Jr., and John E. Foster.

## *Monthly Weather Review-Bound Volumes for 1954*

**B**INDING of the loose editions of the Monthly Weather Review for 1954 that have been returned to the Central Office by field stations has been delayed because of a contractual difficulty which we expect will be cleared up soon. It is expected, however, that the delay will be as much as

two months or more.

Many stations have written that they would like to have other editions of the Monthly Weather Review bound. This cannot be done until the present backlog of binding has been brought up to date and additional funds are made available.

## RETIREMENTS

### *B. Elmer Johnson*

B. ELMER JOHNSON, Meteorologist, Weather Bureau Airport Station, Springfield, Missouri, retired on July 31, 1955, because of disability. He entered the Weather Bureau at St. Louis, Missouri, as a Meteorological Aid on December 1, 1941, and transferred to Springfield on February 16, 1944.

He was born in Ozark, Missouri, April 25, 1912 and attended grade and high schools in Springfield, where he was employed principally as a hotel clerk before entering the Weather Bureau.

Mr. Johnson's home address is 715 West Webster Street, Springfield, Missouri.

### *Leo W. Weaver*

LEO W. WEAVER retired from the Government service, effective July 11, 1955. Mr. Weaver's retirement was for disability. He entered the Weather Bureau on July 21, 1930, as Junior Observer at Del Rio, Texas. Following the Del Rio assignment, he served successively at the Houston, Texas, Airport; Tyler, Texas, where he served as Observer in Charge; Lubbock, Texas; San Angelo, Texas; and returned to Lubbock from where his retirement was effective.

Mr. Weaver can be contacted at his home at 2822 - 41st Street, Lubbock, Texas.

## DEATHS

### *Charles C. Dieter*

CHARLES C. DIETER, Meteorologist at Weather Bureau Airport Station, Pittsburgh, Pennsylvania died suddenly of a heart attack on July 16, 1955. He was 40 years of age and had completed nearly 13 years of Government service which included his military service during World War II. His entire period of civilian service was with the Weather Bureau at Pittsburgh.

Mr. Dieter entered the Weather Bureau on April 26, 1946 with an appointment to the position of Meteorological Aid at WBAS, Pittsburgh. Immediately prior to this he completed 3 years and 8 months in the Army Weather

Service which included service in Labrador and the Arctic.

Mr. Dieter was born February 15, 1915 in Pittsburgh. He grew up there, attended the local public schools and graduated from the Penn Township High School in 1932. He then entered Penn State University, majoring in Agriculture. After a year of college he engaged in poultry farming for seven years followed by a few months as streetcar operator in Pittsburgh and then entered the Army on April 18, 1942. He entered the Weather Bureau shortly after his discharge from the Army on December 29, 1945. Mr. Dieter was married but had no children. His wife survives him.

### *Fred Graf*

FRED GRAF, retired Weather Bureau Telegrapher died of a heart ailment on July 21, 1955 at the Sibley Hospital in Washington, D. C. Mr. Graf was 75 at the time of his death. He retired from the position of Chief of the Telegraph Section on January 31,

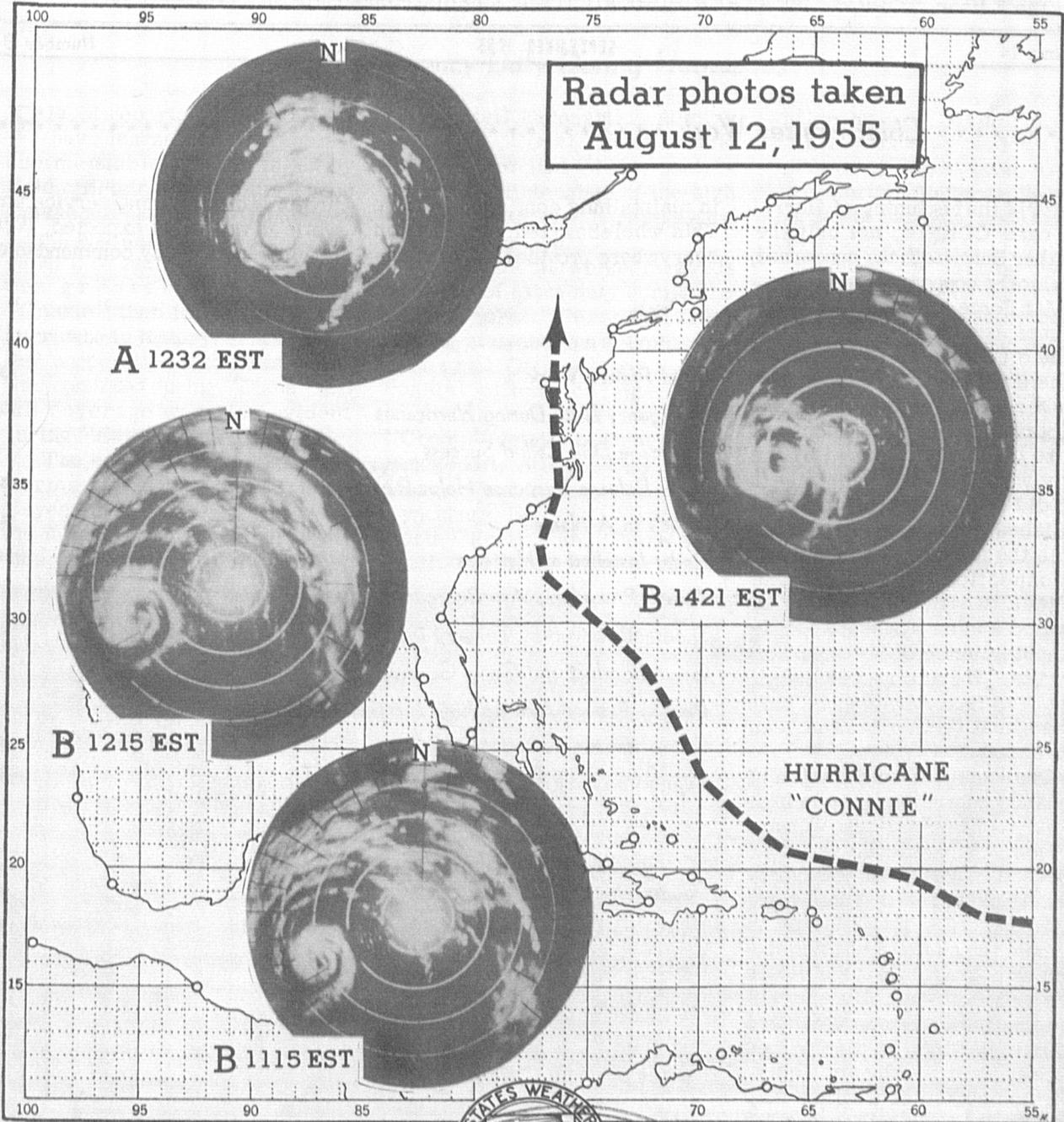
1947, after having completed 41 years of service all of which was in the Central Office. An article on his retirement was published in TOPICS March 1947.

Mr. Graf is survived by four married daughters and 10 grandchildren.

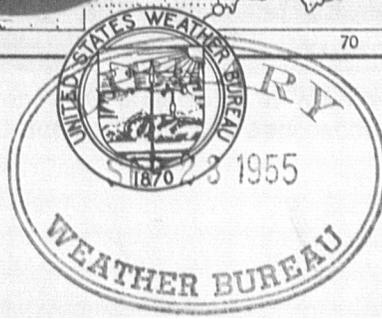


# WEATHER BUREAU TOPICS

SEPTEMBER  
1955



Volume 14



Number 8

WEATHER BUREAU TOPICS is published monthly to inform all employees about newsworthy operations and work programs of the Bureau; to give background on instructions; to carry news of new personnel assignments, retirements, deaths, and similar information about employees; and to serve as a medium through which ideas and views may be exchanged to promote efficiency and teamwork in attaining our common goals. While the contents, unless otherwise specified, reflect the Central Office viewpoint, they are not instructions but are presented for information. Opinions, discussions or comments by readers are invited; they should be marked for the attention of the Editor, TOPICS. WEATHER BUREAU TOPICS is distributed for official use only.

..... *Chief Praises Work* .....

**F**ROM the beginning of Hurricane CONNIE, not only the Weather Bureau offices concerned, but also the cooperating agencies—the Air Force and Navy in aircraft reconnaissance, the Coast Guard, the Red Cross, etc.,—responded to the emergency most creditably.

Of course, there will be complaints from beach concessionaires whose trade was reduced by the early warnings, and from others who did not pay attention to the published advisories, but on the whole the forecasts and warnings in connection with Hurricane CONNIE were about as far in advance and as accurate as the present science of meteorology permits. We are reviewing all important factors with great care to see what further lessons can be learned.

The excellent cooperation of all hands contributed to the high standards of the Hurricane Warning Service. Field officials remained on duty throughout the emergency in many cases. Personnel were detailed from inland stations to augment the staffs of coastal stations and Central Office officials, whose duties normally are administrative, hurried by car and by air to Weather Bureau offices in the path of the storm where their assistance as weather map analysts and assistant forecasters was needed. Many continued on duty throughout the night to assist

in maintaining continuous watch. This wholehearted cooperation everywhere provided a high stand-

ard of storm warning service and while it was to be expected, it is nevertheless highly commendable.

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## ABOUT THE COVER

**P**HOTOGRAPHS are official Weather Bureau photos taken at Cape Hatteras where the new radar installation has been put into operation. (See story

page 141.)

Photos marked "A" have a range of 50 nautical miles between range rings, or 250 miles to the edge of the scope.

"B" photos have a 20 nautical mile range between rings or 100 miles to the scope edge.

All azimuths are true. Direction North is noted by "N" on all photos.

## Emergency Duty During Hurricanes

**F**ROM reports received we have learned of a number of commendable actions taken by field officials during Hurricanes Connie and Diane. Distribution of alerts and warnings by the newspapers, on radio and on television was greater in the case of "Connie" than for any previous hurricane in history. This excellent cooperation with news media was continued during "Diane" and full coverage was also evident during "Edith's" history.

The excellent handling of the storms by Weather Bureau employees in the affected areas and the full cooperation of other agencies, especially the Air Force,

Navy, Civil Aeronautics Administration, Coast Guard, Civil Defense and Red Cross, contributed to maintenance of the high standards of the Hurricane Warning Service.

Field officials worked hundreds of hours of extra duty during the emergencies. Personnel from inland stations and from the Central Office were sent to coastal offices on emergency hurricane details. During "Connie" details to Providence, Bridgeport, Atlantic City, Baltimore, Washington, Norfolk, Lynchburg, Hatteras, Wilmington, North Carolina and Charleston, South Carolina, were arranged

while during "Diane" similar details were worked out for Baltimore, Washington, Lynchburg, Norfolk, Hatteras, Wilmington, North Carolina, and Charleston, South Carolina.

Emergency Warning Centers were established on short notice at many coastal Weather Bureau offices and these were very effective in securing rapid and widespread distribution of hurricane information. Numerous direct radio and television broadcasts were made from these Centers as well as from first order stations.

At Raleigh, North Carolina, a record may have been established



Photo courtesy of Washington Evening Star

Scene shows new emergency warning room at WNA where members of the Press kept 24-hour vigil during hurricane approaches.

when over 275 radio and television broadcasts were made direct from the Weather Bureau office during an 85 hour period. Many of these were carried simultaneously over more than 50 stations in North Carolina.

Under a revised program in effect this year, NWAC coordinated requests for special hurricane raobs and here again splendid cooperation was displayed by raob stations. A total of 92 special radiosonde observations were taken by eleven Weather Bureau stations during "Connie" and 46 specials were taken by

eight stations during "Diane".

Through cooperative arrangements the Air Force and Navy also assisted in the special raob program and, in addition, specials were obtained from Cuba and Canada.

One local office reports that a list of hurricane safety precautions which had been prepared in advance was printed on the front page of the local newspaper as "Connie" approached the coast. This appears to be a good method for getting this information to the public at a time when it will be heeded.

Several Meteorologists in Charge at coastal locations, who had planned short vacations, either postponed their plans or returned early to be on hand during the emergency. One forecaster from another station who happened to be in New York City, and could not return quickly to his own station, reported to the City Office and helped out with the extremely heavy workload. It is not possible to require such devotion to duty as was evidenced during Hurricanes Connie and Diane. To all who helped, the Central Office expresses a sincere note of thanks for a job WELL DONE.

## *Hurricane Drill Called Success*

**A**BOUT 48 stations participated in a hurricane drill on July 15 over Weather Bureau Circuits 7021 and 7072. The drill, first of a planned series, was held to familiarize personnel with the procedures to be used in the event a hurricane was found to be approaching the station.

Detailed instructions were enclosed in sealed envelopes and distributed to the stations involved. The envelopes were not opened until specific instructions to do so were received over Circuits 7021 and 7072.

An advisory message, especially worded for the drill was included in the envelope. Briefly, the drill consisted of adapting the

advisory for use, preparation of local public bulletins based on the advisory, and contacting parties on the stations' warning list.

"We believe the drill was a success and in several cities the press took favorable notice of the drill. We have gained experience in this type of operation and we plan to use additional drills in the hurricane warning service and with regard to other types of warnings.", E. M. Vernon, Chief of SR&F Division reported.

Weaknesses that were noted were rectified and there is no doubt that the drill was instrumental in playing a great part in the successful operations during "Connie" and "Diane".

## *News Release Response Helps Recruitment*

**D**URING the month of July a nation-wide news release was distributed to MIC's and the response has been most helpful in recruitment plans to meet increased demands for new employees.

Approximately 200 applications for positions as Electronic

Technician have been received, and it will be several weeks before their qualifications can be adequately reviewed to determine appropriate offers.

The response from persons seeking employment as Meteorological Aids totaled between three and four hundred.

## *What's In A Name?*

**E**VER since the Weather Bureau has designated girls' names for hurricanes, the Bureau and the newspapers have received a great volume of mail on the subject.

Some letters take a critical view of using girls' names in connection with the storms. However, here is a sample of another type:

"I am 9 years old. My name is Elinor. Will you name a hurricane after me, please?"

Or another, "Next year will you please name a hurricane 'Collene'? It's my wife's name and the description of a hurricane and the havoc caused by one fits her."

A new twist was added in Knoxville, Tennessee. Mrs. Bush of the city gave birth to a 7 lb. 14 oz. girl and named her Connie Diane Bush.

But probably "the end" to this trivia lies in a letter to the editor of the New York Daily News, August 17, 1955. Along about the time Connie was unleashing her fury and Diane was "cooking", a gentleman wrote in asking if Connie and Diane were "TWIN TWISTERS."

## Radar Installed at Hatteras

A program of instrumental installation of considerable magnitude was completed at Cape Hatteras on August 1, 1955.

The largest single job was the conversion and installation of the radar, a converted Navy war surplus set designed for fighter-direction and battle control. It was received on January 16, 1955 and was contained in four large trailers.

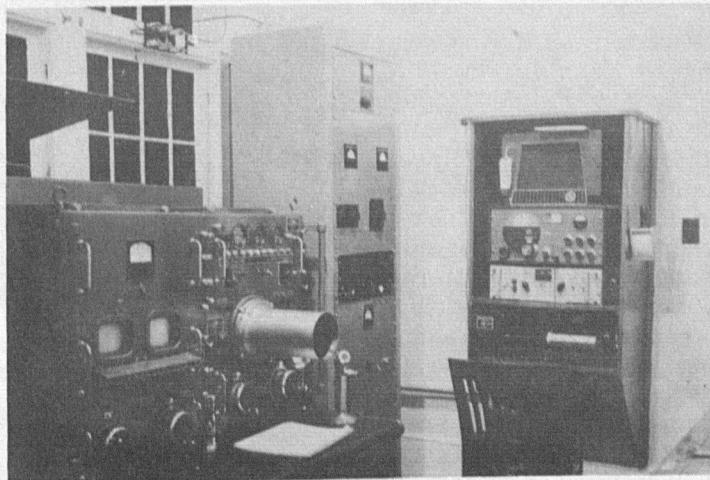
Personnel of the Instrument Division, working under the supervision of Mr. Dewey R. Soltow, completely converted the equipment from mobile status to a form suitable for fixed land-station operation.

This radar is the most powerful set operated by the Weather Bureau. It is capable of a peak power output of 1,000,000 watts and has an 8-foot antenna.

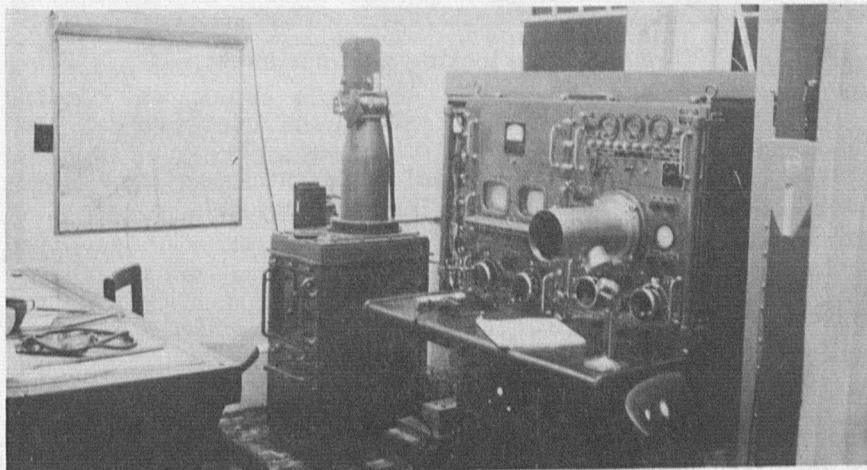
Within 16 days of the installation, the radar had looked two hurricanes in the "eye". "Connie" passed within 26 miles of Hatteras, and "Diane" was 130

miles away at the nearest point.

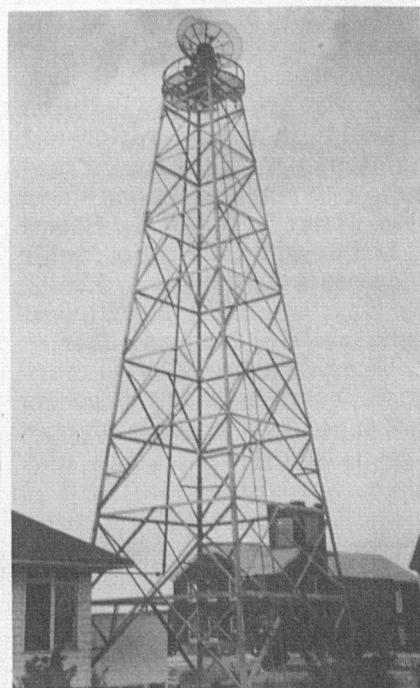
Also installed were two standby engine generators — one of 15 Kw capacity for the radar and the other, 10 Kw for general station operations; two-way radio equipment between Hatteras and WBAS Norfolk and Washington National



Operating console of SP1M radar set. Radio transmitting and receiving equipment and the radiophoto transmitter are shown in center and right of picture.



Another view of radar operating room. Time-lapse 35 mm. camera on independent repeater scope, radar plotting board and 24-inch projection PPI repeater are shown from center to left, respectively.

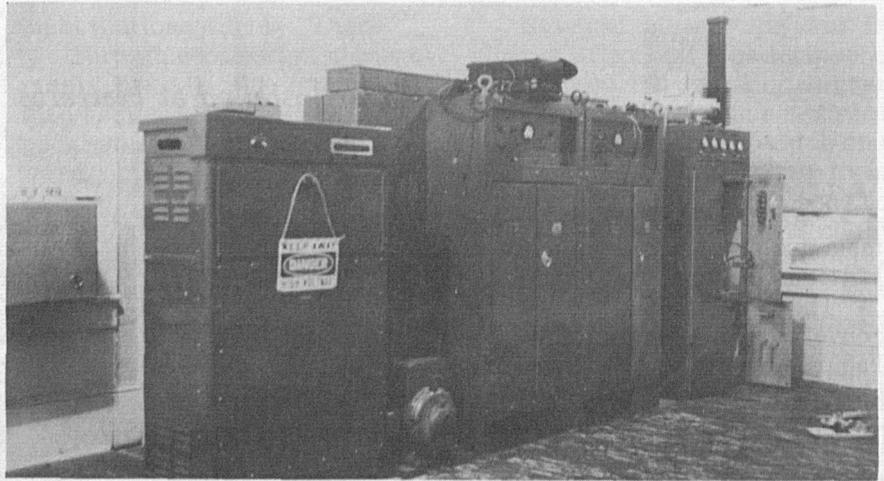


SP1M antenna on 65-foot tower. Two emergency gasoline engine-generators are located in shelter at left foot of tower.

Airport, and including radio-facsimile equipment between Hatteras and Washington. Adapters were designed for mounting a 35 mm. camera and a polaroid camera on the scopes of the new radar.

Photos taken at Hatteras were delivered by radio-facsimile to the forecast center at Washington National Airport within ten minutes from the time the pictures were taken. The quality was satisfactory for magazine and newspaper reproduction.

Personnel of the Hatteras station, under the supervision of Mr. Clarence A. Wardman, and including Mr. Lawrence L. Hendrickson, resident electronics technician, performed their duties in admirable fashion. Although the station operated on emergency power and emergency radio communications for from two to three days for each of the two hurricanes, not a single surface or rawinsonde observation was missed. Special credit is also due to personnel from the Central Office who travelled to Hatteras to assist in the operation and maintenance of the radar and radio equipment. Among these were Dewey R. Soltow and Robert R. Miller who assisted on radar maintenance; William A. Kuning and Charles C. Uhl on radio and radio-photo operations; Charles L. Dannheiser on facilities operation, including the engine generators; and Vaughn D. Rockney on radar observations.



Radar transmitter room. From left to right, antenna control unit, short and long-pulse modulators, and transmitter.



View of station looking west northwest.

The fact that the path of a number of hurricanes in the past two years has been very near to Hatteras focused national atten-

tion on the importance of our office there. We can all be proud of the performance of the Weather Bureau personnel.

## *Award Procedures Are Reorganized*

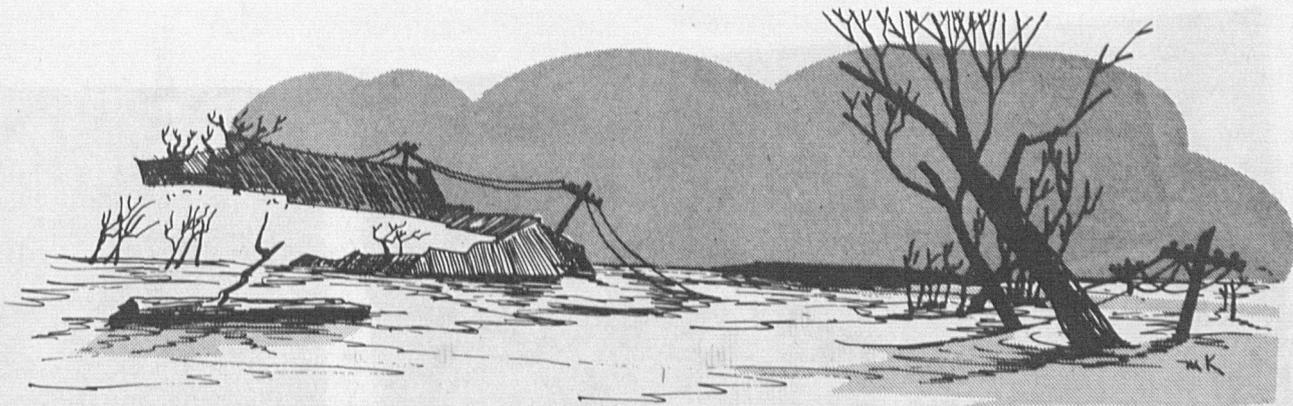
**I**NCENTIVE Award procedures have been reorganized and a new Awards committee appointed.

Under the revised procedure, all awards recommendations will be evaluated by the division re-

sponsible for the activity in which the employee being recommended for an award is engaged.

After the initial evaluation, they will be passed upon by the Incentive Awards Committee which

now consists of six members including the Chief of Division of Personnel Management as a permanent member, and five other Chiefs of Divisions or offices who will serve on a rotating basis.



## Thousands Saved by Timely Flood Warnings

**I**MMEDIATELY after the August floods in Northeast United States, field parties of the Hydrologic Services Division visited the flooded areas to determine if everything possible had been done to save lives and property. The following synopsis of their observations has been prepared by Don Baker, Ralph Kresge, Dick Tarble and Walter Wilson.

The public's appreciation has been expressed by press, radio and TV for the Weather Bureau's excellent job wherever there was coverage. The Harrisburg River Forecast Center did a particularly outstanding job. Pennsylvania was well warned except in some extreme headwaters areas, where local reporting and warning networks had not been established; and in a few places along the Delaware where local communities failed to heed or disseminate Bureau warnings.

In New England the rain was heavier and the damage worse. Many areas were not covered by our service. Such places had to rely on their own interpretations of events as they developed locally. The River District Office at Hartford, the only one in the flooded area of New England, did a very good job on the Connecticut. River District officials at Hartford, Philadelphia, Allentown, and Reading stayed on continuous duty many hours during the emergency.

They worked closely with our cooperative observers and with Civil Defense, state and local police, and other disaster agencies.

At Tamaqua, Pennsylvania, the cooperative observer noted heavy rain early afternoon of the 18th, but a swiftly rising creek kept him from reaching his gage. Before his phone failed he called the state police from his marooned home and told them how to make the observation and transmit it. This they did, by car radio, because public power failed in the meantime. The Reading River District Office received prompt warning of six inches in three hours at Tamaqua, and as other reports came in warnings were prepared and sent out.

The previous morning, O. D. White of Harrisburg River Forecast Center had issued a widely disseminated warning that moderate to heavy rain was expected to fall on wet soil, and that while Diane's course was uncertain, severe flooding would occur along many streams.

Perhaps the two most striking examples of lives saved were cited by the Pennsylvania Director of Civil Defense: A thousand people watching the rising Delaware from a bridge were removed by our timely warning of a record-breaking stage that shortly afterward destroyed the bridge; six hundred child campers were saved

from islands in the Delaware—the last few by helicopter. It is not known how many millions of property damage were saved by our warnings, or how much more would have been saved by a more widespread service.

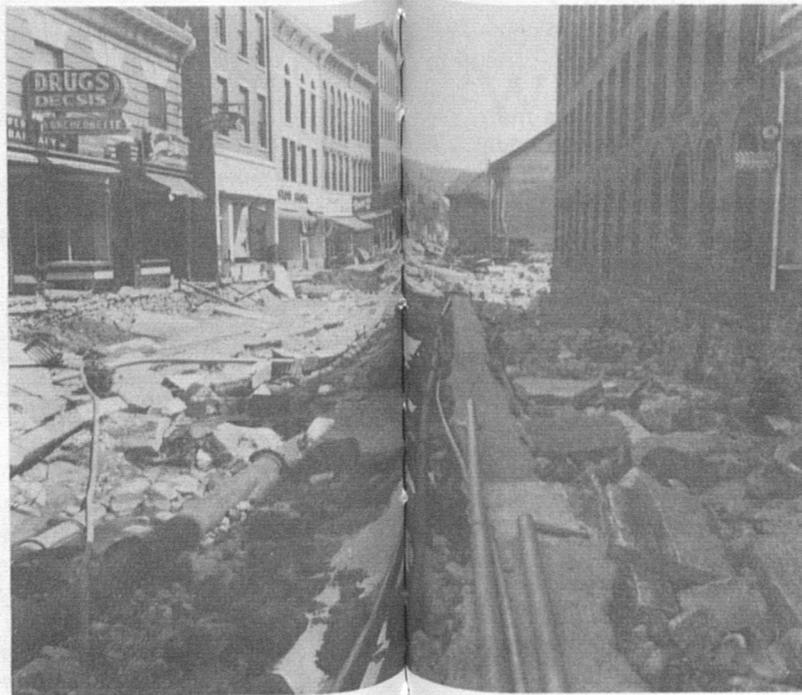
There were many instances of failure to heed warnings, and disbelief in the possibility of the river rising higher than ever before. Police told of numerous cases where they could not evacuate people except by bodily force.

Photographs of the flood damage shown here illustrate the flood's magnitude. The flood did more than inundate; it wrecked, overturned, destroyed, and transposed blocks of buildings as well as bridges. In the town of Holyoke, Mass., the destruction was tremendous, but not the result of mere overflow; it was heavy rainfall roaring like temporary rivers down the streets. At Blandford, Mass., an observer said it was the first time she had seen a flood on top of a hill.

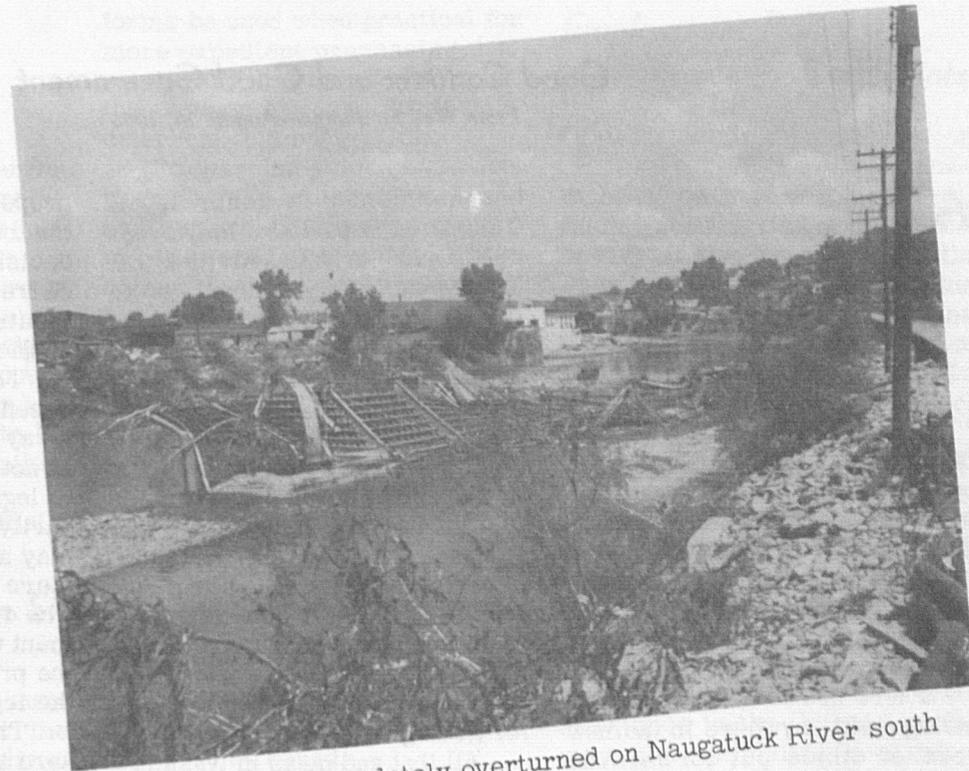
This is a flood with approximately a billion dollars' damage. The most complete and accurate warning system might have saved only a small percentage of it. The loss of life, however, can be reduced and even eliminated by education and a perfected warning system. The Central Office is rapidly formulating plans for this improvement.



Taken near Russell, Mass. Showing extensive washout from local runoff where no stream previously existed.



Extensive damage to the main street of Winsted, Conn. River had gouged to a depth of about ten feet, exposing all utility conduits.



Highway bridge completely overturned on Naugatuck River south of Waterbury, Conn.



Damage on right bank Naugatuck River at Torrington, Conn.



View showing damage to highway bridge and adjacent buildings along Quinebaug River in Gorge, Mass.



Scene taken in Collinsville, Conn. Showing autos from local automobile agency that had been washed several hundred feet downstream and piled against a factory.

## Good Conduct and Good Government

*From Wall St. Journal—August 24, 1955*

**A**T first glance it might seem that to tell a Government official he may accept no gift or entertainment that "might reasonably be interpreted" as tending to influence his judgment would offer an insubstantial guidepost for his conscience.

Presumably an invitation to tea or a Christmas candy-box can pass a social courtesy while a food freezer or mink coat cannot. But there is still no clear-cut dividing line to mark what might reasonably be misinterpreted. Each man is still to be left with his own decision.

There are few clear-cut dividing lines anywhere in the new code of ethics put forward by Secretary Weeks for the officials and employees of the Commerce Department.

Private business transactions, for example, are prohibited if they "tend" in any way to interfere with the performance of duty or may "reasonably be expected" to reflect discredit on the Department or become a source of em-

barrassment. In general, all Commerce Department employees are to avoid private activities that "may reasonably be expected to result in a conflict of interest which would tend to prevent the employee from exercising impartial judgment on behalf of the Department."

This is not a standard that will appeal to those who want rules laid out in precise array; nor will it be very helpful to men who need laws to tell them what is permissible. Yet for all that, it seems to us about the only standard to which both the public servant and the public can repair in the search for good government.

All that sad mess in Washington a few years back did not come from a want of laws; it came from a disregard—almost a disdain—for the requirements of propriety. Indeed, in this realm precise laws can be the enemies of good conduct. To set out precisely that such and such a gift is permissible to receive but one worth a dollar more is not—to so define what is

proper is to remove from a man the burden of making his own decision and to deprive the public of freedom to make its own judgments about the conduct of its public servants.

The essential difference between the tone of our Government today and that of the recent past is not in any stricter adherence to legal statutes. Nor is it necessarily in the absence of men who may act without propriety; such there will probably always be. The difference is that the Government today does have a regard for the proprieties quite apart from the legalities.

These things are admittedly hard to judge, for what may seem reasonable to one man may not to another. And a code thus based is a harsh one because it deprives a man of the easy landmarks of well-defined law. Nonetheless, a code that demands the most from our consciousness of good conduct cannot lead us far from good government. And it may well be the only thing that will lead us to it.

## Plan to Expand Moving Ship Program

**I**MRESSED by the way the Weather Bureau is conducting its moving ship upper-air program, representatives of the U. S. Navy are now anxious to expand the program.

Plans for further development of the program were discussed at a meeting between G. D. Cartwright, Chief of SF&MO Division; Mr. Lieurance, of Mr. Little's office; Capt. Bob Williams, representing

the Navy Bureau of Aeronautics; and Comdr. Charles Dale, representing the Chief of Naval Operations.

The naval representatives explained the two types of vessels operating in the Military Sea Transport Service program and said that they would like to undertake, as a Navy project, similar upper-air programs on U. S. military vessels engaged in MSTs.

For its part, the Weather Bureau would pursue the extension of the upper-air program to merchant ships.

"We would keep in close touch with the development of the Navy program to insure a minimum of duplication and overlap in the routes on which the upper-air program is operated", Mr. Cartwright reported.

## Correction Please

**W**E wish to correct an error in the article concerning suggestions on page 94 of the June issue of TOPICS.

It was not intended to imply that suggestions must be submitted on an official suggestion blank. Many suggestions have been received and have been accepted, and will continue to be accepted, when written on other forms or in letter form.

It is recommended that official

forms be used when practical for more expedient processing, but employees are urged not to let the absence of such a form be a deterrent to a suggestion.

Forwarding your suggestion through your supervisor, MIC, and Regional Office often results in better and faster action. Their comments could easily make it a better suggestion.

If you send your suggestion direct to the Central Office, mark it "attention Awards Committee." If sent through supervisory channels, send a copy direct to the Awards Committee to avoid unnecessary delays.

## Suggestion Program Shows Considerable Increase

**P**ARTICIPATION in the suggestion program for the fiscal year just ended has shown a considerable increase over the same period last year, Department of Commerce figures show.

In 1954, 1909 suggestions were received while in 1955, 2828 were processed. Last year, the Department paid out \$6816.50 and estimated the savings resulting from the suggestions to be \$77,043.45.

The current year's total shows \$11,185 paid out and an estimated \$126,010.30 saved.

Participation increased to 72 suggestions per 1000 employees this year as compared to 46 per 1000 employees in 1954.

A breakdown of the statistics shows the Weather Bureau well ahead of the average with a participation record of 143 suggestions per 1000 employees during 1955.

## Air Liaison Appointments Announced

**T**HE Domestic Aviation Section, announced the appointment of four MIC's as Aviation Liaison officials. They are:

Mr. Guy C. Anderson, MIC, WBAS, Wilmington, Delaware.

Mr. Lars C. Christensen, MIC, WBAS, Springfield, Illinois.

Mr. Robert E. Helbush, MIC, WBAS, Burlington, Vermont.

Mr. Howard S. Kenny, MIC, WBAS, Columbus, Ohio.

As the Weather Bureau's field representative to the state aeronautics offices of their respective states, these men are

responsible for effecting a continuing liaison with the State Aviation Commissions.

They will keep the state directors informed of trends and developments in the Bureau's aviation service program and receive their comments and suggestions for improvements in service to aviation.

The special aviation liaison work of these MIC's is part of a continuing Bureau program to work closely with all state aeronautics offices in the development of aviation.

## Employment Policy Complaints

**T**O further implement existing laws prohibiting discrimination based on race, color, religion, or national origin, the President has issued Executive Order 10590. This Order creates the President's Committee on Government Employment Policy and provides uniform procedures for filing, considering, and solving employment policy complaints.

Weather Bureau employment policy complaints will be processed in accordance with Department of Commerce Administrative Order 202-2 (Amended), July 27, 1955. Section 5 of this Order provides that employees, or applicants for employment in the Weather Bureau who are citizens or owe allegiance to the United States, may file complaints regarding unfavorable personnel actions (including failure to act) that adversely affect equality of economic opportunity, provided such actions are based on considerations of race, color, religion, or national origin.

Complaints must be in writing and may be filed with the Deputy Employment Policy Officer for the Weather Bureau, the Regional Employment Policy Officer, the Employment Policy Officer for the Department of Commerce, or the President's Committee on Government Employment Policy.

Complaints may be filed by the individual or duly constituted organizations acting for the individual. Complaints alleging discrimination must:

1. Specify whether the alleged discrimination is based on race, color, religion or national origin.

2. Disclose the specific action or personnel matter leading to the complaint.

3. Give approximate date or dates of the grievance.

4. Identify the official, if

known, responsible for the action.

5. Identify the position involved, its grade, and the unit or office in which located.

6. Contain all factual information which the complainant may have to support the allegation of discrimination including dates, names of individuals involved, incidents, occurrences and circumstances.

7. If it involves a disciplinary action, set forth sufficient facts or circumstances to form a substantial basis to support the specific allegation of discrimination as distinguished from the complainant's denial of a "letter of charges" on which the disciplinary action was based.

All complaints will be investigated initially by the Regional Employment Policy Officers or the Deputy Employment Policy Officer. If satisfactory explanations or adjustments are not accomplished within the Bureau, complaints will be referred successively to the Employment Policy Officer, Department of Commerce, and the President's Committee on Government Employment Policy, for further investigation, hearings, review, recommendations and final decision.

Employees are urged to discuss tentative complaints informally with supervisors and personnel officers before submitting formal charges. Well-founded complaints must be adjusted as fairly and promptly as possible.

On other occasions the cause for complaint may not arise from discrimination, and in such cases the responsible Employment Policy Official will refer the complaint or grievance to the appropriate personnel official.

Ordinarily complaints originating in the field service will be forwarded to the Regional Employment Policy Officer and those in the Central Office will

be submitted to the Deputy Employment Policy Officer, although complaints may be forwarded to the Commerce Department Employment Policy Officer, or the President's Committee on Government Employment Policy direct.

Regional Employment Policy Officers will be guided by Administrative Order 202-2 (Amended), July 27, 1955, Section 5, in referring unsettled cases.

Complaints must be in writing.

The following are designated Weather Bureau Employment Policy Officials:

Regional Employment Policy Officers

Region I	James W. Osmun	Weather Bureau Regional Office Federal Building New York International Airport Jamaica 30, N. Y.
Region II	Erle L. Hardy	Weather Bureau Regional Office Fort Worth 2, Texas
Region III	C. F. Van Thullenar	Weather Bureau Regional Office 709 Federal Office Building Kansas City 6, Mo.
Region IV	Hugh D. Spangler	Weather Bureau Regional Office 222 S. West Temple Street Salt Lake City, Utah
Region V	Glen Jefferson	Weather Bureau Regional Office Pouch 13 Anchorage, Alaska
NWRC Asheville, N.C.	Leslie Smith	Supervisor National Weather Records Center U. S. Weather Bureau Arcade Building Asheville, N. C.
Hawaiian & Pacific Islands	Roy L. Fox	Meteorologist in Charge Pacific Supervisory Office Weather Bureau Airport Station Box 3650 Honolulu, T. H.
San Juan	Ralph L. Higgs	Meteorologist in Charge U. S. Weather Bureau Airport Station Box 5187 Puerto de Tierra Station San Juan 27, Puerto Rico

Deputy Employment Policy Officer

Central Office	R. R. Hamann	Chief, U. S. Weather Bureau Washington 25, D. C. Attention: Mr. R. R. Hamann
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## Publications Corner

**I**N order to supplement information concerning new publications distributed by the Publications Unit, TOPICS will begin with this issue to list the newer releases. The list that follows shows publications that were distributed during July and August.

"If a Regional Office or station has been skipped, we shall welcome memo requests for the material not received," Vincent Vasco, publications head announced.

1. Reprint from the Congressional Quarterly Weekly report entitled "Weather Bureau—Congress Votes Crash Program for Storm Alerts—Weather Man's Modern Tools Show Promise."

2. Federal Civil Defense Administration Advisory Bulletin on "Construction of Fallout Plots from Coded Messages Provided by the U. S. Weather Bureau."

3. Weather Bureau and Cooperative Upper Air Stations as of July 1, 1955.

4. Directory of Weather Broadcasts for 1955.

5. Winds and Fallout: "A Climatological Appraisal".

6. Leaflet on "Community Tornado Warning Networks".

7. Weather Service for Merchant Shipping.

8. "Climatology and Irrigation Scheduling," reprinted from June 27, 1955, Weekly Weather and Crop Bulletin.

9. Letter Supplements: 5501—Notes on the Naming of Hurricanes; 5502—Notes on Sources of Information on Hurricanes; 5503—Notes on the Weather Bureau Hurricane Warning Service; 5504—Notes on Hurricane Habits and Habitats; 5505—Hurricane Entering U. S. Mainland, Hatteras to Brownsville, 1896-1954; 5506—

Notes on Devastating North Atlantic Hurricanes; 5507—A Short Bibliography on Artificial Production of Precipitation.

10. Upper Air Fallout Data Code.

11. Use of Crest Stage Relations in Forecasting the Rise and Fall of the Flood Hydrograph.

12. Leaflet on "Some Outstanding Tornadoes, Data, Number of Deaths, Number Injured and Estimated Property Damage, 1875-1955."

13. Aviation Series Leaflets—No. 5, The Mountain Wave, What it means to the Pilot; No. 6, Storm Detection Radar, How it Helps the Pilot; No. 7, Thunderstorms, Part 1; No. 8, Thunderstorms, Part 2.

14. Weatherwise, Vol 8, No. 4, August 1955.

15. Memorandum on Water Levels Accompanying Atlantic Coast Hurricanes.

16. The Hurricane Surge (Interim report).

17. Monthly Weather Review, Vol. 83, No. 5, May 1955.

## Report on Courses at Pennsylvania State U.

**F**OR the 6-month period ending July 1, the report submitted by Pennsylvania State University on Weather Bureau employees taking its correspondence courses indicated that:

99 Weather Bureau employees completed one or more courses.

38 dropped out.

265 are now taking one or more courses.

## Retirement Legislation

**L**EGISLATION approved August 11, 1955 provides for an increase in the annuity of Federal employees who retired between August 20, 1920 and June 30, 1955 of 12 percent on the first \$1500, and 8 percent on that portion of the annuity in excess

of \$1500.

Since the legislation also provided for increases in lesser amounts for employees retiring from July 1, 1955 to December 31, 1957, the following schedule is reproduced for the benefit of those who may be interested.

If annuity commences between—	Annuity not in excess of \$1,500 shall be increased by—	Annuity in excess of \$1,500 shall be increased by—
August 20, 1920, and June 30, 1955	12 per centum	8 per centum
July 1, 1955, and December 31, 1955	10 per centum	7 per centum
January 1, 1956, and June 30, 1956	8 per centum	6 per centum
July 1, 1956, and December 31, 1956	6 per centum	4 per centum
January 1, 1957, and June 30, 1957	4 per centum	2 per centum
July 1, 1957, and December 31, 1957	2 per centum	1 per centum

The maximum to which an employee's annuity, exclusive of that purchased by voluntary contributions, can be increased is \$4,104 per annum.

## 1000-Hour Sick Leave Club

TO lend more timeliness and importance to the "1000-Hour Sick Leave Club", here, for the time being at least, is the last list of eligible members.

The Editor of TOPICS wishes to thank everyone involved for the splendid cooperation in listing members of the "Club".

### Albany, N. Y., WBAS

J. J. Cassidy

### Birmingham, Ala., WBAS

Cecil R. Jobe

### Buffalo, N. Y., WBAS

J. S. Collier

### Central Office and

### Asheville, N. C., WRPC

L. C. Armstrong

W. H. Bartlett

R. E. L. Blumenauer

G. W. Brier

F. W. Burnett

J. W. Coover

A. J. Crowshaw

C. L. Dannheiser

G. C. Denman

B. Edelman

L. W. Foskett

N. B. Foster

R. W. Gorseline

R. A. Green

J. H. Hagarty

P. A. Humphrey

W. E. Jones

M. A. Kohler

E. L. Kvam

P. B. Marks

J. W. McCook

P. A. Miller

H. W. Rahmlow

C. G. Reeves

A. Rosenbloom

A. F. Seebode

Lula J. Smith

C. A. Sutton

J. S. Szokolszky

E. M. Vernon

W. K. Wettrich

J. P. Winner

A. W. Youmans

### Charlotte, N. C., WBAS

W. T. Conner

J. M. Howe

J. W. McNeal

### Chattanooga, Tenn., WRPC

M. W. Burley

### Cincinnati, Ohio, WBO & RFC

F. A. Baughman

E. G. Bice

R. W. Carey

D. O. Martin

J. H. Nickles

A. W. Walstrom

### Columbia, Mo., WBAS

M. A. Lanham

H. C. McComb

A. D. Stedry

R. P. Tipton

### Denver, Colo., WBAS

Cecil N. Kellum

### Eugene, Oregon, WBAS

R. B. Graves

### Grand Junction, Colo., WBAS

M. G. Chinn

### Greensboro, N. C., WBAS

L. S. Holcombe

W. H. Miller

T. E. Street

### Greenville, S. C., WBAS

A. J. Davis

### Harrisburg, Pa., WBAS

J. W. Knepp

C. L. Rock

### Little Rock, Ark., WBAS

R. S. Gephart

J. F. Rink

### Macon, Ga., WBAS

D. A. Bush

R. M. Holeson

F. P. Lamb

W. H. Miller

### Muskegon, Mich., WBAS

M. F. King

M. E. Soderberg

### New York, N. Y., WBO

A. Nagelberg

### Panama

E. H. Marx

### Red Bluff, Calif., WBAS

E. E. Doren

### Reno, Nevada, WBAS

E. U. Nummela

C. E. Shepherd

### Sacramento, Calif. WBO

F. E. Hug

L. H. Magar

Mary R. McDaniel

### Sacramento, Calif., WBAS

J. H. Calvert

W. C. Enloe

C. M. Veliquette

### St. Louis, Mo.

J. C. Hurley

W. W. Parker, Jr.

### Trenton, N. J., WBO

A. E. White

### Washington National Airport

G. H. Brown

H. B. Cole

R. A. Hoover

Edith L. Horner

O. R. Houston

R. F. Kresge

F. K. Schuck

## NEW METEOROLOGISTS IN CHARGE

### *Lewiston, Idaho*

MR. ROBERT R. ROLAND, currently MIC at Glasgow, Montana has been selected for transfer as MIC at Lewiston, Idaho.

Mr. Roland succeeds Mr. James W. Grant who is being transferred to WBAS in Anchorage,

Alaska.

Mr. Roland, with the Bureau since June, 1941, has served at Ellensburg, Tatoosh Island, and the Hydrologic Unit at Portland, Oregon. He has been in charge at Glasgow since March, 1948.



## Dr. Isaac Monroe Cline



DR. ISAAC MONROE CLINE, pioneer of the Weather Bureau for 53 years until his retirement in 1935, died August 3, 1955 in New Orleans, Louisiana after a prolonged illness. Dr. Cline was 94 years old.

He was perhaps best known for his connection with hurricane warning and river and flood work. He was officially commended for his "heroic devotion to duty" during the infamous Galveston hurricane of 1900 which devastated that city and killed thousands of its residents.

Aside from actually forecasting the disaster, Dr. Cline personally drove along the beach warning people of their impending danger. Dr. Cline's wife, the former Miss Cora Ballew of Abilene, died when their home was torn from its foundation during the height of the storm.

In 1927 Dr. Cline again distinguished himself during the great flood that raged throughout the

Mississippi Valley. He received a special commendation from former President Herbert Hoover who was Secretary of Commerce at the time.

Born in 1861, Dr. Cline took great delight in telling friends, "I'm older than the Weather Bureau."

He enlisted in the Signal Corps on July 7, 1882. After the usual period of instruction at Fort Myer, Virginia, he was transferred to Pittsburgh as assistant, serving as assistant also at Little Rock and Fort Smith, respectively. He later served as official in charge at Fort Concho (Texas), Little Rock, Abilene, Galveston, and New Orleans, in that order.

His service at Galveston covered a period of about 12 years (1889-1901), and that at New Orleans 34 years (1902-1935) as district forecaster for the New Orleans district and Section Director for the States of Louisiana and Mississippi.



## Joseph L. Cline



JOSEPH L. CLINE, brother of Dr. Isaac Cline, passed away eight days later in Dallas, Texas on August 11, 1955 at the age of 84. He had been in ill health for three months.

Joseph Cline retired from the Weather Bureau in 1940 after 48 years of distinguished service.

He began his career in the Weather Bureau under his brother at Galveston in 1892 and played a hero's role in the hurricane of 1900. He was credited with sending the last message from the stricken city before it was isolated giving the news that the city was inundated and that a terrible disaster was in progress.

His commendation for heroic devotion to duty on the occasion "under great personal peril" led

to his promotion to Section Director at San Juan, Puerto Rico. Subsequently, he was in charge at Sandusky, Evansville, Corpus Christi and Dallas where he served as head from 1913 to 1940.

While at Corpus Christi, he was urged to run for mayor, but declined this second opportunity to enter politics. His first came when he was asked to become chief of police at Galveston when he was 27 years old.

In 1913 he chose the Dallas station and began the long career in which he achieved an enviable record. It was here that Joseph Cline developed a system of forecasts for the Trinity River that repeatedly saved loss of life and property. He was said to have a record well above 90% accuracy

in his forecasts.

Dr. Cline was the author of a multitude of meteorological papers and books. Perhaps most noteworthy was his book on "Tropical Cyclones", regarded as a valuable contribution to the science of meteorology. Among other books, he wrote "Summer Hot Winds on the Great Plains", and "Storms, Floods and Sunshine", a book of personal memoirs.

In June of 1934, the honorary degree of Doctor of Science was conferred upon him by Tulane University and later in recognition of the service he rendered to New Orleans and the Gulf States, a bronze bust was placed in the Delgado Museum of Art in New Orleans.

For further details of Dr. Cline's eventful life, readers are requested to refer to the article in the December, 1935 issue of TOPICS on his retirement. His passing is mourned by his many friends and co-workers both in the Central Office and in the field.

in his forecasts.

Mr. Cline was a member of the International Mark Twain Society, Lambda Chi Alpha Fraternity, Texas Academy of Science and was a fellow for the American Association for the Advancement of Science. His biography appears in the International Blue Book in three languages.

"Doc", as he was affectionately known to his many friends, continued to maintain a lively interest in the Weather Bureau activities at the Dallas office with frequent visits there until his illness. M. C. Harrison, MIC of the Dallas office and two members of the staff—W. B. Swope and T. Wilson—served as pall bearers at his funeral.

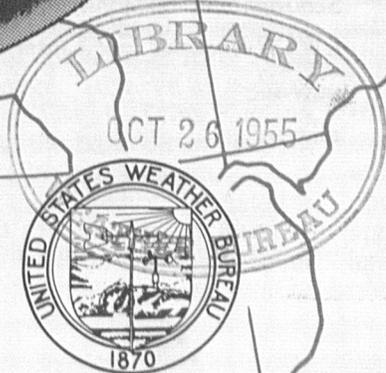
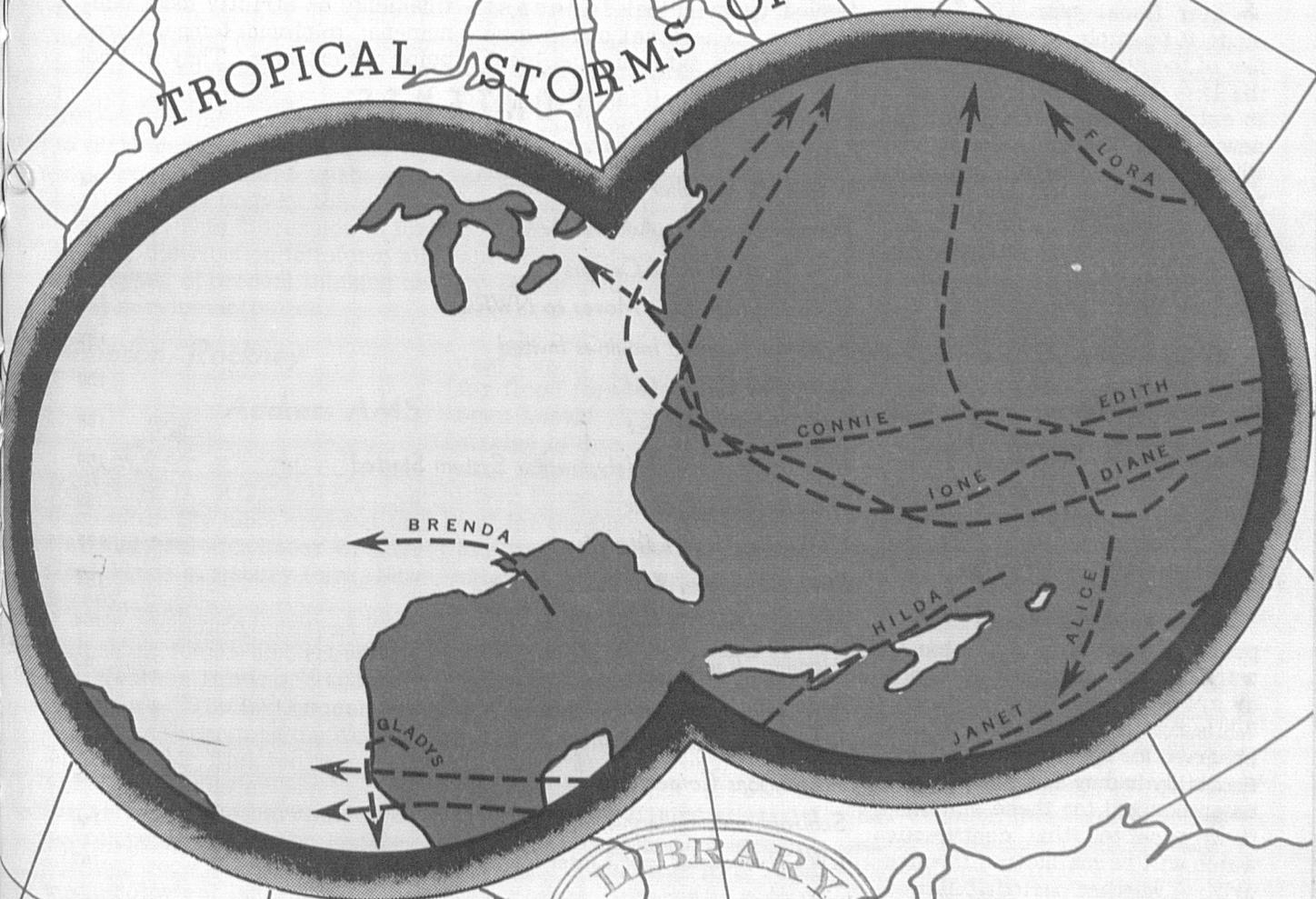


WEATHER BUREAU

OCTOBER  
1955

# TOPICS

TROPICAL STORMS OF 1955



Volume 14

Number 9

WEATHER BUREAU TOPICS is published monthly to inform all employees about newsworthy operations and work programs of the Bureau; to give background on instructions; to carry news of new personnel assignments, retirements, deaths, and similar information about employees; and to serve as a medium through which ideas and views may be exchanged to promote efficiency and teamwork in attaining our common goals. While the contents, unless otherwise specified, reflect the Central Office viewpoint, they are not instructions but are presented for information. Opinions, discussions or comments by readers are invited; they should be marked for the attention of the Editor, TOPICS. WEATHER BUREAU TOPICS is distributed for official use only.

## New Type Weather Bureau Office

THE increase in appropriations for fiscal year 1956 has made it possible to reactivate a few of the stations closed during the last two or three years and to establish a small number of new stations at some of the places where there has been persistent public demand for weather advices and services. At most of these places the technical justification for a full-time office is not great because they are only short distances from major service offices or forecast centers. However, to meet the demands of very weather-conscious groups in each of the areas in a reasonable and economic way, part-time offices with small staffs are planned which will operate under somewhat different concepts from the conventional 24-hour Weather Bureau office.

These offices will be staffed primarily for the distribution of warnings and advisories of severe or critical weather conditions. While routine office hours will be observed for normal days, greater flexibility in duty assignments will be authorized for these stations. It is expected that continuous watch will be maintained through critical weather periods followed by limited hours of duty on good weather days to discharge compensatory time.

Employees accepting assignment to these stations are apprised that they are primarily

disseminators of the forecasts issued by principal forecast centers. The local office may add detailed data such as local

interpretation and forecast refinements on strictly local phenomena; minimum temperatures being one example. They will not

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be equipped to try to make more accurate forecasts than those from the major forecast centers regarding the general features of the weather map. Local forecasts may be based on recognized local objective forecasting schemes or factors applied to the prognostic charts of NWAC or to the mapped forecasts from the District or State Forecast offices. It is realized that any limitation on local forecasting is a delicate matter, but the time has come when we must emphasize that the job of the local meteorologist is to keep the public informed of weather developments (six to eighteen hours in advance) leaving the longer period forecasting to the offices that have staff and maps to make such forecasts.

Program letters to the new stations will convey the above concepts. This discussion is for general distribution to inform all employees of present thinking on local service activities.

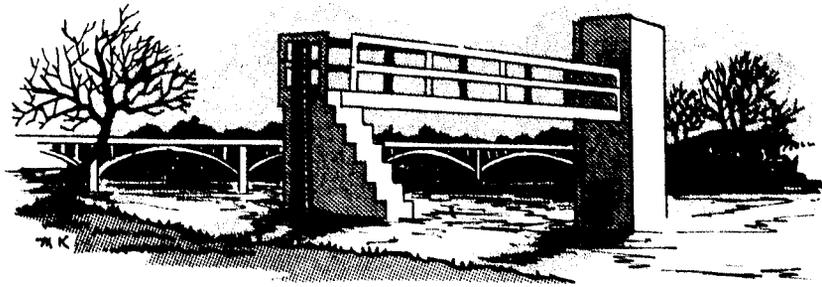
## *Simpson, Rockney*

### *Address AMS*

ROBERT H. SIMPSON and VAUGHN D. ROCKNEY, on September 12, 1955, spoke at the National AMS--5th Radar Weather Conference at Asbury Park, New Jersey.

Mr. Simpson's topic was "The Hurricane Research Program of the Weather Bureau," and Mr. Rockney's "The Instrument Development Program of the Weather Bureau." Mr. Simpson described plans that are under development for an extensive hurricane research program and Mr. Rockney outlined recent developments in meteorological instrumentation and procurement plans of the Bureau for new meteorological equipment.

Much interest was shown by the conference in these aspects of the Weather Bureau's work.



## *New River Forecast Centers*

**I**N order to provide a modernized river forecast coverage for as much of the hurricane belt as possible with existing funds, two new River Forecast Centers have been established.

It has long been known that many of the record floods in this area have been associated with hurricanes, and the establishment of these two new centers was authorized before Connie followed by Diane provided a shocking reminder.

The merits of the River Forecast Center type of organization for flood forecasting have also been known. This was demonstrated by our experience beginning with the establishment of a River Forecast Center at Cincinnati for the Ohio River. But only this year have funds become available for the latest expansion as part of the program for improving forecasting and warning services in connection with hurricanes, severe local storms, and other emergency conditions.

One of the new centers is located at Bradley Field, Windsor Locks, Connecticut, across the field from WBAS Hartford. Charles D. Hopkins, Jr., formerly Principal Assistant at RFC Tulsa, is in charge. Its area of responsibility will be all of New England, including the Lake Champlain and Hudson River drainages.

The other center is located in quarters adjoining WBAS Augusta. William E. Fox, formerly Prin-

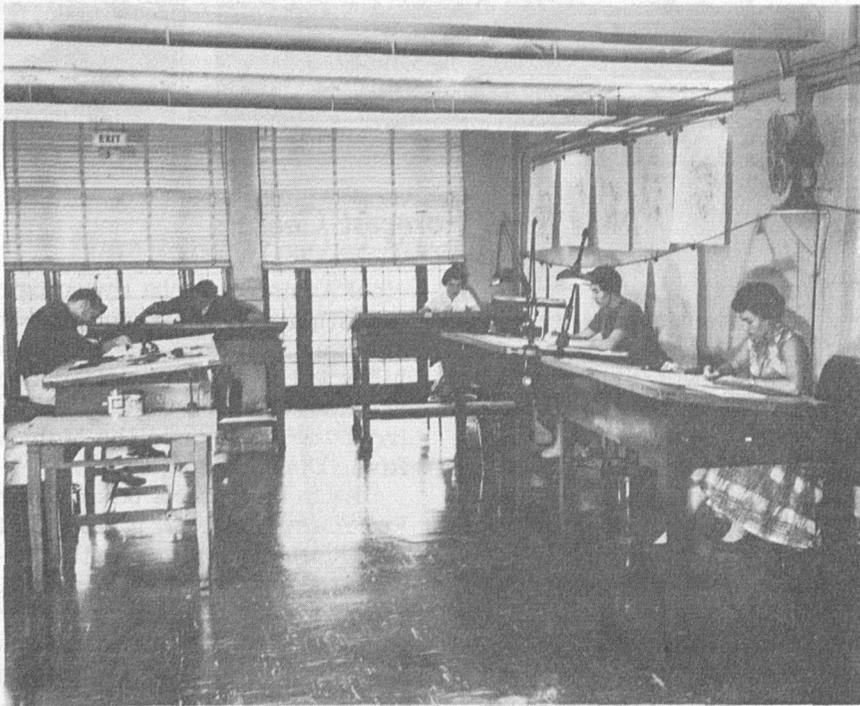
icipal Assistant of the Hydrologic Investigations Section, is in charge. Its area of responsibility will be the Southeast Atlantic and East Gulf drainage systems, from the Raleigh to the Mobile River District, inclusive.

As in the case of other River Forecast Centers, a period of procedure development will precede the issuance of forecasts. Procedures will be developed for points now served and for points not now served, for both main stem and tributary stations extending as far into headwater areas as available techniques permit.

Priority of development will be established from known extent and frequency of flood damage. While even the first round of procedure development will extend over a period of several years, forecasting operations will begin as rapidly as procedures are completed. As in other Centers, forecasts for key points will be issued to River District Offices for localization and dissemination within their areas.

With the addition of the two new centers, there are now nine River Forecast Centers, with their ultimate area of responsibility somewhat more than half the country. Eight others also in the hurricane belt are planned, with highest priority given to coverage of the Lower Mississippi and West Gulf-Rio Grande drainages.

## Historical Map Unit Moves to NWRC . . . . .



was reorganized and reassigned from Scientific Services Division to Climatological Services Division. Of the 16 employees with the unit in the Central Office, only seven transferred to Asheville.

While applications for the three professional vacancies (see TOPICS for August) were being received during the early part of July, all of the sub-professional vacancies were filled in Asheville. The extensive training program of plotters, draftsmen and analysts is now nearing its final phase, and with the arrival of one more analyst in October, personnel will be complete and the unit once more in full production.

The Data Listing Unit, which was previously located at the NWRC, and the Plotting and Analysis Unit, have now been inte-

**D**URING the last weekend in July the Northern Hemisphere Historical Map Unit, which has been housed in the Central Office for more than six years, moved from the second floor of FOB #4 at Suitland to the National Weather Records Center at Asheville, North Carolina. The new quarters, on the third floor of the Grove Arcade Building, have been extensively refurnished to allow for maximum utilization of space as well as efficient operation of the many phases of work involved in the publication of the Northern Hemisphere Synoptic Series.

The unit was moved lock, stock and pencils, by commercial van. The office equipment arrived at NWRC on August 1 and two of the map plotters were entering data on the charts the afternoon of the same day. Simultaneous with the physical move, the unit



grated into a single Unit. Work schedules have been reorganized so that both maps and data listings will be published on a 12 month per year basis with not more than six months lag; the July 1955 issue to be distributed by January 1956.

There will be no change in the form of monthly publication of one time per day sea-level and 500 millibar maps. The data listings will be changed to a daily form and will include checked upper air data for all times of observations for North America, in addition to the regularly published northern hemisphere data.

The Unit is also preparing maps for the years 1943 through 1945 to partially fill in a war-years gap in the long series of Historical Northern Hemisphere Charts. The complete series will eventually extend from 1899 through July 1939 and from 1943 to the current series. The present reorganization of the schedule will create another gap from January 1954 through June 1955 which will be filled in gradually as facilities permit.

Although radio and teletype transmissions are used extensively as a source of data for the publication, wherever possible arrangements are made with foreign meteorological services to provide more accurate manuscript or printed copies of their observations. Special arrangements are in effect or planned for obtaining checked upper air observations from foreign areas in the Northern Hemisphere. Arrangements have been made with the Canadian Meteorological Office for them to supply data on punched cards. Every effort is made to obtain as complete coverage of data for the Northern Hemisphere as possible in order that the charts and listings may be of maximum value for research and study purposes.

• • • • • *Antarctic Position Inquiries Invited*

**A**T Brussels, Belgium during September 8-14, 1955, the Special Committee for the International Geophysical Year met to present specific plans for the year which begins 1 July 1957. This meeting follows a meeting in Rome, Italy last year and a special meeting in Paris on Antarctic problems this summer. Dr. Harry Wexler, Chief, Scientific Services Division, has attended all of these meetings and is the leading I.G.Y. geophysical scientist in Antarctic matters.

Thirteen nations plan more than forty meteorological stations in the Antarctic regions. The U. S. National Committee for the I. G. Y. is now planning five stations instead of three as indicated in the article on the cruise of the U.S.S. Atka in TOPICS, June 1955. In addition to the Little America, South Pole, and Marie Byrd Land stations, there will probably also be a U. S. station on the Weddell Sea and one on the Knox Coast.

Nearly all of the meteorological equipment for the first three stations has been purchased and will be transported to the Antarctic this fall. A tractor train to the Byrd Station and an air lift to the Pole must begin next October to take advantage of the full period of operational weather during the Antarctic summer 1956-1957. Supplementing the usual surface and GMD-1A rawinsonde observational equipment, radiometers are being provided for measuring incoming and outgoing radiation. Pyrheliometers will measure surface albedo and a meter will measure sky brightness. Other scientific personnel

are getting ready equipment for the following programs: aurora and airglow, cosmic rays, geomagnetism, glaciology, gravity, ionospheric physics, and seismology.

Arctic operations specialists of the Weather Bureau are assisting with the movement of the scientific equipment. An office with Weather Bureau personnel has been established in Davisville, Rhode Island, to receive I. G. Y. items and to assist when the Navy ships are loaded. Two Weather Bureau specialists will winter in the Antarctic during 1956. They will assist in the establishment of the Pole Station and the Byrd Station.

An important part of the Antarctic operations will be a weather central at the Little America station for collecting, analyzing, and relaying observations. Forecasts will also be prepared for all Antarctic operations. Other nations with stations in the Antarctic have agreed that the United States will have primary responsibility for the central.

The Antarctic stations will be maintained by Defense Department personnel, with the Weather Bureau supplying meteorologists, rawinsonde technicians, rawinsonde observers, and a chartman. Tours of duty will be for one or two years, with some of the assignments starting late next summer. In general, the work and living conditions will be much the same as at the northernmost Arctic stations.

Anyone desiring further information about this program is urged to write to the Central Office. Positions are still open.

**O**CTOBER 24th has been proclaimed United Nations Day by the President of the United States in observance this year of the 10th anniversary of the founding of the U. N.

Appropriate ceremonies, statements, and speeches will honor the U. N. throughout the U. S. and the other countries holding membership in this great establishment.

Since its inception, the U. N. has shown many great and positive results. More than one million refugees have been resettled or returned to their homes through U. N. agencies. The U. N. has raised the living standards of many backward areas by making

hundreds of thousands of acres of barren land productive. It has helped eliminate disease, pro-

vided food, clothing, and medical supplies to millions of needy children; has helped illiterate people to learn to read and to write; postal and radio communications have been improved; airways and seaways have been made safer.

During the Korean conflict, the U. N. marked the first attempt in history to organize effective collective resistance to armed aggression. U. N. mediation helped stop hostilities in Israel and Kashmir.

The Weather Bureau through the Department of Commerce takes pride in joining the celebration of United Nations Day.



### Radar-Rainfall Project

**A** contract has been executed with the University of Miami, Coral Gables, Florida, for the adaptation of radar observations to the quantitative estimate of rainfall.

Even in widespread precipitation producing floods on major basins, the network of observation stations reporting rainfall is often inadequate to provide a sufficiently detailed picture of the correct areal distribution.

In severe local storms and tornadoes, often accompanied by heavy rainfall, the situation is even worse because the precipitation is so localized that even a "dense" reporting network may miss the significant rainfall. In headwater areas and in small drainage basins with rapid concentration of runoff, an added factor is that observa-

tions must be made, transmitted, and interpreted without delay for effective warnings. Complicating it all is the fact there is a practical limit to the number of reports that can be received at a station, since communication facilities are crowded when most needed.

Radar surveillance of rainfall seems to be the most promising solution now. One of the problems that the project at the University of Miami intends to solve is the integration of the instantaneous echo image on the PPI scope over a period of time so that the quantitative areal distribution of rainfall will be known for durations of, say, one to six hours.

It is proposed to make the integration by continuous photograph of the PPI scope, so that the end product is a pattern of

light and shade (a variable grayness) proportional to the accumulated echo intensity of the scope and hence proportional to the rainfall amounts. A "gray scale" will be developed for calibration purposes but part of the plan is to "calibrate" each integrated image by using key rainfall reports in the area of radar surveillance. Some preliminary work along these lines has been done by Vaughan D. Rockney at Massachusetts Institute of Technology and at Silver Hill.

One Weather Bureau employee has been assigned to work with the University of Miami on this project. He is Leslie F. Conover, formerly MIC of WBAS Harrisburg. The project is under the technical direction of the Chief of the Hydrologic Services Division.

## New International Teletypewriter System Started

**A**S part of the Weather Bureau's expansion to improve the severe weather warning service, a new system of internal rarep and warning coordination teletypewriter circuits (RAWARC) was put into operation on September 1, 1955.

The system is composed of three circuits, all of which terminate at the relay center. It will be used primarily for the coordination of forecasts, dissemination of warnings of all types, radar reports, upper air information not adequately distributed on other

circuits, and emergency reports. Secondary traffic will include administrative messages.

The speed of the circuit is 75 words-per-minute. All stations with a considerable amount of traffic are equipped with automatic transmitters. The system has been limited to forecast offices, including state centers, radar stations and raob/rawin stations east of the Rockies. There is the realization of the advantages in having drops on this system in every Weather Bureau office, but this is economically impracticable

at the present time.

Seventy-six stations were listed as having drops on the three circuits when operations began. It is planned to add nine more stations on December 1, 1955 as a means of improving the cold wave and blizzard warning service. Installation at 17 additional stations is planned for February 1, 1956.

Administration of the system and authorization of traffic will be carried out from the Central Office and all questions and recommendations should be addressed to the SR&F Division.

## The Hurricane Project

**F**OR many years the Weather Bureau has carried on hurricane research, devoted in part to studies of structure and in part to the development of new forecast methods. While considerable progress has been made, the hurricane disasters of 1954, especially Carol and Hazel, made it apparent that research on hurricanes should be accelerated and more accurate methods of forecasting developed. Also, any possibilities of modification or control of this violent phenomenon should be studied.

While the Weather Bureau started plans for a more comprehensive program of research, Congress was besieged with requests from constituents alarmed by the apparent increase in hurricanes affecting New England, and every encouragement was given the Weather Bureau to expedite its new plans.

On December 16-17 an inter-agency conference was held in Washington to discuss most probable means of investigating hurricanes and for promoting effective

research and development on forecast methods. Represented at the conference were scientists from the Air Force and Navy and various universities and research institutions with interests in the hurricane problem. From this conference came a set of recommendations for research which formed the cornerstone of Weather Bureau planning.

As the plans were developed, Congress last spring was asked to set aside a supplemental appropriation for a hurricane research project. Not only were funds provided directly to the Weather Bureau for the stage setting operation which will take place during the current fiscal year, but in addition funds were also provided under Public Law 71 for studies of the hurricane problem. This law charges the U. S. Engineers to make studies of measures needed to protect low-lying coastal areas against damage from hurricane induced high waters. Funds are being transferred to the Weather Bureau to carry out certain forecast aspects

of this problem.

Figure 1 shows the task organization plan for the hurricane project. It is expected that approximately five years will be required to complete these studies. The project consists of three parts:

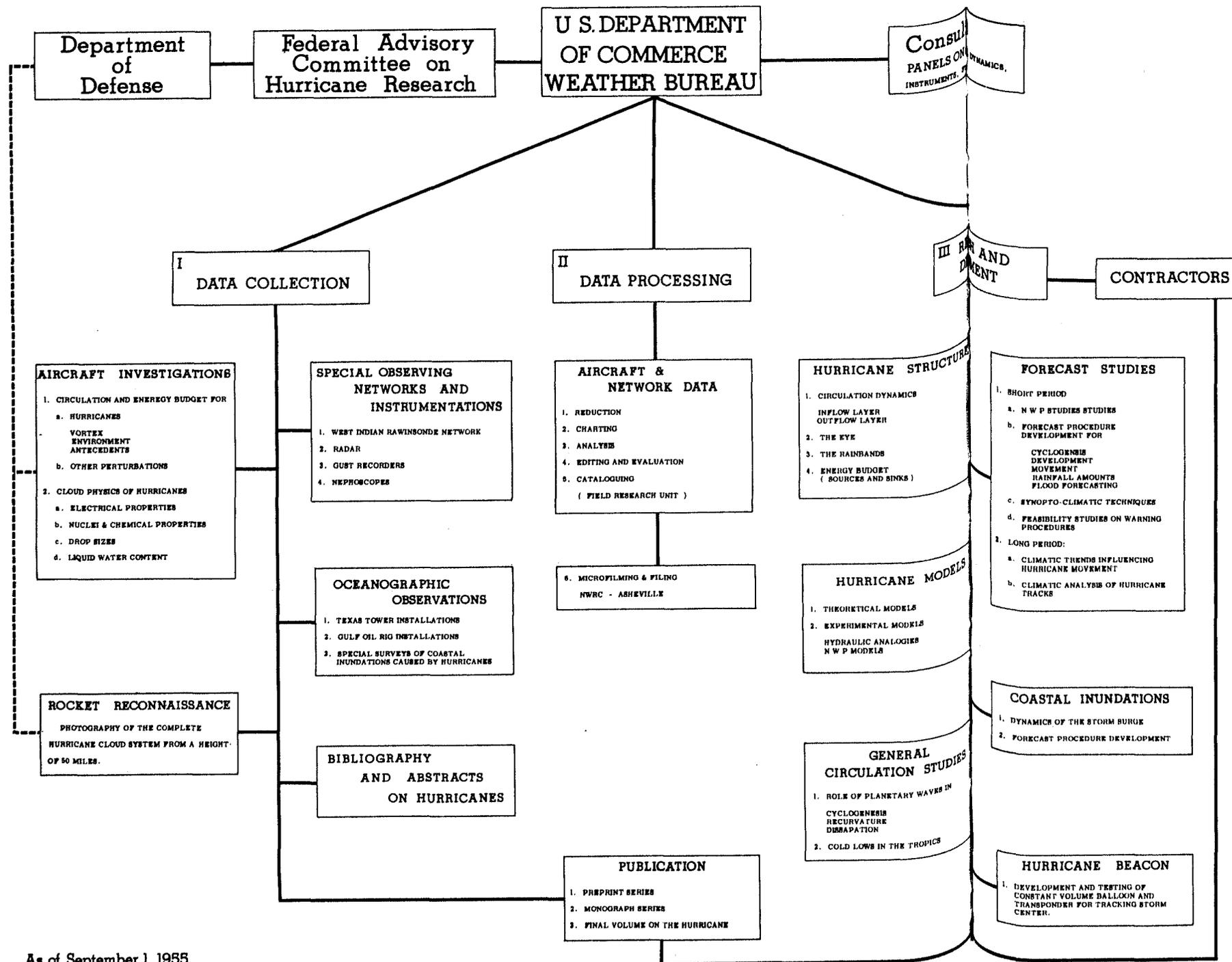
1. Data Collection.
2. Data Processing
3. Research and Development.

During fiscal year 1956 much of the expenditures will be in connection with tooling up for the data collection part of the program. It is expected that three or four aircraft will be supplied by the Department of Defense and be based somewhere in Florida. These will be completely instrumented to measure as accurately as possible all elements of importance to energy computation in the hurricane and for defining its circulation characteristics. One of the primary objectives of this part of the program will be to compute an energy budget for the hurricane in advance stages of development.

The data collection phase will be directed from a field research

# THE HURRICANE PROJECT

## Task Organization Plan



headquarters to be established between now and next May at a location yet to be selected. The location of the field headquarters will be determined largely by the availability of suitable facilities for basing the aircraft being provided by the Department of Defense.

The accompanying chart shows in some detail the various portions of Phase 1. The special rawinsonde observing network is composed of stations already in existence plus a number of proposed new ones to be established between now and next May especially for this project. Cooperation will be provided by the Missiles Test stations extending from Patrick Air Force Base in Florida to St. Lucia. It is hoped that through the cooperation of the other countries in the West Indies, we will be able to augment this line of stations with others at significant locations. The plan calls for twice-daily rawinsonde observations at Sabana de la Mar in the Dominican Republic, and on the Islands of St. Martins, Guadeloupe, Curacao, Jamaica, Grand Cayman, and St. Andrews. In addition negotiations are being initiated with the Mexican Government for the expansion of the program at Merida to twice-daily rawinsonde observations.

At each of these stations it is proposed that the Weather Bureau furnish the ground equipment, all expendables necessary for the operation of the station through 1958, and a resident technician observer to care for the equipment and furnish such other assistance as may be feasible. It is hoped that the various countries concerned will be able to supply the necessary observing personnel. It is planned to establish an observer-training school at San Juan to provide training for the observers selected by the various meteorological services cooperating in the project.

Two of the aircraft being supplied by the Department of Defense will be conventional propeller-driven planes to operate at altitudes up to 25,000 ft.; the others will be specialized aircraft capable of operating at 40,000 ft. or more. These aircraft will be made available to the Weather Bureau early in 1956 to permit the installation of special meteorological equipment before the hurricane season and will be available to the project through October. They will again be available from July through October 1957.

In addition to the rawinsonde stations and the project aircraft, special instrumentations are planned for selected first order stations along the Gulf and Atlantic Coasts. These stations will be supplied with special wind recorders, nephoscopes and facilities for radar photography.

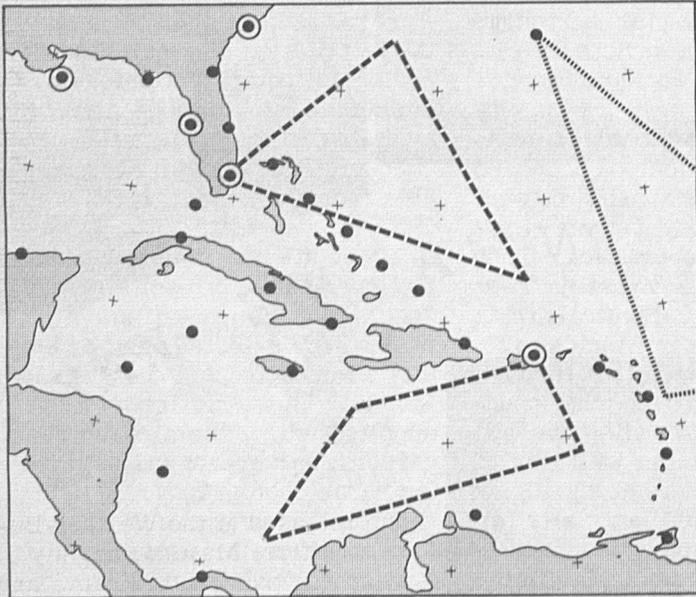
It is also proposed to attempt to photograph the overall cloud system associated with one or more hurricanes by means of rockets to be launched in proximity to the storms.

While all of this is going on, certain other special research tasks will be carried out in cooperation with other government agencies and the staffs of leading universities. These will include (1) the development of a device to be dropped into the eye of the hurricane to permit the tracking of the storm by electronic means and (2) installation of special tide gages and wave analyzers on Gulf oil rigs and the Texas Towers being erected along the Atlantic Coast as well as the making of special water height observations by the Coast and Geodetic Survey. At the same time studies in forecast development, general circulation, and numerical weather prediction will be accelerated, setting the stage for phases 2 and 3 of the project to be carried out in subsequent years.

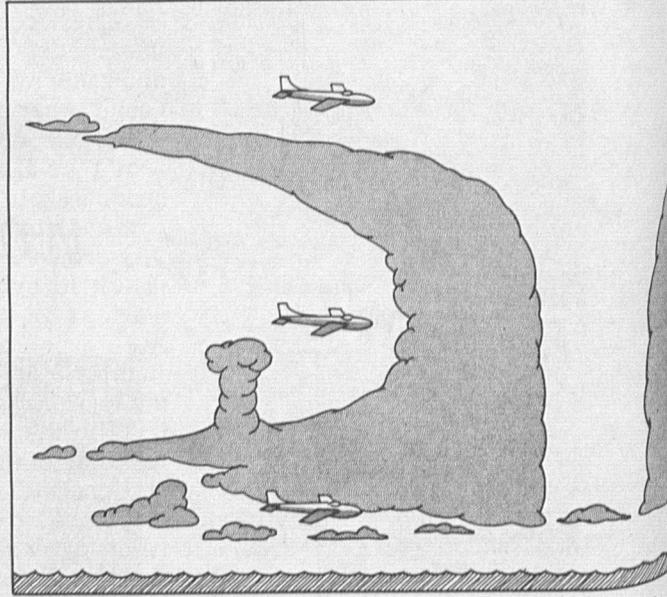
# THE HURRICANE PROJECT

## PHASE I - 1956

### I. SPECIAL RAWINSONDE OBSERVING NETWORK AND PROPOSED RESEARCH FLIGHT TRACKS



### II. AIRCRAFT INVESTIGATIONS: HURRICANES, EASTERLY WAVES, OTHER PERTURBATIONS



#### LEGEND

- TWICE DAILY RAWINSONDES AND COMPLETE SURFACE OBSERVATIONS
- GUST RECORDERS, NEPHOSCOPES (ALL COASTAL AND ISLAND FIRST ORDER STATIONS)
- RADAR PHOTOGRAPHY AND RAINBAND ANALYSIS
- PROPOSED RESEARCH FLIGHT TRACKS

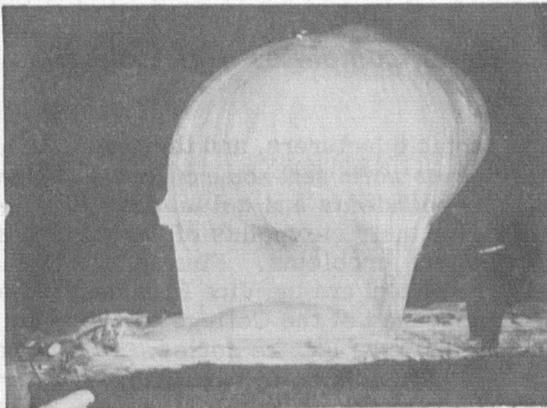
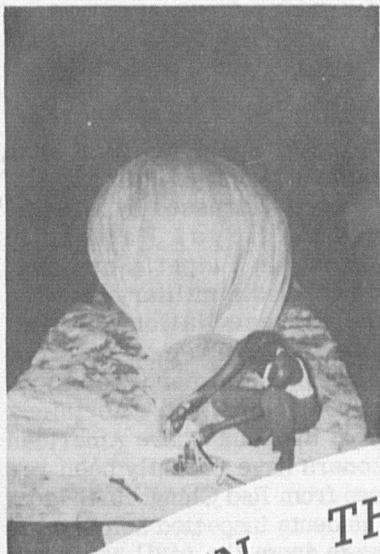
#### SPECIAL AIRCRAFT INSTRUMENTATIONS

- |  |  |
|--|--|
| a. PRECISION NAVIGATION EQUIPMENT                                    | g. BOLMETERS FOR SEA SURFACE TEMPERATURES                    |
| b. SEARCH RADAR  | h. CLOUD SAMPLING EQUIPMENT                                  |
| c. VORTEX THERMOMETER  | i. ELECTRIC ACCELEROMETERS                                   |
| d. INFRA RED HUMIDITY PHOTOSPECTROMETER                              | j. TIME LAPSE CLOUD PHOTOGRAPHY CAMERAS                      |
| e. PRECISION EQUIPMENT FOR MEASURING SPCT WINDS AT FLIGHT LEVEL      | k. CONTINUOUS RADAR PHOTOGRAPHY FROM PPI REPEATERS           |
| f. PRECISION EQUIPMENT FOR MEASURING AND DIRECTLY RECORDING D VALUES | l. SYNCHRONOUS RECORDERS FOR ALL NAVIGATION AND WEATHER DATA |

### III. FIELD RESEARCH HEADQUARTERS

### IV. SPECIAL RESEARCH TASKS

- |  |  |
|--|--|
| a. FORECAST DEVELOPMENT STUDIES<br>MIAMI, WASHINGTON | f. INSTALL OCEANOGRAPHIC RECORDERS<br>(CONTRACT)           |
| b. NWP STUDIES (CONTRACT)                            | g. R & D ON STORM SURGES (SEVERAL CONTRACTS)               |
| c. HYDRAULIC MODEL STUDIES (CONTRACT)                | h. ROCKET RECONNAISSANCE OF HURRICANE CLOUDS<br>(CONTRACT) |
| d. GENERAL CIRCULATION STUDIES                       | i. HURRICANE BEACON DEVELOPMENT (CONTRACT)                 |
| e. CLIMATIC TRENDS AFFECTING HURRICANES              |  |

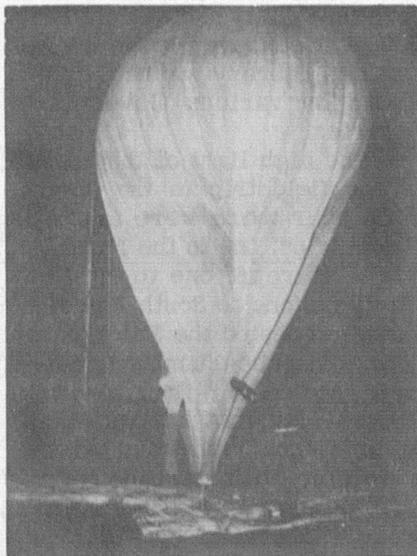


## UP IN THE AIR IN A BIG WAY

**H**OW would you, as a rawinsonde observer, like to spend approximately one hour inflating one rawinsonde balloon and utilize six full cylinders of helium in the process? Fantastic? Not at all! Such an inflation procedure took place at Truk in the far Western Pacific on a dark night in July of this year.

This particular balloon weighed 10,900 grams and was one of several which are being used in a balloon testing program at points in the Tropical Pacific. One other Weather Bureau station, Majuro, is participating in this program which is being carried out by the Weather Bureau, the Navy and the Air Weather Service for the Geophysics Research Directorate of the Air Force.

At these two locations, balloons of various sizes made by different manufacturers and with differing construction and anti-freeze compounds are being tested. All of the test runs are



being made at night and with varying rates of ascent. During the first part of the test, some balloons were filled with hydrogen and others with helium and a comparison made of the heights reached. During the latter stages of the program only helium is being utilized.

The 10,900-gram balloon reached a height of 102,050 feet. Other test balloons have also carried rawinsonde instruments to high altitudes. For example,

one released at the Weather Bureau office, Majuro, on July 3, weighing over 8300 grams and requiring three tanks of helium for inflation carried the rawinsonde instrument to more than 101,500 feet, which was the altitude at which the rawinsonde run was terminated because of the weak radiosonde signal. In that flight, 4490 grams of free lift were used, resulting in an ascension rate of 1000 feet per minute.

Why were stations in the Tropical Pacific selected as sites for this balloon test? It has been known for some time that one of the causes for the early bursting of rawinsonde balloons is the reduced elasticity of the rubber at very low temperatures. The Weather Bureau and other agencies have been working with balloon manufacturers in developing a balloon which will not become brittle but will remain elastic and pliable at very low temperatures. This present balloon program is one of the field tests devised to help reach these goals.

## Davis Completes War College

**A**FTER nearly a year's absence from the Bureau, Jeff Davis has returned to duty from his assignment as a student at the National War College. This assignment was unique in several respects, and Davis describes it as one of the most challenging and yet delightful experiences he has known.

The College was established in 1946 as a recognition of the fact that most political decisions in the international field have security aspects--and that similarly, most high level military decisions have profound moral, political and economic implications. Consequently, civilian and military personnel from each of three services are brought together in this training program, to learn their areas of common interest and to acquire practice in joint operations. There were 132 students in the class, which was approximately one-fourth civilian, one-fourth Navy, one-fourth Army, and one-fourth Air Force. All students wore civilian clothes and became acquainted on a first name basis.

During the year, lectures were given by practically all Cabinet Members. Heads of various military services appeared before the student body. Lawmakers from Capitol Hill also contributed. Princeton, Harvard, and other Universities provided

notable lecturers, and the newspaper world sent some of its correspondents and columnists to give their viewpoints of various world problems. Finally, the President and the Vice President appeared at the College to culminate the lecture series.

In addition to the lectures, there were discussion groups, committee problems, panel-discussions, seminars, a great deal of course reading, and individual studies. Each student pursued an individual study, wrote it up in thesis form, and presented it before the faculty and student body. These studies are filed in the War College Library where they are used by various Government agencies.

The high light of the course is the field trip in the spring. This year there were four different trips, one to the Far East, one to Europe, one to the Near East, and one to South America. Davis requested the Far Eastern trip, and subsequently traveled by air to such far-flung places as Alaska, Japan, Okinawa, Hong Kong, Saigon, Bangkok, Manila, Honolulu, with various intermediate stops. At each stop, the group was briefed by American diplomatic and military heads, and was entertained by both local and American personnel. Many times, they were also briefed by the local government officials.

The group spent an hour with President Magsaysay in Manila. They were addressed by a member of the Royal Family in Bangkok. In Taipei, Formosa, they received a military briefing in the Chinese Nationalist war room. The British took the group through her Mainland Colony of Koroloon, China, and entertained them at the point where American prisoners have recently been released from Red China. In Saigon, the students inspected some of the damage from the civil wars occurring there. The overall purpose of these field trips was to enable the students to compare what they had learned back at the College with their own impressions and observations, and with the reports of those actually in the field.

Davis reported an active interest in meteorology at the War College. One student was from the Air Weather Service, one was a former Navy "Hurricane-Hunter," and one was a former Air Weather Service officer. Col. Ben Holzman, former Weather Bureau employee, completed the War College course several years ago. As Davis sees it, the role of meteorology is becoming more and more important, and this fact is being recognized at higher and higher levels.



## Merchant-Ship Program Expanded

**T**HE Weather Bureau, in cooperation with the A. H. Bull Steamship Company, has inaugurated a surface and upper-air observational program aboard the freighter E MILIA which

makes a round trip between Baltimore, Maryland and Puerto Rican ports every two weeks. The program began on September 1, 1955 and about October 6, 1955 was expanded to a sister ship, the

JEAN, traveling the same route.

The program is under the direct supervision of the Atlantic Weather Project in Boston. Two Weather Bureau employees assigned to the vessel take four

daily surface synoptic observations and two daily raobs. Light-weight radiosonde equipment of FINNISH design and manufacture is being used, as on the MSTs project in the Pacific which was reported in TOPICS for January, 1955.

Observations are transmitted by commercial and government radio facilities to Washington and from there are distributed to other meteorological channels.

Negotiations are under way looking toward extension of this program to the Gulf of Mexico.

### "Homing" Raobs

MILTON W. WILLIAMS, Forecaster at the Tampa WBAS, is beginning to believe recovery of rawinsondes released by the Bureau is not the difficult problem it used to be.

On September 9th, Milt assisted in the morning raob release at 10 a. m. EST. Two hours and fifteen minutes later, he received a telephone call from his wife that their neighbor had spotted the parachute and instrument with the balloon landing in one of the big trees on Milt's own backyard.

The balloon had been in the air 86 minutes before bursting at an altitude of 80,423 feet. It was carried the first 52 minutes in an easterly direction to a maximum distance of 12½ miles, where it reversed its course to return and burst almost directly over the station at the end of its run. Then like a homing pigeon, it floated over to Milt's backyard about 4 miles NNE of the Airport Station.

Not to be outdone by Milt's "homing raob", three days later a morning release rose 150 feet the first 30 seconds, collapsed over the Terminal Building and landed on the roof of the Weather Bureau office.



## Automatic Telephones Establish New Record

WITH all the publicity given to the presence of hurricanes today, the automatic telephone weather forecast installations are proving a timely way to give the public an opportunity to take advantage of the latest Weather Bureau alerts, advisories and bulletins.

On Friday August 12th 383,489 persons dialed New York City's most popular telephone number WEATHER 6-1212 to keep informed of the movement of Hurricane "Connie". These weather forecasts over the automatic telephone appeared to satisfy their needs because on September 19th 406,899 persons called the New York City

installation to learn of the hour-by-hour progress of Hurricane "Ione", thereby establishing a new high-day record for this public service.

The 1955 hurricane season has also seen topping of all previous records in Washington, D.C., as 395,486 calls were recorded on the automatic weather telephone when Hurricane "Connie" approached the city on August 12th. On September 19th although Hurricane "Ione" turned its full fury away from Washington, 380,371 weather-conscious persons dialed Weather 6-1212 for Weather Bureau information.

### Scholarships Awarded

IN keeping with the Bureau's program to further academic requirements, ten additional scholarships have been awarded. Each carries with it one full year's tuition.

Those selected are:

Daniel M. Krueger of Milwaukee, Robert C. Davis of Denver, and Isaiah Zammaripa of Kansas City. All three will attend the University of Chicago.

Frank Christensen of Oakland, Cal. will attend the University of Washington. Lester L. Benson of Jackson, Miss. and Charles R. Hays of Shreveport, La. will go to Florida State University at Tallahassee.

Glenn E. Denney of San Antonio, Tex. will enroll at Texas A.&M. Alden P. Richter of San Francisco was awarded a scholarship to U.C.L.A.

Harold Crutcher of the NWRC at Asheville, N. C. and Miles Harris of the Scientific Services Division will attend New York

University.

A three-month advanced forecaster's course at the University of Chicago to be given by Dr. Sverre Pettersen will be attended by Charles B. Johnson, George W. Francis, George C. Williams, and Louis E. Richards, Jr.

Ten employees in the Miami, Fla. area will attend a 12-week evening course at the University of Miami on Radar-Meteorology. They are: W. R. Davis, P. L. Moore, G. E. Dunn, W. I. McGehee, H. W. Witchi, E. V. Cope-land, H. S. Lawler, E. Roger, L. E. Hughes, and W. F. Brown.

A. V. Carlin, head of the Training Section at the Central Office will conduct a work shop on "Personnel Supervision" the week of October 24 at the Regional Office in New York. Twelve MIC's will attend.



## Publications Corner

"METEOROLOGY and Atomic Energy," prepared by the members of the Scientific Services Division and published by the Atomic Energy Commission, has been distributed to selected stations. The Chief of Bureau states in the foreward—"Of the numerous applications of meteorology, none is more interesting and potentially more vital than the forecasting of the action of the atmosphere in diluting and dispersing foreign materials released into it."

This publication provides a summary of some of the meteorological techniques and their application to possible atmospheric pollution problems deriving from the use of atomic energy.

For those desiring copies for personal libraries, they can be purchased from the Superintendent

of Documents, U. S. Government Printing Office, Washington 25, D. C. at \$1.00 per copy.

The following publications have been issued during the month of September:

1. Causes and Characteristics of Thunderstorms and other Atmospheric Disturbances: Seventh Interim Report.
2. Evaporation From Pans and Lakes: Research Paper No. 38, by M. A. Kohler, W. E. Fox, and T. J. Nordenson. 28 pages.
3. Climatic Summary of the United States, Section 18, Southern California and Owens Valley, by Climatological Services Division. Reprint. 44 pages.
4. It Looks Like a Tornado, by Synoptic Reports and Forecasts Division. Reprint. 12 pages.
5. Hurricane Diane and Floods

in Northeast--August 1955--A Preliminary Report, by Hydrologic Services Division. 4 pages.

6. Maximum Station Precipitation for 1, 2, 3, 6, 12, and 24 Hours: Part XI: North Carolina: Technical Paper No. 15, by Hydrologic Services Division. 84 pages.

7. Maximum Station Precipitation for 1, 2, 3, 6, 12, and 24 Hours: Part XII: Oregon, Technical Paper No. 15, by Hydrologic Services Division. 108 pages.

8. Monthly Weather Review, Volume 83, Number 6, June 1955, by Scientific Services Division. 38 pages.

9. Training Guide in Surface Aviation Observations, Training Paper No. 9 (1st Revision), by Observations Section and Training Section. 104 pages.

## Schizophrenic Balloon-Run

WHEN the Air Force observer at WBAS Burlington, Vermont went to take a pilot balloon run on August 25, 1955 he thought he was normal in every sense of the word. When he was through he had his doubts.

The balloon had reached an elevation of 57,000 feet when another balloon of the same size and color entered the field of vision at what appeared to be the same height. There was an agonizing moment of indecision while the observer fumbled frantically with the theodolite knobs, trying to make up his mind which balloon to follow.

All was in vain however, and the observer emerged from under the pibal dome with a bad case of schizophrenia.

A survey of the winds aloft at the time pointed to WBAS Syracuse or Buffalo as the originator of the errant balloon.



## LWOP Requests Get Closer Review

**I**n an article entitled "Time Out" appearing in TOPICS for April 1954, we pointed out that LWOP could be granted in cases where it might be beneficial to the employee as well as to the Bureau. Because of limited appropriations at that time more requests for LWOP were approved than would

be possible under normal conditions. The granting of LWOP in some cases prevented separations by reduction in force.

New and augmented programs now reverse the situation and there are more critical demands for personnel in various categories. While LWOP regulations

remain basically the same, individual requests will be reviewed much more closely and from the standpoint of Bureau needs, and it is likely that few requests will be approved except for those employees who wish to obtain further University training in Meteorology.

### NEW METEOROLOGISTS IN CHARGE

#### *Thomasville, Georgia*

CLARENCE E. SKILLMAN, currently a Fruit Frost Forecaster at Lakeland, Florida, has been selected for transfer to the MIC position at the new station being established at Thomasville, Georgia. Mr. Skillman has been with the Bureau since July 1930, having served at Raleigh, Spartanburg, Miami, Atlanta and Montgomery, prior to his assignment to Lakeland in 1942.

#### *Lake Charles, La.*

JOE D. WORRELL, currently serving as Principal Assistant at Lake Charles, has been selected for the MIC position at that station, replacing Mr. Paul S. Cook who has been granted a one year leave of absence. Mr. Worrell has been with the Bureau since December 1939, having served at Knoxville and Memphis, prior to assignment to Lake Charles in 1949.

#### *Glasgow, Montana*

WILLIAM A. GRIMES of the

Great Falls, Montana, WBAS has been selected for transfer to Glasgow, Montana, as MIC. He has been with the Bureau since 1936. His assignments have been Sheridan, Bismarck, McGrath, Gambell, Nome, Anchorage, Billings, Tatoosh Island, and Great Falls.

#### *North Platte, Nebraska*

DON K. HALLIGAN, now in charge at Sheridan, Wyoming, has been selected for transfer to North Platte, Nebraska, as MIC, succeeding Mr. G. Cleveland Holladay.

Mr. Halligan entered the Bureau in 1939, at Lincoln, Nebraska. His subsequent assignments were Bismarck, North Dakota; Bethel, Alaska; Anchorage, Alaska; Fairbanks, Alaska; Atlanta, Ga., (Field Inspector); Boston, Mass., (Field Inspector); Nantucket, Mass., (MIC); and Sheridan, Wyo., (MIC).

#### *St. Joseph, Mo.*

ALLEN D. STEDRY, who served as principal assistant at Columbia, Mo. since 1951, has been selected as the new MIC at St. Joseph, Mo.

Mr. Stedry joined the Bureau in 1941 and has seen duty at Omaha, Washington National Airport, Boston (AWP), New York (AWP), Boston (MIT), and Columbia, Mo.

## Deaths

#### *Margaret M. Casey*

MARGARET M. CASEY, mimeograph operator at the Weather Bureau's Central Office since 1944 died suddenly September 15, 1955 at Providence Hospital, Washington, D. C. Massive cerebral hemorrhage was the cause of death.

Mrs. Casey was loved and respected by all who knew her. Her death was a great shock to her many friends here and in Chicago, Illinois where she lived before coming to Washington. Mrs. Casey was born in New Orleans, Louisiana in 1892.

Surviving is her son, William J. Casey, a draftsman for the Coast and Geodetic Survey.

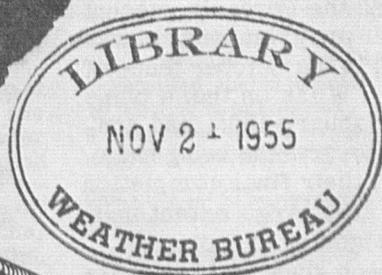
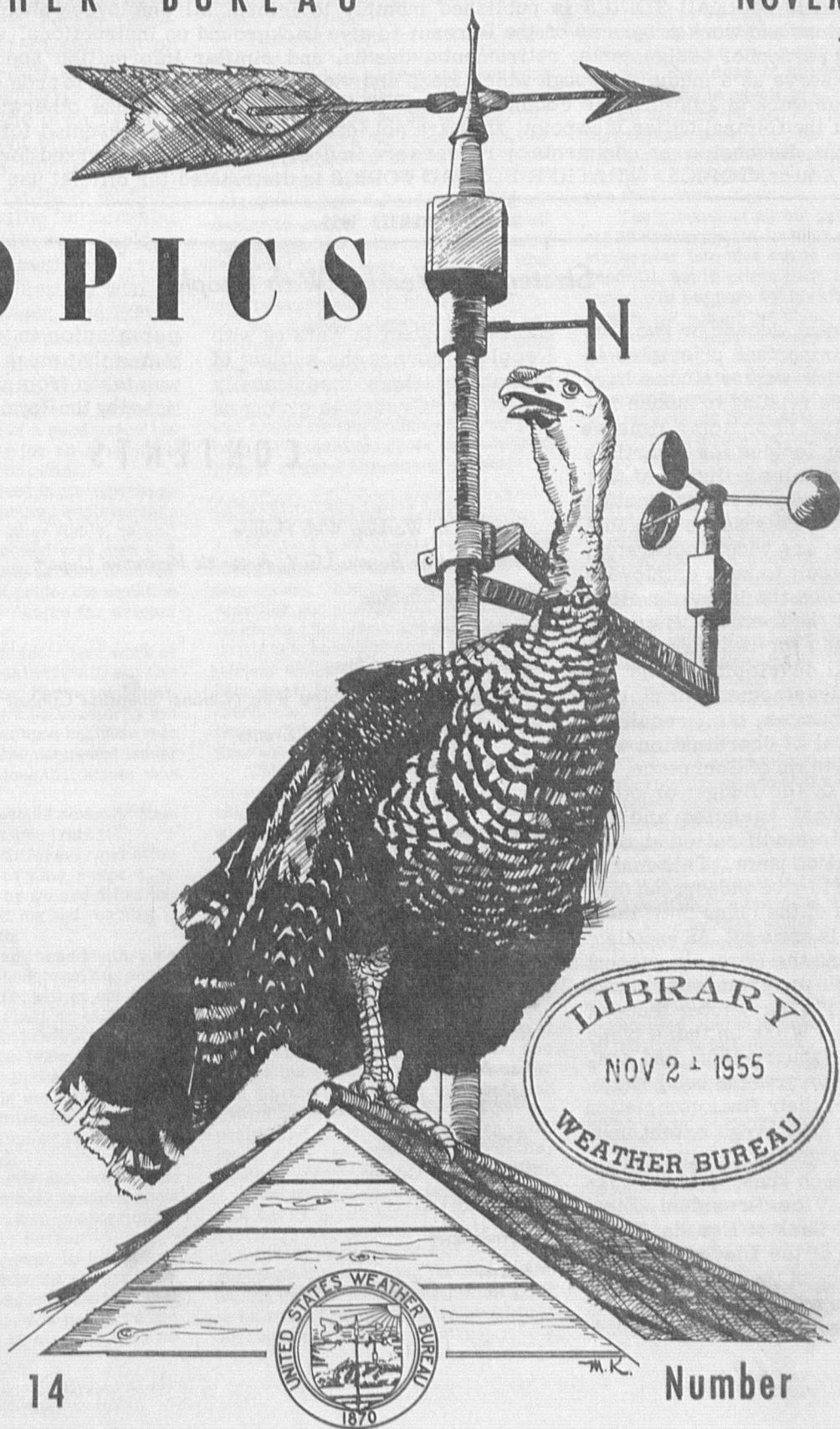
BDR POST September 16, 1955  
"Meteorologist are the most modest and patient of men," declares Vice Admiral W. G. A. Robson of the British Navy.



WEATHER BUREAU

NOVEMBER  
1955

# TOPICS



Volume 14

Number 10

WEATHER BUREAU TOPICS is published monthly to inform all employees about newsworthy operations and work programs of the Bureau; to give background on instructions; to carry news of new personnel assignments, retirements, deaths, and similar information about employees; and to serve as a medium through which ideas and views may be exchanged to promote efficiency and teamwork in attaining our common goals. While the contents, unless otherwise specified, reflect the Central Office viewpoint, they are not instructions but are presented for information. Opinions, discussions or comments by readers are invited; they should be marked for the attention of the Editor, TOPICS. WEATHER BUREAU TOPICS is distributed for official use only.

## Strategy In Working With People

IN the past decade or two, the most important principles in management-worker studies have been those relating to human relationships. For some time we have been looking for an article which contains a digest of this important subject for publication in TOPICS. Because the Bureau's personnel are widely separated, it is difficult to keep employees informed on the latest developments at the Central Office. In fact, plans for basic research, technical development, instrumental development, organizational changes, etc., require a great deal of coordination with the Department of Commerce, the Bureau of the Budget or other government agencies and are subject to modification at each coordination point. This makes it unwise to give widespread distribution of the plans until their approval is assured. An excellent example is the Bureau's present research program which was described in the October issue of TOPICS. Work on these plans began in January, 1955, and considerable progress is being made. However, their final completion depends to a large extent upon future budgetary support.

A speech given by Mr. Jordan Crouch, Vice-President, First National Bank of Nevada, Reno, Nevada, at the Eleventh Annual Conference of the Colorado River Water Users Association at Las Vegas, Nevada, in December 1954,

entitled "Strategy in Working with People," covers the subject of human relations exceptionally well. Mr. Crouch in giving us

permission to use his article states that much of the material was taken from a pamphlet published by the Royal Bank of Canada.

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Communication of ideas, criticism, and personal recognition—each having a direct application to the employee—are largely responsible for shaping an employee's loyalty to the organization and to some extent his career in the organization. Thus success of the Bureau's programs depends almost entirely on the fundamental concept of employees working together harmoniously.

We hope the article will be read by all employees. The Editor of TOPICS will welcome discussion on this subject and will publish letters received from readers.

Ability to get along with people is the prime attribute of a good executive and it is a necessity for all of us if we are to enjoy peace of mind.

Life cannot be lived in an impersonal way. In manufacturing, engineering, finance, and all the other fields, as well as in social life, we deal with men and women who are filled, as we ourselves are, with feelings of pride, the ambition to achieve, and the desire for esteem and affection.

No person can do their best work or attain success in business without the approval of other men. Facing the human equation and solving it satisfactorily are urgent needs imposed upon business men in all walks of life. The competent leader takes many precautions that lesser men neglect.

To understand people demands first of all that we admit two truths:

1. We are all different, and often we are not aware in what respect, to what degree, and why we are different;

2. We are all acting and reacting in different environment.

When we realize these truths, we are inclined to begin understanding people by studying them. We will go out of our way to encourage them to talk about themselves and their interests. Only so can the business man learn what makes employees unhappy in their work, what qualifications young men have for advancement, what mistaken ideas are prevalent in his office or business that should be corrected.

No one in authority can ever do too much listening; the best leaders know that men prosper not in proportion as they talk but as they listen.

But it is not enough to listen and observe; one must examine and appraise. By looking at the subject from the other person's viewpoint, you perceive the things that need to be cleared away so

as to let him see the good points of your plan or proposal.

Those who go in for mottoes might add this one to their stock: "Every human act can be understood if we know all the pertinent facts." When we see a person we know acting in a way that is different from our expectations, we may be shocked or confused. But we need not stop there. By showing a sympathetic interest, by demonstrating our desire to understand, and by taking all the appropriate steps toward becoming informed of the cause, we may find what is wrong with the person—or with our own interpretation of his actions.

We must be prepared to meet resistance, if the attitude we seek to change is a deeply-rooted one. We need to offer something more concrete than generalities. If we take the pains to think out and elaborate our thoughts and our plan in clear consistency, we are likely to reap a reward beyond our hopes.

#### COMMUNICATION OF IDEAS:

To deal with people requires the communication of ideas. This is a two-way street. The business man cannot possibly put across his ideas unless he knows what ideas are already in the minds of others with whom he is dealing—ideas which may clarify or confuse, help or hinder. Workers must understand what management is trying to do before they can be counted on for enthusiastic support.

This means that management must have crystal-clear in its own mind just what is to be attempted, or the result will be confusion and frustration. Napoleon wrote to his General Murat: "You will so manage that the Spaniards may not suspect the course I intend to pursue. This will not be difficult, for I have not fixed upon it myself."

Time is needed to communicate ideas to others and cultivate their growth. In view of the complex conditions to which we human beings must accommodate ourselves and the number of conflicting ideas from which we are compelled to choose, it is no wonder that an effort to rush us into decisions should antagonize us and rouse our opposition. The miracle is that so many leaders by taking time and trouble, succeed in having their ideas accepted.

The man who allows himself to appear in a hurry gives himself a needless handicap. The onlooker is likely to think that the hurrying man has found his responsibilities too big for him and to decide that he, for his part, is not going to be rushed into a decision reached in surroundings of excitement.

None of us likes to feel that he is being told to do something; we prefer to feel that we are acting on our own ideas, or that we are thoughtfully agreeing with the ideas of someone else. The man who is adroit in working with people has mastered the method of giving instructions, proving a point, or winning agreement in such a way that those to whom he conveys his ideas feel they are their own.

The purpose of all but little men is not to dominate but to inspire, not to strike fear into men but to enlist their goodwill, not to gain a point by fighting but to win support by making people want to get behind the plan.

There comes, in every man's life, a time to fight, but it must be tested by asking: "Is the cause worthy: Cannot I persuade rather than compel? If I do win my point by force, will the response be favorable among the people who count in my life? If there is no other way to achieve a worth-the-while purpose, then it is necessary to "lay down the law." Dogmatism is a powerful device when justifiably used, but it is a fighting weapon, not calculated to make friends.

To those who insist upon fighting their way through life, there are some points of strategy that should be watched. It was a principle among the ancient Greek fighters not to cut off the enemy's retreat, because when bottled up he would fight more desperately; in our modern business life it is well to give an opponent a chance to "save face."

To beat a person down out of sheer joy in raising our ego at his expense is not only a breach of good manners and good sportsmanship, it is bad business, because there are no persons so insignificant but may, some time or other, have it in their power to be of use to us.

Violence in a business man makes enemies unless the people surrounding him are wonderfully tolerant—something on which no one has the right to count. Violence takes hold of one's health, too, wears one out more rapidly than does persuasion, and it is not so gratifying to the man of intelligence. Persuasion, as Matthew Arnold phrased it, is the only true intellectual process.

#### STRATEGY IN CRITICISM:

Able men take pains to spare others humiliation, even when it is necessary to criticize their actions. It is foolish to scold. John Wanamaker confessed: "I have enough trouble overcoming my own limitations without fretting over the fact that God has not seen fit to distribute evenly the gift of intelligence."

The purpose of discipline in business,

school, or family life is to prevent repetition of an offense. It should be constructive. Impatient tearing down is likely to breed distaste for necessary regulation.

Criticism should begin with praise and honest appreciation of what the man does well, and then go on to point out how this other thing can be done better. This mode of criticizing will appeal to the worker because it shows an honest desire to be helpful. It recognizes the truth that nobody ever learns anything except by making mistakes. The better a man is, the more mistakes he will make, because the more new things he will try.

Learning to like people and to get along with them by looking for the good in them is a satisfying way of life. If we complain often about our associates or about the firm for which we work, people are likely to think the trouble lies with us.

#### OTHER PEOPLE'S WANTS:

One sure way of getting along with people is to satisfy some of their wants. We can be alert to notice and remember their wishes and preferences. Every business man knows that it is not sufficient to give a man good wages and stable employment and comfortable working space; other, more personal, needs must be met if business is to be a contented, harmonious and efficient team. To build others' feeling of self-respect, to give them the feeling that they are respected; these are important techniques for the man seeking to work with people.

How can we be of greater service to people than by seeing their emotional disturbances, quietly learning the cause, and instilling confidence while helping toward good adjustment? When you help someone to be right you are satisfying one of their greatest needs.

Look favorably on people's motives. The unhappiest person on earth is the man who goes through life suspecting everyone with whom he comes into contact of trying to wrong him. Friendship does not grow out of suspicion, nor is loyalty built on distrust.

There are times to concede and conciliate. He is a wise organizer who lets people beat him a little in discussion of some plan he is trying to "sell," so long as he keeps the main issue clear, and gives in to a change of detail in order to win principle.

One can often get done what one wants done—the other man's way.

Sometimes it is wise to retreat and await a more favorable time. A pliable

plant on a riverbank, dipping its branches into swiftly running water, will save every twig and leaf, whereas a stout tree will be torn away. And, having decided to yield, do so with good grace.

#### PERSONAL RECOGNITION:

To enjoy good human relations we need to recognize the craving of people for personal recognition. They desire prestige. By giving them a feeling of importance we attract them to us, arouse their interest in our ideas, and make them eager to help us accomplish our plans.

A true leader does not hog the limelight, but draws his friends and fellow workers into it, thus inspiring them with enthusiasm and loyalty. It is dangerous and unrewarding to ignore subordinates. Charm, poise, personality and efficiency—attributes of leadership—all arise from a feeling of genuine interest in people and thoughtfulness for them.

The man who sincerely satisfied our hunger for recognition as individuals will hold us in the palm of his hand.

A compliment, particularly on points where we wish to excel and yet are doubtful whether we do or not, is an effective way to gain good will, if the compliment be true and not fabricated flattery. Nothing costs less and gains greater reward than to give praise.

When we make a mistake we take the wind out of our opponent's sails by admitting it quickly and emphatically.

#### FOUR VIRTUES:

There are many virtues, but four are of leading importance to the person seeking to live and work successfully with people. They are Consistency, Sincerity, Courtesy, and Friendliness.

1. We feel more secure in our relationships with consistent men, even though they are always unreasonably demanding, than we do with men who are reasonable part of the time and unreasonable at other times. We can learn how to deal with the man who is consistent, even if he is consistently wrong, but we are utterly incapable of developing a strategy for the man who is guided by whims and notions.

2. Sincerity is important, because it deserves friends. You can't talk your way into friendship in social or business life. If you are going to make friends, people must recognize you as worthy of friendship.

It is not necessary that we should agree with people on every detail, nor that either should admit that the other is infallible in wisdom or justice, but

each should be sure of the other's sincerity, so that they feel free to work out the problem for the good of both. "A deep, great, genuine sincerity," said Thomas Carlyle, "is the first characteristic of all men in any way heroic."

3. No one who wants to get along well with people can afford to ignore courtesy, which means being considerate of others in little things. To refuse a request gracefully, to show respect for what others wish, to treat even bores with consideration, to be eager to do a favor, to be calm under provocation and friendly under pressure: these are evidences of courtesy.

Courtesy is the easiest quality to lift one above the crowd. So often it is lacking in every day life, but in it is a basic quality that wins friends.

It is far more interesting to out-think an opponent, to persuade a wife or a husband, or to "sell" an idea to the group of which you are leader than to gain your way by bulldozing and throwing your weight.

4. Friendliness with a person means that you have, over and above your general merit, some particular merit to that person. It means that even if you are not in position to benefit people materially you take pains to oblige them and show your amiable spirit.

The man in search of success and peace of mind needs friends. Xenophon, the historian, remarked: "It is far less difficult to march up a steep ascent without fighting than along a level road with enemies on each side."

Leadership has been written about for thousands of years, and scores of books are published every year giving advice about how to become an executive. Yet all these years and words have found no substitute for these four virtues: Consistency, Sincerity, Courtesy, and Friendliness.

#### SOME PRINCIPLES:

In addition to the basic virtues, getting along with people requires us to use proven tactics.

You would not appoint a man to a managerial position if he were more interested in the question "Who is right?" than in the question "What is right?" The manager, supervisor, foreman, or other person in a position of command needs to be careful not to allow personalities to sidetrack principles. Sometimes the manager is right; sometimes the worker is right; sometimes both are partly right; but both need to seek the procedure which will be most in keeping with their desire for the best outcome.

The person who gets along with

people avoids focusing on their weaknesses rather than on their strengths, or on their disabilities rather than on their abilities. Everybody has problems and everybody is short-suited in some quality. The thing to do is not to cry about these, but to do something positive to help overcome them.

Practice of this sort means going beyond the stark, necessary demands of business and social life. It calls for willingness to go more than half way in friendly overtures. It is a practice that distinguishes the really great man from the man who is merely adequate.

Great men are not quick to take offense. They know that annoying acts and sayings are the result of an inferiority complex. They know that many criticisms are made because making them gives the critic a feeling of importance. They measure criticism by the value there is in it for them as a guide to doing something better, and not by the degree in which the criticism hurts.

Self-control is necessary to successfully work with people. It is the first virtue taught by Socrates necessary to make the other virtues effective.

Not only does losing one's temper make enemies instead of friends, but it dulls the mind and gives your opponent an advantage over you. When one person is furious and the other cool, onlookers are very likely to suppose that the man who keeps his temper is right, even though he is not. "Whom the gods would destroy, they first make mad!"

In his novel "The Laughing Man" Victor Hugo writes: "Wind, hail, the hurricane, the whirlwind—these are wild combatants that may be overcome...but nothing is to be done against a calm; it offers nothing to the grasp of which you can lay hold."

The man seeking to work in harmony with other people is modest and moderate. He does not exceed what is necessary in discipline or in praise.

Successful human relations are essentially the result of a complicated use of all these principles we have talked about. Every man must play the game within his own particular field and according to his own personal qualities and ideals.

There will be understanding, non-understanding and misunderstanding in every human relationship of two or more people.

The art of working and getting along with people lies in applying fundamental ideas of these four principal virtues—Consistency, Sincerity, Courtesy, and Friendliness.

## First Weather Bureau I.G.Y. Antarctic Personnel Depart

**D**URING November five Weather Bureau employees depart for the Antarctic in preparation for the International Geophysical Year 1957-58. They will accompany Naval Task Force 43 and participate in Operation Deep-freeze.

Edward E. Goodale, Assistant Chief Arctic Operations Project, will sail aboard the new icebreaker the U.S.S. Glacier which leads the Task Force. He is the USNC-IGY representative with the particular responsibility for site selection.

Morton J. Rubin, who recently returned from a tour of duty as Weather Bureau meteorologist in South Africa with the Southern Hemisphere Atmospheric Project will be the scientific representative for the U.S. National Committee for the IGY. He will assist with meteorological operations and lay the groundwork for the IGY Weather Central which will be in the Little America area.

Ernest A. Wood, Weather Bureau cold weather specialist and Head of the Antarctic Section of the Arctic Operations Project, will coordinate problems of camp lay-out and the orderly handling of IGY scientific equipment.

Chesney E. Twombly, electronics technician, will not return with the ships of the Task Force but will winter at the main IGY base at Little America. He will install and maintain the IGY rawinsonde equipment which is to be used by Navy aerological personnel until IGY personnel arrive early in 1957. In addition, he will be responsible for the IGY equipment that is to be cached at the main base and will assist with the movement of equipment to the Marie Byrd station by tractor train. At the Byrd station he will advise on

features of camp construction affecting the scientific programs. It is hoped that during the Antarctic winter he will be able to devise balloon launching techniques and improve meteorological observational techniques generally. A number of scientific groups have asked Twombly to make preliminary observations which are non-meteorological, such as aurora observations. He has been provided with a radar meteor recorder and air monitoring recorders for natural radioactivity.

Kendall N. Moulton, a Weather Bureau cold weather operations specialist, will also winter in the Antarctic but in the historic McMurdo Sound area. He will look after the IGY scientific equipment to be flown to the South Pole. This equipment will be cached at the Navy logistics base and some of it must be prepared for airdropping. As he assists with the safe handling of the delicate instruments for the Pole station, he may be the first Weather Bureau employee to stand on either geographical Pole.

These five men have undertaken a truly great responsibility. As they go to launch the United States IGY Antarctic program they go with our heartfelt wishes for success.

The need still exists for Weather Bureau Antarctic personnel next year. For further information see the October issue of TOPICS.

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The staff of the Weather Bureau Arctic Operations Project held a small luncheon October 27th, when friends and relatives bid "Bon Voyage" to Weather Bureau members of the forthcoming Antarctic Expedition.



THE SECRETARY OF COMMERCE  
WASHINGTON 25

October 5, 1955

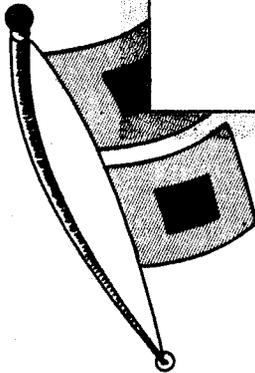
MEMORANDUM

TO: Dr. F. W. Reichelderfer, Director  
Weather Bureau

With the termination of the first and most urgent phase of the disaster caused by hurricanes Connie, Diane and Ione, I wish to express to you my gratification with the splendid manner in which the Weather Bureau rose to assist in meeting the demands of the emergency. It is by such prompt and effective action in the face of an urgent situation that the Department once again proves its value.

Please express to all the people in your Organization who had a part in this operation, my sincere thanks for a job well done.

Secretary of Commerce



. . . . . **Operation Checkup** . . . . .

**F**OR the last several years an increasing number of comments have reached the Central Office on the subject of liberties taken by radio and television announcers in broadcasting Weather Bureau warnings. Following Hurricanes Connie and Diane of this year this matter reached a point where it was felt necessary to institute some form of checkup in order to obtain factual information on this subject. As mentioned in TOPICS for September, page 139, the broadcast coverage on Connie was greater than for any previous hurricane in history.

A complete survey for any single storm, such as a hurricane, of all news and weather broadcasts made over radio and television stations would be a mammoth operation requiring weeks of planning and a relatively large expenditure of funds. In order to develop facts on which to base further action for improvement of the dissemination of warnings to the public it was felt that a sampling of a few radio and television stations in a few cities might be sufficient to provide the necessary information.

On very short notice the Regional Offices at New York and Fort Worth and the Meteorologists in Charge at Brownsville, Corpus Christi, Tampa, Miami, West Palm Beach, Jacksonville, Norfolk, Washington, D. C., Philadelphia, New York City and Boston set up radio and television monitoring surveys which produced the desired results with a minimum expenditure of time and money. The excellent cooperation received from these offices and the magnitude of the results obtained represent a feat worthy of special notice. A program for improvement of this phase of

Weather Bureau services is being formulated and the survey results have already more than justified the extra labor involved in the September checkup.

In some cities arrangements were made with the radio and television stations for them to furnish magnetic tape recordings of all news programs (including weather broadcasts) during a one or two day period while Hurricanes Hilda and Ione were threatening the United States mainland. In other cities Weather Bureau employees used magnetic tape recorders of their own to pick up selected news and weather broadcasts. Another means employed was to contract with a radio monitoring service which picked up the same type of information and furnished typewritten transcripts of pertinent broadcasts. The fourth method used was to employ on an emergency assistance basis a number of stenographers who took notes of all broadcasts on selected radio and television stations and furnished the Bureau with typewritten copies of what they heard.

For Hurricane Hilda broadcasts were picked up on September 13 and 14 in Jacksonville, West Palm Beach, Tampa, Miami, St.

Petersburg, Norfolk and Washington, D. C. Hurricane Hilda was covered again on September 18 and 19 at Brownsville and Corpus Christi. Monitoring of Hurricane Ione was carried out on September 14 at Jacksonville, Miami, Tampa, West Palm Beach, Washington, D. C. Another period of monitoring on Hurricane Ione on September 17 through 20 was conducted at Boston, New York, Philadelphia, Washington, D. C. and Brownsville, Texas.

Statistics on the survey show that about 85,000 feet of magnetic tape or roughly 350 hours of broadcast time were recorded. This material was monitored at the Central Office and typewritten notes made of pertinent portions. Several hundred additional hours of broadcast time were covered by the third and fourth methods described above and the typewritten copies of broadcasts were furnished to the Central Office for study. A total of 88 radio and television stations were included in the brief survey.

A summary of the number of broadcasts monitored is below.

In analyzing cases where the broadcasts were in disagreement with information given in the Weather Bureau advisory it was

HURRICANE HILDA

Tape recorded.....	300	
Stenographic Transcription.....	200	
AP and UP Teleprinter Reports.....	<u>125</u>	
Total.....		625

HURRICANE IONE

Tape recorded.....	500	
Stenographic Transcription.....	125	
AP and UP Teleprinter Reports.....	<u>75</u>	
Total.....		700
Grand Total.....		<u>1325</u>

found that a major discrepancy occurred in 4% of the cases; a minor discrepancy was noted in an additional 12% of the cases; and in 84% information broadcast was in essential agreement with the latest Weather Bureau advisory. While at first glance this would seem to be a pretty good record for authenticity of releases the tremendous public interest generated in receipt of hurricane information makes it necessary that we exhaust every possible means for eliminating all discrepancies between information broadcast by radio and television announcers and material contained in Weather Bureau hurricane advisories or bulletins.

While the above checkup was concerned with the hurricane warning service it is believed that results obtained may be representative of conditions in other areas of the Weather Bureau warning service. Further information and instructions regarding this matter will be issued through normal channels.

## Corrections

THE last sentence in the article "New River Forecast Centers" on page 155 of the October issue inadvertently became scrambled. It should have read, "Six others are planned, with highest priority given to coverage of the Lower Mississippi and West Gulf-Rio Grande drainages which are also in the hurricane belt."

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THE title of the article about the new teletypewriter system on page 159 of the October issue should have read "New Internal Teletypewriter System Started."

## European Office Closes

SINCE 1943 the Weather Bureau has maintained a liaison office in Europe, for some years in London and later in Geneva. The first incumbent, Mr. Norman R. Hagen, completed his assignment in London in early 1952 and at that time the Office of the Meteorological Attache was moved to Geneva. The main reason for relocation of the office was the establishment of the headquarters of the World Meteorological Organization (WMO) in that city, which is the European center for United Nations and other international activity. Since the Chief of Bureau held the Presidency of the WMO, the maintenance of more or less continuous direct liaison with the Secretariat of the Organization became essential.

One of the main functions of this office was the representation of the United States in delegate or observer capacity at a large variety of international meetings. For example, the office during the time of its existence in Geneva provided representation at three of the six Regional Associations of the WMO, namely those for Africa, Asia, and Europe, and assisted on the delegations to three of the eight technical commissions of the Organization, those for Agricultural Meteorology, Bibliography and Publications, and Maritime Meteorology. General liaison was maintained with most of the countries in the European area, and during the past three years, the activities have required travel to such far flung places as New Delhi, India; Tananarive, Madagascar; Washington, and most capitals in between.

At the beginning of the Chief's Presidency of the WMO, the

Secretariat was very much understaffed, which gave us an excellent opportunity to contribute directly to the development of the Organization's technical program, and especially to promote the recognition of meteorology as an important factor in providing technical assistance to underdeveloped countries through the medium of the United Nations Expanded Program of Technical Assistance.

Finally, the office provided United States membership on the tripartite Allied Meteorological Board of the Allied High Commission in Germany. This was mainly for the purpose of assisting the Federal German Weather Service in its international activity, including the securing of membership for that country in the WMO. Periodic visits to Germany were necessary every month or two for participation in Board meetings, and liaison with the German Weather Service during the period of its continuing post war development.

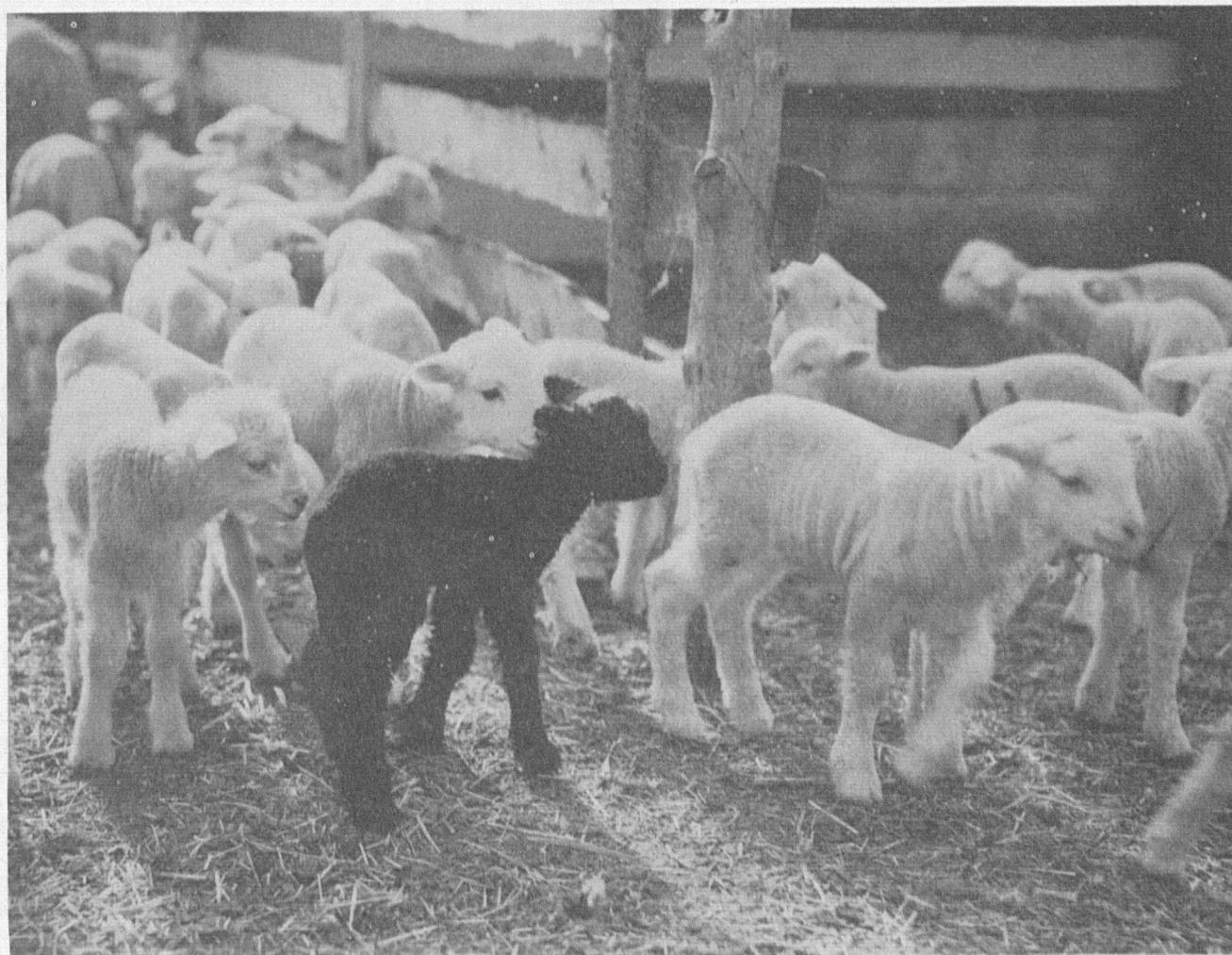
Now that the post World War rush of meteorological meetings has somewhat tapered off, and Germany has attained sovereignty which permits them to negotiate internationally independent of the former High Commission, and also the fact that the United States terminated responsibility for the office of the President, having fostered the principle of rotation of the Presidency of the WMO, the requirement for maintenance of an office in Europe has been decreased. The office was therefore closed in June and the most recent incumbent, Mr. Arthur W. Johnson, has now returned to the United States for duty in the Central Office.

## *Weather Bureau Employee Wins National Snapshot Contest*

S. DEAN GREEN, of the WBAS Salt Lake City staff, won \$1,000 in the Newspaper National Snapshot Awards competition at Explorers Hall of the National Geographic Society here in Washington.

Mr. Green's winning snapshot was taken last spring during one of his frequent trips into the Intermountain States Area as Substation Inspector. The photo was entered in the contest through The Salt Lake Tribune.

Mr. Green entered the Weather Bureau in October 1918 at Salt Lake City and has remained at that station throughout his Weather Bureau service. His hobbies include archery, winter sports, square dancing, horticulture and, of course, photography.



*Sequence of Weather and Events:  
Hurricane Janet, Sept. 26-27, 1955,  
Swan Island, West Indies (From Memory)*

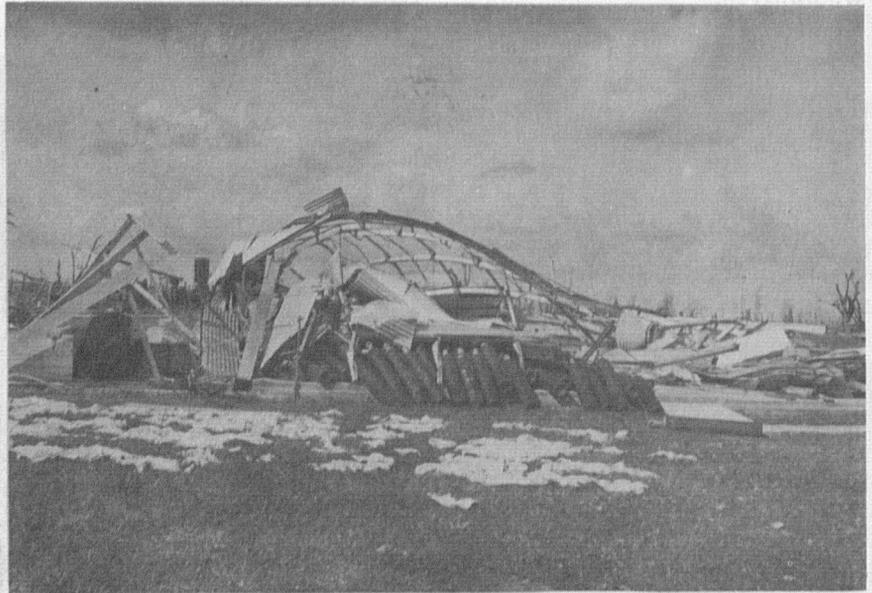
*John Laban*

Photographs - Courtesy of Mr.  
Jenkins, CAA, Fort Worth, Texas

**S**EPTEMBER 26, 1955. Weather all day high thin Cs, wind variable in morning ESE to N, sea condition moderate to rough (Check weather reports sent to Miami by Radio-teletype).

During the afternoon, sea increased slightly. Late evening, around 8 p.m., moon was full becoming obscured by thickening Cs with cumulus congestus from E, wind increasing to around 20-25 mph. I was at Glidenville and told four Grand Caymanian women to prepare on the morrow to go with blankets, food stuff, babies and children, newspapers, to Navy Seismo Building, where U. S. Navy Seismo operator, Francis Lewandowski, had prepared the building for them. (Late evening, DL and Thunder.)

September 27, 1955. Time 1:55 a.m. Just got to bed when there was a wind shift from E to N accompanied by squall with heavy RW—duration about 10 minutes. Awoke, a little late in the morning, prepared Quonset Building for storm, cut off butane gas, went to Mess Hall, then station. Weather conditions  $\ominus \oplus \oplus$ , Fc/Fs - Sc/As. Wind from NE about 20-25 mph. Sea very rough, waves to height of 10-15 feet from ESE or E. In station, found all weather personnel up, heard of R.T. request for 3-hourly R/s and hourly surface reports. Time around 8:00 a.m. Started in our Set R/s Inst. Took sensitivity for R/s Run -



Inflation Shelter.

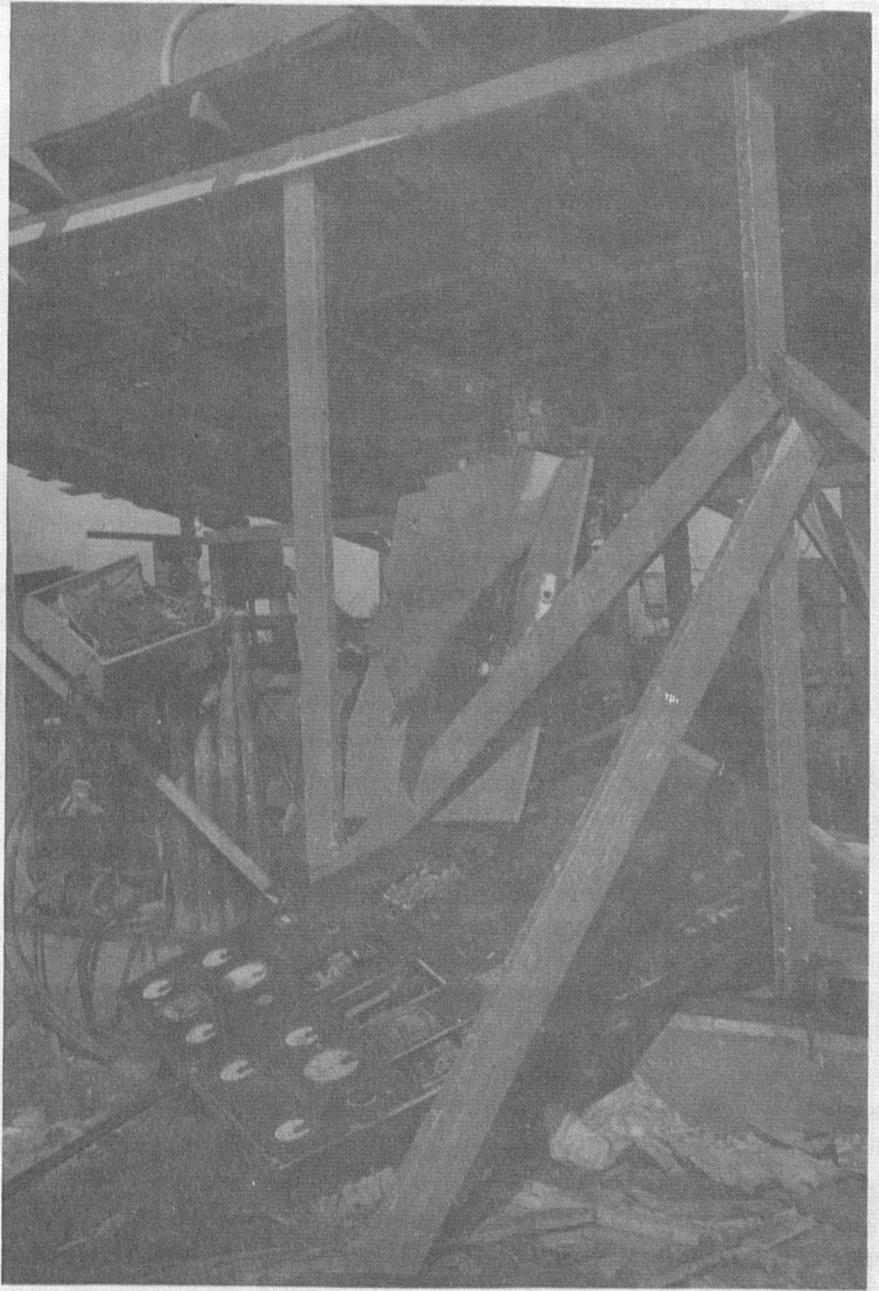
balloon filled - time around 8:30 a.m. Wind increasing, sea higher (waves), coconut trees starting to uproot (just a few).

Breazeale and Brown thought we should take R/s earlier before the wind was too strong. Released R/s at 0909 a.m.  $\ominus \oplus$  RW, Wind NNE 13.8 mph, station pressure 29.55 inches.

Run very stable. Breazeale atop inflation building operating SCR-658. During run, wind increasing fast. Over intercom, Breazeale said winds to gale force—terrific racket at SCR-658. Hurricane recon plane made 3 or 4 passes. At this time Breazeale terminated run. Winds dangerously high at SCR-658. Run to about

45,000 feet. Run evaluated by Brown and me. Winds by Breazeale and Brown, then transmitted all to Miami. Plane makes last pass to within 100 feet of surface. Pilot says, "You boys have your hole ready?" We answer with yes. He comes back with "Better get into it—this one (hurricane) is a bad one." Says there is a squall line 50 miles E of station. During this time sea and wind increased, coconuts beginning to uproot, coconuts flying, waves to 70 feet on south side from ESE. Wind over average of 50 mph. Charles A. Dowd, Jr. (Elect. Tech. - CAA) sends message to his wife and mine that we are OK, etc. Time is after 10:00 a.m. Then Dowd sends message saying antennas going down—abandoning station. Squall almost upon us. Dowd and I cover radio transmitters and receivers with empty U. S. Mail bags. We went back into weather room at time north corner of Building ripping.

Weather RW. Wind over 75 mph from N. Sea ESE, waves to 70 feet. Dowd goes out to west corner of station to see if any flying debris—I back into building to get three flashlights, put forms in drawers, read wind—over 100 mph average from N. Pressure 29.065. Time a little before 11:00 a.m. We both dashed for Mess Hall where Henry Alsted Glidden had lunch ready. We all pitched in to re-inforce shutters on north side, then had lunch. All except Lewandowski who stayed in Seismo Building. Hurried with lunch—shutters ready to fly in. Cleared most of dining table off. We went into kitchen, looked out of kitchen door (south side), saw debris flying—asbestos from station—SCR-858 turns over atop Inflation Building. Shutters in dining room fly in, we see that kitchen shutters ready to go also. Wind increased now to (est.) over 120 mph. We all move into pantry and wait for about five minutes, when kitchen



Destruction of Power Shed and Equipment.

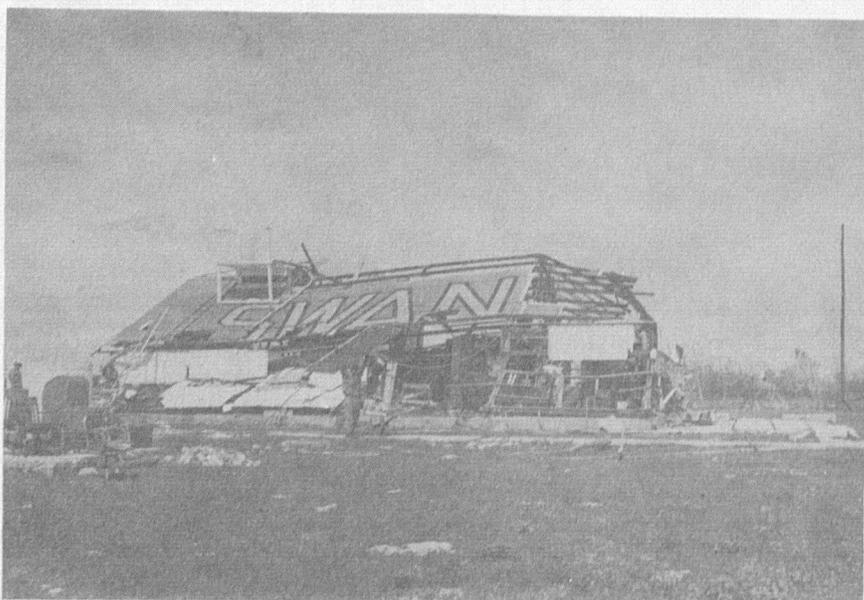
shutters blow in. I kept pantry door open to equalize pressure. Things are crashing in dining room and kitchen, we go to bathroom, then into Sims' office in last room of Building on south side. Racket of crashing things in other parts. Someone suggested we go to Seismo Building but it

was too dangerous. Moved office desk in front of office door to kitchen, time estimated to be about 12:50 p.m. There are seven of us here, Sims, Breazeale, Guarcello, Brown, Dowd, Al Glidden (cook) and I. There is a silence among all, Glidden with fear reflected in his eyes—others with thoughts

and prayers to themselves. As for myself, I had dreamed two days previously that the storm would hit us and that I had read the message sent to Miami that I was dead—the only fatality. I was asking myself when was I going to get it. I prayed for all of us and those people, men, women, and children, down at Gliddenville. I presumed all were dead or injured, they being closer to the sea by about 300 feet. I asked Brown again what the time was—1:15 p.m. The wind was estimated at over 150 mph now and the rain was going by between the buildings in a horizontal watery stream. I could discern the living quarters about 25 to 30 feet away. About two inches of water was on the floor. Time estimated at about 1:30 p.m. A loud CRASH and we all made a dive for the space under the office desk, 30" x 24". How all our heads got into that space is a wonder. Seconds later we looked up and saw we were



General view of destruction.



Operations Building.

without a roof. Some walls were standing and we went over the side of the building platform (made of concrete pillars) and put our heads along the edge of the platform. We were all given a baptism of 500 gallons of diesel fuel. We were completely soaked, our eyes smarting, our mouths, ears and heads covered with diesel fuel. Someone suggested we get under the building and take a chance from flying debris. Then another suggestion—to make 125 foot dash to U. S. Navy Seismo concrete building where Lewandowski is. Sims and Guarcello went first and are knocked off their feet. Then we others made the dash. Lewandowski (Ski) is most surprised to see us, especially in our condition of fright and wild stare (diesel fuel in our eyes).

We immediately tried to wipe the diesel fuel from our eyes but there were no dry cloths around. A few moments were spent in talking, cussing the fuel in our

eyes, scratches and abrasions on our feet, etc. Someone said that the people from Gliddenville are coming up and there was a sort of let up in the wind and rain. (R-) We dashed out to the desperate people—men carrying children and babies in thin blankets and bags—men and women with fright in their eyes. Some of the men had cuts and scratches but no one was seriously hurt. Thank God, all are accounted for. All we could see was havoc and damage. All that was standing of the Mess Hall we seven were in is the proverbial toilet—atop the concrete platform.

### *First Duty First*

**O**FTEN the observer in the course of his duty must decide which of several urgent demands should receive his attention first. This decision is particularly difficult when a delay in meeting either demand may result in inconvenience to many and embarrassment to the Bureau.

Such a decision faced the observer on duty at Cheyenne, Wyoming, on the evening of June 26, 1955. The local TV station called immediately after the observation had been completed and requested information as to current and expected weather conditions to be broadcast in a special public service program about weather. The 2228M aviation observation was not transmitted in the 2230 sequence collective.

The Meteorologist in Charge states that at that time:

“Only one person was on duty after 2:30 p.m., June 26th. During the afternoon and evening, very heavy rains, tornadoes, and flooding occurred north of Cheyenne. During the late evening the local TV station carried a special public service program about the storm. As part of the program



Mess Building. Weather Bureau staff was here when the building was destroyed.

they telephoned the Weather Bureau for information on current and expected weather conditions. The telephone conversation was broadcast on both TV and radio . . . . The 2228M observation was made on schedule but the observer was tied up with the call from the TV-radio station when the observation should have been transmitted.

“Considerable excitement, bordering on hysteria, had developed locally because of reports and rumors of tornadoes and floods. The observer on duty believed it more important at that moment to furnish factual information to the large number of people reached through the TV program, even though it meant delaying transmission of the 2228M observation.”

In reply to a complaint from an airline regarding the incident, the Regional Office stated and we

agree that:

“The observer on duty at the time performed all duties possible and gave priority to mass local distribution of warnings by radio and TV. The subsequent transmission of the local observation at 2250M on June 26, 1955, indicates that he did not neglect his routine duties and performed them as expeditiously as possible.”

Emergencies like the foregoing occur from time to time since it is not always possible to anticipate the need for extra help. When it appears that emergency situations of this type are likely to develop it may be desirable to alert one or more employees to be ready to report for emergency overtime duty on short notice. Such return for emergency duty may be compensated for by use of paid overtime as per instructions in Chapter I-F-50 of the Weather Bureau Manual.

## Safety Item

THESE pictures show the before and after positions of a wireweight gage installation on a bridge over the Little Miami River at Perintown, Ohio. The original installation, for proper mounting of the gage, required the observer to stand in a dangerously narrow traffic roadway to make the reading. The modification permits use of the safe pedestrian walkway. But to accomplish this, Jere B. Scott and Harold E. Shipley of WBO Cincinnati had to reverse the gage mechanism in its case and provide a special support. The ingenious and resourceful way in which this modification was accomplished is described in the U. S. Geological Survey's Water Resources Division Bulletin of November 1955. Other stations faced with a similar problem can secure a copy by writing the Central Office, Attention: River Services Section.



FOR some time there has been a recognized need to emphasize further the technical work and qualifications in the management and administrative staff of the Bureau. Late this past summer a pilot project was established which has temporarily been named the Advanced Technical and Executive Development Program. For purposes of the pilot project only three employees have been selected, all of whom have recently returned to the Central Office from various field assignments which have served as a good introduction to a course of familiarization with the newest technical developments. The three are Messrs. P. H. Kutschenreuter,

J. J. Davis, and A. W. Johnson.

The program is designed primarily to familiarize personnel in the upper grades with the latest scientific developments in meteorology. Included in the activities are surface and upper air analysis and prognoses, special studies of severe storm forecasting, jet stream analysis and forecasting, extended forecast techniques, a comprehensive review of recent literature, lectures by various Central Office staff specialists concerning their going programs, and assignment of staff problems to the training class or to individuals on an ad hoc basis. These ad hoc problems are assigned as a means of familiarizing

## More on Training

the employees with the type of problems they may handle in their future careers.

Plans are being made for conducting two or three such classes

each year, made up of field and Central Office employees. Tentative arrangements are being made for the next group to come to Washington early in January for

approximately three months. Employees in grade GS-12 or above who would like to participate are invited to indicate their desires by letter to the Central Office, attention Training Section.

## *Tornado Forecast Verification*

**S**INCE the establishment of the severe local storm forecasting program early in 1952 a close check has been maintained of the accuracy of tornado forecasts issued by the Weather Bureau. While we can not be sure that all tornado occurrences are reported and show up in verification results it is quite likely that in the last several years a great majority of tornadoes are recorded in the official records of the Weather Bureau.

Information received at the Central Office through correspondence and in visits with field officials of the Weather Bureau indicates that the tornado forecasts released by the SELS Center are becoming increasingly accurate. Credit for this improvement is due not only to the personnel of the SELS Center but also in some measure to the excellent work being done at the district forecast centers. Improved radar tracking of developing storm situations and the transmission of this vital information to the district and SELS Centers has also played a very important part in this program.

In verifying tornado forecasts two approaches are used. First the number of tornadoes occurring within a previously issued forecast area are tabulated. From these figures it is possible to determine the percentage of tornado occurrences which were forecast in advance. The second method is to tabulate the number of tornado forecast areas issued in which tornadoes occurred during the valid period of the

forecast. The figures given below show results obtained through use of both verification methods. An additional figure has been compiled in which the tornadoes occurring outside of the forecast area but within 150 miles of the area and within a two hour period after valid time are counted.

Tornado verification results for the first seven months of this

year show about 32% of the tornadoes reported to the SELS Center were correctly forecasted in advance. This figure represents a decided improvement over the same period in 1954 when 14% of the tornadoes were forecasted. During this same time, the percent of forecasts followed by a tornado in the forecast area increased from 19% to 35%.

### TORNADO FORECAST VERIFICATION, JANUARY 1 TO AUGUST 1

(Based on Unofficial Tornado Reports to the SELS Center)

<u>TORNADOES</u>	<u>1955</u>	<u>1954</u>
(a) Number of tornadoes .	417	507
(b) No. of tornadoes in a tornado forecast area .	133 (32%)	70 (14%)
(c) No. of tornadoes inside plus those within 150 miles and within valid time plus 2 hours .	258 (62%)	200 (40%)
(d) No. of tornadoes not included in line (c).	124 (38%)	307 (60%)
<u>FORECAST AREAS</u>		
(a) Number of forecasts (areas) .	191	196
(b) Average area (square miles).	19,600	-
(c) No. with tornadoes in area .	67 (35%)	37 (19%)
(d) No. with tornadoes inside normal forecast area plus areas with tornadoes within 150 miles and plus 2 hours of valid time.	113 (59%)	81 (41%)
(e) No. of areas not included in line (d).	78 (41%)	115 (59%)

## Pilots Like The Arcola Broadcasts

SOME earlier issues of TOPICS contained information on the jointly operated Weather Bureau - CAA automatic continuous aviation weather broadcasts being made over the CAA low-frequency range station at Arcola, Virginia.

When this new service had been in operation long enough for a large number of pilots to become acquainted with it, a survey was made to learn more about the uses pilots are making of the broadcast and to what extent it is serving their needs. Survey cards were sent to all public airports in Maryland, Delaware, Virginia, West Virginia, Southern Pennsylvania, and the District of Columbia, as representative locations in the area covered by the normal transmission range of the broadcast.

About 400 of the survey cards have been returned by pilots, and they show almost unanimous acceptance of the new continuous

broadcast service. A number of pilots supplemented their card reports with letters offering more specific comment. One that we believe will be of more than usual interest to field personnel is quoted here:

September 10, 1955  
"Chief, U. S. Weather Bureau  
Washington 25, D. C.  
Attn: 0-5.31

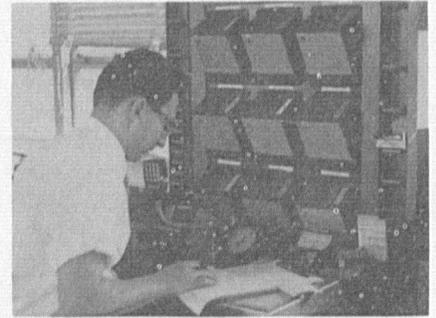
Dear Sir:

While on a trip last Wednesday, I was informed for the first time of the Arcola Continuous Weather Broadcast by the Weather man on duty at Tri City Airport, Tennessee. On my return flight that afternoon, I took advantage of this service while passing thru the Washington area and found it to be extremely helpful. In my opinion, the extension of this service to many or all of the range stations would be more than worthwhile.

"At this time allow me to

compliment your bureau on the caliber of men in its employ and on service rendered. I have never met a weather man on the airways who didn't go out of his way to be courteous and helpful to me.

Sincerely Yours,  
/s/ D. Barker Cook  
Consumers Ice Company  
25 Bloomsbury Street  
Trenton, New Jersey"



Conrad Martinez, WNA, makes recording for continuous aviation broadcasts.

## Communications Projects

PICTURES of the radar scope at Cape Hatteras were taken during hurricanes by using a Polaroid-Land camera and transmitted to Washington National Airport over a radio circuit by wirephoto equipment of the type used by press associations. This gave the forecaster the picture within a very few minutes. For future use, larger cameras, more powerful radio equipment and more suitable frequencies are planned to improve the service. The Dage Electronic Company

is independently developing a "slow motion" television camera which can continuously scan the scope of a radar set and transmit in a "slowed down" fashion so that transmission is possible over a landline of 5,000 cycle bandwidth. We are watching the development of this equipment to determine if it can be adapted to meet our requirements within reasonable costs.

Facsimile installations have been increased by 23 bringing the total for field stations to about

100. Times Fax, Alden Equipment Co. and the Muirhead Co. are now prepared to furnish continuous recorder equipment, and Western Union and AT&T are developing facsimile equipment for weather map service. A date of July 1, 1958 has been established for converting the speed of the National Facsimile Network from 60 scans per minute to 120 scans per minute. The plan includes replacement of all the present drum recorders with continuous recorder equipment by the time of the increased transmission speed.

## Report on the "Mapped Forecast" Program

**T**HE mapped forecast program was started as an experiment during the summer of 1954 by the Washington District Forecast Center for part of their district on a once-a-day basis. Several offices in the area covered by the mapped forecasts used them in preparing one state forecast a day for their areas during August of 1954. Results showed further tests were warranted and on April 1, 1955 WBAS, Washington began preparing mapped forecasts four times daily for New York, Pennsylvania, Maryland, and Delaware for guidance of the state forecast centers in these states. Later this spring the Kansas City District Forecast Office also began issuing mapped forecasts for several states on a routine basis.

Present plans call for the Chicago Forecast Center to begin the mapped forecast program for several states this winter. When this occurs, some realignment of states in the Washington, Kansas City, and Chicago Forecast Districts will be made in order to make the areas as homogeneous as possible and so as to provide guidance material for new state forecast centers being established. Eventually it is planned to make arrangements so that the mapped

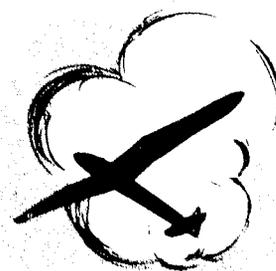
forecasts will be prepared at district forecast centers for the entire nation.

The guidance information distributed by the Forecast Centers in the form of mapped forecasts is an extension and amplification of the larger scale guidance material being prepared and distributed nationally by the National Weather Analysis Center and Extended Forecast Section. It is intended that the mapped forecasts be used primarily by the state forecast centers as a guide in preparing forecasts for their areas. Of primary importance now is the District Forecaster's responsibility for maintaining a continuous watch for severe weather conditions, particularly those that threaten a large area; e.g., cold waves, blizzards, etc. The District Forecaster interprets the large scale weather features and keeps the State Forecasters advised of the expected effects in their areas.

At the present time the mapped forecast is being sent in coded form on Service "C" in conjunction with the FP-1 guidance material but it is hoped that at some future time it will be possible to send the mapped forecast by facsimile, thereby eliminating the coding and decoding steps.

crop season, the Weekly Weather and Crop Bulletin was expanded to double its former size and timely articles on applied climatology and farm topics were introduced. A small Bioclimatology Section was established to study the relations of climate to crops. These actions were taken in the interest of making climatological information more useful and more readily available to agricultural interests.

Considerable progress has been made in climatological research and development. A special study has been started of hurricane trends over the past 75 years. Analyses will begin soon of climatic trends at the 20 long record stations that have been tentatively selected as bench-mark stations. Several other research projects have been started through contracts with colleges and universities, dealing with such subjects as marine climatology, analysis of regular climatic data for bioclimatic comfort purposes, droughts, and micro-filming processes.



### Riding on Air

**S**CORES attained at the 22nd National Soaring Contest at Elmira, New York during July 4-14 again attest to the value of competent meteorological service when skillfully applied to the task of flying high performance motorless aircraft. Reported literally and figuratively the "hottest"

### Climat Notes

**T**HE Climatological Services Division is quite proud of its accomplishment in collecting, checking, compiling and printing within 16 days after the end of August hourly and daily precipitation values for all substations and for some private precipitation

gage networks as a special bulletin on hurricane rains in the Eastern States. That was possible because of the almost completely mechanized procedures for processing and publishing climatological data.

At the beginning of the past

Elmira contest of them all—there were two days of 100 degree weather and competition was keen—when the final scores were tallied it was found that the 27 contestants had accumulated a total of more than 15,000 flight miles.

B. L. Wiggin, MIC at Buffalo, was, as usual, assigned as meteorologist to the national meet, and is again credited with rendering outstanding service. Known as "Barney" to the veteran contestant as well as the newcomer, Mr. Wiggin has gained the respect and admiration of all associated with the soaring movement in the United States for his accurate forecasts and his intimate understanding of what soaring pilots need.

### Fan Mail

THE letter quoted below was received at the Hartford Office after the floods from the hurricane rains:

To whom it may concern:

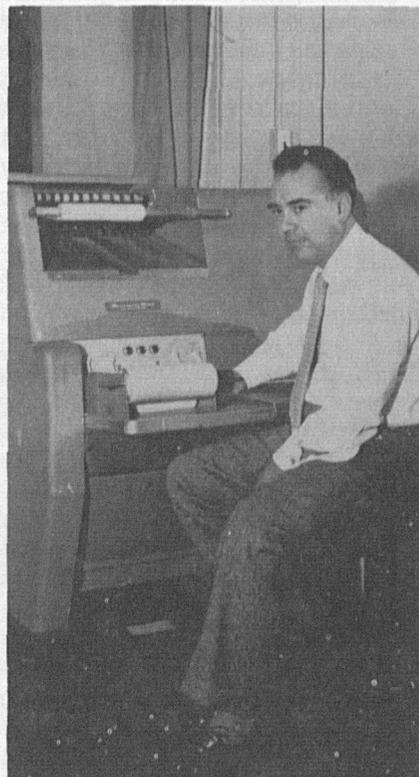
Why don't you dump flour in the Connecticut River to keep it from overflowing its banks. The flour would make a paste of the water and no more water. It would stop the threat of another flood.

## Microfilming of Teletype Collections

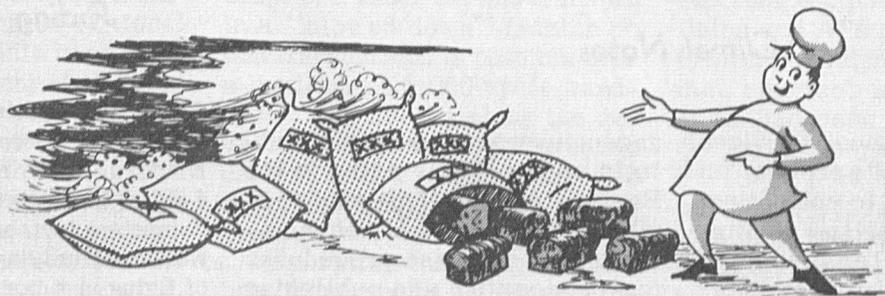
THE Weather Bureau, beginning with data for July 1955, inaugurated a microfilm program which will provide a complete copy of all data transmitted on circuits 8002 and 8003 of Service A, circuits 30 and 31 of Service C, and circuits 8275 and 8279 of Service O, also the Denver circuit 7438 and the Air Force circuit 1L64 (North Atlantic, Europe, and Africa).

The original teletype paper is photographed on 16 mm film, using dual 8 mm images in a continuous strip, exactly as transmitted over the teletype circuits. Any viewer with a magnification of 20 or more diameters is sufficient for reading the film.

A need for an inexpensive means of saving data transmitted over Weather Bureau teletype circuits has existed for a long time, since these circuits represent the only readily available source of strictly synoptic type data. The lack of this type data has probably hindered investigators in their efforts to attack research problems. This should



no longer be the case, for this will provide adequate coverage for any particular synoptic development at low cost.



## Awards

*Archie E. Shaw, Jr.*

ARCHIE E. SHAW, JR. received a cash award of \$100 for sustained superior performance as Chief of Procurement and Supply for the Alaskan region.

In spite of the loss of his two well-trained assistants Mr. Shaw did an outstanding job during the past year. This was primarily due to his thorough knowledge of the supply and equipment requirements of the Bureau, and his mastery of procurement procedures, sources of supply, transportation and distribution problems which are especially difficult because of the remoteness of stations and the severe weather conditions in Alaska.

*George L. Poole*

GEORGE L. POOLE, Assistant Supervisor, Atlantic Weather Project, has been given a superior accomplishment award of \$80 for effecting a reduction in the transportation cost of helium.

Before Mr. Poole's plan was adopted, helium was ordered in small amounts on a ship to ship basis since no storage facilities were available. And even if storage had been possible, drayage charges between ships and the storage point would have cancelled out any savings realizable by volume shipments from Lakehurst, N. J.

Mr. Poole solved this problem by arranging for the storage of up to 176 helium cylinders (23,000 lbs.) at a trucking company's terminal; and for the local drayage by this company (to piers within a radius of less than a mile from their platform) at no added cost. Also the trucking company allows empty cylinders to accumulate so that a cheaper transportation rate is obtained on return shipments in volume.



## Publications Corner

**B**INDING has now been completed for the sets of Monthly Weather Review that were sent in by field stations several months ago and distribution will be made as rapidly as possible. A notice will be issued later for recall of other miscellaneous sets of the Review that stations may want bound. The following publications have been issued during the month of October:

1. Hurricane Rains and Floods of August 1955 (Carolinas to New England): Preliminary Precipitation Data (Revised data will be the subject of Technical Paper No. 26), by Climatological Services Division. 80 pages.

2. Aviation Series: No. 9, Flying Weather Information-What

it Means to the Pilot; No. 10, Ceiling, How it is Determined and What it Means to the Pilot, by Synoptic Reports and Forecasts Division. Each 8 pages.

3. Letter Supplements: 5508, Hurricanes Entering U. S. Mainland, Key West, Fla., to Eastport, Maine 1896-1954; 5509, Summary of Hurricane Occurrences for Years 1915-1954; 5510, Nuclear Bombs and Hurricanes.

4. Change A6, Addendum to Circular O, 4th edition, by Station Facilities and Meteorological Observations Division. 6 pages.

5. Storm Warning Facilities Chart, Cape Hatteras to Brunswick, Ga., by Synoptic Reports and Forecasts Division.

## NEW METEOROLOGISTS IN CHARGE

*Bridgeport, Conn.*

JAMES W. DECKER, Forecaster at Bridgeport, Connecticut, has been selected for the Meteorologist in Charge position at that station replacing Mr. Roger S. Frantz who has transferred to Hartford. Mr. Decker has been with the Bureau since June of 1927. During that time he has served at Cape Henry, Virginia, New York, New York, and Block Island, Rhode Island. He has been assigned at Bridgeport since March of 1951.

*Champaign, Ill.*

LOTHAR A. JOOS, now Meteorologist in Charge at Madison, Wisconsin, has been selected to succeed Mr. Paul F. Sutton at Champaign, Illinois as State Climatologist. Mr. Joos is 44 years of age and entered the Bureau July 18, 1941. Before entering

military service for World War II, he served as an Assistant at Madison and Akron, and upon returning to the Bureau he was assigned to Madison as MIC.

*Harrisburg, Pa.*

PAUL F. SUTTON recently entered on duty as Meteorologist in Charge at Harrisburg, Pennsylvania, replacing Mr. Leslie F. Conover who transferred to Miami, Florida. Mr. Sutton entered the Bureau in November of 1929 at Richmond, Virginia. Since that time he has served at Asheville, N. C.; Missoula, Montana; Chicago and Springfield, Illinois, and Urbana, Illinois, where he was assigned as Climatologist prior to his transfer to Harrisburg.

### *Raton, N. M.*

THE Raton station which was previously closed in 1953 is being reestablished. Mr. William O. Peterson, presently serving as Principal Assistant at Pendleton, Oregon, has been selected for transfer to the MIC position at Raton. He originally entered the Weather Bureau in 1941, having served at Fargo, North Dakota; Madison, Wisconsin; and Seattle, Washington, prior to his assignment at Pendleton in 1948.

### *Worcester, Mass.*

LAWRENCE M. DYE, currently serving as Chief of the Records Services Section of the Climatological Services Division at the National Weather Records Center at Asheville, N. C., has been selected for transfer to the Meteorologist in Charge position of the new station being established at Worcester, Massachusetts. Mr. Dye entered the Bureau in October of 1937 at Omaha,

Nebraska. Since that time he has served on the Atlantic Weather and Thunderstorm Projects and with the Weather Records Processing Centers at Chicago and Chattanooga. He has been assigned to the National Weather Records Center at Asheville for the last four years.

### *Yakima, Wash.*

ROBERT C. BORDERS, Meteorologist in Charge at Fort Wayne, Ind., has been selected for transfer to Yakima, Wash., as Meteorologist in Charge, succeeding Mr. Harry L. Swift, who is being assigned to the Central Office.

Mr. Borders is 44 years of age and entered the Weather Bureau on September 24, 1930. His assignments have been at Detroit, Toledo, Billings, Great Falls, Lewiston (in charge 6 years) and Fort Wayne (in charge since December, 1952).

## RETIREMENTS

### *William J. Houmark*

WILLIAM J. HOUMARK, Supervising Observer at WBAS, Reno, Nevada retired October 31, 1955, after completing over twenty-five years of Federal service, twenty-four of which were with the Weather Bureau.

Mr. Houmark was born in Minden, Nebraska December 24, 1891, and completed high school at Blair, Nebraska. Following graduation from the University of Nebraska in 1916 with a Bachelor of Arts Degree, he taught school for approximately one year. In 1917 he enlisted in the U. S. Army and was commissioned a Second Lieutenant in August, 1918. Upon returning to civilian life following World War I, he was employed as a high school principal. From 1919 to 1926 he was manager and part owner of the Minden Ice Company. Following this, he was a salesman of petroleum products, real estate, and automobiles, and later worked as a highway inspector for the State of Nebraska.

Mr. Houmark was appointed a Junior Observer at Omaha, Nebraska November 2, 1931. He was transferred successively to Fresno, Burbank, San Francisco Airport, and Redding, California; Winslow, Arizona; and Reno, Nevada. Following retirement, Mr. and Mrs. Houmark may be reached at 147 East Liberty Street, Reno, Nevada.

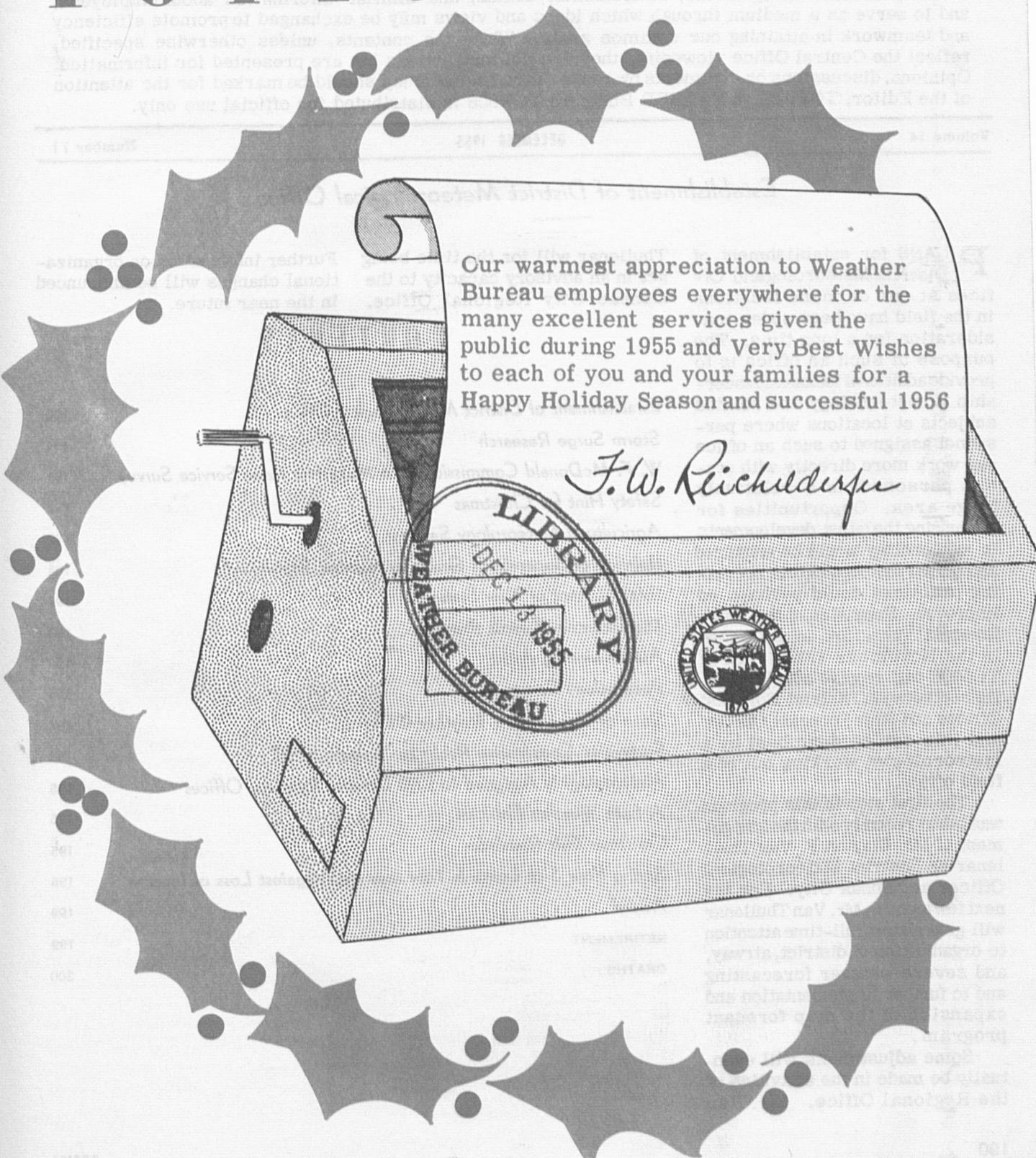


### *Edgar C. Horton*

EDGAR C. HORTON who retired in 1945 after 35 years as MIC at Birmingham, Alabama, passed away October 28 after a lengthy illness. Mr. Horton was in his eightieth year and had worked for the Weather Bureau for 41 years. Friends who wish to communicate with his wife, Mrs. Carrie Bell Horton, can reach her at 4413 Fifth Avenue, South, Birmingham, Alabama. For details of his Weather Bureau service see page 532 of TOPICS for December 1945.

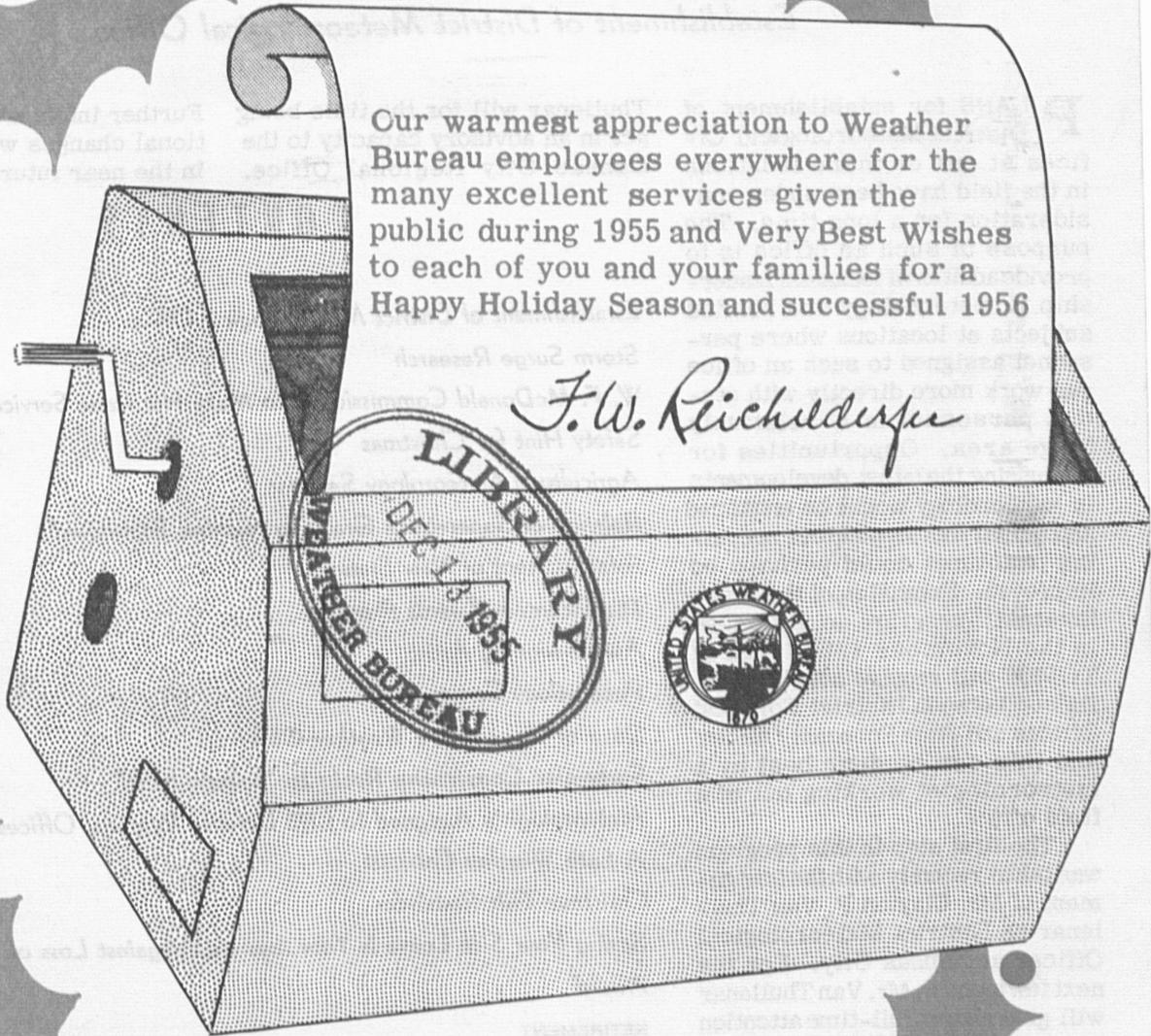
# TOPICS

DECEMBER  
1955



Our warmest appreciation to Weather Bureau employees everywhere for the many excellent services given the public during 1955 and Very Best Wishes to each of you and your families for a Happy Holiday Season and successful 1956

*F. W. Reichelderfer*



WEATHER BUREAU TOPICS is published monthly to inform all employees about newsworthy operations and work programs of the Bureau; to give background on instructions; to carry news of new personnel assignments, retirements, deaths, and similar information about employees; and to serve as a medium through which ideas and views may be exchanged to promote efficiency and teamwork in attaining our common goals. While the contents, unless otherwise specified, reflect the Central Office viewpoint, they are not instructions but are presented for information. Opinions, discussions or comments by readers are invited; they should be marked for the attention of the Editor, TOPICS. WEATHER BUREAU TOPICS is distributed for official use only.

## *Establishment of District Meteorological Office*

**P**LANS for establishment of District Meteorological Offices at one or more locations in the field have been under consideration for a long time. The purpose of such an office is to provide additional technical leadership in meteorology and related subjects at locations where personnel assigned to such an office can work more directly with station personnel in a relatively large area. Opportunities for discussing the latest developments in meteorology would be enhanced and actual meteorological operating practices could perhaps be improved. Expansion of the "map forecast" program as described in the November 1955 issue of TOPICS will require considerable liaison between District Forecast Offices and State Forecast Offices and this can be done best by a meteorologist working out of a field office.

The first step in this program was taken recently with the assignment of Mr. Clayton F. Van Thullenar as District Meteorological Officer at Kansas City. For the next few months, Mr. Van Thullenar will give almost full-time attention to organization of district, airway, and severe weather forecasting and to further implementation and expansion of the map forecast program.

Some adjustments will eventually be made in the activities of the Regional Office. Mr. Van

Thullenar will for the time being act in an advisory capacity to the Kansas City Regional Office.

Further information on organizational changes will be announced in the near future.

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## *Storm Surge Research*

**T**HE inundations of the coasts brought about by the high winds and low pressures of tropical storms have been responsible for more than half of the loss of life and a substantial portion of the property damage due to these storms. Yet the problem of the generation of these storm surges, caught as it is between the fields of meteorology and oceanography has long been in need of more attention by researchers of both sciences.

The tremendous losses from the hurricanes Carol, Edna and Hazel in 1954 have led to a renewed interest in this problem. The hurricanes of 1955 provided an additional stimulus, and a substantial portion of the additional funds appropriated for the current year is being spent in improving our organization and research into methods of forecasting these inundations.

The ultimate goal of this pro-

gram is the development of practical forecast techniques, but our knowledge of the physical processes involved in the generation of these surges is rather limited and some basic research will be required before we can hope for a satisfactory solution to this problem. This means that our program must involve both basic and applied research. For the most part, the empirical research directed toward an improvement in practical forecasting techniques will be accomplished by the storm surge specialists appointed to field stations, and the more basic type of approach will be carried out by the Central Office and research groups at universities and oceanographic institutes. Coordination will be achieved by frequent visits and at least one meeting annually of all interested workers in the field.

The greatest handicap to both

empirical and basic research is the deficiency of data relating to storm tides along the coasts. This deficiency is caused in part by the difficulty of separating the effects of severe weather from the normal astronomical tides, and in part by the difficulty of maintaining water level recorders in the open sea during times of severe weather. Both of these problems are receiving attention, and it is believed that a satisfactory solution to the first problem will be found in a few months, and that we will know how to solve the second problem by the end of the fiscal year. It is planned to install some remote recording tide gages at forecast offices in critical locations and to install a few additional gages during the current fiscal year, but it is unlikely that all of the needs in this phase of the program can be met with the available funds.

## *W. F. McDonald Commissioned to Make Hurricane Service Survey*

**T**HE Chief of Bureau has called on W. F. McDonald, former Assistant Chief of Bureau who retired from active duty last year, to act as a Consultant for gathering information and drafting a summary of the Bureau's present hurricane service capabilities and their use this year. In this, Mr. McDonald was given broad scope for fact finding and

for pulling together in a summary report the nugget material out of which it is hoped to produce something of a "standard operating procedure" for forecast centers and stations concerned with the public use of hurricane warnings and associated advices.

Mr. McDonald began his work in Washington immediately upon receiving the request for his

services, and he hopes to get over the first phase of the study, the fact and suggestion gathering phase, by the middle of December. The plan contemplates advancement to the second phase, a preliminary summarization, in time for the annual conference on hurricane operations in January. The formal report and any agreed-upon recommendations will be finalized thereafter.



### *Safety Hint for Christmas*

**T**O many of us Christmas is not Christmas without a lighted tree to symbolize our happiness, but all too often we hear of Christmas trees catching fire and bringing tragedy to what was a happy scene only moments before. It is the rapid drying of the cut tree that makes it such a fire hazard.

Of course the safest tree is an artificial one, made of non-combustible materials, but the traditional pine, spruce, or fir can be made a fairly safe Christmas tree with a few precautionary measures.

1. Insist on a freshly cut tree - one that has been cut for several weeks is already a dangerous fire hazard.

2. Cut the base of the trunk at a 45° angle and place in a container of water. The large cut surface will enable the tree to take in water to replace some of that which is lost by transpiration.

3. Place the tree as far away from radiators or hot air ducts as possible, in order to slow the drying process.

4. Make sure that all wiring is in good condition, and that light circuits are not overloaded.

5. Even with the above precautions the tree will become dryer and thus a greater fire hazard as each day passes. So plan to get rid of it as quickly as the kids will permit - say seven to ten days at the most.

## *Agricultural Meteorology Seminar*

**D**R. F. A. BROOKS of the University of California has in the past arranged seminars in Agricultural Meteorology for visiting foreign agricultural and meteorological workers. Dr. Brooks has now been asked by the Chief of Bureau to sponsor such a meeting for Weather Bureau employees as a method of promoting interest and progress in the field of agricultural meteorology. Tentative arrangements have been made for this meeting to be held March 19-23, 1956 on the Davis campus of the University of California.

We are planning for this meeting to be a series of lectures and

discussions held from 8 to 5 daily, and presented by leaders in the field of agricultural meteorology. Dr. Landsberg, Director of the Climatological Services Division of the Weather Bureau, will be one of the speakers, with most of the others chosen from the staff of the University of California.

This meeting is open to any Weather Bureau employee and all who will be in the Sacramento area during the time of the seminar are cordially invited to sit in on the meetings.

Invitations to attend these meetings have been sent to the members of the American Meteorological Society Committee on Agricultural Meteorology.

## *Relation of Supervisor's Grade to Number Supervised*

**T**HE Civil Service Commission since the enactment of the Classification Act of 1949 has issued periodic statements for the purpose of eradicating a common misapprehension of some supervisors that their grade or salary rate will be lowered if they suggest ways and means of doing the same work with fewer people. These same supervisors may believe also that an increase in salary rate or grade will result if they can arrange an increase in the number supervised. Since both of these concepts are directly contrary to any management improvement program looking toward the better conservation and utilization of manpower, it is important that this misapprehension on the part of supervisors be dispelled.

Although in some instances

the number of subordinates supervised may be one of the factors considered in surveying a supervisor's position, the effect of this factor is minimized as shown by Section 303 of the Classification Act of 1949 which reads as follows:

"Sec. 303. No appropriated funds shall be used to pay the compensation of any officer or employee who places a supervisory position in a class and grade solely on the basis of the size of the group, section, bureau, or other organization unit or the number of subordinates supervised. Such factors may be given effect only to the extent warranted by the work load of the organization unit and then only in combination with other factors, such as the kind, difficulty, and complexity of work supervised, the

degree and scope of responsibility delegated to the supervisor, and the kind, degree and character of the supervision actually exercised."

Supervisors who initiate management improvement, whether clarification of organizational structure, simplification of work methods, elimination of work program or introduction of labor saving devices, which result in a reduction of the number of personnel supervised, make themselves more valuable to the organization and thus become eligible for advancement to positions of greater responsibility. Also, if the accomplishment is sufficiently noteworthy there is opportunity under the Incentive Awards Program to reward supervisors and teams of supervisors and employees who are responsible for superior performance through management improvement.

The policy of the Bureau with respect to supervisory positions is, of course, the same as that of the Civil Service Commission in that a minimum of emphasis is placed on the number supervised. It is hoped that this statement will encourage supervisors and employees alike to be on the lookout for management improvement procedures or methods which will result in better conservation or utilization of manpower.



**A**N old adage has it "There is nothing certain but death and taxes." Why not wrap these up in a broader generalization that will cover the point more inclusively and say "There is nothing certain but change."



## Establishment of New Stations

**W**ITH the appropriation of additional funds this fiscal year to strengthen the Bureau's Severe Storm Warning Services, a few new stations have been established and a few offices have been reopened that had been closed for economy reasons during the last few years. Most of these new or reestablished stations are part-time offices with small staffs and their primary responsibility is to distribute warnings and advisories to the local communities during periods of severe or threatening weather. The stations are listed below:

Station	Staff	Hours of Operation	Approximate Opening Date
Erie, Pa.	2	8	October 17, 1955
Flint, Mich.	5	24	December 1, 1955
Lancaster, Pa.	1	8	October 17, 1955
Raton, New Mex.	3	16	November 1, 1955
Thomasville, Ga.	2	8	September 28, 1955
Valdosta, Ga.	1	8	To be opened soon
Waterloo, Iowa	2	8	October 17, 1955
Worcester, Mass.	4	16	November 1, 1955

## The Incentive Awards Program

**A** news release from the Executive Branch Liaison Office, The White House, dated October 27, 1955 gave some very interesting statistics on the results from the Government Employees Incentive Awards Act of November 30, 1954. Quoting the news release:

"During the first seven months that the program was in

effect - November 30, 1954 to June 30, 1955 - one employee suggestion was submitted every half minute. One suggestion was adopted every two minutes. One superior performance award was granted every 20 minutes. The dollar value to the Government of adopted suggestions and superior performance averaged \$34,358 every hour.

Number of suggestions received.....	138,000
Number of suggestions adopted.....	35,000
Number of superior performance awards.....	3,850
(This is all awards other than suggestions)	
Total cash awards to employees.....	\$1,519,462
Total savings to the American Taxpayer.....	\$40,724,215

"COMPARISON OF 7 MONTHS RECORD UNDER NEW PROGRAM WITH 1954 RECORD--Figured on an annual-rate basis, the number of suggestions submitted by employees increased by 34%. The adoption rate remained about the same, indicating that the increase did not result in lower quality of suggestions. Dollar benefits to the Government from adopted suggestions increased by 35%. Amount of awards to employees for suggestions increased by 26%. One hundred and two suggestions for every one thousand

employees came in under the new program, as compared with 76 per 1000 in 1954. The number of suggestions adopted per 1000 employees rose from 21 to 26."

The Weather Bureau suggestion rate has consistently exceeded even the accelerated average rate of 102 per 1000 employees. For the period November 1954 through June 1955, the Weather Bureau rate was 134 per 1000 but previously had been as high as 150 per 1000 employees.

### Award-winning Artist

**A**NDY BUCCI, observer-briefer at the WBAS Greenville, South Carolina is also an award-winning artist.

"Landscape of a Windy Day," a highly abstract work by Mr. Bucci, recently took a second prize in the oil painting category of the annual fall exhibition sponsored by the New Orleans Art Association, of which the LSU graduate is a member.

Mr. Bucci's "Girl in a Brown Dress" won a first-place award

last year in the Mississippi Oil Show and is now in the show's permanent collection.

Mr. Bucci became a weather forecaster while in the Air Force, and after his discharge from service, worked a year for the Weather Bureau in his home town of Vicksburg, Mississippi, before entering art school in Chicago. Mr. Bucci decided to return to the weather-watching business, and joined the Greenville Weather Bureau last April.

### Dean of Cooperative Weather Observers

GEORGE W. RICHARDS, Dean of Cooperative Weather Observers in Minnesota, announced his resignation August 31, after 63 years of service at the Maple Plain, Minnesota, Weather Substation.

Mr. Richards, 83, opened the station at Maple Plain and became officially associated with the Weather Bureau on January 1, 1892. His entire life has been spent as a resident of Minnesota.

On December 6, 1951, Mr. Richards was honored by the Secretary of Commerce, Charles Sawyer, and the Chief of the Weather Bureau. The Secretary presented Mr. Richards with a scroll



and a specially bound volume of "The Cooperative Weather Observer" with his name engraved in gold to commemorate Mr. Richards' 60 years of outstanding public service.

On that occasion, Mr. Sawyer said that Mr. Richards represented the highest type of American citizen, "who unselfishly devotes his time and exposes himself to the severest of weather in the service of his government and who is content to do so for the general good he performs."

Mr. Richards' many friends wish him much health and happiness in the years ahead.

### Publications Corner

"**I**NSTRUMENTS Used in Weather Observing", just released, is the first of what we hope will be a series of "popular" 4-page leaflets that will be issued on weather topics of general interest. These leaflets can be adapted for use in schools as general science aids, to stimulate and promote interest in meteorology among students, and as correspondence aids. All the leaflets will be confined to four pages and will be 8 X 10½ inches in size.

The following publications have been issued during the month of November:

Aviation Weather Reporting Stations (chart).

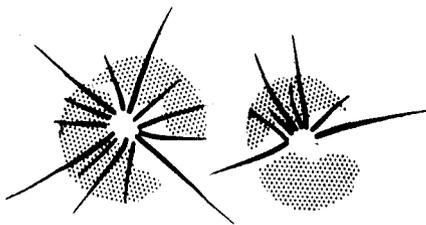
Climatology of the United States: (1) No. 11-13, Kentucky; (2) 11-38, Virginia.

Instructions for Climatological Observers, 10th ed., revised (Circular B).

Instruments Used in Weather Observing. (4 pages.)

Letter Supplements: (1) 5511, Notes on Recent Hurricane Paths

Cont'd. on page 199



## Forty-nine Consecutive Raobs to "balloon burst"

**T**HROUGH force of habit, the Observer at WBAS, Columbia, Missouri, almost inadvertently indicated "balloon burst" as the reason for termination of the 1500 GCT rawinsonde observation on November 15th. In case you are wondering why, the reason is the fact that prior to

that time forty-nine consecutive raobs were evaluated to the bursting point of the balloon. This excellent record was finally broken by a weak or fading signal. The Columbia staff and technicians are to be commended for their contribution to this fine performance.

## Meteorologists Assigned to Civil Defense Regional Offices

**R**ECENT tornado, hurricane and flood disasters have stimulated a growing interest by governmental agencies in organized advance planning to minimize the havoc wrought by such natural phenomena. This development has created a continuing need for meteorological staff assistance to FCDA Regional Administrators and action has been taken to assign Weather Bureau representatives to all seven FCDA Regional Offices. Their assignments, at the Regional level, will be similar to that of the Bureau representative in the

FCDA National Office at Battle Creek, Michigan (TOPICS, August 1955, page 124). Since the advent of "high-yield" nuclear weapons with their enormous fallout potentialities, civil defense at all levels has had to incorporate fallout forecasting in its operational planning. This closer liaison with civil defense also opens up new possibilities of effective dissemination and utilization of severe weather warnings and alerts.

The following meteorologists have been selected for these assignments:

FCDA Region 1, Newton Center, Mass.	: Paul J. Divver, WBAS, Boston, Mass.
FCDA Region 2, Olney, Maryland	: Paul H. Peridier, WBAS, Washington, D. C.
FCDA Region 3, Thomasville, Ga.	: Roland L. Anderson, WBO, Jacksonville, Fla.
FCDA Region 4, Battle Creek, Mich.	: Henry W. Chidley, WBFC, Chicago, Ill.
FCDA Region 5, Denton, Texas	: Thomas L. Gibson, WBAS, Fort Worth, Texas
FCDA Region 6, Denver, Colo.	: Harley B. Laird, WBAS, Denver, Colo.
FCDA Region 7, Santa Rosa, Calif.	: Joseph V. McBride, WBAS, San Francisco, Calif.

Each of these meteorologists has had considerable operational experience in the Bureau, is thoroughly familiar with his particular region, has taken an interest in civil defense, and has shown an aptitude for both technical service and the diplomatic handling of official contacts. The entire group is receiving a concentrated 7-day briefing on all aspects of their assignments early this month in the Central Office and Battle Creek.

## A Late Weather Forecast

WAYNESBURG, PA. (AP)—What goes up must come down even if it takes several years. A weather balloon with its parachute still attached was found hanging from a tree. Inscribed on the instrument box was a faded but still legible: "Lexington, Ky. Dispatched July 26, 1952."

## Christmas Gift Reminder

**E**ACH Christmas we face the question—if I receive a Christmas gift from a person or firm with whom I have official relations, what should I do? The Agency Inspection Staff reminds us that it is our responsibility to graciously return it with a note of thanks for the sender's thoughtfulness, and the seasons greetings. By doing this, you will eliminate any possible embarrassment and criticism which may develop either to you or the Department.

## *Saving Your Sick Leave is Your Insurance Against Loss of Income*

**T**HE information on the following four pages was issued in pamphlet form by the Army

Finance Center in Indianapolis and called to our attention by the New York Regional Office. We

think it is too valuable and interesting to withhold, so here it is for the benefit of all.

UNITED STATES  
GOVERNMENT

Dear Federal Employee:

December 1952

Are you passing up something good? In these days of making dollars count, let's talk in terms of **THRIFTINESS**. Every American thinks he recognizes a good **BARGAIN**... He likes to get his **MONEY'S WORTH**...He expects to give and receive a **SQUARE DEAL**.

But facts and figures from a medical survey indicate we may be over-looking a good thing - **ACCRUED SICK LEAVE**. Here is the best **HEALTH & ACCIDENT INSURANCE** you can get. And **YOU** don't have to buy it! It is given to you **ABSOLUTELY FREE**. Such a gift should not be thrown away. Yet survey figures show **FEDERAL EMPLOYEES** spend millions of dollars for sick leave benefits each month. This represents thousands of man-days lost in illness. A little more than **HALF THIS AMOUNT** is for illnesses of 1-2-or-3 days-'small illnesses.'

As a thrifty American, are you getting **YOUR MONEY'S WORTH** when you 'spend' a day of sick leave? It is your privilege, but remember: **SAVED SICK LEAVE MEANS PROTECTION** when real sickness strikes you down... **FULL PAY CHECKS** coming to your door... **ECONOMIC SECURITY** for you when you need it most.

Spend this, which is given to you, wisely. Don't throw it away. Every day of sick leave you save is money in the bank for the future.

Sincerely,

## SICK LEAVE DOLLARS & SENSE

Use Sense  
In Spending  
Your  
Sick Leave

Accrued  
Sick Leave  
Insures  
Against Loss  
of Income

Can be  
a Life  
Saver

Pays  
Dividends  
-  
Assures Full  
Salary

13 Days  
Sick Leave  
to Save  
Each Year

Most of us are interested in making sure we have some kind of insurance against loss of income. Those of us who work for a living know what it means to get our pay checks regularly - lodging, food, clothing, care for our families. This pay check spells S - E - C - U - R - I - T - Y. Take it away for 1-2-3-4 weeks, and to most of us it would mean ECONOMIC RUIN. But there is a way to guarantee that you can be assured of an income in time

of prolonged illness - and it WON'T COST YOU ONE CENT.

The combination of saving your sick leave and participating in your own health and accident insurance gives generous protection for accident and illness. Below are figures showing what it would cost you to buy insurance against loss of income, as compared to what it costs you to SAVE YOUR SICK LEAVE to use as income insurance in case of illness.

### PRIVATELY-PURCHASED INSURANCE AGAINST LOSS OF INCOME

1. Most Insurance Companies will only insure for 80% salary.
2. 'Average' policy pays benefits of \$50 per week - \$100 bi-weekly.
3. No benefits paid for first 2 weeks illness 'waiting period.'
4. Average 4-6 weeks before first check received. Sick reports sent in monthly.
5. Benefits pro-rated at 7 days per week.
6. Cost of average Health & Accident policy for average paid worker - \$95 per year.

### YOUR FREE SICK LEAVE... INSURANCE AGAINST LOSS OF INCOME

1. Accrued Sick Leave guarantees full salary.
2. 'Average' salary equals about \$125 bi-weekly.
3. Benefits start with first day of illness - no waiting period.
4. No loss of time in receiving checks - mailed bi-weekly as medical certificates are received.
5. Sick leave deducted at 5 days per week - gives 7 days coverage.
6. No cost to employee - accrual automatic with employment. . .  $\frac{1}{2}$  day each pay period - 13 days per year.

FOR EXAMPLE:

As an 'Indefinite Employee' with 2 years service, you become ill and are away from work 4 weeks. Here's what it would cost you to insure your income

COST:

\$ 95 per year premiums  
x 2 years (employment)  
\$ 190 paid in premiums

RECEIVES:

\$ 50 weekly benefit  
x 2 weeks only  
(waiting period of 2 weeks)  
\$ 100 total benefits

PROFIT:

\$ 190 paid premiums  
\$ 100 benefits received  
\$ 90 LOSS

through INSURANCE and what it would cost you to 'cash in' on ACCRUED SICK LEAVE for 20 days you have saved for sickness emergency.

COST:

No money . . .  
Saving sick leave each month

RECEIVES:

\$ 125 bi-weekly salary  
x 2 pay periods  
\$ 250 full salary

PROFIT:

\$ 250 full salary  
0 costs  
\$ 250 PROFIT

EVERYTHING TO GAIN AND NOTHING TO LOSS . . .

Saving your sick leave is like carrying insurance on your car. You may carry car insurance for years and never need it. But you wouldn't think of canceling it - you know one bad accident without insurance can mean financial ruin for you. Four weeks of sickness with no sick leave to cover time off can also mean ECONOMIC BANKRUPTCY for low-salaried employees. Permanent employees as well as older employees know that the sick hazard increases as we

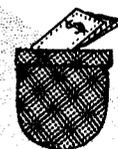
grow older. But for everyone there is everything to gain and nothing to lose in saving sick leave. Sick leave earned at the GS-2 rate of pay may pay off at the GS-7 rate!

This 13 days of sick leave a year is credited to your account - with no limitation on the amount you can save - Handed to you ON A SILVER PLATTER! Free of charge - No dues, no deduction, no premiums - Costs nothing to get, but PAYS BIG DIVIDENDS TO SAVE.

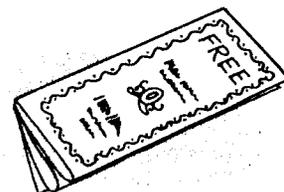
SAVING YOUR SICK LEAVE

MEANS:

1. MONEY IN YOUR POCKET  
Time off for real sickness needn't cost one cent. . .  
- if sick leave is saved for emergency  
Saved sick leave means FULL PAY CHECKS. . .  
- coming to your door when sickness strikes  
The sick leave privilege. . .  
- is YOURS TO waste or SAVE and CASH IN



2. FREE INSURANCE  
Approved sick leave acts. . .  
- as PROTECTION to you  
Saving your sick leave. . .  
- GUARANTEES this protection  
Make sure your sick leave. . .  
- is used to. . .  
YOUR BEST ADVANTAGE



3. GOLD IN THE BANK  
Accrued sick leave. . .  
- is as GOOD AS GOLD-no limit to the amount  
Build up your account. . .  
- real sickness can be COSTLY  
Having to use annual leave for sick leave. . .  
- costs you money that could be spent for VACATION - RECREATION - RELAXATION



Cont'd. from page 194

Along the Atlantic Coast; (2) 5512, Hurricanes Affecting North and Middle Atlantic States; (3) 5513, Tropical Storms of 1955; (4) 5514, Notes About Weather Bureau Publications.

Reading the Weather Map (chart intended especially for use by Pilots).

Technical Papers: (No. 15, Maximum Station Precipitation for 1, 2, 3, 6, 12, and 24 Hours - (1) Part XIII, Kentucky; (2) Part XIV, Louisiana.

Terminal Forecasting Reference Manuals: (1) Capital Air-

port, Springfield, Illinois; (2) Columbia Municipal Airport, Columbia, Missouri; (3) Natrona County Airport, Casper, Wyoming; (4) Minneapolis-St. Paul International Airport, Minneapolis, Minnesota; (5) St. Joseph County Airport, South Bend, Indiana.

The Aviation Forecast (chart).

The Aviation Weather Report (chart).

Visibility. How it is Determined and What it Means to the Pilot. Aviation Series No. 11.

World Sunshine Maps.

## Award

*Hubert D. Bagley*

HUBERT D. BAGLEY'S consistently superior performance during the past year has earned him a \$200 award. As substation inspector for Alabama and Georgia, Mr. Bagley has repeatedly demonstrated his ability to get things done in a highly efficient manner. His successful liaison work with cooperative observers, and his intelligent solutions to problems assigned to him attest to his overall competence. On occasion, Mr. Bagley has been called upon to straighten out unusually troublesome situations. His promptness and effectiveness in dealing with these situations have brought him the highest praise, and have re-

flected credit on the Bureau.

After serving in the U.S. Navy for eight years, Mr. Bagley entered the Weather Bureau in October of 1945, as a Meteorological Aid, at Atlanta, Georgia. In December of the same year he was transferred to Rome, Georgia where he remained until June of 1949 when he was promoted and transferred to Atlanta, Georgia as Hydrologic Inspector. In 1950, he was reassigned and transferred to his present position. Mr. Bagley is a native Georgian and holds the rating of Chief Aerographers' Mate in the United States Naval Reserve.

## RETIREMENTS

*Martin R. Hovde*

ON September 20, 1904, a 19 year old boy joined the Weather Bureau at the Minneapolis office as a messenger boy. Fifty-one years later on November 30, 1955, Martin R. Hovde retired in his native Minneapolis leaving behind a most enviable record.

In his letter of November 25, 1955, to Mr. Hovde, the Chief of the Bureau wrote, "In reviewing the record we find your distinguished career is not limited to a few outstanding accomplishments - it is rather a record of over a half-century of sustained highly effective service and con-

stant devotion to duty."

From 1906 to 1913 he saw service in Sandusky, Ohio; Erie, Pennsylvania; Nashville, Tennessee; and Minneapolis. For the next seventeen years, he was in charge of the station at Devil's Lake, North Dakota, where he advanced to the position of Junior Meteorologist. In April of 1930, Mr. Hovde was promoted to Assistant Meteorologist and put in charge of the St. Paul office.

After two years at St. Paul, he was transferred to Huron, South Dakota, where he remained for one year. In this short space of time, Mr. Hovde won the confidence of the people of Huron because of his friendly interest in their problems. Although Mr. Hovde was at Huron during a terribly dry season, his personal encouragement and active participation in a "Safer Farming" campaign endeared him to the people of Huron.

On September 21, 1934, Mr. Hovde was promoted to Associate Meteorologist, transferred to Minneapolis and placed in charge of the Climatological Program for the State of Minnesota, a position he has filled with distinction ever since.

Throughout his career, Mr. Hovde has been active in civic affairs. He is a member of the AMS, Masonic Lodge, and a past president of the Twin Cities Federation of Business Associations. Mr. Hovde has always given freely of his time for talks to luncheon clubs, schools, churches, Boy Scouts, and is the local weather counsellor for the Boy Scouts. It is obvious that Mr. Hovde has been, and will continue to be, an active and useful member of his community.

Mr. Hovde's distinguished career has also served as an inspiration to his family. The Hovdes have four children. One son, Frederick Lawson Hovde, is President of Purdue Univer-

sity; another son, John, is supervising district forecaster at Chicago; a daughter, Ruth, is an assistant professor in medical technology at the University of Minnesota; and another daughter, Elaine — Mrs. Elaine Wagner — is an active civic leader in Waterloo, Iowa.

At a dinner in honor of Mr. Hovde on the eve of his retirement, November 29, 1955, his associates and many friends joined in Dr. Reichelderfer's tribute, "Your career as a public servant has been outstanding — more than a half century devoted to the safety and welfare of the people and carried on with the high standards of the Weather Bureau."

Mr. Hovde's present address is 5832 Oakland Avenue, Minneapolis, Minnesota.

#### *William M. Labovich*

On November 30, 1955, Mr. William M. Labovich retired after more than forty-five years of Weather Bureau service. Except for a short period of military service during and immediately following World War I, Mr. Labovich's Weather Bureau service has been continuous. He began his career in 1910 as a messenger at Minneapolis, became an assistant observer in 1914, and entered military service in March of 1918. In July of 1919, Mr. Labovich returned to the Weather Bureau as an observer at Milwaukee, Wisconsin. In July of 1924, he became an Assistant Meteorologist and in September of 1933 was transferred back to the City Office at Minneapolis where he has remained until the present time.

Mr. Labovich lives at 1124 Irving Avenue, North, Minneapolis 11, Minnesota.

#### *George C. James*

GEORGE C. JAMES, Warehouseman in the Procurement and Supply Section of the Central Office, voluntarily retired November 30 after more than 37 years of Government service.

Mr. James began his government career with the Weather Bureau in 1915. In 1917 he was called to active duty in the U. S. Army and served with Company D, 511th Engineers until June of 1919. On his return to civilian status, Mr. James was employed by the Army Quartermaster Corps until October of 1920, when he returned to the Weather Bu-

reau. He has remained with the Bureau ever since except for the years 1943 - 1945 when he worked for the Federal Works Agency.

Mr. James was born in 1893 in Brunswick County, Virginia and attended grammar school in the town of Brunswick, Virginia. He received his high school education at the Armstrong school in Washington, D. C. After retirement, Mr. James plans to live on his farm in Lawrenceville, Virginia. Friends may reach him by writing to his home at 148 Adams Street, N.W., Washington, D. C.



#### *Wilfred H. Grace*

WILFRED H. GRACE, Meteorological Aid, at Del Rio, Texas died suddenly on November 3, 1955. He served two periods in the Weather Bureau, the first at Dubuque, Iowa from April 1948 to November 1948 and at Del Rio from March 1, 1950 until the time of his death. Mr. Grace is the brother of Joseph A. Grace who is Personnel Officer in the Fort Worth Regional Office.

#### *William K. Schneider*

WILLIAM K. SCHNEIDER, Meteorologist at the Weather Bureau Office, Lincoln, Nebraska died November 20, 1955.

Mr. Schneider was born at Cedar Falls, Iowa, October 25, 1914, and completed three years towards an engineering degree at the University of Wyoming before entering the Weather Bureau at Casper, April, 1940. He served in Alaska over four years as an Observer at Nome and

Barrow. He returned to the States at Grand Junction, Colo., and about a year later transferred to the Regional Office MOBEU. In November 1947, he transferred to Lincoln. Mr. Schneider received a citation for heroic action in extricating an employee from a disastrous hangar fire at the Lincoln Airport. The details of this citation were described in TOPICS, June 1949. He is survived by his wife and daughter who reside at 1611 South 6th Street, Lincoln 2, Nebraska.

#### *John B. Harris*

JOHN B. HARRIS, who retired from the printing plant at the Weather Bureau Office, Louisville, Kentucky in 1948, passed away recently at the age of 76. Mr. Harris entered the Weather Bureau service November 11, 1907, and served for forty-one years. Mrs. Harris can be reached at 307 Breckinridge Lane, St. Matthews, Kentucky.