

U. S. DEPARTMENT OF AGRICULTURE

U. S. WEATHER BUREAU

CHARLES F. MARVIN, Chief

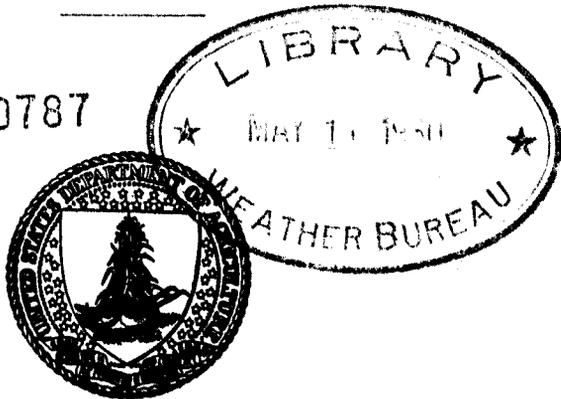
WEATHER BUREAU
TOPICS (AND PERSONNEL)

WITH
INDEX

RAREBOOK
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1925-1929

JANUARY, 1925-DECEMBER, 1929

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WASHINGTON
WEATHER BUREAU OFFICE

National Oceanic and Atmospheric Administration Weather Bureau Topics and Personnel

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WEATHER BUREAU TOPICS AND PERSONNE

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WEATHER BUREAU TOPICS AND PERSONNEL

JANUARY, 1929

REPORTS OF AIRCRAFT ACCIDENTS

In the May, 1928, number of TOPICS, page 308, officials in charge of all stations were directed to submit reports of all aircraft accidents occurring within the areas for which those stations furnish weather service. These reports are proving to be of great value and are often consulted by officials of the Department of Commerce. At the request of that department, officials in charge of all stations are directed hereafter to furnish these reports in duplicate, forwarding both copies to the Central Office. One copy then will be turned over to the Department of Commerce for information and use of its Aircraft Accident Committee.

NOTIFICATION FOR TELEGRAPHING FROST WARNINGS

Observers are reminded that the season is approaching when it will be necessary to notify forecast centers to begin frost warnings for their localities. It is desired that they bear this in mind so that prompt notification will be given. Such notification should be in accordance with the Circular of March 15, 1928, which specifies that the words "warnings" and "cease" shall be sent by separate telegrams when notification can not be effected within 24 hours by mail. When the information is sent by mail, it should be made the subject of a separate letter and should not be added to forms containing other data or information.

TELEGRAPHIC DISTRIBUTION OF OBSERVATION REPORTS ON SUNDAYS AND HOLIDAYS

On December 27, 1928, a letter was sent to all stations (except the forecast centers) to which reports are telegraphed under the new system, requesting information as to whether or not such reports are required on Sundays and legal holidays.

Fifty-six stations reported that full service as now given is not required. Some indicated that the reports were needed in the a. m. and not in the p. m., while others wished the service to continue as at present, except during portions of the year. Arrangements will be made at an early date to discontinue Sunday and holiday a. m. service in accordance with the recommendations made in each case. Only a few stations reported no need for Sunday and holiday p. m. service, therefore p. m. reports will be continued in all cases. The stations affected will be notified by separate letter. An official in charge not receiving such letter will under-

stand that there will be no change in present arrangements, so far as his station is concerned.

FOG SYMBOL FOR WEATHER MAPS

Beginning with January 2, 1929, the symbol "F" to indicate fog was added to the Washington Weather Map. Future printings of base maps for station use will include this symbol in the explanatory notes. It is desired that the symbol be used at all stations after the present supply of base maps is exhausted, but there is no objection to this being done at once if an appropriate note be printed on the map in explanation of the symbol.

REPRINTING MAP A1

The Central Office has under consideration the redrawing and reprinting of Map A1, used at stations for the charting of current weather reports. Suggestions as to any changes that may advantageously be made in preparing the new drawing are requested from stations using this chart.

"DEAD LINE" IN ACCOUNTING FOR TELEGRAPHIC OBSERVATIONS

Instructions in the December, 1928, number of TOPICS AND PERSONNEL, under the caption "Late Telegraphic Reports", provide that reports received after 9:35 a. m. and p. m. are not to be counted.

It is requested that the Central Office be furnished, at the termination of each month, a report of all authorized observations (listed daily, a. m. and p. m., separately) received after this "dead line" time.

WIND AND SUNSHINE RECORDS FOR DAVENPORT STATION

Owing to the erection of higher buildings around the Davenport office and the prohibitive cost of renting space and necessary telephone wires for a roof exposure on such buildings, satisfactory wind and sunshine records can not be made at the Davenport station. Therefore, beginning January 1, 1929, the wind and sunshine records made on a 50-foot tower at Moline Airport, 7 miles south-southeast from Davenport, will be used as the official Davenport data. Records will be continued at Davenport until January 1, 1930, for comparison.

INCREASED ELEVATION OF ANEMOMETER AT SPRINGFIELD

On November 1, 1928, the station wind instruments at Springfield, Ill., were moved to the Abraham Lincoln Hotel. The anemometer is now 191 feet above the ground, which is 100 feet above its former location. The present exposure is practically free from obstruction. Comparisons for two and one-half months show 43 per cent increase.

RAIN TRACE CATCHER

Instructions contained in TOPICS AND PERSONNEL for September, 1928, requiring the continuous exposure of a rain trace catcher are hereby

modified to permit the discontinuance of the apparatus in the discretion of the official in charge. Difficulty in distinguishing rain from dew, fog, etc., at a number of stations warrants this modification.

NEPHOSCOPES

In order that Weather Bureau nephoscopes may be utilized to the fullest extent in aiding local officials to keep informed through cloud observations of the movement of air currents above the reach of surface instruments, officials in charge are authorized in their discretion to remove the nephoscope to some convenient location. The new location may be indoors by a window, or elsewhere in a place preferably sheltered from rain, even though only a portion of the sky is within range. The large double-flanged stand is easily oriented and leveled.

The concrete base provided at some stations and the copper cover may be disposed of when no longer required.

The cover is not really necessary, even where the nephoscope is used outdoors, since the mirror may be readily carried to a sheltered place. In several instances, one resulting in personal injury, copper covers have been blown from the roof. These covers should not be continued in use where there is a possibility of their being blown into the street.

AIRWAY OBSERVERS' WEATHER REPORT, FORM 1180

On the next printing of this form, a column will be provided to show "Field condition", preceding the column "General condition". Under this additional heading should be given any information relative to the condition of the field, such as "field covered with a certain depth of snow", "field soft", "hard ruts", etc., and information relative to any obstructions on the field that would make landing and taking off hazardous, such as "wrecked aircraft on the run-way", etc. When the field condition is good, "field good" should be stated. At airports this information should be obtained from the airport managers by the employee making the weather report.

The column headed "Remarks" on the old forms can be used for entering "Field condition", pending the receipt of new forms.

The time of taking the observation should be shown in the column headed "Time" and the time of filing the telegraphic message should be given under "Remarks".

Weather Bureau Offices having airway stations under their supervision should convey the foregoing instructions, which become effective immediately, to the airways observers.

RATES FOR ELECTRICITY, GAS, AND WATER

To comply with recent instructions of the Comptroller General, station officials are requested to forward to this office the contract, agreement, or schedule of rates covering electricity, gas, or water furnished as a continuous service, both at first-order stations and at substations under

their supervision. If no such contract, agreement, or schedule of rates is on file, it should be procured from the companies concerned. Where a schedule of rates is furnished, it should clearly indicate the specific rates therein which apply to the service rendered the Weather Bureau. Each contract, agreement, or schedule should show that the rates proposed are those authorized by public service commissions exercising competent rate regulation.

TELEGRAMS RESERVING HOTEL ACCOMMODATIONS

The General Accounting Office calls attention to the inclusion, in vouchers covering telegraph service, of numerous telegrams reserving hotel rooms or canceling such reservations, and requests that the attention of employees be directed to paragraph 57 of Government Travel Regulations, which reads:

Telegrams at Government rates reserving hotel accommodation shall be paid for in cash and the charges therefor included in subsistence expenses for initial date of the period for which the accommodations are occupied.

TELEPHONE NUMBERS ON TELEPHONE RENTAL VOUCHERS

In preparing Standard Form 1034 for telephone rental expenses, station officials are requested to insert the telephone number after the caption "Payee's Acct. No." on the vouchers. This will enable the Central Office to place the numbers on the address slips which accompany the checks and will obviate difficulties now experienced by telephone companies in identifying accounts.

USE FORM 4020B FOR REQUESTING FORMS, ETC.

Requests for forms and for small publications, such as "The Weather Bureau" and "Explanation of the Weather Map", are sometimes being made on Stores Requisitions (Form 2044). In the interest of economy, it is desired that all such requests be made on Form 4020B, as formerly.

PILOT BALLOON OBSERVATIONS AT NIGHT

In addition to the precautions suggested in Topics for November, 1928, those indicated below have been found helpful at Hadley Airport when using candles and paper lanterns in making pilot balloon observations at night in windy weather.

The lantern is only partly distended; the cover is almost sealed shut; and the wick of the candle is cut about half away in thickness, leaving half, or slightly less, the number of wick fibers for the flame to come from for the first few minutes, thus giving a shorter blaze and a chance for a safer get-away.

PILOTS CALLING FOR WEATHER REPORTS

Calls made by pilots for weather reports, when forced down on account of weather over routes where weather reporting service has been established, should be made to the Weather Bureau, preferably to the airport

office instead of to the Airways Communication stations. Such calls will be charged to the Weather Bureau.

NEW FORM 1110A

Stations making single-theodolite pilot balloon observations are requested to make requisition for new Form 1110A. On receiving the new forms, any old Forms 1110 on hand should be returned to the Central Office, marked for "Printing Division".

TRANSPORTATION REQUESTS AND IDENTIFICATION CARDS

Central Office records show that a number of unused transportation requests and identification cards, issued to employees for official travel, have not been returned as directed by the printed instructions mailed with them. Such requests and cards should be promptly returned if the travel for which they were issued has been completed.

FORWARDING SUBSCRIPTIONS TO PUBLICATIONS

The Superintendent of Documents of the Government Printing Office has requested that, in forwarding money for subscriptions to publications, station officials use a separate sheet for each address and indicate clearly the publication for which the remittance is made.

SUBSCRIPTIONS FOR STATION PUBLICATIONS

In forwarding money for subscriptions to Weather Bureau publications issued at stations, the name and address of the subscriber should always be given.

BROKEN ANEROID BAROMETERS

Ordinary aneroid barometers broken at airways stations should be transferred to the supervising center for subsequent utilization there of parts in making minor repairs to other instruments. Recently-purchased instruments have their parts interchangeable.

Quantity production makes possible the purchase of ordinary aneroids at a price so low that repairs other than such replacement of parts as can be made by Weather Bureau officials are not warranted.

PRESERVING RUBBER BALLOONS

A means of prolonging the elastic qualities of rubber balloons is in use in certain foreign countries. It has been found that keeping the balloons in a compartment where a quantity of turpentine is allowed to evaporate adds appreciably to the life of the rubber. This scheme has recently been adopted at the Central Office for keeping sounding balloons.

It is also important not to allow the balloons to remain in temperatures above 75° F., nor as low as 32° F. Additional precautions against deterioration are a generous covering of talc and occasionally changing the position so as to avoid permanent creases.

VERIFYING WIND VELOCITY AT MILWAUKEE

Beginning February 1, 1929, the verifying wind velocity for storm warnings at Milwaukee, Wis., will be 34 miles an hour for all directions.

APPRECIATION OF WEATHER SERVICE TO THE QUESTION MARK

Major Carl Spatz, in charge of the airplane *Question Mark* during the recent refueling test, thanks our San Diego station for "accurate weather information during the entire period of the flight of the *Question Mark*", and adds: "As you of course know, accurate meteorological data were of utmost importance and their use enabled us to stay aloft when, without them, it is possible we might have been forced to descend much earlier".

INSTRUCTIONS NO. 15 AND ASSIGNMENTS OF EMPLOYEES

Instructions No. 15, 1928, the only general Instructions issued during the calendar year, were mailed to all stations on January 9, with December TOPICS.

Assignments of Commissioned Employees as of January 1, 1929, was mailed on January 28 to all stations.

Any station that did not receive these publications will please notify the Central Office immediately.

FEDERAL BUSINESS ASSOCIATIONS

Weather Bureau officials have been elected to office in local Federal Business Associations as follows:

Messrs. J. P. McAuliffe, Corpus Christi, and R. H. Sullivan, Columbia, S. C., elected president; Mr. E. C. Horton, Birmingham, elected vice president; Messrs. J. F. Jungermann, Columbia, S. C., and S. S. Schworm, Charlotte, elected secretary.

DEATHS

Mrs. Ruby S. Hotze, retired, died in this city on January 3, 1929, at the age of 85. Mrs. Hotze, an expert translator, was employed in the Weather Bureau Library for many years. Further information may be found in TOPICS for July of 1920.

Lieut. Robert B. Watkins, U. S. A., retired, died January 14, 1929. Lieutenant Watkins was connected with the Signal Corps, as private, sergeant, and second lieutenant, from 1873 until transferred to the cavalry in 1891.

Mr. Edward M. Mattison, retired, died January 23, 1929, in this city. Mr. Mattison was a Signal Corps veteran, having enlisted December 25, 1874. A brief outline of his service may be found in the July, 1920, number of this publication.

CHANGES IN PERSONNEL

The following, relative to changes in the personnel of the Weather Bureau during the month of January, 1929, is published for the *exclusive* information of employees of the Weather Bureau:

Appointments, promotions, reductions, etc.

Name	Station	Remarks
Adams, Mrs. Ellen J.	Washington, D. C.	Assistant clerk-stenographer, name changed on rolls from Miss Ellen J. MacKenzie.
Aldredge, Robert C.	Macon, Ga.	Appointed junior observer at \$1,440.
Booth, Thomas W.	San Francisco, Calif.	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Brown, Claude V.	Red Bluff, Calif.	Promoted to junior meteorologist at \$2,000 from observer at \$1,800.
Cagle, Cecil.	Atlanta, Ga.	Assistant observer, granted leave without pay from January 1 to March 31, 1929, on account of illness.
Cavanaugh, Daniel J.* ..	Buffalo, N. Y.	Minor observer, granted leave without pay from December 10, 1928, to March 9, 1929, on account of illness.
Cole, Charles E., jr.*	Greensboro, N. C.	Minor observer at \$1,020, appointment terminated; record, unsatisfactory.
Crawford, Gerald P.	Broken Arrow, Okla. ...	Junior observer, restored to duty on February 1, 1929, from leave without pay.
Cummings, John A.	Memphis, Tenn.	Appointed observer at \$1,860, by reinstatement.
Doering, Carroll J.	Washington, D. C.	Promoted to scientific aid, SP-5, at \$1,800, from assistant observer at \$1,620.
Drawbaugh, William B. ..	Washington, D. C.	Promoted to scientific aid, SP-5, at \$1,800 from assistant scientific aid, SP-4, at \$1,680.
Fangman, Leo J.	Washington, D. C.	Scientific aid, SP-5, at \$1,800, resigned; record, excellent.
Guern, Cecil R.	Los Angeles, Calif.	Promoted to observer at \$1,800 from assistant observer at \$1,620.
Hall, Bertram E.	Sheridan, Wyo.	Assistant observer at \$1,680, resigned; record, good.
Haynes, Frank.	Macon, Ga.	Junior observer at \$1,440, resigned; record, excellent.
Haynie, Aubrey L.	Amarillo, Tex.	Appointed minor observer at \$1,020; temporary appointment terminated.
Jarvis, Karl H.	Sacramento, Calif.	Minor observer at \$1,020, resigned; record, excellent.
Johnson, Clinton A.*	Greensboro, N. C.	Appointed minor observer at \$1,020, pending certification of eligibles.
Lane, Joseph J.	Cape Henry, Va.	Appointed skilled laborer at \$1,140, temporary appointment terminated.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Lindquist, Harold D....	Portland, Oreg.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Lothman, Arvy A.....	Portland, Oreg.....	Appointed junior observer at \$1,440.
McGuire, Floyd E.....	Oklahoma City, Okla...	Appointed junior observer at \$1,440; appointment as under observer at \$1,260 terminated.
Maguire, Francis A....	Philadelphia, Pa.....	Minor observer at \$1,080, resigned; record, excellent.
Rabbitt, George G.....	Washington, D. C.....	Appointed assistant messenger, Cu-2, at \$1,080, by transfer from Bureau of Agricultural Economics.
Renstrom, Kenneth S...	Portland, Oreg.....	Assistant observer at \$1,620, resigned; record, fair.
Smith, Julius C.....	Redding, Calif.....	Promoted to assistant meteorologist at \$2,600 from junior meteorologist at \$2,100.
Staples, Lester A.....	Los Angeles, Calif.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Thompson, Jack C.*....	Sacramento, Calif.....	Appointed minor observer at \$1,020, pending certification of eligibles.
Tugman, Alfred B., jr...	Washington, D. C.....	Promoted to junior clerk, CAF-2, at \$1,440 from messenger, Cu-3, at \$1,200.
Wade, William B.....	Albany, N. Y.....	Minor observer, salary adjusted to \$1,140 from \$1,080.
Wilcox, George E.....	Cheyenne, Wyo.....	Assistant observer, leave without pay extended to April 26, 1929, on account of continued ill health.
Willett, Hurd C.....	Washington, D. C.....	Assistant meteorologist, P-2, at \$2,600, resigned; record, excellent.

* Indicates temporary appointment.

Changes in assignments

Name	Relieved from—	Assigned to—
Brown, Claude V.....	Los Angeles, Calif.....	Red Bluff, Calif., in charge.
Reed, Wilson, jr.....	Detroit, Mich.....	New York, N. Y., assistant.
Terry, Cecil T.....	Spokane, Wash.....	Los Angeles, Calif., assistant.



Chief of Bureau.

WEATHER BUREAU TOPICS AND PERSONNEL

FEBRUARY, 1929

NEW SYSTEM FOR TELEGRAPHING FORECASTS FROM CHICAGO

Arrangements have been made with the Western Union Telegraph Company whereby there will be inaugurated on April 1, 1929, a system for the distribution of a. m. forecasts issued at Chicago. The system will be similar to the one inaugurated at Washington on December 2, 1928, which was described in the November, 1928, number of TOPICS AND PERSONNEL.

REVISED GOVERNMENT TRAVEL REGULATIONS

Revised Government Travel Regulations, effective March 1, 1929, are being mailed with this number of "Topics" to all stations and to employees that are required to travel frequently. All employees that travel, even if rarely, should look carefully through the new regulations to ascertain the changes made in revision, and should note particularly paragraphs 45 (b), 47, 48, and 60 (a).

ANNUAL INSTEAD OF SEMIANNUAL REQUISITIONS FOR SUPPLIES

A plan for stations to submit annual instead of semiannual requisitions for miscellaneous nonperishable office supplies (see paragraph 792, Station Regulations) is under consideration at the Central Office. The omission of one of the two requisitions and shipments within the year will result in a material saving in clerical labor, packages, packing, and transportation. Before deciding the question, however, it is desired that every station report promptly whether or not it will be seriously inconvenienced (1) to store a year's supplies and (2) to foresee what supplies will be needed for such period.

As it is desired to reduce the numerous special requisitions for items, particularly such as bulletin paper, etc., that should be covered in regular requisitions, this matter should be considered in reporting on (2), above.

PRINTING AND DISTRIBUTION OF FORMS 1080

One or more stations have recently received requests from outside interests to compile in advance, during the course of each month, certain information that will be published later on Form 1080; or, in some cases,

details of information not even included in that publication. The increased labor incident to such compilation was to be paid for by the outside interests, the object being to procure the information at the earliest practicable date and without the slight delay incident to the preparation and issue of Form 1030.

As the nature of the requests indicated a permanent program of work extending indefinitely into the future, as far as could be seen, and possibly including numerous additional stations, it has been necessary to formulate a definite policy in regard thereto, in effect as follows:

The action by Congress in recent years to place salaries of Government employees on a more satisfactory basis precludes sympathetic consideration of the principle that compensation is permissible for the performance of extra services outside of official hours for private interests, especially where it involves a continued program of indefinite extent. Such ideas involve principles of gratuities which are fundamentally objectionable.

Station officials are advised that the bureau can not establish a precedent of authorizing the systematic furnishing of weather data which will appear later in Form 1030 at an earlier date than that of authorized issue, or allowing receipt of compensation, when offered, for the preparation of such data, even though the material may be prepared outside the usual office hours.

The general demands upon Weather Bureau stations for weather service of every character, including especially the increasing amount of service for aviation, must be regarded as paramount and must not be interfered with by individuals seeking access to original records; nor should this interfere with and embarrass the progress of station work, especially at times of intensive activity. On the other hand, every effort should be extended to facilitate individuals securing personal information they may desire, at times when it is not likely to embarrass or delay the progress of regular work, or to place records of the station in possible jeopardy.

In order to meet promptly the needs of interests using the information on Form 1030, stations should endeavor to issue this form at the earliest practicable date after the last observation, and where private interests at a distance wish copies of these publications they can be furnished by special delivery or air mail, if the necessary postage is supplied to stations in advance.

SAFETY OF LIFE AT SEA CONVENTION

Mr. E. B. Calvert, Chief of the Forecast Division, has been designated as a technical advisor to the delegates of the United States at the International Conference on Safety of Life at Sea, which will convene in London on April 16, 1929. Mr. Calvert will depart with the delegates on April 3. During his absence the Forecast Division will be in charge of Mr. R. H. Weightman.

AIRWAYS WEATHER REPORTS TO BE TRANSMITTED TO WEATHER BUREAU OFFICES

Where airways weather reports are received at airports or landing fields, arrangements should be made to have such reports transmitted from the field to the supervising Weather Bureau Office, where the information will be available to the public.

REPORTS OF CEILING AND VISIBILITY

These reports should show conditions at the local official airports or terminal landing fields rather than at the city offices. Hereafter, therefore, all stations that send airways reports from the city offices will first telephone to the official airport and find out the ceiling and visibility there. This information and that concerning the condition of the field will be included in the regular airways reports.

METEOROLOGICAL EQUIPMENT AT AIRPORTS

All municipal and privately owned airports, in order to be given a rating (A, B, C, or D) by the Department of Commerce, must be provided with weather instruments, including an anemometer, barometer, thermometer, and wind-direction indicator (usually a wind cone). There must also be a bulletin board and facilities for giving pilots the most recent weather information. (See Information Bulletin No. 36, Aeronautics Branch, Department of Commerce.)

The Air Commerce Act of 1926 authorizes the Secretary of Commerce to establish, operate, and maintain along established civil airways all necessary air navigation facilities *except airports*. This provision is construed to mean that municipal and privately owned airports are to be furnished with necessary facilities by the owners of those airports. In line with this interpretation, no lighting facilities, such as boundary, beacon, ceiling, and course lights are provided by the Department of Commerce, nor are meteorological instruments furnished by the Weather Bureau for the use of airport officials.

Exception is made only in the case of important airports or terminal landing fields at which the Weather Bureau establishes stations. Here instrumental equipment is provided for the bureau's own use. The same is true in the case of radio stations erected at airports by the Department of Commerce. The exception is apparent—not real. In these cases the facilities are provided not for the airports themselves, but as a part of the general service for the airways system as a whole.

Officials in charge of all stations, when requested to furnish instruments for use at airports or to submit requisitions therefor to the Central Office, will inform the airport authorities that such equipment must be furnished by themselves. Information regarding the instruments required and the manufacturers of those instruments should be given, when such information is desired.

STORE REQUISITIONS (FORM 2044)

Every station that has received the new 3-page Form 2044 is requested to return by mail to the Printing Division, Central Office, all old Forms 2044 that may be on hand.

Stations that have not yet received a supply of the new form should request them immediately, and should return the old forms to the Central Office, as above, when the new forms are received.

NEW BILL OF LADING FORMS

Standard forms covering shipment, transportation, and delivery of Government property by transportation companies have been prescribed by the Comptroller General for immediate use, as follows:

Form 1058, bill of lading (original).

Form 1058a, bill of lading (memorandum copy).

Form 1059, bill of lading (shipping order).

Form 1060, temporary receipt.

Form 1061, certificate in lieu of lost bill of lading.

Form 1062, continuation sheets for bill of lading forms.

All stations making regular shipments, that have not received a supply of the new bill of lading forms (1058, 1058a, and 1059), should request them immediately.

Continuation sheets and temporary receipts will be issued when required, on request. Continuation sheets will seldom be required for shipments from stations.

Stations should return to Supplies Division, Central Office, by letter, giving serial numbers, all old forms of bill of lading, receipt, and certificate that may be on hand.

In making out a bill of lading, the space "Appropriation chargeable" should be left blank.

Whenever a bill of lading is furnished to a contractor, as in hydrogen-gas shipments, the "Certificate of Issuing Officer", on the new form, will be filled and signed by the official in charge of station. The contract number, required in the certificate, is the bid number that appears on the copy of the accepted bid. In all such cases an extra memorandum copy (1058a), which *must be numbered at time of issue* to agree with the original bill of lading, should be furnished to the contractor. Stations requesting bills of lading from the Central Office should indicate the number of memorandum copies required for issue to contractors.

Possession of a shipment arriving before receipt of the bill of lading may be obtained on a personal receipt, stating that B/L No.— has not been received. An effort should be made to get the bill of lading, and the Central Office should be immediately requested to furnish a blank temporary receipt, which will be executed by the official in charge and turned over to the company making delivery, to replace the personal receipt given.

If the bill of lading has not been located after diligent efforts, the station should request the Central Office, within 30 days, to issue a certificate in lieu of lost bill of lading to support the temporary receipt given, as transportation charges can not be paid on temporary receipts.

If the original bill of lading be found after a certificate has been issued, it will be accomplished and forwarded to the Central Office by letter, stating that a certificate was issued.

In no case will an original bill of lading be kept on file at station after it has been issued to cover a shipment. All memorandum copies must be forwarded promptly to the Central Office after shipment is made.

WIND DIRECTION AND VELOCITY INDICATORS

At some airport stations of the Weather Bureau the need for quickly observing wind direction and velocity has led to the introduction of a combined direction and velocity indicator. This consists of a small board on which are mounted a bell-ringing transformer, to be connected to the nearest lamp socket or other source of 110-volt alternating current; a buzzer; and four automobile lamps in the form of a square, one for each of the cardinal points. The lighting of one or two of the lamps gives the wind direction to eight points, just as it would be read from the triple register; and the number of buzzes per minute indicates the wind velocity.

The equipment includes either a standard 18-foot support with wind-vane contacts, or one adapted for mounting on a Weather Bureau wind-instrument tower, as described in Circular D, Instrument Division.

Officials in charge of airport stations that need such equipment should forward requisition therefor to the Central Office.

WIND VELOCITY INDICATORS

Requisitions for wind-velocity indicators, for use at intermediate airways stations, should specify "transformer type" if connection can readily be made to a 110-volt alternating circuit, or "battery type" if such circuit is not available.

HYDROGEN REGULATORS FOR PILOT BALLOON STATIONS

In order to facilitate the inflation of pilot balloons, as well as to save hydrogen, it is planned to equip all pilot balloon stations with hydrogen regulators. Accordingly, all stations not now possessing a regulator are authorized to submit a Purchase Requisition therefor. Prompt action is requested, as it is desired to obtain bids for the entire lot at one time.

REVISION OF "INSTRUCTIONS FOR AEROLOGICAL OBSERVERS"

The supply of this publication is now exhausted. Part II, which relates to pilot balloon observations, has recently been revised and published as Circular O. As soon as the data can be compiled, another Cir-

cular will be published, containing a revision of the kite section and including instructions for making captive balloon, limited height-sounding balloon, sounding balloon, and airplane observations.

In view of this fact, and since Circular O has been sent to practically all Weather Bureau stations, it is requested that those stations having copies of "Instructions for Aerological Observers" which are not needed in their work, send them to the Central Office in an envelope marked "Aerological Division".

TELETYPE PRINTERS

Regular twice-daily weather reports from stations in the United States and Canada, including upper-air data from about 20 aerological stations, are now being retransmitted morning and night by teletype printers direct from the Weather Bureau at Washington to the airports at Hadley Field, N. J., Bellefonte, Pa., and Cleveland, Ohio, on the eastern sector of the transcontinental airways. This new service was inaugurated on the night of February 6, 1929, as an addition to the program of weather information already made available to aviators and others along this air route.

Under present arrangements, transmission of these reports begins promptly at 8:15 a. m. and p. m. and continues for 20 minutes. There is then a break of 25 minutes for exchange of reports between the airways stations themselves and for other necessary traffic over the wire. At 9 o'clock the sending of weather reports from Washington is resumed, and continues until all have been sent, which is, as a rule, not later than 9:25 o'clock. The reports are sent at a uniform rate of about 40 words a minute, and are received in typewritten form on tape at the airports.

Formerly only a limited number of reports were furnished the airports in question by radio. The new method makes it possible for the airports to receive a far more complete list of reports, and much more promptly.

At Hadley Field and Cleveland these reports are charted and used in connection with detailed weather information furnished to the fliers. Copies of the map are posted also and made accessible to air mail and commercial pilots.

PREPARING FORM 8181

Many station officials are disregarding instructions for dropping fractions of a cent in telegraph accounts, as contained in the April, 1928, number of TOPICS AND PERSONNEL. Fractions of a cent should be disregarded, even in cases where the fraction is in excess of one-half cent.

INDEXES FOR "TOPICS" AND FOR INSTRUCTIONS

An Index for TOPICS AND PERSONNEL, 1925-1928, and an Index of Subjects, Instructions of 1928, were mailed together to all stations on Feb-

ruary 19. Stations failing to receive them should notify the Central Office immediately.

FEDERAL BUSINESS ASSOCIATIONS

Weather Bureau officials have been elected to office in local Federal Business Associations as follows:

Messrs. Paul Hess, Wilmington; E. M. Keyser, Spokane; and L. M. Pindell, Chattanooga; elected president. Mr. B. B. Whittier, Green Bay, elected vice president. Messrs. W. J. Bennett, Tampa; E. D. Emigh, Augusta; and G. S. Lindgren, Albany; elected secretary. Mr. Bennett was also placed on the executive committee.

CHANGES IN PERSONNEL

The following, relative to changes in the personnel of the Weather Bureau during the month of February, 1929, is published for the *exclusive* information of employees of the Weather Bureau:

Appointments, promotions, reductions, etc.

Name	Station	Remarks
Darnielle, Robert B.	St. Paul, Minn.	Junior observer at \$1,440 resigned; record, fair.
Haworth, Joseph F.* ...	Portland, Oreg.	Appointed printer at \$1,800, temporarily.
Heagy, Louis W., jr.	Jacksonville, Fla.	Junior observer at \$1,500, resigned; record, good.
Lundberg, Lester.	Ellendale, N. Dak.	Junior observer at \$1,440, resigned; record, good.
McGrew, Alvie E.	Fort Worth, Tex.	Appointed junior observer at \$1,440; appointment as under observer at \$1,200 terminated.
Mahaffy, William.	St. Paul, Minn.	Assistant meteorologist, granted leave without pay from February 2 to May 1, 1929, on account of continued illness.
Messersmith, Howard*..	Philadelphia, Pa.	Appointed minor observer at \$1,020, pending certification of eligibles.
Minser, Edward J.	Ellendale, N. Dak.	Appointed junior observer at \$1,440.
Nelson, P. Wendell	Salt Lake City, Utah.	Appointed minor observer at \$1,020; temporary appointment terminated.
Parry, Benjamin.	New York, N. Y.	Senior observer, leave without pay extended to March 31, 1929.
Rollins, Howard A.	St. Paul, Minn.	Assistant observer, restored to duty on February 16, 1929, from leave without pay.
Shirley, Robert F.	Fresno, Calif. ...	Appointed minor observer at \$1,020; temporary appointment terminated.
Taylor, Alfred W.	Montgomery, Ala.	Appointed junior observer at \$1,440.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Taylor, Mrs. Lucy E	Pensacola, Fla	Minor observer, name changed on rolls from Miss Lucy E. Clark.
Van Thullenar, Clayton F.	Washington, D. C.	Senior scientific aid, SP-6, at \$2,100, resigned; record, excellent.

* Indicates temporary appointment.

Changes in assignments

Name	Relieved from—	Assigned to—
Rollins, Howard A	Salt Lake City, Utah . . .	St. Paul, Minn., assistant.
Underwood, John B	New York, N. Y.	Boston, Mass., assistant.
Wickham, George D	Seattle, Wash	Yakima, Wash., assistant.

C. H. Marvin.

Chief of Bureau.

WEATHER BUREAU TOPICS AND PERSONNEL

MARCH, 1929

THE PRESIDENT RETAINS PROFESSOR MARVIN

As the personnel of the bureau are aware, the position of Chief of the Weather Bureau is filled by presidential appointment. According to precedent, on change of administration, Professor Marvin tendered his resignation, which has been returned unaccepted, with the statement that the President is anxious that the present Chief of Bureau should continue the distinguished service that he has been rendering.

TRANSFER OF STATES TO NEW ORLEANS FORECAST DISTRICT

The States of Mississippi and Alabama and extreme northwest Florida (west of the Apalachicola River) were transferred from the Washington forecast district to the New Orleans forecast district on January 1, 1929.

USE OF TRANSPORTATION REQUESTS

Government Travel Regulations, paragraph 20, requires that transportation requests be used "when practicable, to obtain all official transportation where the amount involved is \$1.00 or more". The General Accounting Office construes the phrase, "when practicable", as calling for an explanation on the voucher whenever transportation requests are not used for amounts of \$1.00 or more; and states that requests are to be used not only for rail and steamer travel, but for motor-bus transportation where the line is operated as a public transportation facility "commonly recognized as such".

REPORTS OF AIRCRAFT ACCIDENTS

Reports of aircraft accidents, as requested in "Topics" of May, 1928, and January, 1929, should be submitted in typewritten form, in duplicate. Some stations are sending in newspaper clippings instead. Clippings may be included, if desired, but they are not to take the place of the written report, which must be complete in itself.

CONTRACT RATES APPLY ONLY TO WEATHER BUREAU TELEGRAMS

The Aviation Commission of one of the States arranged to telegraph to State airports information furnished by the Weather Bureau, and it was proposed that the telegraph charges be collected from the State at Weather Bureau rates. Unfortunately this is not possible, as rates under contracts between the Weather Bureau and the telegraph companies apply

only to messages sent by the Weather Bureau and paid for from Weather Bureau funds.

DISPLAY OF THE UNITED STATES FLAG

The Central Office was recently informed that the United States flag displayed at one of the Weather Bureau buildings in the field is allowed to fly continuously and is in a dilapidated condition.

In accordance with paragraph 211, Station Regulations, the flag should be displayed only during business hours and on designated holidays. It should be given proper care at all times; and if it becomes faded, worn, or damaged, another should be promptly requested.

MANUSCRIPTS WANTED FOR MONTHLY WEATHER REVIEW

The editor of the Review announces that his stock of articles for printing in the Monthly Weather Review is not as large as he would like and that new manuscripts will be welcomed during the next month or so.

RECORDING RIVER CREST AND LOW-WATER STAGES

Frequently crest and low-water stages occurring in rivers between times of regular observations are not properly recorded. Some are given on Form 1006, some in the flood reports, and others on Form 1078C, but frequently not in all three places. Thus it happens at times that the first information regarding an important crest or low-water stage is obtained on Form 1078C many months after its occurrence.

Officials in charge of river districts are therefore cautioned that data of this character should always appear in the three places mentioned, except of course, that low-water stages will not be reported in the flood reports.

REPORTING HUMIDITY FOR FIRE-WEATHER SERVICE

From April 1 to November 30 a word is added to the a. m. reports telegraphed from Concord, N. H., Northfield, Vt., and Burlington Vt., to indicate the current humidity and humidity at noon of the previous day. It is the last word of the report. These data are primarily for use in connection with the fire-weather warning work.

For the same purpose, "J" words appear in reports telegraphed from some of the Pacific coast and far-western stations.

DISCONTINUANCE OF FORMS 1069A AND 1069C

Form 1069A (record of cold waves) and Form 1069C (record of wind storms) will be discontinued after such forms for March of 1929 are rendered. These forms were prepared for verification purposes and are no longer necessary.

OIL FOR ANEMOMETERS

The recent large increase in the quantity of oil required for anemometers makes it necessary to discontinue the practice of using expensive clock oil indiscriminately.

The clock oil in half-ounce bottles, bearing a facsimile of the maker's signature, is liquid down to -18° F. and like vaseline to -30° or -40° F. Another valuable property is its extremely slow rate of evaporation. But it is too costly to be used, except where necessary.

Unfortunately a lot of inferior oil, labeled porpoise-jaw oil, but lacking the maker's signature, was distributed throughout the bureau several years ago. It thickens near zero and is little better for anemometers than the refined machine oil.

The refined machine oil furnished by the Central Office in bottles labeled Shoemaker & Busch, remains liquid down to 13° F. and becomes like vaseline at 7° F. This oil will flow through the automatic siphon wick with sufficient freedom to meet the needs of many stations throughout the year. Therefore, it should be used for anemometers, except when near-zero temperatures are likely for several days in succession.

SMOKED GLASS AS RAIN TRACE-CATCHER

Pieces of smoked glass, of the same size and shape as the paper slips issued for the purpose, and used with the same wooden blocks and metal weight, are being successfully used as rain trace-catchers at the Port Huron station, where difficulty with the paper catcher was experienced. Six pieces are in use at that station and all are kept smoked in order to have a supply at hand for renewal after a rain. After using, the pieces are washed and resmoked.

So far there has been no difficulty in distinguishing rain from fog and dew. In the thin smoke coating the smallest drops register; while in a heavy fog recently, the water collected in drops on the surface but did not break the coating.

POSTING "MOON-UP" AT AIRPORTS

The daily posting of the time when the moon is up has been found helpful to both pilots and airport force at Hadley Airport. A moon-lighted night, though clouded over, is much less black than a "dark of the moon" night. Experience shows that the moon-up period is preferred to moonrise and moonset data.

PILOT BALLOON OBSERVATIONS AT NIGHT

To prevent the ignition of the lantern or the extinguishing of the light, when using pleated-paper lanterns and candles in making pilot balloon observations at night, the airport station at Portland, Oreg., limits the height of the lantern to about 5 or 6 inches by pasting to top and bottom the respective ends of three narrow strips of paper placed at equal intervals around the lantern. The strips may be made semi-rigid by creasing them slightly lengthwise.

INFLATION OF PILOT BALLOONS

In Circular O, paragraph 51, the use of "cord or tape" is prescribed

to fasten balloon neck to nozzle of inflation balance for weighing and inflating pilot balloons.

Two rubber bands have been found in practice to be better than cord. The bands are doubled back to insure sufficient pressure to keep balloon in place. Several stations are now using this method, which is recommended for general adoption.

ANNUAL LEAVE AT ONE-MAN STATIONS

The Central Office has been making every effort to provide relief for one-man stations in order that officials in charge may take the full allowance of annual leave, as it is realized that such leave will better fit them for their exacting duties throughout the year.

Several employees will be available for relief duty this year from early in June until the latter part of October. As it unfortunately will not be possible to comply with all requests for relief, the later ones necessarily being difficult to arrange for, officials in charge of one-man stations desiring relief are requested to inform the Central Office as promptly as practicable, indicating first and second preference as to time of taking leave. Such preference will be fully considered in making a schedule for the relief men, though it will of course be necessary to route them in a way that will reduce to a minimum both traveling expenses and the loss of time between stations.

Where a suitable person is available for relief duty on an emergency assistance basis, it is much preferred that he be employed, and the necessary arrangements should be made with the Central Office.

UNUSED BALANCE OF AUTHORIZATIONS

All vouchers submitted for purchases authorized by letters of authorization or purchase orders should be accompanied by a memorandum slip stating whether or not further expenses will be incurred under the authorization.

ENTERING FORECAST MESSAGES FROM CHICAGO ON FORM 8057

Instructions on page 381, November, 1928, "TOPICS", for entering combined forecast messages in the Washington forecast district on Form 8057, require that the entries be in accordance with the check on each message received. These instructions will apply also to all stations receiving forecast messages from Chicago. No change in such instructions is contemplated.

INSTRUCTIONS NOS. 3 AND 4

Instructions Nos. 3 and 4, 1929, were mailed to all stations on March 21. Any station that does not receive them should notify the Central Office immediately.

FEDERAL BUSINESS ASSOCIATIONS

Weather Bureau officials were elected to office in local Federal Business Associations as follows:

Messrs. N. B. Conger, Detroit, and M. L. Fuller, Peoria, reelected president; Messrs. G. B. Wurtz, Lexington, reelected, and E. H. Fletcher, Roseburg, elected secretary.

DEATHS

Mr. Henry F. Alps, in charge of the Reno station, died March 21, 1929. Mr. Alps was born May 17, 1875, at New Quincy, Ill. He entered the Weather Bureau on August 8, 1898; and, after serving three years at Nashville, was in charge successively at Lewiston, Reno, Dayton, Helena, and then again at Reno from 1917 until his death.

Mr. Harry E. Adams, Hartford, died March 24, 1929. He was born at Stoughton, Mass., on May 10, 1897. Entering the Weather Bureau on October 1, 1920, he was assigned as assistant for one year at Cleveland and two years at New Haven, and thereafter was in charge at Hartford.

Mr. Orin Parker, retired, died March 30, 1929, at Bentonville, Ark. An outline of Mr. Parker's weather service may be found in TOPICS AND PERSONNEL for July, 1920.

CHANGES IN PERSONNEL

The following, relative to changes in the personnel of the Weather Bureau during the month of March, 1929, is published for the *exclusive* information of employees of the Weather Bureau:

Appointments, promotions, reductions, etc.

Name	Station	Remarks
Ahlborn, Clair W.....	Boise, Idaho.....	Appointed junior observer at \$1,440.
Aldrich, John H.....	Davenport, Iowa.....	Appointed junior observer at \$1,560; appointment as minor observer at \$1,020 terminated.
Andrus, Clarence G.....	New York, N. Y.....	Promoted to associate meteorologist at \$3,300 from assistant meteorologist at \$2,700.
Baldwin, Marvin A.....	Broken Arrow, Okla...	Promoted to assistant meteorologist at \$2,600 from junior meteorologist at \$2,000.
Bartleson, Edwin L.....	Washington, D. C.....	Promoted to scientific aid, SP-5, at \$1,800 from assistant observer at \$1,680.
Bartlett, Wayne H.....	Des Moines, Iowa.....	Appointed minor observer at \$1,020.
Bruce, David.....	Bellefonte, Pa.....	Promoted to assistant observer at \$1,740 from junior observer at \$1,500.
Callaway, Elliott B.....	New Orleans, La.....	Appointed junior observer at \$1,440.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Cameron, Donald C.....	Kansas City, Mo.....	Promoted to junior meteorologist at \$2,000 from observer at \$1,800.
Cavanaugh, Daniel J.*..	Buffalo, N. Y.....	Minor observer, leave without pay extended to June 9, 1929, on account of continued illness.
Choun, Harry F.....	Denver, Colo.....	Promoted to junior meteorologist at \$2,000 from observer at \$1,920.
Cummings, John A.....	Broken Arrow, Okla....	Promoted to junior meteorologist at \$2,000 from observer at \$1,800.
DeHay, W. Clyde*.....	Dallas, Tex.....	Appointed minor observer at \$1,020, pending certification of eligibles.
Derr, James W.....	Atlanta, Ga.....	Appointed junior observer at \$1,440.
Dey, Miss Laura M.....	Washington, D. C.....	Assistant clerk, granted leave without pay from March 23 to June 22, 1929, on account of illness.
Drapier, William C., jr..	Omaha, Nebr.....	Appointed junior observer at \$1,440.
Easton, Miss Katherine..	Washington, D. C.....	Promoted to assistant clerk-stenographer, CAF-3, at \$1,620, temporarily, from junior clerk-typist, CAF-2, at \$1,440.
Fenner, Howard W.....	Denver, Colo.....	Promoted to observer at \$1,800 from assistant observer at \$1,620.
Fink, Kenneth C.....	Redding, Calif.....	Appointed junior observer at \$1,440.
Gardiner, James W.....	Washington, D. C.....	Appointed assistant messenger, Cu.-2, at \$1,080, by transfer from Interstate Commerce Commission.
Gerber, Harry M.....	New York, N. Y.....	Promoted to observer at \$1,920 from assistant observer at \$1,740.
Gorman, Miss M. Elizabeth,	Washington, D. C.....	Promoted to assistant clerk-stenographer, CAF-3, at \$1,620 from junior clerk-stenographer, CAF-2, at \$1,440.
Gray, Mrs. Clara M.....	Washington, D. C.....	Clerk-stenographer, CAF-4, at \$1,800, resigned; record, excellent.
Hagen, Norman R.....	Washington, D. C.....	Promoted to assistant scientific aid, SP-4, at \$1,620 from junior observer at \$1,500.
Hightman, Harry M....	Salt Lake City, Utah...	Promoted to associate meteorologist at \$3,300 from assistant meteorologist at \$2,600.
Hustead, Aubrey D.....	Bellefonte, Pa.....	Promoted to assistant observer at \$1,740 from junior observer at \$1,560.
Jackson, Paige M.....	Denver, Colo.....	Minor observer at \$1,020, resigned; record, fair.
Jones, George R.....	St. Joseph, Mo.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Keefe, John R. F.....	Washington, D. C.....	Assistant clerk-stenographer, granted leave without pay from March 9 to June 8, 1920, on account of illness.
Kessler, Edward L.....	Washington, D. C.....	Promoted to junior clerk, CAF-2, at \$1,440, temporarily, from assistant messenger, Cu.-2, at \$1,140.
Knarr, Aurel J.....	Washington, D. C.....	Scientific aid, SP-5, at \$1,800, resigned; record, excellent.
Kronberg, Nathan.....	San Juan, P. R.....	Promoted to observer at \$1,920 ¹ from assistant observer at \$1,680.
Kutschenreuter, Paul H.	Washington, D. C.....	Promoted to assistant scientific aid, SP-4, at \$1,620 from junior observer at \$1,500.
Landau, Louis.....	New York, N. Y.....	Promoted to assistant observer at \$1,740 from junior observer at \$1,500.
Lowery, Arlie R.....	Davenport, Iowa.....	Appointed junior observer at \$1,560.
McClelland, Harden T...	Seattle, Wash.....	Appointed junior observer at \$1,560.
McGregor, Clifford J....	Washington, D. C.....	Promoted to scientific aid, SP-5, at \$1,800 from assistant scientific aid, SP-4, at \$1,620.
Marx, Edward H.....	New Orleans, La.....	Observer, cash salary readjusted to \$1,980 from \$1,800 to offset loss of quarters.
Morgan, Michael F.....	Washington, D. C.....	Promoted to assistant messenger, Cu.-2, at \$1,080 from junior messenger, Cu.-1, at \$600.
Moser, Frederick T.....	St. Joseph, Mo.....	Appointed junior observer at \$1,440.
Murphy, George P.....	Salt Lake City, Utah...	Promoted to assistant meteorologist at \$2,000 from junior meteorologist at \$2,200.
Parker, Harold P.....	Bellefonte, Pa.....	Promoted to assistant meteorologist at \$2,700 from junior meteorologist at \$2,300.
Parry, Benjamin.....	New York, N. Y.....	Senior observer, restored to duty on March 26, 1920, from leave without pay.
Rampy, Stanley W.....	Omaha, Nebr.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,500.
Reed, Allen.....	Denver, Colo.....	Appointed minor observer at \$1,020.
Rhodes, Miss Callie E...	Washington, D. C.....	Promoted to clerk-stenographer, CAF-4, at \$1,800 from assistant clerk-stenographer, CAF-3, at same salary.
Rigby, Malcolm.....	Seattle, Wash.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,500.
Riley, John A.....	Atlanta, Ga.....	Promoted to associate meteorologist at \$3,200 from assistant meteorologist at \$2,700.
Robinson, Raymond C..	Green Bay, Wis.....	Appointed junior observer at \$1,440; appointment as minor observer at \$1,020 terminated.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Russo, Carl.....	Cleveland, Ohio.....	Appointed junior observer at \$1,440.
Sawyer, Harold A.....	Chicago, Ill.....	Promoted to observer at \$1,800 from assistant observer at \$1,740.
Schaad, Vernon W.....	Chicago, Ill.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,500.
Sedlak, Oliver A.....	Washington, D. C.....	Promoted to senior scientific aid, SP-6, at \$2,000 from scientific aid, SP-5, at \$1,920.
Shope, William B.....	Dallas, Tex.....	Appointed junior observer at \$1,440; appointment as minor observer at \$1,020 terminated.
Snyder, Henry C.....	Denver, Colo.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Stevens, Welby R.....	Washington, D. C.....	Promoted to assistant meteorologist, P-2, at \$2,600 from principal scientific aid, SP-7, at \$2,300.
Steves, Verne D.....	Denver, Colo.....	Appointed junior observer at \$1,440.
Weck, Fred H.....	Chicago, Ill.....	Promoted to associate meteorologist at \$3,200 from assistant meteorologist at \$2,600.
Wren, Azel F.....	Washington, D. C.....	Telegrapher, CAF-4, at \$1,920, resigned; record, good.

* Indicates temporary appointment. ¹ Includes allowance of \$120 for quarters.

Changes in assignments

Name	Relieved from—	Assigned to—
Aldrich, John H.....	Des Moines, Iowa.....	Davenport, Iowa, assistant.
Bartleson, Edwin L.....	St. Joseph, Mo.....	Washington, D. C., scientific aid.
Bruce, David.....	Boston, Mass.....	Bellefonte, Pa., assistant.
Cameron, Donald C.....	Chicago, Ill.....	Kansas City, Mo., assistant.
Cummings, John A.....	Memphis, Tenn.....	Broken Arrow, Okla., assistant.
Gerber, Harry M.....	Bellefonte, Pa.....	New York, N. Y., assistant.
Hagen, Norman R.....	Cleveland, Ohio.....	Washington, D. C., assistant scientific aid.
Hustead, Aubrey D.....	New York, N. Y.....	Bellefonte, Pa., assistant.
Kronberg, Nathan.....	New Orleans, La.....	San Juan, P. R., assistant.
Kutschenreuter, Paul H.....	Montgomery, Ala.....	Washington, D. C., assistant scientific aid.
Marx, Edward H.....	San Juan, P. R.....	New Orleans, La., assistant.
Murphy, George P.....	Denver, Colo.....	Salt Lake City, Utah, assistant.
Sawyer, Harold A.....	Davenport, Iowa.....	Chicago, Ill., assistant.
Sykes, Lloyd A.....	Burlington, Vt.....	Cleveland, Ohio, assistant.

C. H. Marvin

Chief of Bureau.

WEATHER BUREAU TOPICS AND PERSONNEL

APRIL, 1929

ACKNOWLEDGMENT

To the Weather Bureau Personnel:

The notice in the March issue of TOPICS AND PERSONNEL that "The President Retains Professor Marvin" has resulted in a further pleasure to me in the form of a number of personal letters from field officials conveying in cordial terms their own gratification and words of commendation which I feel and appreciate very deeply.

It is hardly practicable to write individual letters of acknowledgment, but I hope that these words of my sincere appreciation of the fine spirit of loyalty and teamwork which animates the entire rank and file of Weather Bureau personnel will serve the purpose better than individual letters.

The place the Weather Bureau holds in public estimation to-day is the result of the concerted and unselfish efforts of its field men, and I am indeed thankful to all who have contributed their part in this mighty factor to the satisfaction and success of my administration.

Sincerely,



Chief of Bureau.

WEATHER BUREAU AIRPORT STATIONS

To avoid confusing them with the supervising Weather Bureau stations or the subsidiary airways stations, it has been decided that airports at which commissioned Weather Bureau employees are assigned or detailed for airways weather service shall be called "Weather Bureau Airport Stations". This will be the official title and will be used for everything except telegrams.

SEMIANNUAL REQUISITIONS FOR SUPPLIES

In February "TOPICS", stations were requested to report on the feasibility of making annual instead of semiannual requisitions for miscellaneous office supplies. In view of the number of adverse reports—about one in six; the difficulty that those reporting adversely would have in stor-

ing more supplies or in foreseeing needs for the longer period; and the confusion that would result from furnishing supplies semiannually to some stations and annually to others, it has been decided to make no change in the present custom of requesting and shipping supplies semiannually.

MEALS AT OFFICIAL STATION

The Comptroller General has ruled that where an employee leaves his official station before 8 a. m. he is entitled, under paragraph 62 of the Standardized Government Travel Regulations, to reimbursement for expense incurred for breakfast after departure from home (or office), whether taken on train or en route to the train. Under this decision it is construed that expense for dinner or supper en route to or from the train at official station is likewise allowable, dependent upon times of arrival and departure, as stated in paragraph 62.

ADVANCE OF PUBLIC FUNDS

Standard Form 1038a has been prescribed by the Comptroller General for use in making requests for advances of funds for subsistence while traveling when the applicant's credit in the retirement fund is to be used as security, in lieu of a surety bond, as provided in paragraph 8 of Treasury Department Circular 369, quoted in Appendix 1 of Government Travel Regulations, effective March 1, 1929. Advances secured by retirement fund credit may be made to cover *subsistence* expense only.

Expense accounts should be submitted as indicated in "Advance of Public Funds for Subsistence", in "TOPICS" for November of 1926.

WEEKLY WEATHER OUTLOOK DISTRICT 4

The designation of the Weekly Weather Outlook District 4, as expressed in Instructions No. 3, 1929, is amended to read "Central and East Gulf States" instead of "East Gulf States".

PREFERENCE CARDS

Preference cards (Form 4047) should be rendered in duplicate on June 1 by all permanent employees except under observers, minor observers, and laborers. While it is not necessary for employees in these three grades to submit cards, there is no objection to their doing so if they desire a change of station.

The conditions set forth in the April, 1926, number regarding allocations and promotions still apply, and employees, in indicating station preferences, should keep them in mind. Please see also the numbers for October of 1919 and April of 1921 and 1925.

It is desired this year to call the particular attention of all employees in the junior observer, assistant observer, observer, and junior meteorologist grades to the fact that beginning about July 1, 1929, there will be need for a number of men for airways assignments. Any employees

who are interested in this line of work should so indicate on their preference card. A separate letter of transmittal is not required.

There will also be one or more vacancies in the fruit-frost work on the Pacific coast beginning in October of this year, and possibly some openings in the fire-weather warnings project. For the fruit-frost work young, single men are preferred, as they have no stationary headquarters and are required to make several moves during the fruit-frost season, in addition to being detailed during the summer on relief work at small stations. Any employees who are interested in either of these special projects should make such a statement on their June 1 card.

In view of the large number of transfers which will be required during the next fiscal year, it would be decidedly helpful to the Central Office in making selections if all employees, especially those in the lower grades, would indicate on their cards any special desires which they may have, such as assignment to a one-man station in charge, relief work, archeological duty, transfer to San Juan, Honolulu, or Juneau, in addition to the airways, fruit-frost, and fire-weather assignments above mentioned.

It is the policy of the Central Office to endeavor to keep all employees satisfied regarding location as far as conditions will permit, but unless we have a definite expression from the men it is sometimes difficult to select the proper man for the vacancy which occurs.

CHECKING RIVER-GAGE CHAINS

In checking river-gage chains at the Topeka station, as described in "TOPICS" for April of 1928, it was noticed that chains shorten materially when even slightly twisted. For example, in adjusting a chain length, bottom of weight to file mark on zero rivet, it was found that this distance was .08 foot less than the original measurement, made a few minutes previously. An investigation showed that the trouble was due to twisting the chain in unscrewing the eyebolt, though no kinks had developed.

As a chain is likely to become twisted in course of inspecting a river gage, either by turning the eyebolt in the weight or by other causes, the only safe rule is to inspect the chain carefully after it has been laid out for checking to see that it is not twisted or kinked, since twisting itself may account for an apparent shortening of .15 foot in a 40-foot chain. In the Topeka district, the practice is to test the chain length under a uniform pull of 12 pounds, measured by a small spring balance that can be purchased locally for about 25 cents.

STATE TAX ON GASOLINE

In a recent decision by the Comptroller General, it is held that the Government can not claim exemption from the State tax on gasoline procured from other than a vendor legally chargeable with the payment of the tax. That is to say, no claim for remittance of tax lies against a

retailer not liable to the State for the tax but to whom it has been "passed on", and who in turn includes it in the price to the Government.

It is preferred, therefore, that gasoline be bought from payers of the State tax who, as such, are precluded from collecting the tax from the Government, unless other dealers will place themselves on a parity by reducing their market price in the amount of the tax.

Instructions on this subject in the September, 1928, number of TOPICS AND PERSONNEL are modified to the extent that contracts for gasoline at prices which may be affected by a State tax are no longer interdicted, provided they are not made with a dealer legally liable for payment of such State tax.

On vouchers covering the purchase of noncontract gasoline hereafter should appear the specific statement by the dealer whether he is or is not a payer of the State tax.

EXTENSION OF AIRWAYS WEATHER SERVICE

Appropriations made by the last Congress included increases amounting to \$516,580 for extension of weather service for airways. The regular agricultural bill provided \$166,580 of this, and the balance, \$350,000, was carried in the second deficiency bill.

The smaller amount will be applied to the organization of new service and the strengthening of that already in operation, including some additional pilot balloon stations.

The larger amount will be used in organizing and maintaining an intensive service along the transcontinental and San Francisco to Los Angeles airways. This service will include hourly reports from numerous points along the airways, supplemented by 3-hour reports from selected places off the airways. These will be sent by teletype, or otherwise, to major control airport stations at Cleveland, Omaha, and Salt Lake City for the transcontinental airways, and to San Francisco for the airways from that place to Los Angeles. Powerful radio stations of the Department of Commerce will broadcast hourly synopses and forecasts to planes in flight.

The system is briefly described in the December, 1928, number of the Monthly Weather Review, pages 505-509.

SUMMARIZING PILOT BALLOON DATA

In order to secure the maximum number of observations for the various levels on Form 1114, all stations will include the wind data for the maximum altitude in the next higher level on this Form whenever the maximum altitude comes within 250 meters of that level.

LAMPS FOR STORM-WARNING LANTERNS

Requisitions for electric lamps for storm-warning lanterns should specify traffic signal lamps. Traffic signal lamps are now readily obtainable at decidedly lower cost than the special 46 and 94-watt lamps

heretofore employed. They are being stocked in 60-watt size and are suitable for use in either white or red storm-warning lanterns.

HOUR OF DEATH

In reporting to the Central Office the death of an employee, the phrase "died last night" has often been used when applicable. This is not sufficient, as it is necessary to know whether the death occurred before or after midnight, in order that the date of death may be accurately recorded and the correct amount of salary and retirement refund be paid. It is therefore requested that the hour of death be always stated in reporting deaths.

USE EARTHQUAKE FORMS FOR ALL EARTHQUAKE REPORTS

For the convenience of the Central Office and the Coast and Geodetic Survey, to which all earthquake reports finally are sent, officials in charge of sections and stations are requested to make all their monthly earthquake reports, including even the report "none", on earthquake forms (No. 5000).

FORM 1181—PILOT'S WEATHER REPORT

This form has been provided for use at airport Weather Bureau Offices where it is the policy to supply weather information on a form to be given to the pilot.

It contains three groups of essential weather information, that is, airways weather reports, winds aloft, and special remarks. Requisition for this form should be made on the Printing Division.

FORM 1182—AIRWAYS WEATHER REPORTS

This is a large form, 26½ by 36 inches, for use at Weather Bureau Airport Stations for posting "Airways Weather Reports". Through the use of this form it is possible to keep bulletins up to the minute and always available. In addition to this, the form becomes a record which can be kept on file for an indefinite period. The use of two successive copies displayed side by side at Hadley Airport has proved very satisfactory.

FEDERAL BUSINESS ASSOCIATIONS

Weather Bureau officials have been elected to office in local Federal Business Associations as follows:

Messrs. R. Q. Grant, Phoenix, and R. T. Lindley, Vicksburg, elected vice president; Mr. T. G. Shipman, Fort Smith, reelected, and Mr. V. F. Stanich, Sacramento, elected secretary; Mr. W. S. Brotzman, Pittsburgh, elected chairman of the executive committee.

CHANGES IN PERSONNEL

The following, relative to changes in the personnel of the Weather Bureau during the month of April, 1929, is published for the *exclusive* information of employes of the Weather Bureau:

Appointments, promotions, reductions, etc.

Name	Station	Remarks
Adams, Harry E.....	Hartford, Conn.....	Junior meteorologist at \$2,200, died March 23, 1929.
Alps, Henry F.....	Reno, Nev.....	Associate meteorologist at \$3,200, died March 21, 1929.
Arias, Ramon.....	San Juan, P. R.....	Minor observer at \$1,020, resigned; record, good.
Armstrong, Lorenz C....	Spokane, Wash.....	Appointed junior observer at \$1,440; appointment as minor observer at \$1,020 terminated.
Baldwin, Norman D....	Hartford, Conn.....	Appointed minor observer at \$1,020.
Ball, Homer W.....	New York, N. Y.....	Promoted to associate meteorologist at \$3,300 from assistant meteorologist at \$2,700.
Bergerson, Maurice P....	Tatoosh Island, Wash..	Appointed junior observer at \$1,500. ¹
Bishop, Denton.....	Spokane, Wash.....	Appointed minor observer at \$1,020.
Brancato, George N.*...	Springfield, Ill.....	Appointed minor observer at \$1,020, pending certification of eligibles.
Brotzman, Lloyd E.....	New York, N. Y.....	Promoted to observer at \$1,800 from assistant observer at \$1,800.
Clark, George A.....	Greensboro, N. C.....	Promoted to observer at \$1,920 from \$1,800.
Cohen, Monroe D.....	Cleveland, Ohio.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Cole, Herbert E.....	New York, N. Y.....	Promoted to observer at \$1,980 from assistant observer at \$1,920.
Coleman, Don E.....	Detroit, Mich.....	Appointed junior observer at \$1,440.
Cone, Fred.....	Green Bay, Wis.....	Promoted to junior meteorologist at \$2,000 from observer at \$1,800.
Cornelius, Rolen L.....	Greensboro, N. C.....	Promoted to observer at \$1,920 from \$1,800.
Crandall, Elwin F.....	Ellendale, N. Dak.....	Unskilled laborer at \$1,020, resigned; record, good.
Demlo, Emil J. W.....	Detroit, Mich.....	Junior observer at \$1,440, resigned; record, fair.
Douglas, Harry W.....	Juneau, Alaska.....	Promoted to assistant meteorologist at \$2,000 from observer at \$1,800.
Eigenmann, Joseph J....	Peoria, Ill.....	Appointed junior observer at \$1,440; appointment as minor observer at \$1,020 terminated.
Garrett, Richard A.....	San Francisco, Calif....	Promoted to junior meteorologist at \$2,000 from observer at \$1,800.
Hall, Bertram E.....	Des Moines, Iowa.....	Appointed assistant observer at \$1,680, by reinstatement.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Haynes, Frank	Denver, Colo.	Appointed junior observer at \$1,440, by reinstatement.
Holland, Mrs May S.	San Francisco, Calif.	Appointed junior stenographer, CAF-2, at \$1,440.
Hawk, Ernest F.	Washington, D. C.	Scientific aid, leave without pay extended to June 26, 1929, on account of continued ill health.
Hutsler, Miss Darathea D.	Washington, D. C.	Appointed junior clerk-stenographer, CAF-2, at \$1,440, by transfer from Navy Department.
Jaqua, James C.	Meridian, Miss.	Promoted to under observer at \$1,200 from minor observer at \$1,020.
Kernan, Thomas A.*	Albany, N. Y.	Appointed minor observer at \$1,020, pending certification of eligibles.
Kolb, Eugene E.	San Francisco, Calif.	Promoted to observer at \$1,800 from assistant observer at \$1,620.
Main, Merl S.	Ellendale, N. Dak.	Appointed unskilled laborer at \$1,020.
Medeiros, Stephen S.	Boston, Mass.	Appointed printer at \$1,800.
Miller, David W.	Ithaca, N. Y.	Appointed junior observer at \$1,440.
Molen, James P.	Greensboro, N. C.	Promoted to assistant meteorologist at \$2,700 from \$2,600.
Moore, Melvin W.	Meridian, Miss.	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Neumann, Oscar D.	Green Bay, Wis.	Appointed minor observer at \$1,020.
Orlich, George N.	Detroit, Mich.	Under observer, granted leave without pay from April 16 to July 15, 1929, on account of illness.
Pierce, Leland T.	Cleveland, Ohio.	Promoted to junior meteorologist at \$2,000 from observer at \$1,800.
Pruchn, Gilbert L.	Juneau, Alaska	Promoted to observer at \$1,800 from assistant observer at \$1,620.
Raplee, Llewellyn.	Hartford, Conn.	Promoted to junior meteorologist at \$2,100 from observer at \$1,980.
Rice, Warren J.	Des Moines, Iowa	Promoted to observer at \$1,800 from assistant observer at \$1,680.
Rose, Martin C.	Washington, D. C.	Appointed telegrapher, CAF-4, at \$1,800.
Rusmisl, George P.	Apalachicola, Fla.	Promoted to junior meteorologist at \$2,000 from observer at \$1,800.
Sager, George V.	Reno, Nev.	Promoted to associate meteorologist at \$3,200 from assistant meteorologist at \$2,700.
Salisbury, Burton	Pittsburgh, Pa.	Appointed junior observer at \$1,440, by transfer from Navy Department.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Sanders, John E.....	Apalachicola, Fla.....	Junior meteorologist, granted leave without pay from April 11 to July 10, 1929, on account of illness.
Sergius, Leo A.....	Reno, Nev.....	Appointed junior observer at \$1,440.
Stiehl, William C.....	Hartford, Conn.....	Minor observer at \$1,020, resigned; record, excellent.
Thompson, Howard J...	Fairbanks, Alaska.....	Promoted to associate meteorologist at \$3,200 from assistant meteorologist at \$2,600.
Tomlinson, John.....	Cleveland, Ohio.....	Under observer at \$1,200, resigned; record, excellent.
Tudor, Robert*.....	Boston, Mass.....	Printer at \$1,800, appointment terminated; record, good.
Vernon, Edward M.....	San Francisco, Calif....	Junior meteorologist at \$2,000, resigned; record, excellent.
Wade, William B.....	Albany, N. Y.....	Minor observer at \$1,140, resigned; record, excellent.
Whittier, Bernard B....	Royal Center, Ind.....	Promoted to assistant meteorologist at \$2,600 from junior meteorologist at \$2,400.
Wilcox, George E.....	Cheyenne, Wyo.....	Assistant observer, leave without pay extended to July 26, 1929, on account of continued ill health.

* Indicates temporary appointment. ¹ Includes allowance of \$120 for quarters.

Changes in assignments

Name	Relieved from—	Assigned to—
Ball, Homer W.....	Royal Center, Ind.....	New York, N. Y., assistant.
Cagle, Cecil.....	Atlanta, Ga.....	San Diego, Calif., assistant.
Cohen, Monroe D.....	Ithaca, N. Y.....	Cleveland, Ohio, assistant.
Cone, Fred.....	Des Moines, Iowa.....	Green Bay, Wis., in charge.
Eigenmann, Joseph J....	Springfield, Ill.....	Peoria, Ill., assistant.
Gold, Harold K.....	Scranton, Pa.....	New York, N. Y., assistant.
Moore, Melvin W.....	New Orleans, La.....	Meridian, Miss., assistant.
Prucha, Gilbert L.....	Seattle, Wash.....	Juneau, Alaska, assistant.
Raplee, Llewellyn.....	New York, N. Y.....	Hartford, Conn., in charge.
Riley, John A.....	Broken Arrow, Okla....	Atlanta, Ga., assistant.
Rusmisl, George P.....	Meridian, Miss.....	Apalachicola, Fla., in charge.
Salisbury, Burton.....	Pittsburgh, Pa.....	Scranton, Pa., assistant.
Whittier, Bernard B....	Green Bay, Wis.....	Royal Center, Ind., in charge.

C. H. Marvin.

Chief of Bureau.

WEATHER BUREAU TOPICS AND PERSONNEL

MAY, 1929

WEATHER BUREAU TELEGRAPH LINES TRANSFERRED TO COAST GUARD

The Weather Bureau's telegraph lines between Cape Henry and Hatteras and between Port Angeles and Tatoosh Island, the short telegraph line between North Head and Fort Canby, and the telephone cable between Beaver Island and Charlevoix (Mich.), will be transferred to the Coast Guard at the termination of June 30, 1929.

The first-order stations at Cape Henry, Hatteras, North Head, Port Angeles, and Tatoosh Island will be retained by the Weather Bureau, but the repair stations at Manteo, N. C., and Clallam Bay and Neah Bay, Wash., will be transferred with the lines.

Weather Bureau messages will be given preference and will pass over the lines without charge. The Coast Guard will continue the policy of handling such commercial business as may be offered.

WEATHER SERVICE AT AIRPORTS

The following supplements an item on "Meteorological Equipment at Airports" in the February number:

Each Weather Bureau station will shortly receive a copy of an article on "Weather Service Essential for Safe and Efficient Operation of Airports". In this article the bureau's policy regarding the organization of service at airports, including quarters, personnel, equipment, etc., is clearly defined. All officials in charge will be governed thereby in recommending the establishment of stations, with commissioned personnel, at local airports and in discussing the subject with airport officials and others. It should be clearly kept in mind that such action is not justified unless it contributes to the safety and efficiency of the airways system as a whole. Only such airport stations will be organized by the bureau as are required to form a network of collecting and distributing centers of weather reports and forecasts. When this network is completed, all other airports will be able to receive full information through frequent radio broadcasts from these centers. It will be necessary for the managers of those airports to arrange for the receipt and posting of this information by their own personnel. This is not a function which the Weather Bureau is supposed to assume.

EXPRESS SHIPMENTS

Under a recent ruling of the Comptroller General, charges on express shipments are now subject to land-grant deductions. This may mean

not only suspension of charges where shipment passes over land-grant territory, but will impose on the employee who submits reimbursement claim therefor the burden of collecting such charges from the express company if finally disallowed. To avoid complications, bills of lading should be used whenever possible. Otherwise, effort should be made to have the express company bill their charges to the Central Office in the usual manner, using the consignee's receipt (commonly called a "charge slip") in support of the items.

BIDS

Recent instructions from the department state that no original proposal document should be returned to a bidder, subsequent to the opening of the bids, to clear up obscurities in his bid. This provision is intended to prevent any change in a bid, as such procedure would not be countenanced by the General Accounting Office and would necessitate resubmitting all bids.

MATERIAL FOR OUTSIDE PUBLICATION OR FOR ADDRESSES

It is the policy of the bureau to encourage its officials to keep in close, friendly, and helpful contact with the public through addresses, written articles, and otherwise, whenever they can do so without detriment to their regular duties. Such contact is encouraging to the individual, informative to the public, and thus generally beneficial to all concerned. However, officials addressing the public in person, by radio, or through outside publications should not fail to comply with paragraph 604, Department Regulations, as amended by Department Memorandum 575, which was published in The Official Record for September 7, 1927. For convenient reference the amended paragraph is reprinted below:

Material for outside publication or for addresses.—Subject to the limitations upon the performance of outside work prescribed in paragraph 601, and to such restrictions and regulations as bureau chiefs may prescribe for members of the bureaus under their jurisdiction, employees of the department may prepare articles and text books for publication, and may deliver addresses to radio or other audiences.

If the material treats in any way of the policies of the department or the work of other bureaus or departments, it must be submitted by the chief of the originating bureau to the director of information for approval before it is offered for publication or the address is delivered.

One copy of each article or written address bearing upon the work of the department and prepared for outside publication or delivery, should be sent to the Office of Information for reference and filing. If the department library does not have the printed article or address, a copy should be furnished by the author.

When such addresses or articles fall under subparagraphs 2 or 3, above, two copies should be furnished, one for the Central Office and the other for submission by the Central Office to the department's Office of Information or for file in the department's library.

Please also refer to the brief item, "Radio Talks by Station Officials", in "TOPICS" for January, 1927.

RESPONSIBILITY OF OFFICIALS AT AIRPORTS

It has come to the attention of the Central Office that officials at some of the airport stations occasionally order flares displayed or in other ways assume functions properly belonging to the operations managers or other officials of the air transport companies. The following excerpt from a paper on "Meteorology as an Aid to Safe Flying" defines the bureau's attitude in this matter and is quoted for the guidance of all officials concerned:

It should be distinctly understood that neither in the current reports nor in the forecasts does the meteorologist tell the pilots whether or not they should fly. His function is, and must always be, only to describe the weather itself and give his opinion as to what it will be in the next few hours, leaving to the pilot or to others in control of the airways operations the decision as to the favorableness or unfavorableness of that weather for flight. The wisdom of this policy is apparent when one considers that the appraisal of weather conditions in relation to flight is to a considerable extent a relative one, depending on the experience and temperament of the pilots, the type of aircraft, and the character of the service. Some pilots do not hesitate to start out in weather that others regard as offering considerable risk. Again, a strong head wind is or is not serious, depending upon the speed and cruising radius of the craft that is to fly against it. Finally, greater caution should be exercised with a passenger-carrying than with a mail or express service. These considerations introduce uncertainties with which the meteorologist, with his usually limited flying experience, is not equipped to deal. He indeed has his own quite sufficient responsibility of saying what the weather *itself* will be.

ADDRESSING TELEGRAMS TO WEATHER BUREAU AIRPORT STATIONS

In order to avoid confusion and wrong delivery of telegrams which are intended for a Weather Bureau airport station, such telegrams will hereafter be addressed "Airways Observer", this to be followed only by the name of the city and State. Heretofore the practice has been to address them as "Observer", followed by the detailed address. Experience shows, however, that the one word "Observer" so identifies the message with the Weather Bureau service, in the minds of telegraph operators, that such messages are frequently sent direct to the downtown office of the Weather Bureau instead of the airport office. The use of the address, "Airways Observer", has been agreed to by the telegraph companies.

The airport stations at Bellefonte, Greensboro, Medford, Moline, Oakland, and Redding are exceptions to the foregoing since in those cases there is only one office of the Weather Bureau. Messages to those places will, therefore, be addressed "Observer", as heretofore.

CHANGES IN FILING TIME OF AIRWAYS OBSERVATION MESSAGES

Officials in charge of Weather Bureau airport stations are authorized to request from other stations a change in the filing time of airways observation messages when necessitated by a change in flying schedules. In such cases no additional authorization is necessary, but a copy of the letter requesting such changes should be forwarded to the Central Office.

PERSONAL JOURNEYS BY AIRPLANE

Instances have come indirectly to the attention of the Central Office wherein air transportation companies have been embarrassed by requests from Weather Bureau employees for transportation for themselves or relatives.

The position of the Central Office in such matters is that airplane companies carry Weather Bureau employees by reason of their connection with the bureau, and that therefore it is not possible to disassociate the person from the official. This makes it necessary to view all such matters from an official standpoint and to be most careful not to abuse the privileges extended by the companies.

TELEGRAPHING OBSERVATIONS

In Circular of March 15, 1928, entitled "New Plan for Collecting and Distributing Regular Weather Observations in Replacement of Circuit System", on page 2, 8th paragraph, it is indicated that no prefix to the additional word (for pressure at the previous p. m. observation and the maximum temperature) will be used to indicate inches. Some observers west of the 100th meridian recently have not observed these instructions.

BAROMETRIC CORRECTIONS FOR ALASKAN AND CANADIAN STATIONS

A number of inquiries have been received regarding the proper corrections to be applied to barometric readings from Alaskan and Canadian stations. No corrections are to be applied to Alaskan reports, but the following Canadian readings should be corrected as indicated below:

Aklavik	+.08	Nottingham.....	+.12
Burwell	+.08	Simpson.....	+.50
Hopes Advance	+.24	Smith	+.80
(Undetermined.)		Wakeham	+.08
Mayo	+.30		

USE GOVERNMENT TELEGRAPH WIRES AND RADIO CIRCUITS

The Central Office receives from stations over commercial lines many telegrams that apparently could have come as well over Government wires or radio circuits. While the resultant saving would not amount to much in a day, it would in a year constitute a very helpful supplement to our hard-pressed telegraph fund.

Under ordinary conditions, messages relating to arrivals or departures, substation inspections, or other administrative matters not requiring haste, should be sent by Government wires or radio circuits whenever practicable. Please refer to "TOPICS" for March, 1926.

Messages from airport stations usually can be sent by Department of Commerce radio.

GOVERNMENT VEHICLES FOR MOTOR TRANSPORTATION

Bulletin 115, dated May 15, 1929, from Office of the Chief Coordinator, states that—

"No commercial vehicles should be hired until the area coordinator or, in the District of Columbia, the Coordinator for Motor Transport, has been applied to and has advised that the requirements can not be supplied by Government-owned vehicles", except "In an emergency where there is insufficient time to communicate with the coordinator".

As the foregoing applies also to shipments by motor truck, it will be necessary for station officials to apply to the area coordinator for transportation whenever shipment of an employee's household goods has been authorized and it is practicable to ship by truck.

If an employee who is to be transferred to another station has household goods or personal effects to be shipped at Government expense, a bill of lading will be furnished with his travel authorization, as heretofore, unless the Central Office be notified that arrangements have been made at station for shipment by truck. If such arrangements have been made, or can be made after the bill of lading has been received at station, the bill of lading should, of course, be returned to the Central Office.

When shipping valuable household goods or personal effects by Government truck, employees should consider whether or not it is advisable for them personally to insure the goods, as the Government can not provide insurance nor pay for loss or damage in transit.

PAPER NEEDED AT STATION

Whenever the need for paper of any kind arises at station, a request for the kind desired should be sent to the Central Office, with a statement indicating the price at which such paper can be purchased locally. If the paper can not be furnished by the Central Office, authority will be given to purchase it locally.

TELEPHONE FORM S. N. 650

Stations receiving bills for long-distance telephone tolls stated on commercial Form S. N. 650, will request the companies to render such forms in duplicate hereafter if they are willing to do so. Both copies should be forwarded to the Central Office.

CLIPPINGS

Many Weather Bureau stations are not complying with instructions in paragraphs 220 and 221 of Station Regulations regarding "Quarterly Clippings" and "Data for Local Press", and seem to misunderstand the purposes for which the clippings and data are needed at the Central Office.

"Quarterly Clippings" should be forwarded from all local newspapers issued on the last working day of March, June, September, and December, of each year. Each clipping should be marked to indicate the name of the paper, date of issue, and whether published in the morning or afternoon, and should be mailed in an envelope marked "Quarterly Clippings—Forecast Division". The purpose of such clippings is to

provide a complete up-to-date file and record of the papers publishing weather information and the kind of information and forecasts printed.

"Data for Local Press" should be mailed on the last working day of each month throughout the year in an envelope marked "Data for Local Press—Forecast Division". The data should consist of actual copies of all weather information furnished by Weather Bureau Offices to the local newspapers, and not merely clippings from the papers. The names of the papers to which the data is furnished and whether it is a. m. or p. m. data should be indicated thereon.

Other communications should not be inclosed in envelopes so marked, and the two kinds of data should not be mailed together in one envelope.

All other clippings should be forwarded (subject to directions for "For Clippings", "Topics" for August, 1927) once each week in envelopes marked "Clippings", except that those of special importance should be forwarded immediately. Clippings that are forwarded two or three weeks late usually have lost their value entirely.

EXAMINATION FOR JUNIOR OBSERVER

Announcements of an examination for the position of junior observer in meteorology were mailed to all stations on May 11. The Civil Service Commission will receive applications not later than June 4, 1929.

LETTERS WRITTEN ON THIN PAPER

The Central Office continues to receive from stations letters that are written on very thin paper. As they are necessarily filed vertically, they soon crumple down in the files and are difficult to find. Station officials are requested to use paper of standard weight for letters to the Central Office. A similar item was published in "Topics" for November of 1925.

INSTRUCTIONS FOR AIRWAYS OBSERVERS

Instructions for airways observers, Form 1133, have been printed on cardboard and shipped to Weather Bureau airport and supervising stations generally for distribution to airways observers.

NOVEL USE OF AIRWAYS REPORTS

A novel use of airways reports is made by Seattle motorists. Shortly after the completion of each round of observations for the local airways service, the office of the local automobile club calls the Weather Bureau Airport Station and is given, for each substation from which reports are received, the weather, visibility, wind velocity, temperature, and such other data as may be of interest to a motorist; and also the time of the next round of observations. The club states that several expressions of appreciation of this information have been received from the motoring public.

DELAYED RETURN OF SOUNDING BALLOON METEOROGRAPH

A sounding balloon meteorograph released from Montgomery, Ala., on December 31, 1927, was found near Athens, Ga., on February 28, 1929. After 14 months' exposure the smoked record sheet was found to be in good condition and indicated that the balloon had penetrated the stratosphere. The return of a sounding balloon meteorograph with the record in good condition after such a long interval is quite unusual and shows the possibility of having these instruments returned after more than a year.

FEDERAL BUSINESS ASSOCIATIONS

Weather Bureau officials have been elected to office in local Federal Business Associations as follows:

Mr. W. T. Lathrop, Trenton, reelected president; Mr. R. W. Gray, Miami, elected vice president; Mr. R. C. Counts, jr., Trenton, reelected assistant secretary-treasurer.

RETIREMENT

Miss Laura M. Dey, of the Central Office, was retired on March 22, 1929, on account of total disability. Miss Dey was born at Rocky Hill, N. J., on August 4, 1868. She entered the bureau on February 18, 1897, was assigned to New Brunswick until 1903, to Atlantic City, Louisville, and Milwaukee for short periods, to Indianapolis until 1914, and thereafter to the Central Office.

CHANGES IN PERSONNEL

The following, relative to changes in the personnel of the Weather Bureau during the month of May, 1929, is published for the *exclusive* information of employees of the Weather Bureau:

Appointments, promotions, reductions, etc.

Name	Station	Remarks
Anderson, James M.* . . .	Vicksburg, Miss	Minor observer at \$1,020, appointment terminated; record, fair.
Bahr, Harry L.	Fresno, Calif.	Appointed junior observer at \$1,440.
Bander, Adolph A	New Haven, Conn	Promoted to minor observer at \$1,080 from \$1,020.
Barrett, Paul G.	Denver, Colo	Appointed junior observer at \$1,440, by reinstatement.
Bridges, Theodore L.	Boston, Mass.	Reduced without prejudice to observer at \$1,800 from assistant meteorologist at \$2,600, because of assignment to less important duties.
Callaway, Elliott B.	New Orleans, La.	Junior observer at \$1,440, resigned; record, fair.
Cartwright, Gordon D.	Pittsburgh, Pa.	Appointed junior observer at \$1,440.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Clark, R. Duncan.....	Baltimore, Md.....	Junior observer, restored to duty on June 1, 1929, from leave without pay.
Clasby, Edward J.....	Boston, Mass.....	Appointed junior observer at \$1,440.
Conover, Leslie F.....	Philadelphia, Pa.....	Appointed junior observer at \$1,440, by reinstatement.
Crooker, Clayton B.....	Wichita, Kans.....	Appointed junior observer at \$1,440.
Crowshaw, Arthur J.....	Syracuse, N. Y.....	Appointed junior observer at \$1,440.
Dau, Bud*.....	Fresno, Calif.....	Appointed minor observer at \$1,020, pending certification of eligibles.
Dey, Miss Laura M.....	Washington, D. C.....	Assistant clerk, CAF-3, at \$1,740, leave without pay revoked, and retired March 22, 1929, on account of total disability.
Dixon, Clarence J.....	Peoria, Ill.....	Junior observer at \$1,440, resigned; record, fair.
Dole, Robert M.....	Portland, Me.....	Promoted to assistant meteorologist at \$2,800 from \$2,600.
Edelson, Milton.....	Richmond, Va.....	Appointed junior observer at \$1,440.
Ellithorpe, Philip D.....	Fresno, Calif.....	Under observer at \$1,200, resigned; record, fair.
Foster, Orville R.....	Pueblo, Colo.....	Appointed junior observer at \$1,440.
Friedman, Herman.....	Richmond, Va.....	Promoted to assistant observer at \$1,800 from junior observer at \$1,500.
Frost, Reuben L.....	Portland, Oreg.....	Appointed junior observer at \$1,440.
Giroux, David E.*.....	Winnemucca, Nev.....	Appointed under observer at \$1,200, temporarily.
Harrison, Malcolm C.....	Richmond, Va.....	Promoted to senior observer at \$2,200 from observer at \$1,980.
Harter, Francis W.....	Rapid City, S. Dak.....	Appointed junior observer at \$1,440.
Haworth, Joseph F.*.....	Portland, Oreg.....	Printer at \$1,800, appointment terminated; record, good.
Jespersen, Charles F.....	Chicago, Ill.....	Promoted to observer at \$1,800 from assistant observer at \$1,620.
Johnson, Clinton A.*.....	Greensboro, N. C.....	Minor observer at \$1,020, appointment terminated; record, good.
Kernan, Raphael F.....	Sioux City, Iowa.....	Appointed junior observer at \$1,440.
Keyser, John J.....	Spokane, Wash.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,500.
Kiltinen, Urho O.....	Sault Ste. Marie, Mich.....	Appointed junior observer at \$1,440.
Kittell, Irving A.....	Seattle, Wash.....	Junior meteorologist at \$2,000, resigned; record, good.
Lane, Arthur A.....	Albany, N. Y.....	Appointed junior observer at \$1,440.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Lawler, Edward A.	Chicago, Ill.	Junior meteorologist at \$2,000, resigned; record, good.
Lawrence, Robert V.	Royal Center, Ind.	Promoted to junior meteorologist at \$2,000 from observer at \$1,920.
MacDonell, Lorne H.	Boise, Idaho.	Appointed junior observer at \$1,440.
McQueen, Henry R.	Kansas City, Mo.	Appointed junior observer at \$1,440.
Mahaffy, William.	St. Paul, Minn.	Assistant meteorologist, leave without pay extended to August 1, 1929, on account of continued illness.
Mahaffy, William.	St. Paul, Minn.	Assistant meteorologist, restored to duty on June 1, 1929, from leave without pay.
Messersmith, Howard.	Philadelphia, Pa.	Appointed minor observer at \$1,020; temporary appointment terminated.
Mindling, George W.	Boston, Mass.	Promoted to assistant meteorologist at \$2,800 from \$2,000.
Minser, Edward J.	Ellendale, N. Dak.	Junior observer at \$1,440, resigned; record, good.
Moreland, William N.	Concordia, Kans.	Appointed junior observer at \$1,440.
Neick, Ralph W.	New Haven, Conn.	Promoted to assistant observer at \$1,680 from \$1,620.
Nichols, Roger C.	Seattle, Wash.	Appointed junior observer at \$1,440.
Pedersen, Henry I.	Kansas City, Mo.	Junior observer at \$1,500, resigned; record, excellent.
Rasmussen, Wiggo.	Tatoosh Island, Wash. ..	Mechanic, cash salary readjusted to \$1,800 from \$1,680 to offset loss of quarters.
Rasmusen, Wiggo.	Tatoosh Island, Wash. ..	Mechanic, granted leave without pay from May 3 to August 2, 1929, on account of illness.
Reed, Thomas E.	New Haven, Conn.	Promoted to junior meteorologist at \$2,300 from \$2,200.
Riley, William G.	New York, N. Y.	Assistant observer at \$1,800, resigned; record, excellent.
Ryan, Thomas F.	Vicksburg, Miss.	Appointed minor observer at \$1,020.
Shirley, Robert F.*	Fresno, Calif.	Appointed under observer at \$1,260, temporarily; appointment as minor observer at \$1,020 terminated.
Sik, Alver E.	Chicago, Ill.	Promoted to assistant observer at \$1,620 from junior observer at \$1,500.
Stevlingson, David J.	La Crosse, Wis.	Appointed junior observer at \$1,440.
Straw, Harry B.	Green Bay, Wis.	Appointed junior observer at \$1,440.
Swenson, Milton O.	Chicago, Ill.	Promoted to junior meteorologist at \$2,000 from observer at \$1,800.
Sykes, Lloyd A.	Cleveland, Ohio.	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Tavris, Hyman	Chicago, Ill.....	Appointed junior observer at \$1,440.
Wagner, Arthur C	Indianapolis, Ind	Appointed junior observer at \$1,440.
White, Arkas E.....	Lansing, Mich.....	Promoted to assistant meteorologist at \$2,600 from junior meteorologist at \$2,100.
Wilson, Carl L.....	Grand Rapids, Mich ...	Appointed junior observer at \$1,440.

*Indicates temporary appointment.

Changes in assignments

Name	Relieved from—	Assigned to—
Andrus, Clarence G.....	New York, N. Y.....	Cleveland, Ohio, assistant.
Derr, James W.....	Atlanta, Ga.....	New Orleans, La., assistant.
Dole, Robert M.....	Lansing, Mich.....	Portland, Me., in charge.
Jakl, Vincent E.....	Cleveland, Ohio.....	Omaha, Nebr., assistant.
Robinson, Raymond C..	Green Bay, Wis.....	Royal Center, Ind., assistant.
Sager, George V.....	Los Angeles, Calif.....	Reno, Nev., in charge.
Sergius, Leo A.....	Reno, Nev.....	Spokane, Wash., assistant.
White, Arkas E.....	Royal Center, Ind.....	Lansing, Mich., assistant.



Chief of Bureau.

WEATHER BUREAU TOPICS AND PERSONNEL

JUNE, 1929

RETROACTIVE APPOINTMENTS PROHIBITED

Attention is invited to the article appearing in the October, 1928, number of TOPICS AND PERSONNEL, entitled "Retroactive Appointments Prohibited". Several cases have recently arisen of recommendations for appointments or notification of employment having been received after the employee had begun work. In each case it was of course impossible to make the appointment effective earlier than the day of receipt of the notification from the stations, the employee suffering loss of pay for the days previously employed. Even though a station official may be instructed to procure a new employee, such as a minor observer, on a certain date, it is still incumbent upon him to see that information as to the person selected, either on Form 4075 or 4075A, or by letter or wire, is received at the Central Office and approval of the Secretary of Agriculture obtained before the employee is put to work.

Station officials are reminded that many important instructions are promulgated in TOPICS AND PERSONNEL and they, as well as the assistants, are cautioned to note them carefully and make appropriate notation in such form as will serve as reminders for future action. The Central Office endeavors to promulgate all necessary instructions for stations, and when such action has been taken, in TOPICS AND PERSONNEL, etc., the Central Office considers its responsibility in the matter as having been discharged. Please refer to the first item in "TOPICS" for September of 1926.

INSPECTION FOR FIRE PREVENTION

The department recently has called attention to the necessity for regular, systematic, and frequent inspections of all Government premises (owned or rented) with a view toward eliminating all conditions that may cause or feed a fire.

At the Central Office such inspections are made weekly, and it is desired that a similar rule be followed by officials in charge of stations occupying Weather Bureau buildings.

DIAGRAMS FOR WIRING THE 3-CUP ANEMOMETER

Wiring diagrams for the 3-cup anemometer, packed with the instrument by the manufacturer, have been found to be in error as to the mile-transmitter and the $\frac{1}{16}$ -mile transmitter. In both these instances

the battery wire should be grounded to the binding post on the base of the anemometer. The error is no doubt apparent to employees familiar with mechanisms of this kind.

METEOROLOGICAL STATION ESTABLISHED AT PRINCE GEORGE, B. C.

The Canadian Meteorological Service has closed the station at Barkerville, B. C., and has opened a station at Prince George, B. C. Prince George is located approximately $53^{\circ} 53' N.$ and $122^{\circ} 45' W.$

Arrangements have been made to distribute the Prince George report, the telegraphic designation of which is "George", to Weather Bureau Offices formerly receiving the a. m. and p. m. Barkerville report.

BAROMETER CORRECTION FOR MAYO

In "Barometric Corrections for Alaskan and Canadian Stations", in the last number of "TOPICS", the correction for Mayo was inadvertently given as $+.30$. It should have been $-.30$.

CORRECTING ERRORS MADE BY OPERATORS

The following is quoted from instructions issued June 1, 1929, by the Western Union Telegraph Company to all employees concerned with the handling of reports by the distribution system:

If an operator omits a word from a signal, it shall be corrected as follows:

Platte add as 3rd Feminal.

If a word is duplicated or added, the signal shall be corrected as follows:

Platte omit 3rd Bank.

NOTE.—Under no circumstances shall the word "correction" be used to correct errors made by the telegraph company. It is for use exclusively by the Weather Bureau for the correction of its own errors.

CEILING BALLOONS

A series of 2-theodolite tests on toy balloons, recently completed at the Central Office, shows very satisfactory performance as to rate of ascent during conditions of low ceiling. An order has therefore been placed for a large number of these balloons, hereafter to be known and referred to as "ceiling" balloons, and when these are received they will be distributed to airport stations and to some other stations located at strategic points on the airways. Moreover, they will be sent to selected intermediate airways (secondary) stations, where frequent weather observations are made and where the observers are qualified to include this additional duty.

The use of these balloons will make possible precise determinations of ceiling during the daytime at relatively small cost, thus displacing the unsatisfactory method of estimating heretofore followed, or the rather large cost involved in using pilot balloons.

More detailed instructions will be furnished later to stations where these balloons are to be used.

MAJOR AIRWAYS CONTROL STATIONS

As rapidly as the development of the airways weather service justifies such action, the policy of the bureau is to assign to selected stations the supervision or control of service for certain designated airways or sections of airways. As a rule, the official in charge of the airport station at those places is field organizer, his work being under the general supervision of the city office. He is charged with the duty and responsibility of investigating the need for additional service at any point on the airways, and submitting recommendations, based on such investigation, to the Central Office. To this end other Weather Bureau stations on these airways will forward their recommendations *through* the major control stations, but they will, in many cases as at present, have supervision of near-by secondary or "ground" stations, at least to the extent of selecting observers, forwarding pay rolls, etc.

As time goes on it will probably be advisable to divide the airways into smaller sections and to bring other airways into the system, but at present, and until further notice, the supervisory control is as indicated below.

<i>New York (Hadley Airport):</i>	<i>Chicago (Municipal Airport):—Contd.</i>
New York to Boston.	Chicago to St. Louis.
<i>Washington (Bolling Field):</i>	Chicago to Kansas City.
New York to Atlanta.	Chicago to St. Paul.
<i>Atlanta (Candler Field):</i>	Chicago to Green Bay.
Atlanta to Jacksonville.	<i>Omaha (Fort Crook):</i>
Atlanta to New Orleans.	Chicago to Cheyenne.
<i>Cleveland (Municipal Airport):</i>	Omaha to Kansas City.
New York to Chicago.	<i>Salt Lake City (Municipal Airport):</i>
Cleveland to Buffalo.	Cheyenne to San Francisco.
Cleveland to Pittsburgh.	Salt Lake City to Great Falls.
Cleveland to Louisville.	Salt Lake City to Pasco.
Cleveland to Detroit.	Salt Lake City to Los Angeles.
<i>Chicago (Municipal Airport):</i>	<i>San Francisco (Oakland Airport):</i>
Chicago to Muskegon, Bay City, and	San Francisco to Seattle.
Detroit.	San Francisco to San Diego.
Chicago to Cincinnati.	

For airways not included in the foregoing list, the present arrangement will be continued—namely, supervision by nearest Weather Bureau station of short sections of those airways—until the "major control station" system is extended to them.

PREPARING FORM 3057 IN 3-HOUR REPORTING SYSTEM

In order to eliminate the necessity of entering the received 3-hourly messages at the major airways control stations—Cleveland, Fort Crook (Nebr.), Salt Lake City, and Oakland—it is requested that the reporting stations enter these messages under the caption "Aerological" on separate Forms 3057A in duplicate (or in triplicate if sent to two control stations) and a copy be forwarded to the proper center or centers for checking and reforwarding to Central Office.

In view of the uniformly large number and brevity of the messages transmitted each day, the checks need not be entered daily, but the total number of messages and words transmitted during the month for each place may be placed in the columns indicated on the form; for example, Green Bay to Cleveland, 240 messages, 4,800 words.

In case messages carry telephone tolls to the nearest telegraph office, rules 7 and 14 on back of form, relative to entry of tolls, must be carefully observed.

QUALIFICATION STATEMENTS FOR AIRWAYS OBSERVERS

The Civil Service Commission has ruled that a certificate must be prepared for each appointment of an airways observer, such certificate to include statements giving "duties of position" and "qualifications for appointment". Special forms for this purpose have been provided and on these have been printed a statement of "duties", prepared at the Central Office.

Hereafter all Forms 4076 covering the appointment of airways observers will be accompanied by a brief statement of qualifications. What is desired is information that indicates the proposed appointee's fitness for the work; for example, that his place of business or his home is so located as to make his reports representative of conditions in that section of the airway. A statement of previous experience as cooperative or special observer for the bureau, when such is the case, would also be helpful.

SPECIFICATIONS FOR QUARTERS AT AIRPORT STATIONS

When plans for the improvement of quarters at a Weather Bureau airport station are in prospect, or in an early stage of development, it is essential that the needs of the bureau be presented to the airport authorities and their architect as fully and specifically as possible. With this object in view, the Aerological Division is prepared to furnish such specifications with accompanying sketches, the memorandum being entitled "Weather Bureau Airport Stations—Housing and Instrumental Equipment".

The foregoing applies also to new airport stations that may hereafter be established. One of the first requirements is the provision of adequate quarters. Before taking *any* action in the matter, station officials should thoroughly familiarize themselves with the bureau's policy as set forth in the pamphlet, recently distributed, on Weather Service Essential for Safe and Efficient Operation of Airports". (See "Topics", May, 1929, page 425.)

FORM FOR TELEGRAPHIC REPORTS NOT ENTERED ON FORM 3131

Stations will shortly receive a supply of blank forms on which should be recorded a. m. and p. m. reports that are not counted and entered on Form 3131, either because they were received after 9:35, E. S. T.,

or because their transmission was not authorized. These forms are to be forwarded monthly to the Central Office, beginning with service during June, 1929, by stations receiving reports by the collecting and distributing system operated through the Western Union Telegraph Company. Instructions for preparing the forms appear thereon.

AIRPORT STATIONS TO RENDER FORM 1058

Airport stations being equipped with mercurial barometers are requested to forward Form 1058, "Report of Elevation and Position of Instruments", in accordance with instructions given in Circular F, Instrument Division, in order that barometer correction cards and sea-level reduction tables can be furnished promptly. A note should be entered on the form giving the distance and direction of the airport station from the downtown station. It is frequently possible to obtain the elevation with sufficient accuracy from the airport plans, or from the architect of the building occupied.

Where the quarters are temporary, pending removal at an early date to a reasonably permanent location, the "station elevation" will be the height of the barometer above sea level in the permanent location.

Upon receipt of a barometer, a set of readings on Form 1027 should be forwarded as soon as practicable, with appropriate explanatory notes, comparing the airport and the downtown station barometers. Similar comparative readings will be made thereafter at least twice a year—once at the designated time in December and the other in one of the summer months. See TOPICS AND PERSONNEL for August, 1925.

"PART XI, DAILY RIVER STAGES"

An urgent request has been received for a copy of "Part XI, Daily River Stages". If any station has a copy of this publication, it is requested that it be forwarded to the Central Office immediately.

COPIES OF TELEGRAPH MESSAGES TO BE RETAINED AT STATION

Hereafter copies of all telegraph messages sent from and received at stations, except ship reports, will be retained at stations instead of being forwarded to the Central Office monthly, as heretofore. At the end of each month the messages pertaining to each communication company shall be separated, arranged by dates, and tied into packages. The packages will be stored for three years, after which they will be destroyed, as permitted by law. Radiograms containing observations from ships will be forwarded to the Central Office, as heretofore.

As payment for telegrams is now made from the abstracts, as prepared by each station on Form 3057, it is essential that care and accuracy be employed in preparing the abstracts, which must be forwarded to the Central Office, as now required.

A new issue of Forms 3057 and 3057A will be printed and the instructions thereon will be made to accord with the foregoing.

The present Form 3057A will be used until the new issue is available. The new forms will then be used exclusively and the old forms will be destroyed.

RECOATING CHALK PLATES

In furnishing to the Central Office the date on which a box of chalk plates will be ready for recoating, stations are requested to be as accurate as possible. A calculation based on the rate of use will generally vary less than a week from the date of actual exhaustion, whereas now it is noticed that frequently shipments are made a month or more after the date reported to the Central Office.

Certificates of Inspection of recoated plates should be mailed to the Central Office immediately on receiving the plates from the contractor. As he submits his voucher as soon as he ships the plates back to station, any delay in furnishing the certificate will delay settlement of his account.

TAX-FREE GASOLINE IN STATE OF NEW YORK

The Tax Commission of the State of New York has made provision for exempting the Federal Government from the payment of the State tax on gasoline. Such provisions, which include official identification of purchaser and proof of sale and delivery, are set forth in P. B. A. Circular 127. This circular will be furnished, on request, to New York stations that may need it.

SMELTER FUMES INVESTIGATIONS

For several years, residents in the vicinity of Northport, Wash., have complained of devastating fumes that apparently come from across the Canadian border. The Weather Bureau recently has detailed to Northport an assistant observer from the Spokane station to study meteorological conditions, with the purpose of assisting to ascertain what remedial action is practicable. In addition to the usual meteorological observations, which began June 8, two or three pilot balloon observations will be taken daily. The study is expected to require somewhat more than six months, and is made in cooperation with the Bureau of Chemistry and Soils. Other Government agencies and the owners of the smelter at Trail, B. C., are also making investigations.

REPLACING MILLIMETER PAPER ON PLOTTING BOARDS

It has been found at the Broken Arrow station that by pricking with a needle the air pockets that sometimes form, millimeter paper can be pasted down more smoothly on plotting boards.

FEDERAL BUSINESS ASSOCIATIONS

Weather Bureau officials have been elected to office in local Federal Business Associations as follows:

Mr. Ernest Carson, Port Arthur, was elected secretary of the Sabine

District Association; and Mr. T. R. Taylor was elected to the executive committee of the newly organized association at Asheville.

DEATH

Mr. Morgan R. Sanford, in charge at Syracuse since 1905, died on June 15, 1929, after a brief illness. Mr. Sanford was born at Cameron, N. Y., on February 12, 1862. He entered the Weather Bureau September 29, 1898, and, in addition to several short assignments, served as assistant at Erie, Ithaca, and Syracuse until 1905, when he was placed in charge of the last-named station.

CHANGES IN PERSONNEL

The following, relative to changes in the personnel of the Weather Bureau during the month of June, 1929, is published for the *exclusive* information of employees of the Weather Bureau:

In view of the substantial increases in compensation received by many officials on July 1, 1928, under the Welch Act, the department followed the policy of deferring further promotions within the higher grades at this time.

Appointments, promotions, reductions, etc.

Name	Station	Remarks
Alexander, Avis D.	Groesbeck, Tex.	Appointed junior observer at \$1,440.
Anderson, O. Kenneth..	Medford, Oreg.	Promoted to under observer at \$1,200 from minor observer at \$1,020.
Atkinson, Charles M....	Sault Ste. Marie, Mich..	Appointed minor observer at \$1,020.
Baldwin, Sherd T.	St. Paul, Minn.	Appointed junior observer at \$1,440.
Ball, Lonnie F.	Groesbeck, Tex.	Promoted to assistant observer at \$1,620 from junior observer at \$1,500.
Beeler, Walter E.	Huron, S. Dak.	Promoted to under observer at \$1,200 from minor observer at \$1,020.
Bender, Lee.	Brownsville, Tex.	Appointed junior observer at \$1,440.
Boink, John L.*.	Evansville, Ind.	Appointed minor observer at \$1,020, pending certification of eligibles.
Breese, Alexander.	San Francisco, Calif. ...	Appointed junior observer at \$1,740.
Brody, Bernard.	Chicago, Ill.	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Brooks, Arthur W.	Miami, Fla.	Promoted to junior meteorologist at \$2,000 from observer at \$1,800.
Byers, Horace R.	San Francisco, Calif. ...	Appointed junior meteorologist at \$2,100.
Carlson, Arvid E. A.	Minneapolis, Minn.	Junior observer, restored to duty on June 19, 1929, from leave without pay.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Carpenter, Myron H....	Fort Worth, Tex.....	Appointed junior observer at \$1,440.
Cavanaugh, Daniel J.*..	Buffalo, N. Y.....	Minor observer, leave without pay extended to September 9, 1929, on account of continued illness.
Christensen, Carl W....	Sioux City, Iowa.....	Promoted to under observer at \$1,260 from minor observer at \$1,020.
Clapp, Leo G.....	Cheyenne, Wyo.....	Promoted to junior meteorologist at \$2,200 from senior observer at same salary.
Clark, Kenneth R.....	Boise, Idaho.....	Appointed minor observer at \$1,020.
Cocuzzi, Michael J.....	Buffalo, N. Y.....	Appointed junior observer at \$1,440.
Cottrill, Edward H.*....	Louisville, Ky.....	Appointed minor observer at \$1,020, pending certification of eligibles.
Crawford, Otho W.....	Port Huron, Mich.....	Appointed junior observer at \$1,440.
Curtis, Robert H.....	Grand Junction, Colo...	Appointed junior observer at \$1,440.
Dahlin, Laurel W.....	St. Paul, Minn.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,500.
Dailey, Fabius H.....	Cape Henry, Va.....	Junior mechanic at \$1,620, transferred to the Coast Guard; record, excellent.
Dannheiser, Charles L...	Terre Haute, Ind.....	Promoted to junior observer at \$1,440 from minor observer at \$1,140.
Davis, Harry.....	San Francisco, Calif....	Appointed junior observer at \$1,680.
Decker, James W.....	New York, N. Y.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,560.
Demme, Wilbur T.....	San Francisco, Calif....	Appointed junior observer at \$1,740.
Drinkwater, Alpheus....	Manteo, N. C.....	Junior mechanic at \$1,620, transferred to the Coast Guard; record, excellent.
Dyer, William W., jr...	Pittsburgh, Pa.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Edelblut, Theodore B...	Augusta, Ga.....	Under observer, granted leave without pay from June 10 to September 9, 1929, on account of illness.
Edming, Walter J.....	Ellendale, N. Dak.....	Promoted to observer at \$1,800 from assistant observer at \$1,620.
Elder, Stanley G.....	Buffalo, N. Y.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Fernandez, Henrique*..	San Juan, P. R.....	Appointed minor observer at \$1,020, pending certification of eligibles.
Fife, Cecil S.....	Pocatello, Idaho.....	Appointed junior observer at \$1,440.
Fisher, Lawrence C.....	Seattle, Wash.....	Promoted to assistant meteorologist at \$3,000 from \$2,700.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Foote, William A.....	Concordia, Kans.....	Appointed junior observer at \$1,440.
Fowler, Ammie P.....	Mount Weather, Va....	Unskilled laborer at \$1,020, transferred to Office of Public Buildings and Public Parks of the National Capital; record, excellent.
Fowler, James E.....	Mount Weather, Va....	Junior mechanic at \$1,500, transferred to Office of Public Buildings and Public Parks of the National Capital; record, excellent.
Fulks, Joe R.....	Winnemucca, Nev.....	Appointed junior observer at \$1,440.
Fuller, H. Clark.....	Ellendale, N. Dak.....	Promoted to junior meteorologist at \$2,000 from observer at \$1,800.
Garrett, Richard A.....	San Francisco, Calif....	Promoted to junior meteorologist at \$2,100 from \$2,000.
Gaskins, Horace T.....	Hatteras, N. C.....	Unskilled laborer at \$1,080, transferred to the Coast Guard; record, excellent.
Gilbert, Clarence G.....	Pittsburgh, Pa.....	Promoted to under observer at \$1,200 from minor observer at \$1,020.
Gillam, Raymond T.....	Wichita, Kans.....	Appointed junior observer at \$1,440.
Gold, Harold K.....	New York, N. Y.....	Promoted to assistant observer at \$1,020 from junior observer at \$1,440.
Gress, Edward F.....	Milwaukee, Wis.....	Promoted to under observer at \$1,200 from minor observer at \$1,080.
Grimes, Harry L.....	Indianapolis, Ind.....	Promoted to under observer at \$1,200 from minor observer at \$1,020.
Grunow, C. Dexter.....	Valentine, Nebr.....	Promoted to junior meteorologist at \$2,300 from \$2,200.
Gustafson, Paul E.....	Lander, Wyo.....	Appointed junior observer at \$1,440.
Hamrick, Andrew M....	Davenport, Iowa.....	Promoted to associate meteorologist at \$2,200 from assistant meteorologist at \$2,800.
Harold, Edward F.....	Columbus, Ohio.....	Promoted to under observer at \$1,200 from minor observer at \$1,080.
Harter, Francis W.....	Rapid City, S. Dak.....	Junior observer at \$1,440; resigned; served but a few days.
Hayes, John W.....	Rapid City, S. Dak....	Promoted to under observer at \$1,200 from minor observer at \$1,020.
Haynes, Frank.....	Denver, Colo.....	Promoted to assistant observer at \$1,020 from junior observer \$1,440.
Hemphill, Phillips P....	Atlanta, Ga.....	Promoted to observer at \$1,800 from junior observer at \$1,500.
Hertzberger, Phillip S..	Evansville, Ind.....	Promoted to under observer at \$1,200 from minor observer at \$1,020.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Hester, Donald M.....	Dallas, Tex.....	Appointed junior observer at \$1,440.
Hoffman, Calman.....	Boston, Mass.....	Appointed junior observer at \$1,440.
Horn, Victor T.....	Denver, Colo.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Howk, Ernest F.....	Terre Haute, Ind.....	Designation changed to observer at \$1,800 from scientific aid, SP-5, at same salary.
Hutchison, Howard E...	Kansas City, Mo.....	Appointed junior observer at \$1,440.
Jackson, Harwood F....	San Francisco, Calif....	Appointed junior observer at \$1,740.
Jennings, Arthur H....	Syracuse, N. Y.....	Appointed junior observer at \$1,440.
Johnson, Clifton E.....	Port Angeles, Wash....	Senior mechanic at \$2,040, transferred to the Coast Guard; record, excellent.
Johnson, Lorand V....	Huron, S. Dak.....	Appointed junior observer at \$1,440.
Johnson, Warren O....	Huron, S. Dak.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Jolliff, Louis W.....	Yakima, Wash.....	Appointed junior observer at \$1,440.
Kauffman, Eldon E....	Springfield, Ill.....	Appointed assistant observer at \$1,620, by reinstatement.
Kee, Elmer M.....	Chattanooga, Tenn....	Observer at \$1,800, resigned; record, excellent.
Keefe, John R. F.....	Washington, D. C.....	Assistant clerk-stenographer, leave without pay extended to September 8, 1929, on account of continued illness.
Kimball, James H.....	New York, N. Y.....	Promoted to meteorologist at \$3,800 from associate meteorologist at \$3,400.
Klemetemo, Arvid S....	Duluth, Minn.....	Appointed junior observer at \$1,440.
Lang, Clarence V.....	Rapid City, S. Dak....	Appointed junior observer at \$1,440.
Larsen, A. Lauritz.....	Lander, Wyo.....	Appointed junior observer at \$1,440.
Larson, O. Theodore....	Chicago, Ill.....	Promoted to observer at \$1,800 from assistant observer at \$1,620.
Lawler, Thomas A.....	Ellendale, N. Dak.....	Promoted to assistant meteorologist at \$2,600 from junior meteorologist at \$2,000.
Lay, Owen T.....	Chicago, Ill.....	Promoted to associate meteorologist at \$3,200 from assistant meteorologist at \$2,800.
Lennahan, Charles M...	Ellendale, N. Dak.....	Appointed junior observer at \$1,440.
Lovett, Ernest K.....	Helena, Mont.....	Promoted to assistant observer at \$1,620 from junior observer at same salary.
McBirney, Harold R....	Boise, Idaho.....	Promoted to under observer at \$1,260 from minor observer at \$1,020.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
McCollum, Willis V.	Washington, D. C.	Appointed assistant clerk-stenographer, CAF-3, at \$1,620, by transfer from the Office of the Secretary.
McDaniel, Wayne A.	Royal Center, Ind.	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
McDonald, Willard F.	New Orleans, La.	Promoted to associate meteorologist at \$3,200 from assistant meteorologist at \$2,800.
McKinney, Wilbur F.	Grand Junction, Colo.	Appointed junior observer at \$1,440.
Mark, Ellison S.	Helena, Mont.	Appointed junior observer at \$1,440.
Martin, Delance O.	Chicago, Ill.	Appointed junior observer at \$1,440.
Merritt, Dale W.	San Francisco, Calif.	Promoted to minor observer at \$1,080 from \$1,020.
Nakamura, Winters T.	Honolulu, Hawaii.	Junior observer, name changed on rolls from Winters T. Nacamura.
Nelson, Walter E.	Redding, Calif.	Appointed junior observer at \$1,440.
Norman, Clarence W.	Portland, Oreg.	Observer, leave without pay extended to June 26, 1929.
Norquest, Kenneth S.	Boise, Idaho.	Junior observer, restored to duty on June 13, 1929, from leave without pay.
O'Daniel, George E.	St. Louis, Mo.	Appointed junior observer at \$1,440.
Parkinson, Gordon R.	San Francisco, Calif.	Promoted to observer at \$1,860 from \$1,800.
Parry, H. Dean.	Pocatello, Idaho.	Appointed junior observer at \$1,440.
Paul, Raymond R.	Winnemucca, Nev.	Appointed junior observer at \$1,440.
Pearson, Floyd H.	Cheyenne, Wyo.	Promoted to observer at \$1,800 from assistant observer at \$1,620.
Pitzen, Gervin N.	Green Bay, Wis.	Appointed junior observer at \$1,440.
Randall, Dwight L.	Medford, Oreg.	Appointed minor observer at \$1,020, by reinstatement.
Reynolds, Hubert W.	Milwaukee, Wis.	Appointed junior observer at \$1,440.
Ribble, Norbert G.	Sioux City, Iowa.	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Richards, Harland.	Springfield, Ill.	Appointed junior observer at \$1,440.
Rollins, Howard A.	Evansville, Ind.	Promoted to observer at \$1,800 from assistant observer at \$1,620.
Ruth, Hjalmar A. A.	New York, N. Y.	Promoted to observer at \$1,920 from \$1,800.
Salisbury, Burton.	New York, N. Y.	Promoted to assistant observer at \$1,740 from junior observer at \$1,440.
Sands, Fred G.	Neah Bay, Wash.	Mechanic at \$1,800 ¹ , transferred to the Coast Guard; record, excellent.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Sands, George O.....	Clallam Bay, Wash....	Mechanic at \$1,020 ¹ , transferred to the Coast Guard; record, excellent.
Sanford, Morgan R.....	Syracuse, N. Y.....	Associate meteorologist at \$3,200, died June 15, 1920.
Schmidt, Reinhart C....	St. Louis, Mo.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,500.
Showalter, Albert K. ...	La Crosse, Wis.....	Appointed junior observer at \$1,440.
Slater, Belden H.....	Port Huron, Mich....	Promoted to under observer at \$1,260 from minor observer at \$1,020.
Slenes, Henry C.....	Helena, Mont.....	Promoted to under observer at \$1,260 from minor observer at \$1,020.
Smalley, Clarence L.....	Pueblo, Colo.....	Appointed junior observer at \$1,440.
Stapowich, Edward F....	Buffalo, N. Y.....	Appointed junior observer at \$1,440.
Strader, Zell E.....	Keokuk, Iowa.....	Appointed junior observer at \$1,440.
Straw, Harry B.....	Green Bay, Wis.....	Junior observer at \$1,440, resigned; served but a few days.
Syer, Charles S.....	Sault Ste. Marie, Mich..	Promoted to under observer at \$1,260 from minor observer at \$1,020.
Timberlake, Richard H..	Cape Henry, Va.....	Appointed skilled laborer at \$1,140.
Ush, W. Howard.....	Grand Rapids, Mich...	Appointed junior observer at \$1,440.
Warren, Leslie A.....	Cheyenne, Wyo.....	Promoted to associate meteorologist at \$3,200 from assistant meteorologist at \$2,700.
Whipple, J. Howard....	Cheyenne, Wyo.....	Appointed junior observer at \$1,440.
Wickham, George D....	Boise, Idaho.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Wilgus, Russel V.....	Valentine, Nebr.....	Appointed junior observer at \$1,440.
Williams, Nelson R.....	Fresno, Calif.....	Appointed junior observer at \$1,440.
Williamson, Robert S...	Chattanooga, Tenn....	Promoted to observer at \$1,800 from assistant observer at \$1,620.
Wilson, Raymond L....	Miami, Fla.....	Appointed junior observer at \$1,500; appointment as minor observer at \$1,080 terminated.
Wozencraft, Jean P....	Cincinnati, Ohio.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Wyland, Miles W.....	Sheridan, Wyo.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Vaughan, Lloyd D.....	Columbus, Ohio.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,500.

*Indicates temporary appointment. ¹Includes allowance of \$120 for quarters.

Changes in assignments

Name	Relieved from—	Assigned to—
Brooks, Arthur W	Atlanta, Ga.	Miami, Fla., assistant.
Carpenter, Myron H.	Fort Worth, Tex.	San Jose, Calif., assistant.
Clapp, Leo G.	Havre, Mont	Cheyenne, Wyo., assistant.
Conover, Leslie F.	Philadelphia, Pa.	Scranton, Pa., assistant.
Cook, Paul S.	Dallas, Tex.	Groesbeck, Tex., assistant.
Dannheiser, Charles L.	Terre Haute, Ind.	Evansville, Ind., assistant.
Decker, James W.	Cape Henry, Va.	New York, N. Y., assistant.
Edming, Walter J.	Boise, Idaho.	Ellendale, N. Dak., assistant.
Fisher, John C.	Ithaca, N. Y.	Syracuse, N. Y., in charge.
Fisher, Lawrence C.	Denver, Colo.	Seattle, Wash., assistant.
Hemphill, Phillips P.	Broken Arrow, Okla.	Atlanta, Ga., assistant.
Kallquist, Clarence R.	Groesbeck, Tex.	Salt Lake City, Utah, assistant.
Lanoureaux, Clarence E.	Ithaca, N. Y.	Syracuse, N. Y., assistant.
Mindling, George W.	Portland, Me.	Boston, Mass., assistant.
Phillips, Victor V.	Groesbeck, Tex.	Brownsville, Tex., assistant.
Rollins, Howard A.	St. Paul, Minn.	Evansville, Ind., assistant.
Salisbury, Burton.	Scranton, Pa.	New York, N. Y., assistant.
Thompson, Howard J.	Juneau, Alaska.	Fairbanks, Alaska, in charge.
Wickham, George D.	Yakima, Wash.	Boise, Idaho, assistant.
Williamson, Robert S.	Raleigh, N. C.	Chattanooga, Tenn., assistant.
Wilson, Raymond L.	Louisville, Ky.	Miami, Fla., assistant.

Central Office promotions within grade, effective July 1, 1929

Name	Title	Classification grade	Salary	
			From	To
Day, Wilfred P.	Assistant Meteorologist	P-3	\$2,900	\$3,000
Hund, Irving F.	Junior Meteorologist.	P-1	2,300	2,400
Rohrer, Charles W.	Administrative Assistant.	CAF-8	3,200	3,300
Brennan, John J.	Principal Clerk	CAF-6	2,500	2,600
DeForest, John S.	Principal Clerk	CAF-6	2,500	2,600
Hurd, Willis E.	Principal Clerk	CAF-6	2,500	2,600
Ross, Lewis C.	Principal Clerk	CAF-6	2,500	2,600
Engell, Don Y.	Senior Clerk	CAF-5	2,300	2,400
Hunter, Herbert C.	Senior Clerk	CAF-5	2,200	2,300
Magrum, Albert F.	Senior Clerk	CAF-5	2,000	2,100
Colborn, Miss Martha J.	Clerk	CAF-4	1,800	1,920
Duval, Charles C.	Telegrapher	CAF-4	1,800	1,800
Long, Miss Olive M.	Clerk	CAF-4	1,800	1,800
Rhodes, Miss Callie E.	Clerk-Stenographer.	CAF-4	1,800	1,800
McKinley, William R.	Senior Operative	CAF-3	1,680	1,740
Ratner, Benjamin	Assistant Clerk	CAF-3	1,620	1,680
Hutsler, Miss Darathen G.	Jr. Clerk-Stenographer	CAF-2	1,440	1,500
Peake, Malcolm E.	Junior Clerk	CAF-2	1,440	1,500
Tugman, Alfred B., jr.	Junior Clerk	CAF-2	1,440	1,500
Ferguson, James H.	Senior Scientific Aid	SP-6	2,000	2,100
Haidle, Arthur J.	Senior Scientific Aid	SP-6	2,100	2,200
Mattice, William A.	Senior Scientific Aid	SP-6	2,100	2,200
Robinson, Milton A.	Senior Scientific Aid	SP-6	2,200	2,300

Central Office promotions within grade, effective July 1, 1929.—Continued

Name	Title	Classification grade	Salary	
			From	To
Schlosser, Lawrence	Senior Eng. Draftsman	SP-6	\$2,100	\$2,200
Staderman, William G	Senior Lith., Mechnl	SP-6	2,100	2,200
Voll, John E	Senior Lith., Mechnl	SP-6	2,100	2,200
Brady, James M	Scientific Aid	SP-5	1,800	1,860
Burg, Alfred C	Scientific Aid	SP-5	1,800	1,860
Doering, Carroll J	Scientific Aid	SP-5	1,800	1,860
Dunn, Gordon E	Scientific Aid	SP-5	1,800	1,920
Gumpf, Ralph E	Scientific Aid	SP-5	1,800	1,860
Harrison, Louis P	Scientific Aid	SP-5	1,800	1,860
King, Milford F	Scientific Aid	SP-5	1,800	1,860
Swenson, Bennett	Scientific Aid	SP-5	1,800	1,860
Zoch, Richmond T	Scientific Aid	SP-5	1,860	1,920
Cox, William C	Assistant Scientific Aid	SP-4	1,740	1,800
Hagen, Norman R	Assistant Scientific Aid	SP-4	1,620	1,680
Kutschenreuter, Paul H	Assistant Scientific Aid	SP-4	1,620	1,680
Lazenby, Richard O	Assistant Scientific Aid	SP-4	1,800	1,860
Wood, Willis A	Assistant Scientific Aid	SP-4	1,620	1,680
Stanton, John B	Junior Mechanic	Cu-5	1,620	1,680
Belt, George H	Assistant Messenger	Cu-2	1,080	1,140
Thomas, Harold	Assistant Messenger	Cu-2	1,080	1,140
Jackson, Walter A	Junior Messenger	Cu-1	600	660

Field promotions within grade, effective July 1, 1929

Name	Title	Station	Salary	
			From	To
Alexander, George W	Asst. Metlgst	Seattle, Wash	\$2,700	\$2,800
Alter, J. Cecil	Asso. Metlgst	Salt Lake City, Utah	3,200	3,300
Bavendick, Frank J	Asst. Metlgst	Bismarck, N. Dak	2,600	2,700
Belt, Charles A	Asst. Metlgst	Pittsburgh, Pa	2,600	2,700
Crombie, Francis C	Junior Metlgst	Boston, Mass	2,000	2,200
Dague, Charles I	Asst. Metlgst	Portland, Oreg	2,700	2,800
Ellison, Eckley S	Asst. Metlgst	Pomona, Calif	2,700	2,800
Felton, Ernest L	Asst. Metlgst	Grand Junction, Colo.	2,600	2,700
Gray, Richard W	Asst. Metlgst	Miami, Fla	2,600	2,700
Green, Berton B	Un-killed Lab	Abilene, Tex	600	660
Greening, Gershom K	Asst. Metlgst	Sioux City, Iowa	2,600	2,700
Hallenbeck, Cleve	Asst. Metlgst	Roswell, N. Mex	2,600	2,700
Keyser, Elgie M	Asst. Metlgst	Spokane, Wash	2,600	2,700
Labovich, William M	Asst. Metlgst	Milwaukee, Wis	2,600	2,700
Lindgren, Gustave S	Asso. Metlgst	Albany, N. Y	3,200	3,300
Lockwood, John E	Asst. Metlgst	Charleston, S. C	2,600	2,700

Field promotions within grade, effective July 1, 1929.—Continued

Name	Title	Station	Salary	
			From	To
McAuliffe, Joseph P.	Asst. Metlgst.	Corpus Christi, Tex. .	\$2, 600	\$2, 700
Moxom, Walter J.	Asst. Metlgst.	St. Louis, Mo.	2, 600	2, 700
Naughton, Percy J.	Asst. Metlgst.	Jacksonville, Fla.	2, 600	2, 700
Nieves, Carlos	Unskilled Lab . . .	San Juan, P. R.	600	660
Nunn, Roscoe.	Asso. Metlgst.	Baltimore, Md.	3, 400	3, 500
Robins, Millard V.	Asso. Metlgst.	Omaha, Nebr.	3, 200	3, 300
Root, Clarence J.	Asso. Metlgst.	Springfield, Ill.	3, 400	3, 500
Scott, Arthur H.	Asst. Metlgst.	Atlanta, Ga.	2, 600	2, 700
Shaver, Robert M.	Asst. Metlgst.	El Paso, Tex.	2, 600	2, 700
Talbott, William W.	Asst. Metlgst.	Springfield, Mo.	2, 600	2, 700
Tannehill, Ivan R.	Asst. Metlgst.	Galveston, Tex.	2, 600	2, 700
Unger, Ellwood E.	Asst. Metlgst.	Meridian, Miss.	2, 600	2, 700
Vanderpool, Jesse L.	Asst. Metlgst.	Rochester, N. Y.	2, 700	2, 800
Wahlgren, Harry F.	Asst. Metlgst.	Oklahoma City, Okla.	2, 600	2, 700



Chief of Bureau.

WEATHER BUREAU TOPICS AND PERSONNEL

JULY, 1929

INSTRUCTIONS IN "TOPICS"

For several years a card index of instructions in "Topics" has been kept at the Davenport station. On receipt of "Topics", a card is prepared for each item applicable to the work of the station. The subject of the instructions is typed at the top of the card, beginning at the left margin, and the number of "Topics" is indicated in the right, upper corner, while a brief summary of the instructions is given below. When instructions are revised, proper notation is made on the card or a new card is prepared and the old one is placed in a "dead" list. Cards are filed alphabetically by subjects.

As important instructions in "Topics" are sometimes overlooked or forgotten, the practice indicated above is recommended to all stations.

AIRWAYS OBSERVERS

As required in the special Civil Service authorization for such cases, individual appointments must be given by the Secretary of Agriculture to airways observers receiving wages in excess of \$45 a month. Therefore, authority for employment of observers at such rates can not be given in Circular No. 7 or in printed Instructions.

Appointment papers will be in the same form as those for regular full-time personnel, and will be referred to by sheet and line numbers on the pay roll in the manner usual for ordinary appointments, promotions, etc. Supervising centers should include the names of employees of this class in their regular monthly pay rolls, segregating them at the end of the rolls by a few spaces.

Checks in payment for such services will be mailed to the supervising centers for distribution, subject, however, to receipt there of completed forms or such other evidence of service as may be required.

Authority for making such appointments does not extend beyond a period of three years.

MAGNIFIED SCALE FOR OVERHEAD PILOT BALLOON OBSERVATIONS

During the summer months there are times when the winds are so light that a pilot balloon drifts away very slowly; as a result the observation points are close together near the center of the plotting board. It was found very difficult to work up that type of observation with accuracy

if the regular scales on the plotting board were used; therefore, the practice at the Moline Airport is to multiply each distance by 10. This enables the observer to work the difficult points with ease and accuracy, as it is necessary only to divide the scaled velocity accordingly, and the direction angle is not affected.

PREPARING AIRWAYS WEATHER REPORTS

Instructions for airways observers, Form 1133, should be used by all stations in preparing airways weather reports. The terms and phrases given on this form for expressing the state of sky and weather and other elements are the result of three years' experience in weather reporting at airport stations. Consistency in their use is essential.

RUST ON ANEMOMETERS

Several anemometers recently returned to the Central Office show rust on the spindle, occasioned by the entrance of water. A preventive measure is to smear a small quantity of cup grease or vaseline on the oil-hole cover—possibly at the top oil cup also. Careful setting up of these parts is essential.

ELEVATION OF WIND INSTRUMENTS AT CLEVELAND

The Weather Bureau Office at Cleveland was moved to the Engineer's Bank Building about June 30, 1929, in order to obtain a better exposure for the wind instruments. The elevation of the anemometer, with accompanying wind vane, was thereby increased from 200 feet to 317 feet above the ground.

NEW ATLAS OF AMERICAN AGRICULTURE

The last of the three climatic sections of the new Atlas of American Agriculture has been completed, after much delay, and a supply is available to furnish each regular station a copy on request.

The new section, 34 pages, is entitled "Temperature, Sunshine, and Wind". The section on "Precipitation and Humidity", 48 pages, appeared in 1922, and that on "Frost and the Growing Season", 12 pages, in 1918. Each section is 19 by 13½ inches, and contains many large and small charts, some text, and a carefully compiled bibliography.

Officials in charge of stations are asked to report which, if any, or if all, of the three climatic sections are desired. The supply of the "Precipitation" and "Frost" sections is limited, and as the size is not convenient for filing, some of the smaller stations may not want them.

The nonclimatic parts of the atlas are not of special interest to meteorologists, and it is expected that all parts will be distributed mainly by the Office of Information of the department. Therefore the climatic part probably will not be listed in the Weather Bureau's "Price List of Publications".

LIVING QUARTERS AT AIRPORTS

As a policy, the Central Office is opposed to the acquisition of living quarters when forming a part of the gratuitous space now being furnished the bureau in airport administration buildings. The acceptance of living quarters results in a number of problems of particular personal concern to the observers, which in most instances present situations of an undesirable nature. The occupancy of such living quarters will require a deduction in cash salary for allowance in kind, in accordance with rulings of the Comptroller General. At the same time, because of the usual isolated location of an airport, they will not be desirable, even for single men. It would in no case be advisable to permit the use of such quarters for family occupancy, and the consequent alternative open to men of family would be the maintenance of separate domiciles. For the foregoing and other reasons, the bureau desires to discourage the construction of airport living quarters for its use, but where such quarters are, nevertheless, provided, to utilize them for temporary rest needs rather than exclusive domicile of the observers.

RADIO CIRCULARS

New editions of Radio Circulars Nos. 13 and 16 have been mailed to all stations. They were dated August 1, 1929, and become effective August 15. A number of changes have been made in the radio broadcasts described therein, and all previous issues of circulars bearing the same numbers should be destroyed. Additional copies may be procured from the Central Office upon application. Radio Circular No. 14 will be issued shortly under date of August 15, 1929, and will be mailed to all stations.

RETIREMENT

Miss Alice T. Hercus, of the Central Office, was retired July 8, 1929, on account of total disability. Miss Hercus was born at Philadelphia, Pa., on June 28, 1862. She entered the Weather Bureau on January 3, 1887, and served continuously at the Central Office until retired.

DEATH

Dr. Harry C. Frankenfield, in charge of the River and Flood Service of the Weather Bureau, died July 29, 1929, from injuries received when struck by an automobile on July 22.

Doctor Frankenfield was born at Easton, Pa., on November 24, 1862. After graduation from Lafayette College he enlisted in the Signal Corps on January 4, 1882, and spent the usual six months at Fort Myer for training. He was assigned to the Central Office for the next four years. He had charge of the Chicago station from 1887 to 1894, and then of the St. Louis station until 1898. From 1898 to 1920 he was one of the official forecasters of the Washington office; and was in charge of the

bureau's River and Flood Service from 1898 to 1912 and again from 1920 to the time of his death.

Doctor Frankenfield had the degrees of A. B. and A. M. from Lafayette College and M. D. from Howard University. He was a member of the Philosophical Society of Washington and of the Washington Academy of Sciences, and Fellow of the American Meteorological Society.

CHANGES IN PERSONNEL

The following, relative to changes in the personnel of the Weather Bureau during the month of July, 1929, is published for the *exclusive* information of employees of the Weather Bureau:

Appointments, promotions, reductions, etc.

Name	Station	Remarks
Aime, E. Allan	New Orleans, La.	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Albrecht, Herbert F.*	Milwaukee, Wis	Appointed minor observer at \$1,020, pending certification of eligibles.
Aldredge, Robert C.	Key West, Fla.	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Alkire, Herbert L.	Davenport, Iowa	Appointed junior observer at \$1,560.
Anderson, Ivan E.	San Francisco, Calif.	Promoted to senior observer and radio operator at \$2,000 from observer and radio operator at \$1,800.
Balch, Samuel A.	Trenton, N. J.	Appointed junior observer at \$1,560.
Banfield, Norman C.	Detroit, Mich.	Appointed junior observer at \$1,440.
Bankert, Max K.*	Huron, S. Dak	Appointed minor observer at \$1,020, pending certification of eligibles.
Beeman, Richard	St. Louis, Mo.	Minor observer at \$1,020, resigned; record, fair.
Belt, George H	Washington, D. C.	Promoted to junior clerk, CAF-2, at \$1,440, from assistant messenger, Cu.-2, at \$1,140.
Booth, Thomas W.	San Francisco, Calif.	Promoted to observer and radio operator at \$1,800 from assistant observer at \$1,620.
Brancato, George N.	Springfield, Ill.	Appointed minor observer at \$1,020; temporary appointment terminated.
Bratton, Robert F.*	Indianapolis, Ind	Appointed minor observer at \$1,020, pending certification of eligibles.
Brotzman, Lloyd E.	New York, N. Y.	Promoted to senior observer at \$2,000 from observer at \$1,860.
Burchett, Herman G.	Greensboro, N. C.	Appointed minor observer at \$1,020.
Burkhead, Charles E.	Raleigh, N. C.	Appointed junior observer at \$1,440.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Byers, Horace R.	San Francisco, Calif.	Junior meteorologist at \$2,100, resigned; record, good.
Cameron, Donald C.	Kansas City, Mo.	Junior meteorologist at \$2,000, resigned; record, excellent.
Canaday, Thomas B., jr. . .	New Orleans, La.	Promoted to assistant observer at \$1,620 from junior observer at \$1,500.
Carlson, Arvid E. A.	Kansas City, Mo.	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Carpenter, Carl A.	San Francisco, Calif.	Appointed senior observer at \$2,000, by reinstatement.
Chappell, Edward H.	Chattanooga, Tenn.	Appointed junior observer at \$1,440.
Collins, Harry L.	New Orleans, La.	Appointed junior observer at \$1,440.
Cook, Paul S.	Groesbeck, Tex.	Promoted to junior meteorologist at \$2,000 from observer at \$1,920.
Dick, L. Walter.	Dubuque, Iowa.	Promoted to assistant meteorologist at \$2,600 from junior meteorologist at \$2,000.
Fisher, John C.	Syracuse, N. Y.	Promoted to associate meteorologist at \$3,200 from assistant meteorologist at \$2,700.
French, George M.	Los Angeles, Calif.	Promoted to assistant meteorologist at \$2,600 from junior meteorologist at \$2,000.
Giroux, David E. *	Winnemucca, Nev.	Under observer at \$1,260, appointment terminated; record, good.
Glasgow, Wilson S. *	Pittsburgh, Pa.	Appointed minor observer at \$1,020, pending certification of eligibles.
Guthrie, Leon J.	San Francisco, Calif.	Designation changed to junior meteorologist at \$2,000 from senior observer and radio operator at same salary.
Hammons, Wendell.	Omaha, Nebr.	Appointed junior observer at \$1,440.
Hercus, Miss Alice T.	Washington, D. C.	Clerk, CAF-4, at \$1,980, retired July 8, 1929, on account of total disability.
Hiner, Thomas J.	Cincinnati, Ohio.	Appointed junior observer at \$1,440.
Hock, Anthony A.	New York, N. Y.	Appointed printer at \$1,800.
Hug, Floyd E. *	Sioux City, Iowa.	Appointed minor observer at \$1,020, pending certification of eligibles.
Jacobson, Henry L.	Chicago, Ill.	Promoted to observer at \$1,800 from assistant observer at \$1,620.
Kallquist, Clarence R.	Salt Lake City, Utah. . .	Promoted to assistant meteorologist at \$2,600 from junior meteorologist at \$2,000.
Kline, Alfred B.	Pittsburgh, Pa.	Appointed junior observer at \$1,440.
Knarr, Elmore D.	Royal Center, Ind.	Promoted to junior meteorologist at \$2,000 from observer at \$1,920.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Lamoureux, Clarence E.	Syracuse, N. Y.	Promoted to junior meteorologist at \$2,000 from observer at \$1,860.
Landau, Louis	New York, N. Y.	Promoted to observer at \$1,920 from assistant observer at \$1,740.
Larsen, A. Lauritz	Salt Lake City, Utah	Promoted to junior observer at \$1,560 from \$1,440.
Larson, O. Theodore	Chicago, Ill.	Observer at \$1,800, resigned; record, excellent.
Lawrence, Robert V.	Omaha, Nebr.	Promoted to assistant meteorologist at \$2,600 from junior meteorologist at \$2,000.
Leschander, Donald B.*	Rochester, N. Y.	Appointed minor observer at \$1,020, pending certification of eligibles.
MacDonald, Hugh*	Helena, Mont.	Appointed minor observer at \$1,020, pending certification of eligibles.
McKenzie, Arnold E.	Columbus, Ohio	Appointed junior observer at \$1,440.
Maguire, Daniel J.	St. Louis, Mo.	Appointed junior observer at \$1,440.
Mahaffey, Lawrence K.	Columbus, Ohio	Appointed minor observer at \$1,020.
Myers, Harry V.	Davenport, Iowa	Appointed junior observer at \$1,560.
Nicholson, David E.	Kansas City, Mo.	Promoted to senior observer at \$2,000 from observer at \$1,800.
Parry, Benjamin	New York, N. Y.	Promoted to assistant meteorologist at \$2,600 from senior observer at \$2,300.
Pawlak, Anthony J.*	Detroit, Mich.	Appointed under observer at \$1,260, temporarily.
Percy, William M.	Macon, Ga.	Appointed junior observer at \$1,440.
Phillips, Victor V.	Brownsville, Tex.	Promoted to junior meteorologist at \$2,000 from observer at \$1,800.
Post, Donald S.	Detroit, Mich.	Promoted to assistant observer at \$1,620 from junior observer at \$1,500.
Orlich, George N.	Detroit, Mich.	Under observer, leave without pay extended to October 15, 1929, on account of continued illness.
Raab, Emil A. P.	Buffalo, N. Y.	Promoted to junior meteorologist at \$2,100 from observer at \$1,800.
Reed, Wilson, jr.	Cleveland, Ohio	Promoted to assistant meteorologist at \$2,600 from junior meteorologist at \$2,100.
Rosenfield, Berthold E.*	Buffalo, N. Y.	Appointed minor observer at \$1,020, pending certification of eligibles.
Rumbaugh, Walter F.	Boise, Idaho	Promoted to junior meteorologist at \$2,000 from observer at \$1,800.
Ruth, Hjalmar A. A.	New York, N. Y.	Promoted to senior observer at \$2,100 from observer at \$1,920.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Sanders, John E.	Apalachicola, Fla.	Junior meteorologist, leave without pay extended to October 10, 1929, on account of continued illness.
Schnurbusch, William J.	Brownsville, Tex.	Promoted to assistant meteorologist at \$2,600 from junior meteorologist at \$2,200.
Sexton, Huyler B.	New Haven, Conn.	Appointed junior observer at \$1,440.
Shultz, Ralph W.	Omaha, Nebr.	Promoted to assistant observer at \$1,620 from junior observer \$1,440.
Solot, Samuel B.	Philadelphia, Pa.	Appointed junior observer at \$1,440.
Springman, Herbert C. .	Kansas City, Mo.	Designation changed to junior meteorologist at \$2,200 from senior observer at same salary.
Sunseri, Nino.	San Francisco, Calif.	Promoted to senior observer and radio operator at \$2,000 from observer and radio operator at \$1,800.
Talbott, William W.	Springfield, Mo.	Assistant meteorologist, granted leave without pay from August 1 to September 5, 1929.
Trolle-Steenstrup, Frank H.	New York, N. Y.	Promoted to assistant observer at \$1,740 from junior observer at \$1,560.
Wilcox, George E.	Cheyenne, Wyo.	Assistant observer, leave without pay extended to October 26, 1929, on account of continued ill health.
Willig, Charles.	Buffalo, N. Y.	Promoted to printer at \$1,800 from under observer at \$1,260.
Wills, H. Merrill.	New York, N. Y.	Promoted to associate meteorologist at \$3,200 from assistant meteorologist at \$2,700.
Wills, Roger M.	Detroit, Mich.	Promoted to assistant observer at \$1,620 from junior observer at \$1,500.

*Indicates temporary appointment.

Changes in assignments

Name	Relieved from—	Assigned to—
Aldredge, Robert C.	Macon, Ga.	Key West, Fla., assistant.
Carlson, Arvid E. A.	Minneapolis, Minn.	Kansas City, Mo., assistant.
Diek, L. Walter.	Medford, Oreg.	Dubuque, Iowa, in charge.
Dyer, William W., jr. . . .	Pittsburgh, Pa.	Washington, D. C., assistant scientific aid.
Grimminger, George.	Kansas City, Mo.	Washington, D. C., scientific aid.
Hutchison, William J. . . .	San Francisco, Calif.	Medford, Oreg., in charge.
Knarr, Elmore D.	Detroit, Mich.	Royal Center, Ind., assistant.
Larson, A. Lauritz.	Lander, Wyo.	Salt Lake City, Utah, assistant.

Changes in assignments—Continued

Name	Relieved from—	Assigned to—
Lawrence, Robert V.	Royal Center, Ind.	Omaha, Nebr., assistant.
Miller, Paul A.	Davenport, Iowa.	Washington, D. C., junior meteorologist.
Murray, Robert S.	Philadelphia, Pa.	Washington, D. C., assistant scientific aid.
Nichols, Roger C.	Seattle, Wash.	San Francisco, Calif., assistant.
Nicholson, David E.	Fort Smith, Ark.	Kansas City, Mo., assistant.
Plummer, Ira C.	Boise, Idaho.	Galveston, Tex., in charge.
Reed, Wilson, jr.	New York, N. Y.	Cleveland, Ohio, assistant.
Rumbaugh, Walter F.	New Orleans, La.	Boise, Idaho, assistant.
Stickley, Allen R.	Raleigh, N. C.	Washington, D. C., scientific aid.
Strader, Zell E.	Keokuk, Iowa.	Sheridan, Wyo., assistant.
Tannehill, Ivan R.	Galveston, Tex.	Washington, D. C., associate meteorologist.
Trolle-Steenstrup, Frank H.	Trenton, N. J.	New York, N. Y., assistant.
Warren, Leslie A.	Ellendale, N. Dak.	Cheyenne, Wyo., assistant.
Wills, H. Merrill.	Dubuque, Iowa.	New York, N. Y., assistant.

C. H. Marvin.

Chief of Bureau.

WEATHER BUREAU TOPICS AND PERSONNEL

AUGUST, 1929

INTERNATIONAL METEOROLOGICAL COMMITTEE MEETINGS

The Weather Bureau will be represented by Mr. E. B. Calvert, Chief of the Forecast Division, at the meetings of the International Meteorological Committee and subcommissions, which will be held at Copenhagen, Denmark, beginning September 9, 1929. Mr. Calvert sailed from New York, August 27, on the *S. S. America*. While in Europe he will visit meteorological service headquarters in Belgium, Holland, Denmark, Germany, Norway, and Sweden. He is expected to return to Washington about October 20.

CHIEF OF RIVER AND FLOOD DIVISION

Mr. Montrose W. Hayes, senior meteorologist, St. Louis, has been selected to succeed Doctor Frankenfield as Chief of the River and Flood Division of the Central Office. His experience in the important St. Louis river district, of which he has had charge since 1910, has well prepared Mr. Hayes for his new duties. He will come to Washington about October 1.

INSTRUMENTAL EQUIPMENT FOR APPROVED PROJECTS

The demands for instrumental equipment created by expansion of the work of the bureau are being met as rapidly as possible. Much of the equipment has had to be constructed since appropriations became available, July 1. It is now expected that equipment for approved projects will all be shipped within four or five weeks. This explanation may save needless correspondence.

TELEGRAPHING LOWER CLOUDS

Paragraphs 75 and 76, Weather Code, 1924, state in effect that lower clouds will not be telegraphed when calm or when they have the same direction as the surface wind, except when moving rapidly. This rule is being disregarded by so many stations, with resulting increased telegraphic expense, that all officials in charge are requested to take immediate action to insure elimination of unauthorized cloud words in their telegraphic reports.

REQUISITIONS TO BE FORWARDED ALWAYS WHEN SUPPLIES ARE NEEDED

In some instances stations make request for supplies, including parts of instruments or equipment, such as slide-rule indicators, theodolite

lenses, etc., by letter rather than by requisition. This makes it necessary for requisitions to be prepared at the Central Office and results, therefore, in delay and additional work. Hereafter in all such and similar cases, stations will forward requisitions which may, if desired, be accompanied by an explanatory letter.

ELEVATION OF WIND INSTRUMENTS AT CLEVELAND

Owing to an error in measurement, the elevation of the wind instruments at Cleveland, in the new quarters, was given in July "TOPICS" as 317 feet above ground. The true elevation is 337 feet.

BAROGRAPH SHOCK ABSORBERS

At the Moline Airport the station barograph is on a shelf fastened to the office wall. Vibration caused the pen to "jiggle" so much that the trace was a wide, unclean line. This trouble has been eliminated by gluing small squares of rubber sponge, one-half inch thick, to the legs of the barograph. The pen now makes a neat line, and even a sharp tap on the shelf does not disturb the mechanism.

FOOT PLATES FOR BALLOON THEODOLITES

Brass foot plates to prevent wear on theodolite platforms will soon be available for stations requiring them. They are to be fastened to wood or sunk in cement. Stores Requisitions should be forwarded for "Foot plates, brass"; "Quantity" 3.

ICE SHIELDS FOR ANEMOMETER

During glaze storms anemometers frequently become so coated with ice as to prevent the cups from revolving. To remove the ice, a dangerous and disagreeable climb to the top of the wind-instrument tower usually is necessary. It has been found, at the Moline Airport, that a small collar, made of a strip of aluminum, fastened just below the crossarms to make a bell-shaped shield, will throw the rain away from the anemometer tube and thus prevent the accumulation of ice where it will stop the cups. As soon as the storm is over, however, the anemometer is always taken down and the ice is removed.

Ice shields are also available for issue from the Central Office.

APPOINTEES' STATEMENTS

Station officials are again requested to see, or to deputize an experienced assistant to see, that the several statements required of new appointees are properly filled and signed before they are forwarded to the Central Office. With the many appointments now being made, it is a burden on the Central Office to have to return appointees' statements for completion or correction in so large a proportion (approximately half) of cases. Please refer to "TOPICS" for May of 1928.

FEDERAL BUSINESS ASSOCIATIONS

Mr. E. M. Keyser, Spokane, was reelected president, and Mr. O. E. Moery, Terre Haute, was elected secretary, of the respective local Federal Business Associations.

CHANGES IN PERSONNEL

The following, relative to changes in the personnel of the Weather Bureau during the month of August, 1929, is published for the *exclusive* information of employees of the Weather Bureau:

Appointments, promotions, reductions, etc.

Name	Station	Remarks
Adams, Mrs. Ellen J.	Washington, D. C.	Promoted to clerk-stenographer, CAF-4, at \$1,800 from assistant clerk-stenographer, CAF-3, at \$1,740.
Baldwin Norman D.	Hartford, Conn.	Minor observer at \$1,020, resigned; record, good.
Bankert, Max K.	Huron, S. Dak.	Appointed minor observer at \$1,020; temporary appointment terminated.
Bishop, Denton.	Spokane, Wash.	Minor observer at \$1,020, resigned; record, fair.
Blanc, Milton L.	Des Moines, Iowa.	Appointed junior observer at \$1,440.
Boss, Louis N.	Washington, D. C.	Appointed junior messenger, Cu.-1, at \$660, by transfer from Interstate Commerce Commission.
Brady, James M.	Washington, D. C.	Promoted to senior scientific aid, SP-6, at \$2,000 from scientific aid, SP-5, at \$1,860.
Brown, Merle A.	Salt Lake City, Utah.	Appointed junior observer at \$1,440.
Bunch, Sterling.	Knoxville, Tenn.	Appointed junior observer at \$1,440.
Collins, Miss Sadie P.	Washington, D. C.	Appointed assistant clerk-stenographer, CAF-3, at \$1,620, by transfer from War Department.
Cover, Donald Mc.K.*	Tacoma, Wash.	Appointed minor observer at \$1,020, pending certification of eligibles.
Cowles, Harold L.	Los Angeles, Calif.	Minor observer at \$1,020, resigned; record, excellent.
DeHay, W. Clyde.	Dallas, Tex.	Appointed minor observer at \$1,020; temporary appointment terminated.
Despain, Lawrence N.	Salt Lake City, Utah.	Observer at \$1,980, resigned; record, good.
Drake, F. Robert*	Los Angeles, Calif.	Appointed minor observer at \$1,020, pending certification of eligibles.
Finnegan, Miles J.	Boston, Mass.	Promoted to observer at \$1,800 from assistant observer at \$1,620.
Frankenfield, Harry C.	Washington, D. C.	Principal meteorologist, P-6, at \$5,800, died July 29, 1929.
Gallenne, Jean H.	Washington, D. C.	Promoted to senior scientific aid, SP-6, at \$2,000 from scientific aid, SP-5, at \$1,920.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Garrett, Raymond L.*...	Sheridan, Wyo.	Appointed minor observer at \$1,020, pending certification of eligibles.
Grimminger, George	Washington, D. C.	Promoted to scientific aid, SP-5, at \$1,800 from assistant observer, SP-4, at \$1,680.
Grubb, Russell C.	Roswell, N. Mex.	Appointed junior observer at \$1,440; appointment as minor observer at \$1,020 terminated.
Gumpf, Ralph E.	Washington, D. C.	Promoted to senior scientific aid, SP-6, at \$2,000 from scientific aid, SP-5, at \$1,860.
Hagen, Norman R.	Washington, D. C.	Promoted to scientific aid, SP-5, at \$1,800 from assistant scientific aid, SP-4, at \$1,680.
Haines, William C.	New York, N. Y.	Assistant meteorologist, leave without pay extended to August 31, 1930.
Halfacre, William E.	Salt Lake City, Utah ...	Promoted to observer at \$1,920 from \$1,800.
Hall, Bertram E.	Des Moines, Iowa	Assistant observer at \$1,680, resigned; record, good.
Hamilton, Ray E.	St. Louis, Mo.	Appointed junior observer at \$1,440.
Harrison, Henry T., jr. .	New York, N. Y.	Observer, leave without pay extended to August 17, 1930.
Harrison, Louis P.	Washington, D. C.	Promoted to senior scientific aid, SP-6, at \$2,000 from scientific aid, SP-5, at \$1,860.
Hatch, Sterling R.	Des Moines, Iowa	Appointed junior observer at \$1,440.
Hayes, John W.	Rapid City, S. Dak.	Appointed junior observer at \$1,440; appointment as under observer at \$1,260 terminated.
Hays, Cloyd A.	Chicago, Ill.	Appointed junior observer at \$1,440.
Hug, Floyd E.	Sioux City, Iowa	Appointed minor observer at \$1,020; temporary appointment terminated.
Hurd, Willis E.	Washington, D. C.	Designation changed to chief scientific aid, SP-8, at \$2,600 from principal clerk, CAF-6, at same salary.
Hutchison, William J. .	Medford, Oreg.	Promoted to assistant meteorologist at \$2,600 from senior observer at \$2,000.
Jackson, Walter A.	Washington, D. C.	Promoted to assistant messenger, Cu.-2, at \$1,080 from junior messenger, Cu.-1, at \$660.
Keyser, Louis S.*.	Spokane, Wash.	Appointed minor observer at \$1,020, pending certification of eligibles.
Loveless, Burton F.	Boston, Mass.	Promoted to under observer at \$1,260 from minor observer at \$1,020.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Miller, Paul A.....	Washington, D. C.....	Promoted to junior meteorologist, P-1, at \$2,000 from observer, SP-5, at \$1,920.
Nalley, Miss Lillian M..	Washington, D. C.....	Appointed junior clerk-stenographer, CAF-2, at \$1,440, temporarily.
Neick, Ralph W.....	Washington, D. C.....	Promoted to scientific aid, SP-5, at \$1,800 from assistant observer, SP-4, at \$1,680.
Nelson, Walter E.....	Redding, Calif.....	Junior observer at \$1,440, resigned; record, fair.
Novicki, Edwin A.....	Sheridan, Wyo.....	Minor observer at \$1,020, resigned; record, fair.
Plummer, Ira C.....	Galveston, Tex.....	Promoted to assistant meteorologist at \$2,600 from junior meteorologist at \$2,000.
Quattlebaum, B. Harold.	Austin, Tex.....	Appointed junior observer at \$1,440; appointment as under observer at \$1,260 terminated.
Quick, Willard V.....	Washington, D. C.....	Appointed junior laboratory mechanic, SP-3, at \$1,440.
Rasey, Lyle B.....	Cincinnati, Ohio.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Rasmussen, Wiggo.....	Tatoosh Island, Wash..	Mechanic, leave without pay extended to November 2, 1929, on account of continued illness.
Ross, Archibald D.....	Boston, Mass.....	Promoted to senior observer at \$2,000 from observer at \$1,800.
Ruoff, Robert V.....	Redding, Calif.....	Appointed junior observer at \$1,440.
Sanders, Ralph.....	Washington, D. C.....	Promoted to scientific aid, SP-5, at \$1,800 from assistant observer, SP-4, at \$1,620.
Slocum, Giles.....	Washington, D. C.....	Promoted to scientific aid, SP-5, at \$1,800 from assistant observer, SP-4, at \$1,620.
Sutton, Everett L.....	Port Angeles, Wash....	Appointed mechanic at \$1,680; temporary appointment terminated.
Tannehill, Ivan R.....	Washington, D. C.....	Promoted to associate meteorologist, P-3, at \$3,200 from assistant meteorologist, P-2, at \$2,700.
Winburn, Henry C.....	Rapid City, S. Dak.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,500.
Wolf, Vernon N.....	Washington, D. C.....	Promoted to principal clerk, CAF-6, at \$2,300 from clerk-stenographer, CAF-4, at \$2,040.
Zoch, Mrs. Katherine M.	Washington, D. C.....	Assistant clerk, name changed on rolls from Miss Katherine M. Gross.
Zoch, Richmond T.....	Washington, D. C.....	Promoted to senior scientific aid, SP-6, at \$2,000 from scientific aid, SP-5, at \$1,920.

*Indicates temporary appointment.

Changes in assignments

Name	Relieved from—	Assigned to—
Halfacre, William E.	Boston, Mass	Salt Lake City, Utah, assistant.
Lang, Clarence V.	Rapid City, S. Dak	Lincoln, Nebr., assistant.
Neick, Ralph W.	New Haven, Conn	Washington, D. C., scientific aid.
Sanders, Ralph	Key West, Fla.	Washington, D. C., scientific aid.
Slocum, Giles.	Knoxville, Tenn.	Washington, D. C., assistant observer.
Winburn, Henry C.	Lincoln, Nebr	Rapid City, S. Dak., assistant.



Chief of Bureau.

WEATHER BUREAU TOPICS AND PERSONNEL

SEPTEMBER, 1929

GOVERNMENT LIFE INSURANCE

The chairman of the National Rehabilitation Committee of the American Legion has requested that the following be brought to the attention of all World War veterans in the bureau:

Section 310 of the World War Veterans' Act, 1924, as amended May 28, 1928, permits the U. S. Government to grant upon application and payment of the initial premium, Government life insurance in any multiple of \$500 and not less than \$1000 or more than \$10,000, to any veteran of the World War who has heretofore applied for or been eligible to apply for yearly renewable term (war time) insurance or converted insurance; provided, that such person is in good health and furnishes evidence satisfactory to the director to that effect.

The Government is offering seven plans of insurance to meet the needs of the veteran. The policies participate in dividends and the premiums are based on the net rate and do not include any charge to cover the cost of administration or the total permanent disability provision. Further, the insured under a United States Government life (converted) insurance policy may designate any person, firm, corporation, or legal entity as the beneficiary under his policy, either individually or as trustee.

A specimen application for insurance (Form 739) and copies of Forms 752 and 865, pamphlets prepared by the U. S. Veterans' Bureau, explaining the provisions of the amendment with regard to the various plans of insurance offered, the premium rates at different ages, etc., * * * will be furnished by the U. S. Veterans' Bureau, or by any of the regional offices of the bureau, upon request.

GUGGENHEIM INTENSIVE AIRWAYS SERVICE

The intensive (reporting every three hours) airways service between San Francisco and Los Angeles, maintained by the Daniel Guggenheim Fund for the Promotion of Aeronautics, was taken over by the Weather Bureau on July 1, 1929. Prior to that date this service had, in reality, been operated by the Weather Bureau, but the cost of maintenance was borne by the Guggenheim Fund. Besides Bakersfield and Fresno, which are referred to elsewhere in this number, the service included stations at Hollister and Lebec Airports. These last two stations are now under supervision of the San Francisco Weather Bureau station. Pilot balloon observations are taken at both places.

NEW WEATHER BUREAU STATIONS

A first-order Weather Bureau station, for airways service only, was opened at Fairbanks, Alaska, on July 1, 1929. Mr. Howard J. Thompson, formerly of the Juneau station, is in charge. For the present, pilot balloon observations will not be made.

The airways station at Bakersfield, Calif., taken over with the Guggenheim organization on July 1 and placed under supervision of the San Francisco station, will be made a first-order Weather Bureau station, for airways service only, on October 1, 1929. Mr. Jack Beller will be in charge. The 24-hour service will be continued and will include pilot balloon observations.

MAJOR AIRWAYS CONTROL STATIONS

Supplementing the item on this subject in the June, 1929, number of "TOPICS":

The Cheyenne Airport Station was made a major airways control station on September 10, 1929. For the present this station has supervision of the airway between Cheyenne and Pueblo.

NEW WEATHER BUREAU AIRPORT STATIONS

The 24-hour service heretofore maintained at the airport at Fresno by the Guggenheim organization, for the San Francisco-Los Angeles Airway, was placed under supervision of the Fresno Weather Bureau station on July 1, 1929. Pilot balloon observations are included.

Service for the Atlanta-Miami and the Miami-West Indies Airways was begun at Miami Airport, under supervision of the Miami Weather Bureau station, on July 1, 1929. No pilot balloon observations are taken.

A 24-hour service for the Cleveland-Buffalo-Albany Airway was established at the local airport, under supervision of the Buffalo Weather Bureau station, early in July. Pilot balloon work will be included within a month or two.

An airport station, under supervision of the St. Louis Weather Bureau station, was established at Anglum, Mo., on July 16, 1929. Twenty-four-hour service, including pilot balloon observations, is furnished for airways to Chicago, Kansas City, Louisville, and Tulsa.

A major airways control station was established at Bolling Field, under supervision of the Central Office, on August 1, 1929, in accordance with the recommendation of the Interdepartmental Committee appointed to coordinate meteorological service at airports used in both civil and military aviation. Twenty-four-hour service has been given since August 14. Pilot balloon observations are taken through cooperation with the Signal Corps of the Army.

Service, including pilot balloon observations, for the Brownsville-San Antonio-Dallas and the Brownsville-Mexico City Airways was established at the Brownsville Airport, under supervision of the Brownsville Weather Bureau station, on August 5, 1929.

A 24-hour service, including pilot balloon observations, for the Chicago-Atlanta and the Louisville-St. Louis Airways was inaugurated October 1, 1929, at the airport at Evansville, under supervision of the Evansville Weather Bureau station.

About October 15, 1929, 24-hour service, including pilot balloon observations, for the Albany-Cleveland and the New York-Montreal Airways will be established at the local airport, under supervision of the Albany Weather Bureau station.

CORRESPONDENCE WITH AIRPORT STATIONS

The official in charge of each of the major airways control stations (Atlanta, Cheyenne, Chicago, Cleveland, Fort Crook, New Brunswick, Oakland, and Salt Lake City) has been authorized to write on his own initiative, and to sign, letters pertaining to the work of his station, but a copy of each letter should be furnished to the supervising Weather Bureau station. Conversely, letters concerning any of the major airways control stations should be sent directly to that station, and a copy of the letter should be sent to the supervising Weather Bureau station.

Letters from any airport station, except the major control stations, should be signed by the official in charge of the supervising Weather Bureau station. Letters concerning any airport station, other than the major control stations, should be sent to the supervising Weather Bureau station, and *not* to the airport station.

THREE-HOUR MESSAGES TO AIRPORT CONTROL STATIONS

Officials in charge of stations making 3-hour reports to airport control stations are requested to make clear to all employees making these observations that the same standard of accuracy must be maintained as in the regular 8 a. m. and 8 p. m. observations. This is particularly true because it is often impossible to detect errors at outlying stations in the area from which reports are received. Officials in charge should determine personally whether sufficient care is being taken in these reports. An error might result in the crack-up of a plane—even in the loss of life.

AIRWAYS WEATHER REPORTS TO BE AVAILABLE TO ALL INQUIRERS

In "Topics" for February, 1929, page 408, all stations concerned were instructed to make arrangements for the transmittal to their offices of all airways weather reports received at local airports and landing fields, under authority issued by the bureau. In some cases the bureau appoints employees of air transport companies as airways observers, and these appointees make local observations and receive reports from other points on the airways. By arranging to receive these reports at the Weather Bureau Offices the information is available for pilots of other companies and in addition for the general public. Automobile clubs frequently call for these data.

In the case of reports at night, when the Weather Bureau Offices are closed, definite arrangements should be made for the posting of the reports in a conspicuous place, so that *all* pilots, or others interested, may receive equal benefit from the bureau's service.

POLICY OF OBTAINING SPECIAL AIRWAYS WEATHER REPORTS

When the Airport Weather Bureau official deems a special report necessary from some point on an *officially* established airway, he is authorized to obtain it at Government expense. Such reports should be obtained by telegraph and not by telephone, unless the former method is impracticable.

Special reports from distant points not on *officially* established airways should be obtained for inquirers at their expense.

PROMPTNESS REQUIRED IN AIRWAYS WEATHER REPORTS

Officials in charge of stations furnishing airways weather reports from their own station, as well as from substations under their supervision, are requested, in all cases where it is apparent that either regular or special reports are not furnished promptly, to take such action as may be deemed advisable to secure prompt rendition in the future.

ELIMINATION OF PILOT BALLOON DISAPPEARANCE DUE TO THE SUN

One of the causes of pilot balloon disappearance is the intense light in the field of vision when the balloon passes near the sun. This can be overcome by placing the hand over the object-end of the telescope, allowing only enough light to pass through the fingers to see the balloon. As the balloon travels nearer the sun the fingers can be closed tighter to allow less light to pass through the instrument, and vice versa as the balloon travels away. If this simple method is used, frequently flights can be lengthened that would otherwise have been ended. Caution should be taken not to continue the observation to the point of possible injury to the eyes.

REQUESTS FOR PREPARATION OF EXTENSIVE DATA

One of the river stations recently received a request for local daily river stages and rainfall for a period of six and two-thirds years. In reply, the official in charge stated that the press of station work made it impossible for the station force to prepare the data, and offered to make the records available to any representative that the applicant might send to do the work, or to procure the services of a competent clerk for the necessary time, estimated at 8 hours.

Though the action of the official in charge is in accord with the policy of the bureau in such matters, it so happened that the desired data for six years was available in printed form in the Central Office, and it was comparatively easy there to fill in the remaining eight months. As similar cases occur from time to time, it is suggested that stations refer such matters to the Central Office whenever there is a possibility that printed data may be available there.

PURCHASE OF ELECTRIC LAMP BULBS

The station practice of purchasing electric lamp bulbs locally should be discontinued. The Comptroller General has ruled that these must be procured under contract with the General Supply Committee, which provides for furnishing electric lamps to all Government establishments within the continental United States. The cost of bulbs under the contract is much less than that prevailing locally. It is requested that hereafter stations submit a Purchase Requisition semiannually to the Central Office for a 6-month supply. Voltage and wattage must be stated in every requisition.

AMENDMENTS TO DEPARTMENT REGULATIONS

Amended pages 491R, 492R, 493R, 494R, 495R, 496R, 497R, 498R, 499R, 500R, 501R, 502R, 503R, 504R, 505R, 506R, 507R, 508R, 509R, 510R, 511R, 512R, 512a, 512b, 513R, 514R, 515R-518R, 519R-522R, 523R, 524R, 549R, 550R, 551R, 552R, 553-2R, 554-2R, 973R, a blank, and a reprint memorandum were mailed to stations on September 25. The figure "2" was omitted, apparently inadvertently, from the numbers of pages 503R, 504R, 507R, and 508R, and may be inserted in pencil. Any station that has not received these 21 sheets should notify the Central Office promptly.

CHANGES IN PERSONNEL

The following, relative to changes in the personnel of the Weather Bureau during the month of September 1929, is published for the *exclusive* information of employees of the Weather Bureau:

Appointments, promotions, reductions, etc.

Name	Station	Remarks
Ahrens, Robert J.	Milwaukee, Wis.	Appointed minor observer at \$1,020.
Albrecht, Herbert F.* ...	Milwaukee, Wis.	Minor observer at \$1,020, appointment terminated; record, good.
Aldrich, John H.	Davenport, Iowa.	Promoted to assistant observer at \$1,740 from junior observer at \$1,560.
Allmendinger, George H. F.	Kansas City, Mo.	Promoted to observer at \$1,800 from assistant observer at \$1,020.
Balch, Samuel A.	Trenton, N. J.	Junior observer at \$1,560, resigned; record, unsatisfactory.
Becker, Jonathan O.	Wichita, Kans.	Appointed junior observer at \$1,440.
Beller, Jack.	Bakersfield, Calif.	Promoted to observer at \$1,800 from assistant observer at \$1,620.
Blackstone, Melvin N. ...	Oklahoma City, Okla. ...	Minor observer at \$1,020, resigned; record, good.
Blomstrand, Paul A.	Duluth, Minn.	Minor observer at \$1,140, resigned; record, excellent.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Bolen, Charles E.....	Sioux City, Iowa.....	Appointed junior observer at \$1,440.
Boss, Louis N.....	Washington, D. C.....	Appointment as junior messenger, Cu.-1, at \$660, revoked.
Bowden, Marmaduke B.	Louisville, Ky.....	Appointed minor observer at \$1,020.
Boyd, William D.*.....	Spokane, Wash.....	Appointed minor observer at \$1,020, pending certification of eligibles.
Bradford, Charles W....	Miami, Fla.....	Observer, granted leave without pay from September 11 to December 10, 1929.
Brooks, Arthur W.....	Miami, Fla.....	Promoted to junior meteorologist at \$2,100 from \$2,000.
Burchett, Herman G....	Greensboro, N. C.....	Promoted to minor observer at \$1,140 from \$1,020.
Cagle, Cecil.....	San Diego, Calif.....	Assistant observer at \$1,620, resigned; record, good.
Carlson, Arvid E. A....	Kansas City, Mo.....	Assistant observer at \$1,620, resigned; record, good.
Cavanaugh, Daniel J.*..	Buffalo, N. Y.....	Minor observer, leave without pay extended to September 16, 1929, on account of continued illness.
Cavanaugh, Daniel J....	Buffalo, N. Y.....	Appointed minor observer at \$1,020; temporary appointment terminated.
Christensen, Carl W....	Sioux City, Iowa.....	Under observer at \$1,260, resigned; record, excellent.
Clark, R. Duncan.....	Baltimore, Md.....	Junior observer, granted leave without pay from September 18, 1929, to June 17, 1930.
Coe, Arthur R.....	Miami, Fla.....	Appointed junior observer at \$1,440.
Cohen, Monroe D.....	Cleveland, Ohio.....	Assistant observer, granted leave without pay from noon September 27 to noon December 27, 1929.
Cornelius, Rolen L.....	Evansville, Ind.....	Promoted to junior meteorologist at \$2,000 from observer at \$1,920.
Cottrill, Edward H.*....	Louisville, Ky.....	Minor observer at \$1,020, appointment terminated; record, fair.
Crawford, Herbert D....	St. Louis, Mo.....	Appointed junior observer at \$1,440.
Crum, Wilbert R.*.....	St. Joseph, Mo.....	Appointed minor observer at \$1,020, pending certification of eligibles.
Curtis, Lester M.*.....	Washington, D. C.....	Appointed under laboratory mechanic, SP-2, at \$1,200, pending certification of eligibles.
Davis, Harry.....	San Francisco, Calif....	Junior observer at \$1,680, resigned; record, good.
Devlin, Frank A.....	Atlantic City, N. J.....	Minor observer at \$1,020, resigned; record, excellent.
Dodd, Kermit P.....	Oklahoma City, Okla..	Appointed minor observer at \$1,020.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Donovan, John F.	Boston, Mass.	Appointed minor observer at \$1,020, by reinstatement.
Duncan, Raymond E.	Boise, Idaho.	Appointed junior observer at \$1,440.
Durgin, Franklin W.	Richmond, Va.	Appointed junior observer at \$1,620.
Edming, Walter J.	Ellendale, N. Dak.	Promoted to senior observer at \$2,000 from observer at \$1,800.
Eklund, Ernest E.	San Francisco, Calif.	Promoted to associate meteorologist at \$3,200 from assistant meteorologist at \$2,600.
Fernandez, Enrique*.	San Juan, P. R.	Minor observer, name changed on rolls from Henrique Fernandez.
Fisher, Lawrence C.	Seattle, Wash.	Promoted to associate meteorologist at \$3,200 from assistant meteorologist at \$3,000.
Fox, Richard T.	Washington, D. C.	Promoted to scientific aid, SP-5, at \$1,800 from assistant observer at \$1,620.
Fuller, H. Clark	Ellendale, N. Dak.	Junior meteorologist at \$2,000, resigned; record, excellent.
Gillam, Raymond T.	Wichita, Kans.	Junior observer at \$1,440, resigned; record, good.
Hanna, Ralph T.	Boise, Idaho.	Promoted to assistant observer at \$1,620 from junior observer \$1,440.
Hayes, Montrose W.	Washington, D. C.	Promoted to principal meteorologist, P-6, at \$5,600 from senior meteorologist, P-5, at \$4,800.
Hazen, John S.	Dayton, Ohio.	Promoted to assistant meteorologist at \$2,600 from junior meteorologist at \$2,400 ¹ .
Hogue, John M.	Nashville, Tenn.	Junior observer, granted leave without pay from September 23, 1929, to June 22, 1930.
Holmberg, Arthur F.	Portland, Oreg.	Appointed junior observer at \$1,440.
Jones, G. Raymond	St. Joseph, Mo.	Assistant observer at \$1,620, resigned; record, excellent.
Glenn, John C.	Wichita, Kans.	Appointed junior observer at \$1,440.
Hannum, Paul M.	Columbus, Ohio.	Appointed minor observer at \$1,020.
Kallquist, Clarence R.	Salt Lake City, Utah.	Promoted to assistant meteorologist at \$2,700 from \$2,600.
Kauffman, Eldon E.	Springfield, Ill.	Assistant observer at \$1,620, resigned; record, good.
Kee, Eliner M.	Jacksonville, Fla.	Appointed observer at \$1,800, by reinstatement.
Keefe, John R. F.	Washington, D. C.	Assistant clerk-stenographer, leave without pay extended to December 8, 1929.
Keyser, Louis S.*.	Spokane, Wash.	Minor observer at \$1,020, resigned; record, good.
Kisselbach, Frank G.	Atlantic City, N. J.	Appointed minor observer at \$1,020.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Kliemann, Ernest W. G.	Cleveland, Ohio.....	Appointed junior observer at \$1,440.
Kohler, Joseph P.....	Sault Ste. Marie, Mich..	Appointed junior observer at \$1,440.
Kraus, Charles.....	Chicago, Ill.....	Minor observer at \$1,020, resigned; record, good.
Kutschenreuter, Paul H.	Washington, D. C.....	Promoted to scientific aid, SP-5, at \$1,800 from assistant scientific aid, SP-4, at \$1,680.
Lerner, Harry.....	Chicago, Ill.....	Appointed minor observer at \$1,020.
Lewis, William.....	Modena, Utah.....	Appointed junior observer at \$1,440.
Loerke, Arthur W.....	Dayton, Ohio.....	Minor observer at \$1,020, resigned; record, excellent.
Löwery, Arlie R.....	Davenport, Iowa.....	Promoted to observer at \$1,920 from junior observer at \$1,560.
Lundberg, Lester.....	Washington, D. C.....	Appointed assistant scientific aid, SP-4, at \$1,620, by transfer from the Treasury Department.
McBirney, Harold R.....	Boise, Idaho.....	Under observer, granted leave without pay from September 20, 1929, to June 15, 1930.
McLaughlin, Earl S.....	Cincinnati, Ohio.....	Appointed junior observer at \$1,440.
Mack, James L.....	St. Paul, Minn.....	Appointed junior observer at \$1,440.
Mahaffey, Lawrence K..	Columbus, Ohio.....	Minor observer at \$1,020, resigned; record, good.
Malm, Carl D.*.....	Duluth, Minn.....	Appointed minor observer at \$1,020, pending certification of eligibles.
Montzka, Alfred J.....	Washington, D. C.....	Scientific aid, SP-5, at \$1,920, resigned; record, excellent.
Moser, Frederick T.....	St. Joseph, Mo.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Neifert, William W.....	Binghamton, N. Y.....	Promoted to associate meteorologist at \$3,200 from assistant meteorologist at \$2,800.
Nickles, J. Harold.....	Due West, S. C.....	Appointed junior observer at \$1,440.
Norquest, Kenneth S.....	Boise, Idaho.....	Junior observer, granted leave without pay from September 16, 1929, to June 15, 1930.
Nunn, Roscoe.....	St. Louis, Mo.....	Promoted to senior meteorologist at \$4,600 from associate meteorologist at \$3,500.
Olson, Oscar E.....	Ellendale, N. Dak.....	Appointed junior observer at \$1,440.
Peacock, Matthew I.....	Albany, N. Y.....	Promoted to junior meteorologist at \$2,000 from observer at \$1,800.
Peterson, Carl G.....	St. Paul, Minn.....	Appointed junior observer at \$1,440.
Phillips, Victor V.....	Brownsville, Tex.....	Promoted to junior meteorologist at \$2,100 from \$2,000.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Rampey, Ernest M.....	Washington, D. C.....	Promoted to assistant scientific aid, SP-4, at \$1,620 from junior observer at \$1,500.
Raven, Charlie.....	Groesbeck, Tex.....	Appointed junior observer at \$1,440.
Russo, Carl.....	Cleveland, Ohio.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Sharp, Wilbur P.....	Springfield, Ill.....	Appointed junior observer at \$1,440.
Shaw, Joseph C.....	Washington, D. C.....	Junior clerk, CAF-2, at \$1,440, resigned; record, fair.
Shepherd, C. Eugene....	San Diego, Calif.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Shirley, Robert F.....	Fresno, Calif.....	Temporary appointment as under observer at \$1,260 terminated; and appointed minor observer at \$1,020, by reinstatement.
Shope, William B.....	Dallas, Tex.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Sims, Wiley K.....	Nashville, Tenn.....	Appointed junior observer at \$1,440.
Smith, Herschel D.....	Greensboro, N. C.....	Promoted to observer at \$1,920 from assistant observer at \$1,620.
Smith, James W.....	Miami, Fla.....	Appointed junior observer at \$1,560.
Souder, Miss Mary O....	Washington, D. C.....	Promoted to clerk, CAF-4, at \$1,800, from assistant clerk, CAF-3, at same salary.
Stiehl, William C.....	Hartford, Conn.....	Appointed minor observer at \$1,020, by reinstatement.
Stopp, Miss Anna.....	Washington, D. C.....	Promoted to assistant clerk, CAF-3, at \$1,680 from junior clerk, CAF-2, at same salary.
Thomas, Phillip D.....	Atlanta, Ga.....	Appointed junior observer at \$1,440.
Thompson, Jack C.....	Sacramento, Calif.....	Appointed minor observer at \$1,020; temporary appointment terminated.
Van Patten, J. Harvey..	San Francisco, Calif....	Promoted to observer at \$1,800 from assistant observer at \$1,680.
Weeks, John R.....	Baltimore, Md.....	Promoted to associate meteorologist at \$3,400 from \$3,200.
Whittelsey, Chauncey A., jr.	St. Joseph, Mo.....	Appointed junior observer at \$1,440.
Williams, George W.*...	Dayton, Ohio.....	Appointed minor observer at \$1,020, pending certification of eligibles.

* Indicates temporary appointment.

¹ Includes allowance of \$340 for quarters.

Changes in assignments

Name	Relieved from—	Assigned to—
Allmendinger George H. F.	Sault Ste. Marie, Mich.	Kansas City, Mo., assistant.
Brown, Merle A.	Salt Lake City, Utah ...	Pocatello, Idaho, assistant.
Cornelius, Rolen L.	Greensboro, N. C.	Evansville, Ind., assistant.
Fox, Richard T.	Cincinnati, Ohio.	Washington, D. C., scientific aid.
Hayes, Montrose W.	St. Louis, Mo.	Washington, D. C., senior meteorologist.
Murray, Robert S.	Washington, D. C.	Philadelphia, Pa., assistant.
Neifert, William W.	Dayton, Ohio.	Binghamton, N. Y., in charge.
Nunn, Roscoe.	Baltimore, Md.	St. Louis, Mo., in charge.
Parry, H. Dean.	Pocatello, Idaho.	Salt Lake City, Utah, assistant.
Peacock, Matthew I.	Ithaca, N. Y.	Albany, N. Y., assistant.
Rampey, Ernest M.	Due West, S. C.	Washington, D. C., assistant scientific aid.
Shepherd, C. Eugene.	Phoenix, Ariz.	San Diego, Calif., assistant.
Smith, Herschel D.	Jacksonville, Fla.	Greensboro, N. C., assistant.
Van Patten, J. Harvey..	Boise, Idaho.	San Francisco, Calif., assistant.
Walton, Leon C.	St. Louis, Mo.	Phoenix, Ariz., assistant.
Weeks, John R.	Binghamton, N. Y.	Baltimore, Md., in charge.

C. H. Marvin.

Chief of Bureau.

WEATHER BUREAU TOPICS AND PERSONNEL

OCTOBER, 1929

TRANSPORTATION REQUESTS NOT TO BE USED FOR PERSONAL TRAVEL

In a recent communication to the department, the General Accounting Office quotes the restriction, "Transportation requests must not be used for personal travel", from paragraph 20 of Government Travel Regulations, and calls attention to "numerous instances" of employes using transportation requests when taking leave en route or when traveling by circuitous routes for that or other personal reasons.

The department states that the restriction quoted above is categorical, and is based not only on the fundamental impropriety of using Government requests for personal travel, but on the fact that such use throws on both department and General Accounting Office the burden of auditing, settling, and paying additional transportation accounts. The department requests that the regulation in question be strictly observed in future.

APPOINTING AIRWAYS OBSERVERS

Appointments of airways observers at a rate in excess of \$45 a month, as set forth in July "Topics", can not be made retroactive. Therefore, such observers should not begin work until the recommendation for appointment has been approved by the Secretary of Agriculture, as it will not be possible to pay for service prior to such date of approval. Please refer to items entitled "Retroactive appointments prohibited", in "Topics" for October of 1928 and June of 1929.

RECOMMENDATIONS FOR INCREASED AIRWAYS SERVICE TO INCLUDE ESTIMATES OF COST

In many cases recommendations are received at the Central Office for a considerable extension of service for airways, but no estimate is submitted as to the cost involved. Prompt action is desirable in many instances, but is impossible because time is required to formulate an estimate which must necessarily be less accurate than one that could be furnished by the supervising station. Hereafter all recommendations for increases or changes of service should include an approximate estimate of cost involved.

SHALL TIED-UP TYPE BE REPLACED WITH ELECTROTYPES?

It has been suggested, as an economy, that electrotypes be substituted for the great quantity of type now tied up permanently in long-period

tables, such as those of the annual summaries. This would release such type for current use, and thereby obviate, for a long time, the necessity of buying much new type. The question to be decided is whether or not the electrotypes would cost less in the long run than the new type. Therefore, printing stations are requested to report as follows: (1) In what set-up tables at your station could electrotypes advantageously be substituted for type? (2) How much and what kind of type would thereby be released? (3) If no change is made in present practice, how much new type, of the kind now tied up, would it be necessary to purchase in this fiscal year and the next?

UNAUTHORIZED TELEGRAPHIC REPORTS

Station officials are requested to report, at the end of each week, on a "Dead Line Form", in duplicate, such unauthorized telegraphic reports as may be received from any one station on three successive days or more, except when the period occurs during the week prior to rendition of the monthly form, in order that prompt action may be taken to have them discontinued.

The unauthorized telegrams thus reported should not be entered on forms rendered at the end of each month.

PRACTICE FORECASTS DURING 1930

Applications to make practice forecasts during the year 1930 will be received until December 10, 1929. Before making application, the item on practice forecasts in the November, 1924, number of TOPICS AND PERSONNEL should be read, as the directions therein will apply during the year 1930.

The grouping of States for practice forecasts for the calendar year 1930 will be the same as for the year 1929. See the October, 1926, number.

Before applying for authority to make practice forecasts for official verification, observers should acquire reasonable familiarity with the work by study and by making practice forecasts unofficially for several months. By verifying the results themselves, they will become familiar with verification rules (Station Regulations, paragraphs 463 to 485, inclusive, and in TOPICS AND PERSONNEL for June, 1924; November, 1924; December, 1925; and October, 1926) and how they are applied.

Extensive developments in the airways service and other enterprises to which weather forecasts are essential have created a larger demand than ever for employees having a sound knowledge of and talent for forecast work. Encouragement is given to those who aspire to qualifying in forecasting, and who heretofore have not engaged in practice forecast work, to do so. Verification facilities in the Central Office will now admit of a material increase in the number authorized to engage in practice forecasts for verification purposes.

INTERNATIONAL MONTH (DECEMBER, 1929) AND SPECIAL SOUNDING BALLOON PROGRAM

Sounding balloons will be released daily during December at Broken Arrow, Okla.

In addition, a special program has been arranged for that month. Each of ten stations will release eight sounding balloons in two groups of four each at 6-hour intervals. The times of release will be decided by the forecasters at the Central Office and will depend on the prevalence of certain pressure distribution. In case no favorable conditions occur during December, the balloons will be released at the first favorable opportunity thereafter.

The stations participating in this work are Amarillo, Cincinnati, Concordia, Davenport, Denver, Little Rock, Nashville, St. Louis, Sioux City, and Vicksburg.

All kite stations will be notified by telegraph to make a 36-hour series on both of these occasions. If winds are too light for kites, captive or limited-height sounding balloons are to be used.

SUPERVISING STATIONS FOR AIRWAYS STATIONS

When making recommendations for new substations on or near the airways, officials in charge of major airways control stations should clearly indicate the first-order stations which are to have supervision of the work of these substations. Form 4076, covering the appointments, should in such cases be sent to the supervising stations for signature of the officials in charge and then be forwarded to the Central Office. This form should include data only for substations that are to be placed under the supervision of a single first-order station.

Stores Requisitions for instrumental equipment and other property for the substations should be forwarded through or by the station which will supervise the work of the substations. On the Stores Requisition there should be indicated the exact shipping address. The property so shipped will be invoiced to the supervising station.

Attention to the foregoing will facilitate action in establishing stations, appointing observers, and keeping an accurate record of the property accountability.

DESIGNATION OF RIVER BANKS

In the preparation of river-gage inspection reports, river banks should be referred to as R. B. for right bank and L. B. for left bank, considering that the observer is standing with his back upstream. The use of points of the compass in designating river banks is confusing, especially when the stream is tortuous. (See instructions printed on Form 4004B.)

TELEPHONE RENTAL ACCOUNTS

To meet recent requirements of the Comptroller General, vouchers

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ADDRESS LETTERS TO CHIEF OF BUREAU

As requested in the August, 1928, number of this publication, every letter to the Central Office that contains anything official should be addressed to the Chief of Bureau. When so addressed, it is opened in the Mail Room, routed to all concerned, and action is begun immediately.

If addressed to a division or an individual, the letter will go to the division and then will be returned to the Mail Room for routing, thus delaying instead of expediting action; or it may be retained in that division and so fail to reach other divisions concerned; or the individual addressed may be sick or on vacation, and the letter may be forwarded to him or lie unopened until his return.

REQUESTING AUTHORIZATION TO TRAVEL BY AUTOMOBILE

In requesting authorization to travel by automobile, station officials should indicate what expenses, necessary if the journey be made by train, could be avoided by using the automobile. This will enable the Central Office to consider such items as hire of special conveyance, loss of time through poor connections, etc., in setting the mileage rate for operating the automobile.

ILLEGIBLE THERMOMETER SCALES AT AIRWAYS STATIONS

Weather Bureau officials having supervision of airways stations should take necessary action to have the scales of all thermometers, used at these stations, kept in such condition as to be easily read. This can be accomplished by the use of ivory black pigment, one or more tubes of which should always be taken on inspection trips. In addition, it is suggested that airways mechanics of the Department of Commerce who inspect the service at intermediate landing fields be furnished with a tube of the pigment and instructed as to its use. This suggestion is based on the fact that the airways mechanics are constantly making trips along the airways and would, therefore, be able to cooperate very effectively with the Weather Bureau in keeping the thermometer scales in good condition.

CHECKING ANEROID BAROMETERS

A simple expedient for keeping aneroid barometer corrections conveniently at hand is used at the Cleveland Airport Station, where very frequent aneroid readings are required. A set of small cards show numbers from 1 to 5 in two series, one series being marked "ADD" and the other "SUBTRACT"; the eleventh card is marked "0" or "NAUGHT". The card indicating the appropriate correction is attached to the aneroid at the time of each reading of the mercurial barometer, usually every three hours, and is used until the next reading. In this way, aneroid errors, in the case of good instruments, may be reduced to insignificant figures.

PREPARATION OF CHARTS FOR REPRODUCTION

The following, written by Mr. G. L. Walls, is quoted from the October 18, 1929, number of Science:

In the making of charts and graphs which are to be reproduced in publications, it is always desirable to make certain that the smallest details, such as lettering, character of lines where several curves are shown on the same coordinates, etc., will show clearly when reduced to the size of journal illustrations. Likewise, when one wishes to place several charts on the same page of text, it is necessary to know how much reduction can be made with safety to the small details. The following rough-and-ready method will give this information without the labor of making measurements and computations:

Pin the chart to the wall. With a foot or so of twine in your hand, back away from the chart to the farthest point from which the smallest detail is clear. Hold the string at the level of your eyes at reading distance from them and parallel to the wall. Fixating the chart, move your hands apart on the string until your two thumb-nails are tangent to the vertical borders of the chart. Measure the length of string between your thumb-nails, which will be the minimum width the chart may have after it is reduced for publication.

REQUISITION FOR ELECTRIC LIGHT BULBS

Every Stores Requisition for electric light bulbs, submitted in accordance with an item in the September number of this publication, should contain a notation showing the purpose for which the bulbs are to be used.

Bulbs should not be requisitioned for office use if they are customarily furnished by the lessor under a provision of the lease for furnishing light.

FEDERAL BUSINESS ASSOCIATIONS

Weather Bureau officials have been elected to office in local Federal Business Associations as follows:

Mr. J. L. Cline, Dallas, elected president; and Mr. G. S. Bliss, Philadelphia, elected vice president.

CHANGES IN PERSONNEL

The following, relative to changes in the personnel of the Weather Bureau during the month of October, 1929, is published for the *exclusive* information of employees of the Weather Bureau:

Appointments, promotions, reductions, etc.

Name	Station	Remarks
Alexander, Avis D.....	Groesbeck, Tex	Junior observer, granted leave without pay from August 31 to November 30, 1929, on account of illness.
Alexander, Harold.....	Oklahoma City, Okla. . .	Appointed junior observer at \$1,440.
Alter, J. Cecil	Salt Lake City, Utah . . .	Promoted to meteorologist at \$3,800 from associate meteorologist at \$3,300.
Anderson, Alfred W.	San Francisco, Calif. . . .	Promoted to observer at \$1,800 from assistant observer at \$1,680.
Andrus, Clarence G.	Cleveland, Ohio.....	Promoted to meteorologist at \$3,800 from associate meteorologist at \$3,300.
Baird, Kenneth K.	Omaha, Nebr.....	Appointed junior observer at \$1,440.
Bender, Leo	Brownsville, Tex.....	Promoted to junior observer at \$1,560 from \$1,440.
Blumenuer, Robert E. L., jr.	Trenton, N. J.....	Appointed junior observer at \$1,500.
Bradford, Charles W....	Miami, Fla.....	Observer, restored to duty on October 8, 1929, from leave without pay.
Breese, Alexander	San Francisco, Calif. . . . (Lebec, Calif.)	Junior observer, cash salary adjusted from \$1,740 to \$1,620 with allowance of \$120 for quarters.
Brinks, Mrs. Isabelle J. .	Washington, D. C.....	Appointed junior clerk, CAF-2, at \$1,440.
Buzbee, James S.....	Des Moines, Iowa.....	Promoted to observer at \$1,800 from assistant observer at \$1,620.
Canaday, George L.....	New Orleans, La.....	Promoted to junior meteorologist at \$2,000 from observer at \$1,920.
Canaday, Thomas B., jr.	New Orleans, La.....	Promoted to observer at \$1,800 from assistant observer at \$1,620.
Chapman, Percy H	New York, N. Y.....	Appointed junior observer at \$1,500.
Clark, George A.....	Greensboro, N. C.....	Observer at \$1,920, resigned; record, good.
Cohen, John M.....	Albany, N. Y.....	Appointed junior observer at \$1,500.
Coleman, Miss Ruth M..	Washington, D. C.....	Appointed junior clerk, CAF-2, at \$1,440.
Cornelius, Rolen L.....	Evansville, Ind.....	Promoted to junior meteorologist at \$2,100 from \$2,000.
Dannheiser, Charles L. . .	Evansville, Ind.....	Promoted to junior observer at \$1,500 from \$1,440.
Drapier, William C., jr..	Omaha, Nebr.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Ferren, Jack E.*	Sheridan, Wyo.	Appointed minor observer at \$1,020, pending certification of eligibles.
Fink, Kenneth C.	Redding, Calif.	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Flavin, William J.	Albany, N. Y.	Appointed minor observer at \$1,020.
Floreen, Harold	Cheyenne, Wyo.	Appointed junior observer at \$1,440.
Garrett, Raymond L.*	Sheridan, Wyo.	Minor observer at \$1,020, appointment terminated; served but a few days.
Glasgow, Wilson S.	Pittsburgh, Pa.	Appointed minor observer at \$1,020; temporary appointment terminated.
Hargett, Ray H.	Phoenix, Ariz.	Appointed junior observer at \$1,440.
Hertzberger, Phillip S.	Evansville, Ind.	Promoted to under observer at \$1,320 from \$1,260.
Heyer, Hobert E.	Canton, N. Y.	Promoted to junior meteorologist at \$2,500 ¹ from \$2,200.
Hightman, Harry M.	Salt Lake City, Utah.	Promoted to meteorologist at \$3,800 from associate meteorologist at \$3,300.
Holladay, Forrest E.	Redding, Calif.	Appointed junior observer at \$1,440.
Jaki, Vincent E.	Omaha, Nebr.	Promoted to meteorologist at \$3,800 from associate meteorologist at \$3,200.
Johnson, Lewis E.	Washington, D. C.	Apprentice lithographer, mechanical, SP-2, at \$1,440, resigned; record, excellent.
Kernan, Thomas A.*	Albany, N. Y.	Minor observer at \$1,020, appointment terminated; record, good.
Knapp, Mrs. Irene B.	Washington, D. C.	Assistant clerk, CAF-3, at \$1,800, resigned; record, excellent.
Knapp, Loyd L.	Richmond, Va.	Promoted to observer at \$1,980 from assistant observer at \$1,620.
Lee, Frank P.	Houston, Tex.	Appointed junior observer at \$1,440.
Little, Delbert M.	San Francisco, Calif.	Promoted to meteorologist at \$3,800 from associate meteorologist at \$3,200.
McCallister, Jack C.	Los Angeles, Calif.	Appointed junior observer at \$1,440.
McGuire, Floyd E.	Oklahoma City, Okla.	Junior observer at \$1,440, resigned; record, unsatisfactory.
Mahaffy, William	St. Paul, Minn.	Assistant meteorologist, granted leave without pay from August 19 to November 18, 1929, on account of illness.
Marting, Dorsey P.	Evansville, Ind.	Appointed junior observer at \$1,440.
Morten, Carl G.	Cheyenne, Wyo.	Promoted to observer at \$1,800 from assistant observer at \$1,620.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Nichols, Esek S.....	San Jose, Calif.....	Promoted to assistant meteorologist at \$2,600 from junior meteorologist at \$2,400.
Orlich, George N.....	Detroit, Mich.....	Under observer, leave without pay extended to January 15, 1930, on account of continued illness.
Owen, Elbert A.....	Alpena, Mich.....	Reduced without prejudice to observer at \$1,920 from junior meteorologist at \$2,000 because of assignment to less important duties.
Parkinson, Gordon R...	San Francisco, Calif....	Observer at \$1,860, resigned; record, excellent.
Peacock, Matthew I.....	Albany, N. Y.....	Promoted to junior meteorologist at \$2,100 from \$2,000.
Peake, Malcolm E.....	Washington, D. C.....	Promoted to assistant clerk, CAF-3, at \$1,620 from junior clerk, CAF-2, at \$1,500.
Reilly, James T.....	San Francisco, Calif....	Appointed junior observer at \$1,440.
Rice, Miss Elsie W.*....	Grand Haven, Mich....	Appointed minor observer at \$1,020, pending certification of eligibles.
Rice, Miss Enid M.....	Grand Haven, Mich....	Minor observer at \$1,020, resigned; record, excellent.
Rice, Warren J.....	Grand Haven, Mich....	Promoted to junior meteorologist at \$2,000 from observer at \$1,800.
Rink, James F.....	Topeka, Kans.....	Appointed junior observer at \$1,440.
Robins, Millard V.....	Omaha, Nebr.....	Promoted to meteorologist at \$3,800 from associate meteorologist at \$3,300.
Rollins, Howard A.....	Evansville, Ind.....	Promoted to observer at \$1,860 from \$1,800.
Sanders, John E.....	Apalachicola, Fla.....	Junior meteorologist, leave without pay extended to January 10, 1930, on account of continued illness.
Stickley, Allen R.....	Washington, D. C.....	Promoted to scientific aid, SP-5, at \$1,800 from assistant observer at \$1,620.
Swayne, William W.....	Modena, Utah.....	Appointed junior observer at \$1,440.
Taylor, Alfred W.....	Richmond, Va.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Terry, Cecil T.....	Phoenix, Ariz.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Tugman, Alfred B., jr...	Washington, D. C.....	Promoted to assistant clerk, CAF-3, at \$1,620 from junior clerk, CAF-2, at \$1,500.
Wells, Roy A.....	Portland, Oreg.....	Assistant meteorologist, granted leave without pay from August 16 to September 30, 1929, on account of illness.
Wilcox, George E.....	Cheyenne, Wyo.....	Assistant observer at \$1,740, appointment terminated; record, good.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Wilson, Howard D.	Washington, D. C.	Appointed junior clerk, CAF-2, at \$1,440 by transfer from Treasury Department.
Wilson, Raymond L.	Miami, Fla.	Junior observer at \$1,500, resigned; record, excellent.
Yarbrough, Ralph H. ...	New Orleans, La.	Appointed junior observer at \$1,440.
Ziegler, William J.	Pierre, S. Dak.	Appointed junior observer at \$1,440.

* Indicates temporary appointment. † Includes allowance of \$340 for quarters.

Changes in assignments

Name	Relieved from—	Assigned to—
Anderson, Alfred W.	San Antonio, Tex.	San Francisco, Calif., assistant.
Beller, Jack	Salt Lake City, Utah ...	Bakersfield, Calif., in charge.
Buzbee, James S.	Omaha, Nebr.	Des Moines, Iowa, assistant.
Centen, Winford J.	Alpena, Mich.	Pierre, S. Dak., in charge.
Coe, Arthur R.	Miami, Fla.	Montgomery, Ala., assistant.
Hanna, Ralph T.	Topeka, Kans.	Boise, Idaho, assistant.
Hazen, John S.	Canton, N. Y.	Dayton, Ohio, in charge.
Heyer, Hobert E.	Grand Haven, Mich. ...	Canton, N. Y., in charge.
Johnson, Leland H.	San Francisco, Calif. ...	Pomona, Calif., assistant.
Marx, Edward H.	New Orleans, La.	San Antonio, Tex., assistant.
Melin, J. Bernhard.	Redding, Calif.	San Jose, Calif., in charge.
Owen, Elbert A.	Pierre, S. Dak.	Alpena, Mich., assistant.
Rice, Warren J.	Des Moines, Iowa.	Grand Haven, Mich., in charge.
Terry, Cecil T.	Los Angeles, Calif.	Phoenix, Ariz., assistant.

C. H. Marvin.

Chief of Bureau.

WEATHER BUREAU TOPICS AND PERSONNEL

NOVEMBER, 1929

DEPARTMENT MEMORANDUM NO. 591

DEPARTMENT OF AGRICULTURE, *November 25, 1929.*

Executive Order No. 5221 of November 11, 1929, is as follows:

LIMITATION ON NONOFFICIAL EMPLOYMENT OF OFFICERS OR EMPLOYEES OF THE
AMERICAN GOVERNMENT

It is hereby ordered that no officer or employee in the executive branch of the United States Government, regardless of whether he is on annual leave or leave without pay, shall be employed with or without remuneration by any foreign government, corporation, partnership, or individual that is in competition with American industry.

In view of the necessity of individual interpretation of this order with respect to cases within its scope arising in the department, it is directed that hereafter no employee of the department, whether in a duty status, on annual leave, or on leave without pay, shall accept employment with or without remuneration from any foreign government, corporation, partnership, or individual without the prior authorization of the Secretary.

(Signed) R. W. DUNLAP,
Acting Secretary

CONTRACTS FOR CONTINUING SERVICE

Some station officials are not following the contract requirements of the Comptroller General concerning "continuing service". (See Note 3 on reverse side of Extracts from Circulars 1 and 7.) A written agreement is required each fiscal year for any service, no matter how small the cost, if of a continuing nature. For example, written proposal should be secured and forwarded to the Central Office for the furnishing of ice, hydrogen, water, gas, electricity, janitor service, laundry service, etc., when deliveries are continuous or periodic. When the annual cost amounts to more than \$50, except for public utility service, competition is necessary and the accepted bid on Standard Form 33 serves as the written contract. Printed forms have been prepared and will be furnished by the Central Office, as required, to cover public utility service in any amount and other service at annual costs of \$50 or less.

Compliance with the foregoing requirements will eliminate much unnecessary delay in payments, as well as suspensions by the General Accounting Office.

VOUCHERS IN FAVOR OF EXECUTORS OR ADMINISTRATORS

To comply with a recent ruling of the Comptroller General, it will hereafter be necessary for station officials to see that all vouchers executed in the name of an executor or administrator of an estate, calling for payment under a contract or lease with the United States, be supported by a statement thereon to the effect that the executor or administrator continues so to act with the approval of the court in administration of the estate.

GOVERNMENT TRUCK FOR TRANSPORTING HOUSEHOLD GOODS

As explained in "TOPICS" for May of 1929, it is necessary for station officials to apply to the area coordinator for transportation whenever shipment of an employee's household goods has been authorized and it is practicable to ship by truck. This requirement is sometimes overlooked at station, with consequent delay in cases where it apparently may be practicable to ship by Government truck, while the Central Office inquires of the area coordinator if a Government truck is available for the shipment. Such delay may be most inconvenient for all concerned, and station officials therefore are requested, when shipment by truck is practicable, to ascertain whether or not a Government truck is available before getting bids for packing and hauling or for shipping by commercial truck, and to inform the Central Office accordingly.

REPORTING THUNDERSTORMS

Some observers seem to be confused in selecting code words for telegraphic reports to indicate the time of ending of thunderstorms. In some of the reports the time of last thunder heard is incorrectly used as the end of the thunderstorm instead of the time the rain ends. Observers should comply with the provisions of paragraphs 60 and 63 of the Weather Code.

TELEGRAPHIC REPORTS OF OBSERVATIONS

Observers at some stations have recently repeated in the p. m. barometer and maximum temperature word of the a. m. telegraphic report an incorrect barometer reading made and previously reported at the preceding 8 p. m. observation. Paragraph 127 of the Weather Code provides that all telegraphic reports must be carefully verified before the next succeeding observation. If this be done, errors of the kind referred to will not occur.

Morning telegraphic reports are occasionally received with a word to indicate inches prefixed to the word for p. m. barometer and maximum temperature. This is a violation of the provisions of Circular of March 15, 1928, General Instructions, page 2, eighth paragraph. Such words should not be used except in connection with current pressure readings and in accordance with paragraph 17 of the Weather Code.

SURPLUS RIVER-GAGE MATERIAL

Station officials are requested to furnish as soon as possible an itemized list of all surplus river-gage material they may have on hand. It is especially desired that the length and breadth of enameled steel figure-blocks be given to the nearest eighth of an inch, as these blocks have been made in several sizes. Condition of material should be stated.

RIVER AND FLOOD DIVISION STEEL TAPE

More than a year ago the River and Flood Division loaned a steel tape to a river district center. The tape has not been returned and papers in the case have been misplaced. It is requested that it be returned, marked "Tape for River and Flood Division".

ANEMOMETER OIL

Anemometer oil for winter use is now issued in bottles containing about 8 ounces. This is U. S. Navy 1075 refrigeration oil, procured under specifications that insure its liquid properties down to zero. Anemometer oil issued for summer use, U. S. Navy 2110, thickens at 35° Fahrenheit.

Both of these oils retain lubricating properties well below the temperature at which they begin to thicken. From the above it will be obvious that personal attention is particularly needful during periods of extremely low temperatures.

CARD RECORD OF INSTRUMENTS AT AIRWAYS SUBSTATIONS

Instrumental equipment on hand on December 31 at intermediate airways stations should be reported each year on Form 4065, appendix, by Weather Bureau stations responsible for it.

To facilitate the care of such property, the Central Office is prepared to furnish card-record material and directions for using it. The record will be similar to that now required for climatological centers, but specially devised for airways. After the record is started, additional cards in the 4067 (forms) series may be procured on requisition in the usual way.

SIGNS FOR WEATHER BUREAU OFFICES

Weather Bureau signs and blueprints therefor are no longer kept in stock at the Central Office.

When a new sign, or the repainting of an old sign, is necessary, the official in charge should obtain quotations from local dealers and submit Purchase Requisition with recommendation for authorization by Purchase Order. The wording of signs must be in accordance with paragraph 723, Department Regulations.

REQUISITIONS FOR CANDLES, LANTERNS, AND BALLOONS

Stations are requested to enter no other item on requisitions for candles, lanterns, and balloons, all of which may be entered on the same requisition. These requisitions should be made out at least one month in advance of the time the supply will be needed. Stations should purchase twine locally for attaching lanterns to balloons.

PLOTTING DIRECTION CURVES FOR BALLOON FLIGHTS

In plotting direction curves for balloon flights on Form 1115, it becomes necessary in some cases to break the curve at its intersection with some vertical direction line and continue it from the other vertical line on the form of corresponding direction. This generally happens when the direction changes rapidly and the direction curve approaches or runs beyond the limits of the part of the form in which the direction is plotted. In such cases the point or minute at which the curve is broken should be plotted again at the second vertical direction line and the curve continued from this latter point. In this event the two corresponding points so plotted should be joined by a dotted line.

When there is dead calm, the direction curve should be omitted and the word "calm" written in the space between the elevations within which the velocity is zero. When the wind is between 0 and 0.5 m.p.s., the direction curve should be dotted for the altitude interval in which this low velocity occurs.

WEATHER AND TEMPERATURE FLAGS

Attention is invited to the items in December, 1920; July, 1927; and April, 1928, numbers of TOPICS AND PERSONNEL, relating to the discontinuance of weather and temperature flag displays.

About 25 flags each of numbers 1, 2, 3, and 4 are now in Central Office stock and will be issued on requisition for use at rural places where weather and temperature flags are now displayed and facilities for obtaining the forecasts by means of newspapers, mail, or radio are not available. It is not desired that weather and temperature flags be displayed at any regular Weather Bureau station. Those in stock at the Central Office should be requisitioned only for use at rural display points. When the present supply is exhausted, the display of weather and temperature flags will be discontinued everywhere.

The foregoing does not affect the display of cold-wave flags, which will be continued in accordance with existing regulations.

SEMIANNUAL LIST OF ASSIGNMENTS OF COMMISSIONED EMPLOYEES

Owing to greatly increased demands on both clerical and printing forces at the times when "Assignments" have heretofore been prepared, about January 1 and July 1, it has been necessary to shift the preparation of this publication to less busy seasons. Hereafter it will be prepared as of March 1 and September 1, and will be issued as soon as practicable after those dates.

FEDERAL BUSINESS ASSOCIATIONS

Weather Bureau officials have been elected to office in local Federal Business Associations as follows:

Mr. F. E. Hartwell, Burlington, reelected president, and Messrs. W. E. Barron, Cairo, and Harry Raynes, Macon, elected president.

CHANGES IN PERSONNEL

The following, relative to changes in the personnel of the Weather Bureau during the month of November, 1929, is published for the *exclusive* information of employees of the Weather Bureau:

Appointments, promotions, reductions, etc.

Name	Station	Remarks
Arnhold, David, 3d.....	Washington, D. C.....	Appointed junior clerk, CAF-2, at \$1,440.
Beller, Jack	Bakersfield, Calif.....	Promoted to observer at \$1,920 from \$1,800.
Bowie, Edward H.....	San Francisco, Calif....	Principal meteorologist, granted leave without pay from November 16, 1929, to March 15, 1930, on account of illness.
Brown, George H.....	Royal Center, Ind.....	Appointed junior observer at \$1,440.
Buzbee, James S.....	Des Moines, Iowa.....	Observer at \$1,800, resigned because of physical disability.
Cagle, Cecil.....	Salt Lake City, Utah...	Appointed observer at \$1,920, by reinstatement.
Centen, Winford J.....	Pierre, S. Dak.....	Promoted to junior meteorologist at \$2,000 from observer at \$1,800.
Cole, Claude A.....	Pomona, Calif.....	Promoted to junior meteorologist at \$2,000 from observer at \$1,800.
Crawford, Herbert D....	St. Louis, Mo.....	Promoted to junior observer at \$1,560 from \$1,440.
Dau, Bud.....	Fresno, Calif.....	Appointed minor observer at \$1,020; temporary appointment terminated.
Deitch, Samuel*.....	New York, N. Y.....	Appointed minor observer at \$1,020, pending certification of eligibles.
Dodd, Irwin T.....	Oklahoma City, Okla....	Promoted to under observer at \$1,260 from minor observer at \$1,020.
Durgin, Franklin W....	Richmond, Va.....	Junior observer at \$1,620, resigned; record, good.
Dyer, William W., jr....	Washington, D. C.....	Designation changed to assistant scientific aid, SP-4, at \$1,620 from assistant observer at same salary.
Edelson, Milton.....	Richmond, Va.....	Junior observer at \$1,440, resigned; record, unsatisfactory.
Fisher, Lawrence C.....	Seattle, Wash.....	Promoted to meteorologist at \$3,800 from associate meteorologist at \$3,200, during detail of senior meteorologist to San Francisco.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Flavin, William J.	Albany, N. Y.	Minor observer at \$1,020, resigned; record, unsatisfactory.
Foreman, Henley T.	Greensboro, N. C.	Appointed junior observer at \$1,560.
Halfacre, William E.	Salt Lake City, Utah.	Promoted to junior meteorologist at \$2,100 from observer at \$1,920.
Harrell, Wayne.	Salt Lake City, Utah.	Appointed junior observer at \$1,440.
Herndon, Mrs. Moselle C.	Washington, D. C.	Clerk, granted leave without pay from November 6, 1929, to February 5, 1930, on account of illness.
Johnson, Leland H.	Pomona, Calif.	Promoted to junior meteorologist at \$2,000 from observer at \$1,800.
Jones, Clifford.	Washington, D. C.	Appointed apprentice lithographer, mechanical (press feeder), SP-2, at \$1,260.
Kennedy, Cecil W.*	Houston, Texas.	Appointed minor observer at \$1,020, pending certification of eligibles.
Kernan, Raphael F.	Sioux City, Iowa.	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Kernan, Thomas A.	Albany, N. Y.	Appointed minor observer at \$1,020.
Lane, Arthur A.	Albany, N. Y.	Promoted to junior observer at \$1,560 from \$1,440.
Leschander, Donald B.*.	Rochester, N. Y.	Minor observer at \$1,020, appointment terminated; record, good.
Lewis, William.	Modena, Utah.	Junior observer at \$1,440, resigned; record, good.
Maguire, Daniel J.	St. Louis, Mo.	Promoted to junior observer at \$1,560 from \$1,440.
Mahaffy, William.	St. Paul, Minn.	Assistant meteorologist, leave without pay extended to February 18, 1930, on account of continued illness.
Melin, J. Bernhard.	San Jose, Calif.	Promoted to junior meteorologist at \$2,000 from observer at \$1,800.
Moore, Bernard H.	Richmond, Va.	Appointed junior observer at \$1,620.
Nelson, P. Wendell.	Salt Lake City, Utah.	Minor observer at \$1,020, resigned; record, excellent.
Nichols, Roger C.	San Francisco, Calif.	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Norman, Clarence W.	Portland, Oreg.	Observer, granted leave without pay from November 1, 1929, to May 31, 1930.
O'Daniel, George E.	St. Louis, Mo.	Promoted to junior observer at \$1,560 from \$1,440.
Peacock, Matthew I.	Ithaca, N. Y.	Reduced without prejudice to observer at \$1,800 from junior meteorologist at \$2,100, because of assignment to less important duties.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Peplusky, John	Washington, D. C.....	Senior lithographer, mechanical, granted leave without pay from November 8, 1929, to February 7, 1930, on account of illness.
Posepny, Charlie J.....	Sioux City, Iowa.....	Appointed junior observer at \$1,440.
Randall, Dwight L.....	Medford, Oreg.....	Appointed junior observer at \$1,440; appointment as minor observer at \$1,020 terminated.
Rasmussen, Wiggo.....	Tatoosh Island, Wash..	Mechanic, leave without pay extended to February 2, 1930, on account of continued illness.
Ribble, Norbert G.....	Des Moines, Iowa.....	Promoted to observer at \$1,800 from assistant observer at \$1,620.
Robinson, Raymond C..	Cleveland, Ohio	Promoted to assistant observer at \$1,820 from junior observer at \$1,440.
Rosenfield, Berthold E.*.	Buffalo, N. Y.....	Minor observer at \$1,020, resigned; record, good.
Schmidt, Reinhart C....	St. Louis, Mo.....	Promoted to observer at \$1,920 from assistant observer at \$1,620.
Smith, Samuel	New York, N. Y.....	Minor observer at \$1,020, resigned; record, excellent.
Stapowich, Edward F...	Buffalo, N. Y.....	Promoted to junior observer at \$1,560 from \$1,440.
Sullivan, Miss Rosemary.	Washington, D. C.....	Designation changed to clerk-stenographer, CAF-4, at \$1,920 from clerk, CAF-4, at same salary.
Summers, Melvin B.....	San Francisco, Calif....	Promoted to principal meteorologist at \$5,000 from senior meteorologist at \$4,000, during absence of District Forecaster on furlough.
Sutton, Paul F.....	Richmond, Va.....	Appointed junior observer at \$1,440.
Swain, Tedrow R.....	Houston, Tex.....	Minor observer at \$1,020, resigned; record, excellent.
Sykes, Lloyd A.....	Cleveland, Ohio.....	Promoted to observer at \$1,800 from assistant observer at \$1,620.
Tavris, Hyman	Chicago, Ill.....	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Thompson, Jack C.....	Sacramento, Calif.....	Appointed junior observer at \$1,440; appointment as minor observer at \$1,020 terminated.
Weinstein, Irving I.....	Rochester, N. Y.....	Appointed minor observer at \$1,020.
Wiggin, Bernard L.....	Albany, N. Y.....	Promoted to observer at \$1,920 from assistant observer at \$1,740.

* Indicates temporary appointment.

Changes in assignments

Name	Relieved from—	Assigned to—
Chapin, William C.	Spokane, Wash.	Seattle, Wash., assistant.
Crombie, Francis C.	Boston, Mass.	Spokane, Wash., assistant.
Klemetsmo, Arvid S.	Duluth, Minn.	Cleveland, Ohio, assistant.
Peacock, Matthew I.	Albany, N. Y.	Ithaca, N. Y., assistant.
Ribble, Norbert G.	Sioux City, Iowa.	Des Moines, Iowa, assistant.
Robinson, Raymond C. ..	Royal Center, Ind.	Cleveland, Ohio, assistant.
Taylor, Alfred W.	Montgomery, Ala.	Richmond, Va., assistant.
Wiggin, Bernard L.	Cleveland, Ohio.	Albany, N. Y., assistant.

C. H. Marvin.

Chief of Bureau.

WEATHER BUREAU TOPICS AND PERSONNEL

DECEMBER, 1929

COOPERATION WITH PUBLIC LAND COMMISSION REQUESTED

The Commission on Conservation and Administration of the Public Domain (commonly known as the Public Land Commission) has requested the aid of the department in the studies of the various phases of the problem being considered by the commission. The Secretary of Agriculture states that it will be the policy of the department to extend full cooperation to the commission, and he requests that all field representatives of the department furnish any information requested by the commission.

NEW SYSTEM FOR TELEGRAPHING FORECASTS FROM NEW ORLEANS

A new system for the distribution of a. m. forecasts from New Orleans, La., by the Western Union Telegraph Company was scheduled to go into effect on January 1, 1930. It embodies the same principles of distribution that are now in operation at the Washington and Chicago forecast centers, which were described in TOPICS AND PERSONNEL of November, 1928, and February, 1929, respectively. A pneumatic tube is used at New Orleans to transmit messages to the Western Union Office, where duplication is made by a gelatin sheet (ditto) process.

APPOINTING MINOR OBSERVERS

The Civil Service Commission has informed the Secretary of the Second Civil Service District, comprising New York and part of New Jersey, that it hereafter will not be necessary to appoint minor observers for service in New York City from certificates made up of eligibles residing in other cities, but that examinations will be held in New York City to fill vacancies there. Presumably this ruling is of general application and will remove, at least for the larger cities, the disadvantage of having to select minor observers from a list of out-of-town boys.

AIRPORT STATIONS

It has been decided to discontinue the use of the special designation, "major airways control station", and to consider all airport stations on an equal basis so far as their classification is concerned, as referred to in TOPICS, semi-annual Assignments of Commissioned Employees, and correspondence. Naturally, some of the stations will have greater responsibilities than others, as at present in the case of regular stations, but there will be no special designations for such stations.

TELEGRAPHING DEPTH OF SNOW AT MORNING OBSERVATION

A question has arisen as to whether or not, under provisions of paragraph 40, Weather Code, the amount of snowfall in excess of 4 inches during the preceding 24 hours should be telegraphed or the actual amount of snow on the ground.

Whenever snow amounting to 4 inches or more falls at the stations designated to render such reports the *accumulated* amount (the total amount of snow covering, regardless of when it fell) should be telegraphed. The actual amount of snow covering is the information of most value to the forecasters. Forecasters can readily judge the amount of fresh snowfall from the precipitation code word.

HEADING FOR MAXIMUM TEMPERATURE COLUMN OF STATION MAPS

There is considerable lack of uniformity in the legends of maximum temperature columns as published in maps and bulletins issued from various stations. The terms "Highest last 24 hours", "Highest yesterday", and "Highest" are used. This data is taken from the maximum temperature word as contained in a. m. telegraphic reports. Under instructions, the maximum temperature as coded is the highest that occurred during the 24 hours preceding the 8 a. m. observation. Therefore, the correct legend is "Highest last 24 hours".

It is desired that immediate action be taken at stations issuing Maps DD and CM to use the correct heading. Stations issuing Map E and Form 1038 can continue to use the headings printed thereon until the present stock of base forms is exhausted.

SUBSCRIPTIONS TO WEATHER MAPS

It is the desire of the Central Office to limit as much as practicable the free issue of weather maps, confining free listing, as a rule, to Government and municipal offices, libraries, universities, colleges, and schools where courses in physical geography (including meteorological subjects) are given regularly; also, to persons having facilities for displaying the map conspicuously in places where it will be accessible to the general public and who agree to make such displays promptly and regularly. Lower grade schools having intermittent instruction in physical geography can be supplied occasionally with short-period (a week or 10 days) files of current or past issues. Listing during the entire school year is not considered necessary, as such short-period files will usually suffice for such instruction purposes.

Firms, individuals, or pupils requiring the maps for their own purposes are not entitled to be furnished maps free of cost. They may secure them by subscription through the Superintendent of Documents, Washington, D. C.

A careful purging of the map list at some stations has resulted in considerable decreases in the free list and material increases in the sub-

scription list. An instance of this kind is Chicago, Ill., where the number of subscribers has been increased from 58 on January 1, 1928, to 508 on January 1, 1930. At the same time, the total issue at Chicago has been maintained at a practically constant level.

It is directed that prompt action be taken by officials in charge of all stations at which Maps DD, E, or CM are issued to print the following notice on all future map issues:

Price: 20 cents a month; \$2.00 a year. Send subscriptions to Superintendent of Documents, Washington, D. C.

This notice should appear at the base of the chart and above the forecast and tabular data in a manner similar to that adopted on maps issued at Chicago. The official in charge of that station has been requested to send a copy of the Chicago map to all map-issuing stations.

In order that the Central Office may obtain correct information as to the increase or decrease in map subscriptions, it is desired that all stations issuing Maps DD, E, or CM forward at once, on Form 4028, data as to the number of map subscriptions on January 1, 1928, January 1, 1929, and January 1, 1930. Stations that have not submitted Form 4028 for December, 1929, should do so at once and include thereon the additional information as indicated.

TELEGRAPH RATES

From letters of inquiry recently received it is evident that many station officials are not informed regarding telegraph rates. As set forth in the May, 1927, number of "TOPICS AND PERSONNEL", under the caption "Telegraph Rates", they are as follows:

For 1,000 miles or less, 24 cents for 20 words or less, address and signatures counted, and $1\frac{1}{2}$ cents for each additional word. For distances over 1,000 miles, one-fourth the price of messages for 1,000 miles is added for each 500 miles or fraction thereof, except that no message within a State shall exceed the minimum rate.

The foregoing applies to all classes of messages except observation reports collected and distributed by the special system, the rate for which is \$0.007 per word.

CEILING-LIGHT EQUIPMENT

By agreement with the Airways Division of the Department of Commerce, the responsibility for procuring and furnishing ceiling-light equipment will be transferred to the Weather Bureau on January 1, 1930. Thereafter all correspondence on the subject will be addressed to the Central Office.

"DEAD-LINE AND UNAUTHORIZED REPORTS"

A number of stations are transmitting to the Central Office "Deadline and Unauthorized Reports" forms with the notation "None" under each heading. No report should be made except in case of delayed or unauthorized service, and then always in duplicate.

PREPARATION OF FORM 3057 IN 3-HOUR REPORTING SYSTEM

Instructions in the June, 1929, number of TOPICS AND PERSONNEL under the above caption appear to be misunderstood by most of the station officials concerned. Forms are being received on which no daily entries are made, the total number of messages and words being entered only in the columns at right of form. This procedure entails unnecessary time and labor at the airways center in that it becomes necessary to examine the received messages in cases where a discrepancy occurs. The phrase, "the checks need not be entered daily", in the first paragraph on page 438, will be interpreted to refer to action at the center only; sending stations will enter the items daily in accordance with instructions on back of form, and officials should see that the forms are mailed by the fifth day of each month, one copy to the Central Office and the other to the center.

FEDERAL BUSINESS ASSOCIATIONS

Mr. Albert Brand, of Helena, has been elected vice-president of the local Federal Business Association.

CHANGES IN PERSONNEL

The following, relative to changes in the personnel of the Weather Bureau during the month of December, 1929, is published for the *exclusive* information of employees of the Weather Bureau:

Appointments, promotions, reductions, etc.

Name	Station	Remarks
Alexander, Avis D.	Groesbeck, Tex.	Junior observer, leave without pay extended to February 28, 1930, on account of continued illness.
Bahr, Harry L.	Fresno, Calif.	Promoted to junior observer at \$1,560 from \$1,440.
Boink, John L.*.	Evansville, Ind.	Minor observer at \$1,020, appointment terminated; record, good.
Borders, George R.	Royal Center, Ind.	Appointed junior observer at \$1,440.
Bratton, Robert F.	Indianapolis, Ind.	Appointed minor observer at \$1,020; temporary appointment terminated.
Crum, Wilbert R.	St. Joseph, Mo.	Appointed minor observer at \$1,020; temporary appointment terminated.
Dailey, Richard B.	Hatteras, N. C.	Promoted to junior meteorologist at \$2,400 ¹ from \$2,200. ¹
Demme, Wilbur T.	Fresno, Calif.	Promoted to assistant observer at \$1,860 from junior observer at \$1,740.
Ewing, Arland W.	Buffalo, N. Y.	Appointed junior observer at \$1,560; appointment as minor observer at \$1,020 terminated.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Franklin, Horace	El Paso, Tex.	Appointed junior observer at \$1,440.
Garrison, Percy E.	Red Bluff, Calif.	Promoted to senior observer at \$2,000 from observer at \$1,800.
Geren, Harry O.	Trenton, N. J.	Promoted to associate meteorologist at \$3,200 from assistant meteorologist at \$2,800.
Gilbert, Norman E., jr.	Boston, Mass	Appointed junior observer at \$1,440.
Hagan, John C.	Evansville, Ind	Appointed junior observer at \$1,440; appointment as minor observer at \$1,020 terminated.
Hoffman, Calman	Boston, Mass	Junior observer at \$1,440, resigned; record, fair.
Jefferson, Glen	Omaha, Nebr.	Promoted to assistant meteorologist at \$2,600 from junior meteorologist at \$2,300. ¹
Kaminski, Walter F.	Grand Rapids, Mich	Appointed minor observer at \$1,020.
Kee, Elmer M	Jacksonville, Fla.	Observer, granted leave without pay from December 28, 1929, to March 27, 1930, on account of ill health.
Keefe, John R. F.	Washington, D. C.	Assistant clerk-stenographer, leave without pay extended to March 8, 1930, on account of continued illness.
Klemetsmo, Arvid S.	Cleveland, Ohio	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Lathrop, William T.	Yellowstone Park, Wyo.	Reduced without prejudice to assistant meteorologist at \$3,000 ¹ from associate meteorologist at \$3,400, because of assignment to less important duties.
Lee, Frank P.	Brownsville, Tex.	Promoted to junior observer at \$1,560 from \$1,440.
Lennahan, Charles M.	Ellendale, N. Dak	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Marting, Dorsey P	Evansville, Ind.	Junior observer at \$1,440, resigned; record, good.
Miller, Roy F.	Huron, S. Dak	Appointed junior observer at \$1,440.
Mills, Richard H.	Chicago, Ill.	Assistant observer, name changed on rolls from Richard H. Bagemihl.
Peplusky, John	Washington, D. C.	Senior lithographer, restored to duty on December 16, 1929, from leave without pay.
Rampy, Stanley W.	Omaha, Nebr.	Promoted to observer at \$1,800 from assistant observer at \$1,620.
Reed, Thomas E.	Boston, Mass	Promoted to assistant meteorologist at \$2,600 from junior meteorologist at \$2,300.
Reeves, Edgar W.*	Columbus, Ohio.	Appointed minor observer at \$1,020, pending certification of eligibles.

Appointments, promotions, reductions, etc.—Continued

Name	Station	Remarks
Rossman, Leonard J	Grand Rapids, Mich	Appointed junior observer at \$1,440; appointment as minor observer at \$1,020 terminated.
Sanders, John E	Knoxville, Tenn	Junior meteorologist, restored to duty on December 5, 1929, from leave without pay.
Scott, Jere B	Evansville, Ind	Appointed minor observer at \$1,020.
Shirley, Robert F	Fresno, Calif	Promoted to under observer at \$1,260 from minor observer at \$1,020.
Thomas, Ralph W	Erie, Pa	Promoted to assistant meteorologist at \$2,600 from junior meteorologist at \$2,200.
Ulsh, W. Howard	Greensboro, N. C	Promoted to assistant observer at \$1,740 from junior observer at \$1,440.
Underwood, John B	New Haven, Conn	Promoted to junior meteorologist at \$2,000 from observer at \$1,920.
Waite, Loren H	Cairo, Ill	Appointed minor observer at \$1,020.
Whipple, J. Howard	Cheyenne, Wyo	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.
Williams, George W	Dayton, Ohio	Appointed minor observer at \$1,020; temporary appointment terminated.
Williams, Nelson R	Fresno, Calif	Promoted to junior observer at \$1,560 from \$1,440.
Wolfe, Alfred Y	Jacksonville, Fla	Promoted to assistant observer at \$1,620 from junior observer at \$1,440.

*Indicates temporary appointment. ¹Includes allowance of \$240 for quarters.

Changes in assignments

Name	Relieved from—	Assigned to—
Bender, Lee	Brownsville, Tex	Houston, Tex., assistant.
Brown, Claude V	Red Bluff, Calif	Los Angeles, Calif., assistant.
Chappell, Edward H	Chattanooga, Tenn	Shreveport, La., assistant.
Cohen, Monroe D	Cleveland, Ohio	Chicago, Ill., assistant.
Ewing, Arland W	Columbus, Ohio	Buffalo, N. Y., assistant.
Garrison, Percy E	Los Angeles, Calif	Red Bluff, Calif., in charge.
Hagan, John C	Cairo, Ill	Evansville, Ind., assistant.
Jefferson, Glen	Yellowstone Park, Wyo	Omaha, Nebr., assistant.
Lathrop, William T	Trenton, N. J	Yellowstone Park, Wyo., in charge.
Lee, Frank P	Houston, Tex	Brownsville, Tex., assistant.
Reed, Thomas E	New Haven, Conn	Boston, Mass., assistant.
Sanders, John E	Apalachicola, Fla	Knoxville, Tenn., assistant.
Ulsh, W. Howard	Grand Rapids, Mich	Greensboro, N. C., assistant.
Underwood, John B	Boston, Mass	New Haven, Conn., assistant.

C. H. Mawin.

Chief of Bureau.