



June 3, 1991

Advanced Technology Protects Crowds

Golf Open to Use New Lightning Detection

Newly available technology is being used by NOAA's National Weather Service to protect golf-loving crowds at this weekend's Kemper Open in suburban Washington from possible lightning strikes.

On May 17, a young man was killed and 10 others injured, four critically, when lightning struck a tall tree at a lacrosse match at St. Albans School in Washington. The Weather Service had issued a

lightning warning two hours earlier.

Used for a Year at WSO

The lightning detection equipment, in use at the Washington Weather Forecast Service Office for about a year, will provide warning of any approaching electrical storm, and any such warning will be promptly issued at Avenel, the site of the golf tournament, Washington forecaster Jim Belville said.

Over the past decade, the private sector in cooperation

with the federal government, has developed technology determining the electrical characteristics of thunderstorms. This technology uses a network of sensors across the United States to detect and map cloud-to-ground lightning strikes as they occur. Typically, a flash is mapped within three seconds of its occurrence.

The lightning detection system, along with the Weather Service's radar capability, has

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Americans Ate Less Fish in '90, NOAA Says

The Nation's per capita consumption of seafood took a minor drop to 15.5 pounds in 1990, NOAA (the National Oceanic and Atmospheric Administration) announced today.

The drop, from a 1989 figure of 15.6 pounds, was expected, according to NOAA's National Marine Fisheries Service (NMFS). NMFS marketing experts said record-breaking seafood exports in 1990, combined with a reduction in imports, reduced the overall amount of fish available to Americans. The 0.1 pound drop was in the "fresh and frozen" category of seafood.

The per capita figures represent the consumption of edible meat rather than the weight of the whole fish or shellfish. ☺

U.S. Per Capita Seafood Consumption, 1981 -1990

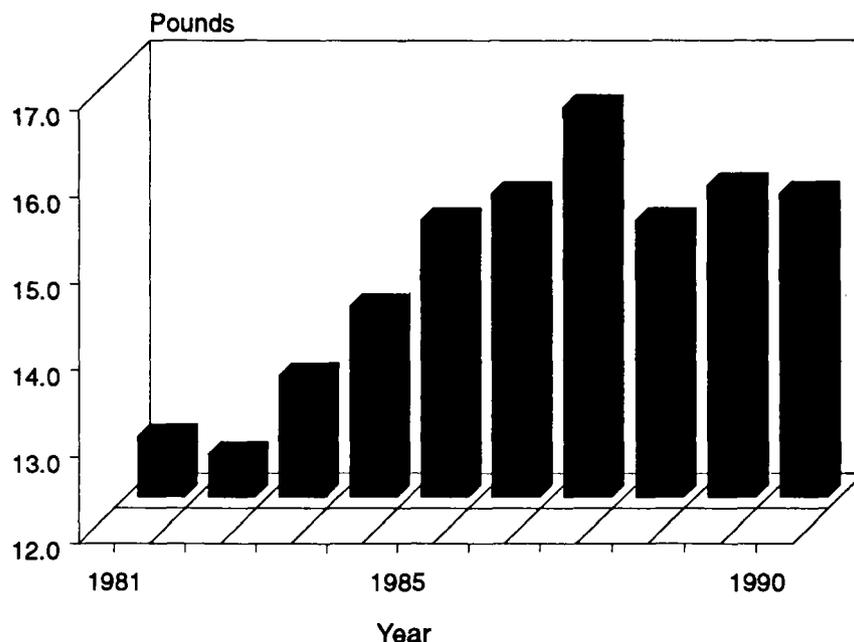


Chart above shows slight decline in American seafood consumption in 1990.

U.S. DEPARTMENT OF COMMERCE • National Oceanic and Atmospheric Administration

Sends Signal to Home, Cable TV or Radio Station

New Alert System Can Pinpoint Storm Warnings

NOAA Weather Radio is a great way to stay prepared for severe storms—if you have a radio that can receive it. And getting storm bulletins from TV and radio is another good way—assuming your television or radio is on.

But new technology now being tested can help to alert you even if your television is off. The NOAA Weather Radio Specific Area Message Encoder (NWRSAME) can send a signal to a special receiver in a radio or television station, in a cable television distribution facility, or a user's home, which would interrupt all programming in the specific storm area to bring the important storm warning.

While a similar system is being used for special weather alert radios, these alerts could

not be pinpointed to a specific county by a local weather service office, which often has many counties to cover. The new system allows WSOs to issue automated alerts to single counties.

Individualized county alerts could help save lives. If you were watching a local television program through cable and a severe storm was approaching, you would see a warning or watch as it was delivered by the local station. But if you were watching a movie on a

national pay channel such as HBO, or a baseball game on Atlanta's WTBS superstation, you wouldn't see any warning. Since these broadcasters send their signal all over the country, they can't break in with local announcements.

But with NWRSAME and a product called the Safety Alert Monitor (SAM), your cable company can override all programming on every channel at once in the affected county.

Also, many radio stations today are totally automated—no disk jockeys, no newscasters. A SAM unit installed at the

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Kemper Golf Open Uses NOAA Lightning Warnings

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proved useful for on-the-spot support of major outdoor events such as the Kemper, which require a certain amount of time to move thousands of spectators to places of safety.

Although the Washington area forecast is for partly sunny weather this weekend, Belville urged those attending the golf classic to be conscious of the weather and, if a warning is issued, to head promptly for the clubhouse.

"A person carrying a golf club in the open is a natural lightning rod," he said.

Lightning kills an average of 100 Americans and injures another 250 per year. It is the second worst killer of all weather disasters behind flash floods.



Staying Safe During a Lightning Storm

The recent death of a young man during a Washington lightning storm proves that lightning can be extremely dangerous. Here's a few tips on how to stay safe during a lightning storm:

- ① At the sign of an impending storm—towering thunderheads, darkening skies, increasing winds—tune in your NOAA weather radio, television or radio for the latest weather information.
- ② Get inside a home, a large building or an all-metal automobile—not a convertible.
- ③ Do not use the telephone, except for emergencies.
- ④ If you're caught outside, do not stand under a tall isolated tree or a telephone pole. In open areas, go to a low place, such as a ravine or valley.
- ⑤ Get away from open water, wire fences, clotheslines, metal pipes and rails.

Remember, lightning may strike several miles from the parent cloud. If you feel your hair standing on end, you may be about to be struck by lightning. Drop to your knees and bend forward, with your hands on your knees. Do not lie flat on the ground. ☺

Part of Interagency Team

NOAA Helps Set Up Israeli Fire Weather Service

Two NOAA weather forecasters were among an interagency crew sent to Israel to implement a fire weather service similar to the one currently existing in the United States.

1991 Hurricane Season Begins

The 1991 hurricane season officially began this weekend, and NOAA has cautioned Gulf and East Coast residents to prepare for it.

Although hurricane tracking and forecasting skills have improved, millions of people with no hurricane experience live in high-risk coastal areas, said Dr. Robert Sheets, director of NWS's National Hurricane Center in Coral Gables, Fla.

"It is nearly impossible to provide adequate lead time for communities such as New Orleans in the event of a major hurricane," Sheets said. "More and better refuges are needed in areas where rising waters can inhibit safe evacuation."

\$16 Billion in Damages

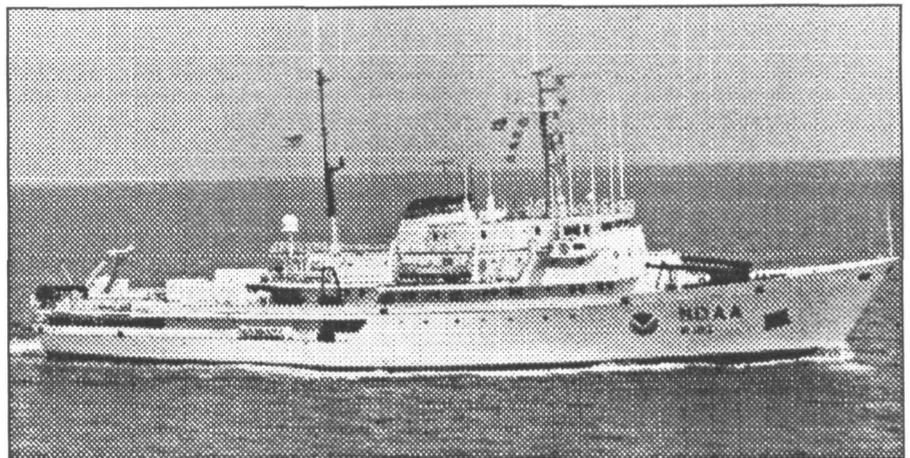
Since 1960, hurricanes on the East Coast have caused nearly 200 deaths and over \$16 billion in damages, spreading from Florida to the Middle Atlantic states and into New England. In 1989, Hurricane Hugo caused 49 directly related storm deaths, 26 in the United States and its Caribbean islands. The hurricane also left \$10 billion in damage. The previous year, Jamaica was devastated by Hurricane Gilbert, the most intense hurricane ever recorded in the Western Hemisphere. The United States barely escaped this storm's ravages. ☺

"The availability of accurate weather data is the backbone of a successful fire weather service," said NOAA's Chris Fontana, NWS meteorologist in charge at the Redding, Calif. Weather Service Office. Fire weather meteorologists need weather observations from special observing stations. Land management stations provide local weather information on wind, temperature, relative humidity, precipitation, fuel moisture and other elements. This data is used to determine the potential for fires. In addition to these operations, data is gathered from standard surface, upper air and radar weather reporting

stations and from weather satellites.

Fontana and Gary Bennet, Fire Weather forecaster at the Wenatchee, Wash. WSO spent one week gathering and providing information for the Israeli forestry service and one week with the Israeli weather service. The focus of this visit was to suggest information on the importance of northern Israeli land management stations capable of gathering and distributing local weather data. NOAA's fire weather premise is that a good weather forecast minimizes the time and resources necessary to bring wild fires under control.

The Israeli trip was sponsored by the U.S. Forest Service and the Jewish National Fund. ☺



Baldrige Open House This Weekend

As a special treat this weekend, the NOAA ship **Malcolm Baldrige** (above) will hold an exclusive open house for NOAA employees when it docks at Alexandria, Va. as part of the Red Cross Waterfront Festival. The employees open house is Sunday, June 9, from 10 am to 12 noon. It's open to the general public on Friday, June 7 from 7 pm to 9 pm; and on Saturday, June 8 and Sunday from 12 noon to 5 pm. The Baldrige will dock at the Robinson Terminal adjacent to Founders Park. ☺

New Weather Alert Technology Being Tested in Midwest

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radio station would be able to break into programming and issue the NOAA Weather Radio alert.

Midwest Testing

While the technology is being tested in several midwestern cities, NWS has no funds for outfitting its WSOs with the three units needed—

one transmitter, one backup transmitter, and a receiver to check if the warning is going out. However, Hollyanne Inc., manufacturers of SAM, may provide some funds. ☺

Please share this copy of NOAA Report with colleagues in your office.

Coming Events							June 1991	
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday		
2	3	4	5	6	7	8		
International Association for Great Lakes Research conference, in Buffalo, NY				Coastal Ocean Science wking grp	Cooperative Centennial Celebration, honors NWS co-op stations in Colorado & Wyoming			
9	10	11	12	13	14	15		
International Association for Great Lakes Research conference, in Buffalo, NY					NWS modernization briefing for new govt officers, Hall of States, Washington			
16	17	18	19	20	21	22		
Career Colloquium, to encourage graduate students who have been accepted into relevant doctoral programs to persue careers in environmental science, at the NOAA Science Center, Camp Springs, Md.								
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From June 1 thru June 26								
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National Oceanic and Atmospheric Administration

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12200 Kiln Court
Beltsville, MD 20704-1387
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