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Operations and Services
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COMPLEMENTARY DISSEMINATION SERVICES

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signed 10/1/02

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Complementary Dissemination Services

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1. Introduction. This National Weather Service (NWS) Instruction (NWSI) provides guidelines on NWS complementary dissemination services and identifies the managerial relationships and operational functions. These services include the provision of NWS information by telephone, by the print and electronic media, through the Federal Communications Commission's (FCC) Emergency Alert System (EAS), and the Federal Emergency Management Agency's (FEMA) (or its equivalent) National Warning System (NAWAS).

The provision of marine weather information requires the products have specific formats and codes for proper dissemination through a wide variety of methods to meet customer needs. For details, see NWSI 10-304, Marine and Coastal Services Communications/Dissemination.

Certain requests from the public, the media, and others in the private sector for NWS services may infringe on the role of private weather companies. Guidelines for handling these requests are in Weather Service Operations Manual (WSOM) Chapter A-06, Policy and Guidelines Governing National Weather Service and Private Sector Roles. It can be found on the Internet at: http://www.nws.noaa.gov/directives.

All NWSIs mentioned in this Instruction also can be found on the above Internet site, including information on primary dissemination services for NOAA Weather Radio (NWR) Dissemination (NWSI 10-1710) and NOAA Weather Wire Service (NWWS) Dissemination (NWSI 10-1715).

1.1 Mission Connection. The NWS mission to protect life and property, and to enhance the national economy, is further advanced by timely delivery of NWS information through these complementary dissemination services. Information supplied to the print and electronic media, including to the EAS, and in coordination with emergency officials through the NAWAS, help enhance the public's awareness of hazardous weather, flooding and non-weather emergencies, and actions that may be taken to mitigate the effects.

2. Procedural Responsibilities.

2.1 Weather Service Headquarters (WSH). The Office of Climate, Water, and Weather Services (OCWWS) provides service requirements and guidelines for the complementary dissemination services, in coordination with the Regional Headquarters and the National Centers for Environmental Prediction (NCEP).

2.2 Regional Headquarters. Each Regional Headquarters manages the complementary dissemination services within its region and should have a designated regional focal point to oversee, review and evaluate day-to-day operations. The Regional Headquarters will, as necessary, define and document in regional supplements to this Instruction any region-specific information.

2.3 The National Centers for Environmental Prediction (NCEP). NCEP manages the overall complementary dissemination services carried out by its National Centers (NC) and ensures that its NCs have sufficient telephonic equipment to carry out its responsibilities with its customers.

Each NC should have a designated focal point to oversee day-to-day operations, ensuring the NC adopts these guidelines consistent with the needs of its customer base and staffing, including proper telephone recording technique and telephone answering etiquette.

2.4 Field Offices. In this NWSI, NWS field offices include Weather Forecast Offices (WFO), River Forecast Centers (RFC), and other operational offices that interact with the public. Field office management adopts these guidelines and regional supplements consistent with local service requirements and staffing. Each field office should designate a focal point to oversee these complementary dissemination services, ensuring that all operational staff carry out these duties effectively, including proper telephone recording technique and telephone answering etiquette.

3. Telephone Services. It is required that all NWS field offices and certain NCs (as determined by NCEP) have specific telephone services provided to the public, other government agencies, and the media, as described in subsections below. Many of these offices also have the other telephone lines mentioned below, providing a full range of public services. (Certain other field office telephone lines not primarily used for public service, such as data collection or maintenance services, are not described in this instruction.)

NWS staff should make it clear during interactions with customers and partners, that while these telephone services provide a valuable addition to NWS's overall dissemination methods, they are not the primary method by which the public should expect to receive comprehensive NWS information, particularly for short-duration warning situations.

3.1 Listed Public/Administrative Line(s). **Required service**. The public can use one or more public/administrative telephone lines to talk with NWS office staff during normal business hours. Where workload and other considerations permit, offices should extend this service to the limits that resources allow. This would include placing the administrative phone in answer-status at any hour during periods of existing or imminent hazardous weather or flood events, if such action is deemed in the public interest. NWS weather recordings can be placed on these lines (see section 3.2). If resources do not allow during severe weather or other weather/hydrologic situations requiring full attention of staff, these lines do not have to be answered by office staff.

3.2 Telephone Recordings on Public Line(s). **Required service**. Recordings typically are made by office staff using the office's operational telephone equipment. The weather recording should, at a minimum, include a local forecast for the next 2 days, with a headline of only long-duration watches/warnings/advisories and short-duration watches, as appropriate. Other recordings may include marine or other information depending on the needs of the local community. These recordings should not contain any "value added" information that would compete with the private sector, as stated in WSOM Chapter A-06 (see section 1).

3.3 Recording Implementation Options. In many offices, the recordings are followed by a "ring-through" service where, if the public stays on the line, the call is answered by the office staff during normal business hours. Often, multi-line voice mail systems with a menu of choices

for touch-tone users are offered during business hours. These ring-through services should also accommodate rotary phone users.

3.4 Private Weather Line(s). For the NWS to satisfy the public need for weather information by telephone in some areas of the country, the NWS enters into Memoranda of Understanding (MOU) with private companies to provide weather recordings. Information for these recordings could come from the NWWS or other NWS sources, news services, or other private sector sources. The MOUs, executed between the Regional Headquarters and the company, should ensure the information is recorded in an accurate and timely manner. One such recording is accessed, mainly in some larger metropolitan areas, by the (area code)-WE#-1212 service.

3.5 Unlisted Line(s). **Required service**. This is used for emergency and non-emergency use by all members of the hazards community (e.g., contact with radio/TV stations and newspapers, interviews, coordinating plans for preparedness activities, etc.) in the local calling area. This line(s) could be the same line(s) as described in sections 3.6 and 3.7 at the discretion of the Regional Headquarters.

3.6 Severe Weather Reporting Line(s). **Required service**. All WFOs (and other appropriate NWS field offices) must make a provision to receive hazardous weather and flood conditions from the public by telephone. Telephone numbers for these purposes may be toll-free and/or announced and listed in the general telephone directories, as approved by Regional Headquarters.

3.7 Unlisted Toll-Free Emergency Line(s). This line should be used **only** for emergency operations within the office's area of responsibility and only for incoming calls to support the warning process.

3.8 Telephone Directory Listings.

3.8.1 Government Listings. White and yellow page telephone directory listings should include NWS office telephone numbers, as suggested by the following format. Hours of operation of the telephone numbers may be included, as appropriate.

U.S. Government
Commerce, Department of
National Oceanic and Atmospheric Administration
National Weather Service

(Following are listing of telephone lines, such as:)
Public/Administrative Calls (xxx)-xxx-xxxx
Hazardous Weather Calls (xxx)-xxx-xxxx
Local Area Forecast (xxx)-xxx-xxxx
Marine Forecast (xxx)-xxx-xxxx

3.8.2 Private Company Listings. Private weather-by-phone systems that include commercial sponsor or advertising information should not be listed under "National Weather Service" as

shown in section 3.8.1. Such numbers normally will be listed in a separate section of the telephone directory. If sponsors of the private company want to have an additional listing at their expense under the "National Weather Service," the following format should be used.

A description of the service with a cross reference to the page the telephone company lists the number on:

> "Local Area Forecast by (sponsored service) ... see page x" or alternatively,
> "Local Area Forecast by (sponsored service) ... see listing under (sponsor name)"

This ensures there is no express or implied endorsement by NWS of any of the sponsors.

In the general listing of the directory, the following example may be used:

> Under "N"
> National Weather Service - See listing
>
> U.S. Government
> Commerce, Department of
> National Oceanic and Atmospheric Administration

3.9 Advances in Telephone Services. The Regional Headquarters and its field offices are encouraged to work with OCWWS, OCIO, and Office of Science and Technology (OST) to use innovative technologies and techniques to provide advanced telephonic services that reduce staff workload. An example is the use of the NWR system's Voice Improvement Processor to provide weather messages to telephone recording systems, whether within NWS field offices or to external systems.

4. Media Services. Print media (newspapers, magazines, etc.) and electronic media (radio, television, on-line, etc.) play a major role in disseminating weather information. Field office and NC management, in coordination with regional Public Affairs staff, should ensure strong partnerships with these media in their area to provide a valuable service to the public.

4.1 Print Services. The print media traditionally disseminates weather information that is difficult to disseminate by telephone, radio, or television. In particular, the print media should be encouraged to publish weather awareness information and stories, highlighting steps the public should take to protect themselves and their property from hazardous weather and other environmental conditions. Public Information Statements (PNS), press releases, and direct mailings to the print media are examples of ways to provide these and other forms of important weather information.

NWS employees will not supply the print media with specially prepared information on a routine basis. That is a private sector role as stated in WSOM Chapter A-06. The print media should, however, be encouraged to print in a "weather page" such information as the local area forecasts for the next several days; selected cities forecasts; domestic and foreign temperature/rainfall

tables; and local climatic tables, including sunrise/sunset, degree-day information and, where appropriate, tide information. These products may be obtained from NWS sources, such as the NWWS, or from private meteorological or news sources.

4.2 Electronic Services. Radio, television, and on-line services, etc., should be encouraged to broadcast shortened versions of the hazard awareness information and other materials in PNSs (or equivalent) and press releases.

NWS employees will not provide direct broadcasts for radio and television stations on a routine basis. That is a private sector role, as stated in WSOM Chapter A-06. During ongoing or expected hazardous conditions, however, office staff should try to respond to media requests for live or taped interviews, consistent with workload and NWS's primary mission of getting warnings disseminated accurately and quickly.

In the Alaska Region, however, because of the unique environment and population needs, the NWS provides weather information and support, along with information from the Federal Aviation Administration, to a daily evening weather program of the Public Television Network, broadcast from Anchorage.

5. Pager and E-mail Services. Pager and e-mail services offer additional methods by which the NWS can distribute its critical information to emergency managers and other government officials. Field offices that provide or plan to provide information through pager or e-mail services must ensure the arrangement is non-exclusive and adheres to the following guidelines.

a. NWS field offices will coordinate with their Regional Headquarters before providing information directly to pager or e-mail service companies.

b. The NWS will provide mission-critical information directly through pager and e-mail services only to emergency managers and other government officials.

c. The NWS will inform customers of these direct pager and e-mail services that the NWS does not ensure the reliability of information on any system other than NWS operational dissemination systems.

d. NWS field offices providing information directly to pager or e-mail services by means other than official NWS dissemination systems should disseminate only watches, warnings, outlook products, and other critical information for the protection of life and property.

e. Information intended for government partners via a service provider must be made available to other providers upon request.

f. The NWS guarantees authentic and timely delivery of official NWS information to communications providers that subscribe to NWS operational dissemination systems.

6. Emergency Alert System (EAS) Services. The EAS is a nationwide alerting system requiring all broadcast stations (radio and television), cable television systems and wireless cable systems to have FCC type-certified EAS equipment. The FCC manages the EAS, in partnership with FEMA (or its equivalent) and the NWS. Participation by the electronic media to receive, forward to other EAS participants, and rebroadcast emergency messages to the public is mandatory for national-level EAS alerts and voluntary for state and local messages, such as weather or other environmental emergencies.

The EAS equipment uses a precisely formatted digital protocol including a two-tone attention signal. This signal defines the nature of the event or emergency, the location of the emergency, the party that originated the emergency message, the valid time period of the emergency, and an end-of-message code. This EAS protocol is virtually identical to the NWR Specific Area Message Encoding (NWR-SAME) technique the NWS uses to broadcast messages over all NWR stations (see NWSI 10-1712, Specific Area Message Encoding).

The NWS is a key provider to the EAS in two ways. NWS sends certain time-critical emergency audio messages using NWR-SAME via NWR to EAS participants. It also sends similar products in text format, using highlighted "EAS ACTIVATION REQUESTED" terminology, through satellite driven systems, such as NWWS, the Family of Services, Emergency Managers Weather Information Network, and NOAAPORT. NWSI 10-1710 provides more details on NWR and its role in broadcasting through the EAS to the public and NWSI 10-1701, Text Product Formats and Codes, provides information on using text products to enter the EAS.

NWS WFOs should be active participants in state and local EAS plans in their area, as conducted by State Emergency Communications Committees (SECC) and Local Emergency Communications Committees (LECC), respectively. In each state, one NWS WFO is designated as the state liaison office to coordinate with state emergency management and broadcasters. While it is understood that the relay of state/local information by broadcasters is optional, it is typically in these EAS plans that SECC/LECCs recommend how the voluntary participants should respond to weather and other environmental emergencies.

A complete discussion of the EAS is in the FCC's Report and Order, Amendment of Part 11 of the EAS rules, adopted February 22, 2002. The FCC's Report and Order and the EAS rules can be found on the Internet at: http://www.fcc.gov/eb/eas.

7. Emergency Dissemination Services.

7.1 National Warning System (NAWAS) Services. The FEMA predecessor agencies developed the National Warning System (NAWAS) for civil defense purposes under authority of the Federal Civil Defense Act of 1950, as amended. FEMA (or its equivalent) now operates NAWAS. The Government designed NAWAS primarily to convey warning of enemy attack or natural disaster to Federal, state, and local governments, and to the military and civilian population. The Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (found on the Internet at: http://www.fema.gov/library/stafact.shtm), authorizes the use of NAWAS service for emergencies. The Stafford Act identifies emergencies as peacetime nuclear

incidents, railroad disasters, downed aircraft, and other civil emergencies. FEMA's all-hazard approach to emergency management establishes the use of NAWAS extensively for weather, hazardous material, and other various incidents. FEMA has no defined hierarchy for the significance of a hazard, but recognizes all hazards as important.

NAWAS transmits warning of attack to approximately 2,000 Federal, state, and local warning points throughout the Nation. The warning points then distribute the warning to all populated areas to trigger Community Emergency Survival Plans. NAWAS operates 24 hours a day. The system design permits simultaneous issuance of a warning to all warning points on the system via a telephone instrument connected to a dedicated hotline circuit; the ability to place calls during high public call traffic periods; comprehensive coverage of state jurisdictions; conference calling; and high circuit reliability.

The NWS uses NAWAS as an information dissemination and two-way coordination tool with Federal, state, and local warning points. (See NWSI 10-1710, Appendix F for NWR Dissemination Rules for National and Regional Non-Weather-Related Emergency Messages.) All state governments have a Primary Warning Point and Alternate Warning Point terminal. The level to which weather information is disseminated or coordination achieved depends on operational procedures for the state NAWAS circuit established by each state government, and the number and location of additional NAWAS terminals in individual state governments and in the local jurisdictions.

NAWAS operational procedures for NWS facilities are in FEMA's publication *National Oceanic and Atmospheric Administration/National Weather Service National Warning System Terminal Operational Procedures* distributed by FEMA to NWS NAWAS-equipped offices.

7.2 Amateur Radio Service. Amateur Radio Service is provided by volunteers who are licensed amateur radio operators. A primary objective of the Amateur Radio Service is to provide public service through non-commercial emergency communications. Amateur Radio Service is valuable to the NWS, especially during emergencies, due to the de-centralized (generally on-site) nature of communications infrastructure employed. NWS offices should avail themselves of amateur radio assistance, especially where severe weather or hurricane frequency is high. Often this assistance will include the placement and operation of amateur radio equipment by a licensed amateur radio operator in the NWS office. Amateur Radio Service operations and functions are established and documented at each NWS office.

All amateur radio operators and stations are licensed by the FCC with different grades of licenses and privileges accorded, depending on the demonstrated skill and competence of the applicant. All classes of licenses require passing a written examination on basic FCC regulations, electronics theory, and practical radio operations. Amateur radio communications cover a broad spectrum of capabilities. Certain bands are especially suited for mobile communications, while others provide nationwide or international coverage. Amateur radio communications are normally well organized and highly disciplined.

There are two principal emergency communication organizations which also operate at the local level on a more formal basis. The Radio Amateur Civil Emergency Service (RACES) operates on specifically designated segments of the regular amateur radio bands under the sponsorship and authorization of local or state government officials. The Amateur Radio Emergency Service (ARES) is a national organization of amateurs providing voluntary emergency communication services. It is organized at the county level in each state. Unlike RACES, ARES is not sponsored by local or state government but by the American Radio Relay League (ARRL), a national amateur radio organization. ARES groups are organized and ready to assist with local emergency and NWS needs. ARES contact points can be found on the Internet at: http://www.arrl.org/sections/.

7.3 Citizen's Band Service. Citizen's band (CB) radio was established to meet a public demand for a portion of the radio spectrum to be used for personal or business communications which could not normally be met through commercial facilities. The CB operator is not required to pass any written test on the technical aspects of radio. Power limitations and band characteristics normally limit direct communications ranging from 5 to 30 miles. At times, distances may be much greater, but it is illegal to exceed 150 miles.

NWS offices should avail themselves of Citizen's Band Service operations in areas where the unique characteristics of the service may prove helpful to the NWS mission. Citizen's Band Service operations and functions are established and documented at each NWS office.

One of the largest CB groups providing public service is the Radio Emergency Associated Citizens Teams. CB groups have been especially effective in rural areas and small-to-moderate sized cities where Citizen's Band congestion is not as great a problem as in major metropolitan areas.

8. Customer Requests for Resending Products. NWS field offices and NCs may receive occasional customer requests to resend a scheduled or unscheduled NWS product. NWS field offices and NCs should honor customer requests to resend products according to procedures in NWSI 10-1701.