

**NATIONAL WEATHER SERVICE INSTRUCTION 10-1704
JULY 26, 2012**

***Operations and Services
Dissemination Services NWSPD 10-17***

COMPLEMENTARY DISSEMINATION SERVICES

NOTICE: This publication is available at: <http://www.nws.noaa.gov/directives/>.

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SUMMARY OF REVISIONS: This directive supersedes NWSI 10-1704, *Complementary Dissemination Services*, dated October 1, 2002, and recertified on April 30, 2004. Changes include:

- (1) In Section 1, added directive names how to respond to requests for services from the public, media, and others in the private sector, as well as providing support for special events.
- (2) In Section 3, reworded portions of the section to be more clear and concise. In Section 3.6, added information about the National Public Observation Program and in Section 3.8, deleted information detailing specific content of telephone directory.
- (3) In Section 4, added references to web pages and social media as resources for information.
- (4) In Section 5, changed the title of the section to “Emerging Technologies” and revised the language to include various types of emerging technologies.
- (5) In Section 6, added wording stating specifics of FCC requirement for EAS equipment and updated website on EAS.
- (6) In Section 7.3, added enhanced information about REACT and added a new section, 7.4, detailing Maritime Mobile Services.
- (7) Replaced “customer” with “user” throughout the directive.
- (8) Removed references to 10-304 and WSOM Chapter A-06 throughout the directive.

signed _____ July 12, 2012
David B. Caldwell Date
Director, Office of Climate,
Water, and Weather Services

Complementary Dissemination Services

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1.	<u>Introduction</u> . 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 user needs. For details, see NWSI 10-3 series of Directives.

When responding to requests for weather services from the public, the media, and others in the private sector, NWS personnel should be cognizant of the respective roles of the government and private sector. NWS Policy Directive 1-10, *Managing the Provision of Environmental Information*, summarizes the principles of NOAA's partnership policy and may help to guide the response to these requests. Additional guidelines for providing support for special events are included in NWSI 10-1806, *NWS Support for Special Events*.

All NWSIs mentioned in this Instruction also can be found at <http://www.nws.noaa.gov/directives>, 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 National Weather Service Headquarters (NWSH). 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. Each Regional Headquarters will work with NWSH in developing new complementary dissemination services to ensure consistency of services across the NWS.

2.3 The National Centers for Environmental Prediction (NCEP). NCEP manages the overall complementary dissemination services carried out by its National Centers and ensures that its

centers have sufficient communications equipment to carry out its responsibilities with its users. Each center should have a designated focal point to oversee day-to-day operations, ensuring the center adopts these guidelines consistent with the needs of its user base and staffing.

2.4 Weather 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.

3. Telephone Services. It is required that all NWS field offices and certain National Centers (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.)

During interactions, NWS staff should inform users and partners, that telephone services provide a valuable alternative addition to NWS's overall dissemination methods. However, telephone services 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 (for example, today, tonight, and tomorrow), 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 information beyond that included in standard NWS products.

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.

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 NWS 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.

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) are required to 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. The National Public Observation Program (NPOP) enables the public in the United States, including Alaska, Hawaii, Puerto Rico, and the U.S. Pacific Islands, to relay reports of hazardous weather to NWS forecast offices.

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 the NWS office telephone number.

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, Office of the Chief Information Officer (CIO), and Office of Science and Technology (OST) to use innovative technologies and techniques to provide advanced telephonic services that reduce staff workload.

4. Media Services. Print media (newspapers, magazines, etc.) and electronic media (radio, television, webpages, social media, 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. 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, on-line services, webpages, social media, 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. NWS field offices and regional headquarters should work with their representatives on the NWS Emerging Technologies Integrated Work Team to explore the use of new and emerging technologies for dissemination. During ongoing or expected hazardous conditions, however, office staff should try to respond to media requests for live or taped interviews, consistent with

workload, established NOAA/NWS media policies, 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. Emerging Technologies. The NWS continues to explore the potential use of emerging technologies for dissemination. NWS Offices should work through their representative on the NWS Emerging Technologies Integrated Work Team regarding the use of emerging technologies for dissemination, such as social media and mobile wireless services.

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. All AM and FM radio stations, television stations, low power television service (LPTV), and cable TV systems with greater than 5,000 subscribers are required to have an EAS encoder/decoder. If a cable TV system has less than 5,000 subscribers, then they can operate without an EAS encoder if they install an FCC certified decoder (see FCC Title 47, Code of Federal Regulations 11.11)

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 (Emergency Action Notification and Emergency Action Termination) 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 NWS, 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 can be found on the Internet at:
<http://transition.fcc.gov/pshs/services/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 to convey warning of enemy attack or natural disaster to Federal, state, and local governments, and to the military and civilian population as well as convey information on any sort of local, regional, state, and national natural or manmade disaster. The Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (found at: <http://www.fema.gov/about/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 to disseminate information 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. The amateur radio license grade depends 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 (REACT). REACT is a national, volunteer citizen-based communication organization established in 1962. In 1970, the FCC designated "CB-9" as the emergency and travelers assistance channel which REACT routinely monitors. 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. REACT information, including the NWS MOU, can be found on the Internet at: <http://www.reactintl.org/>.

7.4 Maritime Mobile Service. The Maritime Mobile Service is an internationally-allocated radio service providing for the safety of life and property at sea and on inland waterways. NWS Field Offices may operate FCC/NTIA licensed fixed maritime stations which allows direct communication with mariners, both to convey watches and warnings, and to collect observations. The Maritime Mobile Service covers a broad spectrum of capabilities, including communications at VHF, MF and HF frequencies. Maritime Mobile Service operations and functions should be documented in NWS office's where a station is established.

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