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INSTANT MESSAGING (IM) COMMUNICATIONS

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Instant Messaging (IM) Communication

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1. Definition. Instant Messaging (IM) is a real-time, Internet-based method of electronic communication between two or more parties. IM may also be referred to as “chat.” Utilizing a software application known as a “chat client,” multiple users can compose and send messages to each other in forums known as “chat rooms.” In addition to manually composed messages, chat sessions may contain various automated software-generated messages that convey information about disseminated National Weather Service (NWS) products.

1.1 NWSChat is the name for the system providing IM capability to the NWS. NWSChat consists of hardware and software maintained by NWS and client software that can be accessed via a web browser or downloaded on the user’s computer or other equipment.

2. Mission Connection. IM is used by NWS operational personnel to exchange hydrometeorological or other hazards information with “core partners” (see definition in Appendix A). This information aids in the efficacy of local, state, regional and national emergency preparedness, response and recovery efforts, thereby aligning with the agency’s mission of protecting life and property.

3. Concept of Use. Using NWSChat, information is exchanged among NWS personnel and external parties via chat rooms. NWSChat allows for the creation of chat rooms that are facilitated by local offices and regional centers. Each Weather Forecast Office (WFO), River Forecast Center (RFC), and Central Weather Service Unit (CWSU) and National Center will have designated chat room(s). Users of NWSChat can see and participate in communications with other users in the selected chat room(s).

3.1 Hazardous Communication Use. NWSChat may be used to communicate hazardous information (hydrometeorological or other hazards such as: tsunami events, toxic airborne or waterborne releases) with core partners in the media, emergency response communities, and deployed NWS personnel providing on-site aid to NWS partners. The content may assume several different forms, range

significantly in technical nature, and serves external users possessing a variety of backgrounds, skills and needs. Often, this expertise is provided in response to specific queries from the external participants. These parties may play a pivotal role in communicating NWS' hazardous weather messages to the public, or utilizing the NWS information to take actions which directly aid society's response to significant weather or weather-related events.

NWS personnel may provide understanding of current and expected meteorological conditions that could affect a decision on issuing or cancelling an NWS product. NWS personnel may never provide *advance* notice that an NWS office (field office or national center) intends to issue/extend/cancel a watch/warning/advisory before the product is issued since such knowledge may have commercial value. Statements pertaining to watches/warnings/advisories such as "we will be issuing later this period" or "they soon will be issuing" via NWSChat, or other arenas where the audience is limited, are considered pre-release of information. Such statements are prohibited, subject to the following exception: NWS personnel may use chat to state that the *process* for issuing a warning, watch, or advisory product is *underway*, provided that the product is issued within 5 minutes or less subsequent to the chat conversation.

3.2 Decisional Support Communication Use. NWSChat may also be used to convey forecast decision expertise in real-time. Often, this expertise is provided in response to specific queries from the external participants. These parties may play a pivotal role in communicating the NWS' weather messages to the public, or utilizing the NWS information to take actions which directly aid society's response to significant weather or weather-related events. NWSChat is not a primary means of dissemination of NWS forecasts and warnings, i.e. forecast and warning information conveyed by NWS through NWSChat are to continue to be disseminated through the routine suite of NWS products and services.

3.3 Significant Event Reporting and Sharing. NWSChat may also be used as a means for core partners to communicate significant event reports to NWS operational personnel, who utilize the information to make effective follow-on warning and forecast decisions. Chat participants can also use IM as an efficient means of seeking clarifications and enhancements to the communication stream originating from the NWS during a fast-paced significant weather or hydrologic event.

3.4 Other NWS Use. NWSChat may be used by NWS employees either as a means to support services and collaborate internally with other NWS employees (on an individual basis, or as part of group chats). Note: Any chat related to internal collaboration of forecast reasoning and pre-decisional watch/warning/advisory issuance on are to be done in NWS only (restricted) chatrooms, whose access is restricted to NWS account holders. NWSChat may be used for internal and external collaboration of all other uses consistent with this directive. NWSChat may be used by NWS employees as an external means of professional collaboration with individuals, organizations, agencies and academia. NWSChat will not be used for administrative purposes such as time-keeping, tracking employee work hours or tasking. NWSChat is not to be used for trivial or social conversations (see Content and Etiquette, section 6).

4. Users. All NWSChat users must have individual accounts. All NWS employees may have access to NWSChat. Non-NWS personnel may be granted access if they qualify per sections below. All users must abide by the Terms of Use.

4.1 Dedicated Chatroom Users. A dedicated “public” chatroom is available for each field office and National Center on NWSChat. NWS offices choose their level of participation based on operational requirements. Each NWS office provides participation privileges to external (non-NWS) users in their public chatroom(s) who meet one or more of the following criteria:

- a. Member of the emergency management community. This includes public safety officials who serve as employees or contract agents of a government agency at the federal, state, local, or tribal level and are charged with protecting the public from hazards that are influenced by weather or weather-related events. Other members of this community include: safety and emergency personnel, from universities or other large entities with large populations, whose roles are functionally equivalent to the public safety officials described above, Skywarn Net Control Operators, such as Amateur Radio Emergency Services (ARES) and Radio Amateur Civil Emergency Services (RACES).
- b. Government Partner. Government partners who have missions that require close coordination with the NWS. Government partners include (but not limited to) the FAA, and water and land management officials.
- c. Member of the electronic media. Members of the electronic media are parties, and contract agents of parties, who have a need to actively participate in discussions with NWS forecast offices on imminent weather or other hazards, and operate systems that routinely and rapidly relay weather and water watches, advisories, warnings and forecast information to a significant part of the population served by an NWS office. Electronic media includes providers of weather content through electronic information distribution such as radio, television, internet, cellular, and other wireless means.
 - i. “Local” media members. Members of the media with local coverage or customer base are to register via the local WFOs or center with which they customarily collaborate. Approvals are granted by the field office or center.
 - ii. “National” Media members. Members of the media who provide weather news and information on a national level. Approvals are granted by the NWSChat manager.

Note: National Headquarters, National Centers, and Regional Headquarters may access WFO and RFC public chatrooms (individual WFO and RFC rooms which include media and other partners) via the ‘web interface’ feature of NWSChat. The web interface allows users to ‘see’ chat communications, but they cannot submit content to the chat rooms directly. National Centers, and Regional Headquarters may use non-public chatrooms for direct chat and coordination with WFOs, RFCs and other agencies as needed.

Dedicated chatrooms are provided for RFC use in coordinating with USGS and USACE. The

rooms use naming convention ****rfcagencieschat**, where ****** identifies the RFC (e.g. **ncrfcagencieschat**).

4.2 NWSChat Participation Request and Approval. Non-NWS users are granted participation privilege by the field, Regional or National Center, or National Headquarters office with which they are to communicate using NWSChat. Potential Non-NWS users may request account access using the NWSChat website at: <https://nwschat.weather.gov>. The reply decision to accept or deny participation privilege is to be provided within 30 days upon receipt of user account request information and the requester's acceptance of the Terms of Use (available at the NWSChat website at https://nwschat.weather.gov/NWSChat_Terms_of_Use.pdf). If participation is denied, the office is to provide justification to the requestor in the form of an email. Denied requests may be appealed through the respective NWS Regional Headquarters; the Regional Headquarters are to coordinate with the field office and requestor prior to reaching a decision. If the appeal is denied at Regional Headquarters, a final appeal may be made through the NWSChat Manager at NWS Headquarters. NWS Headquarters will coordinate disposition of appeals with the Regional Headquarters, field office, and requestor prior to reaching a decision. NWS processing of each appeal is not to exceed 45 days from the date of appeal.

4.3 User Training and Terms of Use. All NWS and Non-NWS NWSChat participants will be required to complete on-line training materials and agree to Terms of Use at the completion of this training in order to obtain an account. All NWS participants are required to take refresher training on an annual basis for continued access and use of the system.

4.4 Password Retention and Reset. NWSChat user passwords automatically expire in accordance with applicable Information Technology policy. The system sends reminder notifications when the password is about to expire. Users can at any time reset their password by selecting the "Reset Password" link located on the NWSChat website.

5. Field Office Use. All field offices authorized to participate by their Regional or National Director are to support NWSChat, however at no time is NWSChat to interfere with the NWS warning and forecast decision making and dissemination process. The degree of participation, particularly during significant weather or heavy workload is to be determined by each office or their Region. NWSChat is an enhanced service tool; as such, it may be temporarily suspended at the discretion of the office management or the Senior Forecaster/Hydrologist without prior notice. This would most likely occur due to workload constraints. During heavy workload periods where NWSChat participation may cause interference in the decision making and dissemination process, offices may state in their chat room that they will be unavailable for a period of time and will resume active chat communications when time permits.

5.1 Equitable Access for External Partners. If an ad-hoc chat session (i.e., beyond use of the dedicated chatroom) is set up by a local office, attention should be paid to what individuals are invited to join the chat session, to ensure external partners are treated in an equitable manner. Ad-hoc sessions are not recommended for external partners; Rationale: if members of the media are included in such sessions, all approved dedicated chatroom users from the media are to be made aware of the chat session by the local office.

6. NWSChat Content and Etiquette. NWSChat is meant to enhance communications between the NWS and its core partners. NWSChat will not replace official NWS products. All exchanges should remain concise, professional and germane to the given hydrometeorological or hazardous event. References to topics, individuals, offices or groups that are extraneous to a hydrometeorological or other hazardous event discussion should be avoided. Undue personal comments, particularly those regarding other individuals or situations apart from the topic of collaboration, are to be avoided. NWSChat will not be used for trivial or social conversations. All participants should be aware that NWSChat sessions are recorded, archived, are subject to the Freedom of Information Act (FOIA), and may be used at a later time in reviewing particular events or incidents. NWSChat room conversations are saved on the NWSChat servers and backed-up as part of the NWS Internet Dissemination System (NIDS).

7. Naming Conventions. Access to the NWSChat system requires a valid account on the server. All users are to have individual accounts. A valid account consists of the users' affiliation and full name (e.g. nws-joe.forecaster@nwschat.weather.gov). Although users have an individual account using their name, NWSChat allows users the ability to operate under a 'handle' while using the system¹. Other chatroom users only see the 'handle' name, but the actual user named account is used for access and that information is maintained in internal (non-public) logs. This ensures individual accountability by the system while providing a level of anonymity, if the user chooses. *It is strongly encouraged that NWS users performing or participating in a mission critical office capacity (i.e. working the public or short-term desk) use a 'handle' instead of their name.* Details on how to set up account handles can be found in the NWS Toolbox section at <https://nwschat.weather.gov>. The 'handle' naming convention is listed in Appendix B.

8. IT Security. The chat client software installed on NWS office computer systems is bound by all applicable DOC/NOAA/NWS rules and regulations governing appropriate and approved use of federal government IT equipment (see Appendix C). All NWS forecasters and management staff are annually certified in NOAA IT Security, and are held accountable for any violations as stated by policy.

9. Responsibilities. This Directive establishes the following authorities and responsibilities for NWSChat:

9.1 The Assistant Administrator for Weather Services is responsible for the overall implementation of the NWSChat program.

9.2 The Office of Operational Systems (OPS) is responsible for Operation and Maintenance of the NWSChat system

¹ The displaying of a personal name while using NWSChat is entirely at the discretion of the individual and their office/organization. NWS employees cannot be mandated to use their names as any part of an account handle.

9.3 The Office of Climate Water and Weather Services (OCWWS) is responsible for:

- Managing the NWSChat Program
- Procedural directives implementing policy and NWSChat Terms of Use.
- Policy assistance to regions and field offices.
- Training materials

9.4 The NWSChat Program Manager is responsible for the enforcement of policies and program management. Contact information for the NWSChat Program Manager is available on the NWSChat website.

9.5 The National Weather Service Regional Directors and the Director of the National Centers for Environmental Prediction are responsible for:

- Support the use of NWSChat within their region or Center, determining which field offices may participate.
- Ensuring participating offices within their region or Center are organized, equipped, and personnel are trained to use the NWSChat system, within resources.

9.6 Meteorologists-in-Charge (MIC) and Hydrologists-in-Charge (HIC) at field offices and Center Directors may deny or restrict access to external groups by applying policies and NWSChat Terms of Use standards as they deem necessary to preserve the integrity and effectiveness of the local chat. The MIC, HIC and Director designate focal point(s) responsible for issuing and maintaining accounts for Non-NWS users who communicate with their respective offices via NWSChat.

9.7 The NWSChat Administration Team, under the direction of the NWSChat Manager, is responsible for the NWSChat service application, and ensures that NWSChat related applications function correctly and are updated as needed. The team is comprised of individuals from the field, OPS, and OCWWS.

APPENDIX A

Glossary of Terms and Abbreviations

ARES: Amateur Radio Emergency Services

CIO: Chief Information Officer (at NWS headquarters)

Core Partners: Government and non-government entities which are involved in the preparation, dissemination and discussions involving hazardous weather or other emergency information put out by the National Weather Service. Core partner categories are listed in section 4.1.

CWSU: Central Weather Service Unit

FAA: Federal Aviation Administration

FOIA: Freedom of Information Act

HIC: Hydrologist-in-Charge

IM: Instant Messaging. Referencing technologies which enable users to communicate with other users in groups defined as “Chat Rooms”

IMET: National Weather Service Incident Meteorologists

MIC: Meteorologist-in-Charge.

NWS: National Weather Service

NWSChat: System comprised of computer servers and client software providing instant messaging capability for the National Weather Service.

OCWWS: National Weather Service’s Office of Climate, Water, and Weather Services.

RACES: Radio Amateur Civil Emergency Services

RFC: River Forecast Center

USGS: United States Geological Survey

USACE: United States Army Core of Engineers

WFO: Weather Forecast Office

APPENDIX B

NWSChat User Account ‘Handle’ Naming Convention

A standard handle naming convention facilitates quick recognition of the user’s office and role, while providing a level of anonymity with respect to the individual’s name. Details on how to set up account handles can be found at <https://nwschat.weather.gov>

NWSChat accounts are to use the following naming convention for their ‘handle’.

Note that all account ‘handles’ are in lower case

WFO, RFC and CWSU: Use the following naming convention: nwsxxx-id, whereby xxx is the three letter identifier for the office and id identifies the workstation, desk type or role.

The following examples demonstrate the convention:

- Desk: nwsbmx-1, nwsbmx-2, nwscnrfc-sch, nwszdc-1, nwsbmx-longterm, nwsbmx-shortterm, or nwsbmx-warning, etc.
- Role: nwsbmx-mic, nwsbmx-wcm, nwsbmx-soo, nwscbrfc-hic, nwszme-mic, etc.

NWS National Centers: Use the following naming convention: nwsxxx-id, or ncep-xxx –id whereby xxx is the standard identifier for the office and id identifies the workstation, desk type, role or name.

National Center examples:
nwsawc-wcm, ncep-sib-michael, ncep-nco-johnson

IMET: Incident Meteorologists (IMET) use the following naming convention: nwsimetxxx-id, whereby xxx is the standard identifier for the office and id identifies the role, or the id may be the individual’s name, at the discretion of the individual and their office.

Examples: nwsimetboi, nwsimetboi-1, or nwsimet-davis

Regional and National Headquarters: Regional and National Headquarters use the following naming convention: nwsxxx-id, whereby xxx is the standard identifier for the region (or ‘hq’ for headquarters) and id identifies the role, office, or the id may be the individual’s name, at the discretion of their office.

Examples for Regional Headquarters: nwswrh-ssd1, nwswrh-ssd2, or nwswrh-jones
Examples for National Headquarters: nwshq-ocwws1, nwshq-ocio or nwshq-ocwws-jones,

NWSChat Program Manager is identified as ‘nwschatmanager’.

Individual NWS Account Naming. For non-mission critical, collaborative chat purposes, NWS users may use their standard account with no alias.

Non-NWS Account Naming. For organizational and accountability reasons, it is required that authorized partners of NWSChat dedicated chatrooms use the following account naming convention.

Partner Account Naming Examples – **Note that all account ‘handles’ are in lower case**

Broadcast Stations: By station call sign and position, location, or last name

Examples: wdkj-1, wdkj-2, wdkj-studio, wdkj-studio2, wdkj-eric.murphy, wdkj-mobile

Emergency Management: By county-state abbreviation and position, station, or last name

Examples: sema-al-1, sema-al-2, sema-al-ops, sema-al-disasterservices, jefferson-al-keeney

Amateur Radio: By office ID net control group or by FCC call sign and first or last name

Examples: nwsshv-alert, nwsict-ham, k4nws-graham

Other agencies – Other federal and state agencies may follow their own defined naming convention, provided that the ‘handles’ are in lower case characters.

APPENDIX C

Applicable IT Security Policies

NWSChat service has been vetted and is in compliance with the following:

NIST Special Publication 800-39 risk management principles:

- NIST Special Publication 800-53R3 controls, especially those for external information systems (AC-20)
- NIST FIPS Publication 199 to categorize information posted on social media websites and guide application of SP800-53R3 and SP800-60. For example, data posted to the public, the security categorization should be NA for Confidentiality (all public information) and no greater than LOW impact for Integrity and Availability
- NIST Special Publication 800-60 categorization of the information based on the mission-based information type and intended use of the new technology
- DAO 219-1 (Sections 8.04, 9.03), “The formal approval process described in Section 8.01 [9.01] does not apply to National Weather Service employees authorized as part of their routine responsibilities to communicate information about the weather to the public.” This is also clarified in the document “[Guidance for NOAA Employees Regarding Implementation and Interpretation of DAO 219-1.](#)”