

***NATIONAL WEATHER SERVICE WESTERN REGION SUPPLEMENT 9-2003  
APPLICABLE TO NWSI 10-801, 10-803 and 10-813  
AUGUST 31, 2018***

***Operations and Services  
Aviation Weather Services, NWSPD 10-8  
Aviation Weather Services, NWSI 10-801, 10-803 and 10-813  
WESTERN REGION AVIATION SERVICES***

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***SUMMARY OF REVISIONS:*** This directive supersedes Regional Supplement 9-2003, dated July 7, 2014, filed with Instructions 10-801, 10-803 and 10-813.

The following changes were made in this issuance:

1. Removed section 2.a. Changes to TAF hours since it is no longer necessary.
2. Section 3 Categorical Amendment Criteria (CAC) was added since the process of checking for changes in airport minimums has changed nationally.
3. Section 4. TAF Collaboration Product Operational Evolution Partnership (OEP) was changed significantly. The product issuance and format are no longer required. Also, language was added on the importance of TAF(s) collaboration between CWSU and WFO.
4. The Appendix – TAF Collaboration Product (OEPXXX) example was deleted because the OEP is no longer required.

Signed

08/16/18

Dr. Grant Cooper

Date

Director, Western Region

<u>Table of Contents:</u>	<u>Page</u>
1. Description.....	2
2. Terminal Aerodrome Forecasts (TAF) .....	2
3. Categorical Amendment Criteria (CAC) .....	3
4. TAF Collaboration Product (OEP) .....	3
5. Airport Weather Warnings (AWW).....	4
6. Aviation Section in the Area Forecast Discussion (AFD).....	4

1. Description: The aviation program at Western Region (WR) WFOs and CWSUs is a vital part of NWS forecast operations and the Weather Ready Nation Initiative. Regardless of grade, aviation forecasters must be fully qualified to produce aviation products. WFO workload often requires any forecaster on shift to issue an aviation forecast, not just a designated “aviation forecaster”.

2. Terminal Aerodrome Forecasts (TAF). WFOs prepare and issue TAFs for airports as listed here [http://www.nws.noaa.gov/os/aviation/cac/asb\\_cac\\_thresholds\\_09-15-2016.htm](http://www.nws.noaa.gov/os/aviation/cac/asb_cac_thresholds_09-15-2016.htm)

a. Verification. The national aviation verification statistics are on the “Stats on Demand” web site: <https://verification.nws.noaa.gov/content/pm/verif/aviation/index.aspx>). Other supplemental verification programs may be used by the WFO, but statistics from “Stats on Demand” will be used for any regional or national purposes. Verification results must be evaluated by the WFO management team/focal point on a routine basis to determine strengths and weaknesses of the WFOs TAF program.

b. Content. In addition to the guidelines presented in National Weather Service Instruction (NWSI) NWSI 10-813, WR forecasters should take the following information into account when preparing TAFs:

1. Write the forecast based on the conditions a pilot can expect when landing or departing from the airport, keeping in mind that an automated observation system may only “see” over a point, while the TAF covers a five-mile radius from the center of the airport.
2. Although the critical TAF period for most airports is within the first six hours (0-6 hours) of the TAF valid time, international airports with flights crossing the Atlantic and/or Pacific rely on the second half of the 30 hour TAF to plan their flight operations. Airlines and airports with flights originating in Australia, Europe and Asia, use information 12 - 30 hours

from the current valid time, as this is when their flights are arriving at International Airports within the Western Region.

3. Use of temporary conditions (TEMPO) group: WR forecasters should use TEMPO sparingly in the first 12 hours of a TAF, and should eliminate them after 12 hours. TEMPO is defined to indicate fluctuating conditions that have a high probability of occurring, and should not be used as a “just in case” group.
4. Strive for consistency with other NWS information. While the public forecasts and TAFs have different purposes and exact match is not always expected, aviation customers, most notably Federal Aviation Administration (FAA) facilities and Airlines, use NWS public and aviation information to make decisions. Recently, the National Digital Forecast Database and the “point and click” forecast for an airport(s) location have become popular for aviation planning. WFOs should routinely evaluate the uniformity between public and aviation information.

3. Categorical Amendment Criteria (CAC). WFOs utilize CAC for ceiling and visibility amendment thresholds. CAC thresholds are provided to NWS Headquarters Aviation and Space Weather Branch (AFS24) on a 56 and 28 day cycle by the FAA. AFS24 reviews these changes and updates any changes to the ceiling and visibility minimums in the CAC Threshold spreadsheet. The spreadsheet is then posted on the CAC Website, and emailed out to the Aviation Focal Points (AFP) via the AFP email distribution list. You can access the CAC website from <https://www.weather.gov/aviation/cac> and the main NWS Aviation page (public facing) at <https://www.weather.gov/aviation>. All AFPs should then review the spreadsheet and update their local Aviation Forecast Preparation System (AvnFPS) software to reflect the changes. If any errors or questions arise from the ceiling and visibility minimum changes, the AFP should contact the Regional Aviation Meteorologist.

4. TAF Collaboration Product (OEP). The OEP product from the CWSU (OEPXXX) is no longer mandatory. The CWSU may continue to issue an OEP product or may issue an aviation discussion similar to the WFOs AFD except with a focus on aviation forecast concerns and impacts across the airspace. It is recommended the OEP or CWSU AFD be issued at least twice per day and at least one hour prior to each scheduled TAF issuance time (i.e. before 1630Z and 2230Z). This information will be disseminated via the CWSU Advanced Weather Interactive Processing System (AWIPS), and added to the CWSU’s web page.

It is important for the CWSU and the appropriate WFO to collaborate effectively and regularly on the TAF(s) especially for the Hub (core 30) airport TAFs. The collaboration should be done with the most effective tools available to the CWSU and WFO. This may be done via nwschat, Google chat, the phone or with other collaboration tools. The important point is the collaboration occurs effectively to benefit NWS aviation core partners. TAF collaboration and decision support will become even more important in the future as the NWS Western Region moves toward digital aviation services.

5. Airport Weather Warnings (AWW). AWWs are prepared for airports through agreement between local airport management and the supporting WFO. An example of the required Letter of Agreement (LOA), between the issuing office and the users, is detailed in NWSI 10-801. The AWW complements, and remains consistent with, existing NWS warnings and forecasts.

The AWW addresses weather phenomena which can adversely impact airport ground operations. Information contained in this product is useful to airport managers, fixed-based operators, airline ground personnel and others responsible for the safety of ground operations. AWWs are not intended for use by in-flight operations.

- a. The AWW will be disseminated via the NOAA PORT AWIPS Satellite Broadcast Network (SBN). The AWW may use county codes Universal Geographic Code (UGC) or zone codes depending on local requirements for dissemination. In addition, a locally established communication system can be used if the NOAA data stream is unavailable. Refer to NWSI 10-801 for additional AWW procedures and issuance criteria.
- b. Verification. AWWs will be verified and evaluated by the WFO management team/focal point on a routine basis similar to analysis of other NWS warning products. WFOs are required to produce AWW verification summaries for WRH on a quarterly basis. These reports will be submitted by January 31, April 30, July 31, and October 31. Events are separated into long fused events (synoptic type) and short fused events (thunderstorms, hail, etc.).

6. Aviation Section in the Area Forecast Discussion (AFD). An aviation section is mandatory in the AFD and follows the main portion of the AFD (Discussion section(s)) and topic divider (“&&”). This section will begin with the string, “AVIATION...”, and should be written to the NWS aviation customers.

- a. The aviation section of the AFD should be short and concise, and discuss scientific reasoning (using semi-technical language) and uncertainties regarding expected aviation related weather conditions. Avoid using abbreviations and contractions since they are not always understood by the customers of the information. Forecasters should use the aviation section to discuss details not permitted in the TAF (e. g. confidence factors, areal coverage and possibilities).
- b. The aviation section should be updated as necessary to convey the latest forecast reasoning near the issuance time of the TAFs. If the TAF issuance time does not correspond near local WFO AFD issuance time, update the aviation section and add to the product header - “AVIATION SECTION UPDATED”. An update to the aviation section is not required each time the TAF is amended.
- c. If significant aviation weather is not expected to affect the forecast area for 24 hours do not enter “see TAFs” or “refer to TAFs”. Aviation customers have responded negatively to forecasters adding “see TAFs” to the AFD. Address the forecast and/or observed conditions even during benign weather situations.