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Administration and Management

Aviation Weather Services, NWSPD 10-8

CENTER WEATHER SERVICE UNIT SITE REVIEW PROGRAM

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

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SUMMARY OF REVISIONS: Supersedes NWS Instruction 10-814, *Center Weather Service Unit (CWSU) Site Review Program*, and dated November 10, 2008. Changes are necessary out of cycle to accommodate the second phase of the CWSU Site Review Program and take advantage of lessons learned during the initial site reviews.

Changes include:

1. Deleted processes that were proven unworkable in the original site reviews conducted during FY09.

2. Deleted Appendix C as not relevant to the site review, and since the normal site review checklists can also serve a self-review function.

3. Deleted Appendix B as a duplicate of Appendix A Site Review checklist and therefore not needed.

4. Extensive revision more accurately reflects the purpose of the on-going CWSU site review program, including changing the order of sections and adding clarifying detail.

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May 19, 2010

David B. Caldwell Date Director, Office of Climate, Water, and Weather Services

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1. <u>Purpose</u>. This directive establishes general procedures for conducting on-site reviews of quality assurance of services and products provided by National Weather Service (NWS) Center Weather Service Unit (CWSU) to the Federal Aviation Administration (FAA). CWSU support to the FAA is detailed in NWSI 10-803.

2. <u>General</u>. NWS CWSU support is designed to improve aviation safety and enhance efficient flow of air traffic by forecasting and monitoring adverse weather. Efficiency is promoted by maintaining close coordination with traffic managers whose decisions affect the flow of air traffic through the National Airspace System (NAS). Quality assurance of CWSU services and products will result in improved services to the FAA.

3. <u>Background</u>. The CWSU Site Review Program was developed in response to the Government Accountability Office's (GAO) finding regarding verification of CWSU products and services. Historically, verification of CWSU products and services has been accomplished annually using subjective, free-form evaluations from the FAA's Traffic Management Unit (TMU) Controllers, and some NWS Regional Headquarters.

4. <u>Site Reviews</u>. Each CWSU will be reviewed annually and their products and services documented. Input will be gathered by on-site observations, and by interviewing the appropriate FAA representatives.

4.1 <u>Notification of Site Review</u>. During each fiscal year, the schedule of site reviews is determined and published. The published schedule, along with every revision, is provided to the FAA CWSU Contract's Officer Technical Representative (COTR) for forwarding to the Air

Route Traffic Control Center (ARTCC) Facility Managers, the TMU Supervisor, and the regional FAA Quality Assurance Program Managers. The schedule is also provided to the NWS OCWWS Director, the OCWWS Aviation Services Branch Chief, the Regional Directors, the Regional Service Division Chiefs, the Alaska Aviation Weather Unit (AAWU), the Regional Aviation Meteorologists (RAMs), and the WFO and CWSU MICs.

One month prior to the scheduled Review, Aviation Weather Services Branch (ASB) will notify all representatives associated with the scheduled CWSU site review.

5. <u>CWSU Site Review Team</u>. The function of the CWSU Site Review Team is to assess individual CWSU services and products and to report results to the NWS and FAA management.

The CWSU Site Review Team consists of three participants – a member of the OCWWS ASB, a RAM, and NWS Senior Executive, if available, or designate. The RAM and/or the NWS Senior Executive participating on the review team will be from a different region than that of the CWSU. The team will proceed as planned even if the Senior Executive, or designate, cannot participate.

5.1 <u>**Other Participants.**</u> In addition to the Site Review Team, both the MIC of the "parent" WFO, the MIC of the AAWU when appropriate, and the MIC of the CWSU will accompany the Site Review Team to provide information to the Reviewers but they do not participate as reviewers. The CWSU MIC will not participate in any interviews. Regional headquarters managers may also observe the review but will have no inputs.

6. <u>Initial CWSU Site Reviews (Fiscal Year (FY) 2009)</u>. Initial Site Reviews were conducted at each CWSU in FY 2009. These reviews were used as a "baseline" evaluation and provided CWSUs with insight into the review process and to program expectations. Findings and recommendations were identified and tracked. Findings were also used to determine the baseline for the Quality Verification Rating (QVR) which will be used in the FY 2010 Site Reviews.

6.1 <u>Determining QVR.</u> Eight Service Categories or Routine Assessment Listings (RAL) are used to evaluate a CWSU. The RALs are:

- Stand-up Briefings
- On-Demand Briefings
- TMU Support
- TRACON Support
- Tower Support
- Center Weather Advisory (CWA)/ Meteorological Impact Statement (MIS)
- CCFP Tracking
- Standard Operating Procedure (SOP)

The acceptable quality level (AQL) for each category or RAL is 85%. Based on a scale of 1 to 10 where 10 equals 100% when converted to a percentage, one finding will drop a category to 90% and two findings will drop a category to 80% which is below the AQL of 85%.

All the RALs taken together generate the Quality Verification Rating (QVR) for the entire site review which is also based on an AQL of 85%. Here, each of the categories is worth 10 points for a total possible of 80 points, or 100%. The number of findings is deducted from the total number of possible points and divided by the total possible. If a site has only one finding, 80 minus 1 divided by 80 equals 79/80 for a QVR of 98.8%. There must be 13 findings within the 8 RALs to drop the QVR for a site below 85%.

7. <u>CWSU Site Review Program</u>. Individual elements of the CWSU services and products will be evaluated and any findings will be tabulated to determine a Quality Verification Rating (QVR). Any element receiving a QVR less than 85% will be deemed "underperforming".

7.1 <u>On-site Review</u>. The CWSU Site Review is conducted over 1-2 days. Upon arrival to the facility, the site review team should meet with the Traffic Management Officer (TMO), appropriate members of the ARTCC staff, and the WFO MIC. The initial meeting should include a briefing by the CWSU Review Team explaining the purpose of the visit, procedure and review plan. Participation from the ARTCC TMU and Sector Managers/Supervisors is necessary to get an accurate evaluation of the services provided by the CWSU. When the primary TRACON is within a reasonable distance from the ARTCC, the CWSU Site Review Team should go to the TRACON and interview Traffic Management Personnel. Tower personnel should also be interviewed when possible to do so.

In addition, the CWSU MIC will provide an in-briefing to the site review team detailing CWSU operations and changes since the last site review visit including actions taken to address any findings from previous site reviews.

7.2 <u>**CWSU Observations.**</u> Ideally, the site review team will evaluate two standup briefings, preferably one each in the morning and afternoon. Furthermore, the team will observe the CWSU operations for as long as possible. This observation may include interactions between the CWSU and the FAA including scheduled briefings, on-demand briefings, and the issuance of any CWSU product.

CWSUs will be evaluated using the CWSU Site Review Checklist (Appendix A).

7.3 <u>Interviews</u>. The Site Review Team will interview appropriate FAA representatives. The interviews should follow the CWSU Site Review Checklist (Appendix A) and responses should be noted on the checklist. The FAA COTR will request the FAA to schedule the FAA interviews. The team will ask FAA to provide examples of how the CWSU meteorologist assists, or does not assist, the FAA in improving safety and efficiency of the NAS. Specific examples will be encouraged.

7.4 Exit Briefing. Upon completion of the on-site portion of the CWSU Site Review, the Site Review Team will provide the TMO, appropriate members of the ARTCC staff, WFO MIC and CWSU MIC with an exit briefing. The briefing should include a discussion of preliminary findings.

7.5 <u>**Results Briefing.**</u> The Senior Executive or designate, or, in the absence of that person, the ASB member, will provide a briefing slide on the major findings, recommendations and underperforming elements of each Site Review within 48 hours of the completion of the on-site review. The briefing will be provided to:

- NWS Assistant Administrator
- NWS Deputy Assistant Administrator
- NWS OCWWS Director
- NWS Regional Director of the CWSU
- NWS Regional Service Division Chief of the CWSU
- NWS Regional Aviation Meteorologist of the CWSU

7.6 <u>Final Report</u>. The Site Review Team will provide a written report of the review to the following within two weeks of the end of the review:

- FAA CWSU COTR (COTR will provide a copy of the report to the appropriate FAA personnel)
- NWS OCWWS Director
- NWS Regional Director of the CWSU
- NWS Regional Service Division Chief of the CWSU
- NWS Regional Aviation Meteorologist of the CWSU
- WFO/AAWU MIC
- CWSU MIC

ASB will send the final reports, QVR and results briefing slides to the RAMs for further distribution.

7.7 Evaluations Resulting in Underperforming Elements. An underperforming element on the CWSU Site Review Checklist (Appendix A) is any element which is below the QVR of 85%.

7.8 <u>Mitigation of Underperforming Element(s)</u>. If any element(s) of the CWSU Site Review is deemed underperforming, the WFO and CWSU MIC will provide a written Element Improvement Plan to the NWS Director of OCWWS within two weeks of receipt of the final report. The Element Improvement Plan should include planned actions to improve the underperforming element(s) with a timeline.

ASB, the NWS Region, the WFO and CWSU will work together to successfully mitigate any underperforming elements within 90 days of the final written report.

Appendix A CWSU Site Review Checklist

The following are examples of questions that can be used when talking with FAA Traffic Managers. Some pertain more to ARTCC personnel while others would be more useful when talking with tower or TRACON managers. This is not meant to be a complete list of questions, nor is it a list of questions that must be asked. The intent is to provide help and guidance to site review team members for generating their own questions.

1. How many stand-up/schedule ARTCC briefings were observed?

Keep these questions in mind while observing a stand-up briefing. These questions can also be used when talking with FAA to determine their satisfaction with the stand-ups.

Note: A minimum of one briefing will be observed, more are desirable.

(These questions are for both the CWSU Team and the FAA)

- a. Were the briefings clear and concise?
- b. Was the pace and tone appropriate for the audience?
- c. Was the language non-technical and appropriate for the audience?
- d. Were the user impacts briefed?
- e. Was the length of the briefing appropriate for the problem of the day?
- f. Was the FAA satisfied with the length of the briefing?
- g. Were the weather graphics relevant?
- h. Was the problem of the day addressed?

2. Is the CWSU engaged in ARTCC weather training?

- a. Do the CWSU meteorologists provide weather training to the controllers and/or managers?
- b. Is the training adequate?
- c. Would you find more training helpful?
- d. Have you considered asking the CWSU for training on a specific subject?
- e. Does the CWSU MIC offer training seasonally?

3. Are CWSU Meteorologists anticipating your needs?

- a. Are the meteorologists aware of Air Traffic concerns and changing needs?
- b. Do the meteorologists proactively provide weather information in an effort to assist you in planning?
- c. Is the weather impacting your operations consistently being addressed?
- d. Are you notified of changes in the forecast with sufficient time to take action if necessary?

4. Are you receiving consistent NWS weather information?

a. Are the CWSU meteorologists providing consistent weather information or does it conflict with other official NWS sources?

- b. Are the meteorologists clarifying and eliminating inconsistent weather information to assist you in planning?
- c. Do the meteorologists generally provide a clear, consistent picture of expected weather conditions?

5. Are you satisfied with the overall service you receive from the CWSU?

- a. What services do you rely on the most?
- b. What services from your CWSU are least helpful/useful?
- c. Have you been given copies of the IA/SOW?
- d. Have you received copies of the Weather Service Directive or the FAA Order governing CWSU operations?
- e. Are you notified of changes to these documents?
- f. Are the CWSU operations in accordance with these agreements?

6. Are you familiar with the CWSU Backup Operations?

- a. Has the CWSU MIC given you their backup CWSU information when your CWSU is closed, or unavailable during normal hours of operation because of emergencies or staffing problems?
- b. Has the CWSU MIC provided you information on their backup CWSU including phone numbers and hours of operation?
- c. Do you know who to contact for weather after the CWSU has gone home for the night?
- d. How often does the CWSU go into backup mode?
- e. Are you notified ahead of time your CWSU will be going into backup mode?
- f. Do you have the contact information for the parent WFO?
- g. How often do you contact the CWSU and/or WFO?
- h. When the CWSU is in backup mode, how would you rate your experience working with the backup office?

7. Are you familiar with the CWSU Website?

- a. Has the CWSU given you the link to their website?
- b. Can you access the website?
- c. Does the website address your needs?
- d. What additional information would you like to see?

8. Questions for the CWSU MICs:

- a. How often do you test your backup procedures?
- b. When was the last update of the CWSU WIP?
- c. When was the last update to the CWSU SDM?
- d. How often do you contact your Tower(s) and TRACON(s)?
- e. How would you rate the support you receive from your Region?
- f. How would you rate the support you receive from Headquarters?

Remarks:

NWS QA Assessment/Review Checklist					
1. LOADED BY:			2. QUALITY VERIFICATION RATING 3. DATE		
DATABASE USE ONLY					
4. REVIEWERS					
			6. TOTAL NUMBER OF FINDINGS		
5. CWSU SITE LOCATION		0. TOTAL NUMBER OF FINDINGS			
	0 4854				
7. MEASURE	8. AREA		9. SERVICE CATEGORY ARTCC Briefings:		
	PRODUCT				
TIMELINESS	PROCESS MISC				
TRAINING	EQUIPMENT				
			On-Demand Briefings:		
	PRODUCT				
TIMELINESS	PROCESS				
	MISC				
TRAINING	EQUIPMENT				
			TMU Support:		
	PRODUCT PROCESS				
ACCURACY	MISC				
TRAINING	EQUIPMENT				
			TRACON Support:		
	PRODUCT				
TIMELINESS	PROCESS				
ACCURACY	MISC EQUIPMENT				
			Tower Support:		
CONSISTENCY	PRODUCT PROCESS				
	MISC				

