

***NATIONAL WEATHER SERVICE INSTRUCTION 10-814***

***April 30, 2018***

***Operations and Services  
Aviation Weather Services, NWSPD 10-8***

***SITE REVIEW PROGRAM***

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

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***SUMMARY OF REVISIONS:*** This directive supersedes NWS Instruction 10-814, *Center Weather Service Unit (CWSU) Site Review Program*, and dated June 17, 2013. Changes made to reflect NWS Headquarters reorganization effective April 1, 2015.

The following changes were made to this directive:

1. Title change: The phrase “Center Weather Service (CWSU)” was removed from the title to reflect inclusion of the National Aviation Meteorologists unit at the FAA Air Traffic Control System Command Center in Warrenton, VA, in the site review program.
2. Document was updated throughout to cover all NWS units which are embedded within Federal Aviation Administration (FAA) facilities.
3. The previous “Section G” (CCFP) was removed. The 12 points in that section were split between Section A and Section B. The previous “Section H” has been renamed “Section G”.

Signed

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Date

**Site Review Program**

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## **1 Purpose**

This directive establishes general procedures for conducting site reviews of National Weather Service (NWS) units embedded with FAA operational centers.

## **2 General**

NWS support is designed to improve aviation safety and enhance the 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 NWS services and products results in improved services to the FAA.

## **3 Site Reviews**

Each NWS unit receives a scheduled on-site review typically every three years. Input will be gathered by on-site observations, and/or by interviewing the appropriate FAA representatives. The review cycle will be determined by the Aviation and Space Weather Services Branch (AFS24) and coordinated through the Financial Management Centers (FMC) at least 30 days prior to the review occurring. AFS24 may schedule off cycle reviews, coordinated with the FMC, at any time when requested by FAA or NWS Headquarters. If an off cycle review is needed, 30 days of notice to the unit being reviewed and the FMC is required.

### **3.1 Notification of Site Review**

By the end of January, AFS24 publishes the schedule of site reviews for that year. The published schedule, along with every revision, is provided to the FMCs, the Meteorologist in Charge (MIC) of the unit being reviewed and the FAA Contract Officer Representative (COR) for forwarding to FAA personnel.

## **4 Site Review Overview**

The function of the Site Review Team is to assess individual NWS units and report results to the NWS and FAA Management.

### **4.1 Review Team**

The Site Review Team typically consists of an AFS24 member, a representative from a different FMC than the unit under review, and an optional representative from the same FMC as the unit under review.

#### **4.1.1 Other Participants**

In addition to the Site Review Team, the manager of the “parent” NWS Unit being reviewed may accompany the Site Review Team to provide information to the reviewers, but does not participate as a reviewer. The MIC of the unit being reviewed typically does not participate in any interviews unless requested by the Site Review Team. Other FMC representatives may observe, but are not considered team members.

## **5 Quality Verification Rating**

Findings from the Site Review Team will be used to develop a Quality Verification Rating (QVR). The QVR will be used to score the unit.

### **5.1 Determining QVR**

Seven Service Categories or Routine Assessment Listings (RAL) are used to evaluate the unit. The RALs are:

- Stand-up Briefings
- On-Demand Briefings
- Traffic Management Unit (TMU) Support (as applicable)
- Terminal Radar Approach Control Facility (TRACON) Support (as applicable)
- Tower Support (as applicable)
- Products
- Standard Operating Procedures (SOPs)

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%.

Each section has a point value assigned to it ranging from 4 to 20 points. The “points earned” section(s) are determined by multiplying the RAL percentage by the total points possible in that section. For example, a RAL of 90% in a 20 point section would have the unit earn 18 points in that section. This process is completed for each of the seven sections. Once all sections are completed, the points are totaled and the QVR for the entire review is calculated by adding the sections together. The sheet used to determine QVR is maintained by AFS24.

## **6 Site Review Program**

The Site Review Team will evaluate individual RALs and tabulate any findings to determine the QVR. If a unit does not meet the criteria items listed below it will be considered underperforming:

- Total QVR of 94% or better
- A RAL of 85% or greater in each section (one finding or less per RAL)

### **6.1 Review Process**

The site review is typically conducted over 2 days. Upon arrival to the facility, the Site Review Team should meet with the appropriate FAA and NWS managers. The initial meeting should include a briefing by the Site Review Team lead explaining the purpose of the visit, procedures and review plan. In addition, the local NWS manager will provide an in-briefing to the Site Review Team detailing operations and changes since the last site review, including actions taken to address any findings from previous site reviews. The majority of the Site Review Team’s time will be speaking with FAA personnel. Participation from the FAA is necessary for an accurate evaluation.

## **6.2 Observations**

The Site Review Team should evaluate two standup briefings, preferably one each in the morning and afternoon. Furthermore, the Site Review Team will observe operations for as long as possible. This observation may include interactions between the NWS employees and the FAA including scheduled briefings, on-demand briefings, and the issuance of any products.

## **6.3 Interviews**

The Site Review Team will interview appropriate FAA representatives. The interviews should follow the Site Review Checklist (Appendix A). The Site Review Team may ask FAA personnel to provide examples of how the NWS meteorologists assist, or do not assist, the FAA in improving safety and efficiency of the NAS.

## **6.4 Exit Briefing for Reviews**

Upon completion of the on-site portion of the Site Review, the Site Review Team will offer FAA and NWS Managers an exit briefing. The briefing should include a discussion of preliminary findings, results of the interviews, and observations from the Site Review Team.

## **6.5 Final Report**

The Site Review Team will provide a written report and QVR score to the following within 30 days of the review:

- FAA COR
- NWS Analyze, Forecast, and Support Office Director
- NWS Regional Director or equivalent
- NWS Regional Service Division Chief or equivalent
- Regional Aviation Meteorologist or equivalent
- Manager of parent NWS office
- MIC of unit reviewed

AFS24 will distribute the final report and maintain a record of the report.

## **6.6 Mitigation of Underperforming Element(s)**

If any element(s) of the site review is deemed underperforming, the FMC will provide a written Element Improvement Plan to AFS24 within 60 days of receipt of the final report. The Element Improvement Plan should include planned actions to improve the underperforming element(s) with a timeline. NWS Managers will work together to successfully mitigate any underperforming elements.

**APPENDIX A - Site Review Questions and Example QVR Worksheet**

Examples of questions that can be used when talking to FAA Traffic Managers is maintained by AFS24 and will be provided upon request.

Due to the small amount of data and questions asked regarding the product section, the Site Review Team can use the monthly metrics data to support the review process.

The correction rate needs to be kept as low as possible. For sites that have a correction rate of less than 5%, no finding should occur. If the correction rate is between 5% and 10%, a finding could be issued based on what the Site Review Team determines during the review. If a correction rate is greater than 10%, a finding should be issued unless the Site Review Team or local MIC being reviewed can prove corrections were not the fault of the unit such as equipment malfunction.

Example of a QVR Worksheet:

|                                   |           |  |  |
|-----------------------------------|-----------|--|--|
| 1. LOADED BY:                     |           | 3. DATE  |  |
| 2. QVR SCORE: <b>100.0%</b>       |           |  |  |
| 4. REVIEWERS:                     |           |  |  |
|                                   |           |  |  |
|                                   |           |  |  |
| 5. CWSU SITE LOCATION             |           | 6. TOTAL NUMBER OF FINDINGS                      |  |
|                                   |           | <b>0</b>   |  |
| 7. MEASURE                        | 8. AREA   | 9. SERVICE CATEGORY                              |  |
| CONSISTENCY                       | PRODUCT   | Section A--ARTCC Briefings (12 points total)     |  |
| TIMELINESS                        | PROCESS   |  |  |
| ACCURACY                          | MISC      |  |  |
| TRAINING                          | EQUIPMENT |  |  |
| <b>TOTAL FINDINGS PER SECTION</b> |           | <b>0</b>   | <b>RAL Score 100.0% Points Earned 12.0</b> |
| CONSISTENCY                       | PRODUCT   | Section B--On-Demand Briefings (12 points total) |  |
| TIMELINESS                        | PROCESS   |  |  |
| ACCURACY                          | MISC      |  |  |
| TRAINING                          | EQUIPMENT |  |  |
| <b>TOTAL FINDINGS PER SECTION</b> |           | <b>0</b>   | <b>RAL Score 100.0% Points Earned 12.0</b> |
| CONSISTENCY                       | PRODUCT   | Section C--TMU Support (20 points total)         |  |
| TIMELINESS                        | PROCESS   |  |  |
| ACCURACY                          | MISC      |  |  |
| TRAINING                          | EQUIPMENT |  |  |
| <b>TOTAL FINDINGS PER SECTION</b> |           | <b>0</b>   | <b>RAL Score 100.0% Points Earned 20.0</b> |
| CONSISTENCY                       | PRODUCT   | Section D--TRACON Support (8 points total)       |  |
| TIMELINESS                        | PROCESS   |  |  |
| ACCURACY                          | MISC      |  |  |
| TRAINING                          | EQUIPMENT |  |  |
| <b>TOTAL FINDINGS PER SECTION</b> |           | <b>0</b>   | <b>RAL Score 100.0% Points Earned 8.0</b>  |
| CONSISTENCY                       | PRODUCT   | Section E--Tower Support (8 points total)        |  |
| TIMELINESS                        | PROCESS   |  |  |
| ACCURACY                          | MISC      |  |  |
| TRAINING                          | EQUIPMENT |  |  |
| <b>TOTAL FINDINGS PER SECTION</b> |           | <b>0</b>   | <b>RAL Score 100.0% Points Earned 8.0</b>  |
| CONSISTENCY                       | PRODUCT   | Section F--CWSU CWAs & MISs (4 points total)     |  |
| TIMELINESS                        | PROCESS   |  |  |
| ACCURACY                          | MISC      |  |  |
| TRAINING                          | EQUIPMENT |  |  |
| <b>TOTAL FINDINGS PER SECTION</b> |           | <b>0</b>   | <b>RAL Score 100.0% Points Earned 4.0</b>  |
| CONSISTENCY                       | PRODUCT   | Section G--CWSU CCFP (12 points total)           |  |
| TIMELINESS                        | PROCESS   |  |  |
| ACCURACY                          | MISC      |  |  |
| TRAINING                          | EQUIPMENT |  |  |
| <b>TOTAL FINDINGS PER SECTION</b> |           | <b>0</b>   | <b>RAL Score 100.0% Points Earned 12.0</b> |
| CONSISTENCY                       | PRODUCT   | Section H--CWSU SOPs (4 points total)            |  |
| TIMELINESS                        | PROCESS   |  |  |
| ACCURACY                          | MISC      |  |  |
| TRAINING                          | EQUIPMENT |  |  |
| <b>TOTAL FINDINGS PER SECTION</b> |           | <b>0</b>   | <b>RAL Score 100.0% Points Earned 4.0</b>  |