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Operations and Services

Surface Observing Program (Land), NWSPD 10-13

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***REQUESTS FOR SPECIAL OBSERVATIONS, SYNOPTIC OBSERVING STATIONS IN
MICRONESIA, STATION INSPECTION PROGRAM, DISPOSITION OF MAPSO
RECORDS***

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

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SUMMARY OF REVISIONS: This supplement is issued due to the consolidation of NWSI's 10-1301, portions of 10-1302, 10-1303, 10-1306 and 10-1308. This supplement replaces the following Pacific Region Supplements: 07-2003, "REQUESTS FOR SPECIAL OBSERVATIONS IN SUPPORT OF OPERATIONS", certified January 6, 2005, filed with Instruction 10-1301 and Directive 10-1400; 01-2004, "SECOND ORDER SYNOPTIC OBSERVING STATIONS IN MICRONESIA", dated July 30, 2004, filed with Instruction 10-1301 and Directive 10-1300; 10-2003, "STATION INSPECTION PROGRAM FOR SURFACE OBSERVATION SITES", dated May 25, 2005, filed with Directive 10-13; and, 06-2003, "ON-STATION RETENTION AND DISPOSITION OF MAPSO RECORDS", certified March 18, 2005, filed with Instruction 10-1306 and Directive 10-1300. This revision consolidates the indicated supplements; makes changes to eliminate duplication of information; and makes word changes to improve readability, to clarify information, and to reflect current practices; and updates the NCDC mailing address and removed references to rescinded National Weather Service Instructions.

Signed

April 5, 2010

R. J. LaDouce

Date

Director, Pacific Region

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1. General. This supplement describes the National Weather Service (NWS) Pacific Region's (PR) methods and procedures for:
 - a. Requests for special observations in support of operations;
 - b. Second order synoptic observing stations in Micronesia;
 - c. Station inspection program for surface observation sites;
 - d. On-station retention and disposition of MAPSO records.
2. Requests for Special Observations In Support of Operations.
 - 2.1 Purpose. The purpose of this section of the supplement is to summarize instructions for taking special upper-air and synoptic observations in support of severe weather and/or special requests in the Pacific Region.
 - 2.2 Authority to take Special Observations. Special upper-air or synoptic observations from Pacific Region first and second-order stations shall be taken when requested from forecast centers listed in section 2.3. All stations will make maximum effort to meet such requests, scheduling overtime as needed.
 - 2.3 Requests from Forecast Centers.
 - a. JTWC Pearl Harbor. Although the Japanese Meteorological Agency (JMA) has tropical cyclone warning responsibility for the western North Pacific west of the 180th meridian, the Joint Typhoon Warning Center (JTWC) issues tropical cyclone forecasts for U.S. interests. The JTWC may request through the Weather Forecast (WFO) Guam special upper-air and synoptic observation support from any WFO or Weather Service Office (WSO) in that area.

The JTWC will make requests to WFO Guam for additional observational support. The WFO Guam will contact the Micronesian WSOs from which specials are desired. An informational email will be addressed to PRH at pr.essd@noaa.gov.

All stations are obligated to take specials and to relay to second-order stations such requests for specials, except in emergency conditions such as a shortage of staff or hazardous weather. Specials will be started when requested by WFO Guam and continued at the intervals specified until word to discontinue is received.

Requested special synoptic and extra upper-air observations at 0600Z and 1800Z will be provided on a non-reimbursable basis in accordance with the following criteria:

- (1) A tropical cyclone warning has been issued for Micronesia, a tropical

cyclone formation alert on a tropical disturbance is in effect, and data from the selected station will directly enhance forecasting.

b. CPHC/WFO Honolulu. The Central Pacific Hurricane Center (CPHC) may request special upper-air observations from WSO Pago Pago and Data Collection Offices (DCOs) Hilo and Lihue. CPHC/WFO Honolulu will send requests for special observations to the stations concerned with an informational email to PRH at pr.essd@noaa.gov. Stations are expected to respond to such requests under the same conditions as specified in section 2.3.a.

c. Format: The special observations must be requested by station, date, and time, i.e., requesting message may not be on an “until further notice” basis. Additionally, not more than eight consecutive upper-air observations at 6-hour intervals will be made at a station. Therefore, such requests should anticipate the likelihood of a greater need for extra soundings within 72 hours.

d. Procedure: All upper-air observations taken at primary synoptic times (0000 and 1200 UTC) will be processed completely. Upper-air observations taken at 0600 and 1800 UTC will be coded only up to and including 100 Millibars/ Hectopascals (mbs/hpa), and use “10159” as the appropriate reason for termination in the upper-air observation message for the 0600 and 1800Z observations. Transmit the coded upper-air messages as-soon-as possible.

2.4 Special Requests from other Agencies. Requests received from other agencies will be referred to PRH for approval.

2.5 Specials Initiated Locally:

a. Upper-Air Observations. Upper-air stations are authorized to increase their program to six-hourly whenever a tropical cyclone is known to be within 300 nautical miles of the station, regardless of whether specials have been requested under the provisions of section 2.3.

b. Special Surface Synoptic Observations. MICs/OICs may request additional three and six-hourly synoptic observations from second-order stations under the WSOs supervision whenever there is reason to suspect that a tropical cyclone or other severe weather is developing or moving into the WSO’s Area of Responsibility (AOR). Hourly observations are authorized when a tropical cyclone is near an observing station but not at the risk of observer safety. Reports from Second Order synoptic stations will not exceed 18 continuous hours.

2.6 Extending Hours of Operation. Offices operating less than 24-hours daily are authorized to extend station operating hours as necessary to comply with sections 2.3 or 2.5.

- 2.7 Transmission of Special Observations. Special observations should be transmitted using the standard communication headers/protocol over regularly used communication channels. FAX or long distance telephone calls may be used when normal telecommunication channels are out of order.
3. Second Order Synoptic Observing Stations In Micronesia.
- 3.1 General. National Weather Service Pacific Region (NWSPR) operates a paid network of second order synoptic stations in Micronesia to support mission requirements. These stations are located on remote islands and atolls from the Republic of the Marshall Islands, westward across the Federated States of Micronesia to the Republic of Palau, and help fill the void in a data sparse region.
- 3.2 Policy. This section of the supplement is applicable only to Micronesian second order synoptic stations. These stations located in WMO Region V, follow coding practices contained in Federal Meteorological Handbook No. 2 (FMH-2), and use the symbolic code form (FM12 SYNOP) for reporting surface observations from land stations. Due to lack of infrastructure (i.e., power, telecommunications, observing equipment), coding practices may be modified to reflect these limitations where necessary.
- 3.3 Pacific Region Headquarters (PRH). The Data Systems Group (DSG) provides management assistance, financial resources, observer certification, equipment resources and oversight of the network.
- 3.4 Supervisory Offices. First Order Weather Service Offices (WSOs) Majuro, Pohnpei, Chuuk, Yap, and Koror are responsible for the supervision of second order stations within their respective AOR. Supervision includes site surveys, equipment installation, maintenance, and calibration, observer training and certification, observer payroll functions, station inspections, and data collection and transmission. Appendix A of this supplement lists the second order locations, supervising offices, and inspection schedules.
- 3.5 Observing Equipment at Second Order Stations. The following equipment resources are provided for each station:
- Barometer (Set to read Sea Level Pressure)
 - Anemometer (Hand Held – Read in Knots)
 - Battery operated Psychrometer (For air temperature and dew point)
 - 8 inch Standard Rain Gage
 - HF Radio (Transmission of reports to supervising office)
 - FMH-2 (Synoptic Code Manual)
 - Observational Aids (Conversion tables, charts and graphs)
 - WS Form B-15-1 (Record of 3 and 6 hourly synoptic observations)

4.2 Policy and Procedures. National Weather Service Instruction (NWSI) 10-1303, Appendix C, establishes standard guidelines, policy, and procedures for conducting an effective inspection program. All Pacific Region (PR) personnel responsible for conducting station inspections shall follow these guidelines during the inspection process. In addition, inspecting personnel shall be knowledgeable of the following NWS Directive System (NDS) procedural directives which are pertinent to the surface observations inspection program and follow the guidance provided in these directives as required. These directives are available on the web at URL: <http://www.nws.noaa.gov/directives/>. Managers should have these directives available for ready reference:

- 10-1301, Aviation and Synoptic Observations
- 10-1304, Certification of Observers
- 10-1305, Observations Quality Control – General

4.3 Scope. The surface observation program in the Pacific Region includes the following type of stations:

- a. Staffed NWS observing offices including Weather Forecast Offices (WFOs), Weather Service Offices (WSOs), and Data Collection Offices (DCOs).
- b. Synoptic Paid Stations (Second-Order).
- c. Limited Aviation Weather Reporting Station (FAA LAWRS).
- d. FAA Contract Weather Observing Station (FCWOS).
- e. Supplemental Aviation Weather Reporting Station (SAWRS).

4.4 Frequency of Inspections. Each surface observing site shall be visited and inspected based on the following schedule:

- a. Stations listed in sections 4.3.a, 4.3.b, 4.3.c, and 4.3.d above shall be visited at least once per Fiscal year.
- b. Stations listed in 4.3.e shall be visited twice per Fiscal year.

4.5 Responsibility for Inspections. Supervising stations listed in Appendix A are responsible for station inspections in the Pacific Region. DCOs Hilo and Lihue are responsible for inspections for their assigned sites; WFO Honolulu will provide assistance to the DCOs as requested. The PRH Surface Program manager is responsible for the overall inspection program and can provide assistance as required. The PRH Data System Group managers will perform periodic assistance visits to offices.

- 4.6 Forms and Reports. Weather Service (WS) Form 10-13-9, Aviation & Synoptic Observation Inspection Checklist, shall be used to assist the inspector(s) in conducting a complete program review. WS Form 10-13-10, Aviation & Synoptic Observation Station Inspection Report, shall be used to complete a post-inspection written report. Both forms are electronic and available at URL: <http://www.nws.noaa.gov/om/forms>. When possible, the inspector should include with the WS Form 10-13-10 digital photographs that best show the layout of the observing site and equipment exposure.
- 4.7 Disposition of WS Forms 10-13-9 and 10-13-10.
- a. Electronic copies of completed WS Forms 10-13-9 and 10-13-10 will be sent to the PR Surface Program Manager and the MIC/OIC for review within 5 working days of returning to the home station.
 - b. Subsequent to review, the forms shall be returned to the inspector(s) for correction(s) if any. This subsequent review period should be for no longer than 5 working days.
 - c. If there are no correction(s), or if corrections have been made, the forms shall be returned to the inspector(s) so that an electronic copy and a printed copy can be made available to the station manager of the observing site that was inspected. A copy will be provided to the inspector's station manager as well as the appropriate WFO/WSO/DCO MICs/OICs, if applicable.
 - d. The PR Surface Program Manager will forward an electronic copy to NWS Headquarters, the local FAA office if applicable, and file a printed copy for the record.
- 4.8 Retention of WS Forms 10-13-9 and 10-13-10.
- a. The supervising field office shall retain these forms for at least 3 years.
 - b. PRH shall retain these forms for at least 2 years.
 - c. Regardless of recency, the supervising field office should retain the latest inspection report for information and continuity until it is superseded.
- 4.9 Technical Guidance. Supervising field offices should contact the Region's Surface Program Manager for assistance as required.
5. On-Station Retention and Disposition of MAPSO Records.
- 5.1 Policy. Pacific Region (PR) first-order stations (Pago Pago, Majuro, Pohnpei, Chuuk, Yap, and Koror) that use the Microcomputer Aided Paperless Surface Observations (MAPSO) for taking METAR, SPECI, F-6, and SYNOPTIC observations shall follow

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the procedures listed below for on-station retention and disposition of these observational records:

- a. In addition to end-of-month records that are sent to NCDC, retain MAPSO diskettes (copy of NCDC disk) on station for one year. After one year, recycle for future use.
- b. Retain MAPSO printouts (hard copy) on station for three months, then dispose of locally. There is no longer a requirement to mail observational records to the University of Hawaii.

APPENDIX A

List of Staffed Surface Observation Sites by Type and Supervising Office

<u>1. NWS First Order Observing Sites (Annual Inspections)</u>	<u>Supervising Office</u>
WSO Chuuk	PRH
WFO Guam*	PRH
DCO Hilo*	WFO Honolulu
WSO Koror	PRH
DCO Lihue*	WFO Honolulu
WSO Majuro	PRH
WSO Pago Pago	PRH
WSO Pohnpei	PRH
WSO Yap	PRH
<u>2. FAA LAWRS Sites (Annual Inspections)</u>	
Guam FCT*	WFO Guam
Hilo ATCT*	DCO Hilo
Honolulu FCWOS*	WFO Honolulu
Kahului ATCT*	DCO Hilo
Kona FCT*	DCO Hilo
Lihue FCT*	DCO Lihue
Molokai FCT*	WFO Honolulu
Saipan FCT*	WFO Guam
<u>3. SAWRS Sites (Inspections twice a Fiscal Year)</u>	
Babelthuap AP (ROP)	WSO Koror
Kahului AP (WP)	DCO Hilo
Kapalua AP (HI DOT)	DCO Hilo
Kosrae AP (FSM)	WSO Pohnpei
Lanai AP (WP)	WFO Honolulu
Majuro AP (RMI)	WSO Majuro
Midway AP (F&W) *Once a year	PRH
Molokai AP (WP)	WFO Honolulu
Pohnpei AP (FSM)	WSO Pohnpei
Rota AP (CNMI)	WFO Guam
West Tinian AP (CNMI)	WFO Guam

4. Second Order Synoptic Stations (Annual Inspections)

Supervising Office

Ailinglapalap	WSO Majuro
Fanunu Island	WSO Chuuk
Jaluit	WSO Majuro
Kapingamarangi	WSO Pohnpei
Kosrae	WSO Pohnpei
Losap Island	WSO Chuuk
Lukunoch	WSO Chuuk
Mili	WSO Majuro
Mwoakilloa	WSO Pohnpei
Nukuoro	WSO Pohnpei
Pingelap	WSO Pohnpei
Polowat	WSO Chuuk
Onoun	WSO Chuuk
Ulithi	WSO Yap
Utirik	WSO Majuro
Woleai	WSO Yap
Wotje	WSO Majuro

NOTES:

* Automated Sites. Stations provide augmentation and/or backup functions.

ATCT FAA Air Traffic Control Tower
FCT FAA Contract Tower
FCWOS FAA Contract Weather Observing Station
HA Hawaiian Airlines
HI DOT Hawaii Dept. of Transportation
WP Island Air