### BY ORDER OF THE COMMANDER OF THE SEVENTH AIR FORCE

SEVENTH AIR FORCE INSTRUCTION 15-101

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23 OCTOBER 2019 Certified Current, 14 June 2023 Weather

WEATHER SUPPORT FOR SEVENTH AIR FORCE

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**RELEASABILITY:** There are no releasability restrictions on this publication

OPR: 7 AF/A3X

Supersedes: 7AFI 15-101, 2 June 2016

Certified by: 7AF/A3A5 (Colonel Kurt M. Schendzielos) Pages: 26

This instruction implements Air Force Policy Directive (AFPD) 15-1, *Weather Operations*. This instruction defines the mission, organization, roles and responsibilities of Air Force Weather (AFW) organizations providing weather operations for Headquarters (HQ) Seventh Air Force (7 AF) and the 607th Air Operations Center (607 AOC). It applies to all personnel assigned or attached to 7 AF and its associated units, as well as the 17th Operational Weather Squadron (17 OWS). Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Forms 847 from the field through the appropriate functional chain of command. Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW the Air Force Records Information Management System Records Disposition Schedule. The use of name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

#### SUMMARY OF CHANGES

This document has been substantially revised and should be reviewed in its entirety. Major changes include the OPR, which has been aligned under 7 AF/A3X to which this document belongs. Roles and responsibilities have been adjusted to meet requirements in directing AFPDs, Air Force Instructions (AFIs), and other governing documentation. Redundancies and irrelevant information has been removed throughout the document. Several agencies and names were

4

updated and/or deleted where necessary. Critical contact information and web sharing pages were updated. Additionally, support to Co-located Operating Bases (COBs) has been updated, and Installation Data Plans (IDPs) for each individual COB have been established. Finally, abbreviations, acronyms and key terms were updated to be more representative of this instruction.

#### **Chapter 1—GENERAL INFORMATION**

	1.1.	Purpose.	4
	1.2.	Responsibilities	4
	1.3.	Duty Priorities.	5
Table	1.1.	Duty Priorities	5
	1.4.	Release of Weather Information.	6
Chapt	er 2—F	ORECASTING SERVICES	7
	2.1.	Duty Hours.	7
	2.2.	Terminal Aerodrome Forecast (TAF).	7
	2.3.	Operations and Intelligence (O&I) Brief.	7
	2.4.	Sensitive Reconnaissance Observation (SRO) Brief.	7
	2.5.	Pilot-to-Metro Service (PMSV).	7
	2.6.	Situational Awareness Meteorological Watch (METWATCH).	7
	2.7.	Severe Weather Action Plan (SWAP).	7
	2.8.	Other Services.	8
Chapt	er 3—0	BSERVING SERVICES	9
	3.1.	Concept of Operations.	9
	3.2.	Primary Observation Equipment	9
Chapt	er 4—W	VEATHER WATCHES, WARNINGS, AND ADVISORIES	10
	4.1.	General Information.	10
	4.2.	WWA Responsibilities.	10
	4.3.	WWA Dissemination	10
Chapt	er 5—R	ECIPROCAL SUPPORT AGREEMENTS	11
	5.1.	The 607 AOC/CODW will:	11
	5.2.	The 607 AOC/SRD (Strategy Division), Combat Plans Division (CPD), Air Mobility Division (AMD) and JPRC will:	11

# 7AFI15-101 23 OCTOBER 2019

	5.3.	The 607 AOC/COD (Combat Operations Division) will:	11
	5.4.	The 607 AOC/ISRD will:	11
	5.5.	The 621 ACS will:	12
	5.6.	The 7 AF & 17 OWS.	12
Chapter	r 6—D	SSEMINATION OF WEATHER INFORMATION	13
	6.1.	General Information.	13
	6.2.	Dissemination of Weather Data	13
Chapter	r 7—T]	ROPICAL CYCLONE SUPPORT	14
	7.1.	General Information.	14
	7.2.	Tropical Cyclone Responsibilities.	14
Chapter	r 8—B	ACKUP AND EVACUATION OPERATIONS	15
-	r <b>8—B</b> A 8.1.	ACKUP AND EVACUATION OPERATIONS General Information.	<b>15</b> 15
-			
-	8.1.	General Information.	15
-	8.1. 8.2.	General Information	15 15
-	8.1. 8.2. 8.3.	General Information Communication Outages Power Outages	15 15 15
-	<ol> <li>8.1.</li> <li>8.2.</li> <li>8.3.</li> <li>8.4.</li> <li>8.5.</li> </ol>	General Information Communication Outages Power Outages Alternate Operating Location	15 15 15 15
Attachn	<ul> <li>8.1.</li> <li>8.2.</li> <li>8.3.</li> <li>8.4.</li> <li>8.5.</li> <li>nent 1-</li> </ul>	General Information	15 15 15 15 15

## **GENERAL INFORMATION**

**1.1. Purpose.** This document consolidates weather operational requirements and procedures for 7 AF and 607 AOC armistice operations on the Korean peninsula. Weather support procedures for execution of Emergency War Orders (EWO) are covered in applicable Operations Plans (OPLANs). AFW organizations providing weather support for 7 AF include the 607 AOC/CODW, the Seventh Air Force Forces Staff Weather Officer, the 17 OWS at Joint Base Pearl Harbor-Hickam, and weather personnel at USAF Main Operating Bases (MOBs) and COBs in the Republic of Korea (ROK).

#### 1.2. Responsibilities.

1.2.1. The 7 AF/A3X Staff Weather Officer (SWO) – in addition to responsibilities designated in United States Forces Korea Regulation (USFKR) 115-2, *Meteorology and Oceanography Support Responsibilities* will:

1.2.1.1. Plan and organize weather operations for USAF missions, exercises and contingencies in the 7 AF Area of Responsibility (AOR) by developing theater employment and sustainment concepts.

1.2.1.2. Plan and coordinate armistice and contingency weather support requirements for the Joint Forces Air Component Commander (JFACC), Combined Forces Air Component Commander (CFACC), and Korea Air Operations Center (KAOC) in coordination with Pacific Air Forces (PACAF) and the PACAF Weather Functional (PACAF/A3TX).

1.2.2. The 607 AOC/CODW will:

1.2.2.1. Tailor and integrate environmental impacts to meet short-, medium-, and long-range mission needs IAW processes and procedures identified in AFI 13-1AOCV3, *Operational Procedures—Air Operations Center (AOC)*, para 8.9, and the following additional units below:

1.2.2.1.1. The 621st Air Control Squadron (621 ACS).

1.2.2.1.2. The 694th Intelligence, Surveillance and Reconnaissance Group.

1.2.2.1.3. United States Forces Korea (USFK) Joint Personnel Recovery Center (JPRC).

1.2.2.1.4. The 8th Army Battle Coordination Division, Detachment 1 (8A BCD/Det 1).

1.2.2.1.5. KAOC Support Group.

1.2.2.1.6. Korea Combined Operational Intelligence Center (KCOIC).

1.2.2.2. Conduct quarterly/seasonal continuation training concentrating on environmental impacts associated with the upcoming season. Training and certification will be documented in the Air Force Training Records IAW the 1W0X1, *Career Field Education and Training Plan*.

1.2.2.3. The 607 AOC/CODW Team Chief will assume responsibility of 7 AF/A3X if position is vacant.

1.2.3. The USFK Commander has designated the 607th Weather Squadron Commander (607 WS/CC) as the Joint Meteorological and Oceanographic (METOC) Officer (JMO) with functions executed under the guidance and direction of the J2 and J3 IAW Joint Publication (JP) 3-59, *Meteorological and Oceanographic Operations*. The 607 WS, headquartered at United States Army Garrison Humphreys, in addition to responsibilities designated in USFKR 115-1, *USFK Area Weather Watches and Tropical Cyclone Procedures for the Republic of Korea*, and USFKR 115-2, will:

1.2.3.1. Provide liaison officer support to United Nations Command and Combined Forces Command. They will identify and coordinate U.S. requirements for combined METOC support.

1.2.4. The 51st Operations Support Squadron Weather Flight (51 OSS/OSW) at Osan AB and 8th Operations Support Squadron Weather Flight (8 OSS/OSW) at Kunsan AB will provide support in line with their respective OSANABI 15-101, *Weather Support for Osan Air Base*, and 8 FWI15-101, *Weather Support Document*, regulations available on Air Force E-Publishing.

1.2.5. The 17 OWS, a 24/7 ACC unit, at Joint Base Pearl Harbor-Hickam, Hawaii provides theater weather forecasts and data for the Korea Theater of Operations (KTO) as required by AFMAN 15-129V1, *Air and Space Weather Operations – Characterization*, relevant support agreements, and IDPs. Specific weather requirements are outlined and coordinated as needed.

**1.3. Duty Priorities.** As required by AFMAN 15-129V2, *Air and Space Weather Operations - Exploitation,* Table 1.2., and as necessary to ensure AF requirements are met in order of urgency, 607 AOC/CODW provides prioritized weather operations to the AOC as follows:

1	Complete EWO Taskings.					
2	Prepare and disseminate forecasts for special missions (e.g. Dynamic Targeting,					
	Personnel Recovery, or other missions designated as higher priority by the 7 AF/CC,					
	607 AOC/CC, Chief of Combat Operations (CCO) or equivalent representative).					
3	Provide special request support to all units listed in para 1.2.2.1.					
4	Provide routine request support to all units listed in para 1.2.2.1.					
5	Provide tropical weather updates.					
6	Coordinate with ROK Air Force (ROKAF) Combined Weather Squadron intra-theater					
	forecasts.					
7	Participate in KTO-wide meteorological coordination.					
8	Conduct special weather studies.					
9	Conduct unscheduled briefings.					
10	Conduct Weather Functional Training and Continuation Training.					
11	Accomplish Administrative Tasks.					
12	Perform miscellaneous duties.					

#### Table 1.1.Duty Priorities.

**1.4. Release of Weather Information.** Weather organizations under 7 AF do not provide weather support to the general public except as authorized by AFI, the 7 AF/CC, or designated representative. Mutual support between 7 AF and ROKAF weather forces is authorized when performing common missions or in combined exercises or contingencies, provided all data is unclassified or at the "Secret Releasable to US/ROK" level.

#### FORECASTING SERVICES

**2.1. Duty Hours.** 607 AOC/CODW provides weather services from 0500L until 1800L Korea Standard Time on weekdays unless otherwise directed. Specialized support requiring 607 AOC/CODW presence must be coordinated at least 24 hours in advance to allow for a schedule change.

#### 2.2. Terminal Aerodrome Forecast (TAF).

2.2.1. TAFs for 7 AF locations are issued by the 17 OWS.

2.2.2. TAFs for MOBs are issued by 17 OWS IAW respective IDPs between 17 OWS and 8 OSS/OSW and 51 OSS/OSW.

2.2.3. When USAF assets deploy to COBs, 7 AF/A3X will coordinate with 17 OWS for TAF support, if required. Deploying units will refer to the appropriate Base Support and Expeditionary (BAS&E) plan for information.

2.2.4. TAFs are issued IAW AFMAN 15-124, *Meteorological Codes*, using specification and amendment criteria as designated in AFMAN 15-129V1, and the 607 AOC/7 AF IDP or other applicable IDPs, unless deviations are required for local mission requirements as documented in weather support documents or in support assistance requests.

#### 2.3. Operations and Intelligence (O&I) Brief.

2.3.1. The O&I weather brief is produced by 607 AOC/CODW by 0715L each duty day. The brief assists decision makers in maintaining situational awareness of weather that may impact 7 AF mission execution. The weather brief is only updated more than once each day if requested, and due to support requirements the brief is only available via Secure Internet Protocol Router Network (SIPR) at the following address: <u>https://pacaf-cat.ops.hickam.af.smil.mil/bpt/index.cfm?event=page.iframe&briefing\_id=3401</u>.

**2.4. Sensitive Reconnaissance Observation (SRO) Brief.** When SRO assets are flying in or near the Korea Air Defense Identification Zone, 607 AOC/CODW will maintain situational awareness of weather impacts to these missions and provide inputs to Intelligence, Surveillance & Reconnaissance Division (ISRD), KAOC leadership, and 7 AF senior leadership as required.

**2.5. Pilot-to-Metro Service (PMSV).** 607 AOC/CODW does not own a PMSV. PMSV is available from the 8 OSS/OSW, 51 OSS/OSW, and 607 WS Detachment 2 on Ultra High Frequency (UHF) 346.5MHz.

#### 2.6. Situational Awareness Meteorological Watch (METWATCH).

2.6.1. The 607 AOC/CODW monitors and reports on observed and forecasted conditions across the KTO to provide situational awareness of impacts to 7 AF mission execution.

**2.7. Severe Weather Action Plan (SWAP).** The SWAP exists to assist forecasters during severe weather outbreaks or the threat of severe weather. Determining the probability and severity of anticipated severe weather events is an essential part of the Risk Management process to evaluate and determine proper courses of action.

2.7.1. Severe weather planning and response is completed by 8 OSS/OSW for Kunsan AB and by 51 OSS/OSW for Osan AB. 607 AOC/CODW serves an advisory and situational awareness role for 7 AF leadership during these events.

2.7.2. COBs are notified of severe weather by the 17 OWS via phone or email contact and the issuing of watches or warnings as detailed in **Attachment 2**.

2.7.3. The 607 AOC/CODW is not manned to provide active monitoring of severe weather for COBs.

2.8. Other Services. The following services can be provided upon request:

2.8.1. Investigation Boards. A qualified weather officer/forecaster can serve as the weather member of investigation boards upon appointment by HQ PACAF or 7 AF/CC.

2.8.2. Consultation Services. 7 AF/A3X can provide advice concerning weather support problems or requirements, and provide input on weather annexes or appendices to operations orders/plans, pre-deployment orders and deployment orders as required to ensure weather support requirements for HQ 7 AF are accurately documented.

2.8.3. Climatological Services. 7 AF/A3X or 607 AOC/CODW can provide or arrange, through the 14th Weather Squadron (14 WS), tailored climatology support on an as needed basis upon request. 14 WS provides all climatological data for Air Force weather, located at Asheville, North Carolina.

2.8.4. Weather Web Pages. A tailored web page maintained by 17 OWS for PACAF weather is available at <u>https://17ows.us.af.mil/</u>

2.8.5. Exercise support. 607 AOC/CODW can provide tailored exercise weather support to any of its supported agencies including, but not limited to, tailored products and briefing support.

#### **OBSERVING SERVICES**

#### **3.1.** Concept of Operations.

3.1.1. The 607 AOC/CODW does not generate weather observations.

3.1.2. IAW their IDPs, weather observations for Kunsan AB and Osan AB are provided by 8 OSS/OSW and 51 OSS/OSW.

3.1.3. Observing services at activated COBs are provided by deployed weather flights IAW AFMAN 15-111, *Surface Weather Observations*, the governing BAS&E plan, and Letters of Instruction from the JMO and/or 7 AF/A3X.

#### 3.2. Primary Observation Equipment.

3.2.1. Both Kunsan AB and Osan AB use permanently installed Automatic Meteorological Observation Systems to generate surface observations. 8 OSS/OSW and 51 OSS/OSW forecasters augment sensor-provided observations IAW AFMAN 15-111 and local amendment criteria as outlined in their respective IDPs.

3.2.2. Units deploying to the Korean peninsula are advised that fixed-base USAF weather observation equipment is not available at COBs. Weather personnel operate deployable weather observation equipment provided or brought with them as designated in the Time Phased Force and Deployment Data. The TMQ-53, Tactical Meteorological Observation System is the primary solution. As pre-coordinated, 17 OWS will support TAFs and Watches, Warnings, and Advisories (WWAs) for COBs when required.

## WEATHER WATCHES, WARNINGS, AND ADVISORIES

**4.1. General Information.** Weather WWAs are issued IAW AFMAN 15-129V1 to protect vital resources from hazardous conditions, and to provide maximum flight safety. Each WWA is assigned a number following the two-digit number of the current month (e.g. 06-001 would be the first watch/warning/advisory issued in June). Multiple WWAs may be in effect at any given time for the same location.

## 4.2. WWA Responsibilities.

4.2.1. The 607 AOC/CODW does not generate WWAs. 607 AOC/CODW does maintain situational awareness of WWAs for MOBs and COBs and relays significant information to 7 AF leadership when necessary.

4.2.2. MOBs:

4.2.2.1. The 51 OSS/OSW and 17 OWS have dual responsibility for Osan AB WWAs IAW the 17 OWS – 51 OSS IDP.

4.2.2.2. The 8 OSS/OSW and 17 OWS have dual responsibility for Kunsan AB WWAs IAW the 17 OWS – 8 OSS IDP.

4.2.3. COBs:

4.2.3.1. The 17 OWS is responsible for COB WWAs. They are coordinated by 7 AF/A3X IAW the 607 AOC and 7 AF IDP. WWA criteria and impacts for each COB are outlined within the 17 OWS webpage: <u>https://17ows.us.af.mil/tech\_ref/idp/</u>.

4.2.3.2. Deploying forces will coordinate contingency WWA requirements with 17 OWS through 7 AF/A3X and/or WF if deploying to a MOB. WWA criteria and lead times are determined by mission requirements.

4.2.4. Area Weather Watches (AWWs):

4.2.4.1. The 17 OWS issues and disseminates AWWs for the KTO IAW USFKR 115-1. Attachment 2, Table A2.3 depicts AWWs issued by the 17 OWS.

## 4.3. WWA Dissemination.

4.3.1. The 17 OWS disseminates all KTO WWAs by phone or email IAW Attachment 2, Figure A2.1 and posts to the following websites for all MOBs and COBs:

4.3.1.1. Non-secure Internet Protocol Router (NIPR): https://17ows.us.af.mil.

4.3.1.2. Joint Environmental Toolkit (JET): <u>https://owsjet17.us.af.mil/</u>.

4.3.2. The Joint Typhoon Warning Center (JTWC) provides the official Department of Defense forecast for tropical systems for the KTO. Further information is available in **Chapter** 7.

## **RECIPROCAL SUPPORT AGREEMENTS**

## 5.1. The 607 AOC/CODW will:

5.1.1. Provide specialized briefings during armistice, exercises, contingencies, special missions and EWO.

5.1.2. Provide climatology data for long range planning.

5.1.3. Provide specialized products to include Tactical Decision Aids.

5.1.4. Provide solar/lunar data.

5.1.5. Provide AOC with situational awareness of weather impacts to 7 AF operations. This will be done prior to the start of local flying or beginning of a shift during contingencies or exercise scenarios.

5.1.6. Provide 621 ACS with weather support to maintain command and control (C2) and situational awareness during standard 607 AOC/CODW duty hours. This includes current and forecast weather for the KTO, ranges, primary bases and divert bases.

5.1.7. Provide 621 ACS with weather support outside of 607 AOC/CODW duty hours by coordinating support from 8 OSS/OSW, 51 OSS/OSW and 17 OWS. If an in-person weather brief is required, 621 ACS must coordinate at least 24 hours in advance so that duty schedules may be adjusted.

5.1.8. Respond to JPRC weather requests promptly, any time of day, to support Personnel Recovery (PR) efforts.

# **5.2.** The 607 AOC/SRD (Strategy Division), Combat Plans Division (CPD), Air Mobility Division (AMD) and JPRC will:

5.2.1. Provide requirements for weather support (i.e. products required, ops tempo, etc.) and weather impact thresholds to 607 AOC/CODW. Thresholds are identified in Attachment 3.

5.2.2. Provide feedback on weather support.

## 5.3. The 607 AOC/COD (Combat Operations Division) will:

5.3.1. Provide requirements for weather support (i.e. products required, ops tempo, etc.) and weather impact thresholds to 607 AOC/CODW. Thresholds are identified in Attachment 3.

5.3.2. Provide feedback on weather support.

5.3.3. Provide a workspace for weather personnel on the combat operations floor for contingencies & exercises, and office space during armistice.

5.3.4. Provide NIPR, AOC CENTRIXS Enclave (ACE), and SIPR connectivity.

## 5.4. The 607 AOC/ISRD will:

5.4.1. Provide requirements for weather support (i.e. products required, ops tempo, etc.) and weather impacts thresholds to 607 AOC/CODW. Thresholds are identified in Attachment 3.

5.4.2. Provide feedback on weather support.

5.4.3. Provide feedback whenever SRO forecasts impact mission execution.

5.4.4. Contact 607 AOC/CODW when weather affects ISRD operations via Red Switch (784-2513) during duty hours and courtesy copy 607 AOC/CODW on 5W emails after duty hours when weather affects ISRD operations.

#### 5.5. The 621 ACS will:

5.5.1. Provide requirements for weather support (i.e. products required, ops tempo, etc.) and weather impact thresholds for current missions to 607 AOC/CODW. Thresholds are identified in Attachment 3.

5.5.2. Forward Pilot Weather Reports (PIREPs) when received to 607 AOC/CODW via telephone during duty hours.

#### 5.6. The 7 AF & 17 OWS.

5.6.1. The 7 AF/A3X will:

5.6.1.1. Coordinate weather requirements for both the 607 AOC and COBs at least 72 hours prior to an operational start date.

5.6.1.2. Provide feedback on weather support.

5.6.2. The 17 OWS will:

5.6.2.1. Provide WWA and TAF support to COBs.

5.6.2.2. Maintains a webpage and products specifically dedicated to support 7 AF on NIPRNET, SIPR, and ACE/CENTRIXS-Korea.

#### DISSEMINATION OF WEATHER INFORMATION

**6.1. General Information.** Assured communications are crucial to the dissemination of weather information. Weather personnel must ensure timely and proper notifications.

#### 6.2. Dissemination of Weather Data.

6.2.1. The 607 AOC/CODW will disseminate weather information primarily via:

6.2.1.1. The 607 AOC SharePoint website on SIPR at: <u>https://pacaf-</u> cat.ops.hickam.af.smil.mil/bpt/index.cfm?event=page.iframe&briefing\_id=3401.

6.2.1.2. The 607 AOC Portal on ACE/CENTRIXS-K, during exercises and contingencies at <u>https://aocportal.kaoc.cmil.mil/specialstaff.weather/sitepages/home.aspx</u>.

6.2.2. The 17 OWS weather webpage at <u>https://17ows.hickam.af.mil</u> (select "Korea") provides real-time environmental situational awareness for command and control decisions.

6.2.3. Phones: 607 AOC/CODW has access to a Secure Terminal Equipment (STE) and a red switch phone for secure communications. Reference the 7 AF & 607 AOC IDP for additional information.

6.2.4. Personnel requiring weather information without access to these websites should contact 7 AF/A3X to coordinate support.

6.2.5. Osan AB and Kunsan AB use the Joint Environmental Toolkit (JET) system for local and long-distance dissemination of weather data. Contact 8 OSS/OSW or 51 OSS/OSW for additional information.

6.2.6. COBs receive notification of weather parameters IAW their mission requirements directly from 17 OWS; see Attachment 2, Figure A2.1. Figure A2.2 depicts laydown of locations receiving WWAs.

6.2.7. Weather units deploying to the Korean peninsula, in support of Air Force operations must coordinate data dissemination procedures through 7 AF/A3X or 607 AOC/CODW if 7 AF/A3X is vacant.

## **TROPICAL CYCLONE SUPPORT**

**7.1. General Information.** Specific support procedures are IAW U.S. Pacific Command Instruction (USPACOMINST) 0539.1, *Tropical Cyclone Condition of Readiness Program*, which designates the CDR USFK as the Tropical Cyclone Condition of Readiness (TCCOR) authority for the KTO; PACAFI 15-101, *Weather Support for PACAF*; USFKR 115-1; and local Standard Operating Procedures (SOPs).

**7.2. Tropical Cyclone Responsibilities.** Specific responsibilities are as follows:

7.2.1. JTWC at Joint Base Pearl Harbor-Hickam, Hawaii issues warnings and bulletins every six hours at 0000Z, 0600Z, 1200Z, and 1800Z, and are available via the NIPR address <u>https://www.metoc.navy.mil/jtwc/jtwc.html</u>. The frequency will increase to every three hours when tropical cyclones move within 180NM of the ROK to include Jeju Island. These products include position and intensity forecasts out to 120 hours, unless dissipation or extra-tropical transition is predicted to occur earlier.

7.2.2. The 607 WS will:

7.2.2.1. Advise USFK J3, as the TCCOR authority designated by USFK CDR, on tropical cyclone forecasts that will affect the KTO. TCCORs are issued and disseminated based on USFK Areas and dissemination procedures outlined in USFKR 115-1.

7.2.3. The 607 AOC/CODW will:

7.2.3.1. Closely monitor all tropical storms which may impact 7 AF assets or missions.

7.2.3.2. Keep key leadership informed regarding potential impacts from the storm.

7.2.3.3. Elevate monitoring of the storm at TCCOR 3, to include 24-hour phone stand-by.

7.2.3.4. Maintain 24-hour stand-by at TCCOR 2, monitoring forecasts with frequent briefs to 607AOC/COD and the 607 AOC/CC to update 7 AF leadership.

7.2.3.5. Notify 7 AF staff as appropriate when tropical cyclones are forecast to affect other U.S. Pacific Command resources, to include Japan, Okinawa, Guam, and Hawaii.

7.2.3.6. Accomplish additional support procedures in accordance with PACAFI 15-101 and USPACOMINST 0539.1.

7.2.4. The 7 AF/A3X will:

7.2.4.1. Keep 7 AF staff apprised of conditions as they change or every six hours as updates are disseminated via e-mail message or via in-person brief, as necessary, when a tropical cyclone is forecast to affect the peninsula and/or when TCCOR conditions elevate to TCCOR 4 or above.

## **BACKUP AND EVACUATION OPERATIONS**

**8.1. General Information.** It is essential to develop a back-up plan to continue operations should 607 AOC/CODW experience any negative impact from a wide spectrum of natural or manmade events. The Weather Specialty Team (WST) will follow procedures outlined in the KAOC-COOP Plan Executive Summary on ACE and any directions provided by the CCO.

**8.2. Communication Outages.** During communication outages and work center evacuation, 607 AOC/CODW will continue to provide tailored weather support as outlined in this document by using other systems or any outside means. If e-mail and internet communications are non-operable, 607 AOC/CODW will disseminate mission-critical data by other means necessary (i.e. fax or phone).

**8.3.** Power Outages. During power outages at bldg. 935, a generator provides backup power to the building. The building custodian is the 607 AOC Facility Management Office who can be contacted at DSN 315-784-9915/2762.

**8.4.** Alternate Operating Location. In the event bldg. 935 must be evacuated, 607 AOC/CODW operates from the following locations in order of priority. For additional information, reference the 607 AOC Evacuation Plan on the ACE network:

8.4.1. Location designated by the KAOC director or CCO.

8.4.2. The 51 OSS/OSW Weather Flight (WF) office bldg. 870 rm. A111 (DSN 315-784-6332/9370).

**8.5.** Services Provided. All support according to this document will be provided during backup and evacuation. 17 OWS continues to provide weather support to 607 AOC/CODW as outlined in this document and according to the 17 OWS – 607 AOC and 7 AF IDP.

KENNETH S. WILSBACH, Lieutenant General, USAF Commander

#### Attachment 1

## **GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION**

#### References

AFPD 15-1, Weather Operations, 12 November 2015

AFI 13-1AOCV3, Operational Procedures – Air Operations Center (AOC), 2 November 2011

AFMAN 15-111, Surface Weather Observations, 12 March 2019

AFMAN 15-124, Meteorological Codes, 16 January 2019

AFMAN 15-129V1, Air and Space Weather Operations - Characterization, 6 December 2011

AFMAN 15-129V2, Air and Space Weather Operations - Exploitation, 7 December 2011

AFMAN 33-363, Management of Records, 1 March 2008

JP 3-59, Meteorological and Oceanographic Operations, 10 January 2018

PACAFI 15-101, Weather Support for PACAF, 10 August 2016

USFKR 115-1, USFK Area Weather Watches and Tropical Cyclone Procedures for the Republic of Korea, 22 July 2014

USFKR 115-2, Meteorology and Oceanography Support Responsibilities, 23 January 2013

USPACOMINST 0539.1, Tropical Cyclone Condition of Readiness Program, 30 March 2018

1W0X1, Career Field Education and Training Plan, 23 August 2018

OSANABI 15-101, Weather Support for Osan Air Base, 15 July 2019

8 FW15-101, Weather Support Document, 8 January 2019

## Adopted Forms

AF Form 847, Recommendation for Change of Publication

Abbreviations and Acronyms

17 OWS—17th Operational Weather Squadron

51 OSS/OSW-51st Operations Support Squadron Weather Flight

607 AOC—607th Air Operations Center

607 WS-607th Weather Squadron

621 ACS-621st Air Control Squadron

7 AF—Seventh Air Force

8A BCD/Det 1—Eighth Army Battle Coordination Division, Detachment 1

8 OSS/OSW—8th Operations Support Squadron Weather Flight

ACE—Air Operations Center Combined Enterprise Regional Information Exchange System Enclave

**AFI**—Air Force Instruction

- **AFMAN**—Air Force Manual
- AFPD—Air Force Policy Directive
- AFW—Air Force Weather
- AMD—Air Mobility Division
- AOR—Area of Responsibility
- AWW—Area Weather Watch
- BAS&E—Base Support and Expeditionary
- C2—Command and Control
- CCO—Chief of Combat Operations
- CFACC—Combined Forces Air Component Commander
- COB—Co-located Operating Base
- **COD**—Combat Operations Division
- CPD—Combat Plans Division
- EWO-Emergency War Orders
- HQ—Headquarters
- IAW—In Accordance With
- **IDP**—Installation Data Page
- ISRD—Intelligence, Surveillance and Reconnaissance Division
- ISRG—Intelligence, Surveillance and Reconnaissance Group
- JET—Joint Environmental Toolkit
- JFACC—Joint Force Air Component Commander
- JMO—Joint METOC Officer
- JP—Joint Publication
- JPRC—Joint Personnel Recovery Center
- JTWC—Joint Typhoon Warning Center
- KAOC—Korean Air Operations Center
- KCOIC—Korea Combined Operational Intelligence Center
- **KTO**—Korean Theater of Operations
- METOC—Meteorological and Oceanographic
- METWATCH—Meteorological Watch
- MOB—Main Operating Base

- NIPR—Non-secure Internet Protocol Router Network
- O&I—Operations and Intelligence
- **OPLAN**—Operation Plan
- **OPR**—Office of Primary Responsibility
- **OSS**—Operations Support Squadron
- **OSW**—Operational Support Weather
- **OWS**—Operational Weather Squadron
- PACAF—Pacific Air Forces
- PIREP—Pilot Weather Report
- PMSV—Pilot-to-Metro Service
- **PR**—Personnel Recovery
- **ROK**—Republic of Korea
- ROKAF—ROK Air Force
- SIPR—Secure Internet Protocol Router Network
- SOP-Standard Operating Procedure
- **SRD**—Strategy Division
- SRO—Sensitive Reconnaissance Observation
- STE—Secure Terminal Equipment
- SWAP—Severe Weather Action Plan
- SWO—Staff Weather Officer
- TAF—Terminal Aerodrome Forecast
- TCCOR—Tropical Cyclone Condition of Readiness
- UHF—Ultra High Frequency
- USFK—United States Forces Korea
- USPACOMINST-U.S. Pacific Command Instruction
- WF—Weather Flight
- WST—Weather Specialty Team
- WWA-Watches, Warnings, and Advisories

## Terms

**Air Component Commander**—Also known as the JFACC or Commander Air Component Command (CACC). A senior officer who is responsible to the Joint Forces Commander (JFC) for recommending proper employment of assigned, attached, and/or made available for tasking air forces; planning and coordinating air operations; or accomplishing such operational missions as may be assigned.

**Air Operations Center (AOC)**—Both an AF unit and a weapons system that may be employed by the COMAFFOR to exercise control of AF forces, or form the core of a joint (or combined) AOC (JAOC) and be employed by the JFACC to exercise control of joint (or combined) air forces. There are five divisions within the AOC and countless specialty teams used to support operations to include (but not limited to) Combat Operations Division (COD); Combat Plans Division (CPD); Intelligence, Surveillance and Reconnaissance Division (ISRD); Strategy Division (SRD); Air Mobility Division (AMD); Joint Personnel Recovery Center (JPRC); and Weather Specialty Team (WST).

Area Weather Watch/Warning (AWW)—A special notice to inform personnel on the peninsula an established weather condition of such intensity as to pose a hazard to life or property is occurring or is expected to occur in a generalized area on the peninsula. 17 OWS is responsible for issuing AWWs.

**Emergency War Order (EWO)**—A shift in the standard operating procedure from peacetime to wartime contingency. EWOs are activated after a devastating or sneak attack against U.S. or ROK forces, requiring swift action for remaining military units to avoid further destruction.

**Installation Data Page (IDP)**—A document defining the specific environmental support requirements, technical data, reference material, and contact information for each organization receiving TAF and WWA support from OWS.

**Meteorological and Oceanographic (METOC)**—An overarching term to generalize all components with Meteorological, Oceanographic, and Space environment weather operations.

**Meteorological Watch (METWATCH)**—A deliberate process for monitoring terrestrial weather or the space environment in an area or region. The purpose of a METWATCH is to identify when and where observed conditions significantly diverge from forecast conditions and determining courses of action to update or amend a forecast product or group of products and designated agencies notified.

**Operation Plan (OPLAN)**—A plan for one or more operations that deployed units carry out simultaneously or in a series of connected stages. Headquarters issue OPLANs as directives based on stated assumptions to allow subordinate officers to prepare supporting plans and orders.

**Operational Weather Squadron (OWS)**—A weather unit comprised of management, technician, and training personnel responsible for providing regional weather support. Their mission is to produce fine-scale tailored weather forecast products and services to supported users within their AOR. 17 OWS serves the USPACOM AOR, which includes the Korean peninsula.

Pilot Report (PIREP)—A report of in-flight weather provided by an aircrew member.

**Tropical Cyclone**—Non-frontal low pressure system located over tropical or sub-tropical waters with a definite cyclonic surface wind circulation and organized, sustained deep convection. Assuming continued intensification, the development level of a western North Pacific tropical cyclone may progress from tropical depression to tropical storm, to typhoon to super typhoon. Tropical cyclones remain one of the most disruptive and devastating peacetime threats affecting operations.

**Terminal Aerodrome Forecast (TAF)**—A standard text forecast containing the cloud cover, cloud heights, and visibility for general flight rule conditions (IAW AFI 11-202V3, General Flight Rules; and AR 95-1, Flight Regulations) as well as wind, altimeter, and other weather parameters needed to sustain the landing and takeoff of aircraft.

**Weather Flight (WF)**—Weather flights, detachments, or operating locations whose primary purpose is to facilitate exploitation of the environment through integration at every step of the operations planning and execution process. The WF may be located with the supported unit on an Air Force base, Army post, remotely located in another weather unit, or at a deployed location.

**Weather Warning**—A special notice to notify a supported agency when an established weather condition of such intensity as to pose a hazard to life or property is occurring or is expected to occur. Weather warnings provide concise information outlining environmental threats and are used by operational commanders to make resource protection decisions.

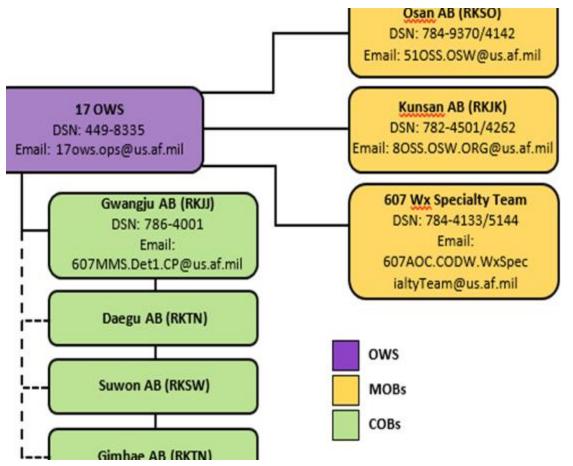
**Weather Watch**—A special notice to notify a supported agency of a potential for environmental conditions of such intensity as to pose a hazard to life or property. Weather watches indicate a potential for environmental threats are used by operational commanders to make force protection and risk management decisions.

## Attachment 2

#### WEATHER WATCH, WARNING, ADVISORY (WWA), AND AREA WEATHER WATCH (AWW) INFORMATION

**A2.1. General.** The following figures outline the dissemination procedures of WWAs issued for MOBs and COBs, as well as USFK AWWs. 17 OWS will only issue watches for MOBs unless prior coordination occurs for support in line with each MOBs respective IDP. 17 OWS issues watches and warnings for each COB through Gwangju Airbase Command Post, who will follow up notification of a WWA with an AtHoc message to the affected base.

#### Figure A2.1. Notification Flow Chart.



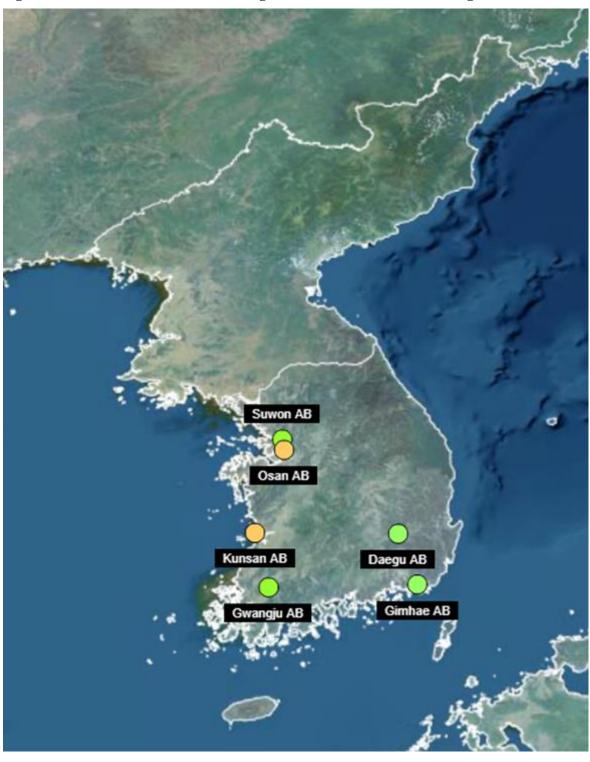


Figure A2.2. MOBs & COBs receiving weather watches and warnings from 17 OWS.

AREA WEATHER WARNING CRITERIA					
PHENOMENA	DLT (in hours	Mission Impacts	COMMENTS		
Severe Thunderstorms (Damaging Winds GTE 45 knots and/or Hail GTE 1/2 in)	48	Possible danage to aircraft and buildings	AWWs will be time-phased as required to		
Moderate Thunderstorms (Strong Winds GTE 35 knots LT 45 knots and/or Hail GTE 1/4 in LT 1/2 in)	48	Potential for damage	accurately portray movement and/or development of thunderstorm cells		
Damaging Winds GTE 45 knots (not associated with Thunderstorm activity).	48	Possible danage to aircraft and buildings	Does not include elevations greater than 1,000 feet MSL, ensure this caveat is include		
Strong Winds GTE 30 knots LT 45 knots (not associated with Thunderstorm activity).	48	Possible for damage	in the AWW text.		
Heavy Rain GTE 2" in 12 Hours	48	Possible flooding damage to resources	Specify fcst amout (e.g. 2-4 in) & duration, do not simply repear criteria. However, in the fc		
Heavy Rain GTE 5" in 24 Hours	48	toresources	txt portion, specify actual time window (e.g. 2		
Heavy Snow GTE 2" in 12 Hours	48	Affects roads and RCR, acft ops	in. in 6 hours) for accuracy.		
Freezing Precipitation	48	Affects roads and RCR, acft ops	N/A		
Surface temperature below 0 degrees Fahrenheit (-18 degrees Celsius).	48	Hazard to operations/personnel	For elevations ≤ 1,000 feet MSL, ensure this caveat is included in the AWW fcst		
Surface wind chill temperature below -20 degrees Fahrenheit (-29 degrees Celsius).	48	Hazard to personnel			

# Table A2.1. USFK Area Weather Watch (AWW) Criteria.

# Attachment 3

## CFACC MISSION WEATHER THRESHOLDS

# Table A3.1. Weather thresholds for armistice, exercises, and contingency missions.

Parameter		Significant Impact (Red)	Marginal Impact (Amber)	No Impact (Green)	
		CIG < 5,000 ft	CIG 5,000 - 20,000 ft	CIG > 20,000 ft	
		VIS < 3 sm VIS 3 - 5 sm		VIS > 5 sm	
Close Air Support (CAS)		SCT or greater TSTMS FEW TSTMS		NO TSTMS	
		Cloud Vertical Extent	Multiple Cloud Layers	SCT or less	
		3,000 - 25,000 ft	3,000 - 25,000 ft	above 10,000 ft	
			CIG < 10,000 ft	CIG > 10,000 ft	
		VIS < 3 sm	VIS 3 - 5 sm	VIS > 5 sm	
Offensive Air Mi	ssions	TSTMS > 1/2	TSTMS < 1/2	NO TSTMS	
(X-INT/SEAD/	OCA)	fcst period	fcst period	NO ISIMS	
90 AU 57	00.25	Cloud Vertical Extent			
		3,000 - 25,000 ft			
		BKN - OVC	SCT	FEW or less	
	FMV	(40-100% Coverage)	(20-39% Coverage)	(00-19% Coverage)	
	4	VIS < 1 sm	VIS 1 - 3 sm	VIS > 3 sm	
		> 10 mRem/hr	3 - 10 mRem/hr	< 3 mRem/hr	
		High-Flyer Cosmic	High-Flyer Cosmic	High-Flyer Cosmic	
		Background Radiation	Background Radiation	Background Radiation	
		Dosage	Dosage	Dosage	
	~	TSTMS w/ Tops above	TSTMS w/ Tops below		
	Operations Area	FL500	FL500		
ISR	suc.		Above FL230:		
(High Altitude)	atic		TSTMS w/in 20 nm	NO TSTMS	
(High Altitude)	oper		Below FL230:	NO ISTNIS	
			TS w/in 10 nm		
			Any ICING	No ICING	
			(Forecast or Observed)	No ICING	
		> MDT TURB (Forecast or	LGT to MDT TURB	≤ LGT TURB	
		Observed)	(Forecast or Observed)	S LGT TORD	
		CIG < 1000 ft	CIG 1000 - 1,500 ft	CIG > 1,500 ft	
	Take-off/ Landing	VIS < 2 sm	VIS 2 - 3 sm	VIS > 3 sm	
	Take	WND ≥ 40 kts Sustained	WND ≥ 25 kts Sustained		
	~~	X-WIND > 15 kts	X-WIND 11 - 15 kts	X-WIND < 11 kts	

# 7AFI15-101 23 OCTOBER 2019

Parameter		Significant Impact (Red)	Marginal Impact (Amber)	No Impact (Green)
	FAN	BKN - OVC (50-100% Coverage)	SCT (25-49% Coverage)	FEW or Less (0-24% Coverage)
	eau	SCT or greater TSTMS (>25%) FEW TSTMS (1-24%)		NO TSTMS
	Operations Area	LGT or Greater ICING (Forecast or Observed)	TRACE ICING (Forecast or Observed)	NO ICING
ISR (RPA)	Oper	SVR TURB (Forecast or Observed)	MDT TURB (Forecast or Observed)	< MDT TURB
		CIG < 300 ft	CIG 300 - 800 ft	CIG > 800 ft
	oft/	VIS < 1 sm	VIS 1 - 3 sm	VIS > 3 sm
	Take-off/ Landing	X-WIND>13 kts	X-WIND 10 - 13 kts	X-WIND < 10 kts
		WND>30 kts	WND 25 - 30 kts	WND < 25 kts
		CIG ≤ 300 ft	CIG 300 - 1000 ft	CIG > 1000 ft
E-8	guij	X-WIND≥25 kts	X-WIND 20 - 24 kts	X-WIND 10 - 19 kts
	Land	VIS≤1 sm	VIS>1-3 sm	VIS > 3 sm
	ofti	CIG <200 ft	CIG 200 - 3000 ft	CIG > 3000 ft
RC135	Take-off/ Landing	X-WIND>25 kts	X-WIND 20 - 24 kts	X-WIND 10 - 19 kts
	-	VIS≤1/2 sm	VIS>1/2-3 sm	VIS>3 sm
	20	SCT or greater TSTMS	FEW TSTMS	NO TSTMS
Defensive Counter Air	Operations	< 10,000 ft Clear Air Space Between 20,000 - 35,000 ft	10,000 ft Clear Air Space Between 20,000 -35,000 ft	CLR above 20,000 ft
(DCA)	2 0	CIG < 300 ft	CIG 300 - 3,000 ft	CIG > 3,000 ft
	ke-off/ nding	VIS < 1 sm	VIS 1 - 3 sm	VIS > 3 sm
	Tak	SCT or greater TSTMS	FEW TSTMS	NO TSTMS
	A.	CIG < 700 ft	CIG 700 - 1,500 ft	CIG > 1,500 ft
Petersilling	Day	VIS < 1 sm	VIS 1 - 3 sm	VIS>3 sm
Rotory Wing	iht	CIG < 700 ft	CIG 700 - 1,500 ft	CIG > 1,500 ft
	Night	VIS<2 sm	VIS 2 - 3 sm	VIS>3 sm
Take-off & La (Bases)		CIG < 300 ft	CIG 300 - 3000 ft	CIG > 3000 ft
** For individual base and aircraft criteria		VIS < 1/2 sm	VIS 1/2 - 3 sm	VIS > 3 sm
reference the SPINS/ OWL		SCT or greater TSTMS	FEW TSTMS	NO TSTMS

Parameter		Significant Impact (Red)	Marginal Impact (Amber)	No Impact (Green)	
		CIG < 500 ft	CIG 500 - 3,000 ft	CIG > 3,000 ft	
		VIS < 1 sm	VIS 1 - 5 sm	VIS > 5 sm	
Maritime, Carrier Asse		Wind > 40 kts			
Carrier Asse	:15	Wave Heights > 15 ft	Wave Heights 12 - 15 ft	Wave Heights < 10 ft	
			Sea Temps < 60° F	Sea Temps > 60° F	
		CIG < 200 ft	CIG 200 - 700 ft	CIG ≥ 700 ft	
		VIS < 1/2 sm	VIS 1/2 - 2 sm	VIS≥2 sm	
Airlift		SVR TSTMS (3/4 in. Hail, Wind > 50 kts, or FC)	FEW - SCT TSTMS (25% - 75% arial coverage)	ISOLD TSTMS (< 25% arial coverage)	
		SVR ICING (Forecast or Observed)	MDT ICING (Forecast or Observed)	< MDT ICING	
		SVR TURB (Forecast or Observed)	MDT TURB (Forecast or Observed)	< MDT TURB	
	Take-off Only	X-WIND > 25 kts	X-WIND 20 - 25 kts	X-WIND < 20 kts	
		VIS < 1 sm	VIS 1 - 3 sm	VIS > 3 sm	
Air Refueling (	SVR TSTMS (3/4 in. Hail, Wind > 50 ir Refueling (Track kts, or FC)		FEW - SCT TSTMS (25% - 75% arial coverage)	ISOLD TSTMS (< 25% arial coverage)	
Area)	Area) SVR ICING (Forecast or Observed)		MDT ICING (Forecast or Observed)	< MDT ICING	
		SVR TURB (Forecast or Observed)	MDT TURB (Forecast or Observed)	< MDT TURB	
	1.2	X-WIND > 25 kts	X-WIND 15 - 25 kts	X-WIND < 15 kts	
off Only		TSTMS w/in 10 nm			

 Table A3.2. Weather thresholds for off-peninsula and miscellaneous missions.