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YOKOTA AIR BASE**

**YOKOTA AIR BASE INSTRUCTION
15-101**



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Weather

WEATHER SUPPORT

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This instruction implements Air Force Policy Directive (AFPD) 15-1, *Weather Operations*, Air Force Doctrine Document (AFDD) 3-59, *Weather Operations*, Air Force Instruction (AFI) 15-114, *Functional Resource and Weather Technical Performance Evaluation*, Air Force Manual (AFMAN) 15-111, *Surface Weather Observations*, AFMAN 15-124, *Meteorological Codes*, AFI 15-128, *Air Force Weather Roles and Responsibilities*, AFMAN 15-129V1, *Air and Space Weather Operations – Characterization*, AFMAN 15-129V2, *Air and Space Weather Operations – Exploitation*, and AFI 90-802, *Risk Management*. It establishes responsibilities and weather support procedures. It also provides general information for weather services, including weather observations and forecasts; weather warnings, watches, and advisories; space weather data, information dissemination, and base-wide reciprocal support. It applies to units assigned to the 374th Airlift Wing (374 AW), subordinate units, and units assigned, attached, or supported by Yokota Air Base (AB). Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) AFMAN 33-363, *Management of Records*, and disposed of IAW the Air Force Records Disposition Schedule (RDS) located at <https://www.my.af.mil/gcss-af61a/afrims/afrims/>. 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.

SUMMARY OF CHANGES

This document has been revised to reflect changes to weather observation, PIREP, cooperative weather watch, and Tropical Cyclone Condition of Readiness (TCCOR) guidance per AFMAN 15-111, AFMAN 15-124, PACOM Instruction 0539.1 and USFJ Instruction 15-4001. Further clarification of the weather staff function, aircrew briefing support requirement and base agency support is provided. This revision updates the mandatory processes and procedures pertaining to weather operations within the 374 AW.

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Chapter 1

GENERAL INFORMATION

1.1. Introduction. The mission of the 374th Operations Support Squadron Weather Flight (374 OSS/OSW) is to provide relevant, operational weather support to the 374 AW, and all associate units assigned to Yokota AB, Japan. This includes weather staff support to Headquarters United States Forces, Japan (USFJ) and Headquarters, Fifth Air Force (5 AF). This instruction establishes local weather support requirements and procedures. Agencies requiring routine weather support not included herein should contact the 374 OSS/OSW to arrange for and document routine weather support requirements.

1.2. Background.

1.2.1. The 374 OSS/OSW is focused on providing mission tailored weather information needed by assigned and associated units of Yokota AB for mission execution, resource protection, and staff support. Support is also provided to the commander of deployed forces during wartime, contingency, and exercise operations. The duties of the 374 OSS/OSW are generally divided into three areas which will be described in detail in subsequent chapters: Airfield Services, Mission Support, and Staff Integration. In this document, the term 374 OSS/OSW will refer to the 374 OSS/OSW personnel at Yokota AB.

1.2.2. According to the Chief of Staff of the Air Force (CSAF)-approved Strategic Plan for Air Force Weather (AFW) Reengineering, 8 August 1997, each Weather Flight will maintain a support relationship with its regional Operational Weather Squadron (OWS). The 17 OWS at Hickam AFB, Hawaii is the servicing OWS for all of Pacific Air Forces (PACAF) and United States Pacific Command (USPACOM). General responsibilities of the 17 OWS and 374 OSS/OSW are outlined in AFI 15-128.

1.2.2.1. The 17 OWS provides resource protection, terminal aerodrome forecasts (TAF), regional and operational-level weather products and information, meteorological watch (METWATCH), Pilot-to-Metro Service (PMSV) via phone patch, and flight weather briefing support for Air Force locations within the Pacific Theater 24 hours a day, 7 days a week. Specific responsibilities of the 17 OWS and 374 OSS/OSW are defined in the Installation Data Page (IDP) weather support agreement between the 374 OSS and the 17 OWS as well as in this instruction.

1.2.3. The 17 OWS and 374 OSS/OSW Back-up Support: The 17 OWS and the 374 OSS/OSW provide back-up support to each other, as outlined in the 374 OSS and 17 OWS IDP. This is a basic outline of back-up support:

1.2.3.1. Back-up Assistance for the 17 OWS: When weather operations at the 17 OWS are interrupted, responsibility for all TAFs and weather watches, warnings, and advisories (WWA) for Yokota AB are transferred to the 374 OSS/OSW until such time when the 17 OWS is postured to resume operations. In addition, the 374 OSS/OSW will be responsible for resource protection (WWA issuance) for Tama Services Annex. Graphical products on the Air Force Weather Web Services (AFW-WEBS) will be utilized by the 374 OSS/OSW until the 17 OWS resumes normal operations. Also, the 17 OWS hosts a minimum amount of data through a back-up website via AFW-WEBS

located at
<https://weather.af.mil/confluence/display/17OWS/PACOM+Theater+Weather+Products?iPlanetDirectoryPro=AQIC5wM2LY4SfcvfxRaVUJoT1NH1ogcavGpmI6rS5VIBPKM%3D%40AAJTSQACMTAAAINLAAkxMDIzMjk5NDYAAlMxAAIwMg%3D%3D%23>.

1.2.3.2. Back-up Assistance for the 374 OSS/OSW: For standard weather office evacuations, support will resume from the alternate weather operations location with the 17 OWS assuming responsibilities during the interim period. For longer interruptions, the 374 OSS/OSW will coordinate with the 17 OWS or other organizations in the production and dissemination of selected tactical-level weather products.

1.3. 374 OSS/OSW Operational Hours. Normal hours are from 0530 JST – 2200 JST (2030 GMT – 1300 GMT) Monday through Thursday and 0530 JST – 1630 JST (2030 GMT – 0730 GMT) or end of 374 AW flying operations on Friday. The 374 OSS/OSW will be closed on Saturday and Sunday, federal holidays and PACAF Family Days unless supporting 374 AW flying operations, specific DV missions, or as requested for other mission support. If the 374 AW flies outside of published airfield hours, the 374 OSS/OSW will be manned at least one hour prior to the first pilot brief annotated on the daily flying schedule and until the last sortie lands. During closed hours, personnel will be on standby. A monthly standby roster will be provided to the 374 AW Command Post (CP) and the 17 OWS. If weather support is required, the stand-by forecaster can be contacted directly or through the 374 AW/CP. During 374 OSS/OSW standby operations, the 17 OWS continues to issue forecasts and weather watches, warnings, and advisories IAW the 374 OSS – 17 OWS IDP. The Automated Meteorological Observing System (AMOS) will continue to record and disseminate hourly and special observations as required per AFMAN 15-111 and this document.

1.3.1. When manning permits, the 374 OSS/OSW will align with airfield open hours (0600 JST – 2200 JST) and work weekends, federal holidays, and PACAF Family Days. The 374 OSS/OSW will continue to maintain a standby forecaster outside of published airfield hours who can be contacted through the 374 AW/CP. In the event 374 OSS/OSW manning does not permit these hours, operational hours will return to what is outlined in 1.3.

1.4. 374 OSS/OSW Operating Location. The 374 OSS/OSW performs duties at the location shown in Table 1.1.

Table 1.1. Primary Location Contact Information.

PRIMARY OPERATING LOCATION	MAILING ADDRESS
Bldg 703, Operations Group	374 OSS/OSW
DSN: 315-225-7213	Unit 5222, Bldg 703
Alt DSN: 315-225-9004	APO, AP 96328-5222
Fax DSN: 315-225-9213	
Email: 374oss.weather@us.af.mil	

1.5. Alternate Operating Location (AOL). In the event of a building evacuation, weather operations will be moved to the alternate location as shown in [Table 1.2](#) For flight safety

reasons, the 374 OSS/OSW will not evacuate during exercises. The 374 OSS/OSW will continue to provide operational support and “Eyes Forward” responsibilities for the 17 OWS. Most services and support will be provided, but will require a case-by-case assessment dependent on communication line status, equipment status, etc. The Pilot to Metro Service Radio (PMSV) on UHF 344.6 MHz will not be available while operating outside of the primary weather facility. There may be additional degraded services (weather products, pilot briefings, sensor data, etc.) dependent upon the communication systems status during the time of AOL use.

Table 1.2. Alternate Location Contact Information.

ALTERNATE OPERATING LOCATION
Bldg 702, 459 Airlift Squadron DSN: 315-225-4596/8222 Alt DSN: 315-225-4210 Fax DSN: 315-225-2482

1.6. Duty Priorities. In order to ensure high priority duties are accomplished in order of urgency, the 374 OSS/OSW will apply Risk Management principles to provide prioritized weather support in the following order of service:

Table 1.3. 374 OSS/OSW Duty Priorities.

Order of Priority	DUTIES
1	Perform Emergency War Order (EWO) Taskings
2	Execute 374 OSS/OSW Evacuation
3	Respond to Aircraft/Ground Emergencies/Mishaps
4	Respond to Pilot to Metro Service (PMSV)
5	Provide Weather Information to Air Traffic Control
6	Perform Severe Weather Action Procedures
7	Prepare and Issue Weather Warnings/Advisories (WWA) Locally
8	Take/Augment and Disseminate Surface Observations locally and longline (“Eyes Forward” support to the 17 OWS)
9	Collaborate with the 17 OWS and provide backup TAF support
10	Prepare and Disseminate Mission Execution Forecasts (MEFs)
11	Disseminate PIREPs locally, longline, and to the 17 OWS
12	Perform MISSIONWATCH
13	Provide Weather Briefings, Other Weather Products, and Information
14	Weather Functional Training
15	Accomplish All Other Routine Tasks

1.7. Assumptions, Shortfalls, and Limitations.

1.7.1. 374 OSS/OSW Assumptions. Weather support can only be provided if the appropriate facilities, funding, communications, personnel, and indigenous support (i.e., power, water, etc.) are available.

1.7.2. 17 OWS Assumptions. Adequate resources and communications will be available to execute the IDP and sufficient weather intelligence will be available from various sources.

1.7.3. 374 OSS/OSW Shortfalls. Some services may not always be available (i.e., out of station flight weather briefings) due to 374 OSS/OSW manning, station evacuation, or other higher priority missions.

1.7.4. 374 OSS/OSW Limitations.

1.7.4.1. Any augmented observations taken from Building 703 do not allow the observer to see the entire aerodrome, particularly southwest through northwest. Buildings, hangars, and tree lines obstruct the view. Lightning may not be seen due to distance, low clouds, or poor visibility. Thunder may not be heard because of flight-line noise. **Note:** There are no limitations to the airfield weather sensors, such as blocked wind sensors.

1.7.4.2. Interruption of the normal receipt of alphanumeric and graphic data via various interconnected weather data systems, Non-classified Internet Protocol Router Network (NIPRNET) or Secure Internet Protocol Router Network (SIPRNET), can severely degrade forecasting capabilities.

1.7.4.3. Due to the unpredictability of weather events, forecasts beyond 24 hours will be used for planning purposes only.

1.7.4.4. Many flying areas are over unpopulated regions. Lack of weather data from such areas may limit the thorough weather watch capabilities of the weather technician. Pilot reports (PIREPs) are extremely useful, particularly over data sparse areas.

1.8. Weather Equipment and Technical Assistance. The 374 OSS/OSW relies heavily on various forms of equipment in order to provide weather support. Most noteworthy are the FMQ-19, FMQ-22, TMQ-53, Kestrel 4000/4500, JET LAN, phones, and PMSV.

1.8.1. Equipment Maintenance. The table below lists the organizations responsible for preventive maintenance and repairs of meteorological and communication equipment:

Table 1.4. Organizations Responsible for Maintenance of Equipment.

Met. Equipment	Maintaining Organization
FMQ-19/FMQ-22	374 OSS/OSAM (Airfield Systems)
Kestrel 4000/4500	374 OSS/OSW
TMQ-53 (TMOS)	374 OSS/OSW, 374 OSS/OSAM, 557 WW FSSC
Comm. Equipment	Maintaining Organization
JET	557 WW
LAN	374 CS/SCOO (Network Control Center)
Phones/Hotlines	374 CS/SCOIN (Telephone Maintenance)
UHF Radio and Remote Monitor Control (PMSV)	374 OSS/OSAM (Airfield Systems)

1.8.2. 557 WW Fielded Systems Service Center (FSSC) Equipment Technical Assistance. The 557 WW FSSC is the single point of contact for the 374 OSS/OSW when it requires technical assistance with the FMQ-19, TMQ-53, or JET. Service is provided 24-hours a day, 7 days a week to handle trouble calls. The FSSC will maintain detailed information on all outages and will track these outages until successful resolution. **Note:** The 374 OSS/OSW will not contact the contractors directly unless otherwise directed.

1.8.2.1. The 374 OSS/OSW will conduct basic troubleshooting to determine the nature of the equipment outage using system manuals, local troubleshooting guides, or instructions available from 2nd Combat Weather Systems Squadron before contacting the FSSC. With assistance from the FSSC, 374 OSS/OSW personnel will generally be able to resolve most problems. If the problem cannot be resolved, the FSSC will contact the appropriate maintenance agency. In some cases, the FSSC may direct the unit to contact their local communication agency.

1.8.3. Certifying Newly Fielded Systems. The 374 OSS/OSW leadership will be the certifying official IAW AFI 33-200, *Cybersecurity Program Management*, for all newly fielded information systems. The certifying official will coordinate site certification and accreditation efforts of these systems with the Yokota AB IA office to obtain approval from the Designated Approval Authority. An Air Force Command, Control, Communications, Computers, and Intelligence Support Plan must accompany new systems. The System Program Office (SPO) responsible for the acquisition will provide the AFC4I Support Plan. For additional assistance and guidance, contact HQ 557 WW/2 SYOS.

1.9. Release of Weather Information to Non-DoD Agencies and Individuals. Most general weather parameters are available to be given to the general public, such as temperature, winds, humidity, and sky condition. However, specific weather information will not be released to non-DoD agencies/non-base agencies without approval from the 374 AW Public Affairs (374 AW/PA) and Legal offices.

Chapter 2

AIRFIELD SUPPORT FUNCTION

2.1. General. The Airfield Support Function includes those actions that affect the Yokota aerodrome (defined as an area within a 5 statute mile (8,000 meters) radius of the center of the aerodrome). Examples include TAF support, weather observing, METWATCH, and resource protection. Resource protection and emergency actions resulting from weather events/natural disasters will be described in Chapter 5.

2.2. TAF Support. The Yokota AB TAF is required 7 days a week, 365 days a year, during published airfield hours unless coordinated otherwise. Issue times are 0600, 1400, and 2200 JST (2100, 0500, and 1300 Zulu). The 13Z TAF will be issued to assist missions scheduled to arrive when the airfield reopens the following day at 21Z; however, the 13Z TAF will not be amended by the 17 OWS unless requested by the 374 OSS/OSW. The TAF applies to an area within a 5 statute mile (8,000 meters) radius of the center of the aerodrome and is valid for 30 hours. TAFs are produced by the 17 OWS and disseminated through JET or AFW-WEBS if JET is inoperative. TAF specification/amendment criteria is listed in Attachment 2. TAF format and decoding instructions can be found in AFMAN 15-124.

2.3. Points of Observation. On Yokota AB, the active FMQ-19 sensor suite is the primary observing site for the airfield. There are two sensors (i.e., two sites) with one near each end of the runway. The active sensor (and active observing site) will correspond to the active runway. When the FMQ-19 is inoperable and the airfield is open observations will be augmented (i.e., taken manually by an observer) at the end of the Distinguished Visitor's Garden walkway just east of Building 703. Refer to paragraph 1.7.4.1 for augmented observation point limitations.

2.4. Primary Observation Equipment. All observations will be taken using the FMQ-19 unless the system is inoperative altogether (i.e., communication failure) or in part (i.e., sensor failure). The system continuously measures wind speed and direction, visibility, precipitation type and intensity, obscurations to vision, cloud height and depth, sky cover, temperature, dew point, atmospheric pressure, and lightning occurrence, location and frequency. Observations will be transmitted via the JET automated dissemination system hourly or whenever SPECI/LOCAL criteria dictate (See [Attachment 2](#)).

2.4.1. FMQ-19 Limitations.

2.4.1.1. This system is only able to sample atmospheric information in the immediate vicinity and may not provide an accurate representation of weather in the entire aerodrome complex. Therefore, ceilings and visibility will only be measured and reported from or above the official observation site.

2.4.1.2. When visibility changes rapidly, the FMQ-19 observation will lag the actual weather due to the time-averaged algorithms used by the system.

2.4.2. FMQ-19 Outage Procedures.

2.4.2.1. In the case of an FMQ-19 short-term outage, the 374 OSS/OSW will use the Kestrel during augmentation to provide limited weather data. The Kestrel is a hand-held weather observing device that measures wind speed, temperature, dew point temperature

and pressure. It does not have the precision of other equipment and will be used as a short-term backup device only.

2.4.3. In the case of a long-term outage, the TMQ-53 Tactical Meteorological Observation System (TMOS) may be used. The TMQ-53 TMOS is a tactical weather observing instrument suitable for measuring the same weather parameters the FMQ-19 can measure.

2.5. Augmentation of Observation Equipment. Augmentation is the process of weather technicians manually adding or editing data to an observation generated by the FMQ-19. The two processes of augmentation are backup and supplementing IAW AFMAN 15-111, *Surface Weather Observations*.

2.5.1. Backup is the method of manually providing meteorological data and/or dissemination of an AMOS observation when the primary automated method is not operational or unavailable due to sensor and/or communication failure while the airfield is open. With the exception of some automated remarks, backup refers to weather technicians providing the same reporting capability as that provided by the FMQ-19.

2.5.2. Supplementing is a method of manually adding meteorological information to an automated observation that is beyond the capabilities of the FMQ-19 to detect and/or report. Forecasters will be prepared to supplement when the conditions in **Table 2.1** are forecasted to occur within 1 hour and the weather station is open.

Table 2.1. Mandatory Supplementary Weather Conditions.

Mandatory Supplementary Weather Conditions
Tornado (+FC)
Funnel Cloud (FC)
Waterspout (+FC)
Hail (GR) (any size)
Volcanic Ash (VA)
Ice Pellets (IP)
Visibility < ¼ mile (400 meters) (during airfield operating hours and blizzard conditions warning has been issued)
Snow Depth (only during airfield operating hours and if heavy snow warning has been issued and snowfall is occurring)

2.5.2.1. During airfield closure the only element required to be supplemented is tornadic activity per AFMAN 15-111. When the environment is favorable for tornadic activity, Severe Weather Action Procedures (SWAP) will be initiated (see Chapter 5 for SWAP procedures) and the 374 OSS/OSW will ensure supplementation occurs as outlined in SWAP procedures. **Note:** AFMAN 15-111 requirement to only supplement observations for tornadic activity does not relieve the 374 OSS/OSW from their SWAP responsibilities during non-duty hours.

2.6. Basic Weather Watch (BWW). 374 OSS/OSW personnel conduct a BWW IAW AFMAN 15-111 when backup augmentation is required. Weather conditions will be reevaluated at intervals not to exceed 20 minutes and when conditions in [Table 2.2](#) are observed or are forecast to occur within 60 minutes.

Table 2.2. Increased Weather Check/Observation Frequency.

Increase Frequency of Observation Thresholds
Ceiling forms below or decreases to less than 1,500 feet.
Ceiling dissipates or increases to equal or exceed 1,500 feet.
Visibility decreases to less than 3 statute miles (4800 meters).
Visibility increases to equal or exceed 3 statute miles (4800 meters).
Precipitation (any form).
Thunderstorms.
Fog or mist.
Any supplementary conditions listed in Table 2.1.
During mandatory AMOS back-up conditions (i.e. sensor outages during airfield operating hours)
Special Weather Observation (SPECI) or LOCAL thresholds (if augmenting).

2.7. Cooperative Weather Watch. Cooperative Weather Watch is the process whereby ATC personnel, flying units, and Security Forces personnel notify the 374 OSS/OSW of any occurrence of weather conditions which could affect flight safety or resource protection. This process is primarily concerned with reports of tower visibility different from prevailing visibility, local PIREPs, and any occurrence of previously unreported weather conditions.

2.7.1. ATC task certified personnel will notify the 374 OSS/OSW when any of the following occur:

2.7.1.1. Tower prevailing visibility is evaluated to be less than 4 statute miles (6000 meters) and is different from the surface prevailing visibility.

2.7.1.2. Tornadoes or funnel clouds.

2.7.1.3. Thunder is heard and/or lightning is seen.

2.7.1.4. Any other meteorological condition that could impact flight safety or be critical to the safety or efficiency of other local operations and resources (hail, damaging winds, etc.).

2.7.1.5. Any weather information received from pilots for inclusion into a PIREP and/or surface observation will be relayed to 374 OSS/OSW within 5 minutes, or as soon as possible, after receipt for dissemination.

2.7.1.5.1. ATC will relay urgent PIREPs (as identified in **Table 2.3, Urgent PIREP Weather Conditions**) to the 17 OWS within 5 minutes, or as soon as possible, should 374 OSS/OSW personnel not be on duty.

2.7.2. 374 OSS/OSW will reevaluate weather conditions and the accuracy of the AMOS when information reported from a reliable source differs from the last disseminated observation. If the information is determined to be accurate and the AMOS is determined to be malfunctioning, the 374 OSS/OSW will follow established augmentation procedures.

2.7.3. 374 OSS/OSW will notify airfield leadership if continuous RVR reporting is needed during airfield closure hours. The RVR system requires the runway lights to be left on in order for the AMOS to work properly.

2.8. Meteorological Watch (METWATCH). METWATCH is 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 determine courses of action to update or amend a forecast product or group of products and ensure designated agencies are notified. It is a collaborative process performed by and collaborated on between the 374 OSS/OSW and the 17 OWS.

2.8.1. METWATCH by the 374 OSS/OSW. The 374 OSS/OSW will review and analyze regional data to determine how weather conditions may change at the installation. The 374 OSS/OSW will keep the Airfield Management Operations Section (OSAA), ATC, 374 AW/CP and RAPCON fully aware of current and expected weather conditions. 374 OSS/OSW personnel will integrate anticipated changes into the Yokota MEF product and collaborate with the 17 OWS on TAFs and/or WWAs for Yokota AB.

2.8.2. METWATCH by the 17 OWS. The 17 OWS performs a continuous terminal METWATCH for Yokota AB (to include the Tama Services Annex). The METWATCH is in support of the Yokota TAF and in support of 17 OWS issued weather WWAs for Yokota AB and Tama Services Annex.

2.9. “Eyes Forward” Process/Procedure. 374 OSS/OSW technicians will relay significant, time-sensitive meteorological information to the forecasters conducting resource protection and METWATCH operations at the 17 OWS. “Eyes Forward” provides an organized approach for weather personnel to maintain situational awareness of the current and future meteorological situation within a designated area.

2.10. PMSV Support. The 374 OSS/OSW will monitor UHF 344.6 MHz during its operational hours and will solicit aircrews to provide PIREPs of weather conditions over this frequency. Aircrews will be provided current weather conditions and will be warned of weather hazards along their route of flight; however, the 374 OSS/OSW will not vector aircrews around hazards (only ATC facilities can vector aircraft).

2.10.1. Limitations. The PMSV operating range is restricted to line-of-sight transmissions between the aircraft and the ground at Yokota AB. The range is approximately 20-40 nautical miles (NM) at normal operating altitudes. Local terrain range restrictions exist from the southwest (SW) to the northwest (NW).

2.10.2. PMSV Outages. 374 OSS/OSW personnel will:

2.10.2.1. Notify ATC and OSAA of any PMSV outage. ATC and OSAA will monitor UHF 344.6 MHz and advise aircrew attempting to contact Yokota METRO to contact the 374 AW/CP (frequency UHF 349.4MHz or VHF 128.0MHz, DSN 225-3740/225-4400) for a phone patch to the 374 OSS/OSW (DSN 225-7213/225-9004). For additional PMSV services aircrews can find information in the Flight Information Publication (FLIP).

2.10.2.2. Contact OSAA and ensure information on PMSV outages is included in local Airfield Advisories and Notices to Airmen (NOTAMs).

2.10.2.3. Notify ATC, OSAA, and 374 AW/CP when the equipment has been restored to operational status.

2.11. Pilot Reports (PIREPs). PIREPs are reports of in-flight weather made by aircrews. PIREPs will be relayed to the 374 OSS/OSW via PMSV, phone-patch, ATC/RAPCON, or the 374 AW/CP. ATC/RAPCON and 374 AW/CP will relay all PIREPs and pertinent weather information to the weather technician within 5 minutes, or as soon as possible, after receipt for dissemination. Any 374 AW aircrew encountering hazardous weather conditions which jeopardize flight safety should report conditions to the 374 OSS/OSW IAW AFI 11-202V3, *General Flight Rules*, paragraph 5.22.1.

2.11.1. Aircrews providing a PIREP must state location, flight level, significant weather observed (minimum one weather element), time of observation, and type of aircraft for a PIREP to be disseminated, IAW AFMAN 15-124. Other useful weather data for inclusion into a PIREP includes, but is not limited to: flight level winds, bases/tops of clouds (approach ceilings), visibility (approach visibility), turbulence, icing, thunderstorms, hail, or low level wind shear.

2.11.2. Any PIREPs significant to local flying will be disseminated locally using JET. All other PIREPs deemed as not significant will be relayed to the 17 OWS. At a minimum, all urgent (UUA) PIREPs will be disseminated longline and locally via the approved local dissemination system. Urgent PIREPs are those which include any of the elements listed in Table 2.3.

Table 2.3. Urgent PIREP Weather Conditions.

Urgent PIREP Weather Conditions
Tornado, water spout, or funnel cloud
Severe Icing
Severe or extreme turbulence, including Clear Air Turbulence (CAT)
Low-Level Wind Shear (LLWS). (When the fluctuation in airspeed is 10 knots or more)
Hail (GR or GS)
Volcanic eruption and/or ash (VA) when reported by any source, in the air or the ground
Any condition that, in the judgment of the person entering the PIREP into the system, would present an extreme hazard to flight

2.12. Yokota Extended Outlook Forecast. A 5-day weather forecast product will be produced during duty days. The product will include at a minimum: sky conditions, expected weather, wind direction and speed, high and low temperatures, precipitation amount, sunrise and sunset times.

CHAPTER 3

MISSION WEATHER SERVICES

3.1. General. The Mission Weather Element (MWE) will use the Mission Execution Forecast (MEF) process to tailor weather products and provide decision-quality environmental information for mission planning and execution for the 374 AW. The TAF and the MEF for Yokota AB are the primary weather tools used in supporting 374 AW flying missions. While the TAF is a standardized product for airfields worldwide, the MEF is a mission weather product (MWP) tailored to specific customer requirements and specific missions. As a customized product, a MEF can be in almost any format. A local area weather sheet, a verbal flight weather briefing and a DD Form 175-1, *Flight Weather Briefing*, are all MEF examples.

3.2. 374 OSS/OSW Mission Details. The 374 OSS/OSW supports many different organizations, weapons systems, and missions which are limited by various weather parameters.

3.2.1. The 374 OSS/OSW provides tailored weather support to its primary flying customers with the accompanying missions and requirements which are listed in **Table 3.1**

3.2.1.1. Increased awareness of mission limitations is necessary for properly tailored briefings and daily weather discussions. It is the responsibility of the flying units to notify the 374 OSS/OSW if a new weather limitation poses an impact to missions.

Table 3.1. Yokota AB Organizations Missions, and Requirements.

Organization	Mission	Requirements
36 AS (C-130)	Prepares for, and when tasked, conducts passenger and cargo movement, combat employment and sustainment, and aeromedical evacuation.	-see Attachment 3 -all WWAs
459 AS (C-12 and UH-1)	Conduct Operational Support Airlift, Aeromedical Evacuation, and Search and Rescue missions across the Kanto Plain and throughout the Western Pacific	-see Attachment 3 -all WWAs

3.2.2. Due to the size of the training areas, there are very few instances when weather will make an operating area completely unusable. Pilot discretion is used to determine mission GO/NO-GO criteria regardless of the weather phenomena listed in the Mission Execution Forecast (MEF) or the briefing provided. Routinely used training areas are depicted in **Attachment 5**.

3.3. Airframe Specific Weather Limitations. Weather limitations for resident and common airframes are listed in **Attachment 3**. The tables provide the general airframe weather limitations based on 11-series AFIs and 11-series PACAF Supplements. Weather limitations for other aircraft can be obtained by visiting the 17 OWS website at https://17ows.us.af.mil/Tech_Ref/owl/index.cfm?AOI=5&UID=&BW=H&UF=M&AOR=1&USEHF=1&TEST=0.

3.4. Mission Execution Forecast (MEF). The MEF is mission tailored environmental information describing a specific impact to an operational mission. The 374 OSS/OSW follows the AFMAN 15-129V2 administrative MEF process to conduct deliberate forecast processes while developing, delivering, monitoring, and amending MEFs by fusing perishable data with operational and strategic level weather forecast products into decision quality information for an operational end user. The result is a briefing tool designed to provide timely, accurate, and relevant weather intelligence to various customers. It is designed to provide critical GO/NO-GO weather information for all phases of the mission. The MEF must be horizontally consistent with products issued by the 17 OWS, to include the TAF and flight hazards. However, during rapidly changing conditions, emergencies, or when conditions threaten resource protection, the 374 OSS/OSW will amend the MEF to reflect the conditions and brief the 17 OWS as time permits.

3.4.1. The MEF will be issued during 374 AW flying days by 2030Z (0530 JST) or not later than either two hours prior to the first takeoff or 15 minutes prior to the weather decision time, whichever is earlier.

3.4.2. The Yokota MEF contains the following data: hourly take-off/recovery weather to include forecasted wind direction and speed, crosswinds, visibility, present weather, sky conditions, temperature/dewpoint, forecasted altimeter, DA and PA, current WWAs/TCCORs for Yokota AB, space weather impacts to UH, UHF and GPS for both day and nighttime, route weather forecasts for the Northwest, Northeast, Fuji/Camp Fuji, and Tokyo/Hardy Barracks quadrants, forecasted flight level winds, temperatures and freezing level over Yokota AB and Camp Fuji from FL005-FL100, Tokyo Bay sea surface temperature for the day, and solar and lunar data. See [Attachment 4](#) for a MEF sample.

3.4.2.1. The MEF applies 36 AS and 459 AS aircraft sensitivities and mission requirements. Listings of these impacts are included in [Attachment 3](#).

3.4.2.2. The 374 OSS/OSW will use the 17 OWS graphical and alphanumeric analysis and forecast products, TAF, and WWAs in developing the MEF, as well as for updating supported units' decision-makers on environmental impacts to operations.

3.4.3. MEF Amendment Criteria: Amendments will be issued based on the discretion of the 374 OSS/OSW and per the amendment criteria listed in the table below.

Table 3.2. MEF Amendment Criteria.

MEF Amendment Criteria
Any forecasted or unforecasted condition that crosses mission limiting thresholds (Attachment 3)
If altimeter is off +/- 0.08 inHg.
If wind direction and speed differ from TAF amendment criteria per AFMAN 15-129v1
If temperature is off +/- 4 °C
Issuance or change of any WWA or TCCOR condition
Any other weather situation, that in the forecaster's opinion, requires an update.

3.4.4. MEF Dissemination.

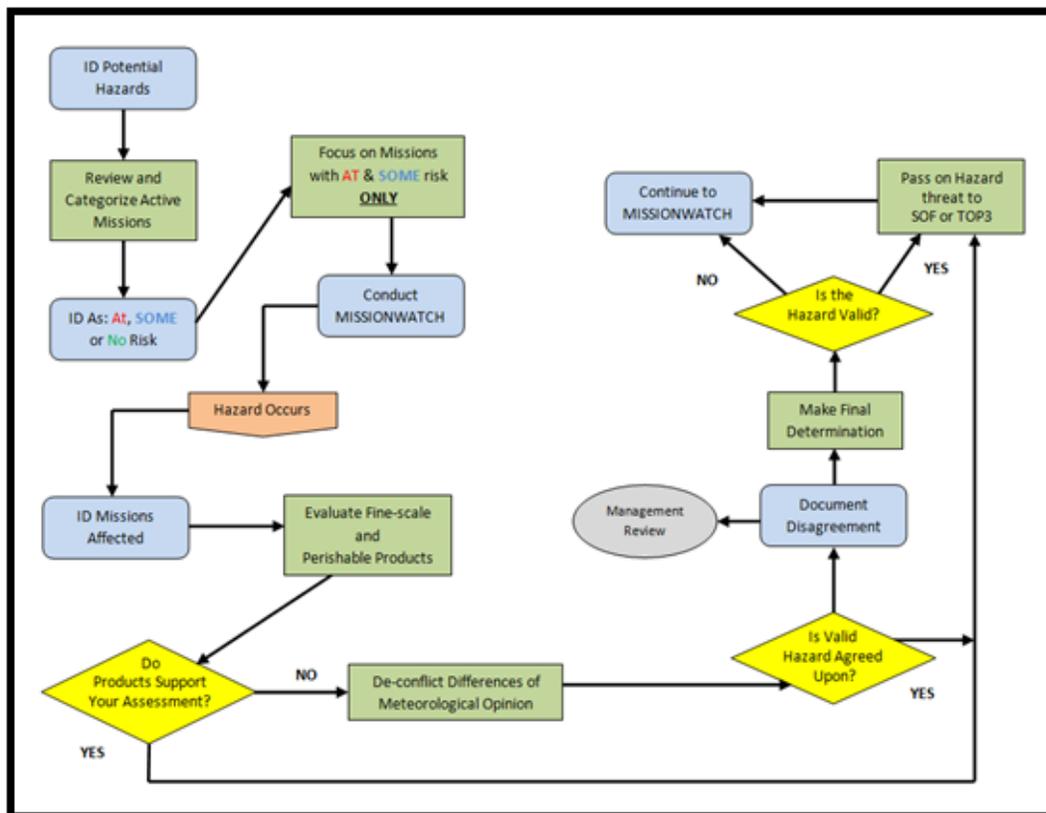
3.4.4.1. The Yokota AB MEF will be available on the 374 OSS/OSW SharePoint site at <https://yokota.eis.pacaf.af.mil/374AW/374OG/374OSS/osw/SitePages/Home.aspx>.

3.4.4.2. If LAN support is not available, the 374 OSS/OSW will disseminate the information to the 36 AS and 459 AS via email or hand delivery.

3.4.4.3. MEF Amendment Dissemination. Amended MEFs will be disseminated utilizing the same dissemination means as those listed above.

3.5. MISSIONWATCH. Process which describes how the 374 OSS/OSW monitors the weather for all missions through the use of the RM MISSIONWATCH process (**Figure 4.1**). It is the primary responsibility of the duty forecaster to use all on-site meteorological and commercial data sources to accomplish this task. It is through this method that MEF amendments or updates are accomplished.

Figure 3.1. RM MISSIONWATCH Process.



3.5.1. The 374 OSS/OSW has established MISSIONWATCH procedures that aid forecasters in determining if the weather conditions will have a high or low risk impact on missions, to include those critical points in missions (i.e., takeoff, landing, airdrop, low level route entrance, etc).

3.5.1.1. If the weather conditions are determined to have little risk to a mission the forecaster will reassess the weather conditions at least once an hour during the mission.

3.5.1.2. Weather conditions for high risk missions will be reviewed every 20 minutes during the mission and 15 minutes prior to the following mission critical points: takeoff, landing, airdrop, and entry into a low level route.

3.5.2. If any mission crosses one of the mission limiting thresholds the 374 OSS/OSW will perform the following as required:

3.5.2.1. Notify 36 AS/459 AS Operations Desk(s), Air Traffic Control Tower and/or RAPCON, and the 374 AW/CP in order to pass the weather information to the aircrew(s).

3.5.2.2. Amend/update the Mission Execution Forecast

3.5.2.3. Coordinate changes to the TAF and hazard charts with the 17 OWS

3.5.3. The 374 OSS/OSW will perform MISSIONWATCH for missions within the AOR, for the entire duration of the mission.

3.5.3.1. If an aircraft is flying off-station, the 374 OSS/OSW will perform MISSIONWATCH until the aircraft reaches its final mission destination. If an aircraft will be staying off-station overnight or for a longer duration, the 374 OSS/OSW will cease MISSIONWATCH once the aircraft has landed off-station.

3.6. Aircrew Briefing Support. The 374 OSS/OSW will provide briefing support to 374 AW missions as requested either via email, over the phone, or in person. 374 OSS/OSW requests any 374 AW missions needing 175-1 support be loaded into GDSS and/or a briefing request be made (via email, in person, or over the phone) the duty day prior or Friday prior by 1630L. The 374 OSS/OSW will provide formal briefings for formation flights involving two or more C-130 aircraft. Formal briefings will be posted on the 374 OSS/OSW SharePoint site and will be conducted in person when manning permits. Formal briefing requests are required no later than 1630L the duty day prior. If briefing requests cannot be provided by 1630L the duty day prior, aircrew are advised to contact the 374 OSS/OSW forecaster or standby forecaster (via the 374 AW/CP) to ensure briefing receipt and timely mission support as the 374 OSS/OSW is not manned 24/7.

3.6.1. Missions that are AMD/IFM will receive their briefing support from AMD.

3.6.2. Transient Support. The 374 OSS/OSW will provide weather support to transient aircrews during normal duty hours while manning or operations tempo permits. During normal duty days, the 374 OSS/OSW requests any 175-1 briefs be requested at least two hours in advance of the requested departure time. In the event that the 374 OSS/OSW cannot assist, they will provide/arrange for weather support with the 17 OWS or appropriate OWS.

3.7. Mission Planning Weather Outlook. The 374 OSS/OSW produces and provides the 36 AS and the 459 AS Mission Planning Weather Outlook products during duty days for the next two scheduled flying duty days. These products are tailored for the flying squadrons based on their routine flying operations. See **Attachment 4** for sample planning weather outlook products.

3.7.1. Mission Planning Weather Outlook will be available on the 374 OSS/OSW SharePoint site at <https://yokota.eis.pacaf.af.mil/374AW/374OG/374OSS/osw/SitePages/Home.aspx>.

3.7.1.1. If LAN support is not available, the 374 OSS/OSW will disseminate the information to the 36 AS and 459 AS via email.

3.8. Tactical Decision Aids (TDAs). Target Acquisition Weapons Software (TAWS) is the only TDA used by the 374 OSS/OSW and it is only used to gather solar and lunar data.

3.9. Space Weather. The 374 OSS/OSW will utilize the current suite of global and regional scale products provided by the 557 WW and the 17 OWS to relay relevant data and information and apply it for the 5 AF, USFJ, and 374 AWs operations as needed.

3.9.1. The 36 AS and 459 AS use communication systems that include HF, VHF, UHF, GPS, TACAN and SATCOM which could be inhibited by increased solar activity. Space weather impacts are included in the MEF process.

3.9.2. The 374 OSS/OSW will coordinate with the 5 AF and USFJ as needed to determine space weather thresholds and requirements in order to provide the most value in supporting their operations.

3.10. National Airborne Operations Center (NAOC) Support. NAOC support is detailed in 374 AW Plan 553. If the NAOC is to arrive at Yokota AB, the 374 OSS/OSW will provide environmental data for the aircrew as requested. A NAOC watch officer will be identified through the 374 AW/CP. The 374 OSS/OSW will notify the watch officer of all Yokota AB weather WWAs to include those additionally required advisories needed in support of the NAOC mission. NAOC support advisories are listed in [Table 3.3](#)

Table 3.3. NAOC Support Advisories.

NAOC Support Advisories:	
Visibility < 1 sm	Observed
Thunderstorms within 50 nm	Observed
Thunderstorms within 25 nm	Observed
Thunderstorms within 10 nm	Observed
Crosswinds > 20 knots	Observed
Crosswinds >12 knots (wet runway)	Observed
Turbulence \geq moderate within 50nm and below 10,000ft MSL (outside TSTMS)	Observed
Icing \geq moderate within 50nm and below 10,000ft MSL (outside TSTMS)	Observed
Snowfall \geq trace <u>but</u> less than 2 inches	Forecast

Chapter 4

STAFF INTEGRATION FUNCTION

4.1. General. Staff services are those briefings or support provided primarily by the 374 OSS/OSW leadership. These unit members will function as a direct interface with the 374 AW commander and staff, and provide direct support to command, control, and planning functions. Weather technicians will be integrated into the staff weather element as needed.

4.2. Staff Weather Briefings. Weather is briefed at several organizational staff meetings. Briefing times, content, and delivery method are tailored to the customer's situational requirements and are subject to change at any time. Generalized descriptions of the briefings are below:

4.2.1. 374 AW Staff Meetings. For briefings at the 374 AW or 374 OG level, the weather data presented usually consists of a 5-day outlook of forecasted weather limitations to operations at major AOR installations and the Yokota Extended Outlook forecast product. Also included are off-station operations, weather forecasts for upcoming events, and significant weather phenomena such as natural disasters. Tropical cyclone forecasts and analysis are included when tropical cyclones are in the AOR.

4.2.2. USFJ and 5 AF Staff Meetings. Briefing content is similar to that for the 374 AW weather briefs. For USFJ briefings, an equal focus is placed on non-AF installations. Weather data for operations and upcoming events are tailored to each organization.

4.2.3. Emergency Operations Center (EOC). The 374 OSS/OSW supports EOC exercises and real-world events with atmospheric/environmental data as requested.

4.2.4. Crisis Action Team (CAT). The 374 OSS/OSW is a member of the CAT Advisory Support Staff and will support the CAT as outlined in the Yokota Air Base Instruction 10-203, *Yokota CAT Operations*, when manning and operations tempo permit.

4.3. Defense Threat Reduction Agency (DTRA) Briefings. In person briefings will be provided to the DTRA team as requested. At a minimum, those briefs will consist of flight weather (take-off, en route, and destination weather), inspection location(s) forecasted weather, and forecasted return flight weather.

4.4. 374 AW Quarterly Flight Safety Briefings. The 374 AW/SE office dictates the frequency and seasonal content of the briefings. Weather information presented includes items such as lightning avoidance, microburst and wind shear, monthly/seasonal climatology, seasonal severe weather events, airfield/flight weather hazards, space weather products and impacts, interpretation of weather products, etc.

4.5. Instrument Refresher Course (IRC). The 374 OSS/OSW does not provide IRC briefings on a routine basis; however, the 374 OSS/OSW Training Manager will work with the Yokota AB IRC Point of Contact to finalize the weather agenda for IRC briefings upon request.

4.6. ATC Limited Observation Program. The 374 OSS/OSW will provide initial observation training for ATC personnel in a Limited Observation Training Program. This training is designed to enable the Cooperative Weather Watch program and provide better "Eyes Forward" for the 17 OWS. New ATC personnel who have not been trained will call the 374 OSS/OSW

and schedule an appointment with the 374 OSS/OSW Training Manager. At the end of training, ATC personnel are tested for qualification and will receive a familiarization tour of the weather station.

4.7. Climatology Briefings. The 374 OSS/OSW provides climatology information during the 374 AW Quarterly Safety Briefings. All other climatology support will be provided when requested.

4.8. Flight Information Publication (FLIP) Weather Updates. The 374 OSS/OSW will provide information to the Airfield Manager for FLIP entries. Data includes, but is not limited to, 374 OSS/OSW operating hours, PMSV frequency and user information, and 17 OWS contact information. Upon notification from the Airfield Manager that new FLIPs have been published and/or on the FLIP expiration date, the 374 OSS/OSW will validate the accuracy of the new FLIP information and take immediate steps to correct erroneous data. In addition, the FLIPs will be reviewed for changes to SPECI criteria and the 374 OSS/OSW will take actions to update SPECI observation criteria.

4.9. Pre-Deployment Planning. The 374 AW will make every effort to include the 374 OSS/OSW in planning and operations for war, contingency, and military operations other than war. The 374 OSS/OSW leadership will do the following:

4.9.1. Provide pre-deployment planning briefings when requested for deploying units. The briefings will contain current and forecast weather, climatology for deployed location and other previously coordinated weather data as requested. Requirements for pre-deployment briefings should be identified as far in advance as possible.

4.9.1.1. Participate in pre-deployment planning to ensure theater-specific environmental impacts are properly factored in the 374 AW deployment activities.

4.9.2. Ensure personnel who are AEF deployable are prepared to successfully perform their duties in an austere environment with limited communication and weather data access.

4.9.3. Verify GO/NO-GO thresholds for deploying aircraft. If required, modify weather thresholds for the deployed locations using deployed mission and operational requirements, rules of engagement, and theater specific environmental impacts of the supported unit.

4.9.4. Coordinate reach-back support from the appropriate OWS if required.

4.9.5. Develop tactical SOPs and weather products if needed by modifying the 374 OSS/OSW standard set of SOPs and products to incorporate major functions of tactical support activities (i.e., duty priorities, manual observing and augmentation of automated sensors). Duty priorities should be coordinated with the 374 AW.

4.9.6. Perform operational checks on TMQ-53 and other tactical weather equipment.

4.9.7. Ensure 374 OSS/OSW members deploying to a contingency theater follow reporting instructions listed on their orders, and other applicable guidance provided by the Joint Meteorological and Oceanographic Officer (JMO) Meteorological and Oceanographic (METOC) Letter of Instruction (LOI) or Expeditionary Weather Squadron/Expeditionary Operations Support Squadron.

4.10. USFJ/5 AF Contingency and Exercise Support. 374 OSS/OSW personnel will be available to provide operational support for exercises and contingencies involving USFJ or 5 AF assets or interests as long as manning is adequate. The 374 OSS/OSW will rely on reach-back support from the 17 OWS which is in direct support of Pacific Air and Space Operations Center PAOC. This relationship ensures unified support through the theater of weather operations.

Chapter 5

RESOURCE PROTECTION SERVICES

5.1. Weather Watches, Warnings, and Advisories (WWAs). Resource protection is accomplished through a joint effort between the 17 OWS and the 374 OSS/OSW. The 17 OWS is responsible for issuing all forecast products including weather watches and warnings via JET. The 17 OWS will make contact with the 374 OSS/OSW prior to issuing, extending, or cancelling a WWA (when time permits). If differences arise in the issuance, extension, or cancellation of a WWA between the 17 OWS and the 374 OSS/OSW that cannot be resolved, the 17 OWS will be the final authority. The 374 OSS/OSW acts as the “Eyes Forward” for the 17 OWS and is responsible for issuing all observed warnings and advisories during operational hours. The 374 OSS/OSW can issue any forecast warning if there is an immediate threat to life and/or property. In this case, the 374 OSS/OSW will back brief the 17 OWS when time permits and will also be responsible for dissemination to local supported agencies. Conversely, the 374 OSS/OSW will act as the alternate dissemination and notification source for the 17 OWS. The goal is to provide the best possible resource protection to Yokota Air Base. Weather WWAs are documented in the 374 OSS/OSW-17 OWS IDP. See [Attachment 5](#) for customer weather limitations and sensitivities.

5.1.1. Weather Watches. A weather watch is a special notice sent to Yokota AB agencies indicating that conditions are favorable for the development of a particular type of weather phenomena of such intensity to pose a hazard to life or property for which protective measures should be considered. Watches are issued for a 5 nautical mile radius of the center point of the Yokota runway complex. Each watch will be assigned a number following the two-digit number of the current month (i.e., 06-001 would be the first watch in the month of June). **Table 5.1.** contains all of the weather watches and desired lead times issued for Yokota AB. Forecast weather watches are issued IAW AFMAN 15-129V1 and local requirements.

Table 5.1. Yokota AB Forecast Weather Watches.

Phenomena	DLT (in minutes)	ISSUED BY
Lightning within 5 nm	30	17 OWS
Tornado or Funnel Cloud	As potential warrants	17 OWS
Freezing Precipitation	As potential warrants	17 OWS
Surface Winds \geq 50 knots	As potential warrants	17 OWS
Heavy Rain \geq 2 inches in 6 hours	As potential warrants	17 OWS
Heavy Snow Accumulation \geq 2 inches in 12 hours	As potential warrants	17 OWS
Moderate Thunderstorm (winds \geq 35 knots but < 50 knots and/or any hail < 3/4 inch)	As potential warrants	17 OWS
Severe Thunderstorm (winds \geq 50 knots and/or hail \geq 3/4 inch)	As potential warrants	17 OWS
Blizzard Conditions (duration \geq 3 hrs, wind or gusts \geq 30 kts, falling and/or blowing snow with visibility \leq 1/4 sm)	As potential warrants	17 OWS

5.1.1.1. For the Tama Service Annex, the watch for lightning within 5 nautical miles will be issued during daylight hours, 2000Z – 1400Z (0500 JST – 2300 JST). The 17 OWS will contact the 374 AW/CP with specifics on the lightning watch, and the 374 AW/CP will notify the Tama Service Annex. In the event the 17 OWS is unable to issue the lightning watch, the 374 OSS/OSW will take over support and notify the 374 AW/CP in the event of a lightning watch issuance.

Table 5.2. Tama Service Annex (of Yokota AB) Forecast Weather Watch.

Phenomena	DLT (in minutes)	ISSUED BY
Lightning within 5 nm (2000Z – 1400Z only)	30	17 OWS

5.1.2. Weather Warnings. Weather Warnings (WW) are special notices provided to an installation personnel/operational user to notify them 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 the 374 AW to make resource protection decisions. Warnings are issued for a 5 nautical mile radius of the center-point of the Yokota AB runway complex. Each warning will be assigned a number following the two-digit number of the current month (i.e., 06-001 would be the first warning in the month of June). Forecast warnings and desired lead times are contained in [Table 5.3](#) Forecast weather warnings are issued IAW AFMAN 15-129V1 and local requirements.

5.1.2.1. Observed Lightning WWs. Lightning Warnings are issued when lightning is observed or detected within 5 nautical miles of the airfield IAW AFI 91-203, *Air Force Consolidated Occupational Safety Instruction*.

5.1.2.2. The 374 OSS/OSW will issue and cancel observed lightning WWs during duty hours. When issuing or canceling an observed lightning WW, the 374 OSS/OSW will provide timely notification to supported units and the 17 OWS IAW the 17 OWS – 374 OSS/OSW IDP.

5.1.2.3. The 374 OSS/OSW will issue observed lightning warnings separately from, and at times concurrent with, a 17 OWS issued warning for any other criteria. The observed lightning and tornado WW are the only warnings that may be issued separately from warnings for other criteria.

5.1.2.4. The 374 OSS/OSW will include a statement in the lightning and tornado WW cancellation message indicating the effect on any previously issued warnings.

5.1.2.5. During non-duty hours, the 17 OWS will issue and cancel observed lightning warnings IAW the 17 OWS – 374 OSS/OSW IDP. The 17 OWS will issue observed WWs for hazards that affect airfield operations during 374 OSS/OSW non-duty hours when the airfield is open.

Table 5.3. Yokota AB Weather Warnings.

Phenomena	DLT (in minutes)	ISSUED BY
Lightning within 5 nm	Observed	374 OSS/OSW
Tornado	30	17 OWS
Freezing Precipitation	90	17 OWS
Surface Winds \geq 35 knots but $<$ 50 knots	90	17 OWS
Surface Winds \geq 50 knots	120	17 OWS
Heavy Rain \geq 2 inches rain in 6 hours	90	17 OWS
Heavy Snow Accumulation \geq 2 inches in 12 hours	90	17 OWS
Severe Thunderstorm (winds \geq 50 knots and/or hail \geq 3/4 inch)	120	17 OWS
Moderate Thunderstorm (winds \geq 35 knots but $<$ 50 knots and/or any hail $<$ 3/4 inch)	90	17 OWS
Blizzard (duration \geq 3 hrs, wind or gusts \geq 30 kts, falling and/or blowing snow with visibility \leq 1/4 sm)	90	17 OWS

5.1.2.6. For the Tama Service Annex, the warning for lightning within 5 nautical miles will be issued anytime the phenomenon is occurring. The 17 OWS will utilize AFW-WEBS/JET to METWATCH for lightning impacts to the Tama Service Annex. If the web based tools are indicating lightning the 17 OWS will call personnel at the Annex to verify that lightning is occurring. The 17 OWS will then contact the 374 AW/CP with specifics on the lightning watch, and the 374 AW/CP will notify the Tama Service Annex. In the event the 17 OWS is unable to issue the lightning warning, the 374

OSS/OSW will take over support and notify the 374 AW/CP in the event of a lightning warning issuance.

Table 5.4. Tama Service Annex (of Yokota AB) Weather Warning.

Phenomena	DLT (in minutes)	ISSUED BY
Lightning within 5 nm (24/7)	Observed	17 OWS

5.1.3. Weather Advisories (WA). Weather Advisories are special notices provided to an operational user to notify them of environmental conditions impacting operations that is occurring or is expected to occur within a 5 nautical mile radius of the center-point of the Yokota AB runway complex. Each advisory will be assigned a number following the two-digit number of the current month (i.e., 06-001 would be the first warning in the month of June). Forecast advisories and desired lead times are contained in [Table 5.5](#) Forecast weather advisories are issued IAW AFMAN 15-129V1, and local requirements.

5.1.3.1. If the 374 OSS/OSW evacuates its primary duty location and is unable to provide Observed Weather Advisory support from its location, the 17 OWS will assume responsibility for Observed Weather Advisories if the capability to METWATCH exists (i.e., the wind sensor must be operational).

5.1.3.2. Heat Stress Condition. 374th Aerospace Medicine Squadron Bioenvironmental Engineering Flight (374 AMDS/SGPB) calculates and issues the Heat Stress Advisory IAW YOKOTA ABI 48-107, *Heat Stress Monitoring*.

Table 5.5. Yokota AB Weather Advisories.

Phenomena	DLT (in minutes)	ISSUED BY
Surface Winds \geq 25 knots but $<$ 35 knots	30	17 OWS
Snow Accumulation \geq 1/2 inch	120	17 OWS
Freezing Temperature	Observed	374 OSS/OSW
Crosswinds \geq 25 knots	Observed	374 OSS/OSW
Low-Level Wind Shear below 2,000 feet	Observed	374 OSS/OSW
Moderate or Greater Turbulence below 10,000 feet AGL	Observed	374 OSS/OSW
Moderate or Greater Icing below 10,000 feet AGL	Observed	374 OSS/OSW
Heat Stress Advisory(ies)	Observed	374 AMDS/SGPB

5.1.4. WWA Upgrades and Downgrades. Advisories and warnings will be upgraded (i.e., winds increase from 35 knots to 50 knots) or downgraded as required. Upgrades should meet the desired lead-times specified above. **Only one forecast warning may be in effect at a time except when observed lightning has been issued.**

5.1.5. WWA Amendments. Amendments to weather warnings and watches will only be issued to change the valid time and will be issued before the original watch or warning expires. New warnings and watches will be issued for any changes in weather criteria.

5.1.6. WWA Cancellation. Warnings and watches may be cancelled when the weather phenomena are no longer occurring or expected to occur. However, if not cancelled, they will expire at the end of the valid period. Observed advisories will be cancelled when the criteria is no longer occurring and is not expected to occur again in the next hour.

5.1.7. WWA Dissemination. The primary mode of dissemination is through JET. If it is out of service, the 17 OWS and/or 374 OSS/OSW will call each agency as indicated in the notification trees in **Attachment 7**.

5.2. Severe Weather Action Procedures (SWAP). SWAP is in place to ensure that the 374 OSS/OSW has sufficient personnel available during potential/actual severe weather or natural disaster events which may have significant impacts on operations and/or personnel. See **Table 5.6** for conditions requiring SWAP notification/activation.

Table 5.6. Conditions requiring SWAP Notification/Activation.

Conditions requiring SWAP Notification/Activation
Tornado
Severe Thunderstorms (wind \geq 50kt and/or hail \geq 3/4")
Moderate Thunderstorms (wind \geq 35kt but $<$ 50kt and/or hail $<$ 3/4")
Damaging Wind (\geq 50kt)
Freezing Precipitation
Heavy Rain (\geq 2" in 6 hrs)
Heavy Snowfall (\geq 2" in 12 hrs)
Yokota placed in TCCOR 2 or below
*Volcanic Activity (see note 1)
*Earthquakes (see note 1)
*Tsunamis (see note 1)
Note 1: 374 OSS/OSW leadership will assess the need to activate SWAP

5.2.1. SWAP Activation. SWAP can be activated by either the 374 OSS/OSW or the 17 OWS. When the 17 OWS issues a WWA that meets SWAP criteria, the 17 OWS will notify the duty forecaster or the stand-by forecaster to start the SWAP procedures. If unable to reach the primary stand-by forecaster, 17 OWS will notify the 374 CP who will then contact 374 OSS/OSW leadership. Whoever is notified first will assume SWAP team lead responsibilities and will implement SWAP procedures.

5.2.2. SWAP Initiation. The SWAP team lead will do the following:

- 5.2.2.1. Notify Flight Commander, NCOIC, or WWO of SWAP implementation and assess the need for additional personnel.
- 5.2.2.2. Increase METWATCH/MISSIONWATCH using available tools (i.e., radar, METSAT, lightning surveillance, etc.)
- 5.2.2.3. Relay vital weather information to the 374 AW/CP in a timely manner. Prepare and/or coordinate WWA issuance with 17 OWS.
- 5.2.2.4. Augment observing equipment as required (“Eyes Forward” support to the 17 OWS).
- 5.2.2.5. Ensure meteorological discussions are coordinated with the 17 OWS.
- 5.2.2.6. Verify horizontal consistency with WWAs, MWP, and TAF.
- 5.2.2.7. Document all actions in the shift log.
- 5.2.2.8. Update unit and wing leadership as required.
- 5.2.2.9. Ensure proper OPREP-3 information is passed to 374 CP, PACAF A3/6TX & 17 OWS following the occurrence of severe weather if required.
- 5.2.2.10. Archive local data for future review and sharing with the 17 OWS or JTWC.

5.3. Tropical Cyclone Procedures. The 374 OSS/OSW will monitor all tropical storms or typhoons that are forecasted to track within 300nm of a USFJ installation as forecasted by the Joint Typhoon Warning Center (JTWC). They will keep 374 AW, USJF, and 5AF leadership informed of the current situation and forecast track of the storm. No deviation from the official forecast position, track, movement, maximum wind speed, or intensity trend is authorized; however, 374 OSS/OSW will also stress that the accuracy of the forecasts beyond 72 hours is subject to a wide margin of error.

5.3.1. The 374 OSS/OSW will provide tropical cyclone briefings as requested by the 374 AW, USFJ, and 5AF leadership. Briefings are typically conducted through 374 OG meetings, verbally with 374 AW leadership, at Stand-up Briefings and/or Crisis Action Team (CAT) meetings, and/or through tropical cyclone update emails.

5.3.1.1. In the event the 374 AW decides to evacuate aircraft, the 374 OSS/OSW will provide mass weather briefings at the 459 AS and 36 AS as needed.

5.3.2. TCCOR levels are conditions of readiness designed to guide personnel in preparations for a tropical cyclone impact. Per USFJ Instruction 15-4001, TCCOR level(s) are issued for the Kanto Plain. The TCCOR authority is COMUSFJ and authority is normally delegated to the USFJ/J3. The OSS/OSW is responsible for providing USFJ/J3 with TCCOR recommendations as outlined in USFJ Instruction 15-4001, *TCCOR* for all installations within the Kanto Plain (Yokota AB, NAF Atsugi, Camp Zama, and Camp Fuji) as well as 374 AW leadership TCCOR recommendations for Yokota AB (see **Table 5.7.**).

5.3.2.1. If the Kanto Plain is expected to be impacted by a tropical cyclone, the 374 OSS/OSW will convene and facilitate a tropical cyclone conference call for bases located in the Kanto Plain to discuss the forecasted storm effects across the region and potential TCCOR recommendations. Forecasters and emergency managers from JTWC, 17 OWS, Camp Zama, Atsugi NAS, Camp Fuji, and Yokosuka will be invited to attend.

5.3.2.2. Once the TCCOR authority has declared a change in levels, the 374 OSS/OSW will assist in dissemination of the TCCOR announcement to numerous agencies throughout the Kanto Plain.

5.3.2.3. Tropical cyclone update emails will be provided every 12 hours until TCCOR 4 has been declared for the Kanto Plain. When TCCOR 4 has been declared for the Kanto Plain, email updates will be provided every six hours. The 374 OSS/OSW will implement SWAP as discussed in paragraph 5.2. when TCCOR 2 has been declared for Yokota AB.

Table 5.7. TCCOR Criteria and Destructive Winds.

Destructive Winds are defined as 50 knots sustained or greater or 60 knot or greater wind gusts.	
TCCOR 5	Destructive winds are <i>possible</i> within 96 hours.
TCCOR 4	Destructive winds are <i>possible</i> within 72 hours.
TCCOR 3	Destructive winds are <i>possible</i> within 48 hours.
TCCOR 2	Destructive winds <i>anticipated</i> within 24 hours.
TCCOR 1	Destructive winds <i>anticipated</i> within 12 hours.
TCCOR 1 Caution*	Winds of 35-49 knots sustained are occurring on the installation.
TCCOR 1 Emergency	Destructive winds are occurring on the installation.
TCCOR Recovery*	After the passage of a TC when destructive winds have subsided, work and survey crews are sent out to determine the extent of damage and to establish safe zones around hazards. Until the recovery process is declared complete (TCCOR All Clear), the general base population would normally be asked to remain indoors.
TCCOR All Clear*	The storm is over and not forecast to return and recovery efforts are considered complete by the installation commander.
TCCOR Storm Watch	Strong winds of 35 knots sustained or greater are possible due to the proximity of a tropical cyclone; however, winds are not forecasted to meet the destructive wind criteria. Strong winds will meet TCCOR 1 Caution criteria. The storm is also close enough to the area that a heightened alert status is necessary in order to rapidly establish regular TCCOR condition should the storm deviate from the forecast track. Personnel should follow Standard Operation Procedures for TCCOR Storm Watch and stay alert for any changes to TCCOR status.
*Note: For Yokota AB, the TCCOR Authority is the USFJ J3; however, TCCOR 1 Caution/Emergency/Recovery/All Clear are delegated to the Installation Commander by the TCCOR Authority. The wind definitions stated are a guideline. Local commanders can set these conditions as required for the safety and protection of their service members, families, and facilities.	

5.3.3. 17 OWS Support. The 17 OWS will perform the METWATCH and serve as the primary liaison between JTWC and the 374 OSS/OSW.

5.3.3.1. When tropical storms are forecasted to impact USJF installations within 96 hours, the 17 OWS will generate a Tropical Cyclone Threat Assessment Product (TC-TAP) bulletin for tropical cyclone support as outlined in PACAFI 15-101. Every effort will be made to have a fully coordinated TC-TAP in effect NLT 90 minutes after the latest posted JTWC warning and the 374 OSS/OSW will utilize the information when making TCCOR recommendations.

5.3.3.2. The TC-TAP bulletin produced for Yokota AB will include all mandatory items highlighted in PACAFI 15-101 and in the 374 OSS/OSW-17 OWS IDP. These items include the operationally significant parameters listed in [Table 5.8](#)

Table 5.8. Mandatory TC-TAP Forecasted Weather Parameters.

Mandatory TC-TAP Forecasted Weather Parameters
15kt crosswinds
25kt crosswinds
35kt sustained winds
50kt sustained winds
Max forecasted sustained winds
Max forecasted gusts
Amount of precipitation expected

5.3.3.3. WWAs will be issued until Yokota AB is directed to implement TCCOR 1. Although individual watches and warnings will not be issued, all WWAs (with the exception of frozen precipitation due to the nature of tropical cyclones), are considered possible after such time that Yokota AB assumes TCCOR 1. WWA issuance will resume after TCCOR All Clear has been declared.

5.4. Emergency/Crisis Action Response. In the event of an aircraft or ground mishap, the 374 OSS/OSW will do the following:

5.4.1. Make a log of the incident to include as much known data about the incident.

5.4.2. Increase METWATCH.

5.4.2.1. When the FMQ-19 is in automated observing mode, forecasters will reassess the weather conditions from the official observation point to ensure the FMQ-19 is reporting correctly and supplement weather conditions if needed.

5.4.2.2. If the FMQ-19 is in augmentation back-up mode, forecasters will take and disseminate a SPECI observation.

5.4.3. Inform 374 OSS/OSW flight leadership of the incident.

5.4.4. Inform the 17 OWS of the incident and request a data save be completed by the 17 OWS (or the appropriate servicing OWS if the mission crossed AORs).

5.4.5. Create a mishap folder and save the following weather data and products produced at least 12 hours prior to the incident through 2 hours after the incident: radar images, METSAT imagery, JET incident archive, upper air and surface analysis package, hazard charts, JMA PIREP and SIGMET chart(s), TAFs and observations (departure point, destination, and alternates), WWAs, nearest upper air sounding, copies of briefing material (DD Form 175-1, MEF, Verbal Brief Log, etc.), AF Form 3803, current/previous forecasts, surface observations near the location of the incident, PMSV log, and daily shift log.

5.4.6. Save all weather data/products to a CD, deliver to the Airfield Operations Flight Commander for inclusion into their mishap archive and inform Wing Safety that the weather archive is complete and with the Airfield Operations Flight Commander.

5.4.7. Generate an OPREP-3 report and ensure it is passed to 374 CP, PACAF A3/6TX & 17 OWS as per local regulations.

5.5. Severe Weather Damage Reporting/OPREPs. The 374 OSS/OSW leadership will submit OPREP-3 data IAW AFMAN 15-129, *Air and Space Weather Operations- Exploitation*, and AFI 10-206, *Operational Reporting*, when one of the following occurs:

5.5.1. A severe weather event. A severe weather event is defined as winds greater than or equal to 50kts, hail greater than or equal to $\frac{3}{4}$ inch, and/or a tornado.

5.5.2. When the 374 CP requests weather information due to damage/mishap report(s) or significant impacts on operations. Typically these requests are a result of winds greater than or equal to 50kts, hail greater than or equal to $\frac{3}{4}$ inch, tornadoes, lightning strikes, snow storms, heavy rain, tropical cyclones, and TCCOR declaration/changes.

5.5.3. The 374 OSS/OSW will provide the information listed in Table 5.9. to the 374 CP, PACAF A3/6TX, and the 17 OWS.

5.5.3.1. Should the 374 CP submit an OPREP-3 report, they will provide a copy to the 374 OSS/OSW. The 374 OSS/OSW will then forward that report to PACAF A3/6TX and the 17 OWS.

Table 5.9. Items Required for OPREP-3 Report.

#	Item
1.	The actual severe weather experienced including:
	a. Location.
	b. Date and Time.
	c. Phenomenon.
2.	Forecast and observation that was valid at the time of occurrence.
3.	Any WWAs issued including.
	a. Issue date and time.
	b. Valid time.
	c. Actual lead-time.
	d. Customers desired lead-time.
4.	Operational status of meteorological equipment prior to the severe weather event.

5.6. Natural Disasters. In the case of natural disasters the 374 OSS/OSW will follow the actions under the Installation Emergency Management Plan 10-2 (IEMP 10-2). In addition, they will do the following:

5.6.1. Volcanic Ash. The 374 OSS/OSW will monitor the Tokyo Volcanic Ash Advisory Center (VAAC) website, AFW-WEBS, and Japan Meteorological Agency (JMA) for volcanic ash plume advisories. If the 374 OSS/OSW leadership determines that volcanic ash will affect Yokota AB, 374 AW leadership will be advised and the 374 OSS/OSW will begin 24/7 operations until there is no longer a threat. Briefing slides will be completed twice daily and contain the latest satellite image of the eruption, latest ash plume forecast, and wind flow vulnerability forecast. Additionally, the ash concentration product will be included for consideration by 374 AMDS/SGPB to determine volcanic ash inhalation risk for the base.

5.6.1.1. If a FVFE01 (JMA volcanic ash advisory) bulletin is received (or information from a .mil or .gov source indicates an event) the 374 OSS/OSW will immediately notify the USFJ JOC if there are any indications that a volcanic event could significantly affect USFJ military operations.

5.6.2. Earthquake/Tsunami. When a WEJP40 bulletin is received (or information from a .mil or .gov source indicates an event) the 374 OSS/OSW will:

5.6.2.1. Immediately notify the USFJ JOC if one of the requirements below is met. Relay all pertinent earthquake and tsunami data (include expected locations and times of tsunami impact as well as predicted height of tsunami, if available).

5.6.2.1.1. An earthquake/aftershock of magnitude 6.0 or greater in Japan or Korea.

5.6.2.1.2. An earthquake/aftershock of magnitude 7.0 or greater in the rest of the PACOM AOR.

5.6.2.1.3. A tsunami of at least two meters expected to affect land areas throughout the PACOM AOR.

5.6.2.2. 374 OSS/OSW leadership will assess the need to initiate SWAP procedures.

5.7. Chemical Biological, Radiological, Nuclear and High-Yield Explosive (CBRNE).

5.7.1. The 374 OSS/OSW will provide weather data and evaluate the accuracy of transport model data against any/all relevant observation data available as requested by the installation EM, Fire Emergency Services (FES), and Bioenvironmental Engineering (BEE).

5.7.2. Chemical Downwind Messages (CDM). The 374 OSS/OSW will request a CDM IAW AFMAN 15-129V2. The 374 OSS/OSW will then gather the information from AFW-WEBS and provide this data to the requesting agency(ies).

Chapter 6

BASE AGENCY SUPPORT

6.1. General. This chapter contains the specific local requirements submitted by various organizations throughout Yokota AB and verified by the 374 OSS/OSW leadership. The requirements will be reviewed annually by the requesting unit and updated as required. If the MEF or a weather watch, warning, or advisory does not cover a specific local weather requirement, it is the responsibility of the individual unit to contact the 374 OSS/OSW to coordinate support.

6.2. 374 AW Commander (374 AW/CC) will:

6.2.1. Review and approve the Yokota AB Instruction 15-101, *Weather Support*, at a frequency no less than biennially.

6.3. 374 AW/CP will:

6.3.1. Sound the Giant Voice siren in the event of a tornado warning for Yokota AB.

6.3.2. Disseminate weather watches, warnings, and advisories to organizations found in the Yokota AB notification tree and through Yokota's Installation Warning System (IWS).

6.3.3. Notify the 374 OSS/OSW if the primary phone lines go out and use alternate numbers to pass weather watch, warning, and advisory notification.

6.3.4. Serve as a point of contact (POC) between an route aircraft and the 374 OSS/OSW for phone patch weather requests.

6.3.5. Notify the 374 OSS/OSW of Crisis Action Team (CAT) activation and changes to assembly times.

6.3.6. Notify the 374 OSS/OSW of Emergency Operations Center (EOC) activation.

6.3.7. Notify Wing leadership and various base agencies of severe weather when notified by OSAA via Secondary Crash Net (SCN).

6.3.8. Notify the 374 OSS/OSW when any agency reports a funnel cloud, tornado, or significant weather event.

6.3.9. Notify the 374 OSS/OSW upon receipt of a volcanic ash advisory/warning that may impact the Kanto Plain.

6.3.10. Notify the 374 OSS/OSW upon receipt of an earthquake (6.0 or greater) or any tsunami notification effecting Japan.

6.3.11. Provide the 374 OSS/OSW with a copy of any OPREP-3 reports which contain weather information.

6.3.12. Provide the 374 OSS/OSW with a copy of any Post Tropical Cyclone Report sent to USFJ.

6.4. 374 AW Safety (374 AW/SE) will:

- 6.4.1. Request seasonal weather briefings from the 374 OSS/OSW for AW-sponsored safety events. 374 AW/SE and 374 OSS/OSW will collaborate to determine the best topics to present to the 374 AW aircrews.
- 6.4.2. Request weather data for inclusion in aircraft mishap or aircraft accident report.

6.5. 374 AW Public Affairs (374 AW/PA) will:

- 6.5.1. Maintain the Commanders Access Channel.
- 6.5.2. Coordinate news feed to AFN channels during significant weather events (i.e., typhoons, heavy snow, etc.).

6.6. 374 OSS.

6.6.1. Airfield Operations Flight (374 OSS/OSA).

6.6.1.1. Airfield Management Operations Section (OSAA) will:

- 6.6.1.1.1. Ensure dissemination of weather watches, warnings, and advisories as outlined in this instruction.
- 6.6.1.1.2. Notify the 374 OSS/OSW of any aircraft mishap via the SCN.
- 6.6.1.1.3. Notify the 374 OSS/OSW of initial conditions and all changes in Runway Surface Condition (RSC) and Runway Condition Readings (RCR).
- 6.6.1.1.4. Notify the 374 OSS/OSW of all changes to published approach minimums.
- 6.6.1.1.5. Provide an airfield orientation for 374 OSS/OSW personnel.
- 6.6.1.1.6. Coordinate with 374 OSS/OSW on changes to 374 AWI 13-204, *Airfield Operations*.
- 6.6.1.1.7. Monitor frequency 344.6 MHz during normal duty hours, when PMSV is inoperable (Tower will monitor the frequency until OSAA receives proper equipment).
- 6.6.1.1.8. Immediately notify 374 OSS/OSW leadership when a FLIP has been published.

6.6.1.2. Air Traffic Control (OSAT) will:

- 6.6.1.2.1. Perform a Cooperative Weather Watch IAW AFI 13-204V3. At a minimum, controllers will notify the 374 OSS/OSW duty forecaster when conditions outlined in Chapter 2 paragraph 2.7. of this document occur.
- 6.6.1.2.2. Solicit aircraft for PIREPs IAW FAAO 7110.65 2-6-3.
- 6.6.1.2.3. Provide a tower orientation for 374 OSS/OSW personnel.
- 6.6.1.2.4. Notify the 374 OSS/OSW forecaster when the operational runway changes.
- 6.6.1.2.5. Immediately notify 374 OSS/OSW when a JET outage is discovered.

6.6.1.3. Radar Approach Control, RAPCON (OSAR) will:

- 6.6.1.3.1. Relay any PIREPs to the 374 OSS/OSW duty forecaster or urgent PIREPs to the 17 OWS outside of the 374 OSS/OSW operating hours as outlined in paragraph 2.7.1.5.1.
- 6.6.1.3.2. Provide a RAPCON orientation for 374 OSS/OSW personnel.
- 6.6.1.3.3. Immediately notify 374 OSS/OSW when a JET outage is discovered.
- 6.6.1.4. Airfield System Maintenance (OSAM) will:
 - 6.6.1.4.1. Maintain all authorized government weather sensing and display equipment at Yokota AB, and Hardy Barracks IAW the ATCALs Restoral Memorandum.
 - 6.6.1.4.2. Maintain all technical orders to meteorological equipment and advise operators of significant changes.
 - 6.6.1.4.3. Coordinate with the 374 OSS/OSW on routine maintenance to ensure it does not impact mission support.
- 6.6.2. Weapons & Tactics Flight (374 OSS/OSK). 374 OSS/OSK will provide 374 OSS/OSW with graphics depicting new flight training routes.

6.7. 36 AS and 459 AS will or should:

- 6.7.1. Will notify the 374 OSS/OSW leadership of changes to mission or mission limiting parameters (i.e., addition of a new airframe to Yokota AB).
- 6.7.2. Should coordinate with 374 OSS/OSW leadership on mission support feedback, mission verification product accuracy, and support policies annually or on occasions of major publications changes affecting weather minimums required for flight (i.e., changes to AFI 11-2C-130V3, AFI 11-202V3, AFMAN 11-217V3).
- 6.7.3. Will notify the 374 OSS/OSW of additional support requirements or flying requirements that are not covered in the daily flying schedule.
- 6.7.4. Will provide contact information for mission clarification and follow-up.
- 6.7.5. Should notify the 374 OSS/OSW when the Yokota MEF planning weather is unavailable on the 374 OSS/OSW website.
- 6.7.6. Should send PIREPs over PMSV for weather conditions over any target areas.
- 6.7.7. Should provide feedback to the 374 OSS/OSW utilizing weather feedback forms included within mission folders when unexpected or mission impacting weather situations occur.
- 6.7.8. Will provide a completed 374 AW Transient Weather Request form to the 374 OSS/OSW when flying to destinations outside the Kanto Plain.
- 6.7.9. The 459 AS will serve as the weather flight Alternate Operating Location. Will furnish at a minimum: dedicated phone, desk space and LAN access.
- 6.7.10. Mission commanders will request a weather brief in accordance with paragraph 3.6. of this instruction. If there are any changes to briefing times/locations, the mission commander will notify the 374 OSS/OSW immediately.

6.7.11. The 459 AS and 36 AS should include 374 OSS/OSW in operational exercises if able.

6.8. 374th Logistics Readiness Squadron (374 LRS/LGRDX) will:

6.8.1. Notify the 374 OSS/OSW of all mobility concept briefings as soon as scheduled.

6.8.1.1. Provide 374 OSS/OSW with all necessary information needed to be presented at the mobility concept briefings.

6.9. 374th Security Forces Squadron (374 SFS) will:

6.9.1. Promptly inform the 374 OSS/OSW of any hazardous weather observed (tornado, hail, etc.).

6.10. 374th Aerospace Medicine Squadron Bioenvironmental Engineering (374 AMDS/SGPB) will:

6.10.1. Maintain OPR for Heat Stress Index in YOKOTA ABI AWI 48-107.

6.10.2. The SGPB will implement the Heat Stress Advisory and disseminate via phone to 374 AW/CP.

6.11. 374 CES will:

6.11.1. Notify 374 OSS/OSW of any construction that will/may impact power or communication systems in building 703 and/or to either of the FMQ-19 weather sensors located on the north and south ends of the airfield.

6.11.2. Fix mission essential equipment needed by the 374 OSS/OSW in accordance with the ATCALs Restoral Memorandum.

6.12. 374 CS will:

6.12.1. Fix mission essential equipment needed by the 374 OSS/OSW IAW the ATCALs Restoral Memorandum.

6.13. Defense Threat Reduction Agency, Detachment Japan (DTRA/J3OSSJ) will:

6.13.1. Provide mission details necessary for generating weather support.

6.13.2. Provide feedback on actual weather conditions at operational areas.

6.13.3. Quarterly, notify the 374 OSS/OSW when a New START Treaty (NST) Working Group session will convene.

6.14. 374 OSS/OSW will:

6.14.1. Provide the following to the 374 AW/CP:

6.14.1.1. Notification via IWWC phone calls issued through JET, of all issued, cancelled, or extended weather watches, warnings, and advisories. (JET can track positive contact via IWWC WWA tracker.)

6.14.1.2. Weather data for OPREP-3 reports IAW OPREP-3 reporting procedures in AFI 10-206, *Operational Reporting*.

6.14.1.3. Notification when 374 OSS/OSW must evacuate to the Alternate Operating Location.

- 6.14.2. Provide the following to the 374 AW/SE:
 - 6.14.2.1. Weather briefings for safety events and other safety briefings when requested.
 - 6.14.2.2. Weather data pertinent to an aircraft mishap or accident.
- 6.14.3. Provide the following to the 374 AW/PA:
 - 6.14.3.1. Notification of non-governmental requests for weather information.
- 6.14.4. Provide the following to the 374 OSS/OSAM:
 - 6.14.4.1. Notification of issued, cancelled, or extended weather watches, warnings, and advisories.
 - 6.14.4.2. Input for FLIP entries.
 - 6.14.4.3. Accuracy validation of the weather support information each time the FLIP is published and immediate actions to correct erroneous data.
 - 6.14.4.4. Notify airfield leadership if continuous RVR reporting is needed during airfield closure hours. The RVR system requires the runway lights to be left on in order for the AMOS to work properly.
- 6.14.5. Provide the following to 374 OSS/OSAT and 374 OSS/OSAR:
 - 6.14.5.1. Weather indoctrination for the ATC Limited Observation Training as required by CFETP 1C1X1, *Air Traffic Control Operations*.
 - 6.14.5.2. Controllers certification for the limited weather observations on AF Form 3622, *Air Traffic Control/Weather Certification and Rating Record*.
 - 6.14.5.3. IWWC notification via JET of all issued, cancelled, or extended weather watches, warnings, and advisories.
 - 6.14.5.4. Daily radio checks to ensure proper PMSV operation.
 - 6.14.5.5. Monitor frequency 344.6 MHz during normal duty hours, when PMSV is inoperable (until such time OSAM takes responsibility with the proper equipment).
 - 6.14.5.6. Visibility checkpoint charts and pictures to include certification of charts for main and alternate tower sites.
 - 6.14.5.7. Immediate notification when there is a JET outage as well as initiate fix actions through OSAM.
- 6.14.6. Provide the following to the 374 OSS/OST:
 - 6.14.6.1. Seasonal weather and flight hazards training during IRC classes (as requested).
- 6.14.7. Provide the following to the 36 AS and 459 AS:
 - 6.14.7.1. Mission planning and execution weather data according to the daily flying schedule and as required.
 - 6.14.7.2. Weather updates for significant weather changes to the AS duty desks for dissemination to off-station aircrews if a POC/MC is not available for direct contact.

- 6.14.7.3. Weather data in person at formal mission briefings as long as the formal briefing is requested in a timely manner.
- 6.14.7.4. The Yokota MEF via email, hand-delivery, or fax when the 374 OSS/OSW website is unavailable.
- 6.14.7.5. Provide or arrange for weather briefings and mission watch for all 374 AW missions regardless of departure location and destination (coordination needs to be prearranged by squadrons for flights originating outside of Home Station).
- 6.14.7.6. Quarterly mission forecast accuracy statistics.
- 6.14.8. Provide the following to the 374 OSS/OSAM:
 - 6.14.8.1. Notification of meteorological equipment outages.
- 6.14.9. Provide the following to the 374 CES:
 - 6.14.9.1. Contact CE Customer Support 225-5790/5791 or the Snow Control Center (SCC) at 225-5336/8992 or the CE UCC at 225-7310 when snow or ice is forecast for Yokota AB. After duty hours (1615L), contact 225-7290 (Fire Emergency Services Flight who will in turn notify 374 CES Staff Duty Officer), and pass the following information:
 - 6.14.9.1.1. Current wind direction and speed.
 - 6.14.9.1.2. Forecast wind direction and speed.
 - 6.14.9.1.3. High and low temperatures during the period of precipitation.
 - 6.14.9.2. Weather information to 374 CES (by request) for their requirement to generate chemical downwind messages (CDM).
- 6.14.10. Provide the following to the 374 CES/CEF:
 - 6.14.10.1. Weather support to any Toxic Corridor forecast and/or fire ground operations planning (by request).
- 6.14.11. Provide the following to the 374 LRS/LGRDX:
 - 6.14.11.1. The weather portion of the mobility concept briefing as requested by the Installation Deployment Officer.
- 6.14.12. Provide the following to DTRA:
 - 6.14.12.1. Maintain classification on all known mission details.
 - 6.14.12.2. Aircrew planning weather the day prior to the mission and a weather briefing prior to flight.

6.14.12.3. Climatology weather briefings to the inspection team if requested.

6.14.12.4. Attend the quarterly New START Treaty (NST) Working Group session when convened.

DOUGLAS C. DELARAMTER, Colonel, USAF
Commander

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

- AFDD 3-59, *Weather Operations*, 27 August 2012
- AFI 10-206, *Operational Reporting*, 11 June 2014
- AFI 10-401, *Air Force Operations Planning and Execution*, 7 December 2006
- AFI 11-2C-12V3, *C-12 Operations Procedures*, 16 June 2015
- AFI 11-2C-130V3, *C-130 Operations Procedures*, 23 April 2012
- AFI 11-202V3, *General Flight Rules*, 7 November 2014
- AFI 13-204V3, *Airfield Operations Procedures and Programs*, 1 September 2010
- AFI 15-114, *Functional Resource and Weather Technical Performance Evaluation*, 7 December 2001
- AFI 15-127, *Weather Training*, 20 January 2016
- AFI 15-128, *Air Force Weather Roles and Responsibilities*, 7 February 2011
- AFI 33-200, *Cybersecurity Program Management*, 31 August 2015
- AFI 33-364, *Records Disposition-Procedures and Responsibilities*, 22 December 2006
- AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*, 25 June 2013
- AFI 36-2201, *Air Force Training Program*, 15 September 2010
- AFI 90-802, *Risk Management*, 11 February 2013
- AFI 91-203, *Air Force Consolidated Occupational Safety Instruction*, 15 June 2012
- AFMAN 10-2503, *Operations in a Chemical Biological, Radiological, Nuclear, and High-Yield Explosive (CBRNE) Environment*, 6 July 2011
- AFMAN 11-210, *Instrument Refresher Program (IRP)*, 3 February 2005
- AFMAN 11-217V3, *Supplemental Flight Information*, 28 February 2009
- AFMAN 15-111, *Surface Weather Observations*, 27 February 2013
- AFMAN 15-124, *Meteorological Codes*, 28 February 2013
- 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
- AFMAN 36-2234, *Instructional System Development*, 1 November 1993
- AFPAM 10-100, *Airman's Manual*, 1 March 2009
- AFPAM 90-803, *Risk Management (RM) Guidelines and Tools*, 11 February 2013.
- AFVA 15-137, *Operational Weather Squadron Areas of Responsibility*, 27 October 2015

AFWA TN-98/002, *Meteorological Techniques*, 13 February 2012

AFH 36-2235V11, *Information for Designers of Instructional Systems Application to Unit Training*, 1 November 2002

Air Force Strategic Plan on Weather Reengineering

Army Field Manual 3-3, *Chemical and Biological Contamination Avoidance*, 16 November 1992

Army Regulation 115-10/AFJI 15-157, *Weather Support for the US Army*, 10 September 2015

FAA Order 7340, *Contractions Handbook*, 15 October 2015

FAA Order 7110.10, *Flight Service*, 10 November 2014

FYI 42, *Instrument Refresher Course*

Joint Publication 3-59, *Meteorology and Oceanographic Operations*, 7 December 2012

Installation Data Page between 374 OSS and 17 OWS

PACAFI 15-101, *Weather Support for PACAF*, 23 April 2014

USPACOMINST 0539.1, *PACOM Tropical Cyclone Operations*

USFJI 15-4001, *Tropical Cyclone Conditions of Readiness (TCCOR)*, 1 March 2013

Annex H to HQ ACC OPOD 84-12, *Environmental Services (NAOC)*

War Mobilization Plan (Annex CC)

YOKOTA ABI 13-204, *Airfield Operations*, 24 May 2016

YOKOTA ABI 48-107, *Heat Stress Monitoring*, 20 June 2012

YOKOTA ABI 10-203, *Yotota Crisis Action Team (CAT) Operations*, 9 May 2012

Forms Adopted

DD Form 175, *Military Flight Plan*

DD Form 175-1, *Flight Weather Briefing*

DD Form 1801, *DoD International Flight Plan*

AF Form 623, *Individual Training Record Folder*

AF Form 797, *Job Qualification Standard Continuation/Command JQS*

AF Form 847, *Recommendation for Change of Publication*

AF Form 1098, *Special Task Certification and Recurring Training*

AF Form 3622, *Air Traffic Control/Weather Certification and Rating Record*

AF Form 3803, *Surface Weather Observation (METAR/SPECI)*

374 OSS/OSW Form 181, *36 AS mission execution forecast*

Abbreviations and Acronyms

AB—Air Base

AEF—Air Expeditionary Force
AF—Air Force
AFB—Air Force Base
AFH—Air Force Handbook
AFI—Air Force Instruction
AFMAN—Air Force Manual
AFWA—Air Force Weather Agency
AFW—Air Force Weather
AFW-WEBS—Air Force Weather Web Services
AGL—Above Ground Level
ALSTG—Altimeter Setting
AMC—Air Mobility Command
AMDS—Aerospace Medicine Squadron
AMOPS—Airfield Management Operations Section
AMOS—Automated Meteorological Observing System
AOL—Alternate Operating Location
AOR—Area of Responsibility
AS—Airlift Squadron
ASE—Airfield Services Element
ATC—Air Traffic Control
AW—Airlift Wing
BEE—Bioenvironmental Engineering
BWW—Basic Weather Watch
CAT—Category
CAT—Crisis Action Team
CBRN—Chemical, Biological, Radiological, Nuclear
CDM—Chemical Downwind Message
CES—Civil Engineering Squadron
COOP—Cooperative Outage Procedures
CP—Command Post
CSAF—Chief of Staff of the Air Force
CS—Communications Squadron

CWW—Cooperative Weather Watch
DLT—Desired Lead Time
DoD—Department of Defense
DTRA—Defense Threat Reduction Agency
EOC—Emergency Operations Center
EU—Exploitation Unit
EWO—Emergency War Orders
FAA—Federal Aviation Administration
FES—Fire Emergency Services
FLIP—Flight Information Publication
FSS—Force Support Squadron
FSSC—Fielded Systems Service Center
GDSS—Global Decision Support System
GMT—Greenwich Mean Time
GPS—Global Positioning System
GR—Hail
GS—Small Hail or Snow Pellets
HF—High Frequency
HQ—Headquarters
IAW—In Accordance With
IDP—Installation Data Page
IFR—Instrument Flight Rules
IRC—Instrument Refresher Course
IWS—Installation Warning System
IWWC—Integrated Weather Warning Capability
JET—Joint Environmental Toolkit
JMO—Joint Meteorological and Oceanographic Officer
JST—Japan Standard Time
JTWC—Joint Typhoon Warning Center
KTS—Knots
LAN—Local Area Network
LOI—Letter of Instruction

MAJCOM—Major Command
MEDEVAC—Medical Evacuation
MEF—Mission Execution Forecast
MEFP—Mission Execution Forecast Processes
METAR—Meteorological Aviation Report
METOC—Meteorological and Oceanographic
METSAT—Meteorological Satellite
METWATCH—Meteorological Watch
MOA—Memorandum of Agreement
MWE—Mission Weather Element
MWP—Mission Weather Product
NAOC—National Airborne Operations Center
NAS—Naval Air Station
NCC—Network Control Center
NCOIC—Non Commissioned Officer in Charge
NIPRNET—Non-Secure Internet Protocol Router Network
NOTAMS—Notices to Airmen
NST—New START Treaty
NVG—Night Vision Goggles
OG—Operations Group
OIC—Officer in Charge
OPLANS—Operation Plans
OPR—Office of Primary Responsibility
OPREP—Operational Report
ORM—Operational Risk Management
OSAT/OSAR—Operations Support Tower and RAPCON
OSS—Operations Support Squadron
OWA—Observed Weather Advisories
OWS—Operational Weather Squadron
PACAF—Pacific Air Forces
PAOC—Pacific Air and Space Operations Center
PA—Public Affairs, or Pressure Altitude

PIREP—Pilot Report
PMSV—Pilot to Metro Service
POC—Point of Contact
RAPCON—Radar Approach and Control
RCR—Runway Condition Readings
RDS—Air Force Records Disposition Schedule
RSC—Runway Surface Condition
RVR—Runway Visual Change
SATCOM—Satellite Communications
SCC—Snow Control Center
SCN—Secondary Crash Net
SE—Safety Office
SFS—Security Forces Off ice
SIPRNET—Secure Internet Protocol Router Network
SLP—Sea Level Pressure
SM—Statute Miles
SOP—Standard Operating Procedure
SPECI—Aviation Selected Special Weather Report
SPECI—Special Weather Observation
SPO—System Program Office
SW—Southwest
SWAP—Severe Weather Action Procedures
SWAT—Severe Weather Action Team
TAF—Terminal Aerodrome Forecast
TAWS—Target Acquisition Weather Software
TC—Tropical Cyclone
TCCOR—Tropical Cyclone Conditions of Readiness
TC-TAP—Tropical Cyclone-Threat Assessment Product
TDA—Tactical Decision Aid
TMOS—TMQ-53 Tactical Meteorological Observation System
TO—Technical Order
TS—Thunderstorms

TWR—Tower

UCC—Unit Control Center

UFN—Until Further Notice

UHF—Ultra High Frequency

USFJ—US Forces Japan

USPACOM—United States Pacific Command

VA—Volcanic Ash

VFR—Visual Flight Rules

VHF—Very High Frequency

VIS—Visibility

VMC—VFR Meteorological Condition

VOR—VHF Omni Range

WA—Weather Advisories

WWA—Watches, Warnings, and Advisories

WW—Weather Warnings

Attachment 2

TAF AND WEATHER OBSERVATION THRESHOLD CRITERIA

A2.1. TAF Specification Criteria. The elements in the TAF will be specified IAW the guidance in AFMAN 15-129 Volume 1 and general flight rules stated in AFI 11-202, Volume 3. 17 OWS will issue the TAF using the criteria listed in the following table.

Table A2.1. Yokota AB TAF Specification/Amendment Criteria.

Forecast Element/Occurrence	TAF Specification/Amendment Criteria (AFMAN 15-124)	
Ceiling observed or later expected to decrease to less than, or if below, increase to equal or exceed:	Category E Category D Category C Category B Category A	≥ 2000 feet < 2000 feet but ≥ 1000 feet < 1000 feet but ≥ 800 feet < 800 feet but ≥ 300 feet < 300 feet
Prevailing Visibility observed or later expected to decrease to less than, or if below, increase to equal or exceed:	Category E Category D Category C Category B Category A	≥ 3 SM < 3 SM but ≥ 2 SM < 3 SM but ≥ 2SM < 2 SM but ≥ 1/2 SM < 1/2 SM
Surface Winds	<p>Wind Speed: The difference between the predominant wind speed and the forecast wind speed is ≥ 10 knots</p> <p>Wind Gusts: The difference between observed gusts and the forecast is ≥ 10 knots</p> <p>Wind Direction: A change > 30 degrees when the predominant wind speed or gusts are expected to be 15 knots or greater</p>	
Icing, not associated with thunderstorms, from the surface to 10,000 feet AGL	The beginning or ending of icing first meets, exceeds, or decreases below moderate or greater thresholds and was not specified in the forecast.	
Turbulence (for CAT II aircraft), not associated with thunderstorms, from the surface to 10,000 feet AGL	The beginning or ending of turbulence first meets, exceeds, or decreases below moderate or greater thresholds (for CAT II aircraft) and was not specified in the forecast.	
Thunderstorms	Incorrect forecast start or end time	

Weather Warning criteria and/or Weather Advisory criteria	Occur, or are expected to occur during the forecast period, but were not specified in the forecast Specified in the forecast but are no longer expected to occur during the forecast period
Altimeter Setting	Meets or exceeds 31.00 INS and was not specified in the forecast Drops below 31.00 INS and was not specified during the forecast period Drops below 28.00 INS and was not specified in the forecast Increases above 28.00 INS and was not specified in the forecast
Specification of Temporary Conditions	Conditions specified as TEMPO become predominant Conditions specified as TEMPO do not occur during the cardinal hour as forecast Forecast conditions specified as TEMPO are no longer expected to occur
Change to Predominant Conditions	Forecast change conditions occur before the beginning of the specified period of change and are expected to persist Forecast change conditions do not occur within 30 minutes after the specified time Forecast change conditions are no longer expected to occur
Representative Conditions	Forecast conditions are not considered representative of existing or forecast conditions and amending the forecast improves safety, flight planning, operations efficiency, or assistance to in-flight aircraft
<p>Notes:</p> <ol style="list-style-type: none"> 1. Forecast will specify when conditions decrease to less than or if below, increase to equal or exceed the categories in the table. 2. Forecast category is determined by the lower ceiling or visibility value. 3. Use prevailing surface visibility to determine forecast category 4. 5000 meters may be substituted for 4800 meters at OCONUS locations based on the host-nation national practice. 	

A2.2. Weather Observation SPECI Criteria. SPECI observations are taken when certain weather criteria occur as defined in AFMAN 15-124, AFI 11-202V3, AFI 13-204V3, DOD FLIP, and local requirements. Criteria for Yokota AB are in the tables listed below.

Table A2.2. Observation SPECI Criteria Ceiling and Prevailing Visibility for Yokota AB.

Criteria Type	Pertinent Data
Ceiling observed to: form below OR decrease to less than OR if below, increase to equal or exceed	3,000 feet (AFMAN 15-111)
	2,000 feet (AFMAN 15-111, AFI 11-202V3)
	1,500 feet (AFMAN 15-111, AFI 11-202V3)
	1,200 feet (FLIP)
	1,000 feet (AFMAN 15-111, AFI 11-202V3, AFI 13-204V3)
	900 feet (FLIP)
	800 feet (AFMAN 15-111, AFI 13-204V3, FLIP)
	700 feet (AFMAN 15-111, FLIP)
	600 feet (DOD FLIP)
	500 feet (AFMAN 15-111)
	300 feet (FLIP)
	200 feet (AFI 13-204V3)
Prevailing Visibility observed to: decrease to less than OR if below, increase to equal or exceed	3 sm (4800 meters) (AFMAN 15-111, AFI 11-202V3,13-204V3, FLIP)
	2 1/2 sm (4000 meters) (FLIP)
	2 sm (3200 meters) (AFMAN 15-111, AFI 13-204V3, FLIP)
	1 3/4 sm (2800 meters) (FLIP)
	1 3/4 sm (2800 meters) (FLIP Radar Aprch Mins)
	1 5/8 sm (2500 meters) (FLIP)
	1 3/8 sm (2200 meters) (FLIP)
	1 3/8 sm (2200 meters) (AFMAN 15-111, AFI 11-202V3, 13-204V3, FLIP)
	1 1/4 sm (2000 meters) (FLIP)
	1 1/4 sm (2000 meters) (FLIP)
	1 sm (1600 meters) (FLIP)
	1 sm (1600 meters) (AFI 13-204V3, FLIP)
	7/8 sm (1400 meters) (AFMAN 15-111)
	3/4 sm (1200 meters)
1/2 sm (800 meters)	
1/4 sm (400 meters)	

Table A2.3. Observation SPECI Local Criteria.

Criteria Type	Pertinent Data
Runway Visual Range (RVR) is observed to:	≤ 1 sm (1600 meters) (AFMAN 15-111)
	> 1 sm (1600 meters) (AFMAN 15-111)
Runway Visual Range (RVR) observed to: decrease to less than OR if below, increase to equal or exceed	6000 feet (>1500 meters) (AFMAN 15-111, FLIP) (FLIP)
	5500 feet (>1500 meters) (AFMAN 15-111) (FLIP)
	5000 feet (1500 meters) (FLIP)
	4500 feet (1370 meters) (AFMAN 15-111, AFI 13-204V3, FLIP)
	4000 feet (1200 meters) (AFMAN 15-111, AFI 13-204V3)
	2400 feet (750 meters)
	2000 feet (600 meters)
Precipitation that begins, ends, or changes intensity, or changes to or from one of these types:	Freezing Rain Freezing Drizzle Ice Pellets
Precipitation , any type (i.e., rain, snow, hail)	Begins or ends
Sky Condition	Clouds observed below 1200 feet (when not in previous observation) (AFMAN 15-111)
Thunderstorms	Begins (not required if another storm is on station) OR Ends (15 minutes after last occurrence on station)
Tornado	Beginning (observed) and ending time (disappears from sight)
Volcanic Eruptions	When observed or disappears from sight.
Wind Shift	If the wind direction changes by 45 degrees or more in less than 15 minutes when sustained winds are at least 10 knots
Squall (SQ)	Sudden onset of wind speed increase of at least 16 knots sustained at 22 knots or more for at least 1 minute.
Upon resumption of observing	Issue a SPECI within 15 minutes after returning to duty following a break in hourly coverage, but not if METAR is issued during those 15 minutes

Aircraft Mishap	Immediately following notification or sighting of an aircraft mishap at or near the runway, if FMQ-19 is being augmented. (This will be issued as a SPECI due to limitations of ATC IDS-5).
Miscellaneous	Any other meteorological situation that in forecaster's opinion is critical
Observation Local Criteria: Altimeter setting for Yokota AB.	
Criteria Type	Pertinent Data
Pressure: During back-up of AMOS pressure sensor	LOCAL altimeter setting observations are taken at an interval not to exceed 35 minutes when there has been a change of 0.01 inch Hg (0.3 hPa) or more since the last ALSTG value.

Attachment 3

AIRCRAFT WEATHER LIMITATIONS AND SENSITIVITIES

Table A3.1. USAF General Weather Limitations Ref: AFI 11-202V3 Paragraph 8.7.1.1.

Weather Condition	Impact	Customer Action
Ceiling < 2,000 ft Visibility < 3 mi	Alternate required	Add fuel to allow divert
Ceiling < 800 ft Visibility < 2 mi	Terminal may not be favorable for alternate	Review Alternate Requirements

Figure A3.1. 374 OSS/OSW Mission Tailored Weapon Systems (Airframes) Weather NO-GO Thresholds. Note: All information comes from the following regulations: (a) C-130: AFI 11-2C-130V3 (b) C-12: AFI 11-2C-12V3 (c) UH-1: AFI 11-2UH-1NV3 (d) local 36/459 AS regulations.

***Note: Mission Commanders will highlight any changes to mission weather thresholds and air drop sensitivities that are not listed in this table via the weather briefing request form.**

Table A3.2. Operating Frequencies for Solar Activity.

	C-130	C-12	UH-1
UHF Radio	225.0 - 399.9	225.0 - 399.975	225.0 - 399.975
VHF Radio	116.0 - 151.92	108.0 - 173.975 (see Note)	116.0 - 151.975
HF Radio	2.0000 - 29.9999	2.0000 - 29.9999	N/A
VOR Receive	108.00 - 115.97	108.00 - 117.95	108.00 - 118.00

Note: 8.33 spacing available 118.0 - 136.975

Attachment 4

MISSION PLANNING SUPPORT WEATHER PRODUCTS

A4.1. Note. These products are tailored to the customer's needs and can be altered at any time.

Figure A4.1. Mission Execution Forecast.

374 OSS Weather Mission Execution Forecast (MEF) NOT VALID WITHOUT INITIALS											Monday 08/10/15			
Contact the Weather Briefer at 225-7213/9004 for official brief time and initials. Local ASOS Phone Numbers: Camp Fuji 224-8561; Hardy Barracks 229-3521; Yokosuka 243-9079; Camp Zama 263-4963											Valid Time			
Section I: Yokota AB Take-Off / Recovery, Winds, and Temperature											09/ 2100Z - 10/ 1300Z			
Valid Times	Wind (Kt/Mag)	X-WIND	WIND DIR	Weather	Sky Condition (AGL)	TEMP	DPT	ALSTG	CA	PA	MEF#Time	10	A	
0900L / 2100Z	VRB06	06KT	4	BR	FEW015	+24° C	+24° C	2969	+ 2052FT	+ 491FT	Sect V: Yokota Fh Level Data			
0700L / 2200Z	VRB06	06KT	4	BR	FEW015	+25° C	+24° C	2968	+ 2176FT	+ 500FT	2100Z-0300Z			
0900L / 2300Z	VRB06	06KT	5	BR	FEW015	+20° C	+24° C	2967	+ 2300FT	+ 500FT	(AGL)	Winds	Temp	
0900L / 0000Z	02006	02KT	7	NSW	SCT015	+27° C	+25° C	2966	+ 2448FT	+ 518FT	500 ft	0200KT	+24°C	
1000L / 0100Z	02006	02KT	7	NSW	SCT015	+28° C	+25° C	2965	+ 2571FT	+ 527FT	1,000 ft	0201KT	+23°C	
1100L / 0200Z	04006	04KT	7	NSW	BKN015	+28° C	+25° C	2965	+ 2571FT	+ 527FT	1,500 ft	0301KT	+22°C	
1200L / 0300Z	04006	04KT	7	NSW	BKN015	+29° C	+26° C	2964	+ 2718FT	+ 537FT	2,000 ft	0401KT	+20°C	
1300L / 0400Z	06010	06KT	7	NSW	BKN012	+29° C	+26° C	2964	+ 2718FT	+ 537FT	2,500 ft	0501KT	+20°C	
1400L / 0500Z	06010	06KT	7	RA	BKN012	+30° C	+27° C	2963	+ 2877FT	+ 545FT	3,000 ft	0601KT	+19°C	
1500L / 0600Z	06010	06KT	5	-SHRA VCTS	BKN010	+30° C	+27° C	2962	+ 2878FT	+ 555FT	4,000 ft	0701KT	+17°C	
1600L / 0700Z	06010	06KT	5	-SHRA VCTS	BKN010	+29° C	+26° C	2962	+ 2741FT	+ 555FT	5,000 ft	0800KT	+16°C	
1700L / 0800Z	06008	07KT	5	-SHRA VCTS	BKN010	+29° C	+25° C	2963	+ 2705FT	+ 545FT	10,000 ft	0800KT	+16°C	
1800L / 0900Z	05008	07KT	6	RA BR	BKN012	+28° C	+24° C	2964	+ 2568FT	+ 537FT	Freeze Level (MSL) 16,000FT			
1900L / 1000Z	04008	06KT	6	RA BR	BKN012	+27° C	+24° C	2965	+ 2435FT	+ 527FT	0300Z-1300Z			
2000L / 1100Z	04006	06KT	6	BR	BKN008	+26° C	+24° C	2966	+ 2312FT	+ 518FT	(AGL)	Winds	Temp	
2100L / 1200Z	02006	02KT	6	BR	BKN008	+25° C	+24° C	2967	+ 2189FT	+ 509FT	500 ft	0601KT	+30°C	
2200L / 1300Z	02006	02KT	6	BR	BKN008	+24° C	+24° C	2968	+ 2067FT	+ 500FT	1,000 ft	0701KT	+25°C	
Section II: Current Yokota Watches / Warnings / Advisories / TCCOR 'all warn smn'											1,500 ft	0701KT	+24°C	
NONE	Valid	to		Valid	to		Valid	to		Valid	to	2,000 ft	0701KT	+22°C
	Valid	to		Valid	to		Valid	to		Valid	to	2,500 ft	0701KT	+21°C
	Valid	to		Valid	to		Valid	to		Valid	to	3,000 ft	0701KT	+20°C
Section III: Yokota AB Takeoff & Landing Hazards											4,000 ft	0700KT	+18°C	
HAZARD	TYPE	INTENSITY	LEVELS (MSL)	VALID TIME	5,000 ft	0800KT	+16°C							
T-STORMS	NONE		MAX TOPS:		10,000 ft	0800KT	+16°C							
TURB (CAT 1)	NONE				Freeze Level (MSL) 16,000FT									
TURB (CAT 2)	NONE				Fog Fh Level Data									
ICING	NONE				2100Z-0300Z									
PRECIP	-SHRA VCTS	LIGHT		05Z-10Z	(AGL)	Winds	Temp							
Section IV: Route Weather (Sky Condition, Visibility/Weather, Surface Winds, Hazards)											500 ft	0401KT	+23°C	
NORTHWEST					NORTHEAST					1,000 ft	0501KT	+22°C		
Sky Condition (AGL) FEW006 BKN012 FROM 06Z-06Z: FEW005 BKN008 AFT 06Z: FEW005 BKN005					Sky Condition (AGL) FEW006 BKN012 FROM 06Z-06Z: FEW005 BKN008 AFT 06Z: FEW005 BKN005					1,500 ft	0501KT	+21°C		
Visibility/Weather 7SM NSW AFT 03Z: 5SM -SHRA TEMPO 06Z-09Z: 4SM -TSRA AFT 09Z: 5SM BR					Visibility/Weather 5SM BR AFT 00Z: 7SM NSW TEMPO 06Z-09Z: 4 1/2SM -SHRA VCTS AFT 09Z: 6SM BR					2,000 ft	0501KT	+20°C		
Surface Winds (T) 36010KT FROM 06Z-09Z: 35010020KT AFT 09Z: 01012KT					Surface Winds (T) 02006KT FROM 06Z-09Z: 08012018KT AFT 09Z: 02006KT					2,500 ft	0501KT	+19°C		
Hazards (MSL) VCTS 06Z-09Z					Hazards (MSL) VCTS 06Z-09Z					3,000 ft	0501KT	+18°C		
FUJI (CAMP FUJI)					TOKYO (HARDY BARRACKS)					4,000 ft	0601KT	+17°C		
Sky Condition (AGL) FEW000 BKN004 AFT 06Z: FEW008 BKN010 FROM 06Z-06Z: FEW005 BKN008 AFT 06Z: FEW008 BKN010					Sky Condition (AGL) FEW010 BKN020 TEMPO 06Z-09Z: FEW008 BKN012 AFT 06Z: FEW010 BKN010					5,000 ft	0601KT	+15°C		
Visibility/Weather 2SM BR AFT 00Z: 7SM NSW TEMPO 06Z-09Z: 1 1/2 SM -SHRA VCTS AFT 09Z: 3SM BR					Visibility/Weather 5SM BR AFT 00Z: 7SM NSW TEMPO 06Z-09Z: 3SM -SHRA VCTS AFT 09Z: 4SM BR					10,000 ft	0600KT	+08°C		
Surface Winds (T) 0800KT FROM 06Z-09Z: 05012018KT AFT 09Z: 08010KT					Surface Winds (T) 02010KT FROM 06Z-09Z: 08012018KT AFT 09Z: 03010KT					Freeze Level (MSL) 15,000FT				
Hazards (MSL) VCTS 06Z-09Z					Hazards (MSL) VCTS 06Z-09Z					Space Weather Impacts				
Solar and Lunar Data					Time on Target					DAY		NIGHT		
Sunrise	1958Z	0800Z	19	276	-19	310	HF		None	None				
Sunset	0939Z	0900Z	7	284	-27	322	VHF		None	Severe				
Moonrise	1643Z	1000Z	-5	293	-33	336	GPS		None	Marginal				
Moonset	0610Z	1100Z	-16	303	-36	353	NVG Ops 'use after EEC'		Ceiling 1500 + CIG => 300					
EENT	1039Z	1200Z	-25	315	-36	9	Visibility (SM)		VIS => 3					
EECT	1006Z	1300Z	-33	329	-33	25	% Lunar Illum.		21%					
Tokyo Bay Sea SFC Temp.											82°F			
Temp. (F)											82°F			
*HAIL, SEVERE TURBULENCE & ICING, HEAVY PRECIPITATION, LIGHTNING & WIND SHEAR EXPECTED IN AND NEAR THUNDERSTORMS.											RJTY WX PMSV 344.6			

Figure A4.2. 36 AS Mission Planning Weather 2-Day Outlook.

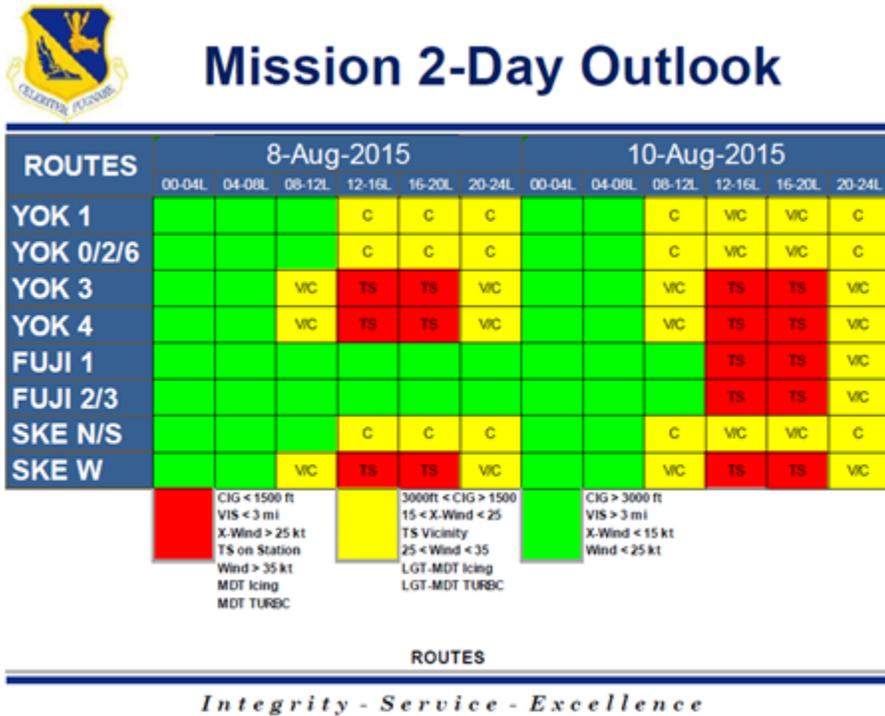
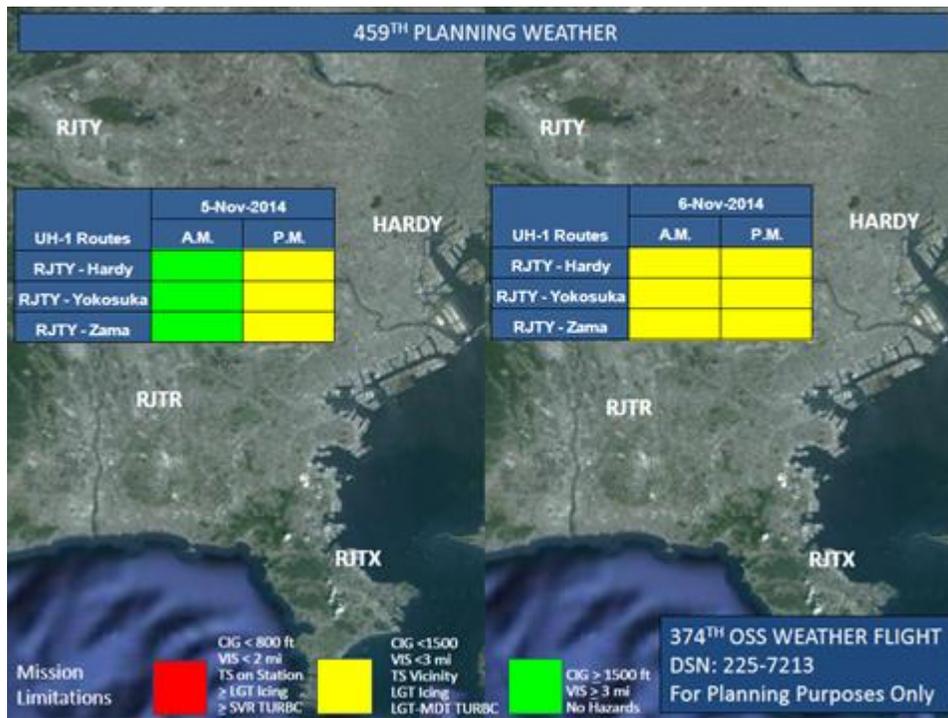


Figure A4.3. 459 AS Mission Planning Weather 2-Day Outlook part 1.



Figure A4.4. 459 AS Mission Planning Weather 2-Day Outlook part 2.



Attachment 5

36 AS TRAINING AREAS

A5.1. AR Tracks. The following figures depict the AR tracks utilized by the 36 AS on a recurring basis.

Figure A5.1. AR Tracks 1.

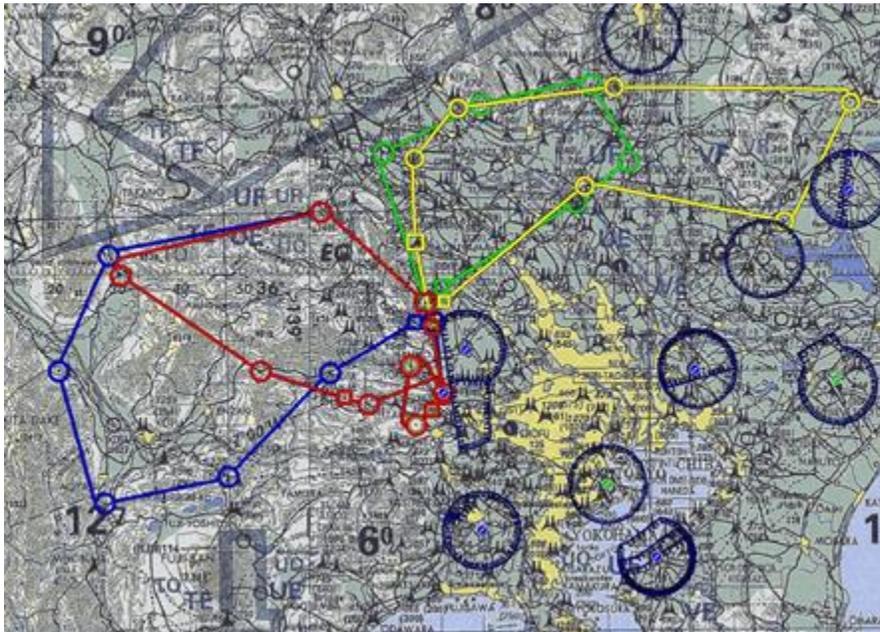


Figure A5.2. AR Tracks 2.

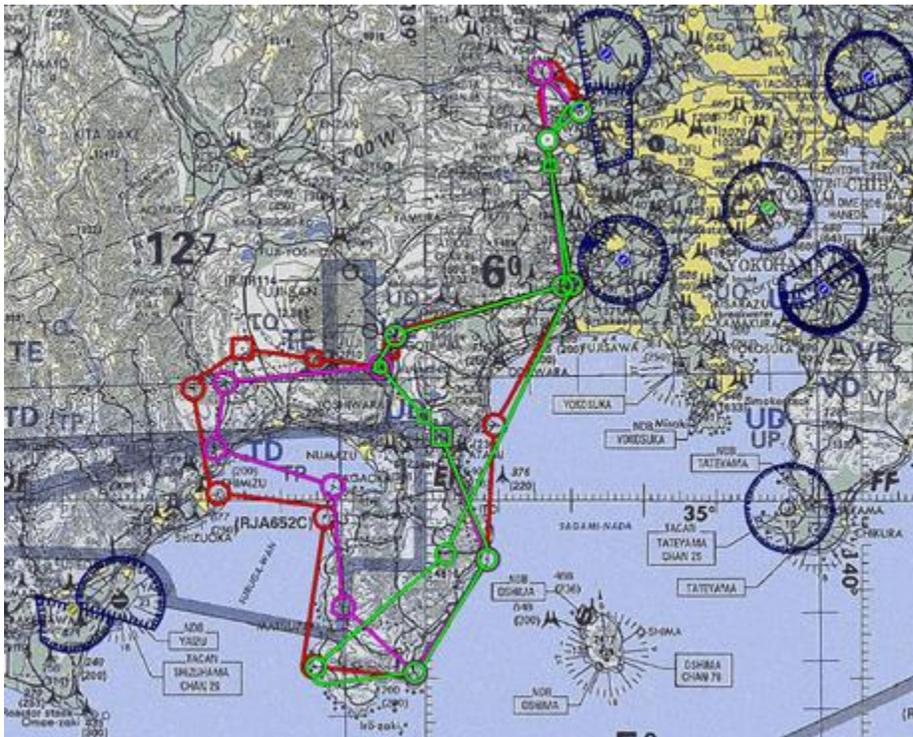


Figure A5.3. AR Tracks 3.



A5.2. Drop Zones. The following three figures depict the drop zones utilized by the 36 AS on a recurring basis.

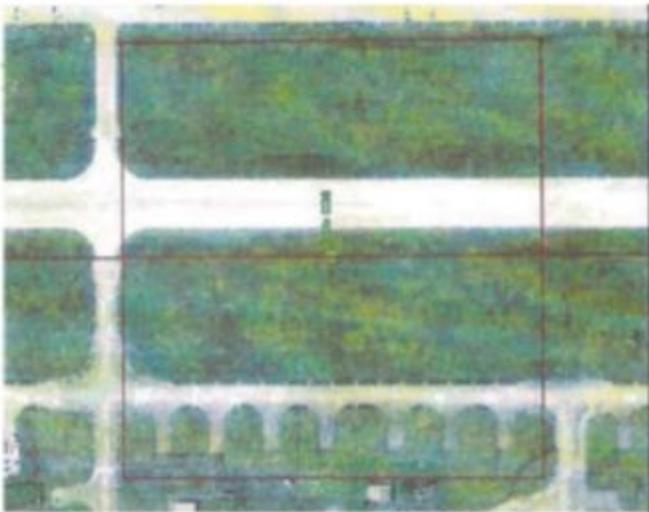
Figure A5.4. Drop Zones located on Yokota AB airfield.



Eagle South



Eagle North



Waldo DZ

Figure A5.5. Drop Zones located at Camp Fuji.



Attachment 6

CUSTOMER WEATHER LIMITATIONS AND SENSITIVITIES

A6.1. General: The following tables identify impacts to 374 AW and Yokota AB associated agencies when weather watches, warnings, and advisories are issued, and the customers' action. Associated agencies include the Tama Hills Annex of Yokota AB.

Table A6.1. Customer Weather Limitations and Sensitivities.

YOKOTA AB WEATHER WATCHES	DLT (in mins)	ISSUED BY	IMPACTS TO OPERATIONS	CUSTOMER ACTIONS
Lightning within 5 nm	30 min	17 OWS	<p>CES - No outside operations for all shops</p> <p>Flyers - Flight line personnel sent inside-no support available for take-off and landing.</p> <p>All: May delay operations.</p>	<p>CES - Notify civilian and military personnel via radio, or telephone of weather warning. Instruct all personnel to cease outdoor work</p> <p>Flyers - May restrict take-offs and recoveries</p> <p>FSS - Clear pool, golf course, outdoor sports activities</p>
Tornado	As Potential Warrants	17 OWS	<p>CES - IAW YAB OPLAN 10-2, <i>Disaster Operations Plan</i>- set up for recovery as needed</p> <p>Flyers - Flight line personnel sent inside-no support available for take-off and landing</p>	<p>Flyers - May restrict take-offs and recoveries.</p> <p>All - Seek shelter, hangar or divert aircraft.</p>
Moderate Thunderstorm	As Potential Warrants	17 OWS	<p>CES - No outside operations for all shops</p> <p>Flyers - Flight line personnel sent inside-no support available for take-off and landing.</p> <p>All: May delay operations.</p> <p>All: Personal</p>	<p>CES - Notify civilian and military personnel via radio, or telephone of weather warning. Instruct all personnel to cease outdoor work</p> <p>Flyers - May restrict take-offs and recoveries</p> <p>All - Seek shelter, hangar or divert aircraft.</p>

			injury, equipment damage	
Severe Thunderstorm	As Potential Warrants	17 OWS	<p>CES - No outside operations for all shops</p> <p>Flyers - Flight line personnel sent inside-no support available for take-off and landing.</p> <p>All: May delay operations.</p> <p>All: Personal injury, equipment damage</p>	<p>CES - Notify civilian and military personnel via radio, or telephone of weather warning. Instruct all personnel to cease outdoor work</p> <p>Flyers - May restrict take-offs and recoveries</p> <p>All - Seek shelter, hangar or divert aircraft.</p>
Freezing Precipitation	As Potential Warrants	17 OWS	<p>CES - Increase barrier arresting kit checks</p> <p>Flyers - All ice, snow and frost must be removed from the entire aircraft before take-off</p> <p>All: Delay or cease operations.</p>	<p>CES - Recall Power Pro technicians</p> <p>AMXS – Deice aircraft. Hangar or protect aircraft.</p> <p>Flyers – Evaluate weather ORM factors for mission execution</p>
Surface Winds \geq 50 knots	As Potential Warrants	17 OWS	<p>CES - Limited outdoor work for all personnel</p> <p>CES - Horizontal Section--no crane operations</p> <p>CES - Electrical Section--no bucket truck operation</p> <p>Flyers - A large crosswind component and slick surface conditions may prevent a safe take-off.</p> <p>All: Equipment</p>	<p>CES - Notify technicians of weather conditions and cautionary measures</p> <p>CES - Recall all personnel and initiate telephone standby</p> <p>CES - Housing inspectors or designees would need to drive through the housing area and notify residents to tie down outside furniture, trampolines, etc., and secure anything else that could be picked up by the wind and cause damage to</p>

			damage.	<p>it or our housing units.</p> <p>AMXS – Add Fuel/Chains or Hangar aircraft.</p> <p>Flyers - Evaluate weather ORM factors for mission execution</p> <p>All - Secure light objects outside.</p>
Heavy Rain \geq 2 inches in 6 hours	As Potential Warrants	17 OWS	<p>CES - Horizontal Section switch work priority from DSW to drain maintenance</p> <p>CES - HVAC and Electrical Sections -- limited outdoor work</p>	<p>CES - Recall and initiate telephone standby for Horizontal Section personnel</p>
Heavy Snow Accumulation \geq 2 inches in 12 hours	As Potential Warrants	17 OWS	<p>CES - Shift to snow removal</p> <p>CES - Increase barrier arresting kit checks</p> <p>CES - Limited service contracts</p> <p>Flyers - All ice, snow and frost must be removed from the entire aircraft before take-off.</p>	<p>CES - Recall snow removal team and initiate telephone standby.</p> <p>CES - Recall Power Pro technicians</p> <p>AMXS - Deice aircraft prior to take-off</p> <p>Flyers - Evaluate weather ORM factors for mission execution</p>
Blizzard	As Potential Warrants	17 OWS	<p>CES - Shift to snow removal</p> <p>CES - Increase barrier arresting kit checks</p> <p>CES - Limited service contracts</p> <p>Flyers - All ice, snow and frost must be removed from the entire aircraft before take-off.</p> <p>All: May delay</p>	<p>CES - Recall snow removal team and initiate telephone standby.</p> <p>CES - Recall Power Pro technicians</p> <p>AMXS - Deice aircraft prior to take-off (airfield operations limited)</p> <p>Flyers - Evaluate weather ORM factors for mission execution</p>

			operations.	
TAMA SERVICE ANNEX (of Yokota AB) WEATHER WATCH	DLT (in mins)	ISSUED BY	IMPACTS TO OPERATIONS	CUSTOMER ACTIONS
Lightning within 5 nm	30	17 OWS	FSS - No outside operations.	FSS - Suspend recreation activities. Instruct all personnel to cease outdoor work
YOKOTA AB WEATHER WARNINGS	DLT (in mins)	ISSUED BY	IMPACTS TO OPERATIONS	CUSTOMER ACTIONS
Lightning within 5 nm	Observed	374 OSS/OS W	<p>CES - No outside operations for all shops</p> <p>Flyers - Flight line personnel sent inside-no support available for take-off and landing.</p> <p>All: May delay operations.</p>	<p>CES - Notify civilian and military personnel via radio, telephone of weather warning. Instruct all personnel to cease outdoor work.</p> <p>Flyers - May restrict take offs and recoveries</p> <p>OSAA - Cease airfield work.</p> <p>FSS - Clear pool, golf course, outdoor sports activities</p>
Tornado	30	17 OWS	<p>CES - IAW 10-2-- No plan required for Yokota (set up for recovery as needed)</p> <p>Flyers - Flight line personnel sent inside-no support available for take-off and landing</p>	<p>Flyers - May restrict take-offs and recoveries.</p> <p>All - Seek shelter, hangar or divert aircraft.</p>
Moderate Thunderstorm	90	17 OWS	<p>CES - No outside operations for all shops</p> <p>Flyers - Flight line personnel sent inside-no support available for take-off and landing.</p>	<p>CES - Notify civilian and military personnel via radio, or telephone of weather warning. Instruct all personnel to cease outdoor work</p> <p>Flyers - May restrict take-offs and recoveries</p>

			<p>All: Personal injury, equipment damage, may delay operations.</p>	<p>OSAA- Cease airfield work. FSS - Clear pool, golf course, outdoor sports activities All - Seek shelter, hangar or divert aircraft.</p>
Severe Thunderstorm	120	17 OWS	<p>CES - No outside operations for all shops Flyers - Flight line personnel sent inside-no support available for take-off and landing. All: Personal injury, equipment damage, may delay operations.</p>	<p>CES - Notify civilian and military personnel via radio, or telephone of weather warning. Instruct all personnel to cease outdoor work Flyers - May restrict take-offs and recoveries OSAA - Cease airfield work. FSS - Clear pool, golf course, outdoor sports activities All - Seek shelter, hangar or divert aircraft.</p>
Freezing Precipitation	90	17 OWS	<p>CES - Increase barrier arresting kit checks Flyers - All ice, snow and frost must be removed from the entire aircraft before take-off. All: Delay or cease operations.</p>	<p>CES - Recall Power Pro technicians Flyers – May restrict take-offs and recoveries AMXS - Deice aircraft prior to take-off</p>
Surface Winds \geq 35 knots but < 50 knots	90	17 OWS	<p>CES - Limited outdoor work for all personnel CES - Horizontal Section--no crane operations CES - Electrical Section--no bucket truck operation</p>	<p>CES - Notify technicians of weather conditions and cautionary measures AMXS - Add Fuel/Chains or Hangar aircraft</p>

			Flyers - A large crosswind component and slick surface conditions may prevent a safe take-off	
Surface Winds \geq 50 knots	120	17 OWS	<p>CES - Limited outdoor work for all personnel--mission essential only</p> <p>CES - Horizontal Section--no crane operations</p> <p>CES - Electrical Section--no bucket truck operation</p> <p>Flyers - A large crosswind component and slick surface conditions may prevent a safe take-off</p> <p>All: Equipment damage.</p>	<p>CES - Notify technicians of weather conditions and cautionary measures</p> <p>CES - Recall all personnel and initiate telephone standby</p> <p>CES - Housing inspectors or designees would need to drive through the housing area and notify residents to tie down outside furniture, trampolines, etc., and secure anything else that could be picked up by the wind and cause damage to it or our housing units.</p> <p>AMXS – Add Fuel/Chains or Hangar aircraft</p> <p>Flyers – May restrict take-offs and recoveries</p> <p>All - Secure light objects outside.</p>
Heavy Rain \geq 2 inches in 6 hours	90	17 OWS	<p>CES - Horizontal Section switch work priority from DSW to drain maintenance</p> <p>CES - HVAC and Electrical Sections -- limited outdoor work</p>	<p>CES - Recall and initiate telephone standby for Horizontal Section personnel</p>
Snow accumulation \geq 2 inches in 12 hours	90	17 OWS	<p>CES - Shift to snow removal</p> <p>CES - Increase barrier arresting kit checks</p> <p>CES - Limited</p>	<p>CES - Recall snow removal team and initiate telephone standby</p> <p>CES - Recall Power Pro technicians</p> <p>AMXS - Deice aircraft</p>

			service contracts Flyers - All ice, snow and frost must be removed from the entire aircraft before take-off	prior to take-off
Blizzard	90	17 OWS	CES - Shift to snow removal CES - Increase barrier arresting kit checks CES - Limited service contracts Flyers - All ice, snow and frost must be removed from the entire aircraft before take-off. All: May delay operations.	CES - Recall snow removal team and initiate telephone standby. CES - Recall Power Pro technicians AMXS - Deice aircraft prior to take-off (airfield operations limited)
TAMA SERVICE ANNEX (of Yokota AB) WEATHER WARNING	DLT (in mins)	ISSUED BY	IMPACTS TO OPERATIONS	CUSTOMER ACTIONS
Lightning within 5 nm	Observed	17 OWS	FSS - No outside operations	FSS - Suspend recreation activities
YOKOTA AB WEATHER ADVISORIES	DLT (in mins)	ISSUED BY	IMPACTS TO OPERATIONS	CUSTOMER ACTIONS
Surface Winds \geq 25 knots but $<$ 35 knots	30	17 OWS	CES - Danger to communication antennas, roofing, scaffolding, and similar construction.	CES - CE and CS personnel secure loose equipment. OSAA - Cease wing walking on large aircraft.
Snow Accumulation \geq 1/2 inch	120	17 OWS	Flyers - All ice, snow and frost must be removed from the aircraft before take-off	AMXS - Deice aircraft prior to take-off
Freezing	Observed	374	MXG - Potential	MXG - Increased

Temperature		OSS/OS W	equipment failure	maintenance timing
Crosswinds \geq 25 knots	Observed	374 OSS/OS W	Flyers - Advisory in nature. Flight hazard	Flyers - AMC aircraft, tankers advisory thresholds. C-12 will not take-off or land
Low-Level Wind Shear below 2,000 feet	Observed	374 OSS/OS W	Flyers - Reported wind shear will prevent take-off/landings	Flyers - Delay operations until safe conditions are present
Moderate or Greater Turbulence below 10,000 feet AGL	Observed	374 OSS/OS W	Flyers - Advisory in nature	Flyers - Advisory in nature to aircrews; does not restrict operations
Moderate or Greater Icing below 10,000 feet AGL	Observed	374 OSS/OS W	Flyers - Advisory in nature	Flyers - Advisory in nature to aircrews; does not restrict operations
Heat Stress Advisory	Observed	374 AMDS/S GPB	MXG/CES - ORM-designed local requirement. Personnel hazard	MXG/CES - safety advisory for outdoor crews. Work/rest cycle for outdoor crews.

Attachment 7

WEATHER WATCH, WARNING, AND ADVISORY NOTIFICATION DIAGRAMS

Figure A7.1. 374 OSS/OSW issued WWA for Yokota AB.

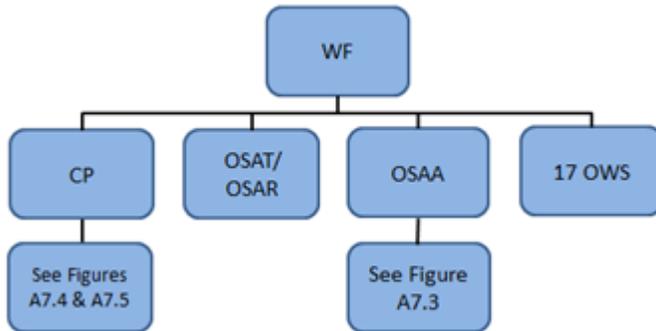
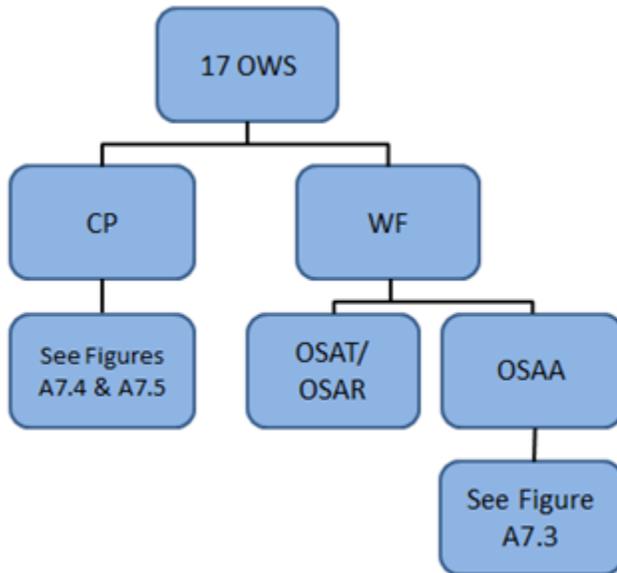


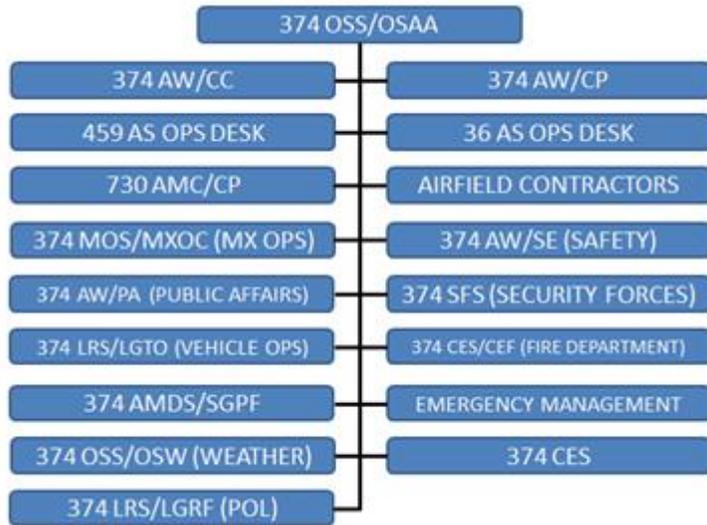
Figure A7.2. 17 OWS issued WWA for Yokota AB.



A7.1. Airfield Management Operations Section (OSAA) WWA Notification Tree. OSAA notifies all organizations as listed below. OSAA will ONLY notify the 36 AS, 459 AS, and applicable contractors when a weather advisory or watch has been issued. However, OSAA will notify all agencies via the SCN for ALL weather warnings, except for the following:

- A7.1.1. Contractors on airfield are notified via radio.
- A7.1.2. 36 AS and 459 AS Operations Desks are notified via phone hotline.

Figure A7.3. OSAAWWA Notification Tree.



A7.2. 374 AW/CP WWA Notification Table. 374 AW/CP personnel will disseminate all WWA via the Installation Warning System (IWS) and also accomplish telephonic notifications, 374 AW/CP WWA Notification Tables using the appropriate CP quick reaction checklist.

Figure A7.4. 374 AW/CP WWA Notification Tables.

NOTE: REQUIRED NOTIFICATIONS INDICATED BY GREEN SHADED BOXES

WEATHER WATCHES / WARNINGS / ADVISORIES	CP CHIEF	WG/CC HL/5-3741	WG/CV HL/5-3742	OG/CC HL/5-3743	MSG/CC HL/5-3744	MKG/CC HL/5-3745	MDG/CC HL/5-3746	Notifiable* (S-8131) or Sides* (S-7246)	IN / OUT ACFT VIA UHF	374 COMM FOCAL POINT S-2666	DRCC WHEN ACTIVE S-7831	374 CONS S-8138/9346 **After duty stand-by	MAIN GYM S-8889	374 AW/PA S-7338	USFI CCC HL/225-6066	TAMA HILLS ANNEX 224-5421	459TH HL/5-8222 36AS HL/5-6050	
	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A
LIGHTNING POTENTIAL / OBSERVED WITHIN 5 NM																		
TAMA ANNEX LIGHTNING POTENTIAL / OBSERVED WITHIN 5 NM																		
TORNADO / FUNNEL CLOUD / WATER SPOUT																		
MODERATE THUNDERSTORMS (WINDS 35 TO < 50KTS AND/OR ANY HAIL < 3/4")																		
SEVERE THUNDERSTORMS (WINDS ≥ 50KTS AND/OR ANY HAIL ≥ 3/4")																		
FREEZING PRECIPITATION																		
SURFACE WINDS 25 - 34KTS																		
SURFACE WINDS 35 - 49KTS																		
SURFACE WINDS ≥ 50KTS																		
RAIN ≥ 2" IN ≤ 6 HOURS																		
SNOW ACCUMULATION ≥ 2" IN ≤ 12 HOURS																		
SNOW ACCUMULATION ≥ 1/2"																		
BLIZZARD																		
FREEZING TEMPERATURES																		
CROSSWINDS ≥ 25KTS																		
TCOR (ALL)																		
HEAT STRESS ADVISORY (issued by 374 AMDS/SGPB)																		
LOW-LEVEL WIND SHEAR BELOW 2,000'																		
TURBULENCE ≥ MODERATE BELOW 10,000'																		
ICING ≥ MODERATE BELOW 10,000'																		

* NOTIFY BASE POOL FOR LIGHTNING (WATCHES OR WARNINGS) WITHIN 5 NM
Green = make notifications / Black = do not make notifications