

**BY ORDER OF THE COMMANDER  
RAMSTEIN AIR BASE**

**RAMSTEIN AIR BASE INSTRUCTION  
15-101**



**18 SEPTEMBER 2024**

**Weather**

**WEATHER SUPPORT**

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This instruction implements Air Force Policy Directive (AFPD) 15-1, *Air Force Weather Operations*; Air Force Manual (AFMAN) 10-206, *Operational Reporting*; AFMAN 15-111, *Surface Weather Observations*; AFMAN 15-124, *Meteorological Codes*; and Department of the Air Force Manual (DAFMAN) 15-129, *Air and Space Weather Operations*. This Instruction applies to all civilian employees and uniformed members of the Regular Air Force, Air Force Reserve, and Air National Guard who provide or utilize weather support for Ramstein Air Base (RAB), except where noted otherwise. This publication may not be supplemented or further implemented or extended. Refer recommended changes and questions about this publication to the OPR using the AF 847, *Recommendation for Change of Publication*; route AF 847s from the field through the appropriate functional chain of command. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3) number following the compliance statement. See Department of the Air Force Instruction (DAFI) 90-160, *Publications and Forms Management*, for a description of the authorities associate with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately to the Publication OPR for non-tiered compliance items. Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and are disposed in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System.

***SUMMARY OF CHANGES***

This document has been substantially revised and must be completely reviewed. Major changes include: Continuity of operations contact information and procedures, Geographically Separated Units (GSU) support, reciprocal support agreements, and incorporating updates to Air Force Weather (AFW) publications.

<b>Chapter 1—GENERAL INFORMATION</b>	<b>4</b>
1.1. Purpose. ....	4
1.2. Administrative Notes. ....	4
1.3. Duty Priorities. ....	4
1.4. Assumptions. ....	4
1.5. Limitations. ....	4
<b>Chapter 2—ROLES AND RESPONSIBILITIES</b>	<b>5</b>
2.1. 86 OSS/OSW. ....	5
2.2. 21 OWS. ....	5
2.3. 618 AOC. ....	5
2.4. Geographically Separated Units (GSU). ....	5
2.5. Release of Weather Information. ....	6
<b>Chapter 3—STAFF INTEGRATION FUNCTION (SIF)</b>	<b>7</b>
3.1. General. ....	7
3.2. Wing O&I Sync. ....	7
3.3. Wing Plans Support. ....	7
3.4. Crisis Action Team (CAT). ....	7
3.5. Exercise and Contingency Planning. ....	8
3.6. Climatology Services. ....	8
3.7. Intelligence Preparation of the Battlefield (IPB). ....	8
3.8. Severe Weather Action Plan (SWAP). ....	8
Table 3.1. SWAP Criteria. ....	9
3.9. Operational Reporting. ....	9
<b>Chapter 4—AIRFIELD SUPPORT FUNCTION (ASF)</b>	<b>10</b>
4.1. General. ....	10
4.2. Observations. ....	10
4.3. Augmentation. ....	10

Table 4.1.	Mandatory Supplementary Weather Conditions Criteria.....	11
4.4.	TAF.....	12
4.5.	Watches, Warnings, and Advisories (WWA). ....	12
4.6.	Alternate Operating Location (AOL).....	13
<b>Chapter 5—MISSION INTEGRATION FUNCTION (MIF).</b>		<b>14</b>
5.1.	General.....	14
5.2.	Flight Weather Briefings (FWB). ....	14
5.3.	Training.....	16
<b>Chapter 6—SUPPORT TO FLYING OPERATIONS.</b>		<b>17</b>
6.1.	Local Flying Squadrons. ....	17
6.2.	Transient Aircraft.....	18
6.3.	National Airborne Operations Center (NAOC). ....	18
6.4.	CLOSEWATCH. ....	19
6.5.	Volcanic Ash Plume and Concentration Forecasts. ....	19
6.6.	Pilot-to-Metro Service (PMSV). ....	19
6.7.	424 ABS (Chièvres Air Base, Belgium). ....	20
6.8.	Maintenance Support. ....	20
<b>Chapter 7—SUPPORT TO NON-FLYING OPERATIONS.</b>		<b>21</b>
7.1.	86th Mission Support Group (MSG). ....	21
7.2.	86 AW Command Post. ....	22
7.3.	65th Operations Support Squadron.....	23
7.4.	435th Contingency Response Squadron (CRS). ....	23
7.5.	603 <sup>rd</sup> AOC.....	23
<b>Chapter 8—RECIPROCAL SUPPORT AGREEMENTS.</b>		<b>24</b>
8.1.	86th Operations Group.....	24
8.2.	65 ABG, 65 OSS.....	25
8.3.	86 AW Staff Agencies. ....	25
8.4.	435th CRS.....	26
<b>Attachment 1—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION</b>		<b>27</b>
<b>Attachment 2—86OSS/OSW DUTY PRIORITIES</b>		<b>33</b>

## Chapter 1

### GENERAL INFORMATION

**1.1. Purpose.** Weather support is provided to meet the mission requirements of units assigned to, or ISO the 86 AW and partner units. This instruction defines and consolidates into a single document the requirements, responsibilities, and procedures for weather support during peacetime, exercises, emergencies, contingencies, and wartime operations.

**1.2. Administrative Notes.**

1.2.1. Classification. This document is UNCLASSIFIED and may be reproduced locally.

1.2.2. Authority. Department of Defense Instruction (DODI) 4000.19 and AFW ReEngineer directives.

1.2.3. Changes to RABI 15-101: Requests for changes to this document are coordinated through the 86th Operations Support Squadron Weather Flight (86 OSS/OSW) biennially or as changes in weather support dictate.

1.2.4. The OPR for this document is the 86 OSS/OSW Flight Commander, who can be reached at [86weather@us.af.mil](mailto:86weather@us.af.mil) (86 OSS/OSW in the GAL) or DSN 480-2185.

**1.3. Duty Priorities.** 86 OSS/OSW completes daily tasks IAW the duty priorities list in [Attachment 2](#).

**1.4. Assumptions.** Weather communications networks will function continually and without interruption to provide sufficient data for continuity of weather operations during peacetime. Loss of communication will cause significant degradation of quantity and quality of weather services.

**1.5. Limitations.** 86 OSS/OSW support to 86 AW is limited as follows:

1.5.1. The 86 OSS/OSW is responsible for Airfield Support Function (ASF), Mission Integration Function (MIF), and Staff Integration Function (SIF) sections to 86 AW at RAB, Germany. When able, 86 OSS/OSW will direct inquiries for the aforementioned functions to the appropriate supporting weather unit IAW DAFMAN 15-129.

1.5.2. Weather support to Air Force Reserve, Air National Guard, and Civil Air Patrol (unless on Title 10 orders) units will be provided by or arranged for by their home station weather unit. The 521st Air Mobility Operations Wing (AMOW), 435th Air Ground Operations Wing (AGOW), and 406th Air Expeditionary Wing (AEW) are tenant wings utilizing Ramstein airfield and base facilities. The 521<sup>st</sup> AMOW will be predominantly supported by 618 Air Operations Center (AOC)/WXD for briefing support. In accordance with local support agreements, 435 CRS/OPSF utilizes 86 OSS/OSW weather briefing support for transient aircrews, however the CRS utilizes their assigned weather personnel for airfield support functions once arrived at an expeditionary location. The 406th AEW utilizes assigned weather personnel at its locations to accomplish its mission.

## Chapter 2

### ROLES AND RESPONSIBILITIES

**2.1. 86 OSS/OSW.** The Ramstein weather flight provides world-class weather support for the 86 AW and its partner nations anytime, anywhere. The weather flight provides airfield support and resource protection for RAB, staff support to the 86 AW Commander, and mission weather support to 86 AW-hosted training, exercises, and all 603rd AOC tasked theatre airlift missions IAW DAFMAN 15-129 Table 6.1. Non-86 AW transient aircrew briefings will be provided support upon request by the 86 OSS/OSW as time and resources allow IAW posted 86 OSS/OSW duty priorities ([Attachment 2](#)), and DAFMAN 15-129. Otherwise, aircrew briefings will be referred to the 21 OWS. 86 OSS/OSW remains postured to support EUCOM and 86 AW peacetime and wartime deployment taskings with dedicated equipment and personnel.

**2.2. 21 OWS.** 21 OWS provides synoptic-scale analysis/forecast products as well as Flight Weather Briefings (FWBs) for unsupported transient and applicable 603 AOC/AMD/IFM-tasked missions for USEUCOM AOR IAW DAFMAN 15-129. 21 OWS provides weather products to USAFE weather flights as required by relevant AFMANs and the Ramstein (ETAR) Installation Data Page (IDP), which is maintained and filed by both units. 21 OWS provides resource protection to locations without weather manning assigned for that purpose. 21 OWS coordinates IDP updates for unmanned locations IAW 15-129 section 5.4.2.1. Additional weather support requirements are coordinated through the 557th Weather Wing as applicable. The IDP will be kept until superseded, rescinded, obsolete or no longer needed.

**2.3. 618 AOC.** The 618 AOC/WXD provides weather services to include all FWBs for AMC missions and mission execution forecasts (MEFs) for United States Transportation Command (USTRANSCOM)-tasked missions.

**2.4. Geographically Separated Units (GSU).** The 86 AW has three GSUs: 424 ABS, Chièvres AB, Belgium; 65 ABG, Lajes Field, Azores; and 496 ABS, Morón AB, Spain.

2.4.1. Chièvres AB. The 424 ABS and associated airfield located at Chièvres AB are not manned with AF weather personnel. 86 OSS/OSW will keep the 86 AW/CC aware of mission-limiting weather occurring or forecast at GSUs as directed by the Commander. FWBs are provided or arranged for by the transient aircraft's home station weather unit. The 21 OWS at Kapaun AS, Germany, will provide FWBs for transient military aircrews without home base support. Resource protection is provided by 21 OWS (reference DAFMAN 15-129). Services provided by 86 OSS/OSW are outlined in [paragraph 6.7](#).

2.4.2. Lajes Field. The 65 OSS/OSW is only manned to provide local staff and FWB support to Lajes Field. 86 OSS/OSW will provide back-up support to 65 OSS/OSW operations when manning cannot support. 86 OSS/OSW will keep the 86 AW/CC aware of mission-limiting weather occurring or forecast at GSUs as directed by the commander. Resource protection is provided by 21 OWS (reference DAFMAN 15-129). Services provided by 86 OSS/OSW are outlined in [paragraph 7.3](#).

2.4.3. Morón AB. The 496 ABS and associated airfield are not manned with AF weather personnel. 86 OSS/OSW will keep the 86 AW/CC aware of mission-limiting weather occurring or forecast at GSUs as directed by the commander. FWBs are provided or arranged for by the transient aircraft's home station weather unit. The 21 OWS will provide FWBs for military aircrews without home base support. Resource protection is provided by 21 OWS (reference DAFMAN 15-129).

**2.5. Release of Weather Information.** 86 OSS/OSW does not provide weather support or information to non-DoD organizations or to the general public except as authorized by AFI, Joint Ethics Regulation (5500.7-R) or the 86 AW/CC (or designated representative). In addition, 86 OSS/OSW personnel will not release weather data to outside agencies unless coordinated through 86 AW Public Affairs (PA).

## Chapter 3

### STAFF INTEGRATION FUNCTION (SIF)

#### 3.1. General.

3.1.1. 86 OSS/OSW SIF provides direct or continuing support to a mission set and determines both environmental threats and effective decision points to inject weather into the planning and execution process of the mission. These briefings, except for Climatology Services, will be retained for 6 months then destroyed if no longer needed.

3.1.2. SIF will:

3.1.2.1. Ensure sound RM principles and other safety considerations are applied to mitigate hazards to the mission.

3.1.2.2. Emphasize the need to the chain of command for weather forces participation in combat related training through operational exercises.

3.1.2.3. Ensure adequate resources are provided to meet mission requirements.

3.1.2.4. Provide weather support to the 86 AW/CC as outlined in [Chapter 8](#) and as otherwise requested.

3.1.3. Operating Hours. The SIF operates 0730L to 1630L Monday through Friday and is closed on USAFE family days, 86 AW goal days or down days, and US Federal holidays.

3.1.4. Location. The SIF is located on the fourth floor of Building 2303. Reference [paragraph 4.6](#) for AOL information.

3.1.5. Contact Information. During operating hours, contact the SIF at DSN 480-2185. Contact the ASF personnel at DSN 480-2488 for weather support outside of operating hours.

3.1.6. Operating Hours During 86 AW Contingencies and Exercises. All 86 OSS/OSW elements will alter operating hours and/or manning requirements to meet mission demands during 86 AW contingencies and exercises.

**3.2. Wing O&I Sync.** Wing O&I weather slides are produced by the 86 OSS/OSW on SIPR the day of the brief. The 86 AW/CC, wing staff and commanders are briefed upcoming weather for the week to maintain situational awareness of conditions which may impact mission execution.

**3.3. Wing Plans Support.** The 86 OSS/OSW Staff Integration Function (SIF) provides advice concerning weather support problems or requirements and provides input on weather annexes or appendices to operations orders, plans, pre-deployment orders, and deployment orders as required to ensure weather support requirements for 86 AW are accurately documented.

**3.4. Crisis Action Team (CAT).** Weather inputs provided for supporting the CAT vary depending on the nature of the contingency or crisis. Upon receiving notification from 86 AW/XP, or AtHoc notification for exercise or contingency, material will be produced by the 86 OSS/OSW SIF and disseminated as directed. Slides will be saved and disseminated to the appropriate 86 AW/XP representative. During SIF non-duty hours, the on-duty forecaster will contact 86 OSS/OSW leadership for direction.

**3.5. Exercise and Contingency Planning.** Support will be provided as required. Product delivery times and formats are coordinated with the requester on a case-by-case basis. The primary customers for exercise support include, but are not limited to, 86 AW/IGI. 86 OSS/OSW SIF/WIT members will provide exercise weather injects as requested by 86 AW/IGI for installation exercise requirements per DAFI 10-2501, *Emergency Management Program*, AFI 10-2501\_USAFESUP, *Air Force Emergency Management (EM) Program Planning and Operations*, DAFI 90-302, *The Inspection System of the Department of the Air Force* and 86 AW IEMP 10-2 in order to maximize exercise benefit for the 86 AW. When manning allows, the 86 OSS/OSW will maintain two trained WIT members.

**3.6. Climatology Services.** 86 OSS/OSW SIF provides tailored climatology support on an as-needed basis. 86 OSS/OSW ASF provides a monthly climatology report to base and wing agencies upon request. These reports will be kept for 2 years then until no longer needed.

**3.7. Intelligence Preparation of the Battlefield (IPB).** Upon request and IAW duty priorities, 86 OSS/OSW will provide weather information to agencies, such as the 86 AW/AT, for IPB purposes. The information provided includes, but is not limited to, solar and lunar illumination data and space weather data that can impact communications.

**3.8. Severe Weather Action Plan (SWAP).** SWAP consists of actions taken by the WF to enhance the unit's response capability prior to and during a severe weather event. Actions include, but are not limited to, recalling personnel or reallocating resources from other tasks, based on sound RM practices, to provide focused support during a severe weather event. The weather technician will coordinate with flight leadership on the requirement for an augmentee recall, based on workload or severity of the weather situation SWAP is designed to assist installation command personnel in managing severe weather events.

3.8.1. **Table 1.3** lists Ramstein SWAP criteria. Per DAFMAN 15-129, tornadic activity and severe thunderstorms with hail GTE to  $\frac{3}{4}$  inch require a forecaster to be present in order to supplement observations as necessary. All other SWAP criteria will be evaluated on a case-by-case basis using RM and flight leadership coordination to determine whether an additional person will report to the weather station. (For example, during heavy snow or freezing rain, the road conditions may not be safe for travel.)

3.8.2. At a minimum, 86 OSS/OSW flight leadership will be notified when a watch or warning is issued or observed for any of the conditions in **Table 3.1**. Once a severe weather recall is activated, the team leader will intensify the METWATCH functions, and be prepared to supplement weather observations as required. Ensuring an expedited response to operational concerns is the top priority.

**Table 3.1. SWAP Criteria.**

1.	Tornado/Funnel Cloud*
2.	Severe Thunderstorms (Winds GTE 50 kts and/or Hail GTE ¾ inch*)
3.	Volcanic Ash*
4.	Ice Pellets*
5.	Snow GTE 2 inches in 12 hours (Snow Depth Measurement)*
6.	Rain GTE 2 inches in 12 hours
7.	Blizzard - Surface visibility LTE 0400 meters - Considerable falling/blowing snow - Sustained wind speeds or gusts GTE 30 kts - Duration GTE 3 hours
8.	Surface Winds GTE 50 kts
9.	Freezing Precipitation
* Ramstein Mandatory Supplementary Criteria	
(NOTE: Hail GTE ¼ inch is mandatory supplementary criteria, while hail GTE ¾ inch is SWAP criteria)	

**3.9. Operational Reporting.** In the event of an aircraft mishap, weather event causing damage, or 86OSS/OSW will initiate data saves and emergency actions as necessary and consolidate and archive all pertinent weather data for an OPREP-3 to be submitted by 86 AW/CP IAW AFI 10-206, Operational Reporting, the USAFE CCIR (derived from AFI 10-500, AFGSC CCIR), and the Wing CCIR (commander's discretion). 21 OWS will be notified of the OPREP-3 and will provide the WF with copies of archived weather data as required. Data saves will be kept for 2 years then destroyed once no longer needed.

## Chapter 4

### AIRFIELD SUPPORT FUNCTION (ASF)

#### 4.1. General.

4.1.1. 86 OSS/OSW ASF provides direct support to the airfield operations and base resource protection through the reporting and forecasting of weather conditions.

4.1.2. Operating Hours. The ASF operates 24 hours a day, 7 days a week in conjunction with airfield operating hours.

4.1.3. Location. The ASF is located on the 6th floor of Building 2303. Reference [paragraph 4.6](#) for AOL information.

4.1.4. Contact Information. The ASF can be contacted at DSN 480-2488 or through email at [86weather@us.af.mil](mailto:86weather@us.af.mil).

#### 4.2. Observations.

4.2.1. Observations are issued for RAB under the ICAO identifier ETAR, 24 hours a day, seven days a week. Routine “METAR” observations are issued every hour between 55 and 59 minutes past the hour. Special “SPECI” observations are issued whenever weather conditions cross RAB airfield specification criteria thresholds. These criteria are based on AFMAN 15-111 SPECI Criteria, DAFMAN 15-129 standard specification and amendment criteria, and FLIP takeoff and landing minima for RAB. A complete list of specification and amendment criteria for RAB can be found in the Ramstein (ETAR) IDP, under the “SPECI Criteria” and “TAF Criteria” tabs. A copy of the ETAR IDP can be provided upon request.

4.2.2. RAB utilizes the AMOS, FMQ-19 Fixed Based System as the primary means of gathering real-time weather data on the Ramstein airfield complex. The AMOS is an integrated system of multiple weather sensors that continually measures environmental weather conditions to provide responsive, reliable, real-time weather information ISO flight operations. The 86 OSS/OSW utilizes the AMOS to take and disseminate automated observations IAW AFMAN 15-111. AMOS equipment and sensors are installed on runway 08, runway 09, runway 26, runway 27, and at the runway complex midfield. A certified observer maintains weather situational awareness and is available 24/7 to augment AMOS observations as necessary. All observational data is sent 14th Weather Squadron each day, then destroyed once no longer needed.

#### 4.3. Augmentation.

4.3.1. Augmentation is the process of having position qualified weather technicians manually add or edit data to an observation generated by a properly sited automated observing system. Certain weather phenomena are beyond the detection and reporting capabilities of the FMQ-19 system. Supplementary augmentation is the method of manually adding meteorological information to an automated observation that is beyond the capabilities of the FMQ-19 and will be conducted during operating hours. At all times 86 OSS/OSW personnel will respond to SWAP procedures (see [paragraph 3.8](#)) and supplement mandatory criteria as required.

4.3.2. Augmented meteorological elements will be determined from the primary official point of observation (elevation 817 ft above MSL) on the roof of the 4th floor on the east and west side of Building 2303. When 86 OSS/OSW technicians are conducting operations from the AOL, augmented meteorological elements will be determined from the alternate official point of observation (elevation 779 feet above MSL) just to the south of the AOL.

4.3.3. **RAB Specific Supplementation Criteria.**

**Table 4.1. Mandatory Supplementary Weather Conditions Criteria.**

(IAW AFMAN 15-111, tailored for RAB airfield requirements)
Body of Report
Tornado (+FC) (NOTE 1) (NOTE 2)
Funnel Cloud (FC) (NOTE 1) (NOTE 2)
Waterspout (+FC) (NOTE 1) (NOTE 2)
Hail (GR) (Only when size is greater than ¼ inch IAW local warning criteria)
Volcanic Ash (VA)
Ice Pellets (PL)
Remarks Section of Report
Snow Depth
Tower Visibility (For reportable values reference CWW OI 13-204)
Funnel Cloud (Tornadic Activity _B/ E(hh)mm_LOC/DIR_(MOV)) (NOTE 1)
NOTES: 1. The immediate reporting of funnel clouds takes precedence over any other phenomena. 2. ASF technician will log on to AMOS and be prepared to supplement for tornadic activity any time a weather watch or warning has been issued for the phenomena.

4.3.4. The ASF is authorized to supplement the prevailing visibility of the AMOS weather observation when VFR conditions (5000 meters or 1500 feet AGL) are predominant over the airfield but the active sensor is reporting unrepresentative values due to localized fog (i.e., the active sensor is reporting the only area of patchy fog on the flight line). Reference AFMAN 15-111.

4.3.4.1. The ASF will supplement observations if notification is received from tower personnel indicating that operations are being impacted due to this erroneous reading (i.e., VFR pattern closed, formation awaiting takeoff), and a switch of runways is not a viable alternative.

4.3.4.2. Based on ORM, supplementation will also take place during all hours when sufficient visual cues are available for an accurate manual observation.

#### **4.4. TAF.**

4.4.1. TAFs are issued by the ASF IAW AFMAN 15-124 using specification and amendment criteria as designated in DAFMAN 15-129 displayed in the Ramstein (ETAR) IDP. Exception: Deviations required for SARs or Memorandums of Agreement (MOAs) for deployed weather teams.

4.4.2. TAFs for RAB will be issued every 8 hours by the ASF for the ICAO identifier ETAR and are valid for a 30-hour period. Official TAF issue times for RAB are defined in the Ramstein (ETAR) IDP and will be disseminated by ASF NLT 15 minutes past each respective issue time. All TAFs and amendments, will be retained for 6 months then destroy if no longer needed.

4.4.3. Weather conditions within the TAF are forecast and amended for specific RAB amendment criteria listed in the Ramstein (ETAR) IDP. If any unforeseen weather criteria are occurring and are expected to persist for more than 30 minutes. The ASF will amend the TAF to be representative of current conditions and/or when deemed operationally significant.

#### **4.5. Watches, Warnings, and Advisories (WWA).**

4.5.1. WWAs are issued by the ASF, as directed in DAFMAN 15-129, Chapter 6, to protect vital resources from hazardous conditions and to maximize flight safety. Each watch, warning, or advisory is assigned a number following the two-digit number of the current month (e.g., 08-001 would be the first WWA issued in August). Only one watch or warning will be in effect at one time for a given location, excluding the tornado warning and lightning watch or warning. Although only one watch or warning may be in effect at one time for a given location, multiple-criteria WWAs may be in effect at the same time for a single location. All WWAs are valid for an area within a 5 NM radius from the center of the Ramstein airfield midpoint. NOTE: WWAs are specifically issued for RAB and as such may not necessarily be valid or representative throughout the entire KMC. All WWA records will be retained for 6 months then destroy if no longer needed.

4.5.2. WWAs are issued for both flying and non-flying operations. Impacts to flying operations are listed in the Ramstein (ETAR) IDP and hosted on the 86 OSS/OSW SharePoint page and are also available upon request.

##### **4.5.3. Weather WWA Responsibilities.**

4.5.3.1. The 86 OSS/OSW ASF technician should coordinate WWA issuances for RAB with the 21 OWS during severe weather events.

4.5.3.2. The 86 OSS/OSW issues weather WWAs for operational threshold criteria IAW DAFMAN 15-129, Chapter 6 and for Ramstein-specific criteria listed in the Ramstein (ETAR) IDP. The 86 OSS/OSW will issue all weather watches, warnings, and advisories, for weather criteria within 5 NM of the airfield complex.

4.5.3.3. WWA responsibilities for 86 AW units while forward deployed are coordinated with the 557th Weather Wing and included in a Support Assistance Request (SAR), if necessary.

4.5.3.4. Dissemination and Criteria. WWA dissemination and criteria with desired lead time (DLT) are outlined in the Ramstein (ETAR) IDP under the “Unique WWA Support” tab.

4.5.3.5. The appropriate weather agency will disseminate all RAB WWAs through an automated phone messaging system and/or email via JET.

4.5.3.6. Units and contact information will be maintained in the Ramstein (ETAR) IDP. Any changes to support or contact information will be coordinated between the unit and 86 OSS/OSW.

4.5.3.7. The criteria for WWAs are coordinated and outlined by the IDP between the 86 OSS/OSW and 21 OWS. The IDP will remain available on the 86 OSS/OSW Sharepoint and 21 OWS Warfighter HUD, or upon request.

#### **4.6. Alternate Operating Location (AOL).**

4.6.1. In the event of an emergency evacuation of all primary weather facilities, 86 OSS/OSW personnel will resume duties at the AOL. NOTE: PMSV is not available at the AOL.

4.6.2. In the event of a JET communications outage, observations, PIREPs, and TAFs observed WWAs will be disseminated via AFW-WEBS. WWAs will be disseminated locally by email, or telephone to ATC, GCA, CP, Airfield Management. If the communication method is not simultaneous, ATC and GCA are contacted first. If unable, 86 OSS/OSW will coordinate with another weather flight within USAFE to disseminate the weather data longline via AFW-WEBS or JET, and the 86 OSS/OSW will document WWAs and observations using hard copy procedures.

4.6.3. In the event of a power outage or FMQ-19 outage, back up tactical weather equipment to include a TMQ-53 or Tactical Meteorological Observation System (TMOS), a laser range finder, Kestrel, visibility markers, and compass will be utilized to continue providing ASF to RAB.

4.6.4. In the event of a significant or catastrophic communication outage or if 86 OSS/OSW is no longer able to provide support to 86 AW agencies, personnel will coordinate backup support with 21 OWS or another USAFE-AFAFRICA weather flight.

## Chapter 5

### MISSION INTEGRATION FUNCTION (MIF).

#### 5.1. General.

5.1.1. Mission Integration involves gaining an in-depth understanding of supported mission platforms, equipment, systems capabilities, and sensitivities. Additionally, the mission integration process injects timely, accurate, and relevant environmental information at every decision point in the planning and execution phases of operations to optimize mission execution.

5.1.2. 86 OSS/OSW provides deployed or in place reach-back mission planning, climatology, MEFs, FWBs and stand-up crew briefings. Mission execution support will be provided primarily in the form of Mission Weather Products (MWP) such as: MEF flimsy, DD Form 175-1, Global Decision Support System (GDSS) Weather Briefings, DZ and LZ forecasts. All MIF records will be kept for 6 months then destroyed if no longer needed.

5.1.3. Operating Hours. The MIF will tailor operating hours to accommodate local training flight mission requirements. Generally, the MIF will be on duty during local training mission launch and recovery times. The MIF shift is normally an 8-hour window that begins prior to the first training mission of the day. Training missions that extend past this time, USAFE family days, 86 AW goal days or down days, US Federal holidays, will be covered by the ASF

5.1.4. Location. When manning allows, the MIF will be located in the 37 AS Mission Planning Room in Building 2291, Rm 115A. The MIF may also perform duties from the 6th floor of Building 2303, Room 601 as required. Outside of MIF operating hours, both MIF and ASF are performed by the ASF personnel in Room 601, 6th floor of Building 2303.

5.1.5. Contact Information. During MIF operating hours, contact the MIF briefer at DSN 480-2487. Contact the ASF personnel at DSN 480-2488 outside of MIF operating hours or when the briefer is not in the 37 AS Building 2291.

#### 5.2. Flight Weather Briefings (FWB).

5.2.1. The MIF provides multiple types of FWBs to pilots depending on the location and scope of the mission. In all cases, once crews are airborne, weather forecasters will MISSIONWATCH all missions briefed to pilots and notify the 37 AS and 76 AS Operations Centers or designated POCs of any mission-impacting changes to forecast weather.

##### 5.2.2. Mission Execution Forecast (MEF).

5.2.2.1. The 86 OSS/OSW MEF is a Mission Weather Product (MWP) based on the MEF Process and designed to provide local flying squadrons with consistent and tailored mission planning and execution forecast weather. It allows quick and easy access to detailed weather information at home station, along flight routes, and over DZs and operating areas to assist local flying squadron missions.

5.2.2.2. MEF Operating Area. The MEF provides weather coverage to the operating area bounded in Germany, Cheivres, and French Polygone. Flights operating beyond this boundary will require a DD 175-1 (para 6.1.8) weather briefing unless otherwise coordinated.

5.2.2.3. Local MEF Procedures. A MEF consisting of production/update time, takeoff, enroute, destination and alternate forecasts, hazards, flight level winds/temperature charts, DZ forecast as applicable, and space weather impacts will be provided twice daily at 0400L (02/03Z) and 1200L (10/11Z) (unless prior coordination with MIF briefer dictates otherwise) via the RAB Weather SharePoint Page at: <https://usaf.dps.mil/sites/86OSS/OSW> and Mattermost channel located at: <https://chat.il4.dso.mil/usaf-usafe-86aw/channels/weather-brief-request--86-osw>. Should the sharepoint become unavailable, e-mail will be the method of delivery via [86weather@us.af.mil](mailto:86weather@us.af.mil).

### 5.2.3. DD Form 175-1 Briefings.

5.2.3.1. 86 AW controlled missions operating outside of the MEF operating area will utilize 175-1 weather briefings. All 175-1 weather briefings will be provided to each flying squadron NLT 3 hours prior to mission departure time in person (when working directly within each squadron) or by sending weather briefings through Mattermost or email.

5.2.3.2. Aircrews are asked to submit brief requests through the 86 OSS/OSW email Org Box at [86weather@us.af.mil](mailto:86weather@us.af.mil) or through the brief request Mattermost channel located at: <https://chat.il4.dso.mil/usaf-usafe-86aw/channels/weather-brief-request--86-osw> or by phone. The weather team requires a request to be submitted at least 4 hours prior to take-off to complete a weather brief, but 24 hours is desired. Aircrews that receive weather briefings electronically are requested to call the weather station to log their flights, validate the official briefing, and check for updates.

5.2.3.3. Request Contents. Aircrews requesting a briefing will provide the following mission data as part of their 175-1 request:

5.2.3.3.1. Number and type of aircraft performing the flight.

5.2.3.3.2. Aircraft call sign(s) or tail number(s). If multiple aircraft are on the same mission, then call sign or tail number of the mission commander.

5.2.3.3.3. Location and estimated time of departure and return (if applicable).

5.2.3.3.4. Flight levels to be flown.

5.2.3.3.5. Destination and alternate airfields and associated launch and recovery times.

5.2.3.3.6. Route of flight to include training areas, low level routes and areas, refueling areas, DZs and LZs.

5.2.3.3.7. Graphical forecast requirements (flight level wind charts, aviation hazards charts, etc.).

5.2.3.4. The mission commander or designee will contact the weather technician to determine method and time of briefing delivery and to provide any additional information or special requirements needed to enable the weather technician to tailor the briefing.

5.2.4. GDSS Briefings. 603rd AOC controlled IFM missions will be accomplished through GDSS. The MIF will work closely with 603rd AOC Flight Managers (FM) to provide weather briefing support for theatre airlift missions IAW DAFMAN 15-129 Table 6.1. Weather briefings will be delivered through GDSS NLT 5 hours before departure unless notified by the FM of a short-notice mission.

**5.3. Training.** 86 OSS/OSW will, IAW DAFMAN15-129, provide Instrument Refresher Course (IRC) briefings ISO of 86 AW aircrew training requirements.

## Chapter 6

### SUPPORT TO FLYING OPERATIONS.

**6.1. Local Flying Squadrons.** There are two flying squadrons assigned to the 86 AW and 86 OG, that 86 OSS/OSW is tasked to support.

6.1.1. Assumptions. 86 OSS/OSW will coordinate directly with the flying squadrons to the maximum extent possible to integrate into supported units.

6.1.2. 37th Airlift Squadron (37 AS). 86 OSS/OSW provides routine mission weather support to 37 AS.

6.1.2.1. Airframes Used. The 37 AS operates the C-130J model for tactical airlift.

6.1.2.2. Commonly Used Local Flying Areas. 37 AS commonly uses local airspace around RAB and airspace throughout Germany, eastern France, and the Benelux.

6.1.2.3. Drop Zones and Operating Areas. In addition to local airspace, 37 AS also operates at a multitude of DZs and operating areas. Reference local flying material for commonly used DZs and operating areas' latitude/longitude data.

6.1.2.4. Airframe and Mission Limiting Weather Thresholds. Airframe and mission limiting weather thresholds can be found on the 86 OSS/OSW Sharepoint page and are available upon request. These records will be kept until superseded, rescinded, obsolete or no longer needed.

6.1.3. 76 AS. 86 OSS/OSW provides routine training mission weather support to 76 AS.

6.1.3.1. Airframes Used. The 76 AS operates the C-21 and C-37 aircraft for operational support, executive airlift, aeromedical evacuation, and courier missions.

6.1.3.2. Commonly Used Operating Areas. The 76 AS commonly operates throughout airspace in western, central, and southern Europe for point-to-point training. However, aircrews are encouraged to contact 86 OSS/OSW as soon as crews are assigned for training missions (NLT 1700L the day prior) with pertinent mission planning information to mitigate weather impacts along their routes of flight.

6.1.3.3. Airframe and Mission Limiting Weather Thresholds. Airframe and mission limiting weather thresholds can be found on the 86 OSS/OSW SharePoint page and are also available upon request. These records will be kept until superseded, rescinded, obsolete or no longer needed.

6.1.4. Formation Briefings. If weather flight manning or duty priorities allow and it is requested by the mission commander, an in-person formation briefing may be conducted for multi-aircraft operations (three-ship or more) at the 37 AS (location as directed by the mission commander).

6.1.5. Off-Station Training (OST) and Joint Airborne/Air Transportability Training (JA/ATT) Mission Support. 86 OSS/OSW will provide or arrange for weather support to OST and JA/ATT operations. Weather support can be provided in-person or from home station, depending on mission requirements and 86 OSS/OSW manning. Additionally, climatological weather support can be requested further in advance for mission planning purposes. For both in-person and reach-back OST support, the mission commander will complete an LOI to determine mission dates/times and weather support requirements. The LOI will be sent via e-mail to 86 OSS/OSW ([86weather@us.af.mil](mailto:86weather@us.af.mil)) within two weeks for review and implementation. Deviations to the established LOI should be coordinated with the WF as soon as they are known, but NLT one day prior to the mission if possible. The LOI template can be found on the RAB Aviator Weather SharePoint Page under Weather Links, OST Template.

6.1.5.1. OSTs Requiring In-Person Weather Support. If the mission commander requests a weather technician to accompany the crew to the off-site location, 86 OSS/OSW staff should be notified NLT four weeks prior to the departure date. During coordination, all mission and administrative requirements will be determined in order to provide timely and proper weather support for the OST.

6.1.5.2. OSTs Not Requiring In-Person Weather Support. Weather product delivery method and time for sustained contingency or training operations should be coordinated with the 86 OSS/OSW staff NLT two weeks prior to the mission start date. At that time, product suite and delivery mechanism and times will be established, and the mission commander of the OST will complete an LOI.

6.1.6. Planning Weather for Flying Missions. The 86 OSS/OSW will produce a Five-Day Forecast each weekday morning to be used for planning purposes and is hosted on the OSW Sharepoint page. Mission commanders can request additional planning weather from 86 OSS/OSW as necessary. The on-duty weather technician will complete planning weather requests IAW 86 OSS/OSW duty priorities (see [Attachment 2](#)).

6.1.7. Hotwash Briefing. The OG Hotwash is a phone/Teams meeting held each day for the OG/CC to cover the prior day's missions and get an outlook for future operations. The 86 OSS/OSW will brief the OG/CC a two-day weather outlook for Ramstein, all GSUs, and any additional locations requested by leadership, highlight impacts to operations and personnel.

**6.2. Transient Aircraft.** Upon request and as duty priorities permit, 86 OSS/OSW will provide or arrange for FWB support to transient North Atlantic Treaty Organization (NATO) and U.S. aircrews, as stipulated in the FLIP. All briefings will be documented on either a DD Form 175-1 or the specifically requested product format.

**6.3. National Airborne Operations Center (NAOC).** The E-4B aircraft serves as the NAOC for the National Command Authorities. In case of a national emergency or destruction of ground command control centers, the aircraft provides a modern, highly survivable, command and control, and communications center to direct U.S. forces, execute emergency war orders and coordinate actions by civil authorities. President of the United States (POTUS) and other Distinguished Visitor (DV) support will take place on request, most often in conjunction with NAOC support.

6.3.1. Notification. 86 AW/XP will provide notification of mission dates and times to the 86 OSS/OSW, who will provide continuous weather support. While on Ramstein, NOAC requires specific weather support. Reference 86 AW OPLAN 84-18 *National Airborne Operations Center (NAOC)*.

6.3.2. Primary Environmental Support. Primary support for NAOC is the responsibility of 86 OSS/OSW, while 21 OWS will provide back-up support. The 86 OSS/OSW will provide 24 hour environmental support to the NAOC operations team and aircrew, which includes planning weather, staff briefings, and notification of NAOC unique weather requirements.

6.3.3. NAOC Unique WWAs. The advance agent/NAOC Watch Officer will pass current contact information to the 86 OSS/OSW, to include a direct phone number. The 86 OSS/OSW will notify the NAOC Watch Officer of any NAOC unique issued WWAs. NAOC unique WWAs will be cancelled when conditions are no longer occurring or no longer expected to occur. 86 OSS/OSW will notify the NAOC Watch Officer of NAOC specific WWA cancellation. If a direct phone number to the advance agent/NAOC Watch Officer is not available, the 86 OSS/OSW will make all unique WWA notifications via the 86 AW/CP. NAOC unique WWA issuance and cancellation will be conducted locally and will not be completed within JET. Reference the “Unique WWA Support” tab on the Ramstein (ETAR) IDP for NAOC unique WWA criteria.

#### **6.4. CLOSEWATCH.**

6.4.1. Per RABI13-526, one of the 86 OSS/OSW members listed on the current CLOSEWATCH appointment letter will provide forecast weather conditions for Ramstein and other destinations or divers associated with the special assignment airlift mission and hazardous cargo as required.

6.4.2. 86 OSS/OSW will attend and brief weather at the CLOSEWATCH pre-coordination and mission briefings. Slides will be disseminated via SIPRNET email or as directed by the Wing Central POC.

**6.5. Volcanic Ash Plume and Concentration Forecasts.** The 86 OSS/OSW will provide volcanic ash forecast updates, leveraging products produced by the AOR-appropriate VAAC office. The regional VAAC will be the primary authoritative source for volcanic ash hazard products related to that event. The 557<sup>th</sup> Weather Wing is the secondary source.

6.5.1. London VAAC Office. The primary VAAC office servicing northern Europe is the London VAAC run by the United Kingdom Meteorological Office.

6.5.2. Toulouse VAAC Office. The primary VAAC office servicing southern Europe, Africa, and western Asia is the Toulouse VAAC office run by Meteo France.

**6.6. Pilot-to-Metro Service (PMSV).** 86 OSS/OSW provides 24/7 PMSV support to aircraft operating within RAB airspace. The Ramstein PMSV radio frequency is 284.425 megahertz (MHz) and the 86 OSS/OSW callsign is “Ramstein Metro”. Spangdahlem AB provides PMSV support on the same frequency under the callsign “Spangdahlem Metro” during duty hours (M-F 0600-2000L). Aircraft requiring PMSV support when the weather flight is located at the AOL, or when the Ramstein PMSV is down can phone patch through Ramstein Tower or 618 AOC Weather via 1-800-AIR-MOBL.

**6.7. 424 ABS (Chièvres Air Base, Belgium).** In support of 424 ABS, 86 OSS/OSW will:

6.7.1. Send 86 OSS/OSW personnel to review the weather familiarization program at Chièvres annually.

6.7.2. Send via email, acknowledgement that the controller is certified as a limited weather observer for Chièvres AB upon receipt of the weather training completion memo and weather examination from the Chièvres NCOIC of Training and Standardization. This memo will serve as the weather certification until the controller's AF Form 3622 can be documented by the weather certifier during the 86 OSS/OSW annual Chièvres visit or a 424 ABS/Ramstein support run. These records will be kept for 1 year or until no longer needed.

6.7.3. Develop and validate the Chièvres AB daytime and nighttime visibility charts for determining control tower prevailing visibility IAW AFMAN 15-111. These charts will be kept until superseded, rescinded, obsolete or no longer needed.

6.7.4. Maintain a computer-based training program covering local weather orientation and local weather effects. This information will be reviewed during the annual Chièvres visit and updated as necessary.

6.7.5. Tailor weather familiarization to local conditions at Chièvres to the maximum extent possible. All training is IAW AFMAN 13-204V2, AFI 13-204V2\_USAFE SUP\_I and AFMAN 15-111.

**6.8. Maintenance Support.**

6.8.1. 86 OSS/OSW will maintain JET access for the 86 MXG/MOC and 721 AMXS/MOC to include unlocking accounts and resetting passwords. JET accounts provide users on demand access to real-time weather data for the Ramstein Aerodrome. In the event of a communications outage that impacts JET access, 86 OSS/OSW personnel may provide weather data to 86 MXG/MOC and 721 AMXS/MOC if requested via telephone, or email.

6.8.2. Weather WWA Criteria for Maintenance Operations. 86 OSS/OSW will coordinate with 86 MXG units to ensure up to date maintenance operations WWA criteria are documented. ASF will act as the local focal point for weather WWA issuances.

## Chapter 7

### SUPPORT TO NON-FLYING OPERATIONS.

#### 7.1. 86th Mission Support Group (MSG).

##### 7.1.1. 86th Security Forces Squadron (SFS).

7.1.1.1. Working Dog Training. 86 OSS/OSW will provide weather information, to include observed and forecasted wind speed and direction, ambient temperature, and lightning data via the on-duty forecaster, as requested, to support 86 SFS working dog training.

7.1.1.2. Road Condition Status. 86 OSS/OSW will provide observed and forecasted snow accumulation and ice information as requested to aid the 86 SFS in road condition status determination. NOTE: 86 OSS/OSW will NOT make the road condition status determination, they will only provide the forecast and observed weather information required by decision makers. The forecaster on duty will direct all road conditions inquiries to the Ramstein Weather Update webpage: <https://www.ramstein.af.mil/Weather-Info/>.

##### 7.1.2. 569th United States Forces Police Squadron (USFPS).

7.1.2.1. Road Condition Status. 86 OSS/OSW will provide observed and forecasted snow accumulation and ice information as requested to aid the 569 USFPS in road condition status determination for Vogelweh AS and the Kaiserslautern Military Community (KMC).

##### 7.1.3. 86th Communications Squadron (86 CS).

7.1.3.1. Weather WWA Email Notification. The issuing weather unit will provide email notification of WWA criteria outlined in [paragraph 4.5](#) via JET to the 86 CS organizational boxes listed in the Ramstein (ETAR) IDP.

7.1.3.2. Space Weather Environmental Awareness. When requested, 86 OSS/OSW will provide updates via email to 86 CS Satellite Communications ([86cs.satcom@us.af.mil](mailto:86cs.satcom@us.af.mil)). Depending on the type of activity, notification may be in a text bulletin or graphical format.

##### 7.1.4. 786th Force Support Squadron (FSS).

7.1.4.1. Fitness Assessment Cell (FAC) Planning Product. The primary FAC planning product will be the 86 OSS/OSW Five-Day Forecast which is produced each weekday morning and is hosted on the OSW Sharepoint page.

7.1.4.2. Real-Time Weather Data. 86 OSS/OSW will provide the Ramstein FAC with real-time wind speed in nautical miles per hour, ambient air temperature in Fahrenheit, precipitation, and lightning data via the ASF as requested prior to fitness test sessions in order to aid in DAFMAN 36-2905, *Physical Fitness Program*, testing weather threshold assessment and testing location decisions. NOTE: 86 OSS/OSW personnel will NOT make testing location decisions and will only provide forecast and observed weather information required by FAC staff.

7.1.4.3. 86 FSS. Golf Course and Swimming Pool Lightning Notification. 86 OSS/OSW will provide notification of WWA's and observed lightning strikes within 5 NM of the RAB complex via JET or the 86 AW/CP. For more information on WWA notifications see [Chapter 2](#).

#### 7.1.5. 86th Civil Engineer Group (CEG), 786th Civil Engineer Squadron (CES).

7.1.5.1. Explosive Ordnance Disposal. 86 OSS/OSW will provide forecast and observed weather information to include wind speed and direction, ambient temperature, and lightning data via the on-duty forecaster as requested prior to Explosive Ordnance Disposal training, operations, or emergencies.

7.1.5.2. CDMs/EDMs. 86 OSS/OSW will provide text based CDMs/EDMs to 786 CES/CEX and 86 CES/CEF when requested. CDMs/EDMs can be requested by contacting 86 OSS/OSW (reference chapter three for primary and on-call contact numbers). CDMs/EDMs are based on model data produced by 557th Weather Wing. NOTE: 86 OSS/OSW is NOT responsible for producing toxic corridor and nuclear fallout calculations for RAB. This responsibility falls within the 786 CES/CEX. However, 86 OSS/OSW will provide the most accurate and representative observed and/or forecast weather data to 786 CES/CEX plume models to ensure consistency between CBRN hazard area predictions and the installation forecast.

7.1.5.3. Emergency Operations Center (EOC). When manning allows, 86 OSS/OSW will provide weather personnel to the EOC when requested during exercises and real-world contingencies. 86 OSS/OSW personnel embedded into the EOC will inject relevant and timely weather information into the planning and decision-making processes. When manning does NOT allow for an embedded briefer at the EOC, EOC personnel will contact the 86 OSS/OSW ASF for specific weather requirements.

7.1.5.4. Snow Removal. The 86 OSS/OSW will contact the 786 CES snow removal shop (DSN 480-5852) when 1/2 inch of new snow accumulation or greater is forecast for RAB. 86 OSS/OSW will provide the estimated amount of new snow accumulation in order to assist the snow removal process. A daily update may be required via e-mail if snowfall is forecast to continue beyond 24 hours. Updates will be sent out IAW 86 OSS/OSW SSOP4, paragraph 10 Winter Weather Outlook, until the threat of accumulation no longer exists.

7.1.6. 86th Medical Group, 86th Operational Medical Readiness Squadron (OMRS). 86 OSS/OSW will provide 86 OMRS/SGXB with real-time weather conditions via JET to support Wet Bulb Globe Temperature calculations used to determine Heat categories. NOTE: Heat Category and Flag Color status is reported by 86 OMRS/SGXB to 86 AW/CP per DAFI 48-151. All Heat Category/Flag Color status inquiries to the 86 OSS/OSW will be directed to 86 OMRS/SGXB.

## 7.2. 86 AW Command Post.

7.2.1. Weather WWA Information. WWAs will be provided to 86 AW/CP via JET automated emails and phone calls. Reference [Chapter 5](#) for more information on WWAs.

7.2.2. DAF CCIR. In the event of damage caused by severe weather, 86 OSS/OSW will provide relevant weather information as required by 86 AW/CP to include in DAF CCIR reports.

7.2.3. Contact Information. 86 OSS/OSW will immediately notify 86 AW/CP whenever any contact information changes.

7.2.4. Crisis Action Team (CAT). When manning allows, 86 OSS/OSW will provide weather personnel to the CAT during exercises and real-world contingencies. 86 OSS/OSW personnel embedded into the CAT will inject relevant and timely weather expertise and information into the planning and decision-making processes. See [paragraph 3.4](#) for more information.

7.2.5. Early Release and Delayed Reporting. The 86 OSS/OSW will contact the 86 AW/CP and 86 AW/CCE when 1/2 inch of new snow accumulation or greater or freezing precipitation is forecast for RAB. 86 OSS/OSW will provide the estimated amount of new accumulation in order to assist the early release/delayed reporting decision making process. If requested by 86 AW/CC, 86 OSS/OSW will produce winter weather outlooks slides to aid in the commander's RM process. NOTE: 86 OSS/OSW is NOT the responsible organization for making early release/delayed reporting decisions and thus will NOT dictate whether the installation is under early release/delayed reporting status. The forecaster on duty will direct all Early Release/Delayed Reporting inquiries to the Ramstein Weather Update webpage (<https://www.ramstein.af.mil/Weather-Info/>) and the caller's chain of command.

### **7.3. 65th Operations Support Squadron.**

7.3.1. 86 OSS/OSW will provide FWB and Staff functions when 65 OSS/OSW manning does not allow them to support operations.

7.3.2. 86 OSS/OSW personnel will train, certify, and recertify 65 OSS/OSW personnel if manning at Lajes does not allow them to complete internally.

7.3.3. 86 OSS/OSW will review the 65 OSS/OSW continuation training program annually.

### **7.4. 435th Contingency Response Squadron (CRS).**

7.4.1. 86 OSS/OSW will provide each 435 CRS Weather Airman with 16 hours of monthly proficiency training during dayshift hours (e.g., 0600L-1500L).

7.4.2. 86 OSS/OSW will ensure a qualified Weather Airman is available and present to provide training in all areas of conventional weather operations.

7.4.3. 86 OSS/OSW will provide a minimum of 24 hours' notice to the 435 CRS/OPSF Commander or Chief (DSN 480-3870 or Comm +49 6371-47-3870) for any cancellation of scheduled training.

7.4.4. 86 OSS/OSW will ensure 435 CRS Weather Airmen are not scheduled as shift personnel. Due to the nature of their primary duties, they may be recalled for short notice deployments.

### **7.5. 603<sup>rd</sup> AOC.**

7.5.1. 86 OSS/OSW will provide forecast products to the 603d AOC/Weather Specialty Team (WST) for integration with the JFACC/USAFE-AFAFRICA CDR update briefs.

## Chapter 8

### RECIPROCAL SUPPORT AGREEMENTS.

#### 8.1. 86th Operations Group.

##### 8.1.1. 37 AS and 76 AS.

8.1.1.1. 37 AS will provide the 86 OSS/OSW embedded weather forecaster with adequate and dedicated workspace to include desk, NIPRNET computer, phone line, and printer access.

8.1.1.2. 37 AS and 76 AS aircrews will request DD 175-1s NLT 4 hours prior to take-off. 86 OSS/OSW duty priorities and forecaster task load will determine the precedence of briefing requests submitted after the four hours prior deadline.

8.1.1.3. For OST support, 37 AS and 76 AS OST mission commanders will submit an OST support LOI within the time frames laid out in [paragraph 6.1.6](#).

8.1.1.4. The 37 AS and 76 AS should:

8.1.1.4.1. Pass PIREPs to either ATC or directly to OSW if any of the required weather phenomena are encountered IAW the Flight Information Handbook, and when possible, when the following criteria are encountered: tornado, hail, volcanic ash, crosswinds that equal or exceed 25 knots, windshear, or any condition that, in the judgment of the aircrew member, would present a hazard to flight. All PIREP records will be destroyed after 1 month.

8.1.1.4.2. Coordinate with 86 OSS/OSW to provide aircraft and mission-limiting weather impacts to support aircraft and mission types.

8.1.1.4.3. Contact the on-duty 86 OSS/OSW weather technician to validate the official briefing, and check for updates when receiving a weather product (MEF, DD 175-1, etc.) electronically.

8.1.1.5. Coordinate additional requirements as needed. 37 AS Training Shop (DOT) will provide a schedule of IRC briefings that require a weather briefer. Current IRC Briefing can be scheduled through coordination through [37AS.DOT@us.af.mil](mailto:37AS.DOT@us.af.mil) and OSW leadership.

8.1.1.6. Notify 86 OSS/OSW of any changes to the following:

8.1.1.6.1. Aircraft and mission limiting weather thresholds.

8.1.1.6.2. Their respective local flying areas.

8.1.1.6.3. Any changes to the day's local training missions being supported by 86 OSS/OSW personnel.

8.1.1.6.4. When possible, relay any other significant changes to their respective operations that will impact how 86 OSS/OSW provides terrestrial or space weather support.

- 8.1.1.6.5. When possible, provide aircrew feedback to the 86 OSS/OSW after each mission on the accuracy and timeliness of weather briefing support. When possible, the weather technician will verbally debrief returning crews and refine subsequent forecasts based upon this feedback.
- 8.1.2. 424ABS (Chièvres Air Base, Belgium).
- 8.1.2.1. The 424 ABS/AOAT NCOIC of Training and Standardization or designated representative at Chièvres AB will:
- 8.1.2.1.1. Administer local weather familiarization training (to include tower visibility observation training) and a written weather examination. All records associated with this training will be kept for 1 year or until no longer needed.
- 8.1.2.1.2. Email the completed weather examination to 86 OSS/OSW at [86weather@us.af.mil](mailto:86weather@us.af.mil), along with a memo stating the controller has completed the local weather familiarization training.
- 8.1.2.1.3. Ensure all assigned tower personnel receive recurring tower visibility certification. Ensure all assigned tower personnel document recurring certifications on AF Form 1098, *Special Task Certification and Recurring Training*.
- 8.1.2.2. 424 ABS shall fund 86 OSS/OSW temporary duty (TDY) to Chièvres AB supporting the 424 ABS/AOAT.
- 8.1.3. 86 OSS.
- 8.1.3.1. 86 OSS/OSW and Airfield Operations (86 OSS/OSA), including ATC, GCA, and Airfield Management, agencies operate closely under a framework of cooperative weather watch, familiarization training, and weather and airfield data dissemination. 86 OSS MOA 13-204, *Ramstein AB Cooperative Weather Watch (CWW)*, defines each agencies responsibilities and includes specific procedures to report malfunctions, outages, and restoration of weather reporting equipment. The agreement can be located on the OSW Sharepoint.
- 8.1.3.2. 86 OSS Current Operations (86 OSS/OSO) will provide future mission planning calendars for 86 AW missions in order to assist in planning weather requirements for 86 AW flying squadron OSTs.

## 8.2. 65 ABG, 65 OSS.

- 8.2.1. 65 OSS/OSW will fund 86 OSS/OSW TDY to Lajes Field to support training and certification requirements laid out in [paragraph 7.3](#).
- 8.2.2. 65 OSS/OSW personnel will train, certify, and recertify their weather personnel when manning allows.

## 8.3. 86 AW Staff Agencies.

- 8.3.1. 86 AW Plans and Programs (86 AW/XP). 86 AW/XP will:
- 8.3.1.1. XP and individual plan OPRs will coordinate with the 86 OSS/OSW on all 86 AW Plans to include new plans and those in review.

8.3.1.2. Provide 86 OSS/OSW advance notice (when possible) of NAOC or equivalent visits and include 86 OSS/OSW in requirement planning coordination regarding such visits.

8.3.1.3. When availability exists, provide a workspace for one 86 OSS/OSW member during CAT activation (Real World and Exercise) to include one NIPRNET workstation, one SIPRNET workstation, and DSN phone access.

8.3.2. 86 AW Command Post (86 AW/CP). 86 AW/CP will:

8.3.2.1. Relay all issued WWAs IAW the RAB dissemination chart (reference Ramstein IDP).

8.3.2.2. Ensure 86 OSS/OSW is notified of all CAT recalls through AtHoc and/or telephone notification IAW 86 AW Recall Plan 10-218.

8.3.2.3. Allow 86 OSS/OSW personnel access to 86 AW/CP, with a restricted area badge with corresponding CAT area (open) or those listed on an authenticated EAL (Entry Authorization List), during exercises, contingencies, or emergencies or periods of staff weather personnel evacuation of Building 2303.

8.3.2.4. Notify 86 OSS/OSW of any reports of severe weather which cause damage to 86 AW assets, or which significantly impact 86 AW operations.

8.3.2.5. Prepare and submit OPREP-3 weather data for aircraft incidents utilizing inputs from applicable directives. These records will be kept for 6 months, then destroyed.

8.3.3. 86 AW Safety (86 AW/SE). 86 AW/SE will coordinate with 86 OSS/OSW on any mishap reports containing weather-related information before the safety report is transmitted.

#### **8.4. 435th CRS.**

8.4.1. 435th CRS will contact the 86 OSS/OSW to schedule proficiency training for the unit's Weather Airmen NLT the 15th of each month for the subsequent month's duty schedule.

8.4.2. 435th CRS will ensure each 435 CRS Weather Airman is scheduled for 16 hours of monthly proficiency training during dayshift hours (e.g., 0600L-1500L).

8.4.3. 435th CRS will provide a minimum of 24 hours' notice to the 86 OSS/OSW leadership of any cancellation of scheduled training, unless unable to due to mission requirements.

8.4.4. 435th CRS will provide immersions to 86 OSS/OSW Airmen over contingency weather operations, as requested, and as approved by the 435 CRS/OPSF Commander or Chief.

ADRIENNE L. WILLIAMS  
Brigadier General, USAF  
Commander

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

AFPD 15-1, *Air Force Weather Operations*, 14 Nov 2019

DAFI 10-2501, *Air Force Emergency Management (EM) Program Planning and Operations*, 16 Oct 2023

AFI 33-322, *Records Management and Information Governance Program*, 23 Mar 2020

DAFI 36-2905, *Fitness Program*, 21 Apr 2022

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***Abbreviations and Acronyms***

**AB**—Air Base

**ABS**—Air Base Squadron

**AF**—Air Force  
**AFI**—Air Force Instruction  
**AFMAN**—Air Force Manual  
**AFW**—Air Force Weather  
**AGL**—Above Ground Level  
**AMD**—Air Mobility Division  
**OMRS/SGXB**—Aerospace Medicine Squadron Bioenvironmental Engineering  
**AMOS/FMQ**—Automatic Meteorological Observing System  
**AOAT**—Airfield Operations Air Tower  
**AOOC**—Air and Space Operations Center  
**AOL**—Alternate Operating Location  
**AOR**—Area of Responsibility  
**AS**—Airlift Squadron  
**ASF**—Airfield Support Function  
**ATC**—Air Traffic Control  
**AtHoc**—Network-Centric Emergency Mass Notification System  
**AW**—Airlift Wing  
**Benelux**—Belgium, Netherlands, and Luxembourg  
**CAT**—Crisis Action Team  
**CBRN**—Chemical, Biological, Radiological, and Nuclear  
**CC**—Commander  
**CDM**—Chemical Downwind Message  
**CEF**—Fire Emergency Services  
**CES**—Civil Engineer Squadron  
**CEX**—Readiness & Emergency Management Flight  
**CFETP**—Career Field Education and Training Plan  
**CP**—Command Post  
**CRS**—Contingency Response Squadron  
**CRS/OPSF**—Contingency Response Squadron Operations Flight  
**CS**—Communications Squadron  
**DD/DoD**—Department of Defense  
**DSN**—Defense Switching Network

**DZ**—Drop Zone

**ETAR**—ICAO identifier for Ramstein AB

**EDM**—Effective Downwind Message

**EOC**—Emergency Operations Center

**EUCOM**—US European Command

**FAC**—Fitness Assessment Cell

**FLIP**—Flight Information Publication

**Flt/CC**—Flight Commander

**FWB**—Flight Weather Briefing

**GAL**—Global Address List

**GCA**—Ground Control Approach

**GDSS**—Global Decision Support System

**GTE**—Greater Than or Equal To

**IAW**—In Accordance With

**ICAO**—International Civil Aviation Organization

**IDP**—Installation Data Page

**IFM**—Integrated Flight Management

**IGI**—Inspections Directorate

**IRC**—Instrument Refresher Course

**ISO**—In Support of

**JET**—Joint Environmental Toolkit

**KMC**—Kaiserslautern Military Community

**LOI**—Letter of Instruction

**LZ**—Landing Zone

**MEF**—Mission Execution Forecast

**METAR**—Aviation Routine Weather Report

**METWATCH**—Meteorological Watch

**MIF**—Mission Integration Function

**MISSIONWATCH**—Mission-Scale Meteorological Watch

**MSL**—Mean Sea Level

**MOC**—Maintenance Operations Center

**MWP**—Mission Weather Product

**NAOC**—National Airborne Operations Center  
**NIPRNET**—Non-classified Internet Protocol Router Network  
**NLT**—No Later Than  
**NM**—Nautical Miles  
**OPR**—Office of Primary Responsibility  
**OPREP**—Operational Report  
**OPLAN**—Operations Plan  
**RM**—Risk Management  
**OSS**—Operations Support Squadron  
**OSS/OSW**—Operations Support Squadron Weather Flight  
**OST**—Off-Station Training  
**OWS**—Operational Weather Squadron  
**PIREP**—Pilot Report  
**PMSV**—Pilot-to-Metro Service  
**RAB**—Ramstein Air Base  
**SAR**—Support Assistance Request  
**SE**—Safety  
**SFS**—Security Forces Squadron  
**SIF**—Staff Integration Function  
**SIPRNET**—SECRET Internet Protocol Router Network  
**SPECI**—Aviation Selected Special Weather Report  
**SWAP**—Severe Weather Action Plan  
**TAF**—Terminal Aerodrome Forecast  
**TMOS/TMQ**—Tactical Meteorological Observing System  
**USAFE**—United States Air Forces Europe  
**VAAC**—Volcanic Ash Advisory Center  
**VFR**—Visual Flight Rules  
**WF**—Weather Flight  
**WIT**—Wing Inspection Team  
**WS**—Weather Squadron  
**WWAs**—Watches, Warnings, and Advisories  
**XOW**—Weather Operations Directorate

**XP—Plans and Programs***Terms*

**557th Weather Wing**—A strategic weather center at Offutt AFB NE, providing atmospheric data and analysis and forecast products required by the regional OWSs and the WFs worldwide. 557 WW provides the centralized repository for global observations and forecasts that are data based at 557 WW and, in turn, disseminated to DoD weather data users worldwide. In addition to global observations and forecasts collected from worldwide sources, 557 WW collects meteorological satellite data from multiple sources. Based on global analysis of available data, 557 WW creates global analysis and forecast products to meet the forecast requirements of its supported users.

**Aviation Routine Weather Report (METAR)**—The World Meteorological Organization (WMO) METAR code format used worldwide to encode weather observations.

**Aviation Selected Special Weather Report (SPECI)**—An unscheduled report taken when certain criteria have been met.

**Continuous Weather Watch (CWW)**—Weather technicians will monitor weather conditions continuously and perform no other significant duties. In addition to taking METARs, weather technicians will take and disseminate observations as conditions occur that meet SPECI observation criteria. Weather flights may perform a CWW during AMOS augmentation if locally determined to be more appropriate due to existing meteorological conditions.

**Desired Lead Time (DLT)**—The total amount of time required to disseminate a forecast WWA from the supporting OWS through the local dissemination tree to all affected end-users plus the amount of advance notice a supported organization requires to complete mandatory protective actions before the onset of a particular weather phenomenon.

**ICAO (International Civil Aviation Organization) Identifier**—A specifically authorized 4-letter identifier assigned to a location. The ICAO is not to be confused with the Routing Identifier used by the Automatic Digital Weather Switch to transmit addressed messages including Automated Response to Queries. Routing IDs may not always match a station ICAO and can have 5 characters.

**International Civil Aviation Organization (ICAO)**—A United Nations organization specializing in international aviation and navigation.

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

**Mission Weather Product (MWP)**—Any weather product or group of weather products generated by an Exploitation Unit that is integrated into the military decision making process. MWPs may be planning or execution products and are not limited to aviation missions.

**MISSIONWATCH (Mission Meteorological Watch)**—A deliberate process for monitoring terrestrial weather or the space environment for specific mission-limiting environmental factors. The

**MISSIONWATCH**—process identifies and alerts decision-makers to changes affecting mission success.

**Operational Weather Squadron (OWS)**—A characterization unit comprised of management, technician, and training personnel responsible for providing regional weather support. Their mission is to produce fine-scale tailored weather forecast products and services to supported users within their area of responsibility (AOR).

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

**Severe Weather Action Plan (SWAP)**—Actions taken by a weather unit to enhance the unit's response capability during a severe weather event. Actions include, but are not limited to, recalling personnel or reallocating resources from other tasks to provide focused support during a severe weather event.

**Support Assistance Request (SAR)**—Used to request specialized weather, space environmental, or climatological support from the 557 WW, 14 WS, MAJCOMs.

**Terminal Aerodrome Forecast (TAF)**—A standard text forecast containing the cloud cover, cloud heights, and visibility for general flight rule conditions (IAW AFI 11-202, Volume 3, General Flight Rules; and AR 95-1, Flight Regulations), as well as wind, altimeter, and other weather parameters needed to sustain the landing and takeoff of aircraft.

**Watch, Warning and/or Advisory (WWA)**—**Watch:** A special notice to notify installation personnel and supported units of a potential for environmental conditions of such intensity as to pose a hazard to life or property. Weather watches indicate a potential for environmental threats and are used to make force protection and risk management decisions. **Warning:** A special notice to notify installation personnel and supported units when an established weather condition of such intensity as to pose a hazard to life or property is occurring or expected to occur. Weather warnings provide concise information outlining environmental threats and are used to make resource protection decisions. **Advisory:** A special product notifying an end user when an established environmental condition affecting operations is occurring or is expected to occur.

## Attachment 2

## 86OSS/OSW DUTY PRIORITIES

Table A2.1. Duty Priorities.

<b>86OSW DUTY PRIORITIES</b>	
<b>ORDER OF PRIORITY (1 = Highest)</b>	<b>DUTIES</b>
<b>1</b>	Perform WF Emergency War Order (EWO) Taskings
<b>2</b>	Execute WF Evacuation
<b>3</b>	Issue Weather Warnings/Lightning Watch and SWAP Operations
<b>4</b>	Respond to Aircraft/Ground Emergencies
<b>5</b>	Respond to Pilot to Metro Service (PMSV) Contacts
<b>6</b>	Relay Disseminate Urgent PIREPS (UUA)
<b>7</b>	Issue Weather Advisories
<b>8</b>	Disseminate Weather Observations/TAF
<b>9</b>	Provide Weather Information/Products to 86 AW Airlift Squadrons
<b>10</b>	METWATCH & MISSIONWATCH/Amend Weather Products
<b>11</b>	Relay and Disseminate PIREPs (UA)
<b>12</b>	Provide Briefings for Members outside of 86 AW Airlift Squadrons
<b>13</b>	Respond to Support Assistance Request (SAR)
<b>14</b>	Accomplish Weather Functional Training
<b>15</b>	Accomplish Administrative Tasks