BY ORDER OF THE COMMANDER
RAF LAKENHEATH (USAFE)

LAKENHEATH INSTRUCTION

15-101

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Weather

WEATHER SUPPORT

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements Air Force Policy Directive (AFPD) 15-1, *Weather Operations.* It establishes responsibilities and weather support procedures for Royal Air Force (RAF) Lakenheath and RAF Feltwell. It applies to all units assigned to the 48th Fighter Wing. It provides general information for observations and forecasts; weather warnings, watches, and advisories; space weather supported services and dissemination of information and reciprocal support. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using AF Form 847, *Recommendation for Change of Publication*; route AF Form 847s from the field through the appropriate functional chain of command. This publication may not be further implemented/extended. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and disposed of IAW the Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS).

SUMMARY OF CHANGES

Resource protection procedures have been updated to reflect up-to-date Exploitation Unit (EU) requirements. Specialized Support procedures have been updated to remove redundant information already available in other authoritative documents.

1. General Information.

1.1. Introduction. 48th Operations Support Squadron Weather Flight (48 OSS/OSW) provides and arranges weather support for the 48th Fighter Wing (48 FW). Basic concepts and procedures are outlined in Air Force and Major Command (MAJCOM) directives listed in **Attachment 1**. This instruction establishes responsibilities and procedures for areas of weather support required for 48 FW operations.

1.2. Support. Weather support provided by 48 OSS/OSW is largely driven by the requirements of flying operations and base agencies.

1.3. Duty Priorities. Duty priorities are listed on the RAF Lakenheath Weather Support Data Sheet maintained by the 48 OSS/OSW and the 21st Operational Weather Squadron (21 OWS).

1.4. Release of Weather Information. Weather observations, forecasts, and historical data/records will be released only to Department of Defense (DoD) agencies or contractors under contract to the United States Air Force (USAF). All other agencies and civilians will be referred to Public Affairs (48 FW/PA) and/or the Base Freedom of Information Act Monitor (48 CS/SCXK) to obtain approval prior to the release of weather observation records.

2. Limitations to Weather Services.

2.1. Interruption of the normal receipt of alphanumeric and graphic data via Joint Environmental Toolkit (JET), Non-classified Internet Protocol Router Network (NIPRNET) or Secret Internet Protocol Router Network (SIPRNET) can degrade forecasting capabilities.

2.2. 48 OSS/OSW does not have weather radar. To compensate, the weather flight uses a combination of Air Traffic Control (ATC) radar, data from the Air Force Weather Web Services (AFW-WEBS), United Kingdom (UK) composite radar and/or pilot reports (PIREPs) to determine if precipitation and/or thunderstorms are within 25 Nautical Miles (NM) of the base.

2.3. RAF Feltwell has no weather personnel or weather sensors. Therefore, in the interest of safety and resource protection, all weather watches, warnings, and advisories (WWAs) issued for RAF Lakenheath are also in effect for RAF Feltwell. The only exceptions are that induction icing and wind shear are not applicable to RAF Feltwell and there is a separate lightning warning for RAF Feltwell.

2.4. Due to local terrain features near the runway, sensor wind speeds between the 06 and 24 approach ends of the runway may differ by several knots. This is a standard and acceptable variance and no corrective action is warranted.

3. Airfield Support Function (ASF).

3.1. General. All official weather observations at RAF Lakenheath will be taken and augmented IAW AFMAN 15-111, *Surface Weather Observations*. 48 OSS/OSW operates a FMQ-19, automated observing system, which provides 24 hour observation capability. 48 OSS/OSW will be on duty during normal duty hours, from 0200L on Monday through 1800L on Friday. Deviations to these hours can be made by the Weather Flight Commander, 48 Operations Support Squadron Commander (48 OSS/CC), 48 Operations Group Commander (48 OG/CC), or 48 Fighter Wing Commander (48 FW/CC) as required to support mission needs. A standby member will be subject to recall at all times when the weather station is closed. A standby technician may be recalled through the Command Post (CP) at DSN 314-

226-4800 or the assigned mobile phone and will man the weather station no more than 1 hour after being recalled.

3.2. If the primary observation site is non-operational, or the technician has to evacuate building 1392, observations will be taken from the Alternate Operating Location (AOL). Building 1319 is the primary AOL. However, if Building 1319 is unsafe or inaccessible, any location with a view of the airfield complex, a telephone, and access to the base local area network (LAN) may be used as an AOL in an emergency. Observations made from an AOL might contain estimated elements, such as winds and pressure. Contact information for the AOL is in the RAF Lakenheath Weather Support Data Sheet.

4. Mission Integration Function (MIF).

4.1. General. The 48 OSS/OSW is primarily responsible for a Mission Weather Product (MWP) or DD Form 175-1, *Flight Weather Briefing*.

4.2. Local MWP. A local MWP consists of two parts: the flimsy, a graphical planning document produced daily to support local flying; and a verbal brief provided to each aircrew or squadron Top-3 based on individual mission weather thresholds. These two parts in conjunction are the equivalent of a DD Form 175-1, prescribed by AFMAN 15-129, *Air and Space Weather Operations*.

4.2.1. **Attachment 2** is an example of the flimsy. Due to continuous upgrades to technology and mission requirements, the content or format of the flimsy may be changed whenever new information/technologies are deemed significant to operations or deemed obsolete. The 48 OSS/OSW Wing Weather Officer, Mission Integration or Staff Integration NCOICs will coordinate changes with the 48 OSS/494 FS/493 FS/492 FS Directors of Operations (DOs) before changes to content or format are made.

4.2.2. Briefing Procedures. The local flimsy is disseminated via the 48 FW Weather SharePoint page with the first flimsy issued five hours prior to first takeoff. Aircrew or Top-3 will call the weather station at 226-4660 to receive a finalized flight brief prior to departure. If a forecaster is available at the operations desk within the flying unit, aircrew will receive an in-person finalized flight brief prior to departure. If the TAF is different than the forecast given in the MWP, the TAF should be used to determine airfield status and if an alternate airfield is required. Differences in the forecasts will not cross operational thresholds unless there's a time constraint to adjust forecasts with rapidly changing weather conditions.

4.2.3. Updates to MWPs. Updates to each MWP will be communicated to aircrew or squadron Top-3s prior to aircrew step brief time.

4.2.4. Amendments. The MWP will be amended IAW AFMAN 15-129, Chapter 4, and any time it is deemed unrepresentative of the actual or forecast conditions.

4.3. Planning Weather. A planning forecast for the following day will also be completed Monday through Friday and posted on the 48 FW Weather SharePoint page simultaneously with the daily flimsy. Included will be a regional breakdown of expected UK flying and water areas for the next flying window and links to forecast wind and wave data.

4.4. MISSIONWATCH. A MISSIONWATCH is conducted by the MIF forecaster on all areas of operations and will use RM to focus on daily mission areas to be used by the 48 FW, IAW

AFMAN 15-129, Chapter 4. If the MIF technician determines the need to notify aircrew of weather changes discovered during MISSIONWATCH, they will immediately contact the Supervisor of Flying (SOF) and the flying squadron Top-3s, and provide pertinent information to these individuals for relay to aircrew.

4.5. Pilot-to-Metro Service (PMSV). 48 OSS/OSW provides PMSV support as listed in the Flight Information Publication (FLIP). Weather operates this program IAW AFMAN 15-129, Chapter 5, and uses standard phraseology found in Federal Aviation Administration Handbook (FAAH) JO 7110.10, **Chapter 12**.

4.6. Electro-Optical (EO) Support. Lakenheath uses the Target Acquisition Weapons Software (TAWS) to generate electro-optical tactical decision aid (EOTDA) products. This windows-based program computes detection and lock-on ranges for various precision-guided munitions (PGMs) and temperature contrasts between target and background. Aircrew will submit request for TAWS data by filling out a request form on the 48 FW Weather SharePoint page, or by calling 226-4184. TAWS products should be requested at least 2 hours prior to the desired delivery time. Short notice requests will be handled by the counter forecaster as duty priorities allow.

5. 21 OWS Forecasting Services.

5.1. General. The 48 OSS/OSW works in concert with the 21 OWS. The 21 OWS is open 24 hours per day, 7 days a week and is located at Kapaun Air Base, Germany. The 21 OWS is a backup for continuation of operations for all Terminal Aerodrome Forecasts (TAFs), forecast watches and observed advisories (when required) when the 48 OSS/OSW is incapable of issuing these products. The 21 OWS also performs a continuous meteorological watch (METWATCH) and resource protection for RAF Lakenheath and RAF Feltwell.

5.2. Communication. 48 OSS/OSW is primarily responsible for all METWATCH, TAF, and resource protection responsibility at RAF Lakenheath and RAF Feltwell. If a communication outage occurs, 48 OSS/OSW will exhaust are resources and notify local agencies of potential weather threats. The 21 OWS will assist 48 OSS/OSW to disseminate TAFs, WWAs, 175-1s until communication links are restored.

6. Specialized Support.

6.1. General. Unless stated otherwise in this instruction, the minimum notification time required to request briefing support is 24 hours. Short-notice requests will be fulfilled if weather personnel are available. 48 OSS/OSW standard briefing format is PowerPoint and/or paper hardcopies.

6.2. Transient Aircraft. 48 OSS/OSW will provide transient aircraft weather briefings via a DD Form 175-1 upon request when a technician is on duty and time allows. When no MIF technician is on duty, or when higher duty priorities preclude it, the 21 OWS will provide the flight weather briefings. The OWS can be contacted at DSN 489-2133/6145, via their website at **https://21ows.us.af.mil**, or via email at **ows.ops@us.af.mil**.

6.3. Cross-Country. 48 FW aircrews departing RAF Lakenheath whose final destination is not RAF Lakenheath will contact 48 OSS/OSW to obtain the necessary weather briefing. 48 FW aircrews departing another location and whose final destination is not RAF Lakenheath may contact the 48 OSS/OSW, or other approved source such as the 21 OWS flight weather-briefing

desk at DSN 489-2133/2136, via their website at **https://21ows.us.af.mil**, or via email at **ows.ops@us.af.mil** for flight weather information.

6.4. Deployment/Contingency. 48 OSS/OSW will provide in-squadron briefings in support of deployments and/or contingency operations. General information required for briefing support is briefing time and location, take-off times, route, destination, and CORONET Delivery Control Officer (DCO) contact information if available.

6.5. Wing Standups. A 48 OSS/OSW representative will present a weather briefing at the wing staff meeting held every Tuesday and Thursday, only producing the slide deck on Friday. Briefing content will generally consist of the synoptic situation, local forecast, and forecast for areas of interest (usually areas where 48 FW aircraft are deployed).

6.6. Situation Briefings. Situation briefings are briefed upon request. Content varies depending upon the situation; however, most briefings contain satellite, synoptic overview, and the local forecast.

6.7. CORONET. These briefings are prepared and briefed upon request from the coordinating Air Combat Command Delivery Control Officer (ACC DCO), who will establish brief times and locations. 48 OSS/OSW has an established briefing format for CORONET EAST movements. Enroute hazards forecasts are coordinated with the ACC Air Operations Squadron, Air Operations Weather (AOW).

6.8. Close Watch Briefing. 48 OSS/OSW will provide a briefing when RAF Lakenheath is on close watch divert plan.

6.9. Instrument Refresher Course (IRC). Presented to aircrews when requested by instructor.

6.10. Base/School delays and cancellations. When requested, 48 OSS/OSW will provide weather information for the Mission Support Group Commander (48 MSG/CC) for impacts to operations. This information is normally requested via conference call with the CP.

6.11. Chemical Downwind Messages (CDM) and Effective Downwind Messages (EDM). 48 OSS/OSW will provide weather information for creation of CDMs and EDMs as required.

6.12. Long-range forecast. RAF Lakenheath 5-day forecast is available on AFW-WEBS. This product provides planning weather for outdoor events but is not intended for operational use.

6.13. Tropical Cyclone Support. Though RAF Lakenheath does not enact official Tropical Cyclone Conditions of Readiness or Hurricane Conditions, 48 OSS/OSW will provide the necessary forecast services/products required for installation commanders to make mission execution decisions such as evacuation and resource protection.

6.14. Volcano Support. 48 OSS/OSW will use the appropriate Volcanic Ash Advisory Center (VAAC) to provide necessary forecast services/products required for installation commanders to make mission execution decisions such as evacuation and resource protection.

6.15. Climatological Support. Requests for climatological data and studies should be sent to 48 OSS/OSW Flight Leadership.

7. Weather Watches, Warnings, and Advisories (WWA).

7.1. General. Weather WWAs will be issued when any of the specific criteria listed on the RAF Lakenheath Weather Support Data Sheet is occurring or is expected to occur, as

appropriate, within a 5 NM radius (unless otherwise specified) from the center of the RAF Lakenheath runway. In the interest of safety and resource protection, all WWAs issued for RAF Lakenheath are also in effect for RAF Feltwell with the exceptions of induction icing and wind shear. There is also a separate lightning WWA for RAF Feltwell. All WWAs will be issued by 48 OSS/OSW or as prescribed below, or by 21 OWS when 48 OSS/OSW is unable to do so and there is imminent risk to life and/or property (AFMAN 15-129). Attachment 3 lists WWAs for RAF Lakenheath and RAF Feltwell.

7.2. Definitions:

7.2.1. Weather Advisory (WA). A special notice provided to supported customers that alerts them when an established weather condition that could affect operations is occurring. Advisory criteria are located on the RAF Lakenheath Weather Support Data Sheet**.**

7.2.2. Weather Watch (WWATCH). A special notice provided to supported customers that alerts them of conditions favorable for the development (potential) of weather conditions within 5 NM of the center point of the RAF Lakenheath runway of such intensity as to pose a hazard to life or property. Watch criteria are located on the RAF Lakenheath Weather Support Data Sheet.

7.2.3. Weather Warning (WW). A special notice provided to supported customers that alerts them to the occurrence or expected occurrence of weather conditions within 5 NM of the center point of the runway of such intensity as to pose a hazard to life or property. Warning criteria are located on the RAF Lakenheath Weather Support Data Sheet.

7.3. Dissemination.

7.3.1. Issuing and Canceling. Weather WWA meeting the criteria on the RAF Lakenheath Weather Support Data Sheet will be disseminated IAW **Attachment 4** and **Attachment 5**, with JET being the primary means.

7.3.2. Observed WWA. Observed advisories will be issued by the 48 OSS/OSW during airfield hours of operations and backed up by 21 OWS if required.

7.3.3. Forecast Warning. Severe and non-severe forecast warnings will be issued by the 48 OSS/OSW and backed up by 21 OWS if required.

7.3.4. Forecast Watch. Severe and non-severe forecast watches, will be issued by the 48 OSS/OSW and backed up by 21 OWS if required.

7.3.5. Confirmation of Receipt. The weather flight will verify receipt by the SOF, CP, RAPCON, Airfield Management Operations (AMOPS), and Tower.

7.3.6. Backup Procedures. If there is a JET outage, then telephones and hotlines will be used to disseminate weather WWAs to normal recipients, and to notify them of the JET outage.

7.4. Severe Weather Action Plan (SWAP). When severe weather threatens RAF Lakenheath and/or RAF Feltwell, 48 OSS/OSW will take actions to monitor the weather and provide timely notification to base agencies. Standby personnel will also be available for recall at all times and will man the weather station IAW section 3.1 of this document. Once recalled (or notified of the need during regular duty hours), 48 OSS/OSW will augment personnel as the situation dictates and intensify the METWATCH of all weather changes and notify impacts to base

agencies, within duty priorities. The weather flight will identify in local standard operating procedures (SOPs) further SWAP actions required (e.g. checklists accomplished). In addition, supported agencies can request that the 48 OSS/OSW take specific actions for each type of severe weather.

8. Roles and Responsibilities.

8.1. In order for the 48 OSS/OSW to provide the best weather support possible it is necessary to receive reciprocal support from various organizations.

8.2. 48 Fighter Wing CP (48 FW/CP) will:

8.2.1. Upon notification from 48 OSS/OSW or 21 OWS of WWA issuance for RAF Lakenheath and RAF Feltwell immediately notify all base agencies IAW Attachments **4** and **5** of this instruction. When the airfield is closed, questions or concerns about the weather should be directed to the standby forecaster or the 21 OWS duty forecaster at DSN 489-2134.

8.2.2. Ensure the 48 OSS/OSW is promptly notified of all contingencies, alerts, exercises, deployments, or emergency movement of aircraft that would require weather support.

8.2.3. Promptly notify 48 OSS/OSW of any aircraft incidents or mishaps or any weather-related property damage to the base, so they can save significant weather data.

8.2.4. Notify the 48 OSS/OSW on all OPREP-3 messages on events or incidents that involve weather to ensure accurate weather data and information is contained in the OPREP-3 message.

8.3. 48 FW Plans and Inspections (48 FW/XP) will:

8.3.1. Ensure 48 OSS/OSW conducts Severe Weather Action Procedure exercise annually.

8.3.2. Reserve workspace for one weather person, including one NIPRNET and one SIPRNET connection, and a secure telephone in the Installation Control Center (ICC) for exercises and contingency operations.

8.4. 48 FW Safety Office (48 FW/SE) will notify 48 OSS/OSW as soon as practical of all reported air or ground incidents in which weather or weather services may be a factor.

8.5. 48 FW Installation Deployment Officer (48 LRS/LGRDX) will ensure a weather briefing (if requested) is included in the concept briefing, to include the appropriate deployment area. 48 OSS/OSW requests as much notice as possible for concept weather briefings.

8.6. 48th Communications Squadron (48 CS) will coordinate local and enterprise support to mitigate and resolve outages to 48 FW systems that are used to obtain weather data. Support priorities will be triaged based on 48 FW's mission priorities.

8.6.1. The following order of priority will apply to restoring communications:

8.6.1.1. SIPRNET.

8.6.1.2. NIPRNET

8.6.1.3. PMSV Radio.

8.6.1.4. Phone.

8.6.2. Provide all position certified 48 OSS/OSW personnel with permission to upload documents within the shared documents section of the weather pages on the 48 FW Weather SharePoint page.

8.6.3. Provide communications and equipment plans and programming support on matters affecting RAF Lakenheath weather equipment.

8.7. 48th Civil Engineering Squadron Readiness and Emergency Management Flight (48 CES/CEX) will:

8.7.1. Ensure the Comprehensive Emergency Management Plan (CEMP) 10-2 and procedures that require weather support are coordinated with 48 OSS/OSW.

8.7.2. Ensure the 48 OSS/OSW Flight Commander or designated alternate attends the semi-annual wing readiness council meeting to address any issues regarding severe weather resource protection.

8.7.3. Solicit required weather data from 48 OSS/OSW for CDM and EDM.

8.8. Defence Infrastructure Organization (48 CES/DIO) will obtain permission from the on-duty weather shift supervisor prior to transferring any weather facility or weather sensor equipment to/from primary power.

8.9. 48th Operations Group Standardization and Evaluation (48 OG/OGV) will ensure that SOF interaction with 48 OSS/OSW will be conducted IAW AFI 11-418 Lakenheath Supplement, *Operations Supervision*.

8.10. Flying Squadron Responsibilities:

8.10.1. Aircrew desiring mass weather briefings (in squadrons, etc.) will request these briefings at least 24 hours in advance. Short-notice requests will be fulfilled if weather personnel are available.

8.10.2. Aircrew flying local sorties will provide post-mission weather feedback to 48 OSS/OSW whenever possible, especially if conditions were significantly different than the forecast.

8.10.3. Coordinate weather support requirements at least 48 hours in advance when possible with 48 OSS/OSW Flight Commander or designated alternate for all deployments. Requirements should include both support for flying operations and resource protection.

8.10.4. If in-squadron weather support is requested, allow space and opportunity for a weather technician to perform in-squadron MWP refinement and aircrew pre-departure briefings at or near the operations counter, both home station and deployed.

8.10.5. Report PIREPs as soon as possible after making the observation. PIREPs at any time are valuable, especially in poor flying weather. In-flight PIREPs may be passed to any USAFE Control Agency (Control Tower, Ground Radar Facility, etc.) or RAF Lakenheath PMSV. Post-flight PIREPs may be passed directly to weather personnel or by phone. PIREPs passed to any USAFE Air Traffic Control Agency at RAF Lakenheath will be relayed to the ASF technician as soon as possible. When relaying a PIREP, aircrew will attempt to report the following information:

8.10.5.1. Time, location, altitude, and aircraft type.

8.10.5.2. Clouds (bases, amount (FEW, SCT, BKN, OVC), tops) on takeoff, enroute, and arrival.

8.10.5.3. Hazards: icing, turbulence, hail, lightning, etc. Be sure to specify intensity, location, and proximity to clouds, altitude, and time.

8.10.5.4. Significant deviations from forecast weather, winds, clouds, etc.

8.10.5.5. Wind shear whenever encountered.

8.11. 48th Operations Support Squadron Intel Flight (48 OSS/IN) will:

8.11.1. Ensure 48 OSS/OSW is informed when a contingency mission-planning cell is activated.

8.11.2. Notify 48 OSS/OSW as soon as possible when requesting Mission Qualification Training briefing support.

8.12. 48th Operations Support Squadron Current Operations Flight (48 OSS/OSO) will:

8.12.1. Ensure 48 OSS/OSW has access to weekly/daily flying schedule and other information required for flight weather briefings.

8.12.2. Promptly notify 48 OSS/OSW of upcoming IRC briefings.

8.13. 48th Operations Support Squadron Airfield Operations Flight (48 OSS/OSA) will:

8.13.1. Notify 48 OSS/OSW leadership of quarterly Airfield Operations Board meetings. 48 OSS/OSW leadership must attend.

8.13.2. Allow for aircrews to access weather forecasts (48 FW Weather SharePoint page and 21 OWS webpage) on a computer in building 1392.

8.13.3. Submit change requests to FLIP on behalf of 48 OSS/OSW. If the change is urgent, the NCOIC, Airfield Management Operations (NAMO), or designated FLIP manager will issue a Notice to Airmen (NOTAM).

8.13.4. Upon issuance of Aircraft-Induced Lightning advisory, Tower personnel will broadcast the advisory on ATIS. Specific verbiage will be as follows: “Aircraft-induced lightning risk high at flight level XXX-YYY” with levels XXX and YYY identified by 48 OSS/OSW for each advisory.

8.13.5. Upon issuance of Aircraft-Induced Lightning advisory, RAPCON personnel will note at-risk flight levels and, when possible, attempt to minimize vectoring aircraft at or through levels identified to be at risk. Ex. “Aircraft-induced lightning risk high at flight level 040-060” would indicate that aircraft are at greatest risk to induce a strike at flight levels between 4000 feet and 6000 feet.

8.13.6. Cooperative Weather Watch. ATC units play an essential role in the Cooperative Weather Watch with 48 OSS/OSW by reporting the following data in a timely manner to weather:

8.13.6.1. Pilot Reports (PIREPs). RAPCON and Tower will:

8.13.6.1.1. Solicit PIREPs from aircraft IAW JO 7110.65, *Air Traffic Control*, and/or when requested by 48 OSS/OSW personnel.

8.13.6.1.2. The ATC facility that receives a PIREP will relay the information to Weather Flight personnel and opposite ATC facility in a timely manner, contingent upon higher priority duties.

8.13.6.2. IAW JO 7110.65, and AFI 13-204V3, ATC duties take precedence over non-ATC duties. Controllers shall not allow the reporting of meteorological information to interfere with air traffic control operations.

8.13.6.3. All tower controllers must receive Cooperative Weather Watch training IAW AFI 13-204V3 and AFMAN 15-111.

8.13.6.4. 48 OSS/OSW will assist tower personnel in creating appropriate guides to perform CWW. This will include day and night visibility marker guides that will be validated annually.

8.13.6.5. Tower personnel will attempt to schedule training in advance with the OSW Airfield Services NCOIC. No-appointment training will only be conducted when manning and meteorological conditions permit. At the completion of this training, OSW personnel will issue Tower controllers a weather familiarity exam. If the controller scores 80% or higher, they will be certified to take tower visibility observations and the training will be documented on AF Form 3622, *Air Traffic Control/Weather Certification and Rating Record* (LRA), prescribed by AFI 11-218, *Aircraft Operations and Movement on the Ground* (located in the individual's AF Form 623, *On-The-Job Training Record*, prescribed by AFI 36-2201V3, *Air Force Training Program On the Job Training Administration*). A qualified weather technician will conduct the initial training in the weather duty section during controller in-processing.

8.13.6.6. RAPCON will verbally notify 48 OSS/OSW of significant observed radar weather echoes, contingent upon higher priority duties.

8.13.6.7. 48 OSS/OSW will coordinate with the Tower and RAPCON Watch Supervisor before deactivating wind sensors for either the active or inactive runway.

8.13.6.8. AMOPS will verbally notify 48 OSS/OSW of the following:

8.13.6.8.1. Changes in Runway Surface Condition (RSC).

8.13.6.8.2. Changes in Runway Condition Reading (RCR).

8.13.6.8.3. Notice to Airmen (NOTAM), which affect airfield minimums.

8.13.6.8.4. Scheduled flights with Distinguished Visitors on board.

8.13.6.8.5. Any changes to published airfield operating hours (i.e. early/late opening/closing or out of normal operations).

8.13.6.9. 48 OSS/OSW will notify Airfield Management when temperature is forecast at or below 2 degrees Celsius IAW 48 FW Plan 32-1002.

8.13.6.10. Airfield Systems (48 OSS/OSAMA) will:

8.13.6.10.1. Place priority of maintenance to AN/FMQ-19 Automated Meteorological Observing System.

8.13.6.10.2. Upon request from 48 OSS/OSW leadership, arrange for designated

weather personnel to view all airfield weather sensors. All 48 OSS/OSW personnel must view airfield sensors once per tour IAW AFMAN 15-129.

8.13.6.10.3. Preventive maintenance and prompt repair of weather equipment, associated circuits, and ancillary equipment located at RAF Lakenheath, and maintained by the Airfield Systems.

8.13.6.10.4. Preventive maintenance or modifications that require equipment shutdown will be coordinated with 48 OSS/OSW flight leadership beforehand.

8.13.6.11. All 48 OSS/OSW personnel must receive ATC Familiarization Training from the NCOIC, Air Traffic Control Training (NATCT), as part of their indoctrination. No-appointment training will only be conducted when manning permits. This training will include the following:

8.14. 492d Fighter Squadron (492 FS) and 494th Fighter Squadron (494 FS) will:

8.14.1. Reserve workspace for one person, including a desk, NIPRNET connection, and a telephone in Building 1319, Strike Eagle Complex (SEC).

8.14.2. Provide the code for entry into the 492 FS and 494 FS to the Weather Flight Commander or Flight Chief any time the codes are changed, to include cipher locks on the outside doors.

8.15. 493d Fighter Squadron (493 FS) will:

8.15.1. Reserve workspace for one person, including a desk, NIPRNET connection, and a telephone in Building 1370.

JASON A. CAMILLETTI, Colonel, USAF
Commander, 48th Fighter Wing

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 13-201, *Airspace Management,* 21 August 2012

AFI 13-204V3, *Airfield Operations Procedures and Programs,* 01 September 2010

AFI 13-204V3, USAFE Supplement, *Airfield Operations Procedures and Programs,* 23 February 2016

AFI 36-2201, *Air Force Training Program*, 09 Oct 2018

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

AFMAN 15-129, *Air and Space Weather Operations,* 09 July 2020

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

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

JO 7110.65V, *Air Traffic Control,* 3 April 2014

Adopted Forms

DD Form 175-1, *Flight Weather Briefing*

AF Form 623, *On-the-Job Training Record.*

AF Form 847, *Recommendation for Change of Publication*

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

Abbreviations and Acronyms

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFPD—Air Force Policy Directive

AFRIMS—Air Force Records Information Management System

AFW-WEBS—Air Force Weather Web Service

AMOPS—Airfield Management Operations

AMOS—Automated Meteorological Observation System

AOL—Alternate Operating Location

ASF—Airfield Services Function

ATC—Air Traffic Control

CDM—Chemical Downwind Message

CES/CEX—Civil Engineering Squadron Readiness

CES/DIO—Civil Engineering Squadron Defence Infrastructure Organisation

CP—Command Post

CS—Communication Squadron

CS/SCXK—Base Freedom of Information Act Monitor

CWW—Cooperative Weather Watch

DCO—Delivery Control Officer

DLT—Desired Lead Time

DoD—Department of Defense

DoDDS—Department of Defense Dependent Schools

EDM—Effective Downwind Message

EO—Electro Optics

EOTDA—Electro-Optical Tactical Decision Aid

FLIP—Flight Information Publication

FS/CC—Fighter Squadron Commander

FW—Fighter Wing

FW/CC—Fighter Wing Commander

FW/PA—Fighter Wing Public Affairs

FW/SE—Fighter Wing Safety

FW/XP—Fighter Wing Plans and Inspections

IAW—In Accordance With

ICC—Installation Control Center

IDRC—Installation Deployment Readiness Cell

IRC—Instrument Refresher Course

JET—Joint Environmental Toolkit

LAN—Local Area Network

LLWS—Low Level Wind Shear

LRS/LGRDX—Fighter Wing Installation Deployment Officer

MAJCOM—Major Command

METAR—Aviation Routine Weather Report

METWATCH—Meteorological Watch

MIF—Mission Integration Function

MSG/CC—Mission Support Group Commander

MWP—Mission Weather Product

NAMO—NCOIC, Airfield Management Operations

NATCT—NCOIC, Air Traffic Control Training

NIPRNET—Nonsecure Internet Protocol Router Network

NOTAM—Notice to Airmen

NVG—Night Vision Goggles

OG—Operations Group

OG/CC—Operations Group Commander

OG/OGV—Operations Group Standardization and Evaluation

OJT—On-the-Job Training

OPR—Office of Primary Responsibility

OSS/CC—Operations Support Squadron Commander

OSS/OSA—Operations Support Squadron Airfield Operations

OSS/OSW—Operations Support Squadron Weather Flight

OWS—Operational Weather Squadron

PA—Public Affair

PIREP—Pilot Report

PMSV—Pilot-to-Metro Service

RAF—Royal Air Force

RAPCON—Radar Approach Control

RCR—Runway Condition Reading

RM—Risk Management

RSC—Runway Surface Condition

RVR—Runway Visual Range

SEC—Strike Eagle Complex

SIPRNET—Secret Internet Protocol Router Network

SOF—Supervisor of Flying

SOP—Standard Operating Procedure

SPECI—Aviation Special Weather Report

SWAP—Severe Weather Action Plan

SWAT—Severe Weather Action Team

TAF—Terminal Aerodrome Forecast

TAWS—Target Acquisition Weapons Software

TDA—Tactical Decision Aid

TO—Technical Order

UK—United Kingdom

USAF—United States Air Force

USAFE—United States Air Forces in Europe

UAO—Unmanned Airfield Operations

VAAC—Volcanic Ash Advisory Center

WA—Weather Advisory

WWATCH—Weather Watch

WW—Weather Warning

WWA—Watches, Warnings, and Advisories

Terms

Blizzard Conditions-—Duration of ≥ 3 hours, sustained winds or gusts ≥ 30 knots, considerable falling and/or blowing snow, with prevailing visibility frequently ≤ ¼ mile/0400 meters.

Desired Lead-time-—The amount of advanced notice a supported agency desires before the onset of a particular weather phenomenon.

Issue Time—-The time when an agency is notified of a WA, WWATCH, or WW. When more than one agency is notified, the issue time is the time the last agency is notified. Follow up notifications are not considered when determining issue time. For RAF Lakenheath, the issue time is the time the WA, WWATCH, or WW was transmitted on JET.

Limited Duty Station—-A weather station that provides less than 24-hour a day forecast service.

Meteorological Watch-—Monitoring the weather for a route, area, or terminal and advising concerned organizations when hazardous conditions that could affect their operations or pose a hazard to life or property are observed or forecast to occur.

Mission Weather Product—-A MWP is the integration of strategic center (557 WW) products, OWS produced products, and perishable weather data to the supported operator's/war-fighter's weapon system and tactics.

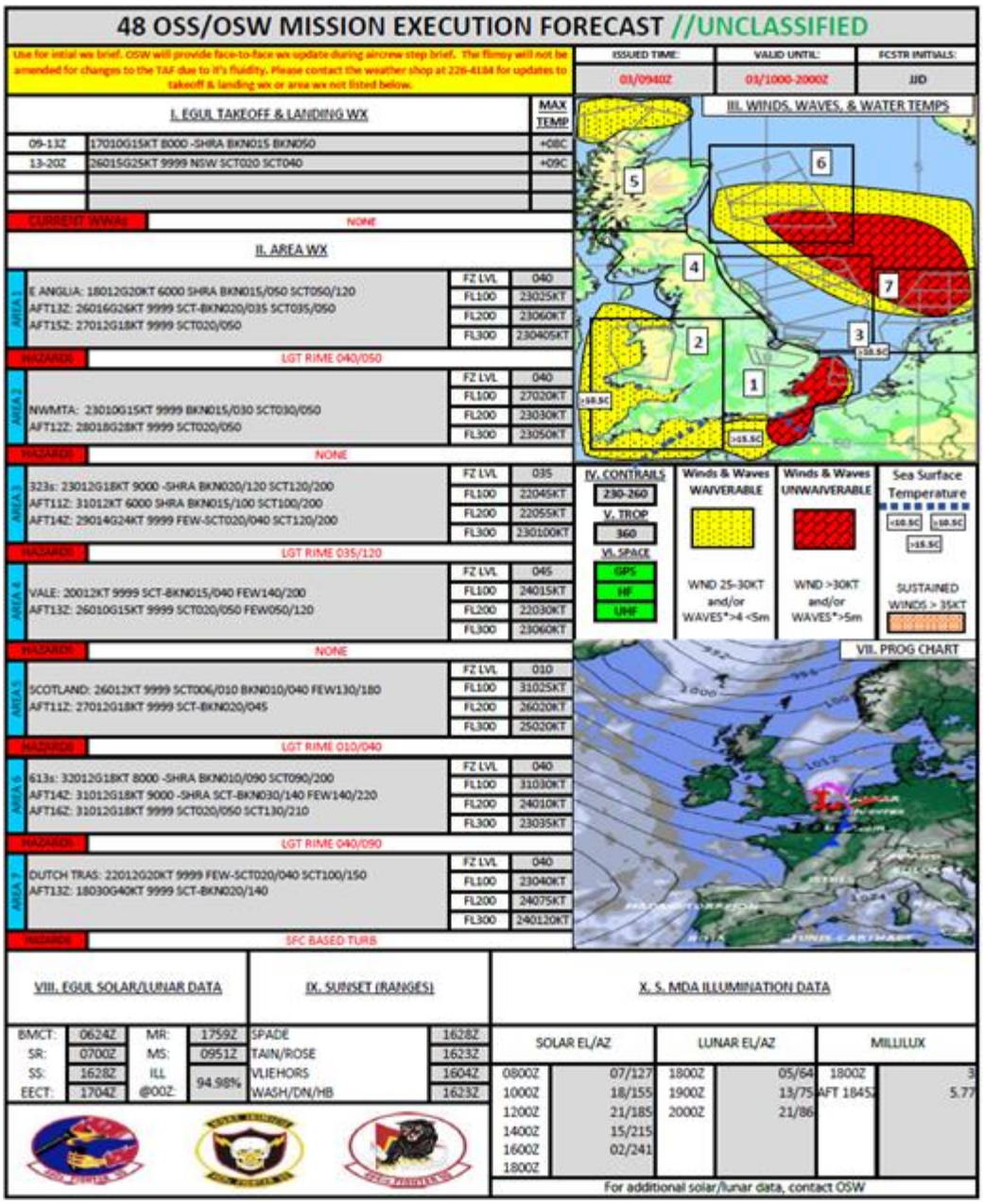
MISSIONWATCH—Monitoring the weather for a route, sortie, or training area and advising concerned organizations when forecast conditions change past operational thresholds or hazardous weather conditions that could affect operations or pose a threat to life or property are observed or forecast to occur.

Operational Weather Squadron—-An organization with regional forecast responsibility. The organization is comprised of the assigned management, staff, and technical personnel and its assigned resources. Their mission is to produce fine-scale tailored weather forecast products and services to customers within their area of responsibility.

Attachment 2

EXAMPLE WEATHER FLIMSY

Figure A2.1. Flimsy (Day 1).



48 OSS/OSW MISSION EXECUTION FORECAST //UNCLASSIFIED

Use for initial wx brief. OSW will provide face-to-face wx update during aircrew step brief. The flimsy will not be amended for changes to the TAF due to it's fluidity. Please contact the weather shop at 226-4184 for updates to takeoff & landing wx or area wx not listed below.

ISSUED TIME:	VALID UNTIL:	FCSTR INITIALS:
03/0940Z	03/1000-2000Z	JJD

I. EGUL TAKEOFF & LANDING WX

		MAX TEMP
09-13Z	17010G15KT 8000 -SHRA BKN015 BKN050	+08C
13-20Z	26015G25KT 9999 NSW SCT020 SCT040	+09C

CURRENT WWAs: NONE

II. AREA WX

AREA 1: E ANGLIA: 18012G20KT 6000 SHRA BKN015/050 SCT050/120 AFT13Z: 26016G26KT 9999 SCT-BKN020/035 SCT035/050 AFT15Z: 27012G18KT 9999 SCT020/050	FZ LVL	040
	FL100	23025KT
	FL200	23060KT
	FL300	23040SKT
HAZARD: LGT RIME 040/050		
AREA 2: NWMTA: 23010G15KT 9999 BKN015/030 SCT030/050 AFT12Z: 28018G28KT 9999 SCT020/050	FZ LVL	040
	FL100	27020KT
	FL200	23030KT
	FL300	23050KT
HAZARD: NONE		
AREA 3: 323s: 23012G18KT 9000 -SHRA BKN020/120 SCT120/200 AFT11Z: 31012KT 6000 SHRA BKN015/100 SCT100/200 AFT14Z: 29014G24KT 9999 FEW-SCT020/040 SCT120/200	FZ LVL	035
	FL100	22045KT
	FL200	22055KT
	FL300	230100KT
HAZARD: LGT RIME 035/120		
AREA 4: VALE: 20012KT 9999 SCT-BKN015/040 FEW140/200 AFT13Z: 26010G15KT 9999 SCT020/050 FEW050/120	FZ LVL	045
	FL100	24015KT
	FL200	22030KT
	FL300	23060KT
HAZARD: NONE		
AREA 5: SCOTLAND: 26012KT 9999 SCT006/010 BKN010/040 FEW130/180 AFT11Z: 27012G18KT 9999 SCT-BKN020/045	FZ LVL	010
	FL100	31025KT
	FL200	26020KT
	FL300	25020KT
HAZARD: LGT RIME 010/040		
AREA 6: 613s: 32012G18KT 8000 -SHRA BKN010/090 SCT090/200 AFT14Z: 31012G18KT 9000 -SHRA SCT-BKN030/140 FEW140/220 AFT16Z: 31012G18KT 9999 SCT020/050 SCT130/210	FZ LVL	040
	FL100	31030KT
	FL200	24010KT
	FL300	23035KT
HAZARD: LGT RIME 040/090		
AREA 7: DUTCH TRAS: 22012G20KT 9999 FEW-SCT020/040 SCT100/150 AFT13Z: 18030G40KT 9999 SCT-BKN020/140	FZ LVL	040
	FL100	23040KT
	FL200	24075KT
	FL300	240120KT
HAZARD: SFC BASED TURB		

III. WINDS, WAVES, & WATER TEMPS

IV. CONTRAILS: 230-260

V. TROP: 360

VI. SPACE: GPS, HF, UHF

Winds & Waves WAIVERABLE: WND 25-30KT and/or WAVES*>4 <5m

Winds & Waves UNWAIVERABLE: WND >30KT and/or WAVES*>5m

Sea Surface Temperature: <10.5C, >10.5C, >15.5C

SUSTAINED WINDS > 35KT

VII. PROG CHART

VIII. EGUL SOLAR/LUNAR DATA

BMCT:	0624Z	MR:	1759Z
SR:	0700Z	MS:	0951Z
SS:	1628Z	ILL	94.98%
EECT:	1704Z	@00Z:	

IX. SUNSET (RANGES)

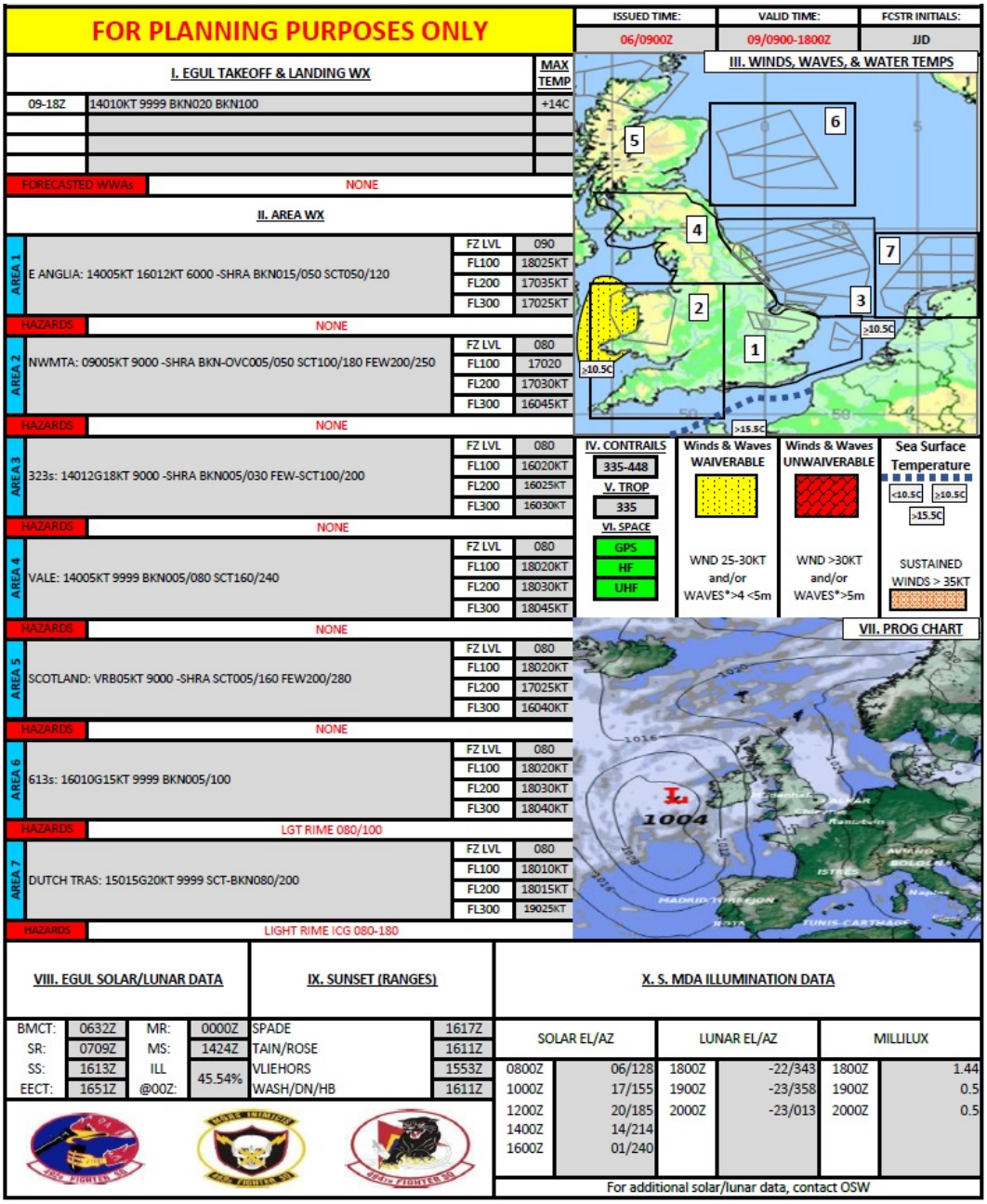
SPADE	1628Z
TAIN/ROSE	1623Z
VLIEHORS	1604Z
WASH/DN/HB	1623Z

X. S, MDA ILLUMINATION DATA

SOLAR EL/AZ		LUNAR EL/AZ		MILLILUX	
0800Z	07/127	1800Z	05/64	1800Z	3
1000Z	18/155	1900Z	13/75	AFT 1845Z	5.77
1200Z	21/185	2000Z	21/86		
1400Z	15/215				
1600Z	02/241				
1800Z					

For additional solar/lunar data, contact OSW

Figure A2.2. Planning Weather (Day 2).



FOR PLANNING PURPOSES ONLY

ISSUED TIME:	VALID TIME:	FCSTR INITIALS:
06/0900Z	09/0900-1800Z	JJD

I. EGUL TAKEOFF & LANDING WX

		MAX TEMP
09-18Z	14010KT 9999 BKN020 BKN100	+14C

FORECASTED WWAs: NONE

II. AREA WX

AREA 1	E ANGLIA: 14005KT 16012KT 6000 -SHRA BKN015/050 SCT050/120	FZ LVL	090
		FL100	18025KT
		FL200	17035KT
		FL300	17025KT
HAZARDS	NONE		
AREA 2	NWMTA: 09005KT 9000 -SHRA BKN-OVC005/050 SCT100/180 FEW200/250	FZ LVL	080
		FL100	17020
		FL200	17030KT
		FL300	16045KT
HAZARDS	NONE		
AREA 3	323s: 14012G18KT 9000 -SHRA BKN005/030 FEW-SCT100/200	FZ LVL	080
		FL100	16020KT
		FL200	16025KT
		FL300	16030KT
HAZARDS	NONE		
AREA 4	VALE: 14005KT 9999 BKN005/080 SCT160/240	FZ LVL	080
		FL100	18020KT
		FL200	18030KT
		FL300	18045KT
HAZARDS	NONE		
AREA 5	SCOTLAND: VRB05KT 9000 -SHRA SCT005/160 FEW200/280	FZ LVL	080
		FL100	18020KT
		FL200	17025KT
		FL300	16040KT
HAZARDS	NONE		
AREA 6	613s: 16010G15KT 9999 BKN005/100	FZ LVL	080
		FL100	18020KT
		FL200	18030KT
		FL300	18040KT
HAZARDS	LGT RIME 080/100		
AREA 7	DUTCH TRAS: 15015G20KT 9999 SCT-BKN080/200	FZ LVL	080
		FL100	18010KT
		FL200	18015KT
		FL300	19025KT
HAZARDS	LIGHT RIME ICG 080-180		

III. WINDS, WAVES, & WATER TEMPS

IV. CONTRAILS 335-448

V. TROP 335

VI. SPACE GPS, HF, UHF

Winds & Waves WAIVERABLE: WND 25-30KT and/or WAVES*>4 <5m

Winds & Waves UNWAIVERABLE: WND >30KT and/or WAVES*>5m

Sea Surface Temperature: <10.5C, ≥10.5C, >15.5C

SUSTAINED WINDS > 35KT

VII. PROG CHART

VIII. EGUL SOLAR/LUNAR DATA

BMCT:	0632Z	MR:	0000Z
SR:	0709Z	MS:	1424Z
SS:	1613Z	ILL	45.54%
EECT:	1651Z	@00Z:	

IX. SUNSET (RANGES)

SPADE	1617Z
TAIN/ROSE	1611Z
VLIEHORS	1553Z
WASH/DN/HB	1611Z

X. S. MDA ILLUMINATION DATA

SOLAR EL/AZ		LUNAR EL/AZ		MILLILUX	
0800Z	06/128	1800Z	-22/343	1800Z	1.44
1000Z	17/155	1900Z	-23/358	1900Z	0.5
1200Z	20/185	2000Z	-23/013	2000Z	0.5
1400Z	14/214				
1600Z	01/240				

For additional solar/lunar data, contact OSW

Attachment 3

WEATHER WATCH, WARNING AND ADVISORY

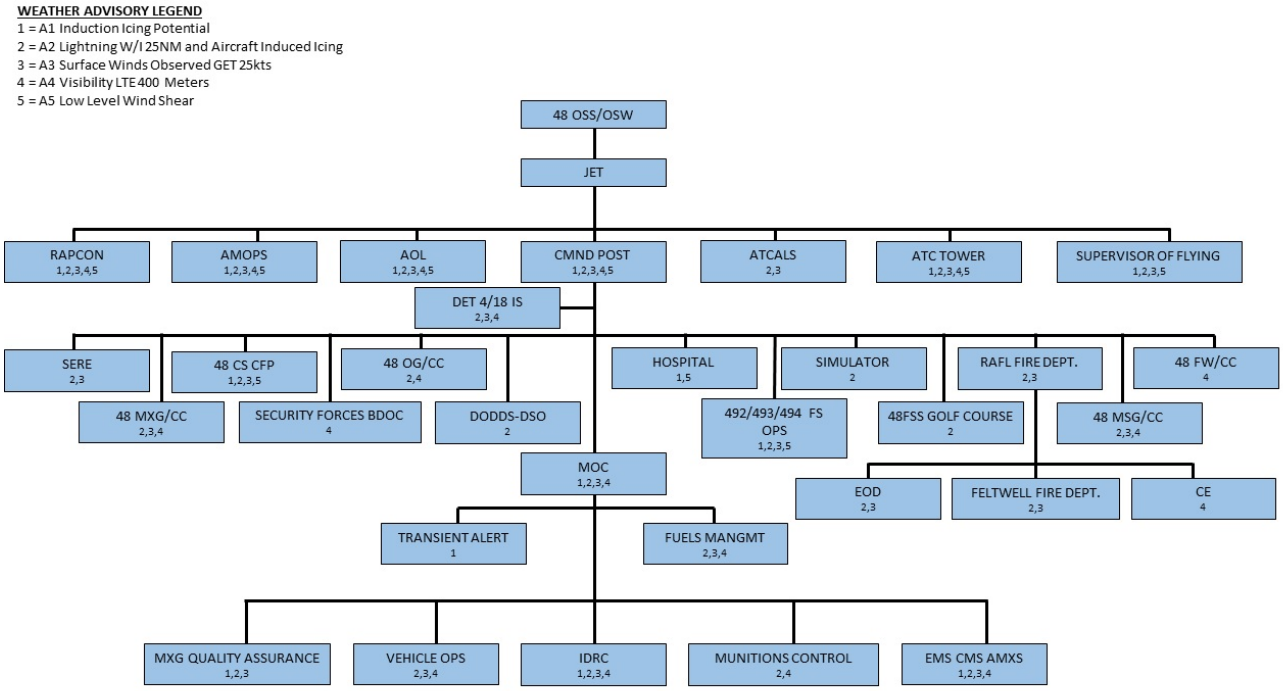
Figure A3.1. Weather Watch, Warning and Advisory Criteria.

Advisory Criteria			
Criteria	**Forecast/Observed**	**Desired Lead Time**	**Issued By**
Induction Icing Potential (1)	Observed	Observed	48 OSS/OSW*
Lightning within 10 NM	Forecast	30 minutes	48 OSS/OSW
Lightning within 10 NM	Observed	Observed	48 OSS/OSW
Lightning within 25 NM (2) (Aviation only)	Observed	Observed	48 OSS/OSW
SFC winds 25-34kts	Observed	Observed	48 OSS/OSW*
Visibility ≤ 400 meters	Observed	Observed	48 OSS/OSW*
Windshear Conditions below 2000ft AGL (Aviation Only)	Observed	Observed	48 OSS/OSW
AOL Activation	Observed	Observed	48 OSS/OSW
Fighter Index of Thermal Stress (FITS) Caution (Aviation Only)	Observed	Observed	48 OSS/OSW
Fighter Index of Thermal Stress (FITS) Danger (Aviation Only)	Observed	Observed	48 OSS/OSW
Note 1 *- Temp +10C ~ -20C with a Dew point Depression ≤ 3C*			
Note 2 - *Determine the altitude of +8C and -8C; if height values are separated by less than 10KFT (5KFT on either side of freezing level) then calculate heights on 5KFT above and below the freezing level; if values are separated by greater the 10KFT, use actual heights. When Aircraft-Induced LTG potential exists, include "Aircraft-Induced lightning risk high between Flight Levels XXX-YYY".*			
Watch Criteria			
Tornado	Forecast	As potential warrants	48 OSS/OSW
Severe Thunderstorm ≥ 50 knots and/or Hail ≥ ¾ inch in diameter**	Forecast	4 hours	48 OSS/OSW
Moderate Thunderstorm ≥ 35 knots but < 50 knots and/or Hail ≥ ¼ but < ¾ inch in diameter**	Forecast	4 hours	48 OSS/OSW
Nonconvective Damaging Winds ≥ 50 knots**	Forecast	4 hours	48 OSS/OSW
Snow Accumulation ≥ 2 inches in 12 hours***	Forecast	As potential warrants	48 OSS/OSW
Rain Accumulation ≥ 2 inches in 12 hours***	Forecast	As potential warrants	48 OSS/OSW
Freezing Precipitation	Forecast	As potential warrants	48 OSS/OSW
Lightning w/i 5 NM RAF of Lakenheath and Feltwell	Forecast	30 Minutes	48 OSS/OSW
Warning Criteria			
Tornado	Forecast	15 minutes	48 OSS/OSW
Severe Thunderstorm ≥ 50 knots and/or Hail ≥ ¾ inch in diameter**	Forecast	2 hours	48 OSS/OSW
Moderate Thunderstorm ≥ 35 knots but < 50 knots and/or Hail ≥ ¼ but < ¾ inch in diameter**	Forecast	1 hours	48 OSS/OSW
Nonconvective Damaging Winds ≥ 50 knots**	Forecast	2 hour	48 OSS/OSW
Nonconvective Strong Winds ≥ 35 knots but < 50 knots**	Forecast	1 hour	48 OSS/OSW
Snow Accumulation ≥ 2 inches in 12 hours***	Forecast	1 hour	48 OSS/OSW
Rain Accumulation ≥ 2 inches in 12 hours***	Forecast	1 hour	48 OSS/OSW
Freezing Precipitation	Forecast	1 hour	48 OSS/OSW
Lightning w/i 5 NM RAF Lakenheath	Observed	Observed	48 OSS/OSW*
Lightning w/i 5 NM RAF Feltwell	Observed	Observed	48 OSS/OSW*
Blizzard	Forecast	1 hour	48 OSS/OSW
NOTES:			
***Exploitation Units (EUs) will issue ALL WWAS to include observed/forecast warnings, watches, and forecast/observed advisories. Characterization unit (CU) will issue observed warnings and advisories when the EU is unreachable and imminent danger is present. Observed Weather Advisory (OWA) labeled "Aviation Only" will not be issued when the airfield is closed or during non-duty hours. EUs will notify the CU upon arrival & departure of airfield hours.**			
The CU will perform back-up responsibilities in the event a forecasted warning, advisory or lightning watch is forecasted to occur. (This includes if EU is enroute to AOL or in a COOP.) When the weather event is imminent, the CU will issue any required WWA if the EU contact cannot be reached.			
In the interest of safety and resource protection, all weather watches, warnings, and advisories issued for RAF Lakenheath are also in effect for RAF Feltwell. The only exceptions are induction icing and windshear are not applicable to RAF Feltwell and there is a separate lightning warning for RAF Feltwell.			
**** The issuing unit will specify the magnitude and direction in addition to the hail size of the each event. For example the operational threshold for a wind event is > 50 knots with hail size 3/4 in diameter; the EU will issue a weather warning (WW) and specify the peak wind speed for the event, such as peak gust 65 knots from 270 degrees and hail stones 3/4 inches in diameter.**			
***** The issuing unit will specify maximum rain/snow accumulations meeting or exceeding the threshold.**			

Attachment 4

WEATHER ADVISORY DISSEMINATION MATRIX

Figure A4.1. Weather Advisory Dissemination Matrix



Attachment 5

WEATHER WATCH/WARNING DISSEMINATION MATRIX

Figure A5.1. Weather Watch/Warning Dissemination Matrix