BY ORDER OF THE COMMANDER
RAF LAKENHEATH (USAFE)

LAKENHEATH INSTRUCTION 11-250

18 April 2025

Flying Operations

AIRFIELD AND FLYING OPERATIONS

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Certified by: 48 OG/CC
(Colonel Joshua O. Arki)

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This instruction implements Air Force Policy Directive (AFPD) 11-2, *Aircrew Operations*. It interfaces with Department of the Air Force Manual (DAFMAN) 13-204 Volume 3, *Airfield Operations Procedures and Programs,* Air Force Instruction (AFI) 11-2F-15 Volume 3, *F-15 -- Operations Procedures;* and AFI 11-2F-15E Volume 3, *F-15E -- Operations Procedures*. It establishes procedures and guidelines relating to Air Traffic Control (ATC) services, operation of the airfield, associated equipment, local flying, and operating procedures for F-35 and F-15E aircraft. It applies to all units assigned to 48th Fighter Wing (48 FW). This publication may not be supplemented or further extended. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the DAF Form 847, *Recommendation for Change of Publication*; route DAF Forms 847 from the field through the appropriate functional chain of command. Ensure all records generated as a result of processes prescribed in this publication adhere to 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. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force. Compliance with attachments is mandatory.

SUMMARY OF CHANGES

This document has been substantially revised and must be completely reviewed. Major changes include Runway designation changes to Runway 05 and Runway 23 along with incorporated procedures from LAKI 11-250 IC_2 dated 12 Sep 2023.

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Chapter 1

ROLES AND RESPONSIBILITIES.

1.1. Authority: This publication interfaces with DAFMAN 13-204 Volume 3, *Air Traffic Control*, AFMAN 11-202 Volume 3, *Flight Operations*, AFMAN 11-218, *Aircraft Operations and Movement on the Ground*, USAFEI 11-201, *Flying Operations Conducted at USAF-Occupied Royal Air Force (RAF) Instillations in the United Kingdom (UK),* Federal Aviation Administration Order (FAAO) 7110.65, *Air Traffic Control (ATC)*, Regulatory Article (RA) 3228, British Military Flying Regulation, Civil Aviation Authority Publication (CAP) 774 and 722, International Civil Aviation Organization (ICAO) procedures, Military Air Traffic Services, RAF Military Radar and Military Air Traffic Operation Procedures and Patterns for East Anglia.

1.2. Responsibilities: 48th Operations Group Commander (OG/CC) will ensure this instruction is maintained, enforced, and viable.

1.2.1. 48th Operations Support Squadron Commander (OSS/CC) will ensure revisions to this instruction are fully coordinated with applicable base agencies.

1.2.2. 48 OG Standardization and Evaluation (OG/OGV) will validate and disseminate interim changes and applicable attachments to this instruction via an appropriate medium.

1.2.3. 48 OSS Airfield Operations Flight (OSS/OSA) will compile, consolidate, and coordinate changes to this instruction and is responsible for its content.

1.2.4. 48 FW Scheduling (OSS/OSOS) will ensure Temporary Duty (TDY) units flying local missions are assigned a host unit. Host units will brief and ensure understanding of procedures contained in this instruction before a TDY unit begins flying local sorties.

1.2.5. 48 FW assigned and attached fixed-wing fighter aircrew will comply with AFI 11-2 MDS Volume 3, (as applicable), and this instruction which is directive in nature. However, if more restrictive guidance is published, e.g., instruction change, Flight Crew Information File, or Read File, the more restrictive procedures will be applied. Aircrew should refer to the 48 FW In-Flight Guide (IFG) for additional illustrations of the local area, working area descriptions, and divert information. These operating procedures are designed to increase combat capability, enhance compliance with peacetime restrictions, and minimize inherent risks. **NOTE:** Unless otherwise specified, USAF TDY/Deployed units to RAF Lakenheath (RAFL) will be treated as hosted units.

1.2.6. A hosted unit refers to transient aircraft conducting sorties alongside locally assigned aircraft, with the hosting squadron managing all requests, flight plans, fueling, parking, and other logistics. Once the unit arrives, hosted units are considered locally assigned and can follow the procedures outlined in this instruction.

1.2.6.1. The 48 OG/CC will designate an operations group project officer for all hosted units.

1.2.6.2. A 48 OG/OGV Stan/Eval Flight Examiner or SIM Instructor will administer Local Area Orientation (LAO) academics. These are required for all hosted aircrew and will be complete prior to their first local sortie. These academics will not be “back-briefed” to aircrew who were unable to attend previously administered academics.

1.2.6.3. Hosted units will only be permitted to low fly if all prerequisites are followed IAW USAFE Instruction 11-201, *Flying Operations Conducted at USAF-Occupied Royal Air*

Force Installations in the United Kingdom, paragraph 8. – Operational Restrictions for Non-UK Based Aircraft Operating in the UK. **NOTE:** 35 days notice is required IAW USAFE Instruction 11-201.

1.2.7. Visiting units, not 48 FW hosted, must establish a temporary Letter of Agreement (LOA) prior to flying local sorties. The 48 OSS/CC and the visiting counterpart shall be signatories. Visiting units shall contact the 48th OSS, Airfield Operations Flight Commander (AOF/CC), 48 OG/OGV and 48th FW Safety to schedule required briefings.

1.3. Recommending Changes: The 48 OSS/OSA reviews this instruction bi-annually; submit all requested changes to the AOF/CC or designated representative.

1.4. Aircraft Applicability: Paragraphs prefaced with (A) or (E) are applicable only to the F-35A or F-15E, respectively.

1.5. Applicability during Deployed Status: Deployed 48 FW units will comply with this instruction unless operational control is transferred to another United States (US) or North Atlantic Treaty Organization (NATO) agency or commander. Deployed squadron commanders should attempt to comply with this instruction to the maximum extent possible. However, if conflicting guidance exists, the deployed instructions supersede these local operating procedures (LOP). Deviations require 48 OG/CC notification.

1.6. Waiver Authority: The 48 OG/CC, or deployed equivalent, is the waiver authority for procedures in this instruction unless otherwise specified. **Exceptions:** Cockpit media restrictions waiver will be IAW 48th Fighter Wing RAF LAKENHEATH, UK Special Access Program Standard Operating Procedures.

1.6.1. Cockpit camera usage requires coordination with 48th Fighter Wing Advanced Programs (48 FW/AP) and written approval by the USAFE-AFAFRICA Program Security Officer. AFMAN 11-202 Volume 3 restrictions must be followed if camera or cell phone usage is approved.

1.7. Command and Control.

1.7.1. The 48 OG/CC will approve all 48 FW flying operations. This includes cross-country, ferry, Operational Check Flight, and Functional Check Flights (FCF).

1.7.2. Flying units will advise 48th Operations Support Squadron Airfield Management (OSS/OSAA) and the Supervisor of Flying (SOF) of all aircrew and mission changes as soon as they occur. In addition, units will update PATRIOT EXCALIBUR (PEX) with the most current schedule.

1.7.3. The local flying units in concert with the SOF will provide positive command and control for all flights:

1.7.3.1. For off-station sorties in the United States European Command (EUCOM) Area of Responsibility, Actual Time of Departure (ATD), Estimated Time Enroute (ETE), and Actual Time of Arrival (ATA) must be passed to the SOF.

1.7.3.2. If the sortie is in conjunction with a deployment, the deployed commander will develop procedures to ensure ATD and ATA are passed as soon as possible after landing.

1.7.3.3. If the off-station sortie is a cross-country with no other support, the aircraft commander will ensure the ATD and ATA are passed to flying units. On DD Form 1801,

Department of Defense (DoD) International Flight Plan, block 18, annotate, "RMK/PASS ATD-ETE-ATA TO EGUL YWYO." DD Form 1801 is prescribed by AFMAN 11-202 Volume 3, *General Flight Rules*.

1.7.3.4. The 48th flying units and/or SOF will pass off-station information to the respective squadron leadership and the 48 OG/CC.

1.7.4. The SOF has the authority to recall or divert flights and is the focal point for command and control of flight operations as the 48 OG/CC delegated authority. During an emergency or an abnormal situation, the SOF provides aircrews, unit supervisors, Command and Control personnel and other supporting agencies with guidance, timely advice, and assistance to determine a correct course of action.

1.8. Unit Standards: 48th Operations Group Administrative Standards will be published by 48 OG, with 48 OG/OGV as OPR and 48th Operations Support Squadron Weapons and Tactics (48 OSS/OSK) as OCR.

Chapter 2

AIRFIELD INFORMATION

2.1. Runways (RWY) and Taxiways (TWY): RWY 05/23 is 8,998 feet long by 150 feet wide, the airfield elevation 31 feet mean sea level (MSL); RWY 23 is the primary instrument and calm wind RWY. The first 500 feet of RWY 05 and the first 1000 feet of RWY 23 are grooved concrete; the remaining is a Porous Friction Surface (PFS). RWY 05 overrun is 997 feet long and RWY 23 is 999 feet long, both are non-load bearing. See **Attachment 2**. Airfield Diagram, depicting RWY/TWY designators.

2.1.1. RWY Restrictions

2.1.1.1. C-17 and larger aircraft are not permitted to enter or exit the runway from Taxiway Victor when Runway 23 is active.

2.1.1.2. Every effort shall be made when maneuvering Fire Department (CES/CEF) vehicles to limit changes of the direction on the PFS when responding to emergencies. 48 CES/CEF should conduct their turn onto the RWY outside the solid white RWY edge lines and ease the truck at an angle onto the RWY surface. Turning maneuvers are permitted outside the RWY edge lines. Heavy utility vehicles, such as fire trucks, should also enter and exit the RWY from the concrete ends.

2.1.1.3. F-35B or other Short takeoff and vertical landing (STOVL) enabled aircraft are not permitted to perform vertical takeoffs, vertical low approaches, or vertical landings anywhere on the airfield.

2.1.2. Permanently Closed/Unusable Portions of the Airfield

2.1.2.1. The closed paved area between TWY November and TWY Whiskey (commonly referred to as the Gantry area) is not usable for aircraft or towing operations.

2.1.2.2. Juliet bubble is permanently closed.

2.1.2.3. Foxtrot North is permanently closed.

2.1.2.4. TWY Quebec is permanently closed.

2.1.3. RWY Selection Procedures

2.1.3.1. RAFL Control Tower (TWR) Watch Supervisor (WS)/Senior Controller (SC) will select the active RWY based on weather, availability of arresting systems, airfield lighting, and opportunity for practice approaches.

2.1.3.2. Prior to commencing a RWY change, TWR WS/SC will coordinate with RAFL Radar Approach Control (RAPCON) and SOF.

2.1.4. RWY Change Notification Procedures

2.1.4.1. Upon commencing and completing a RWY change, TWR will inform RAPCON, Airfield Management Operations (AMOPS), 48 OSS Weather Flight (OSS/OSW), 48 CES/CEF, 48th Civil Engineering Squadron Power Production (CES/CEOFP), and RAF Mildenhall (MLD) Tower. RAPCON and TWR will also

broadcast an advisory on all appropriate frequencies. TWR will update the Automatic Terminal Information Service (ATIS).

2.1.4.2. AMOPS will advise Transient Alert (TA) and update Command and Control Incident Management Emergency Response Application (C2IMERA) appropriately.

2.1.4.3. 48 CES/CEOFP will request 48 CES/CEF assistance to reconfigure the cables when needed.

2.1.4.4. SOF will notify 48 OG/CC and each Squadron Operations Supervisor (Ops Sup).

2.2. Control of Ground Traffic in the Controlled Movement Area (CMA)

2.2.1. CMA: See also Lakenheath Instruction (LAKI) 13-213, *Airfield Driving,* for vehicle operation procedures in the CMA, and a CMA diagram.

2.2.1.1. The CMA is defined as the RWY, overruns, and all areas within 150 feet of the paved surface of the RWY and overruns. The areas between the RWY hold lines and the RWY are included in the CMA.

2.2.1.2. TWR is responsible for controlling the movement of vehicles, equipment, and personnel in the CMA. TWR will continuously monitor the RAMP net during airfield operating hours. **NOTE:** Perimeter Road at the approach ends of the RWY is not considered CMA.

2.2.1.3. Construction in the CMA

2.2.1.3.1. All construction must be pre-approved by the Airfield Manager (AFM).

2.2.1.3.2. AMOPS will inform TWR of pertinent data, including radio call sign.

2.2.1.3.3. Work personnel must follow all procedures listed in LAKI 13-213.

2.2.1.3.4. The 48th Civil Engineering Squadron (48 CES) will provide an escort vehicle for construction vehicles/personnel who do not have two-way communication with TWR.

2.2.1.4. In the event of radio failure, all vehicles and personnel will exit the RWY and remain a minimum of 150 feet from the edge of the RWY or overruns until two-way radio communication with TWR is re-established.

2.2.1.4.1. TWR will immediately notify AMOPS when two-way communications with any vehicle or personnel within the CMA is lost.

2.2.1.4.2. If TWR is unable to reestablish two-way radio communication with personnel within the CMA, controllers shall flash the RWY lights on and off and/or use light gun signals to alert personnel to immediately vacate the area.

2.2.1.4.3. AMOPS will respond to vehicles and personnel within the CMA when loss of two-way communications happens to provide an escorted departure from the CMA.

2.2.1.5. AMOPS and 48 CES/CEF will continuously monitor the RAMP net and CRASH net respectively.

2.2.2. RWY access for personnel and vehicles

2.2.2.1. Authorized vehicles may be permitted to cross the RWY only when in direct two-way radio communication with TWR and verbal approval is granted by TWR. Authorized vehicles will only cross the RWY for mission-essential duties. To the maximum extent possible vehicles will use the airfield perimeter road to transit between the north and south sides of the airfield.

2.2.2.2. Vehicles escorting a towed and/or emergency aircraft must be in two-way radio contact with TWR if a RWY crossing is required.

2.2.2.3. Procedures for RWY access during TWR and AMOPS closures

2.2.2.3.1. When TWR closes, TWR will broadcast on the RAMP net and CRASH net: *ATTENTION ON THE NET, LAKENHEATH TOWER IS NOW CLOSED. FOR ACCESS TO THE RUNWAY, CONTACT EAGLE OPS ON THIS NET.*

2.2.2.3.2. All vehicles shall contact 48 FW/CP (call sign: EAGLE OPS) when requesting access to, or when exiting the CMA.

2.2.2.3.3. 48 FW/CP will monitor the RAMP net and CRASH net and verify the airfield status for each vehicle, stating, "*(CALL SIGN), EAGLE OPS, AIRFIELD CLOSED, PROCEED AT YOUR DISCRETION, USE CAUTION, REPORT OFF."* or, if mistakenly called when the TWR is open, "*(CALL SIGN), EAGLE OPS, AIRFIELD OPEN, CONTACT TOWER FOR CMA ACCESS."*

2.2.2.3.4. When TWR opens, TWR will broadcast on the RAMP net and CRASH net: *ATTENTION ON THE NET, LAKENHEATH TOWER IS NOW OPEN. ALL VEHICLES RESPOND WITH CALL SIGN AND POSITION IN THE CMA.*

2.2.2.3.5. AMOPS will conduct a RWY sweep prior to the airfield opening. In the event the RWY sweep is not completed prior to the airfield opening time, the airfield will open with runway ops suspended.

2.3. ATC Facilities.

2.3.1. Normal airfield, TWR, and AMOPS operating hours are Monday through Thursday 0600-2200L and Friday 0600L-1800L.

2.3.1.1. The beginning of the fly window will be 30 minutes prior to the first scheduled takeoff and will end 30 minutes after the last scheduled land. The daily fly window will be finalized the Thursday prior for the scheduled week. Extensions to the end fly window will be handled IAW the 48 FW SOF Checklist. Any changes to opening the fly window sooner than scheduled will need to be coordinated NLT 1400L the day prior and approved by the AOF/CC. The final approval authority will rest with the 48 OG/CC. The following organizations will need to be contacted by the organization requesting the change to ensure they can accommodate and concur.

2.3.1.1.1. 48 OSS/OSA, AOF/CC (x1165, x3571)

2.3.1.1.2. 48 OSS/OSW, Base Weather (x4184, x4660)

2.3.1.1.3. 48 CES/CEF, Fire Chief (x4205, x1501)

2.3.1.1.4. 492/493/494/495 FS, Ops Sup (x0492, x4493, x0494)

2.3.1.1.5. 492 FGS (x0200, x0201)

2.3.1.1.6. 493 FGS (x5021, x2620)

2.3.1.1.7. 494 FGS (x0415, x0449)

2.3.1.1.8. 495 FGS (x4953, x2620)

2.3.1.1.9. 48 OG/CC (x4803)

2.3.1.1.10. Inform 48 OSS/OSOS, Wing Scheduling, when complete (x3389).

2.3.1.2. The airfield, TWR, and AMOPS are closed on all US holidays and United Kingdom (UK) Bank Holidays unless open by Notice to Air Mission/Airmen (NOTAM).

2.3.1.3. The airfield, TWR, and AMOPS are closed on all 48 FW Goal Days, No-Fly Days, and USAFE Family Days. AMOPS will issue a closure NOTAM and inform TA, Barrier Maintenance, and 48 CES/CEF prior to the closure.

2.3.2. RAFL RAPCON operates 24 hours per day, 7 days per week, unless otherwise published via NOTAM.

2.3.3. 48 FW/CP is the point of contact (POC) for initiating short-notice procedures to open the airfield outside normal operating hours.

2.3.3.1. 48 FW/CP will request authorization from 48 OG/CC or designated representative as specified in **paragraph 2.3.4**.

2.3.3.2. If authorization is granted, 48 FW/CP will then notify designated 48 OSS/OSA and 48 OSS/OSW representatives, who will in turn contact any additional personnel needed to open.

2.3.3.3. 48 FW/CP will notify any additional agencies required by the original requestor (e.g. TA, Fuels personnel, etc.).

2.3.3.4. 48 OSS/OSA will identify designated representatives (**paragraph 2.3.3.2**) in writing to 48 FW/CP.

2.3.3.5. The minimum notification time for 48 OSS/OSA personnel is 120 minutes prior to the proposed operation.

2.3.4. 48 OG/CC approval is required to open the airfield outside of published hours for non-hosted or transient aircraft not supporting the 48 FW, including aircraft diverts from MLD. 48 OSS/CC or 48 OSS/DO approval is required for all other out-of-hours operations (i.e. local flying, 48 FW cargo support, etc.). For operations during quiet hours, see **paragraph 2.18**. **NOTE:** 48 OG/CC approval may be obtained via the approval of the flying schedule. The airfield will not remain open, and TWR will not provide ATC instructions without 48 OG/CC approval. TWR will issue an advisory that TWR and the airfield are closed and recommend termination of operations if necessary.

2.3.4.1. TWR and AMOPS will open the RWY 60 minutes prior to an aircraft's Estimated Time of Arrival (ETA) or Estimated Time of Departure (ETD).

2.3.4.2. For departures, the airfield (TWR and AMOPS) will remain open for 30 minutes after last departure.

2.3.4.3. For arrivals, the airfield (TWR and AMOPS) will remain open for 30 minutes after last landing or when advised by the pilot of engine shutdown, whichever is first.

2.4. Airfield Lighting Systems.

2.4.1. RWY 05/23 has Precision Approach Path Indicators, High Intensity RWY Lights (HIRL), RWY End Identifier Lights, High Intensity Approach Lights, and sequenced flashing lights (SFL). An airfield beacon is located on the north side of the airfield. **NOTE:** Simplified Short Approach Lighting may be used for energy conservation purposes when weather conditions permit.

2.4.2. Lighting Inspections

2.4.2.1. AMOPS will inspect airfield lighting, including obstruction lighting, daily when the airfield is open.

2.4.2.2. 48 CES exterior lighting personnel will check the approach lighting system and SFLs and report outages to AMOPS daily.

2.4.2.3. AMOPS will document unserviceable light outages.

2.4.2.4. AMOPS will contact 48 CES/CEF via telephone when outages render a lighting system unusable during night or low visibility flying operations outside 48 CES normal operating hours.

2.4.3. 48 CES exterior lighting will report to AMOPS NLT 1000L hours every weekday morning the airfield is open to obtain the prior day's outage report. They will also make every effort to repair all lighting deficiencies the same day and return to AMOPS at the end of each duty day to report repairs, system status, and any pertinent information.

2.4.4. TWR has control of the airfield lighting panel and will operate airfield lights and visual aids IAW FAAO JO 7110.65, 48 OSS/OSAT OI 13-204.

2.4.5. Inoperative HIRL system procedures

2.4.5.1. TWR will (if initially identifying the outages) advise AMOPS, RAPCON, and all aircraft under their control of the outage.

2.4.5.2. AMOPS will advise TWR, RAPCON, and 48 FW/CP of airfield lighting outages, and process a Flight Safety NOTAM.

2.4.5.3. RAFL RAPCON will advise Swanwick Military Air Traffic Control Center (Swanwick Mil) ATC and aircraft under their control of the outage.

2.4.5.4. 48 FW/CP will notify the 492/493/494/495 Fighter Squadrons, and the 48 OG/CC of the outage.

2.4.5.5. Upon restoration of the approach lights, all agencies will make the same notifications.

2.4.6. When TWR is closed, changes to airfield lighting will be coordinated through 48 CES/CEF.

2.5. Aircraft Arresting Systems.

2.5.1. Normal cable configuration for RWY 05 during 48 FW fly window is cables 2 through 4 raised, and cable 1 lowered. Normal cable configuration for RWY 23 is cables 1 through 3 raised, and cable 4 lowered. The minimum arresting system requirement for fighter operations is at least 1 departure end Barrier Arresting Kit-12 (BAK-12). Arresting systems are numbered 1 to 4, starting at RWY 05 approach end.

2.5.1.1. Single system (50,000 pounds [nominal] at 180 knots maximum) BAK-12s (one and four) are located 1,200 feet from the threshold on each end.

2.5.1.2. Single system (50,000 pounds [nominal] at 180 knots maximum) BAK-12s (two and three) are located 2,500 feet from the threshold on each end.

2.5.1.3. BAK-12s can be engaged from either direction. **NOTE:** The Primary Crash Alarm System (PCAS) will not be activated for barrier certifications.

2.5.1.4. BAK-12 cables are tied down across the RWY to prevent excessive cable bounce. A total of eight tie down straps are used per BAK-12 with four located either side of the RWY centerline. If the cables are not tied down, 48 CES/CEOFP will notify TWR and AMOPS. TWR will ensure aircraft are notified, and AMOPS will issue a NOTAM as needed. Cables that are not tied down remain fully operational. Additionally, the prescribed number of tie-downs, outlined above as eight per each BAK-12, should be kept in use to the maximum extent possible. AMOPS will notify TWR and/or SOF when cable tie-downs are missing but will not suspend RWY operations unless directed to do so by SOF, the AFM or 48 CES/CEOFP. Instead, cable tie-downs will be replaced as soon as possible on a non-interference basis with departure/recovery operations.

2.5.1.5. Successive cable engagements on the BAK-12s require a minimum interval of 15 minutes. Engaged cables must be inspected and recertified by 48 CES/CEOFP prior to successive engagements. Additional time may be required as the situation dictates. In extreme emergency situations, it is possible to have one aircraft engaging the departure end arresting system and a successive aircraft engaging an approach end arresting system. If feasible, the second aircraft should divert as directed by the SOF, OG/CC, or OG/CC designated representative. In the rare event that a successive cable engagement is required, TWR must be notified of any nonstandard cable status and/or debris (cable tape connectors, etc.) left on the RWY.

2.5.1.6. If a cable is needed for a subsequent engagement before checks are complete, the senior 48 CES/CEOFP official determines usability, and notifies TWR and AMOPS.

2.5.1.7. Following a cable engagement with subsequent inbound emergency aircraft (that will not require a cable), the SOF may direct 48 CES/CEOFP to delay cable inspection and recertification until any emergency aircraft have landed.

2.5.2. Recovery of aircraft into arresting systems while other aircraft are still on the RWY will be at the discretion of the SOF.

2.5.3. All cables must be removed prior to the arrival and/or departure of EC/RC-135s and U-2 aircraft.

2.5.4. AMOPS will notify 48 CES/CEOFP when cables need to be reconfigured or if a system malfunction exists. Outside of normal duty hours, weekends and on holidays, AMOPS will

notify 48 CES/CEF who will, in turn notify 48 CES/CEOFP. Approximately 30 minutes is required for cable reconfiguration.

2.5.4.1. 48 CES/CEOFP response times is 15 minutes during airfield operating hours and 120 minutes outside airfield operating hours.

2.5.5. Maintenance and Inspection

2.5.5.1. 48 CES/CEOFP will

2.5.5.1.1. Perform maintenance inspections using the applicable technical orders/ regulations.

2.5.5.1.2. Perform daily, weekly, monthly, quarterly, semiannual, and annual arresting system inspections.

2.5.5.1.3. Notify AMOPS prior to and upon completion of arresting system inspections.

2.5.5.1.4. Notify AMOPS not later than (NLT) 30 days prior to due date for annual cable certifications.

2.5.5.1.5. Inspect and certify equipment following engagements and upon SOF, TWR, or AMOPS request.

2.5.5.1.5.1. Cable status and service conditions are defined as follows:

- Normal operation: Available for immediate use.
- Limited service: Capable of one engagement with no rewind capability.
- Out of service: Not available and off RWY.

2.5.5.1.6. Notify AMOPS and TWR of cable limitations.

2.5.5.1.7. Contact TWR for access to arresting system equipment. 48 CES/CEOFP should be allowed to enter and work in cable huts during scheduled flying after coordinating with TWR.

2.5.5.1.8. Perform uninterrupted recurring maintenance every Sunday from sunrise to 1200L if the airfield is closed or after coordination with TWR.

2.5.5.1.9. Correct equipment malfunctions or deficiencies if able, report them to AMOPS if they cannot be corrected.

2.5.5.1.10. Request 48 CES/CEF assistance through TWR and assist with resetting and certifying cables after any engagement.

2.5.5.2. 48 CES/CEF will

2.5.5.2.5. Reset and/or help 48 CES/CEOFP reset the arresting system after each engagement. **NOTE:** Only 48 CES/CEOFP personnel may recertify a cable.

2.5.5.2.6. Notify TWR when access to arresting system equipment is required and when all personnel and vehicles are off the RWY after resetting and inspecting the equipment.

2.5.5.2.7. Use only qualified personnel to maintain and inspect arresting system equipment.

2.5.5.2.8. Report arresting system malfunctions to AMOPS, 48 CES/CEOFP, and TWR.

2.5.5.3. TWR will

2.5.5.3.5. Notify pilots of the location of arresting system malfunctions or deficiencies.

2.5.5.4. AMOPS will

2.5.5.4.5. Check and report obvious unsatisfactory conditions of the arresting system that could compromise the system's operation.

2.5.5.4.6. Upon notification from 48 CES/CEOFP that an annual certification is due, AMOPS will coordinate a certification date and time through the AOF/CC. Once notified by AOF/CC of an approved date and time, AMOPS will notify ATC, Barrier Maintenance, SOF, 48 CES/CEF, Crash Recovery, and Maintenance Operations Center (MOC) once upon notification and once again NLT 2 hours prior to cable certification.

2.6. Parking Plan.

2.6.1. AMOPS will be the coordinator for all transient aircraft parking. For the local Aircraft Parking Plan (normal and contingency aircraft parking, and maximum on ground (MOG)), contact the Airfield Manager at 226-3572.

2.7 Local Frequencies/Channelization: The following frequencies/ultra-high frequency (UHF) channels are utilized for RAFL:

Table 2.5. LKH Frequencies/UHF Channelization

FREQUENCIES						
Channelized Frequencies				**Non-Channelized Frequencies**		
Channel	VHF	UHF	USE	VHF	UHF	USE
1		Variable	Squadron Ops	122.1	257.8	NATO Common
2	121.575	397.35	Ground Control		397.0	Approach Discrete
3	137.1	373.775	Local Control		341.05	LKH ATIS
4		264.575	Departure Control		340.65	LKH PMSV
5		233.725	Swanwick ICF		313.575	LKH CP
6		259.6	Swanwick East	122.55	370.25	MLD TWR
7		280.35	Swanwick West		282.025	MLD ATIS
8		270.050	Swanwick NE		284.425	MLD PMSV
9		266.05	RAMROD (SOF)	131.975	308.85	MLD PTD

10	136.5	275.825	Approach Control		300.8	MLD CP
11	128.9	369.8	Arrival Control	122.55	370.25	MLD TWR
12		269.475	Swanwick ICF			
13		362.775	LKH Emergency			
35		373.175	LKH Overlord			
36		373.525	LKH Overlord			

2.8 Radar, Airfield and Weather Systems (RAWS).

2.8.1. RAWS operate continuously except during published maintenance periods, or when a NOTAM has been issued.

2.8.2. Available RAWS

2.8.2.1. Tactical Air Navigation (TACAN) [located on north side of airfield, southeast of Lima hardstand]

2.8.2.2. Instrument Landing Systems (ILS) for RWY 05/23

2.8.2.3.Digital Airport Surveillance Radar (DASR)

2.8.2.4 FMQ-19

2.8.3. The RAPCON is designated as the primary RAWS monitoring facility and continuously monitors the DASR, ILS and TACAN for proper operation. Pilots should report any weak or anomalous signals to ATC as soon as practical.

2.8.4. Preventative Maintenance Inspection for RAWS will be accomplished during the following windows:

2.8.4.1. TACAN: 0000 – 0600L (Monday – Friday)

2.8.4.2. ILS: 0000 – 0600L (Monday – Friday)

2.8.4.3. DASR: 0000 – 0600L (Monday – Friday)

2.9. Transient Alert Services.

2.9.1. TA is available during published airfield hours. Services and facilities available to support transient aircraft are published in the Instrument Flight Rules (IFR) Supplement Europe, North Africa, Middle East. Coordination for TA support outside published hours must be requested through AMOPS. TA services are required for transient aircraft operations.

2.9.2. LKH does not have a designated drag chute deployment area. Aircraft will be instructed to retain chute to parking. If unable to retain chute, aircraft will release chute at their discretion and TA will retrieve dropped chute.

2.9.3. Per TA’s contract, Transient Aircraft are defined as aircraft enroute from one location to

another that may require routine servicing.

2.9.4. Hosted units visiting LKH for the purpose of flying multiple sorties with local flying units are NOT considered Transient Aircraft and therefore must arrange for their own maintenance with their hosting unit.

2.10. Transient Aircraft Operations.

2.10.1. AMOPS will notify TWR, RAPCON, 48 OSS/OSW and TA of all inbound/outbound transient aircraft to include call sign, aircraft type, times and any arrival or departure time updates. Additionally, AMOPS will notify TWR of transient aircraft parking locations.

2.10.2. TWR will notify TA when transient aircraft are within 15 miles (time permitting). TA should expect aircraft to arrive on schedule and be in place accordingly.

2.10.3. LKH RAPCON will contact the Range Control Officer for the deactivation of StanfordTraining Area/Danger Area 208 (STANTA) prior to any transient aircraft conducting an instrument approach to RWY 23. Solicitation of VFR straight-in (weather permitting) will be exercised to the maximum extent possible to avoid the deactivation of STANTA.
2.10.4. AMOPS will brief transient aircrew on noise abatement and engine run procedures listed in this instruction.

2.11. ATIS.

2.11.1. Current ATIS will be available when Tower is open.

2.11.2. Message format is IAW FAAO JO 7110.65. Additional items may include TWR pattern status, alternate airfield, Runway Surface Condition (RSC) if other than dry/dry, Runway Condition Reading (RCR), STANTA status, weather advisories/watches/warnings, and other data pertinent to aircraft operations.

2.11.3. Aircrew shall obtain the ATIS prior to initial contact with LKH approach or ground control and advise ATC of the ATIS code on initial contact.

2.12. Arm/De-arm and Hot Pit Areas.

2.12.1. Arm/de-arm areas are depicted on airfield diagram (**Attachment 2**).

2.12.1.1 MOC will notify TWR and the 48th Security Forces Squadron Emergency Communications Center (SFS ECC) of scheduled arming/de-arming of aircraft with forward firing munitions.

2.12.2. The 492/493/494/495 FGS will provide qualified personnel for arming/de- arming of aircraft with forward firing munitions.

2.12.3. Aircraft with hung ordnance will be de-armed IAW **paragraph 9.16**.

2.12.4. Pilots will ensure aircraft are properly aligned prior to arming/de-arming.

2.12.4.1. The first aircraft in the arming area will occupy the slot furthest from the RWY. The first aircraft in the de-arming area will occupy the slot closest to the RWY.

2.12.4.2 Aircraft with forward firing munitions shall park IAW the safe heading markings in the arm/de-arm areas.

2.12.5. Approved Hot Pit Operation locations are the Hotel Apron, Victor Ramp, and the 40 and Golf Bubbles. **NOTE:** Hotel Apron use must be coordinated with Airfield Management.

2.13. Aircraft Towing Procedures.

2.13.1. When the airfield is open and an aircraft tow is required on the airfield, MOC shall contact TWR and 48 SFS ECC when the towing operation is ready to begin and state the intended movement of towing operation. MOC will ensure they adhere to airfield restrictions that are sent via NOTAMs.

2.13.2. Tow operators shall contact TWR via Ramp Net to receive approval prior to beginning towing operations. Two-way radio communications must be maintained. Tow operators must give-way to aircraft operations. Towing should be done outside of normal wing flying window hours to the maximum extent possible.

2.13.3. During exercises MOC will coordinate with the Maintenance Group lead exercise representative (Blackjack) for aircraft tows, taxi, and engine runs prior to notifying TWR.

2.14. Airfield Maintenance, Sweeper, and Mowing Operations.

2.14.1. Contractors, working on any area(s) of the airfield environment, must contact AMOPS prior to proceeding on the airfield to provide company name, callsign (if applicable) and work location.

2.14.2. Any work on or near any TWY, RWY, or overrun must be coordinated through the AFM or designated representative.

2.14.2.1. The AFM, or designated representative, will brief the contractors on hazards and clearance requirements, and will coordinate as necessary with appropriate agencies.

2.14.3. Contractors will contact AMOPS to report off the airfield, at the end of the work day.

2.14.4. Sweeper operations will be conducted IAW the Airfield Sweeper Operations and Sweeper Recall Procedures Letter between 48 OSS/OSA and 48 CES Horizontal Repair Section.

2.14.5. Due to the unique requirements of LKH's natural environment, mowing operations will be coordinated on a case-by-case basis through the AFM or designated representative.

2.14.6. Requests for airfield restriction or closure will be submitted through the AFM.

2.15. Runway Surface Condition and Runway Condition Reading Values.

2.15.1. AMOPS determines an RSC and RCR IAW DAFMAN 13-204 Volume 2, TO 33-1-23, *Equipment and Procedures for Obtaining Runway Condition Readings,* and procedures outlined in this instruction. An RSC is expressed for two surfaces, concrete and PFS (i.e. wet/wet, wet/dry).

2.15.2. AMOPS will verify the RSC by physically inspecting the RWY as required, when requested by the SOF or TWR and report IAW DAFMAN 13-204 Volume 2. Additionally, AMOPS determines whether the RWY is wet or dry by driving down the RWY 20 feet on each side of the centerline. Methods used to check the RWY include physically touching the RWY surface for water, observing visible patches, ponding, or standing water, measuring the depth of any standing water, observing spray from a vehicle, or observing pavement discoloration. When discoloration is noted, moisture should be verified through physical means, i.e. touching RWY surface.

2.15.2.1. RSC will always be provided for both surfaces of the RWY, due to their

significantly different frictional characteristics. The first value will be for the concrete surface and the second value for the PFS (e.g., WET/DRY).

2.15.3. LKH's PFS has increased friction characteristics resulting in improved braking action during wet RWY conditions when compared to normal concrete RWY surfaces. The increased PFS friction characteristics have been validated with flood testing at a depth of up to 1mm through independent testing. Testing has shown that when the PFS is wet with 1mm of water on the surface it provides a friction level equivalent to RCR 20.

2.15.4. Standardized RSC measurements are critical to ensuring aircrew use accurate takeoff and landing data (TOLD). Utilizing TOLD corresponding to the actual friction characteristics of the RWY allows aircrew to take advantage of the unique capabilities of the PFS RWY and operate with increased safety and effectiveness.

2.15.4.1. AMOPS will use the following criteria to help standardize the RSC status:

2.15.4.1.1. Dry RWY – A runway is dry when it is neither wet, nor contaminated and when no more than 25 percent of the runway surface area is covered by visible moisture, dampness or frost.

2.15.4.1.2. Wet RWY – AMOPS will report the RSC as Wet/Wet when water is the only form of visible moisture on 25% or more of the runway surface area. If standing water is present, AMOPS will report the existence, location and depth, to the nearest 1/10", of any standing water (ponding, water patches, and puddles). A sample NOTAM would read: RUNWAY 05/23 SURFACE CONDITION: CONCRETE WET AND PFS WET WITH 1/10 OF AN INCH OF STANDING WATER ABEAM TWY VICTOR, 20 FEET NORTH OF CENTERLINE.

2.15.4.2. The SOF may relay specific TOLD instructions for locally assigned aircraft via the ATIS.

2.15.5. AMOPS will relay RSC and RCR information to TWR and 48 OSS/OSW and will issue a NOTAM.

2.15.5.1. Locally assigned aircraft will follow RCR restrictions listed in the appropriate Mission-Design Series (MDS) or as approved by the 48 OG/CC or SOF.

2.15.5.2. Every effort should be made to allow AMOPS personnel to check the RSC and RCR during rapidly changing conditions. If AMOPS personnel observe the RSC or RCR value has potentially changed to become a hazard to operations, they should invalidate the previous reported condition and advise TWR.

2.15.6 Procedures/Requirements for Conducting RWY Inspections/Checks: IAW DAFMAN 13-204 Volume 2, LAKENHEATHI 21-102, and local checklists, AMOPS will conduct daily airfield inspections and additional airfield checks (as required) in response to in-flight emergencies, to examine RSC/RCR, Foreign Object Damage (FOD), Bird Aircraft Strike Hazard (BASH), construction, daytime and nighttime airfield lighting serviceability, and any other items affecting the status of the airfield.

2.16. Engine Test/Run-up Procedures.

2.16.1. If the airfield is open, MOC will inform TWR of all engine runs and pass the aircraft tail number and location prior to start of engine run.

2.16.2. When the airfield is closed, the agency responsible for conducting an engine run must notify 48 SFS ECC.

2.16.3. Transient aircraft engine runs

2.16.3.1. Transient aircraft engine runs will be pre-coordinated with the AFM. Engine runs up to 80 percent power will be performed on Victor Ramp or TWY Whiskey.

2.16.3.2. If required, full-power engine runs will be performed on the RWY.

2.16.3.3. AMOPS will notify TWR of all approved engine runs.

2.16.3.4.Should an aircraft request an uncoordinated engine run, TWR will obtain location/power settings and coordinate with AMOPS.

2.17. Quiet Hours/Noise Abatement Procedures.

2.17.1. UK quiet hour and noise abatement procedures are published in US Air Forces Europe Instruction (USAFEI) 11-201, *Flying Operations Conducted at USAF-Occupied Royal Air Force Installations in the United Kingdom*. The following paragraphs are in addition to these procedures and in the event of any conflicts, USAFEI 11-201 takes precedence.

2.17.2. All fixed-wing aircraft, including transients, are prohibited from flying visual flight rules (VFR) patterns between the end of evening civil twilight and beginning of morning civil twilight due to noise abatement considerations for base housing. IFR patterns, to include numerous practice approaches, are permitted during normal airfield operating times.

2.17.3. Cross-country aircraft recovering on Saturday, Sunday, US, or UK holidays are limited to one straight-in approach (IFR approach, VFR straight- in) to a full-stop landing.

2.17.4. Unrestricted takeoffs/quick climbs will not be made at LKH, or off-station, except for FCF, incentive flights, and on Fridays. Additional exceptions require 48 OG/CC approval for missions at LKH. **NOTE:** Weather requirement for unrestricted takeoffs/quick climbs is at least a 2000-foot ceiling and 5000 meters visibility, and the ability to recover in Visual Meteorological Conditions (VMC).

2.17.5. Aircrew will avoid over-flying Newmarket below 2500 feet above ground level (AGL) and all other local towns or villages below 3000 feet AGL (such as Ely and Ely Cathedral, Lakenheath, Thetford, Bury St. Edmonds, Hockwold, Croxton Park, and Weeting) when operating VFR. When operating in VMC under the direction of a controlling agency, pilots should request avoidance vectors.

2.17.6. Aircraft will avoid over-flying Brandon below 2500 feet AGL or will avoid this area laterally by one-half nautical mile (NM). This restriction is not required if the aircraft is established on a precision or non-precision final approach to RWY 23 (VMC or Instrument Meteorological Conditions [IMC]).

2.17.7. After departing RWY 23 aircrew will ensure that they are at least one Distance Measuring Equipment (DME) and prior to the cut-out canal (a large drainage ditch located at approximately one DME from RWY 05 approach end) before turning.

2.17.8. Special Quiet Hours

2.17.8.1 Special quiet hours are determined by the 48th Maintenance Group Commander (48 MXG/CC) and 48 OG/CC and are normally relayed through the SOF and by NOTAM. Special quiet hour procedures must be routed through the 48 OSS/OSOS and 48 OSS/OSA offices NLT 1200L, the request must include the type of event, location, and expected start and end times (in Local and Zulu). Any changes to information submitted in the request must be forwarded to 48 OSS/OSOS as soon as possible or the change request may be disapproved.

2.17.8.2. 48 OSS/OSOS will determine, based on the information in the request, what

types of operations will be restricted to provide a reasonable balance between flying operations and reduced noise for the event. Before forwarding the request to the 48 OG/CC and the 48 MXG/CC, 48 OSS/OSOS will assign a quiet hour code from the following list:

2.17.8.2.1. Code A: No takeoffs, landings, engine runs, taxis, or Aerospace Ground Equipment (AGE) equipment operation. No noise on the airfield.

2.17.8.2.2. Code B: No takeoffs, engine runs, AGE equipment operation or taxis on the south side of the RWY. Landings straight into a full stop, hold on the north side of the RWY.

2.17.8.2.3. Code C: No takeoffs or taxis on south side of the RWY. Landings straight into a full stop, hold on the north side of the RWY. No engine runs or AGE equipment operation near (location of event).

2.17.8.2.4. Code D: No takeoffs. Landings straight into a full stop. (Used for LKH indoor events and MLD quiet hours).

2.17.8.2.5. Code E: No takeoffs, multiple VFR patterns or MLD over flight below 3000 feet. (Used for MLD quiet hours).

2.17.8.2.6. Code F: No takeoffs or MLD over flight below 3000 feet. (Used for MLD quiet hours).

2.17.8.2.7. Code G: No MLD over flight below 3000 feet. (Used for MLD quiet hours).

2.17.8.3. Notifications when approved

2.17.8.3.1. 48 OSS/OSOS will notify the flying squadrons, 48 OG/OGV, AMOPS, MOC, and 48th Maintenance Operations, Plans, Scheduling, and Documentation (48 MXG/MXOS).

2.17.8.3.2. MOC will distribute the information to appropriate noise producing units.

2.17.8.3.3. AMOPS will send a NOTAM and relay times and/or restrictions to TWR, RAPCON, flying squadrons and pertinent aircraft.

2.17.8.3.4. The SOF and/or MOC will determine if an activity (i.e. engine run, taxi) can be conducted during quiet hours. The SOF will contact 48 OG/CC if any deviations to special event quiet hour policy are required.

2.17.8.3.5. The SOF is the POC for aircraft ground (engine start and taxi) and flying operations.

2.17.8.3.6. MOC is the POC for maintenance operations during quiet hours.

2.18. Precision Approach Critical Area Protection.

2.18.1. See DAFMAN 13-204 Volume 3 for weather minimums and specifics regarding protection of precision approach critical areas.

2.18.2. IAW DAFMAN 13-204 Volume 3, all critical areas will be protected. ICAO standards are used to define the dimensions of the areas to be protected for the RWY 23 glideslope and localizer. Federal Aviation Administration (FAA) criteria are used to define the dimensions of the areas to be protected for the RWY 05 glideslope and

localizer. **NOTE:** Using FAA criteria for the RWY 05 glideslope prevents protecting an area that would interfere with highway A1065 traffic. See **Attachment 2** for ILS critical areas.

2.18.3. The ATIS may include instrument hold line restrictions to protect the ILS critical areas on the north side of RWY 05 and RWY 23 approach ends. TWR will issue hold-short instructions to taxiing aircraft and place an advisory on the ATIS as required. When critical area protection is necessary, entry into the north side arm/de-arm areas may be restricted.

2.18.4. Localizer Critical Areas: TWR will activate the perimeter road traffic lights to protect precision approach critical areas when aircraft are 6-mile final to RWY 23 on an ILS approach, until the aircraft has landed or gone missed approach. See DAFMAN 13-204 Volume 3 for protecting precision approach critical areas. See **Attachment 2** for ILS critical areas

2.18.5. ILS Critical Areas: See **Attachment 2** for ILS critical areas

2.18.5.1. Procedures for securing the ILS critical area when the Critical Area Light is operational:

2.18.5.1.1. TWR shall activate the ILS critical area lights and instruct taxiing aircraft to hold short of the instrument hold lines under the conditions detailed in DAFMAN 13- 204 Volume 3, for protecting precision approach critical areas.

2.18.5.1.2. TWR will also make an appropriate notification on the ATIS broadcast.

2.18.5.2. Procedures for securing the ILS critical area when the critical area light is inoperative:

2.18.5.3. AMOPS will provide or coordinate for security detail personnel to stop vehicular traffic at all ILS hold lines/traffic lights for the RWY in use.

2.18.5.3.1. TWR will

2.18.5.3.1.1. Advise AMOPS when critical area lights are inoperative and warrant activation of the critical area security detail.

2.18.5.3.1.2. Establish radio contact with each member of the security detail on the RAMP net.

2.18.5.3.1.3. Instruct the security detail to, "*SECURE THE CRITICAL AREA*" prior to an aircraft on an ILS approach reaching the final approach fix (FAF).

2.18.5.3.1.4. Not allow an aircraft on an ILS approach to proceed past the FAF until the security detail advises, "*CRITICAL AREA SECURE*."

2.18.5.3.1.5. Instruct the security detail to, "*RELEASE THE CRITICAL AREA*" after subject aircraft has landed.

2.18.5.3.1.6. Advise AMOPS when the security detail is no longer needed.

2.18.5.3.2. AMOPS will

2.18.5.3.2.1. Supervise the security detail and conduct detailed augmentee training.

2.18.5.3.2.2. Use appropriate number of personnel for RWY in use to assist in the ILS glideslope critical area security detail.

2.18.5.3.2.3. Issue a Land Mobile Radio (LMR) to each member of the detail.

2.18.5.3.2.4. Deploy the detail to the appropriate ILS critical area security points.

2.18.5.3.2.5. Ensure a member of the security detail establishes radio contact with TWR on the RAMP net.

2.18.5.3.2.6. Ensure each member of the detail stops all vehicle traffic from proceeding into the ILS critical area when advised by TWR to "*SECURE THE CRITICAL AREA*."

2.18.5.3.2.7. Advise TWR, "*CRITICAL AREA SECURE*" when the vehicle is clear of the ILS critical area.

2.18.5.3.2.8. Allow traffic to proceed when TWR advises, "*RELEASE THE CRITICAL AREA*."

2.18.5.3.2.9. Terminate the detail when advised by TWR it is no longer needed.

2.19. Restricted Areas on the Airfield: Restricted areas on LKH airfield are described in 48 FW Plan 31-101, *Integrated Defense Plan.*

2.20. Opening/Closing/Suspending/Resuming RWY Operations

2.20.1. AMOPS, TWR WS/SC or the SOF has the authority to suspend operations to the RWY.

2.20.2. Because heavy aircraft movements may cause the RWY to be contaminated with FOD, TWR WS/SC shall suspend RWY operations immediately after a heavy aircraft (i.e. B-747, C-5, etc) completes a take-off, full stop, touch-and-go, or stop-and-go. AMOPS shall conduct a FOD sweep and notify TWR when RWY operations may be resumed. Prior to a FOD sweep being completed, the SOF may authorize fighter aircraft to cross the RWY in areas where the heavy aircraft did not touch down.

2.20.3. After an emergency aircraft lands, not including emergency fuel, smoke in cockpit, physiological reasons, or instrument/electrical/communication/navigational problems, the TWR WS/SC will immediately suspend RWY operations. AMOPS must perform a visual inspection of the RWY surface prior to resuming operations.

2.20.4. Only the AFM or designated representative may open/close or resume operations after suspension of RWY operations.

2.20.5. The SOF has the authority to temporarily waive a RWY sweep (FOD check) for locally assigned aircraft. If the SOF exercises this authority, he/she assumes responsibility for

operations until the FOD check has been accomplished at the earliest opportunity and AMOPS will document the suspension of the RWY sweep in their daily events log.

Chapter 3

FLYING AREAS

3.1. Local Flying Area/VFR Local Training Areas: The 48 FW local flying area is defined as the airspace over the entire UK and the adjacent water area to the Flight Information Region (FIR)/upper FIR boundaries including the Dutch Temporary Reserve Airspace, excluding all of Ireland.

3.1.1. The airspace in East Anglia, including the LKH Combined Military Aerodrome Traffic Zone (CMATZ), is predominately Class G, which is uncontrolled airspace. Because of this, LKH RAPCON uses procedures outlined in the CAP 774 and FAAO JO 7110.65.

3.1.2. Do not accomplish practice diversions to civil airports or use the services of civil agencies that charge a fee. Ensure a no-fee approach and/or service for civil radar service.

3.2. Air Traffic Zone (ATZ)

3.2.1. TWR is the controlling and approving agency for operations within the LKH ATZ.

3.2.2. LKH ATZ dimensions are that airspace within 2.5 NM from the center of the airfield and from the ground to 2000 feet AGL.

3.2.3. Unusual maneuvers are not authorized in LKH ATZ airspace except as specifically authorized by LOPs. Unusual maneuvers include any intentional maneuver involving an abrupt change in an aircraft's attitude, an abnormal altitude, or abnormal acceleration not necessary for normal flight. Unusual maneuvers will not be approved unless they are essential to performance of flight in LKH ATZ airspace. All requests must be coordinated through 48 OSS/OSA and approved by the 48 OG/CC.

3.3. Combined Military Aerodrome Traffic Zone (CMATZ)

3.3.1. LKH RAPCON is the controlling agency for the CMATZ, excluding airspace contained with LKH and MLD ATZs. ATZ airspace will be released to RAPCON when LKH TWR is closed.

3.3.2. The CMATZ, shown in **Attachment 3**, is the airspace within 5 NM of the mid-point of both LKH's and MLD's RWYs, from the surface to 3000 feet AGL. This airspace includes stubs, which are projected from the 5 NM radius aligned with the instrument final approach path and have a length of 5 NM. The stubs are 4 NM wide at LKH (2 NM either side of the centerline) and 7 NM wide at MLD (2 NM north and 5 NM south of centerline) and include the vertical airspace from 1000 feet above field elevation to 3000 feet above field elevation.

3.3.3. Military aircraft intending CMATZ penetration must receive a clearance from LKH Approach prior to entering the CMATZ. **Caution:** Civil aircraft may fly through the CMATZ without the prior knowledge or consent of LKH Approach. Due to the close proximity of various airfields, aircrew should make every effort to see, avoid, and remain cognizant of other traffic, especially when LKH is using RWY 23 and MLD is using RWY 28.

3.3.4. The CMATZ is encompassed by Class G (uncontrolled) airspace. RAPCON provides ATC services to aircraft upon request in Class G airspace and within radar coverage from LKH at or below Flight Level (FL) 195.

3.3.5. Control instructions from radar controllers to all military aircraft operating in or enroute to the CMATZ are mandatory to ensure that the required separation minima is maintained.

3.4. Types of Service

3.4.1. The types of service available to aircraft in Class G airspace are Deconfliction Service (DS), Traffic Service (TS), and Basic Service (BS). LKH RAPCON uses a radar Minimum Vectoring Altitude (MVA) chart for aircraft under DS and will not issue altitude clearances below the MVA. See **Attachment 4**. Furthermore, LKH RAPCON will not vector aircraft under TS when the aircraft is below the MVA unless the pilot in command assumes responsibility for maintaining their own terrain and obstruction clearance IAW CAP 774. **NOTE:** Aircraft departing or free-calling RAPCON should expect TS until another radar service is agreed upon. **Note 2:** Deconfliction service is not authorized for aircraft general handling with LKH RAPCON.

3.4.1.1. Basic service is an air traffic service (ATS) provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights. This may include weather information, changes of serviceability of facilities, conditions at aerodromes, general airspace activity information, and any other information likely to affect safety. The avoidance of other traffic is solely the pilot's responsibility.

3.4.1.2. Traffic Service is a surveillance based ATS, where in addition to the provisions of a BS, the controller provides specific surveillance-derived traffic information to assist the pilot in avoiding other traffic. Controllers may provide headings and/or levels for the purposes of positioning and/or sequencing; however, the controller is not required to achieve deconfliction minima, and the pilot remains responsible for collision avoidance.

3.4.1.3. Deconfliction Service is a surveillance based ATS where, in addition to the provisions of a Basic Service, the controller provides specific surveillance-derived traffic information and issues headings and/or levels aimed at achieving planned deconfliction minima, or for positioning and/ or sequencing. However, the avoidance of other traffic is ultimately the pilot's responsibility.

3.4.2. RAPCON is not authorized to provide Procedural Service.

3.4.3. Without prior permission from the Ministry of Defense (MoD), all 48 FW flights on weekends will be under TS as a minimum.

3.4.4. To the maximum extent possible, flights will be under DS prior to entering IMC. **EXCEPTIONS:** Include AFI 11-214, *Air Operations Rules and Procedures*, guidance for IMC Training Rules during "IMC Only Rules", "IMC Rules/UNLIMITED clear of clouds" and "IMC Rules/LIMITED clear of clouds".

3.4.4.1. For the purpose of interpreting the IMC Rules guidance in AFI 11-214, aircraft operating in a segregated special use airspace may execute IMC intercepts. In the UK, segregated special use airspace only exists within the horizontal and vertical boundaries of a Managed Danger Area (MDA) which is booked in advance and declared active by NOTAM.

3.4.4.2. Ground Control Intercept (GCI) / Airborne Warning and Control System (AWACS) or Range Training Officer (RTO) procedures with all aircraft tracking must be

available if aircraft are to maneuver IAW AFI 11-214 paragraph 4.2.10.2 and 4.2.10.3.1. If they are not available, adversaries will be NON-MANEUVERING, blue air will be RESTRICTED maneuvering, and all aircraft will maintain their altitude blocks at all times while in IMC.

3.5. Separation of Aircraft

3.5.1. Regardless of service type, aircraft executing an instrument/IFR procedure will be afforded 1000 feet and/or 3 NM separation from other aircraft executing an instrument/IFR procedure. Additional separation will be added for the required spacing and application of wake turbulence and/or formation flights. **NOTE:** The reduced vertical separation of 500 feet listed in RA 3228 will not be applied by LKH RAPCON controllers to 48 FW aircraft.

3.5.2. Aircraft in the TWR pattern will be issued traffic information to the maximum extent possible, however, the provisions of **paragraph 3.5.1** do not apply. It is the pilot's responsibility to see and avoid. Aircrew should remain vigilant of their proximity to the MLD approach/departure corridors to avoid possible Traffic Alert and Collision Avoidance System (TCAS) resolutions.

3.5.3. Aircraft receiving service from RAPCON will be provided the full separation standard required by the level of service being offered.

3.5.4. During periods of surveillance radar outages, RAPCON will provide BS only. Separation services are not available and will not be provided. During periods of surveillance radar outages, all aircraft can expect to recover to a full stop.

3.6. Supersonic Flight: Aircraft will only accomplish supersonic flight in approved airspace. Aircraft will remain subsonic over land and within 10 NM from shore. In order to prevent inadvertent supersonic events, 48 FW aircrew will not exceed 0.95 Mach in any area not authorized for supersonic flight. The following guidance is IAW UK Military Aviation Authority (MAA) Regulatory Article 2310, *Role Specific Fixed Wing*.

3.6.1. All medium and high-level supersonic flights are to be made over the sea. Aircraft heading directly out to sea may accelerate to supersonic speed when at least 10 NM out to sea and along a line of flight at least 20 degrees divergent from the mean line of the coast; Supersonic flights with the aircraft pointing towards the land, turning, or flying parallel to the coast are to take place at least 35 NM from the nearest coastline.

3.6.2. Supersonic flights at low level (below 2,000 feet AGL) over the sea within the UK FIR are authorized with the restrictions listed in **paragraph 3.6.1**. In addition, maintain a radar/visual search to avoid the following:

3.6.2.1. Shipping and fixed or mobile oil and gas installations: 3 NM

3.6.2.2. Civilian or military transport aircraft: 6 NM

3.6.2.3. Helicopters, helicopter main routes and corridors: 6 NM

3.6.2.4. If not on a routine air-to-air (A/A) or air-to-ground (A/G) training mission in approved overwater airspace, aircrew must notify the controlling agency of planned supersonic flight (e.g., FCF flights).

3.7. Reporting of Breaches of Flight Rule, Airspace, or Speed Restrictions

3.7.1. Any time a breach of UK supersonic restrictions, controlled airspace, flight rule, or low fly rule violation occurs or is suspected, notify the squadron Director of Operations (DO) or Ops Sup and log the occurrence in the Significant Events Tracker on the 48 OG/OGV SharePoint: https://usaf.dps.mil/sites/48FW/48thOperationsGroup/48OGStanEval/SitePages/OGV.aspx. For supersonic and near supersonic (>0.95M) events, annotate the position, time, heading, airspace, altitude, and attitude of the occurrence. Ops Sups will notify 48th Operations Support Squadron Current Operations (OSS/OSO) (226-2399) as soon as possible after being informed of the event.

3.7.2. For supersonic events (exceeding .95 Mach in an area not authorized for supersonic flight does not require this report, only actual supersonic events.). The Ops Sup will also notify the appropriate Control and Reporting Centre or Control and Reporting Point, Senior Military Supervisor at Swanwick Mil ATC, or Naval Radar Unit of any inadvertent supersonic flight within 30 minutes of the aircraft's landing.

3.7.3. If contacted by a Defense Flying Complaints Investigation Team investigator about a potential breach, cooperate and ensure the squadron DO, 48 OSS/OSO, and USAFE-UK are aware an investigation is being conducted.

3.8. UK Restrictions

3.8.1. The WASH and LKH Aerial Training Areas (ATA) are used predominantly for pre-planned upgrade or continuation training missions. Aircrew will refrain from implementing Allied Command Europe (ACE) Manual 75-2-1, "Fighting Edge" Target of Opportunity A/A Training Rules, within these areas.

3.8.2. In the UK, the use of electronic jamming, chaff and flares is prohibited unless over water, or coordinated with a radar service. Do not use chaff in the LAK or WASH Aerial Training Areas if the forecast or observed winds are between 030 degrees and 130 degrees in the LAK Aerial Training Areas, between 310 degrees and 130 degrees in the WASH Aerial Training Areas, or in any case where chaff may drift over land. Jamming and chaff are authorized on Spadeadam range and IAW UK Range Orders.

3.8.3. Use of flares over water is prohibited at night unless His Majesty's (HM) Coastguard is notified in advance. If operating on a controlled range, notify the range officer at least 1 hour in advance. The range officer will notify HM Coastguard if requested. Otherwise, contact the HM Coastguard duty manager at their 24-hour Operations Room (99-01493-851338).

3.9. Airborne Fighter Restrictions

3.9.1. Basic Fighter Maneuvers, Air Combat Maneuvers, or Advanced Handling Characteristics will not be accomplished within 6 NM of Norwich, N52-38.3 E001-18.5.

3.9.2. During incentive, orientation and familiarization flights, aircraft will not perform aerobatics within a 5 NM radius of LKH or any other airfields or built-up areas.

3.9.3. To avoid conflicts with the Clacton/Terminal East Airspace, aircrew will not conduct General Handling in East Anglia south of the East Anglian Military Temporary Reserve Airspace (MTRA) border.

3.9.4. Aircrew will minimize tactical maneuvering in East Anglia between 2,000 feet AGL and 5,000 feet AGL for noise abatement. If weather or airspace constraints require the use of this airspace, aircrew will not operate extensively in the same location. Temporary transit for practice strafe IAW **paragraph 3.11.5** is approved.

3.9.5. F-15E Mission Qualification Training aircrew will not perform A/A refueling single-ship, unless a squadron supervisor or instructor is in the aircraft or in formation with the MQT aircrew in a position to observe.

3.9.6. Comply with UK MAA Regulatory Article 2307, *Rules of the Air,* when executing flying training over land. The following guidance is IAW the above regulations. Aircrew should employ basic airmanship principals to mitigate risk and discomfort (i.e. noise) to those on the ground.

3.9.6.1. Aerobatic maneuvers should not be performed over the congested area of any city, town, or settlement.

3.9.6.2. Air Combat Tactics (e.g. high-Angle of Attack or high-G static setups) is not to take place over densely populated areas.

3.10. Reduced Lighting and Lights Out Operations: Authorized IAW AFI 11-214, AFI 11-202 Volume 3 USAFE Supplement; UK MAA Flying Regulation 2307 (1).

3.10.1. To the maximum extent possible, segregated special-use airspace greater than 3 NM from the coast should be used for reduced lighting (anti-collision lights off with any setting of navigation lights) or blacked out (all lights off) missions at night.

3.10.2. If reduced lighting operations are required in non-segregated airspace, aircrew must plan to use GCI, AWACS, or other military radar service. Examples of non-segregated airspace include the WASH Aerial Tactics Area, Lakenheath Aerial Training Area, WALES Military Training Area, and the East Anglian MTRA. All participating aircraft must squawk assigned Mode 3, Mode C, and Mode S.

3.11. Low Fly Restrictions

3.11.1. All 48 FW Low Altitude Step Down Training (LASDT) will be accomplished IAW MDS LASDT Training Syllabus, UK Military Low Flying Handbook, and Host Nation local guidance with the following additions:

3.11.1.1. Local LASDT will be IAW UK Military Low Flying Handbook (UKMLFHB) and will avoid populated areas (i.e., no additional 48 FW altitude restrictions in addition to UKMLFHB).

3.11.2. In addition to AFMAN 11-2F-15Ev3 guidance, all aircrew will fly no lower than the pilot's LASDT qualification, however WSOs may "go one category lower" (e.g., a crew with a 300' qualified pilot and 500' qualified WSO may fly at 300' AGL, etc.)

3.11.3. All LASDT syllabus upgrade events will be conducted during day VMC.

3.11.4. Aircrew will not low fly in Low Fly Area (LFA) 5 or Night LFA 5A unless no other low flying area is available (due to weather or fuel considerations). Day and Night LFAs can be found on the 48 OG/OGV SharePoint: https://usaf.dps.mil/sites/48FW/48thOperationsGroup/48OGStanEval/SitePages/OGV.aspx. **Exception:** Low-level departures. If low fly in LFA 5 is planned, the flight lead will notify the Ops Sup. The Ops Sup will notify the 48 OG/CC and the 48 FW RAF Commander's (RAF CC) office.

3.11.5. If a close air support sortie is scheduled with joint terminal attack controller (JTAC) support in East Anglia and temporary use of LFA 5 (Night LFA 5A) is required to accomplish dry strafe training, the low fly area may be booked and used for temporary transition during strafe passes. A maximum of four strafe passes per formation may be accomplished on the same target area (within 5 NM). Notification of the 48 OG/CC and the 48 RAF CC's office is not required in this case. The squadron Ops Sup should be notified of the LFA 5 booking and the formation's intentions prior to step. If multiple formations are planning on executing similar mission profiles on the same day, Ops Sups will stress the importance of geographic deconfliction to mitigate noise complaints.

3.11.6. If operating within 10 NM of RAF Marham or operating at MoD Sculthorpe, coordination with Marham Approach must be conducted prior to commencing dry strafe passes.

3.11.7. Aircrew will not tactically maneuver (threat reactions, target attacks, low altitude air-air intercepts) in LFA 11 while below 2,000 feet AGL.

3.11.7.1. Aircrew planning tactical maneuvers or target attacks in the Vale of York Area of Intense Aerial Activity above 2,000 feet AGL must coordinate with Swanwick Mil ATC or other controlling agency to provide "general handling" radar service. If no controlling agency is able to provide general handling, aircrew will not execute tactical maneuvering to reduce the possibility of a mid-air collision with civil or military aircraft operating above the low-fly structure.

3.11.8. Low fly in over water Managed Danger Areas (MDA) may be accomplished down to AFI 11-2MDSV3 minimums and IAW UKMLFHB. When operating below MDA segregated airspace and 2000 feet. AWL aircrew must attempt two-way radio communication with the applicable low altitude radar service agency and be in possession of a current chart that shows the position of all oil platforms, Helicopter Protected Zones, and Helicopter Main Routes.

3.11.9. During transition from overwater to overland flight for increased bird hazards. Water to land transition is defined as 5 NM either side of shore. This does not apply to A/G bombing ranges.

3.11.10. Aircrew will reference 48 FW Plan 91-212 and the 48 FW IFG for additional bird related restrictions during low level flight.

3.11.11. Low fly planning must incorporate the UKMLFHB, current UK Low Fly NOTAMS, and Bird Avoidance Model Geographic Information System (BAMGIS) overlays.

3.11.11.1. The UKLFS is available for use 24 hours a day but is routinely closed on weekends (2300 Fri –0700 Mon local) and Public Holidays (Out of Hours). Additional restrictions are imposed Mon -Thu 2300 –0700 local (Restricted Hours). LF during these periods should be avoided unless operationally necessary and must be approved by MAMC (LF). If prior coordination has not been accomplished with MAMC (LF), 48 FW aircraft

will not operate in the UKLFS during Public Holidays or weekends.

3.12. A/G Range Procedures

3.12.1. Aircraft are cleared to climb out or descend in IMC to MSA under TS, provided they are within the confines of the range and the range is clear of other aircraft.

3.12.2. In planning all weapons deliveries, aircrew will refer to AFI 13-212 Volume 1, *Range Planning and Operations*, and the host nation's standing range orders. UK Air Command Air Weapon & Electronic Warfare Range Orders are linked via the OGV SharePoint external links.

3.12.3. Aircraft will not descend below 1,000 feet AGL until wings level on final or on the approach to the pop-up point on UK ranges and Vliehors Range, Netherlands

3.12.4. When employing actual ordnance from Combat Programmable Armament Control Set (CMBT PACS) or LIVE Stores Management System (SMS), do not turn the master arm on until assured any released weapon will impact within the range danger area and clearance has been given from the Range Control Officer or JTAC. If the ranger authorizes "flight lead control," ensure all aircraft are targeted correctly and do not master arm hot until on the final attack heading.

3.13. F-15E A/G Off-Range Procedures

3.13.1. If carrying live or inert ordnance or if configured with a hot gun, flight leads will ensure all flight members have verified PACS settings before takeoff. All flight members must confirm that Training (TRNG) PACS stores are not loaded on stations with carted stores/fuel tanks/SUU- 20s in all eight PACS programs and A/A and A/G TRNG PACS is selected.

3.13.2. For F-15Es carrying BDU-33s, or uncarted training munitions, the master arm may be armed and simulated weapons employment is allowed provided:

3.13.2.1. Stations with fuel tanks and/or carted A/G munitions, including SUU-20s with BDU-33s are not selected on the TRNG PACS.

3.13.2.2. The gun is "safe" IAW **paragraph 10.28**.

3.13.2.3. Following any CMBT PACS delivery, all aircraft will ensure TRNG PACS is selected and programmed IAW **paragraph 3.13.1** before any off-range delivery.

3.13.3. Do not use TPOD "combat" laser settings off-range. Before employing the TPOD laser, aircrew will visibly check the laser status window in the lower right of the TPOD display. A "T" should be displayed with a flashing "L" while firing the laser. If the "T" disappears or is not present, aircrew should immediately cease off-range laser operations.

3.14. F-15E Heavyweight Inert Weapons Procedures

3.14.1. Aircraft are required to avoid densely populated areas to the maximum extent possible.

3.14.2. With a "safe" gun IAW **paragraph 10.28**, aircrew may Master Arm "hot" and employ simulated A/A ordnance provided:

3.14.2.1. The flight is within the confines of overwater MDAs or overwater Aerial Tactics Areas.

3.14.2.2. Carted stations are deselected in all A/G CMBT PACS programs and A/G Training PACS is selected.

3.14.3. Off-Range A/G attacks with Master Arm "hot" are prohibited.

3.15. Live Ordnance Procedures

3.15.1. Aircraft are required to avoid populated areas to the max extent possible.

3.15.2. Master Arm "hot" while off-range is prohibited until after all live ordnance has been confirmed expended via a battle damage check. If hot gun employed, both aircrew will verify "XXX" in the HUD before Master Arm "hot" for Training PACS off-range attacks (see **paragraph 10.28**.).

3.16. Liberty Routing Procedures

3.16.1. LKH RAPCON has the ability to control aircraft entering the 323s, the Lake ATA and the WASH ATA. **NOTE:** There are no established departure routes for LAKE or WASH ATAs.

3.16.1.1. Entry Procedures

3.16.1.1.1. When Liberty routing procedures are in effect aircraft will expect handover to LKH Overlord at or below FL120. Aircraft can expect a final altitude of FL160 and/or FL170 and vectors to point EAGLE or point LIBERTY 1, 2, or 3.

3.16.1.1.2. Aircraft will receive an airspace entry brief which includes approval to enter the airspace and any restrictions (e.g., 323 ENTRY APPROVED AS PUBLISHED, MAINTAIN FL50 THROUGH FL300 IN NORTHEAST FILLETS).

3.16.1.2. Exit Procedures

3.16.1.2.1. Aircraft will maintain FL140 or FL150, proceed to the edge of the 323s, fly direct Liberty point 1 and contact LKH Overlord.

3.17. Surge Sectors

3.17.1. Surge Sectors are depicted in **Attachment 10**. When utilizing the surge sectors, aircraft shall inform Ground Control if they want to general handle with RAPCON or Swanwick.

3.17.2. Aircraft shall set altimeter 29.92 while operating within assigned Flight Levels.

3.17.3. Aircraft shall give a 5-minute return to base (RTB) advisory.

3.18. Donna Nook (D307) Transit Procedures

3.18.1. Aircraft will depart on local Channel 4 (RAFL Departure) and be switched to Channel 10 (RAFL Approach) NLT 35 NM from EGUL due to radio coverage. In the event Overlord is not staffed, controllers may have aircraft depart on Channel 10.

3.18.2. On departure, controllers will request aircraft to report two-way communications with the range controller and terminate radar service prior to entering the range.

3.18.3. On return, aircrew will "Free Call" RAFL Approach for service on Channel 10.

3.18.4. When only RAF Lakenheath radar is in service, all aircraft going to D307 will be instructed to report two-way communication with the range controller NLT 55 NM from EGUL and expect radar service termination NLT 60 NM from EGUL. (aircrew are not required to know the operating status of radar(s)).

Chapter 4

FLIGHT PLANNING

4.1. Preflight Planning: All aircrew will ensure the following items have been reviewed and briefed prior to flight.

4.1.1. UK NOTAMs

4.1.1.1. At a minimum, the following NOTAMs will be reviewed prior to flying in the UK: Aerodrome NOTAMs, London and Scottish VFR area NOTAMs, and Low Fly NOTAMs (if low fly is planned).

4.1.1.2. The Department of Defense Internet NOTAM Service website only contains NOTAMS that specifically identify which DoD Flight Information Publications (FLIP) approaches are not authorized to be flown. The approved source for NOTAMS in UK is the National Air Traffic Services Aeronautical Information Service website, which provides more comprehensive NOTAMS and should be checked prior to flight.

4.1.1.3. Low Fly NOTAMS: When planning to low fly in UK LFA, aircrew will ensure they are in possession of the most current Civil Aviation Notification Procedure (CANP) prior to flight. The CANP and low fly booking numbers will be carried by each aircraft. If the CANP number briefed by the Low Fly Booking Cell at time of booking does not match the posted CANP, crews will not enter the low fly system until they have reviewed the most current CANP. Any changes/re-booking of low fly will require confirmation and possession of the latest CANP prior to low flying.

4.1.1.4. Royal NOTAMS: These notices will be briefed to the Ops Sup by the SOF prior to aircrew step.

4.1.2. Pipeline Inspection Notification System (PINS): PINS activity will be published via low fly NOTAMS or via the Low Fly Booking Cell for late notices. Typically, PINS notices will apply to an entire LFA and will indicate an increased risk of encountering low altitude helicopter traffic. See and avoid procedures are required with primary deconfliction concerns occurring between 500 feet AGL and 700 feet AGL.

4.1.3. Bird Activity: Available information regarding bird activity, to include: the UK Military Aeronautical Information Planning Document (UK Mil AIP), UK Mil AIP CD, UKMLFHB, UK low fly NOTAMs that mention bird activity, and the local bird watch condition (BWC) as defined by 48 FW Plan 91-212, *Bird Aircraft Strike Hazard Plan*. Formations planning to operate in the UK Low Fly System (UKLFS) should reference bird concentration data BAMGIS. BAMGIS information is available on the 48 FW Flight Safety SharePoint® site.

4.1.4. Centralized Aviation Data Service (CADS): This is an internet-based deconfliction system directed for use by UK Chief of Air Staff for all UKLFS users. All 48 OG units will utilize CADS when planning/booking LFAs within the UKLFS. Each squadron should create an individual user account. CADS usage will be IAW the CADS Standard Operating Procedures (SOP) published in the UKMLFHB.

4.1.5. Mission Data Cards: Each squadron will develop mission data cards for use in their squadron. The mission data card will contain at a minimum the following information: flight

call sign, Joker/Bingo fuels, flight discrete frequency, and TOLD for the aircraft configuration IAW AFI 11-2 MDS Volume 3.

4.1.6. Operational Risk Management (ORM) Review: Flight leads will ensure an ORM worksheet is complete prior to step. Wing Flight Safety (FW/SEF) is the OPR for MDS specific ORM worksheets. Ops Sup will review and update ORM sheets as required prior to step.

4.1.7. Fini-flights: Aircrew on fini-flights will plan and fly missions that include elements based on the unit's current training program. Aircrew will not introduce new missions or mission elements unique to the fini-flight and will brief the mission profile to the Ops Sup.

4.1.8. F-15E Adjusted Max Abort: Maximum abort speed increments for cable engagements as prescribed by TO 1F-15E-1-1, *Flight Manual Performance Data,* will only be referenced/used with 48 OG/CC approval.

4.1.9. Common Divert Airfields: Common 48 FW diverts are listed in the 48 FW IFG. IAW AFI 11-202 Volume 3 USAFE Supplement, common diverts with instrument approaches that are "radar required" are authorized to be declared as alternates for 48 FW aircraft.

4.1.10. 48 OG/CC or designated representative is the approval authority for using RAF Mildenhall as an alternate. Forecasted weather for the time of flight plus one hour at RAF Lakenheath must be equal to or better than 1,000' MSL / 3,200m (2 SM). This guidance does not apply when RAF Mildenhall is used as the close alternate in a dual alternate scenario.

4.2. Filing Flight Plans

4.2.1. Stereo flight plans. 48 OG/OGV is the OPR for stereo flight plans. EGUL stereo flight plans are listed in **Attachment 5**.

4.2.1.1. When filing a local stereo flight plan where the mission begins with AAR, add "Tanker" to the stereo flight plan on the Lakenheath Form 20, Aircraft Commander's Narrative. This only applies to stereo flight plans when the intent is to go direct to an AAR track before entering planned working airspace.

4.2.2. 48 FW flying units may fax, email or electronically file (via PEX) flight plans with AMOPS; original flight plans will be maintained at respective flying units. All other original flight plans shall be maintained at AMOPS.

4.2.2.1. Non-base assigned flying units hosted by a 48 FW flying unit and published on the daily flying schedule may file flight plans in accordance with 4.1.2. Non-hosted flying units not flying on stereo routes will file original DoD Form 1801, DoD International Flight Plans with AMOPS.

4.2.2.2. International Flight Plans. All 48 FW flying units flying non-stereo routes may e-mail DD1801s to 48.OSS.OSAA@us.af.mil for processing. Flight plans must be signed, and original copies will be maintained in originating unit in accordance with Air Force RDS, Table 13-07, Rule 3.00.

4.2.2.3. DD1801s will be filed NLT 4 hours prior to ETD in order to provide ample time for AMOPS to quality check and file; however, the Foreign Clearance Guide (FCG) recommends international flight plans be filed at least 24 hours prior.

4.2.2.3.1. To reduce delays in coordination with Swanwick Mil ATC, Squadron Operations will notify 48 OSS/OSAA immediately upon flight plan changes (i.e., stereo/route changes, departure times, duration, number in flight).

4.2.2.3.2. During surge operations, aircrew must ensure requested flight plan is submitted as soon as possible after landing to ensure enough time to enter the flight plan into the system.

4.2.3. Flight leads will ensure that the ORM sheet (See OGV SharePoint for most up-to-date version) is completed for all local sorties. These records will be archived by Squadron Aviation Resource Management (SARM) offices for one year then discarded IAW the appropriate table and rule. When required, SARM personnel will forward information to 48 OSS/OSO. The daily CADS printout will also be archived with the ORM sheet.

4.3. Calculated Takeoff Time (CTOT): European airspace is overcrowded on most occasions, and is especially saturated during the summer months and holidays. When required, and in order to manage demand the Central Flow Management Unit (FMU) (Brussels, Belgium) calculates and issues a CTOT to AMOPS, see **paragraph 6.1.5**.

4.4. Controlled Takeoff: Flights requiring a controlled takeoff time should contact ground control with request when calling for taxi.

4.5. Military Authority Assumes Responsibility for Separation of Aircraft (MARSA)

4.5.1. MARSA is a condition whereby the military services involved assume responsibility for separation between participating military aircraft in the ATC system. The following guidelines will be followed when MARSA is employed:

4.5.1.1. Flight leads must plan and brief/coordinate with all flights involved in the operation.

4.5.1.2. Mission commanders will ensure all participants are familiar with 2 NM maximum spacing between elements of non-standard formations

4.5.1.3. Flight leads are encouraged to coordinate with ATC as far in advance as possible.

4.5.1.4. All Formation aircraft will achieve standard formation configuration prior to entering controlled airspace.

4.6. Fuel Requirements and Bingo Fuels: Flight leads will plan Bingo fuel based on forecast weather to recover with divert fuel required by AFI 11-202 Volume 3 USAFE Supplement for the designated alternate.

4.6.1. When an alternate is not required, aircrew will plan on arriving at the FAF or Initial with MDS Volume 3 fuels. For nighttime operations, F-15E's will arrive with 3,500 pounds at the FAF. F-35A's will arrive at the FAF with 2,500 pounds.

4.6.2. Flight leads will direct a specific Joker and Bingo fuel prior to takeoff.

4.6.3. If an aircraft reaches 1,000 pounds after landing and taxi delays are anticipated, aircrew will closely monitor feed tank fuel quantities, communicate their fuel state to the Ops Sup, F-15E's will consider shutting down the left engine, all aircraft will formulate a plan with the Ops Sup to get priority in the End of Runway (EOR) for taxi back to the hot pits or chocks. If flameout becomes imminent or is expected during taxi from EOR to parking, shut down the

aircraft in EOR and have the aircraft towed to park.

4.7. Local Environmental Restrictions to Flight Operations

4.7.1. Anti-exposure suits will be worn IAW AFMAN 11-301 Volume 2.

4.7.1.1. IAW AFMAN 11-301 Volume 2, the 48 OG/CC waives the wear of anti-exposure suits when the water temperature ranges between 60°F (15.5C) and 51°F (10.5C), and the local air temperature is 70°F (21.1C) or greater. FS/CCs (via the Ops Sup if necessary) are responsible for choosing when to implement this waiver. FS/CCs will weigh factors discussed in AFMAN 11-301 Volume 2 paragraphs 2.2.2.3.1 through 2.2.2.3.10 before implementing this waiver. In all cases, overwater flight without anti-exposure suit protection when required should still be avoided unless no other training airspace is adequate or available. SQ/CCs will notify the 48 OG/CC, via the SOF, when exercising this waiver.

4.7.1.2. The following UK Air-to-Surface weapons ranges are considered overland: Holbeach, Donna Nook, Pembrey, Cape Wrath, and Tain.

4.7.1.3. Aircrew do not need to wear anti-exposure suits for short overwater transits (e.g., the English Channel) with water temperature below 60°F (15.5C), regardless of outside air temperature. In order to comply with AFMAN 11-301 Volume 2 overwater guidance during these conditions, aircrew will minimize their overwater transient time/distance (e.g., mission plan the route to cross narrow portions, file highest practical flight level, etc.).

4.7.2. High winds and sea state

4.7.2.1. IAW AFI 11-202 Volume 3 USAFE Supplement, the 48 FW/CC delegates waiver authority to the 48 OG/CC for wind and sea state restrictions. IAW T-3 waiver authority, 48 OG/CC further delegates waiver authority to the SQ/CCs.

4.7.2.2. The Top 3 / Ops Sup will notify SOF who will in-turn notify 48 OG/CC or designated representative when aircraft will maneuver tactically during training over water with steady state winds from 25 to 30 knots and/or wave heights between 3 to 5 meters (e.g., 48 OSS/OSW MEF “Yellow” conditions). SOFs and Ops Sup will include waiver utilization in End of Training (EOT) Reports.

4.7.2.3. Tactical maneuvering includes marshalling, CAP-ing, and committing or any other maneuver that logically leads to tactical employment.

4.7.2.4. In all cases, aircrew should avoid overflying areas that exceed the baseline winds and waves limits when able.

4.7.2.5. The SOF will record all waivers in the End-of-Day report.

4.7.2.6. The 48 FW/CC retains waiver authority for all other conditions.

4.7.3. Combat Survivor Evader Locator (CSEL) Usage: In the event CSELs are not included in ejection seat kits, the 48 OG/CC has waived the requirement for fighter aircrew to carry the CSEL (to include survival vests) during training operations for the following conditions.

4.7.3.1. Overland, day or night (ARA 8 considered over land airspace for the purpose of this waiver).

4.7.3.2. Day time operations in the WASH or LAKENHEATH Aerial Training Areas.

4.7.3.3. While operating in all other UK overwater airspace the CSEL is required.

4.8. Cross-Country Procedures: Aircrew will, at a minimum, check with the following agencies when planning cross country sorties:

4.8.1. EUCOM Airfield Vulnerability Assessment Summary Report on the Secret Internet Protocol Router Network (SIPRNET) to ensure there are no Force Protection and Anti-terrorism concerns for the destination.

4.8.2. FCG can be accessed at https://www.fcg.pentagon.mil/fcg.cfm and on the SIPRNET at http://www.fcg.pentagon.smil.mil/.

4.8.3. HQ USAFE Air Procedures Flight (USAFE/APF) to obtain information on airfield suitability and available instrument approach procedures

Chapter 5

GROUND OPERATIONS

5.1. Personal Item Storage: On missions requiring personal luggage where travel pods are not authorized or available:

5.1.1. **F-35A:** Pilots will primarily use the room under the seat or behind the seat to store a "hit and run" backpack in case of a divert. When storing items under the seat or behind the seat, pilots must brief the ground crew and make sure all items will fit properly prior to engine start.

5.1.2. **F-15E:** Aircrew will primarily use the Video Tape Recorder compartment (door 47L) and Conformal Fuel Tank gun compartment (door 570, ensuring doors 41 and 42 are closed). Additionally, aircrew can utilize 47R and 155L/R on the bottom of the fuselage when qualified maintenance personnel are available at the destination. Aircrew will "info note" in the Air Force Technical Order (AFTO) Form 781A, *Maintenance Discrepancy and Work Document*, when personal items are stored in these locations.

5.2. Startup/Taxi Procedures

5.2.1. In a Protective Aircraft Shelter (PAS), aircrew will ensure that all shelter doors are open prior to starting engines. Secure items inside the shelter to reduce the FOD hazard during engine operations. In addition, aircrew will conduct a FOD inspection in the PAS and on the parking apron in front of the PAS prior to engine start.

5.2.2. Aircrew will ensure a recording medium is used on all flights to the max extent possible. This does not mean the aircrew needs to necessarily ground abort for an inop digital video recorder(s). Authorized exceptions include cross-country, air show or fly-by, incentive, and ferry flights.

5.2.3. Monitor ground control frequency during engine start and taxi.

5.2.4. Monitor ATIS prior to calling for taxi instructions.

5.2.5. When carrying chaff or flares, Countermeasures Dispenser built-in test checks will not be accomplished in the PAS, in the vicinity of personnel, or anywhere an inadvertent flare actuation could create a significant hazard.

5.2.6. Contact ground control for taxi prior to leaving the hardstands; state call sign, number of aircraft in flight, ATIS code, parking locations, and intended flight plan.

5.2.6.1. Notify ground control if any part of the flight will taxi separately.

5.2.6.2. Acknowledge the active RWY issued in taxi instructions.

5.2.6.3. Include call signs of flight members if not filed as a single flight.

5.2.6.4. Notify ground if a formation takeoff is planned at the ten-minute prior call.

5.2.7. USAF aircraft will not depart without a flight plan on file at AMOPS. RAF and other foreign country aircraft may depart VFR without a flight plan on file if the flight will remain within the confines of UK island mainland.

5.2.7.1. TWR will not taxi an aircraft, not on flying schedule, without SOF approval. TWR will advise AMOPS of aircraft requesting taxi without a flight plan.

5.2.7.2. AMOPS will inquire with the appropriate FS, 48 FW/CP, and/or SOF for resolution and further instructions if necessary.

5.2.8. Pilots will not taxi/depart unless radio communications can be maintained with TWR.

5.2.9. Standard Taxi Flow

5.2.9.1. F-15Es will taxi via Sierra and arm in the south EOR. Once complete with arming and waiting for takeoff, F-15E's will request to hold in the north EOR to allow additional F-15E arming as required.

5.2.9.2. F-35As will normally taxi via LIGHTNING1 Standardized Taxi Route (STR).

5.2.9.2.1. LIGHTNING1 STR: Taxi via Sierra, Victor, Whiskey, Hotel (as required), November. Aircraft will hold short of active RWY at Victor (midfield) and await ground control instruction to cross RWY. Aircraft will hold short prior to reaching the EOR holding spots until a takeoff clearance is received to allow F-15E's to flow into the north EOR.

5.2.9.2.2. Phraseology:

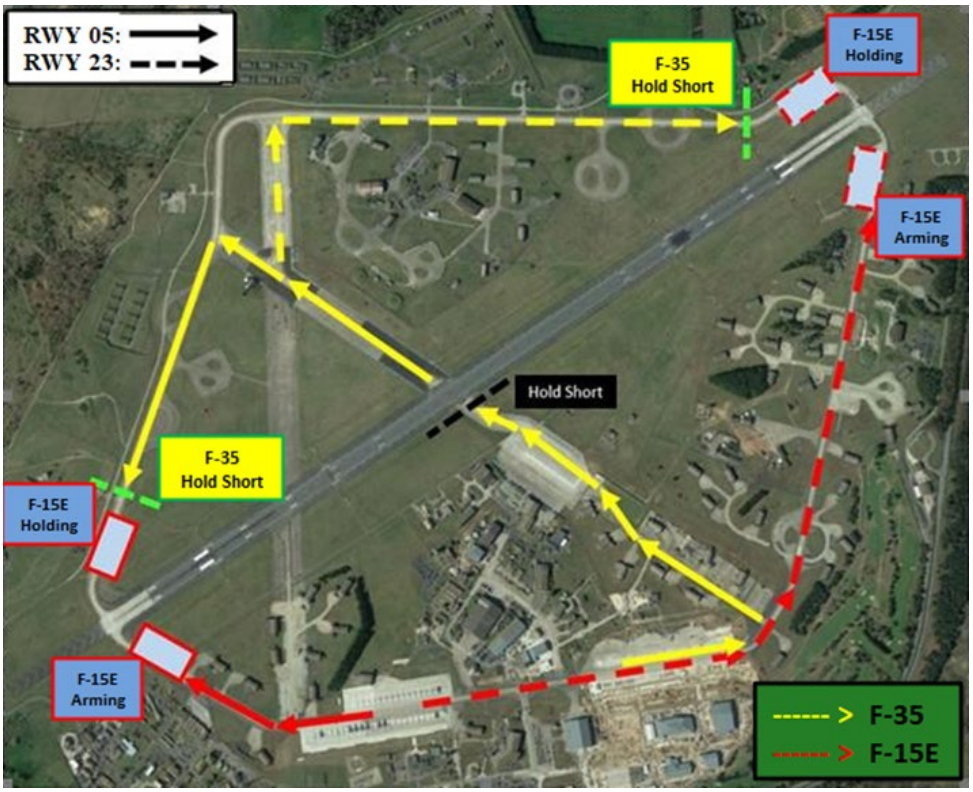
5.2.9.2.2.1. "(AIRCRAFT ID) RUNWAY (NUMBER) TAXI VIA LIGHTNING ONE, HOLD SHORT RUNWAY (NUMBER) AT VICTOR."

5.2.9.2.2.2. "(AIRCRAFT ID) CROSS RUNWAY (NUMBER) AT VICTOR, CONTINUE TAXIING VIA LIGHTNING ONE."

5.2.9.3. Taxi instructions may deviate from the standard taxi flow when requested or when deemed necessary by TWR.

5.2.9.4. Taxi direction in all protected aircraft parking areas will be clockwise. **NOTE:** Back taxiing on TWY Romeo is not authorized.

Figure 5.1. Standard Taxi Flow/Lightning 1 Standardized Taxi Route.



5.2.10. Taxi on TWY/taxi lane/taxi track centerline (staggered taxi only authorized on RWY, Taxiway V, W, and H for F-35A.)

5.2.11. Taxi speed is restricted to 25 knots (or aircraft limits) on all TWYs, taxi lanes and taxi tracks. Do not exceed 15 knots ground speed in parking areas or ramps.

5.2.12. Unless mission needs dictate otherwise, use arming area nearest departure RWY. F-35A's will arm in chocks.

5.2.13. Before takeoff, flight leads will contact Squadron Ops for final words.

5.2.14. Change frequencies to ground control and continue to monitor Guard frequency once they have exited the active RWY and stopped.

5.2.15. Request approval to taxi to parking or against the taxi flow.

5.2.16. Use extreme caution on ramps, TWYs and shelter areas for uncontrolled vehicles.

5.3. Airfield/Taxi Restrictions

5.3.1. Minimum RCR on TWYs for fighter taxi operations is RCR 10.

5.3.2. Aircraft with a wingspan greater than 63 feet are prohibited from taxiing on TWY Sierra, Uniform and south of the Cargo Deployment Facility located on TWY Victor due to the wingtip clearance required from security gates.

5.3.3. No aircraft larger than A-10s (56-foot wingspan) can park on the northern portion of the Golf bubble due to inadequate wingtip clearance.

5.3.4. When aircraft with a wingspan greater than a C-130 (133 feet) require use of TWY November, vehicles traversing perimeter road must remain outside wingtip clearance requirements for TWY November. When needed, perimeter road vehicle traffic blocking procedures will be initiated:

5.3.4.1. Upon notification of inbound/outbound aircraft, TWR shall notify AMOPS to pre-position for vehicular control.

5.3.4.2. When the inbound aircraft reaches 10 mile final, or outbound aircraft calls for permission to taxi for departure, TWR shall turn on the perimeter road traffic lights and inform AMOPS to stop traffic on perimeter road.

5.3.4.3. AMOPS will actively position themselves relative to aircraft taxi route to stop traffic on perimeter road and clear vehicles from wingtip clearance areas until the aircraft has exited TWY November or entered the RWY for departure.

5.3.5. In order to maintain adequate wingtip clearances aircraft with a wingspan greater than a C-130 (133 feet) are prohibited from taxiing off the RWY onto TWY November when there are aircraft in the North Arm/De-Arm areas. These aircraft shall be held on the RWY or given instructions to conduct a 180 degree turn on the concrete portion of the RWY and proceed to the opposite end Arm/De-Arm area if it is not in use.

5.3.6. Due to the close proximity of the north-side perimeter road to TWY November (approximately 102 feet from centerline to road edge), aircraft with a wingspan of 145 feet or greater (e.g. E-3) may not use TWY November while vehicles are on the road. Security fencing north of TWY November is 141 feet from TWY centerline. Aircraft with a wingspan greater than 232 feet (e.g. AN-124) must have a wing walker and/or spotter to use TWY November between the Arm/De-Arm pad on the approach end of RWY 23 (see **Attachment 2**) and Golf (see AFI 11-218, *Aircraft Operations and Movement on the Ground*).

5.3.7. Heavy aircraft jet thrust avoidance procedures. There are no areas on EGUL that require heavy jet thrust avoidance procedures; however, to avoid potential FOD hazards, four-engine jet aircraft will shut-down/down-speed outboard engines on TWYs to the maximum extent possible.

5.3.8. To mitigate FOD hazards, the Arm/De-arm area to the rear of a heavy aircraft executing a 180 degree turn on the RWY must be free of aircraft.

5.3.8.1. TWR will issue heavy aircraft the appropriate direction of turn so that aircraft thrust is directed toward an arm/de-arm area that is not occupied by aircraft.

5.3.8.2. AMOPS will conduct a FOD check of the Arm/De-arm area prior to that area being reopened for use.

5.3.9. TWY Sierra and south of the Cargo Deployment Facility located on TWY Victor limited to aircraft with wingspan of 43 ft or less and must utilize WING WALKERS due to the wingtip clearance requirements at the security gates. **NOTE:** Base assigned and transient F15s/F35s are exempt from this requirement IAW AFI11-218 paragraph 1.16.2.1.5.

5.4. TOLD: Aircrew will use TOLD as directed by ATIS when required.

5.4.1. When the RSC is WET/DRY, DRY/WET, or WET/WET, fighters will use WET TOLD.

5.4.2. The ATIS will include when a WET modifier is present (i.e. standing water, patchy ice, chemicals, etc.).

5.4.3. Aircrew may receive the same information if a RCR is broadcast on ATIS. In this example, the RCR might only apply to a small area of ice on the RWY. However, in this case,

all 48 FW aircraft may be affected.

5.4.4. If an RSC or RCR is broadcast and no additional F-15 TOLD direction is given, TOLD for the reported RSC/RCR will be applied to the entire RWY, and computed for the specific aircraft configuration.

5.5. Equipment Required for Flight

5.5.1. Both Embedded Global Positioning System (GPS) and Inertial Navigation System (INS) attitude information must be operational for night or IMC operations.

5.5.2. TACAN or an updated INS for flight in controlled airspace below FL 195 and all flight above FL 245. IAW UK Mil AIP GEN 1-5-1, military aircraft must have an operable TACAN. However, military aircraft may substitute the TACAN with an updated INS.

5.5.3. Updates may be achieved by TACAN or GPS fixing five minutes prior to entry and at least every 30 minutes thereafter.

5.5.4. Aircraft must have an operable TACAN when the forecasted ceiling plus and minus one hour of ETA of arrival back to EGUL is less than 2,000 feet.

5.5.5. **F-15E.** Aircraft lighting will be IAW AFI 11-2 MDS V3 and any active waiver. The minimum operational lighting to launch (daytime sortie) will be 2 of 3 anti-collision lights. Aircraft launched with inoperable anti-collision lights are Code 3 upon landing unless hot pit refueling or rapid crew swap.

5.6. Hot Pit Procedures

5.6.1. Hot pit refueling will not be conducted if any fuel system abnormality is suspected.

5.6.1.1. Minor fuel imbalances that do not require an AFTO Form 781, *ARMS Aircrew/Mission Flight Data Document*, write up do not prohibit hot pit refueling.

5.6.2. Intentional in-flight fuel dumping is not an abnormality, but aircrew must notify hot pit crew prior to hot pit refueling.

Chapter 6

DEPARTURE PROCECURES (DP)

6.1. General

6.1.1. EGUL departures enter Class G (uncontrolled) airspace. IFR clearances are not issued in uncontrolled airspace.

6.1.2. Intersection departures are not authorized.

6.1.3. TWR will relay amended departure instructions as issued by RAPCON.

6.1.4. CTOT (see also 4.2)

6.1.4.1. AMOPS will coordinate General Air Traffic CTOTs.

6.1.4.2. Aircraft must takeoff within 5 minutes before or 10 minutes after a CTOT.

6.1.4.3. If an aircraft is unable to meet its CTOT, AMOPS will coordinate for a new CTOT.

6.1.4.4. Aircrew will inform ground control of a CTOT when starting engines.

6.1.5. Aircrew requesting an unrestricted climb will coordinate with ground control prior to taxiing.

6.1.6. Aircraft will notify TWR 10 minutes prior to being ready for departure and advise of any subsequent delays.

6.1.7. Aircraft will remain on ground control frequency until a squawk is issued. All flight members will acknowledge squawk upon receipt on intraflight auxiliary frequency.

6.1.8. 48 FW SOF and squadron operations supervision manning guidance is in accordance with AFI 11-418 LAKENHEATHSUP, *Operations Supervision*.

6.1.9. Locally assigned aircraft may only depart via radar vectors, a published DP or 23V departure.

6.1.10. Prior to takeoff, the flight lead will visually or verbally confirm that each aircraft in their flight has been armed and that before takeoff checks were accomplished.

6.1.11. When cleared for an “immediate” takeoff, pilots will execute a rolling takeoff. If this clearance cannot be accepted, notify Tower, and remain clear of the RWY.

6.1.12. Protection of 360-degree overhead. All aircraft will maintain at or below 1000 feet until passing departure end of RWY, to protect the 360-degree overhead pattern.

6.1.13. 48 FW aircraft will

6.1.13.1. Establish a positive climb angle to reduce noise level in nearby communities.

6.1.13.2. During formation join-ups, do not reduce the climb rate for acceleration and overtake.

6.1.13.3. Terminate afterburner at 300 knots indicated airspeed (KIAS) if not carrying heavy weights or performing an unrestricted climb (all wingmen will comply).

6.1.13.4. To aid in noise abatement, formation members will fly the departure ground track assigned and will not turn early on departure for the sole purpose of expediting formation rejoins.

6.1.14. After takeoff, notify Departure Control with "call sign, airborne passing (altitude), Traffic/Deconfliction Service."

6.1.15. Capable Aircraft will utilize Mode S IAW AFI 11-202 Volume 3 USAFE Supplement Attachment 10.

6.2. IFR Departure Procedures

6.2.1. IFR departures will be allocated squawks as assigned by RAPCON.

6.2.2. Departure procedures are available as follows:

6.2.2.1. When RWY 05 is in use and STANTA is inactive or active at or below 7500 feet, expect IPKOP3 DP. 48 FW assigned aircraft expect "Local Climb-out."

6.2.2.2. When RWY 05 is in use and STANTA's southern corridor is active above 2500 feet MSL, expect TIDPU3 DP.

6.2.2.3. When RWY 23 is in use, expect AXHOK2 DP. 48 FW assigned aircraft expect "Local Climb-out."

6.3. VFR Departures

6.3.1. 23V departure

6.3.1.1. 23V weather minimums: ceiling 2,500' (3,000' during Fen Restricted Pattern Procedures); 8,000m (5SM) visibility.

6.3.1.2. "*(aircraft ID) 23 VICTOR APPROVED*" indicates approval to depart the CMATZ via the 23V departure, see **Attachment 6**.

6.3.1.3. The 23V is a local procedure designed to expedite departures. This procedure allows aircraft to depart VFR on RWY 23 to pick up the IFR portion of a flight plan when conflicting traffic inbound/outbound to MLD would normally cause a departure delay. Aircraft should prioritize flying the ground track depicted in **Attachment 6** utilizing increased angle of bank as required to fly between Points Bravo and Charlie.

6.3.1.4. 48 FW aircraft may file for the 23V or may request it prior to departure.

6.3.1.4.1. 48 FW aircraft departing on a 23V must still wait for a Swanwick Mil ATC assigned squawk before they receive their departure clearance unless they waive Swanwick Mil ATC service.

6.3.1.4.2. RAPCON may impose a "hold for release" with aircraft requesting a 23V departure at their discretion.

6.3.1.4.3. 23V Departure instructions: "FLY RUNWAY HEADING, AT 1 DME TURN RIGHT HEADING 320. CLIMB AND MAINTAIN 2,000".

6.3.1.4.4. If DME is not available from the LKH TACAN, aircraft will make their turn prior to the cutoff canal.

6.3.1.4.4.1. "FLY RUNWAY HEADING, PRIOR TO THE CUTOFF CANAL TURN RIGHT HEADING 320. CLIMB AND MAINTAIN 2,000".

6.3.1.4.5. During Fen Restricted Pattern Procedures, climb to 2500 feet MSL.

6.4. VFR Departure Requirements

6.4.1. VFR operations are prohibited for all fixed wing aircraft, including transients, between the end of evening civil twilight and the beginning of morning civil twilight. Additionally, VFR operations are prohibited during published quiet hours. For more information on quiet hour and noise abatement procedures see **paragraph 2.18**.

6.4.2. Special VFR (SVFR) operations are prohibited for 48 FW assigned aircraft.

6.4.3. During Fen Restricted Pattern Procedures, minimum weather is a 3,000-foot ceiling and 8,000 meters of visibility. The SOF will determine when Fen Restricted Pattern procedures are in effect.

6.5. Formation Departures

6.5.1. All formation departure (standard or non-standard) elements are MARSA.

6.5.2. Upon initial contact, aircrews will advise TWR when requesting a formation take-off.

6.5.2.1. Do not perform rolling formation takeoffs.

6.5.3. A standard formation (UK term: "Co-level within a mile") is defined as the formation elements are contained within 1 NM laterally and at the same altitude within 100 feet vertically. Aircrew shall use the UK terminology “Co-level within a mile” instead of “standard formation”.

6.5.4. Non-standard formation departures will normally be conducted at EGUL.

6.5.4.1. Non-standard formation departures will be no more than 20 second spacing between each element. Lateral separation between the lead and last element will not exceed 3 NM for a 2-ship, 6 NM for a 3-ship, 9 NM for a 4-ship, unless pre-coordinated and approved by ATC.

6.5.4.2. Upon initial contact, aircrews will advise ATC of their element spacing (if other than as defined in 6.5.4.1), i.e. “*(callsign), NON-STANDARD, (number MILE) TRAIL*.”

6.5.4.3. Trail Formations of greater than 1 NM are sometimes referred to as “Stream Formations” in the UK.

6.5.5. Non-standard formation flight lead and last element will squawk their flights ATC assigned Mode 3A code. All other elements will squawk standby, unless instructed by ATC. Once rejoined to a standard formation, the last aircraft will strangle Mode 3.

6.5.6. F-35As with working Radar, L16, or MADL may utilize 1NM trail between flight members to aid in Radar Control separation requirements.

6.6. Transient Departure Instructions

6.6.1. Runway 23 departure instructions will be, “(AIRCRAFT ID), ON DEPARTURE MAINTAIN AT OR BELOW 1,000 UNITL DEPARTURE END, AT 1 DME, TURN RIGHT HEADING 320, CLIMB AND MAINTAIN FL100. EXPECT FURTHER CLEARANCE EN-ROUTE. DEPARTURE FREQUENCY 264.575/136.5, ADVISE 10 MINUTES PRIOR TO DEPARTURE FOR COORDINATION FOR SQUAWK” (as assigned by Swanwick Mil ATC).

6.6.2. Runway 05 departure instructions will be, “(AIRCRAFT ID), ON DEPARTURE MAINTAIN AT OR BELOW 1,000 UNTIL DEPARTURE END, AT DEPARTURE END

TURN RIGHT HEADING 075, CLIMB AND MAINTAIN FL100, EXPECT FURTHER CLEARANCE EN-ROUTE. DEPARTURE FREQUENCY 264.575/136.5, ADVISE 10

MINUTES PRIOR TO DEPARTURE FOR COORDINATION FOR SQUAWK" (as assigned by Swanwick Mil ATC).

6.6.3. Non-locally assigned aircraft VFR departures: State route of flight and altitude requested when taxiing. Departures must adhere to noise abatement procedures. TWR will instruct aircraft to advise 10 minutes prior to departure for RAPCON coordination. TWR will coordinate VFR requests with RAPCON. RAPCON must approve VFR departures due to aircraft transitions through the CMATZ.

6.6.3.1. RWY 23: TWR will issue the following instructions, "VFR DEPARTURE AUTHORIZED, AT 1 DME/MILE TURN RIGHT HEADING 320 FOR NOISE ABATEMENT, CONTACT DEPARTURE 264.575 FOR TRAFFIC ADVISORIES."

6.6.3.2. RWY 05: TWR will issue the following instructions, "VFR DEPARTURE AUTHORIZED, AT 1 DME/MILE TURN RIGHT HEADING 075 FOR NOISE ABATEMENT, CONTACT DEPARTURE 264.575 FOR TRAFFIC ADVISORIES."

6.7. Aborted Takeoffs

6.7.1. Aborted takeoffs automatically cancel takeoff clearance for all remaining elements in the flight. Takeoff clearance for any remaining elements must be reissued prior to reattempting takeoff.

6.7.2. Pilots will call "*CABLE, CABLE, CABLE*" on TWR/departure frequency if a barrier engagement is anticipated.

6.8. TACAN Unavailable Departure Instructions

6.8.1. During periods that LKH TACAN is unavailable, MLD TACAN may be used as a backup. When both the LKH TACAN and the MLD TACAN are unavailable, the following procedures shall be adhered to:

6.8.1.1. For locally assigned aircraft RWY 23 departure: "ON DEPARTURE/AFTER COMPLETION OF THE OPTION, FLY RUNWAY HEADING. AFTER DEPARTURE END OF THE RUNWAY AND PASSING 1000 FEET, TURN RIGHT HEADING 320, CLIMB AND MAINTAIN FL100. EXPECT FURTHER VECTORS FROM LAKENHEATH RAPCON. AVOID OVERFLIGHT OF LAKENHEATH VILLAGE."

6.8.1.2. For locally assigned aircraft RWY 05 departure: "EXECUTE LOCAL CLIMBOUT."

6.8.1.3. For non-locally assigned aircraft RWY 23 departure: "ON DEPARTURE FLY RUNWAY HEADING. CROSS DEPARTURE END AT OR BELOW 1000 FEET, CLIMB AND MAINTAIN FL100. AFTER CROSSING DEPARTURE END OF THE RUNWAY AND 500 FEET TURN RIGHT HEADING 320. EXPECT FURTHER VECTORS FROM LAKENHEATH RAPCON. DEPARTURE FREQUENCY WILL BE 264.575/136.5, ADVISE 10 MINUTES PRIOR TO DEPARTURE FOR COORDINATION FOR SQUAWK."

6.8.1.4. For non-locally assigned aircraft RWY 05 departure: issue instructions outlined in **paragraph 6.6.2**.

Chapter 7

ARRIVAL PROCEDURES

7.1. Arrival Procedures

7.1.1. The constraints of local controlled airspace and danger area airspace dictate that arrival and pattern procedures be followed diligently.

7.1.2. On recovery (when within radio range of EGUL), aircrew will contact Operations to pass maintenance codes and get updates to any significant events including weather that may impact recovery.

7.1.3. All aircraft returning to base, regardless of service type, will contact EGUL Approach as soon as possible with intentions. Unless operational necessity exists, aircraft shall not exceed 350 knots within 20 miles of EGUL.

7.1.4. For 48 FW assigned aircraft, lack of a landing light does not constitute as an abnormal condition. TWR will not give an advisory if an aircraft's landing light is not observed.

7.2. Aircraft Recall Procedures

7.2.1. The SOF may direct full stop landings.

7.2.2. In order to keep aircrew informed of changing situations that affect airborne aircraft, TWR will request RAPCON and Swanwick Mil ATC (through RAPCON) broadcast messages when advised by the SOF or 48 FW/CP. Additionally, Distress and Diversion (D&D) may broadcast on 243.0.

7.2.2.1. Aircraft recall: "*ATTENTION ALL RAF LAKENHEATH AIRCRAFT, THIS IS A WEATHER RECALL. RETURN TO BASE IMMEDIATELY. ACKNOWLEDGE RECEIPT OF THIS MESSAGE TO COMMAND POST, SOF, OR AIR TRAFFIC CONTROLLING AGENCY"*.

7.2.2.2. Change of alternate: "*ATTENTION ALL RAF LAKENHEATH AIRCRAFT, THE WEATHER ALTERNATE HAS CHANGED TO (new alternate). ACKNOWLEDGE RECEIPT OF THIS MESSAGE TO COMMAND POST, SOF, OR YOUR AIR TRAFFIC CONTROLLING AGENCY"*.

7.2.2.3. Aircraft accountability check: "*ATTENTION ALL RAF LAKENHEATH AIRCRAFT, THIS IS AN AIRCRAFT ACCOUNTABILITY CHECK. ACKNOWLEDGE RECEIPT OF THIS MESSAGE TO COMMAND POST, SOF, OR THROUGH YOUR AIR TRAFFIC CONTROLLING AGENCY AND CONFIRM CALL SIGN"*.

7.2.2.4. Aircraft diversions: "*ATTENTION ALL RAF LAKENHEATH AIRCRAFT, DIVERT IN PROGRESS. CONTACT COMMAND POST, SOF, OR YOUR AIR TRAFFIC CONTROLLING AGENCY IMMEDIATELY"*.

7.3. Radar Trail Recovery/Sensor Aided Trail Recovery

7.3.1. Locally assigned aircraft may conduct airborne radar trail arrivals. Flight lead will notify RAPCON as soon as possible of intentions to conduct a radar trail arrival.

7.3.2. Non-standard formation flight lead and last element will squawk their flights ATC assigned Mode 3A code. All other elements will squawk standby, unless instructed by ATC.

7.3.3. Normal spacing between flight elements is 1.5 to 2 NM. To ensure flight integrity, TWR will not sequence VFR aircraft between radar trail flight elements, regardless of spacing.

7.3.3.1. If spacing was not established prior to the penetration, and no later than 10 NM, flight leads should direct each flight member to execute a briefed Drag Maneuver in sufficient time to ensure required spacing is obtained prior to the FAF.

7.3.4. All aircraft in the flight will conduct the same type of instrument approach.

7.3.5. Radar trail aircraft may be controlled individually for missed approach and lost communications once standard RADAR separation is achieved. See paragraphs **7.17** and **9.32** for missed approach and lost communications procedures.

7.3.5.1. If flight lead goes missed approach, wingmen will continue the approach unless directed to climb out.

7.3.5.2. If the flight lead directs a climb out, the flight will follow trail departure procedures.

7.3.6. Radar-trail recovery is limited to a maximum of four aircraft.

7.3.7. Aircrews conducting radar -trail recoveries are responsible for their own separation between elements of their flight while on final for full-stop landings. To ensure appropriate departure separation, multiple practice radar trail approaches that do not terminate with a full-stop landing must be conducted only in VMC. During practice approaches in VMC conditions, after an executed low approach/landing, the flight is responsible for their own separation until ATC initiates flight split-ups for individual control.

7.4. Radar Traffic Patterns

7.4.1. See **Attachment 7** for EGUL/EGUN radar traffic patterns.

7.4.2. During periods when STANTA is active above 2500 feet MSL, the south corridor should be released to RAPCON for use.

7.4.2.1. If the south corridor is released and RWY 23 is in use, all aircraft will be vectored to intercept the LKH TACAN 059 radial to commence the TACAN or ILS approaches. Once established on the 059 radial, the aircraft is clear of the active portion of STANTA and descent through the south corridor is authorized.

7.4.2.2. If the southern corridor is active above 2500 feet MSL and RWY 23 is in use, aircraft should expect recovery via the TWR pattern (weather conditions permitting). If the TWR pattern is closed, expect vectors for a TACAN Alpha approach or circling approach. In the event of an in-flight emergency, RAPCON has the ability to halt firing in STANTA to allow passage.

7.4.3. Radar Traffic Patterns

7.4.3.1. RWY 23. The STANTA north corridor (1.6 NM wide) allows aircraft to fly a standard rectangular pattern to RWY 23 at 3000 feet MSL. Due to the north corridor configuration, a slightly extended downwind leg or vectors across final approach may be required.

7.4.3.2. RWY 05. This pattern requires aircraft to be vectored north of the RWY 05 extended centerline normally at 3000 feet MSL. Base leg turn should be kept clear of Ely

(town center) and Ely Cathedral at 2000 feet MSL or above to the maximum extent possible. Descent will be given when aircraft are well clear of Ely or after conflicting traffic, arriving MLD RWY 10 or departing RWY 28, has been resolved.

7.4.4. Transient Arrivals. EGUL RAPCON will contact the Range Control Officer for the deactivation of STANTA prior to any transient aircraft conducting an instrument approach to RWY 23.

7.5. Radar Monitoring Requirements: RAPCON shall radar monitor aircraft as required.

7.5.1. RAPCON will flight follow ILS and TACAN approaches under the following conditions:

7.5.1.1. All military single-piloted turbojet aircraft under either of the following conditions:

7.5.1.1.1. When the ceiling is below 1500 feet AGL and/or visibility is less than 8000 meters.

7.5.1.1.2. Between Sunset and Sunrise.

7.5.1.2. When requested by pilot.

7.5.2. Pilots will contact TWR during landing roll out (i.e., *TWR, EAGLE 01, ILS rollout*) and monitor the Channel 3 while on the RWY. **NOTE:** ATC will not issue communications transfer instructions to locally assigned aircraft unless TWR Channel 3 is inoperative.

7.6. TACAN Alpha Procedures

7.6.1. Normally, TACAN Alpha will only be used when EGUL is landing RWY 23, STANTA is active to 7,500 feet, the south corridor is HOT, and EGUL TWR patterns are not available.

7.6.1.1. TACAN Alpha approaches for proficiency may be conducted with TWR WS/SC, RAPCON WS/SC, and SOF approval regardless of STANTA activity.

7.6.1.2. All TWR patterns shall be sterilized during TACAN Alpha operations.

7.6.1.3. Aircrews requesting practice TACAN Alpha approaches should expect to be sequenced last due to TWR pattern sterilization.

7.6.2. The TACAN Alpha is limited to a single ship or 2-ship radar trail (no more than 2 NM) full stops only. Formation approaches not authorized.

7.6.2.1. Chase formations are authorized only during check rides in VMC (1500 feet/5000m) only and for emergencies as needed. When TWR patterns are closed, the first element of the formation must conclude the approach in a full-stop. The element conducting the chase maneuver must return to radar (local climb-out) for re-sequencing.

7.6.2.2. SOF will coordinate with TWR and RAPCON WS/SC with the call signs of the aircraft conducting check rides.

7.6.3. Aircrew should plan for delays up to 15 minutes and monitor fuel status accordingly.

7.6.4. ATC will reiterate to aircrews to execute a circle to the north for a right base for landing.

7.6.5. Preceding TACAN Alpha aircraft or flight must be landing assured before subsequent TACAN Alpha aircraft cross the FAF.

7.6.6. For departures, the last element of a departure flight must be in departure roll before inbound aircraft on the TACAN Alpha cross the FAF.

7.6.7. The TACAN Alpha procedure will not be authorized when RWY 05 is in use.

7.7. Visual Approach

7.7.1. Visual approaches are approaches conducted on an IFR flight plan which authorizes the pilot to proceed visually and clear of clouds to the airport. Visual Approaches are not authorized at Lakenheath. For VFR Straight-in, refer to **para 7.10.9**.

7.8. VFR Traffic Pattern/Initial Entry Point Altitudes and Weather Minimums

7.8.1. Pattern Altitudes (feet in MSL).

7.8.1.1. VFR Straight-in: 1,000.

7.8.1.2. Breakout: 1,500.

7.8.1.3. Overhead: 1,500.

7.8.1.4. Rectangular: 1,500.

7.8.1.5. Re-entry via Bravo/Delta: 2,000.

7.8.1.6. Initial entry via Bravo/Charlie/Delta: 2,500.

7.8.1.7. High Tactical Initial (HTI): Between FL050 and FL100.

7.8.1.8. High Key: at or below 12,000.

7.8.1.9. Low Key: at or above 3,500.

7.8.2. Fen Restricted Pattern Altitudes (feet in MSL).

7.8.2.1. Re-entry via Bravo: 3,000.

7.8.2.2. Initial entry via Charlie: 3,500.

7.8.3. Weather Requirements

7.8.3.1. The ceiling requirement for each VFR pattern/entry point is 500 feet above the specified pattern altitude. For HTI and Low Key, the ceiling shall be 500 feet above the requested altitude. **NOTE:** For High Key, the ceiling shall be 1,000 feet above the requested altitude.

7.8.3.2. Visibility

7.8.3.2.1. Charlie: 8,000 meters (5 miles).

7.8.3.2.2. All others: 5,000 meters (3 miles).

7.9. Protection of the 360-degree Overhead

7.9.1. All aircraft will maintain at or below 1000 feet until passing departure end of RWY during VMC to protect the 360-degree overhead pattern.

7.9.2. Transient aircraft will be issued pertinent restrictions with departure instructions/climb-out/go-around procedures.

7.10. VFR Pattern Procedures

7.10.1. Aircraft may enter the VFR patterns via initial, HTI, Delta/Bravo for initial, own-navigation to initial, Charlie to downwind, direct High Key, direct Low Key, TWR to TWR transfers, or following an instrument approach.

7.10.2. TWR WS/SC will determine the available traffic patterns for locally assigned aircraft. Pattern selection will be based on weather, availability of arresting gear, airfield lighting, RAWS, and visibility restrictions hampering TWR ability to sequence traffic. As deemed necessary, TWR WS/SC may close any or all VFR traffic patterns due to visibility or ceiling limitations. The TWR WS/SC will coordinate pattern restrictions with the SOF and RAPCON WS/SC.

7.10.3. All fixed-wing aircraft, including transients, are prohibited from flying VFR patterns between the end of evening civil twilight and the beginning of morning civil twilight due to noise abatement considerations for base housing. Additionally, these operations are prohibited during published quiet hours. IFR patterns, to include multiple practice approaches, are permitted during normal airfield operating times.

7.10.4. For aircraft entering the pattern via Bravo/Charlie/Delta or initial, RAPCON will not descend aircraft below the specified pattern/initial entry point altitude unless prior coordinated with TWR. Requests for entry into the VFR pattern, including vectors/own-navigation to initial, should be made with RAPCON. If TWR deems the patterns too saturated aircraft can expect vectors for an instrument approach.

7.10.4.1. Location of Points

7.10.4.1.1. Bravo: LKH 288/5 NM, N52- 25.8/E000-24.7, Shippea Hill railway station.

7.10.4.1.2. Charlie: LKH 333/4 NM, N52- 28.0/E000-29.3, Blackdyke Farm Bridge.

7.10.4.1.3. Delta: LKH 096/6 NM, N52-24.0/E000-42.2, Olleys Farm midway between Elveden and Thetford.

7.10.5. Mandatory VFR position reports: The following position reports must be made to TWR:

7.10.5.1. Departing Bravo, Charlie, or Delta inbound

7.10.5.2. Initial

7.10.5.3. Turn to base leg with gear check

7.10.6. Delta/Bravo Pattern Procedures.

7.10.6.1. Initial Entry

7.10.6.1.1. Pilots enroute to Bravo or Delta must report the entry point or airfield in sight prior to being transferred to TWR.

7.10.6.1.2. If traffic to follow is not in sight, aircraft will not descend below the initial entry point altitude. In the absence of traffic or if traffic is in sight, aircraft may descend to pattern altitude upon passing Bravo/Delta and follow overhead/straight-in procedures.

7.10.6.1.3. If Bravo/Delta or the airfield is not in sight prior to 5 miles, the aircraft will remain with RAPCON and be re-sequenced to recover via an instrument approach.

7.10.6.2. Re-entry

7.10.6.2.1. Following a low approach, go-around, or when carrying through initial, aircraft may request or be instructed to re-enter.

7.10.6.2.2. The standard re-entry point is Bravo for RWY 05 and Delta for RWY 23. Routes are depicted in **Attachment 8**.

7.10.6.2.3. RWY 23: Past departure end, turn left to avoid base housing. Remain north of the MLD RWY extended centerline. An early turn-out may be approved by TWR and must be completed NLT abeam the TWR. Maintain 500-1000 feet until clear of inside downwind. Avoid Elveden Hall, located on the Elveden Estate, enroute to point Delta. Depart Delta heading 305-degrees directly toward the southeast corner of Brandon. Intercept a 3 NM initial or final.

7.10.6.2.4. RWY 05: At departure end, turn left to a 310-degree heading and proceed direct to Bravo. Depart Bravo heading 140-degrees to a 3 NM initial or final. Be aware of the proximity of MLD.

7.10.6.2.5. Pilots will avoid over-flight of the high school, base housing, and the hospital to the maximum extent possible.

7.10.7. Charlie to Downwind

7.10.7.1. Requests for Charlie to downwind will be made on initial contact with RAPCON.

7.10.7.2. If Charlie or the airfield is not in sight prior to 5 miles, the aircraft will remain with RAPCON and be re-sequenced to recover via an instrument approach.

7.10.7.3. In the absence of traffic, or if traffic is in sight, aircraft may descend to 2,000 feet upon passing Charlie.

7.10.7.3.1. Aircraft will not descend to pattern altitude until directly over the RWY.

7.10.7.4. On initial contact with TWR, pilots will state "*(CALLSIGN), CHARLIE TO DOWNWIND*;" TWR will respond with either "DOWNWIND ENTRY APPROVED" or "UNABLE, REPORT (BRAVO OR DELTA)." TWR may utilize "REPORT ONE MILE NORTH", although not a mandatory reporting point. Pilots will then call TWR one mile north of the airfield for downwind entry approval or carry through to bravo/delta.

7.10.7.5. RWY 23

7.10.7.5.1. If TWR disapproves Charlie to downwind entry to RWY 23, then aircraft will remain at 2,000 feet and report Delta, unless otherwise instructed.

7.10.7.6. RWY 05

7.10.7.6.1. If TWR disapproves Charlie to downwind entry to RWY 05, then aircraft will remain at 2,000 feet and report Bravo or Delta as instructed.

7.10.7.7. All Charlie to downwind entry ground tracks will avoid over flight of Lakenheath Village and offset to the approach end of RWY 23, placing the western aircraft no further

west than midfield. Additionally, the inside downwind ground track will be unchanged and crews will avoid over flight of base housing.

7.10.7.8. The downwind entry maneuver must be flown in two-by-two formations.

7.10.8. Overhead Pattern

7.10.8.1. RWY 05: Aircraft will turn initial at 3 miles, unless otherwise directed by TWR. Maintain 2,100 feet until the cutoff canal, then descend to 1,500 feet.

7.10.8.2. RWY 23: Aircraft will turn initial at 3 miles, unless otherwise directed by TWR. Maintain 2,000 feet until reaching initial, then descend to 1,500 feet, to ensure de-confliction with aircraft in the downwind.

7.10.8.3. RWY 23: The normal break point is approach end with left turns. Break shall not be delayed in order to prevent last wingman from proceeding beyond the cutoff canal (approximately 1 DME). If necessary, re-entry will be via a left-hand pattern to Delta.

7.10.8.4. RWY 05: The normal break point is approach end with right turns. Pilots will, unless directed otherwise by TWR, turn base inside cutoff canal to avoid interfering with MLD traffic. If necessary, re-entry will be via a left-hand pattern to Bravo.

7.10.8.5. Flight lead of 4-ship formations should not delay break beyond midfield to alleviate wingmen having to re-enter, unless otherwise instructed by TWR.

7.10.8.6. Do not fly simulated single engine overheads.

7.10.9. VFR Straight-in

7.10.9.1. When requesting "Bravo/Delta for straight-in", pilots will fly the normal VFR pattern ground track for entry and at Bravo/Delta request a straight-in with TWR. If a straight-in is approved, pilots will descend to 1000 feet MSL, configure on base and turn to intercept a 2-3 mile final. If a straight-in is disapproved, pilots will proceed as directed by TWR.

7.10.9.2. When requesting "Direct VFR straight-in" with RAPCON, pilots will be vectored or instructed to fly own-navigation to intercept the extended centerline.

7.10.9.2.1. VFR straight-ins are authorized at night. In the event an aircraft on a VFR straight-in is unable to land with the tower patterns closed, the aircraft will execute the local climb-out outlined in **para 7.15.2**.

7.10.10. High Tactical Initial (HTI)

7.10.10.1. Pilots will report field in sight to RAPCON and can expect to be transferred to TWR NLT 5 NM from the airport. If the pilot is unable to report the airport in sight prior to 5 NM, they will remain with RAPCON and be re-sequenced to recover via an instrument approach or other VFR recovery procedure.

7.10.10.2. Aircraft executing HTI and aircraft entering the TWR pattern will be de-conflicted by the TWR via the following:

7.10.10.2.1. Aircraft on HTI will be held above the field until aircraft inbound from Charlie have turned downwind leg. Simultaneous HTI procedures are authorized if the succeeding aircraft has reported the proceeding aircraft in sight and has been instructed to follow by ATC. TWR will coordinate with RAPCON when holding is required.

7.10.10.2.2. Aircraft in holding will remain within 3NM from EGUL.

7.10.10.2.3. Should aircraft in holding lose sight of the airfield, advise TWR and expect re-sequencing back into the radar pattern.

7.10.10.2.4. Re-entry from the TWR pattern to a HTI is not authorized.

7.10.10.3. Wingman will offset no more than 1.5 NM to the north. Flight elements will be no more than 2 aircraft abreast. Maximum flight size will not exceed 4 aircraft with minimum of 1 NM spacing between elements. In trail operations are not authorized.

7.10.10.4. Pilots will advise TWR "*HI-TAC INITIAL*" and TWR will respond "*REPORT BREAK/BASE, ALTIMETER (number)*," authorizing continuation of the HTI procedure (i.e. descent/break). When unable to complete the HTI procedure, pilots shall maintain HTI altitude and proceed as directed by ATC.

7.10.10.5. Standard HTI break point will be mid-field.

7.10.11. Closed Traffic

7.10.11.1. The closed traffic fixed-wing pattern will be flown to the south. Crosswind for the closed pattern is normally executed abeam the tower for both RWYs unless ATC instructs otherwise.

7.10.11.2. If crosswind on RWY 23 cannot be initiated abeam the TWR it will be delayed until past departure end to avoid over-flight of base housing to the maximum extent possible. **NOTE:** If a delayed closed traffic is necessary for spacing or sequencing, TWR shall state "*PAST DEPARTURE END CLOSED TRAFFIC APPROVED".* When this instruction is given, pilots will delay their closed until past base housing and ensure the turn is made prior to the cut-out canal unless TWR instructs otherwise.

7.10.11.3. Unless instructed by TWR, RWY 05 base leg should not extend beyond cut out canal.

7.10.11.4. If TWR cannot approve closed traffic prior to the cut-out canal for RWY 23, pilots will request Delta re-entry.

7.11. Special Procedures

7.11.1. Aerial displays/unusual maneuvers will be conducted IAW AFI 10-1001, AFI 11-209, AFI 13-201, FAAO JO 7110.65, and AFI 32-7063. Coordination will be accomplished with the AOF/CC at least 2 weeks in advance.

7.11.1.1. Unusual maneuvers include any intentional maneuver involving an abrupt change in an aircraft's attitude, an abnormal altitude, or abnormal acceleration not necessary for normal flight.

7.11.2. Under no circumstances will non-ATC agencies be authorized to broadcast on ATC frequencies.

7.11.3. ATC will not approve unscheduled aerial displays or nonstandard approaches. Requests for such maneuvers will be referred to 48 OG/CC through the 48 FW/CP or SOF.

7.11.4. Civil aircraft, except flight check aircraft, are not authorized to conduct practice approaches unless aircrew has a local area briefing and the operation is approved by 48 OG/CC.

7.12. Reduced Same RWY Separation (RSRS)

7.12.1. RSRS is applicable to all non-formation aircraft except as outlined in this instruction. **NOTE**: RSRS standards do not apply between non-USAF or non-US aircraft IAW AFMAN 13-204v3 USAFE Supplement 8.4.4.

7.12.1.1. Any aircraft or TWR controller may refuse RSRS when safety of flight may be jeopardized. In these cases, apply appropriate separation standards published in FAAO JO 7110.65.

7.12.2. Separation Standards.

7.12.2.1. TWR controllers may apply the RSRS outlined in **Table 7.1** between 48 OG assigned/hosted aircraft.

Table 7.1. RSRS Minimums

Pairings	FS behind TG	FS behind LA	LA behind LA	FS behind FS	LA behind FS	TG behind TG	TG behind LA
Same Fighter Type Sunrise to Sunset	3,000’	3,000’	3,000’	3,000’	3,000’	3,000’	3,000’
Dissimilar Fighter Type Sunrise to Sunset	6,000’	6,000’	6,000’	6,000’	6,000’	6,000’	6,000’
Same Fighter Type or Dissimilar Fighter Type Sunset to Sunrise	6,000’	6,000’	6,000’	6,000’	6,000’	6,000’	6,000’

7.12.2.2. RSRS standards may not be applied:

7.12.2.2.1. To any situation involving an emergency aircraft.

7.12.2.2.2. To a TG behind a FS.

7.12.2.2.3. When the RCR is reported less than 12 and/or braking action reports of less than “Medium” have been received.

7.12.2.2.4. When either the succeeding or preceding aircraft is cleared for the option or a stop-and-go. Exception: RSRS is authorized when the succeeding aircraft is cleared for an option or a stop-and-go behind a LA.

7.12.2.2.5. If braking action reports of “Medium” have been received, separation between same-type fighter aircraft increases to 6,000’ between sunrise and sunset.

7.13. Low Approach Procedures

7.13.1. Aircraft executing a low approach behind a full stop will avoid over flight of aircraft on the RWY by offsetting to the north of the RWY after the landing gear is retracted.

7.13.2. Aircraft escorting/chasing an emergency aircraft will offset to the north side of the RWY (if able) on low approach.

7.14. Restricted Low Approach Procedures

7.14.1. TWR may clear an aircraft for a restricted low approach over personnel, or over a preceding landing or taxiing aircraft. TWR will not clear an aircraft for an altitude restricted low approach over aircraft in takeoff position.

7.14.2. TWR shall inform all personnel on the RWY and/or overrun of the restricted low approach aircraft and altitude.

7.14.3. Phraseology:

7.14.3.1. No aircraft in the overhead pattern **"***(AIRCRAFT ID) CLEARED LOW APPROACH AT OR ABOVE 600 FEET (AT OR ABOVE 1100 FEET for heavy jet aircraft) TRAFFIC (description and location).*"

7.14.3.2. Aircraft in the overhead pattern**, "***(AIRCRAFT ID) CLEARED LOW APPROACH BETWEEN 600 FEET AND 1000 FEET UNTIL DEPARTURE END OF RUNWAY*
TRAFFIC (description and location)." **NOTE:** Heavy aircraft are not authorized restricted low approaches while the overhead is in use.

7.15. Climb-out Instructions

7.15.1. Locally assigned aircraft requesting radar vectors/climb-out to the radar pattern will be instructed to "EXECUTE LOCAL CLIMB-OUT." All aircraft will follow the local climb-out flight profile in **Paragraph 7.15.2**.

7.15.2. Local Climb-out instructions

7.15.2.1. RWY 05: "AFTER COMPLETION OF (LOW APPROACH/ TOUCH-AND-GO/OPTION) CLIMB AND MAINTAIN FL040 (or as instructed). AT DEPARTURE END TURN RIGHT HEADING 075."

7.15.2.2. RWY 23: "AFTER COMPLETION OF (LOW APPROACH/ TOUCH-AND-GO/OPTION), FLY RUNWAY HEADING AT 1 DME TURN RIGHT HEADING 320. CLIMB AND MAINTAIN FL040 (or as instructed)".

7.15.2.3. DME is from LKH TACAN. If DME is not available from the LKH TACAN, aircraft will follow the local climb-out flight profile using the MLD TACAN.

7.15.2.3.1. RWY 23: "FLY RUNWAY HEADING, AT 2.4 DME TURN RIGHT HEADING 320. CLIMB AND MAINTAIN FL040 (or as instructed)".

7.15.3. Transient aircraft will be issued complete climb-out instructions.

7.15.4. Aircraft will maintain at or below 1000 feet until departure end of RWY. Transient aircraft will be instructed to, CROSS DEPARTURE END OF RUNWAY AT OR BELOW 1000 FEET. **NOTE:** Departing RWY 23, turning right beyond 1 DME may cause confliction with MLD departures or successive missed approaches.

7.16. Missed Approach Procedures

7.16.1. During VMC and when the traffic pattern is open, locally assigned aircraft executing a missed approach will maintain VFR and contact TWR for pattern entry.

7.17. Go-around Procedures

7.17.1. A go-around is normally initiated for aircraft inside the FAF.

7.17.2. TWR or RAPCON will issue go-around instructions followed by appropriate climb-out instructions.

7.18. IFR Breakout Procedures

7.18.1. TWR or RAPCON may initiate a breakout anytime an aircraft on an instrument/radar approach cannot be allowed to continue the approach.

7.18.2. A breakout is normally initiated for aircraft that are outside the FAF. Aircraft that are inside the FAF but have not reached the RWY may be instructed to go-around.

7.18.3. RWY 05**:** Turn left heading 300, climb and maintain 3000.

7.18.4. RWY 23: Turn left heading 150, climb and maintain 3000.

7.19. Airport Surveillance Radar (ASR)/Precision Approach Radar (PAR) Approaches

7.19.1. ASR approaches are referred to as Surveillance Radar Approach at UK controlled bases. ASR procedures at these bases are different from those encountered in the US. Upon reaching the descent point, the pilot establishes the published glide path and the controllers give recommended altitudes every 0.5 NM. At RAF bases, controllers giving an ASR approach compute the missed approach point as a triangulation of the minimum descent altitude and the glide path. If Pilot Weather Category minimums are higher than the published approach minimums, advise the controller so that a new missed approach point can be computed.

7.19.2. ASR and PAR approaches are not available at EGUL or EGUN.

7.20. Landing Procedures

7.20.1. Any reference to the “Cold” side of the RWY is directed to the side where De-Arm/EOR activities will normally be conducted. The “Hot” side will be the opposite of the “Cold” side.

7.20.2. When utilizing reduced separation behind similar aircraft ensure proper distance and offset are included in the landing decision. Pilots should use alternate side landing to comply with reduced RWY separation. Conditions permitting, offset should be approximately equal to placing a main gear on the centerline of the RWY. Clear the aircraft to the “Cold” side of the RWY, once the aircraft is safely under control. Clear far enough “Cold” to ensure wingtip clearance for any aircraft that may have to pass on the hot side of the RWY. Aircraft landing in sequence on the “Cold” side will turn landing light off to signal under control and nose tail clearance meets 300 feet spacing requirement.

7.20.3. Every attempt should be made to safely slow aircraft to a safe taxi speed prior to the last cable and prior to departing the porous friction surface. If not decelerating sufficiently, remain on or cross to the “Hot” side to de-conflict from slower aircraft. The “Hot” side should be used if necessary to pass other aircraft on the RWY and to prepare for cable engagement. If wingtip clearance is not a factor engage the cable in the center of the RWY.

7.20.4. If reduced braking action is experienced, aircrew will notify the TWR as soon as possible. Use GOOD, MEDIUM, POOR, or NIL to describe the braking action experienced during rollout. Expect TWR to increase RWY separation requirements between aircraft.

7.20.5. It is possible for the RWY porous friction surface to remain WET, while the concrete

surface on each end is reported DRY. In this case, for a RWY which is reported DRY/WET use the WET/WET restrictions.

7.20.6. For landing crosswind restrictions, use the RCR and RWY surface condition of the concrete portion of the RWY to determine landing crosswind limits.

7.21. Precautionary Flameout (PFO) Procedures

7.21.1. PFO airspace is defined as a 5 NM circle around EGUL, excluding Mildenhall's ATZ and MATZ, see **attachment 9**.

7.21.2. ATC's rendering of services set forth does not in any way absolve the pilot from his/her responsibility to comply with 14 CFR Parts 91.111 and 91.113, other appropriate subparts of 14 CFR Part 91, and/or applicable military regulations.

7.21.3. PFOs are only authorized between sunrise and sunset.

7.21.4. PFOs will be approved on a traffic-permitting basis. Aircraft should request a PFO as soon as possible to prevent delays. PFOs may be terminated because of traffic or for other reasons either before or after the start of the maneuver until the aircraft reports Base Key. Once Base Key, the PFO shall not be terminated.

7.21.5. No more than 4 F-35s are allowed in the PFO overhead pattern at once.

7.21.6. Aircraft shall set the current Lakenheath altimeter prior to commencing a PFO pattern. All altitudes will be provided in MSL.

7.21.7. All PFO patterns shall terminate in a low approach. All aircraft will maintain at or below 1,000 feet until passing departure end of runway, to protect the 360-degree overhead pattern.

7.21.8. Overhead PFO

7.21.8.1. On initial contact or from a low approach, aircraft will "REQUEST HIGH KEY AT (altitude)" from ATC. The maximum High Key altitude will be 1,000 feet below the reported ceiling.

7.21.8.2. Turn out procedures: At departure end, initiate a climbing turn to the north (for high key) and report "HIGH KEY" or a climbing turn to the south (for direct low key) and report "LOW KEY".

7.21.8.3. Aircraft shall remain within 3 NM of approach of the active runway. ATC shall issue traffic advisories for any existing aircraft at High Key/Low Key. Aircraft are responsible for maintaining separation from other aircraft orbiting High Key/Low Key.

7.21.8.4. Aircraft shall not leave High Key without approval from TWR. When TWR directs the aircraft to "REPORT LOW KEY," aircraft shall descend to the south and report "LOW KEY." When TWR directs aircraft to "HOLD HIGH KEY", aircraft shall orbit south of the runway at High Key at their reported altitude and report each time reaching High Key.

7.21.9. Straight-In PFO

7.21.9.1. Aircraft shall request "STRAIGHT-IN PFO" from ATC. For RWY 23, Straight-In PFO begins 10NM from RWY 23 threshold at 10,000' MSL and follows the extended runway centerline. For RWY 05, Straight-In PFO begins 9NM from RWY 05 threshold at 9,000' MSL and follows the extended runway centerline.

7.21.9.2. Aircraft shall report "(10 or 9)-MILE STRAIGHT-IN PFO." and report "5-MILE PFO FINAL." On RWY 23, aircraft shall remain outside D208 when active.

7.21.9.3. Straight-In PFO to RWY 23 is not authorized when D208 is active above 2,500' MSL.

7.21.10. PFO Breakout

7.21.10.1. When directed to breakout, ATC shall state "BREAKOUT, PROCEED TO POINT (BRAVO/CHARLIE/DELTA), AT (directed/requested) ALTITUDE (or alternate instructions)."

7.22. Glider Operations and Safety Procedures

7.22.1. Glider deconfliction is a major concern due to routine glider operations in the vicinity of all traffic patterns. Gliders are most likely to be flying between the months of March and September and between 1K to 5K ft AGL. Due to the composite material of the gliders and the white paint scheme, they are often difficult to detect with radar and visual means as they blend easily with clouds. Additionally, most gliders do not have transponders to aid in detection and deconfliction.

7.22.2. While aircrew ultimately have the responsibility to see and avoid, the SOF and Weather (OSW) will assist in providing advanced warnings when conditions are favorable for gliders in the area. This will be accomplished by monitoring the live FLARM feed (https://ukflarmtracker.org/), the Glider Thermal Forecast (RASP) (https://lazyrasp.com/?p=stars) and/or via notification of glider competitions in the area.

7.22.3. Based on this information, the SOF will declare a Glider Risk level of either Moderate or Severe.

7.22.3.1. **Glider Risk Moderate**

7.22.3.1.1. Departures: Expect departure instructions from Tower to include expedited climb to FL100 with a goal of expediting above cloud bases. This does not imply quick climb, but rather best climb in MIL power after deselecting AB (if used).

7.22.3.1.2. Arrivals: Aircrew should accomplish a full-stop landing, unless required for mission essential training such as a LAO or INSTM check that cannot be accomplished at an alternate location. Aircrew must notify SOF of their intentions. Additionally, aircrew should avoid using Point Charlie due historically increased glider traffic in that area. The standard recovery will be HIGH TAC INITIAL, however aircrew and SOF will use best judgement to ensure the altitude used for HIGH TAC INITIAL does not place aircrew right at cloud bases.

7.22.3.2. **Glider Risk Severe**

7.22.3.2.1. Departures: Aircrew will hold on the ground until SOF/OSW determine the high threat of a glider strike no longer exists.

7.22.3.2.2. Arrivals: Aircrew will work with the SOF to determine the best recovery options available based on current location high threat gliders. Once a safety corridor exists, the procedures will be executed as described above.

Chapter 8

HELICOPTER OPERATIONS

8.1. General

8.1.1. Pilots must use extreme caution on ramps, TWYs, and shelter areas for uncontrolled vehicles. TWR will notify all helicopters that operations within uncontrolled movement areas are at the pilot's own risk.

8.1.2. Hover taxiing is not authorized in uncontrolled movement areas.

8.1.3. Ground taxiing is the preferred method of taxi. If unable to ground taxi, aircraft shall air taxi as directed by TWR.

8.2. Helicopter Operating Areas

8.2.1. TWR may authorize departures and landings for helicopters on the RWY and any non-controlled movement area.

8.2.1.1. CV-22 hover take-off/landings are only authorized on the concrete portions of the RWY.

8.3. Hover Check Areas

8.3.1. The primary hover check area is TWY H. The alternate areas are Golf Bubble South and Papa Bubble.

8.3.2. Hover altitudes above 30 feet AGL shall be requested by the pilot and must be approved by TWR.

8.4. Emergency Procedures

8.4.1. To the maximum extent possible, all helicopter in-flight emergencies will recover to the mid-point of the RWY and exit at TWY Whiskey. If TWY Whiskey is occupied, then TWY Victor will be used.

8.4.2. If it is the pilot's desire to land at an alternate location, inform TWR in advance to allow for emergency response support at the desired location.

Chapter 9

EMERGENCY PROCEDURES

9.1. General

9.1.1. Landing emergency aircraft will exit to the north EOR (see **Attachment 2**) unless otherwise directed, and park in a manner that allows 48 CES/CEF vehicles to park at 45- degree angles on both sides of the front of the aircraft.

9.1.2. TWR will turn perimeter road light to red when the emergency aircraft has 10 flying miles to land or until TWR WS/SC deems no longer necessary. Refer to procedures in **paragraph 2.19.5.3** if the perimeter road lights are inoperative.

9.1.3. Landing emergency aircraft require full RWY separation from all other arrivals outside of their flight.

9.2. Primary Crash Alarm System (PCAS)

9.2.1. The PCAS will be tested daily between 0800L – 0830L. When the TWR is opened for weekend operations, the PCAS will be tested prior to the first arrival/departure.

9.2.1.1. If the PCAS fails or is out-of-service, Tower will relay all emergency information to Airfield Management via the landline. Airfield Management will then activate the Secondary Crash Net (SCN).

9.2.2. The following agencies have two-way communication capability with TWR on the PCAS: AMOPS, 48 CES/CEF, Flight Surgeon's Office and Hospital Emergency Room (ER).

9.2.3. TWR will activate the PCAS for, but not limited to, the following occurrences:

9.2.3.1. Aircraft in-flight or ground emergencies.

9.2.3.2. Any time the WS/SC deems it necessary in response to an emergency situation.

9.2.3.3. The PCAS is not activated to relay non-emergency related data, i.e. Force Protection Condition (FPCON) changes, disaster response group meeting locations, etc. Agencies must utilize other available means.

9.2.3.4. All agencies on the PCAS will remain on the system until TWR terminates the call (including tests). Emergency data often changes frequently and this procedure prevents additional time consuming notifications.

9.3. Secondary Crash Net (SCN)

9.3.1. AMOPS is the primary activation authority of the SCN.

9.3.2. The SCN will be tested daily following the daily PCAS check.

9.3.2.1. The following agencies have two-way communication capability with AMOPS on the SCN: 48 FW/CP, 48 CES/CEF, 48 MDG/ER, 48 MXG/MOC, 48 SFS/ECC, 48 OSS/OSW, 48 FW/PA, 48 FW/SEF, 48 CES/CEOFP, 48 SF/ECC, 48 MXG/Crash Recovery, 48 CES Readiness and Emergency Management, 48 CES/EOD.

9.3.2.2. All agencies on the SCN must use a noise reduction feature such as push-to-talk handsets or mute function that filters background noise.

9.3.2.3. Requests for additions/deletions to the SCN (excluding agencies as required per DAFMAN 13-204v2) must be coordinated through the AFM and forwarded to the 48 OSS/CC for approval/disapproval.

9.3.3. Unless testing, the SCN will only be activated to relay emergency situations that are critical to the safety and security of airfield/flight operations. Emergency situations requiring activation of the SCN are as follows:

9.3.3.1. In-flight or ground emergencies

9.3.3.2. Weather Warnings

9.3.3.3. Disaster Response Force activations/recalls

9.3.3.4. Bomb threats or terrorist activities

9.3.3.5. Relaying real world or exercise FPCON messages, as required

9.3.3.6. As requested by the EOC Director to support the 48 FW 10-2 Installation Emergency Management Plan.

9.3.4. Information received via the PCAS will be passed via the SCN verbatim.

9.4. Emergency Response Procedures

9.4.1. In-Flight Emergencies

9.4.1.1. The Incident Commander ([IC]i.e. Fire Chief or Assistant Chief for Operations), or designated representative, is in charge of ground response to an in-flight emergency until the emergency is terminated. The following applies:

9.4.1.2. Emergency response vehicles will standby at designated points on the airfield and await TWR approval for RWY access. Recovery Tow will standby at designated points on TWY November and await separate TWR approval for RWY access.

9.4.1.3. AMOPS will position their vehicle on the airfield and await TWR approval for RWY access.

9.4.1.4. RWY operations will be suspended pending a FOD inspection unless waived by the SOF IAW **paragraph 2.21.3**.

9.4.2. Emergency Fuel

9.4.2.1. Emergency fuel aircraft do not warrant the suspension of RWY operations unless stranded on RWY. Fuel state must be declared with an ATC agency. **NOTE:** Only the term “EMERGENCY FUEL” will be used. Other terms such as LOW ON GAS, BINGO FUEL, MINIMUM FUEL, etc., will not afford any ATC priority. **Note 2:** MINIMUM FUEL indicates that no undue delay can be accepted.

9.4.2.1.1. On landing rollout, TWR will ask the pilot if further assistance is required. If the pilot declines further assistance, the aircraft will taxi off the RWY.

9.4.2.1.2. Response vehicles will not enter the RWY and RWY operations will not be suspended.

9.4.2.1.3. Once the aircraft has exited the RWY and is in the location coordinated by TWR and SOF, it will be inspected by emergency crews. The IC will notify TWR of emergency termination time.

9.4.3. Ground Emergencies

9.4.3.1. The IC is in charge of ground response until the emergency is terminated. If recovery operations (i.e. towing) are required, the crash recovery supervisor will be in charge of ground operations.

9.4.3.2. The IC requests approval from TWR for vehicles to cross the RWY if necessary.

9.4.3.3. TWR will hold all aircraft within the cordon area of the emergency aircraft.

9.4.3.4. IC will coordinate with TWR to resume aircraft operations once all emergency response vehicles are on scene.

9.4.4. Ground response procedures for off-base accidents are located in 48 FW PLAN 10-2, *Comprehensive Emergency Management Plan*.

9.5. Aircraft System Malfunctions

9.5.1. Do not taxi with any of the following (do not move once safely stopped):

9.5.1.1. Utility hydraulics failure

9.5.1.2. Nose gear steering failure

9.5.1.3. Blown or flat tires

9.5.1.4. Brake malfunctions or anomalies

9.5.2. Do not taxi to park with any of the following (clearing the RWY and/or taxi to an approved emergency area or EOR is authorized):

9.5.2.1. Hung live, hung gun, unsafe ordnance or other ordnance malfunctions that cannot be corrected in de-arm (e.g., jammed gun or hung training bombs that cannot be pinned).

9.5.2.2. Any physical damage to either Low Altitude Navigation or Targeting Infrared for Night pod, SNIPER pod or data-link pod.

9.5.2.3. Known or suspected FOD ingestion.

9.5.2.4. Any malfunction that could cause further aircraft damage or compromise aircrew safety.

9.6. Landing Gear Malfunctions.

9.6.1. If a normal landing is made with unsafe gear indications, or if the emergency gear extension is used (except on FCF sorties), aircrew may clear the RWY upon landing if the gear/steering is confirmed operational during rollout. Once in EOR, have maintenance personnel pin the affected main gear. Aircrew may then taxi back to parking.

9.7. External Stores Jettison Area Procedures.

9.7.1. External stores jettison will depend upon the location of the aircraft and the criticality of the emergency. Selective and combat jettisons should be attempted prior to considering emergency jettison of stores. If able, jettison inert stores on any UK range. Radio contact should be established with the range control agency prior to jettison. If jettisoning live ordnance, aircraft should utilize RAF Holbeach or Donna Nook Air Weapons Range (AWR). After declaring an emergency, use the following emergency jettison procedures:

9.7.1.1. RAF Holbeach (Donna Nook secondary) should be contacted prior to the emergency jettison aircraft entering the Wash Weapons Airspace. If circumstances allow, the SOF should contact the range commercial: 01406-550364 (Donna Nook: 01507-359126) to give advance notification.

9.7.1.2. The Officer Commanding (OC) will clear the range of any aircraft operating in the AWR.

9.7.1.3. If over land, the emergency jettison aircraft should plan to join the range via radar base point depicted in the 48 FW IFG. Stores will be jettisoned on Holbeach heading 314 +/- 5 degrees, 300 feet north of target 8 (Donna Nook heading 334 +/- 10 degrees 300 feet, east of target 3). Stores are to be jettisoned **SAFE**. Aircrew must have positive clearance from the range control officer to emergency jettison; however, aircraft commanders are ultimately responsible for clear range procedures.

9.7.1.4. Following the emergency jettison, aircraft are to depart the range as required avoiding other ranges if active. The OC RAF Holbeach (Donna Nook) will inform SOF of the successful emergency jettison and departure of the aircraft.

9.7.1.5. Fuel tanks will not be jettisoned at either Holbeach or Donna Nook AWRs. Jettison fuel tanks over deep water at least 12 NM off coast, clear of shipping and oil platforms, headed out to sea under control of radar agency.

9.7.2. EGUL RAPCON will provide radar assistance (upon request) to aircraft requiring vectors to Wash Weapons Airspace.

9.7.3. EGUL RAPCON shall not provide guidance to the emergency jettison target areas or when the emergency jettison aircraft is over the emergency jettison target area.

9.7.4. If the above procedures for inert or live stores cannot be followed due to weather or communication problems, stores may be jettisoned over water clear of shipping and oil rigs. Jettison at least 12 NM out to sea under the control of a radar controlling agency if possible. Use all available systems to clear the impact area and mark the position and time of jettison.

9.7.5. In emergency situations, jettison of external stores immediately after takeoff is authorized. A slight turn to the right at either departure end of RWY puts the aircraft over unpopulated areas. This procedure is not to establish a jettison area, but rather provides the aircrew with a way to minimize chances of injury to personnel or property damage in an emergency situation.

9.8. Lateral Asymmetry

9.8.1. Aircrew will pay particular attention to the lateral asymmetry worksheets in the 48 FW IFG to determine if an asymmetry exists that exceeds 5,000 foot-pounds.

9.8.2. **F-15E:** Prior to release of asymmetric A/G stores, predictive lateral asymmetry must be considered and applied to follow-on maneuvers.

9.9. Fuel Dumping: In addition to AFI 11-202 Volume 3, AFI 11-2 MDS V3 guidance:

9.9.1. Fuel dump only for emergencies or to avoid landing distances that exceed 80 percent of available RWY length.

9.9.2. Dump at or above 10,000 feet AGL and over water, when time and conditions permit.

9.9.3. Report fuel dumping below 10,000 feet AGL to the SOF. Include the approximate location, duration, altitude, and weight/volume of fuel dumped.

9.9.4. ATC will broadcast fuel dumping information IAW FAAO JO 7110.65 on appropriate frequencies.

9.10. Physiological Incidents

9.10.1. Contact the SOF and declare an IFE if an aircrew member experiences a physiological incident during flight, including any cockpit decompression above FL 180. The 48 MDG will respond to all physiologic IFEs. A flight surgeon should be part of the 48 MDG response team when practical. All affected aircrew will be transported to the 48 MDG for evaluation. Shut down the aircraft and turn it over to maintenance for impoundment.

9.10.2. For loss of cabin pressure above 18,000 feet, follow checklist procedures and descend below 18,000 feet. If any crew member's oxygen system is not functioning, descend to no higher than 10,000 feet. Declare an emergency and shut down in EOR. Aircrew must be evaluated by Flight Medicine.

9.10.3. For loss of cabin pressure below 18,000 feet, follow checklist procedures and stay below 18,000 feet (10,000 feet without supplemental oxygen). Only declare an emergency if hypoxia symptoms are present or a rapid decompression occurred. If an emergency is declared, aircrew will shut down in EOR and get evaluated by Flight Medicine. If an emergency is not declared, aircrew will land, de-arm and taxi to park normally.

9.11. Emergency Arresting Gear/Barrier Procedures

9.11.1. The EGUL RWY arresting system locations are displayed in **Attachment 2**.

9.11.2. For an approach end engagement with radio failure, comply with AFI 11-205, *Aircraft Cockpit and Formation Flight Signals*, procedures.

9.11.3. If necessary, crash recovery will direct the aircraft's engine to be shut down.

9.11.4. RWY operations are immediately suspended upon barrier engagement. TWR personnel can expect up to 30-minute recovery time for BAK-12 engagements. Recovery time could exceed 30-minutes pending any complications.

9.12. Hot Brake Area and Procedures

9.12.1. After notified of hot brakes, the TWR will activate the PCAS. If required, 48 CES/CEF will be in place for the engine shut down.

9.12.2. Hot-brake areas are as depicted in **Attachment 2**.

9.12.3. Aircraft with hot brakes anywhere on the airfield other than the RWY will immediately notify ground control. They will hold their position if in a safe position (e.g., aircraft at a PAS

will remain there), or move to closest safe position, park into the wind and hold position. The IC will direct response and crash recovery personnel actions.

9.12.4. Aircraft will not taxi past or near aircraft with hot brakes.

9.13. Abandonment of Aircraft/Controlled Bailout Area

9.13.1. The controlled bailout point for locally assigned aircraft is N52-55 E000-40. This point is near Brancaster Bay, 8.5 NM northeast of Sandringham, 20 NM east of RAF Holbeach, near Provost Martial Restricted Area 225 (Wash Range Hold airspace). LKH (channel 39) 010/31 or MLD (channel 106) 013/34. Mandatory heading 360 +/- 10 degrees, 10000 feet MSL, slowest available airspeed, no slower than 150 KIAS (150-250 is the safe ejection regime; higher airspeeds may carry aircraft farther north out to sea). Throttles IDLE, autopilot engaged, if able, for wings-level (non-turning) flight and trim set for a 750-foot per minute descent.

9.13.2. If IMC, pilots will request radar service to the bailout point (only used if the pilot has sufficient time and satisfactory control of the aircraft).

9.13.3. In the event that an aircrew abandons their aircraft, the pilot should make every feasible effort to advise ATC of the aircraft's position prior to abandonment. ATC will plot the estimated position on the base crash grid maps or via radar.

9.14. Personnel/Crash Locator Beacon Procedures

9.14.1. Scheduled operational testing of beacons/Emergency Locator Transmitters (ELT) will be conducted during the first 5 minutes of the hour for no more than three audible sweeps.

9.14.2. RAPCON/TWR will notify AMOPS upon receipt of an ELT.

9.14.3. AMOPS will notify Swanwick D&D (Distress & Diversion), MOC, Kinloss Air Route Control Center and 48 FW/CP of an ELT signal. Additionally, 48 FW/CP will notify AMOPS of any distress beacons they receive including ELT signals, Personal Locator Beacon signals, etc.

9.14.4. MOC will direct the 48 FW Egress shop to check if an ELT was inadvertently activated.

9.14.5. MOC will advise AMOPS when an ELT is found or determined not to be on the airfield.

9.14.6. AMOPS will advise RAPCON/TWR when an ELT is found or determined not to be on the airfield.

9.15. Search and Rescue Combat Air Patrol Procedures: Reference the Search and Rescue Checklist in the 48 FW IFG.

9.16. Hung Ordnance Procedures

9.16.1. After following MDS Volume 3 and TO procedures for any hung or unsafe ordnance, declare an emergency, notify the SOF, and recover to EGUL.

9.16.2. Any failed attempt to fire or release ordnance, any known or suspected gun malfunction, or any known or suspected hung chaff or flare will be considered hung ordnance. TWR will activate the PCAS for live hung ordnance. **NOTE:** Hung BDU-33s do not constitute an emergency unless an emergency is declared by the pilot or SOF.

9.16.3. Aircraft with hung ordnance will avoid over-flying populated areas and they are not permitted to fly VFR patterns.

9.16.3.1. Fixed wing aircraft will recover via a straight-in to a full stop.

9.16.4. Gun Malfunction

9.16.4.1. The designated gun malfunction areas are only authorized for the following aircraft (A-10, F-15, F-16, F-22, & F-35).

9.16.4.2. Aircraft will not be on the RWY in front of an aircraft with a malfunctioning gun.

9.16.4.3. After landing, aircraft will exit the RWY to the north and taxi on taxiway November, if applicable, to the designated gun malfunction area. Aircraft will aim in the following directions depending on the area, and in all cases will line up aircraft with painted safe heading markings.

9.16.4.3.1. Golf Bubble (primary): 023 or 334 degrees magnetic

9.16.4.3.2. South side 23 EOR (spots 1-6): 242 degrees magnetic

9.16.4.3.3. South side 05 EOR (spots 1-4): 015 degrees magnetic

9.16.4.3.4. Victor (spots 1 and 2): 017 degrees magnetic

9.16.4.4. After the weapon is de-armed and the malfunction is cleared, aircraft may continue taxiing to parking.

9.16.4.5. If unable to safe gun, the aircraft will shut down in place.

9.16.5. Hung Bombs

9.16.5.1. Aircraft will land on RWY 23 to the maximum extent possible.

9.16.5.2. After landing, taxi to the north side and reposition to the Golf/Kilo loops for de-arm. Taxi to normal de-arm for hung BDU-33's.

9.16.5.2.1. **F-15E:** Hung secure and unsecure training ordnance will be de-armed in the normal EOR arming areas.

9.16.5.3. Once cleared by the fire chief and maintenance personnel, and after completion of de-arm, aircraft may request to taxi to parking.

9.16.5.4. If unable to safe weapon, aircraft will shut down in position on Golf Bubble.

9.16.6. Hung Missiles

9.16.6.1. Upon landing, aircraft will taxi to Golf Bubble (primary): 024 or 335 degrees true. Alternatively, and as a last resort, aircraft will taxi to an empty PAS with doors closed, point at the doors, and await de-arm.

9.16.7. Hung Chaff or Flare

9.16.7.1. Aircrews should attempt to jettison all chaff and flares over water.

9.16.7.2. If unsuccessful, aircrew will declare and EP and return to base (RTB) via a straight-in, avoiding populated areas to the max extent possible.

9.16.7.3. After landing, aircraft will taxi via November to Golf Bubble.

9.16.7.4. Once cleared by the fire chief and maintenance personnel, and after completion of de-arm, aircraft may request to taxi to parking.

9.16.8. AMOPS will notify MOC, EOD, and 48 SFS ECC via the SCN when advised of arriving aircraft with hot guns and hung ordnance.

9.16.8.1. Crash rescue will respond to all aircraft landing with live hung ordnance and provide downloading standby service.

9.16.8.2. EOD will provide qualified on-call personnel to render safe rocket, bomb, and canister ordnance, which is an abnormal or hazardous condition. Weapons load crews will download hung ordnance once it is rendered safe. Weapons release will correct malfunctions associated with pylons, launchers etc., and prevent reissue until proven defect free.

9.16.8.3. The 48th Security Forces Squadron (SFS) will provide response to the scene for vehicle control if deemed necessary by the IC.

9.17. Wind Limitations on Control Tower

9.17.1. The 48 CES Commander (CES/CC) has determined the TWR cab can safely withstand wind gusts to 87 knots, and the TWR structure can withstand wind gusts to 175 knots.

9.17.2. TWR will evacuate when sustained winds or wind gusts reach 75 knots.

9.17.3. TWR shall request that 48 CES inspect the TWR for possible structural damage prior to reentering facility.

9.18. Digital Airport Surveillance Radar Freewheel

9.18.1. When the wind velocity is forecasted to reach sustained winds of 65 knots or greater, RAPCON shall notify RAWS.

9.18.2. When the wind velocity reaches sustained winds of 85 knots (65 knots if the DASR is operating on a single drive train), RAWS shall turn rotation of the DASR antenna off and place it into freewheel.

9.18.3. When the wind velocity drops below, and is forecasted to remain below 85 knots, RAWS shall return the antenna to normal operating status.

9.18.3.1. If at any point wind speeds reached 125 knots, RAWS shall perform an antenna inspection prior to returning the DASR for operational use.

9.19. Evacuation of ATC and AMOPS Facilities

9.19.1. TWR evacuation procedures

9.19.1.1. The 48 OG/CC has determined that there is no requirement for a fixed alternate TWR facility.

9.19.1.2. If only the TWR is evacuated, TWR personnel will follow evacuation checklists to the maximum extent possible.

9.19.1.2.1. TWR WS/SC will advise MLD TWR, EGUL AMOPS and RAPCON of TWR's evacuation and request RAPCON monitor the TWR local frequencies to advise other aircraft of TWR evacuation.

9.19.1.2.2. Time permitting, TWR will transmit on all assigned frequencies, including 243.0 and 121.5 that TWR is being evacuated and that airfield operations are suspended. TWR will advise all airborne aircraft in the pattern to contact approach control/arrival for further instructions.

9.19.1.3. All aircraft taxiing out for departure will pull into the closest de-arm area and monitor TWR frequency for further instructions.

9.19.2. RAPCON evacuation procedures

9.19.2.1. The 48 OG/CC has determined that there is no requirement for an alternate RAPCON facility.

9.19.2.2. If the RAPCON is evacuated, RAPCON personnel will follow evacuation checklists to the maximum extent possible.

9.19.2.3. No ATC service will be provided by the RAPCON during an evacuation.

9.19.2.4. Time permitting, RAPCON will transmit on all assigned frequencies (TWR will transmit on 243.0 and 121.5), that RAPCON is being evacuated, and to contact Swanwick Mil ATC for further instructions.

9.19.3. In the event that both TWR and RAPCON must be evacuated (i.e. bomb threat), all personnel will relocate to RAWS building 1210. If the cordon established by the On-Scene/IC is larger than 250 feet, personnel shall relocate to the OSS building 1346 heritage room.

9.19.4. AMOPS evacuation procedures

9.19.4.1. AMOPS will resume operations from building 1346, AMOPS alternate facility.

9.19.4.2. If safety permits, AMOPS will activate the SCN and notify TWR and RAPCON.

9.19.4.3. AMOPS will disseminate a NOTAM when any ATC facility is evacuated.

9.19.5. Facility reopening procedures:

9.19.5.1. After coordinating with the appropriate agencies, WS/SC will make a determination when to resume operations in the ATC facilities.

9.19.5.2. Complete equipment checklists.

9.20. Weather Notification

9.20.1. Weather support will be provided IAW LAKI 15-101, Weather Support.

9.20.2. During Observed Induction Ice Potential Advisory conditions on the ground or in the air, aircrew should be alert for engine icing and use engine heat IAW TO 1F-15E-1, *Flight Manual,* or F-35A-FM-001, *F-35A 'Lightning II' Flight Manual*.

9.20.3. Procedures for lightning within 5 miles:

9.20.3.1. 48 OSS/OSW issues weather watches when lightning conditions within 5 NM of the airfield are expected within 30 minutes.

9.20.3.2. 48 OSS/OSW issues warnings for lightning within 5 NM of the airfield when conditions are observed.

9.20.3.3. ATC notifies aircraft of the weather advisories/watches/warnings; TWR broadcasts information on the ATIS.

9.20.3.4. The 48 OG/CC is the approval authority for all takeoffs and landings during observed lightning within 5 NM. The SOF will coordinate with the 48 OG/CC for approval on a case-by-case basis, taking into consideration the operational necessity, lightning location, storm direction of travel and landing RWY and status of alternates.

9.20.3.5. Ops Sups should contact the SOF to determine the estimation of delay.

9.20.3.6. If in a PAS or chocks before engine start or after landing, shutdown, exit aircraft and seek shelter.

9.20.3.7. After engine start and before taxi, contact Ops Sup for guidance to shut down or remain running.

9.20.3.8. Taxiing. Contact the SOF for guidance on whether to continue taxiing or hold your position.

9.20.3.9. Arming/De-arm area. Aircraft will not be armed and will not use the aircraft intercom to communicate with ground personnel. Aircraft will hold position and contact the SOF.

9.20.3.9.1. Notify the Ops Sup when aircraft reaches 1,000 pounds of fuel. If fuel state requires you to taxi back prior to de-arm, coordinate with the SOF and Ops Sup. Taxi to parking and signal ground crew to chock aircraft prior to shut down. If fuel state is critical and not cleared to taxi back, signal de-arm crew with the speed brake (or have the SOF telephone) and have them chock the aircraft prior to shut down.

9.20.3.10. Airborne Aircraft. Hold at maximum endurance and contact the SOF for updates on field status, divert base and weather status. Notify the SOF of holding time and expect to be diverted upon reaching divert fuel.

9.20.3.11. Hot pit refueling. Immediately stop refueling, hold position and contact the SOF for guidance. Avoid using the intercom to communicate with ground personnel.

9.20.3.12. ATC will relay additional information as requested by the SOF.

9.21. Lightning Strike: Perform a battle damage check, assess external/ internal damage to the aircraft. Declare an emergency and land as soon as conditions permit.

9.22. Overdue Aircraft: Follow procedures in AFI 13-202, *Overdue Aircraft,* and FAAO 7110.65. TWR and RAPCON will notify AMOPS of any aircraft 30 minutes overdue.

9.23. UHF use during Emergency Recoveries

9.23.1. Follow procedures outlined in the Flight Information Handbook for using the UK emergency UHF-direction finding system during an in-flight emergency (PAN/MAYDAY) or a practice PAN.

9.23.2. In order to provide command and control agencies up-to-date information during the recovery of emergency aircraft, a single frequency approach capability is available on Channel

13 and is designated as the Emergency Recovery Frequency (ERF). This is intended to provide appropriate agencies the capability of listening as the aircrew, SOF, and ATC effect the recovery of emergency aircraft.

9.23.3. Procedures

9.23.3.1. Use of the ERF for the recovery of emergency aircraft will be of the highest priority.

9.23.3.2. Use of the ERF for normal recoveries will be avoided.

9.23.3.3. All emergency recoveries that declare prior to hand-off to an EGUL controller will be assigned the ERF. The frequency will be cleared if already in use.

9.23.3.4. Changing frequencies after the aircraft is with EGUL RAPCON will not be accomplished unless requested by the aircrew.

9.23.3.5. The SOF may request that an emergency aircraft is changed to the ERF, but final approval rests with the appropriate ATC agency and the pilot.

9.23.3.6. When feasible and as deemed appropriate by TWR, have aircraft remain on ERF for IC direct communications with aircrew, and notify IC that ERF is released for IC use.

9.23.3.7. The IC shall release the ERF back to the TWR when the incident is terminated or at TWR's request (i.e. if higher priority ATC actions require it).

9.24. Locating and Recovering Distressed Aircraft

9.24.1. Locating and recovering distressed aircraft in the UK is the responsibility of D&D. To clarify and standardize actions required by EGUL ATC facilities in assisting lost aircraft, the following guidelines are provided, in addition to those provided in the FAAO JO 7110.65 and other appropriate directives. If an aircraft is directed to land at EGUL by D&D during duty hours, park as directed by AMOPS.

9.24.2. Should TWR or RAPCON receive a call from a lost aircraft on 243.0 or 121.5 apply the following procedures:

9.24.2.1. Respond to the call and assist in any way possible.

9.24.2.2. Inform D&D and verify they received the MAYDAY/PAN PAN call and that they are establishing a fix on the aircraft.

9.24.2.3. Alert the applicable facility of the emergency.

9.24.3. Should TWR or RAPCON receive a call from a lost aircraft on a frequency other than 243.0 or 121.5 apply the following procedures:

9.24.3.1. Respond to the call and assist in any way possible.

9.24.3.2. Alert the applicable facility of the emergency and advise D&D.

9.24.3.3. If the aircraft has encountered IFR conditions, inform pilot of the emergency safe altitude within 100 NM of EGUL (2700 feet).

9.24.3.4. Instruct the pilot to squawk MAYDAY on code 7700.

9.24.3.5. If the aircraft is not located immediately by one of the radar facilities and is able to change frequencies, instruct the aircraft to change to frequency 243.0 or 121.5 as appropriate, for direction finding service from D&D.

9.25. Hydrazine Procedures

9.25.1. When an F-16 Emergency Power Unit is activated, possibility of hydrazine leakage may exist. See **Attachment 2** for hydrazine parking areas.

9.25.2. Procedures are as follows:

9.25.2.1. If able, aircraft will taxi to Golf south (RWY 05), spot Lima (RWY 23) and park into the wind.

9.25.2.2. TWR will activate the PCAS.

9.25.2.3. IC will establish a 300-foot cordon around the aircraft and follow the guidance in T.O. 00-105E-9, *Aerospace Emergency Rescue and Mishap Response Information (Emergency Services)*; and AFTO Form 88, *Aircraft Pre-Fire Plan*, prescribed by TO 00-105E-9, *Aerospace Emergency Rescue and Mishap Response Information (Emergency Services).*

9.26. Flameout Procedures: Aircraft will normally conduct a straight-in procedure to RWY 23.

9.27. Anti-Hijack/Unauthorized Aircraft Movements

9.27.1. Hijack prevention and initial action in the event the prevention has been unsuccessful will be IAW AFI 13-207-O, *Preventing and Resisting Aircraft Piracy (Hijacking)*, FAA Joint Order (JO) 7610.4, *Special Operations*, and 48 FW Plan 31-101, *Integrated Defense Plan*.

9.27.2. Attempted hijacking or theft of a US military aircraft will be resisted by any means determined appropriate by the 48 FW/CC.

9.27.3. Non-US aircraft with a declared hijack in progress will be discouraged from landing at EGUL unless safety dictates or hijackers demand a landing.

9.27.4. In the event of an attempted or suspected hijacking, unauthorized aircraft movement, or an observation of unusual or suspicious activity endangering US Government assets, TWR will:

9.27.4.1. Immediately activate the PCAS and pass location, direction of movement of the activity, communications, and type of aircraft if known.

9.27.4.2. Relay all information to the on-scene commander and provide assistance to the maximum extent possible.

9.27.4.3. Reactivate the PCAS when deemed necessary.

9.27.4.4. Relay information or required actions to other agencies when directed by the on-scene commander.

9.27.4.5. Exercise every possible delay to unauthorized aircraft movements or hijacking.

9.27.5. 48 SFS will delay aircraft movement with vehicles that block taxiways and runways and other strategies to allow time for coordinating resistance and establishing local and off the

airfield communications. Except when reacting to hijacking of an aircraft with nuclear weapons, 48 SFS will use firearms to stop an aircraft taxiing or attempting to take off when directed by the appropriate authority.

9.27.6. The designated hijacked aircraft parking area is TWY W. Alternate parking areas can be coordinated if the situation dictates.

9.28. Lost Communication Procedures

9.28.1. If no transmissions are received for 1 minute in the tower pattern attempt contact on EGUL TWR on Channel 3, squawk 7600 and land. **NOTE:** Expect TWR to utilize light gun signals.

9.28.2. If being vectored to RWY 23, squawk 7600, avoid Norwich Class D to max extent possible, proceed to HI/LO ILS Y or HI/LO TACAN RWY 23 Initial Approach Fix (IAF) at FL60 and proceed with approach. If being vectored to RWY 05, squawk 7600, proceed to HI/LO ILS Y or HI/LO TACAN RWY 05 IAF at FL100 and proceed with approach. **CAUTION: <u>Avoid entering STANTA.</u>**

9.28.3. If already established on an instrument approach and unable to make contact, proceed with approach.

9.28.4. Prior to executing lost communication instructions, pilots shall attempt to contact RAPCON on the last assigned frequency. If negative contact on last assigned frequency, attempt contact on Approach Control (Channel 10).

9.29. Quick Freeze Procedures: If a part is missing from an aircraft and was not previously documented in the aircraft forms or is deemed to be a potentially significant hazard to aircraft, Quick Freeze procedures should be implemented. If the general location of the mission object is known, then the procedures can be localized to that area, however if the location of the missing item cannot be determined all aircraft ground movement may be suspended until the exact location can be specified.

9.29.1. The appropriate Maintenance Superintendent (SUPER), crew chief or EOR crew will:

9.29.1.1. Notify MOC to initiate a Quick Freeze.

9.29.1.2. Stop all maintenance activity on the affected aircraft and in the immediate area.

9.29.1.3. Involve as many personnel as possible in a search of the immediate last-known location area. Maximum effort should continue until object/tool is found, or the search is called off by the SUPER.

9.29.2. MOC will notify (in order) AMOPS, SOF and each flying squadron's Ops Sup of the TWYs/RWYs affected by the Quick Freeze and provide a description of the missing item.

9.29.3. AMOPS will pass Quick Freeze details to TWR and suspend ground movements in the affected areas.

9.29.4. If discovered in EOR, aircrew will call the SOF to report a potential dropped object, pass the physical description of the missing object and the taxi route including parking location.

9.29.5. Aircraft in the affected areas will hold their position. Aircraft on the RWY will exit the RWY as needed and hold as directed.

9.29.6. The SOF and squadron Ops Sup should consider recalling affected aircraft.

9.29.7. Operations may resume under either of the following conditions:

9.29.7.1. Termination of the Quick Freeze.

9.29.7.2. Quick Freeze areas deemed FOD free by AMOPS.

9.29.8. MOC will advise AMOPS, TWR, and each flying Squadron's Ops Sup when the Quick Freeze is terminated.

Chapter 10

MISCELLANEOUS PROCEDURES

10.1. Airfield Operations Board (AOB). IAW AFMAN 13-204 Volume 1 the 48 FW/CD designates the 48 OG/CC as the chairperson of the quarterly AOB.

10.1.1. The following members are required to attend the AOB:

10.1.1.1. 48 OG/CC

10.1.1.2. 48th Mission Support Group Commander

10.1.1.3. 48 OG/OGV

10.1.1.4. 48 FW/SEF

10.1.1.5. 48 OSS/CC

10.1.1.6. 48 OSS/DO

10.1.1.7. 48 CES/CC or representative

10.1.1.8. 48 AOF/CC or AOF/DO and Staff

10.1.1.9. 48 OSS/OSW

10.1.1.10. 48 FW/CP

10.1.1.11. RAWS Noncommissioned officer-in-charge (NCOIC) or representative

10.1.1.12. Host Nation Coordination Cell (HNCC)

10.1.2. AOB attendance is optional for the following members:

10.1.2.1. 492 FS/CC or representative

10.1.2.2. 493 FS/CC or representative

10.1.2.3. 494 FS/CC or representative

10.1.2.4. 495 FS/CC or representative

10.1.2.5. 48th Communications Squadron Commander or representative

10.1.3. The following items will be briefed annually in the AOB, and review/action completed annually in the month listed. See AFMAN 13-204 Volume 1 for additional information.

10.1.3.1. Review existing airfield waivers and correction plans (review to be hosted by 48 CES in November).

10.1.3.2. Complete an annual self-inspection (March).

10.1.3.3. Review listing and effective dates of LOPs (April).

10.1.3.4. Review the aircraft parking plan (July).

10.1.3.5. Review instrument procedures to validate the continuing need for each (August).

10.1.3.6. Complete the Annual Airfield Certification/Safety Inspection (December).

10.1.3.7. Complete AF and/or MAJCOM Special Interest Item checklists (complete before and brief at the first AOB following official release).

10.1.3.8. Status of existing airfield waivers (as required).

10.1.3.9. Results of Quarterly Joint Inspection (as required).

10.2. NOTAM Procedures

10.2.1. Facilities that operate or maintain airfield equipment or RAWS will advise AMOPS when operational status of equipment changes. RAPCON is the NOTAM monitoring facility. When AMOPS is closed, RAPCON will pass information to MLD AMOPS for NOTAM action, and will advise 48 FW/CP and AMOPS (via org box) of NOTAM action taken.

10.2.2. Agencies responsible for maintenance or construction near airfield pavements, lighting, or RAWS must coordinate such activities with the AFM who will inform TWR, RAPCON, 48 FW/CP, and other appropriate agencies of NOTAMs.

10.2.3. The SOF will relay NOTAMs to the 492 FS, 493 FS, 494 FS, and 495 FS.

10.2.4. AMOPS/FSs will ensure NOTAMs received via the National Air Traffic Services are recorded and posted.

10.3. Flight Information Publications

10.3.1. NCOIC, Airfield Management Operations (NAMO) will be responsible for preparing and coordinating non-procedural FLIP changes to be submitted according to General Planning. The NAMO (and/or designated FLIP monitor) will review each new FLIP edition for accuracy and consistency of airfield related data IAW DAFMAN 13-204 Volume 2, AFI 11-201, *Flight Information Publications*, and General Planning. ATC NCOIC, Standardization and Evaluation will review approach/departure plates for accuracy and consistency.

10.3.2. All requested changes to instrument approaches will be coordinated through 48 OG/OGV and ATC. EGUL does not have a permanently assigned Terminal Instrument Procedures Specialist available to develop and locally coordinate procedures. Instrument procedure development and local coordination will be performed by AOF staff and the USAFE/APF.

10.4. Number and Status of Permanent/Temporary Waivers

10.4.1. The number and status of airfield waivers is available from AMOPS or 48 CES and will be tracked and briefed IAW **paragraph 10.1**.

10.4.2. Operational waivers will be created and filed IAW AFI 33-360, AFI 11-202 Volume 2 and implementing supplements.

10.5. Prior Permission Required (PPR) Procedures

10.5.1. All transient aircraft arriving to EGUL require an approved PPR.

10.5.2. PPRs are valid plus/minus 30 minutes of scheduled arrival time.

10.5.3. PPR requests for operations outside of normal operating hours must be requested at least 5 days prior to scheduled arrival and require 48 OG/CC approval.

10.5.4. AMOPS are the approval authorities for all PPR requests for EGUL except those listed in 10.5.3.

10.6. Air Evacuation (AIREVAC) Notification and Response Procedures

10.6.1. AMOPS is designated as the only base agency to coordinate rescue protection of military AIREVAC or civil air ambulance flights. AMOPS will notify TWR, 48 CES/CEF, ER, 48 FW/CP, AIREVAC Office, Immigrations Duty Officer, and provide all data possible (aircraft type, ETA, number of patients off-loading, litter/ambulatory, special equipment/physician required, etc.). AMOPS will coordinate with TA for servicing equipment and parking and provide other priority service as required in the area of transportation and flight-planning.

10.6.2. RAPCON will:

10.6.2.1. Notify AMOPS of arriving AIREVAC, Medical Evacuation, or host nation civil air ambulance aircraft at 20 flying miles.

10.6.2.2. Advise 48 FW/CP of civil air ambulance flights requesting to land on base during airfield closures.

10.7. Unauthorized/Unscheduled Aircraft Arrivals: Procedures for unauthorized/ unscheduled aircraft landing/operations are listed in 48 FW PLAN 10-2, *Comprehensive Emergency Management Plan*. TWR will immediately activate the PCAS to report such incursions.

10.8. Distinguished Visitors (DV) Notification Procedures

10.8.1. AMOPS will confirm all DV flights upon receipt of an inbound message, and when aircrew file outbound flight plans.

10.8.2. 48 FW Protocol (FW/CCP) will brief DV inbound information at wing stand-up and keep abreast of MLD DV movements.

10.8.3. 48 FW/CCP will provide 48 FW/CP DV movement information at least weekly.

10.8.4. 48 FW/CP will advise 48 FW/CCP of DV diverts to EGUL.

10.8.5. 48 FW/CCP will provide guidance on DV procedures.

10.8.6. AMOPS will notify 48 FW/CP, TWR, RAPCON, 48 OSS/OSW, and other appropriate agencies of flight plan information on DV flights. Time permitting, RAPCON will inform AMOPS with ETA on initial contact of arriving aircraft transporting DVs. Primary DV aircraft parking location is Victor Ramp.

10.9. Dangerous/Hazardous Cargo

10.9.1. Policy and procedures for aircraft carrying hazardous materials are outlined in AFI 11-204, *Operational Procedures for Aircraft Carrying Hazardous Material*.

10.9.2. Information concerning an aircraft carrying hazardous materials will be forwarded to the appropriate base support elements upon receipt. This information will normally be provided by message, flight plan or notification to ATC facilities.

10.9.3. AMOPS notifies the following when advised of inbound aircraft with hazardous material: TWR, RAPCON, TA, AOF/CC, 48 SFS ECC, EOD, 48 CES/CEF, 48 FW/CP, and the 48 LRS Air Terminal Operations Center.

10.9.4. AMOPS will acknowledge hazardous material messages as required.

10.9.5. The ATC facility making initial contact with an aircraft carrying unannounced hazardous materials will notify the other ATC facility and AMOPS. TWR will relay to AMOPS all hazardous material load messages received from the pilot.

10.9.6. Kilo and Papa hardstands are used for aircraft carrying Class 1 hazardous (1.1, 1.2.X, 1.3, & 1.4) cargo. Victor ramp can accommodate aircraft carrying Class 1 division 3 & 4 (only) and all other hazardous materials.

10.9.7. Special Assignment Airlift Mission (SAAM)

10.9.7.1. At no time will aircraft under TWR control over-fly a SAAM aircraft, either taxiing or parked.

10.9.7.2. ATC will afford traffic priority to SAAM aircraft IAW this instruction.

10.9.7.3. When SAAM aircraft is at 15 mile final, until in parking, TWR will suspend RWY operations to all aircraft, vehicles, and personnel not involved with the SAAM mission.

10.9.7.4. TWR will notify RAPCON of airspace requiring protection.

10.9.7.5. Charlie to downwind is not authorized.

10.9.7.6. When aircraft with forward firing ordnance must taxi to meet mission requirements, aircrew will avoid sweeping the nose of the aircraft through the hot cargo pad area to the maximum extent possible.

10.10. Local Aircraft Priorities

10.10.1. Local aircraft priorities are as follows:

10.10.1.1. Emergencies

10.10.1.2. Emergency War Order launches

10.10.1.3. AIREVAC (requesting priority)

10.10.1.4. NAVAID flight check aircraft

10.10.1.5. SAAM

10.10.1.6. Controlled Takeoff Times (CTOT), Higher HQ directed missions

10.10.1.7. Full stops

10.10.1.8. Departures

10.10.1.9. Practice approaches

10.10.2. ATC shall apply operational responsibilities IAW FAAO JO 7110.65 and exercise their best judgment when applying traffic priorities.

10.10.3. ATC will afford DVs priority when practical.

10.11. Opposite Direction Takeoffs and Landings

10.11.1. When an arriving aircraft is within 10 flying miles of the RWY, opposite direction departures are not authorized.

10.11.2. When a departing aircraft is released, an opposite direction arrival may proceed no closer than 10 flying miles to the same RWY (opposite direction), until aircraft has departed and is established on a heading that ensures separation.

10.11.3. When an arriving aircraft is within 10 flying miles of the RWY, opposite direction arrivals may proceed no closer than 10 flying miles to the same RWY (opposite direction), until the preceding arrival has landed or executed a missed approach.

10.11.4. TWR will cease VFR operations to the RWY in use when an approved opposite direction arrival reaches 10 flying miles.

10.11.5. When a pilot requests to depart opposite direction, after coordinating with RAPCON, TWR will issue taxiing instructions to the requested RWY and advise RAPCON of the ETD. RAPCON will advise TWR of any anticipated delays. **NOTE:** Opposite direction departures are not authorized for tailhook-equipped aircraft without approval from the SOF. Cables must be reconfigured for tailhook-equipped aircraft.

10.12. Use of Unmanned Aerial Systems (UAS) in the EGUL Flight Restricted Zones (FRZ): Further guidance for UAS procedures on LKH can be found in the 48 FW Installation Defense Plan.

10.12.1. UAS FRZs are depicted at https://nats-uk.ead-it.com/cms-nats/opencms/en/uas-restriction-zones/.

10.12.2. EGUL ATZ Drone Request (Lakenheath Form 27) is a mandatory document for coordination and approval. All EGUL Form 27s shall be sent to 48.OSS.OSAA@us.af.mil.

10.12.3. UAS/Drone operators must obtain approval prior to conducting operations within the EGUL FRZ.

10.12.3.1. The POC and approval authority for all UAS operations within the UAS FRZs is 48 OSS/OSA. Coordination for approval must be requested through all of the following agencies: 48 SFS/S3 and 48 FW/SEF.

10.12.3.2. Once approval is granted the following agencies must be notified prior to the UAS operation: 48 FW/A5, 48 SFS/S3, MOC, 48 FW/PA, 48 FW/SEF, 48 AOF/CC, 48 OSS/OSAR, 48 OSS/OSAT, and 48 FW/CP.

10.13. Civilian Aircraft Operations: Civilian aircraft are not authorized to conduct approaches/landings at EGUL without a Civil Aircraft Landing Permit.

10.14. Weather Dissemination and Coordination Procedures: AMOPS personnel are responsible for disseminating hazardous/severe weather and lightning information via the SCN, IAW DAFMAN 13-204 Volume 2 and LAKI 15-101.

10.15. Snow and Ice Control: Execute all program policies and procedures IAW 48 FW PLAN 32-1002; *Snow and Ice Control Plan*.

10.16. Bird/Wildlife Control

10.16.1. The purpose of the BASH plan is to minimize bird strike hazards to aircraft, and to clarify wing bird strike inspection and reporting procedures.

10.16.2. The authority to declare a BWC lies with the 48 OG/CC, but is delegated to the SOF during wing flying hours or anytime the SOF is in the TWR assisting in the recovery of wing assets. During all other periods, refer to 48 FW PLAN 91-212, *Bird Aircraft Strike Hazard (BASH) Plan*.

10.16.3. BWC and BASH response will be IAW 48 FW PLAN 91-212, *Bird Aircraft Strike Hazard*.

10.17. SOF Operating from TWR

10.17.1. The SOF provides valuable technical assistance to the flying community and ATC, and serves as the 48 OG/CC representative for flying related issues.

10.17.2. SOF/ATC Responsibilities:

10.17.2.1. The SOF shall not perform or direct ATC functions. However, the SOF may restrict wing assigned aircraft from any or all VFR traffic patterns.

10.17.2.2. ATC manages traffic patterns, applies aircraft sequencing/separation standards, determines IFR versus VFR airfield status, opens/closes TWR patterns, and determines the RWY in use.

10.17.2.3. TWR and RAPCON WS/SC are the SOF's primary POC for ATC matters.

10.17.2.4. To promote a safe ATC environment, SOF must comply with ATC facility procedures.

10.17.3. SOF Position Equipment

10.17.3.1. The SOF position equipment includes a preset UHF radio for RAMROD frequency, UHF multi-channel radio, jointly maintained by 21 OWS, 48 OSS/OSW & 48 OSS/OSAM, an automated weather dissemination system, a multi-line phone and a computer connected to the Local Area Network, which can be used to access the EGUL weather SharePoint® page.

10.17.3.2. ATC may request use of the SOF multi-channel radio during equipment outages. Conversely, the SOF may also request use of TWR multi-channel radio/telephones when necessary.

10.17.3.3. The SOF should relay all equipment outages to TWR WS/SC, who will initiate repair actions.

10.17.4. Coordination Procedures

10.17.4.1. To ensure a professional environment, questions and coordination must be accomplished between the SOF and either TWR or RAPCON WS/SC via intercoms or recorded lines as appropriate.

10.17.4.2. Both TWR and RAPCON WS/SC will accommodate requests to the maximum extent possible.

10.17.4.3. TWR WS/SC will inform the SOF of current airfield status, RWY in use, arresting cable status, NAVAID status, STANTA activity, and any other issues that may impact wing flying. The TWR WS/SC will brief the on-coming SOF at the beginning of their assigned shift.

10.17.4.4. Emergencies

10.17.4.4.1. ATC will advise the SOF of a locally assigned emergency aircraft.

10.17.4.4.2. The SOF will advise TWR WS/SC with all available information anytime the SOF declares an emergency or is the first person notified.

10.17.4.4.3. The SOF may request, through TWR/RAPCON WS/SC, that ATC relay information on any ATC assigned frequencies.

10.17.4.4.3.1. ATC will preface SOF requests with *"RAMROD/SOF advises/directs."*

10.17.4.4.3.2. If the SOF deems that the information is too technical, and after receiving approval from the WS/SC, the SOF may communicate directly with an aircraft. When this occurs, advisory instructions must be limited to that essential for flight safety and the prevention of a mishap.

10.17.4.5. Even in the event of an emergency, no SOF may transmit on an ATC frequency without ATC approval.

10.17.4.6. Should TWR/RAPCON need to transmit ATC instructions while aircraft are on

the SOF frequency, the SOF must immediately instruct the aircraft to return to the ATC frequency.

10.17.4.7. The SOF shall advise TWR WS/SC and 48 OSS/OSW of the divert airfield. TWR will relay the data to RAPCON. RAPCON will in turn advise Swanwick Mil ATC.

10.17.4.8. The SOF will advise TWR WS/SC of Pilot Report (PIREP) information, and ATC will relay PIREP information to the SOF.

10.17.4.9. The SOF shall coordinate all RAPCON related requests directly with the RAPCON WS/SC via the direct line.

10.17.4.10. RAPCON WS/SC shall coordinate with the SOF when locally assigned aircraft divert, or whenever it is necessary to direct full stop landings/hold aircraft due to emergency situations.

10.18. Use of Backup Generators

10.18.1. The TACAN, ILS, ASR, ATC radio transmitter site, Airfield Lighting Systems, TWR and RAPCON have generators with auto-start features and will be run during power outages and maintenance checks.

10.18.2. 48 CES/CEOFP personnel will test the auto-start capability of ATC facilities monthly, normally during the first week of the month, and during Preventive Maintenance Inspections times to the max extent possible. 48 CES/CEOFP personnel must always obtain permission from the on-duty ATC WS/SC prior to transferring any ATC facility or NAVAID to/from primary power. The RAPCON WS/SC on-duty will coordinate with 48 OSS/OSW and AMOPS prior to transferring to/from primary power. When the airfield is closed and the facility is placed on backup power, the RAPCON WS/SC on-duty will notify the 48 FW/CP, who will in turn notify the standby 48 OSS/OSW personnel.

10.18.3. 48 CES will pre-coordinate unscheduled transfer of power with 48 CS Operations Center, affected CS facilities, TWR, RAPCON, AMOPS and 48 OSS/OSW.

10.19. Notification of Fire and Crash Rescue Equipment Status

10.19.1. 48 CES/CEF will

10.19.1.1. Notify AMOPS when a major aircraft rescue firefighting vehicle is out of service.

10.19.1.2. Notify AMOPS when major aircraft rescue firefighting vehicles return to service and update firefighting agent capabilities.

10.19.1.2.1. Inform AMOPS what airframe type is at a severe and/or increased risk based on risk decision matrix.

10.19.2. AMOPS will

10.19.2.1. Disseminate the information on firefighting capability to the 48 FW/CP and SOF.

10.19.2.2. Initiate any NOTAM action as required.

10.19.2.3. Notify 48 CES/CEF of large-frame aircraft arrivals, departures, and practice approaches.

10.19.3. 48 FW/CP will notify flying units and wing and/or group commanders of firefighting capability limitation.

10.20. No-Notice Alternate Airfield Procedures

10.20.1. No-notice alternate airfield procedures will be used during wing flying operations when the RWY is closed, or when an alternate airfield is required after locally assigned aircraft have departed without an alternate requirement.

10.20.2. The SOF shall notify RAPCON WS/SC when fuel status reports are required.

10.20.3. RAPCON shall obtain fuel remaining, in time, until the pilot must divert, and sequence arrivals based on their fuel status.

10.20.4. The SOF and RAPCON WS/SC will coordinate necessary diverts of locally assigned aircraft due to airfield conditions or fuel status.

10.21. Practice Diversions: The RAPCON WS/SC will coordinate with TWR prior to approving practice diversions to EGUL. Approval or disapproval will be based on existing or anticipated 48 FW flying. Practice diversions are not authorized during UK quiet hours. Either RAPCON or TWR WS/SC may disapprove a practice divert.

10.22. Exercises and Practice Airfield Attacks

10.22.1. The AOF/CC must be briefed 48 hours in advance of exercises and practice airfield attack scenarios that involve any ATC facilities or the airfield movement area. Minimum information includes:

10.22.1.1. Time of exercise

10.22.1.2. Affected area of the airfield

10.22.1.3. ATC facilities involved and their degree of involvement. **NOTE:** ATC does not participate in air attack/defense notifications or employ early warning procedures.

10.22.2. During exercises, ATC facilities will include alarm conditions on the ATIS and advise aircraft under EGUL control of changes until the ATIS is updated. ATC will broadcast the current alarm condition, EXERCISE, EXERCISE, EXERCISE, RAF LAKENHEATH ALARM (color)/FPCON (code).

10.23. Minimum Communication (MINCOM) Procedures

10.23.1. Weather requirements: Minimum weather requirements for MINCOM procedures are 700-foot ceiling and 3200 meters visibility.

10.23.2. Flight-planning

10.23.2.1. The AOF/CC shall be notified of the intent to exercise MINCOM one week in advance. MINCOM procedures will apply to all wing aircraft and will normally be exercised on Fridays.

10.23.2.2. All MINCOM flight plans will include aircraft tail numbers, parking locations and taxi and departure times.

10.23.2.3. MINCOM flights will be scheduled with at least 10 minutes between flights.

10.23.2.4. Changes to takeoff times will be passed to AMOPS who will relay to TWR and RAPCON.

10.23.3. Taxi procedures

10.23.3.1. MINCOM aircraft will monitor the ATIS prior to taxi and start taxi within 5 minutes of their planned taxi time.

10.23.3.2. If any MINCOM aircraft are unable to taxi within 5 minutes of planned times, they will coordinate a new time with the SOF who will relay this information to TWR

WS/SC.

10.23.3.3. Aircraft experiencing post-taxi maintenance problems will use UHF in-the- clear communications with the TWR ground controller.

10.23.3.4. If some or all aircraft in a flight are unable to make their flight-planned takeoff time +/- 5 minutes they must pass their requests for a departure time change to TWR in- the-clear. Expect to hold for MINCOM departures.

10.23.3.5. Aircraft will not back-taxi during MINCOM procedures.

10.23.4. Departure procedures

10.23.4.1. Once a flight is ready for departure, pilot shall switch to TWR, taxi up to and hold short of the RWY and squawk 0460.

10.23.4.2. Based upon flight-planned takeoff time RAPCON will be coordinating for departure with Swanwick Mil ATC.

10.23.4.3. TWR will clear the flight for takeoff by displaying a steady green light.

10.23.4.4. Once cleared for takeoff, flights will automatically change to departure frequency, give a rolling call, and takeoff using 20 second spacing between aircraft.

10.23.4.5. Once airborne, flights will resume normal communications.

10.23.4.6. The standard DP is the Local Climb-out (RWY 23) or TIDPU3 (RWY 05).

10.23.4.7. Departure control will assign new squawk before transferring aircraft to Swanwick Mil ATC.

10.23.5. Safety considerations

10.23.5.1. The SOF or TWR/RAPCON WS/SC may discontinue MINCOM procedures at any time based on safety.

10.23.5.2. Aborts on the RWY will automatically cease MINCOM procedures for all aircraft.

10.23.5.3. MINCOM procedures will be terminated once aircraft begin to recover.

10.23.5.4. During wing surges, MINCOM procedures will only be in effect for the first launches of the day.

10.24. Fighter Data Link (FDL)/ Link-16 Usage

10.24.1. Aircrew will use Link-16 TNs as assigned by 48 OSS/OSO. These will be assigned via PDF emailed to each squadron along with the applicable usage times.

10.24.2. Additional data as well as FDL avoid areas are published in the 48 FW Fighter Data Link (LINK 16) SOP which can be accessed on the 48 OSS/OSK SharePoint® site.

10.25. Royal Flights

10.25.1. Upon receipt of a Royal flight plan, AMOPS will notify RAPCON via Email, and attach Royal Flight plan to SOF package.

10.25.2. ATC will reroute aircraft as necessary. Aircrew should expect possible delays.

10.26. Gun Procedures: Except for planned gun employment missions, F-15E guns will be safe/cold. All fighters refer to AFI 11-214 and MDSv3 for gun training procedures. Avoid using the term "hot gun" outside of the 48 FW, including MLD. A gun that is capable of firing should be referred to as a "loaded gun."

10.27. Explosive Detection K-9 Teams

10.27.1. If an ATC facility receives a request from a US civil or military aircraft for the location of the nearest explosive detection K-9 team, advise that a K-9 explosive detection team is located at EGUL and request the pilot's intentions.

10.27.2. ATC will advise 48 FW/CP and CP will notify 48 SFS ECC of the situation.

10.27.3. If an ATC facility receives a request from a foreign civil or military aircraft, coordinate the request with 48 FW/CP. 48 FW/CP will contact the 48 SFS ECC who will specify the nearest available K-9 explosive detection team. 48 SFS ECC will pass information to 48 FW/CP who will coordinate with the 48 FW/CC for approval for the use of the EGUL K-9 explosive detection team and return that information to ATC.

10.28. Crash Grid Map Reference: Crash grid map coordinates will be made using the numeric coordinate system (grid numbers for left-to-right and grid numbers bottom-to-top).

10.29. Taking of Photographs: Guidance concerning taking airfield photographs at EGUL is published in 48 FW 31-101, *Integrated Defense Plan*.

10.30. Logistics Support Aircraft (LSA)

10.30.1. The OPR for LSA operations will notify Airfield Operations 48 to 72 hours prior to aircraft arrival to coordinate aircraft taxi route and airfield restrictions.

10.30.2. AMOPS will publish a NOTAM to restrict aircraft from transitioning or overflying Taxitrak Sierra between TWY Victor and Yankee Loop at least 24 hours prior to operations. Note: Control Tower will not authorize tows along Taxitrak Sierra between TWY Victor and Yankee Loop until normal operations are resumed.

10.30.3. RAPCON will advise the Control Tower and Airfield Management when LSA is 30 minutes out and again 10 minutes out.

10.30.4. During LSA operations, Security Forces will conduct a security sweep to sanitize applicable airfield areas to include the runway, designated taxi-route, and TWY Victor. The Control Tower will not authorize access to these areas once the sweep commences.

10.30.5. Security Forces will advise the Control Tower when normal operations may be resumed on the Runway, taxiways, taxitrak, and Victor ramp. The Control Tower will notify Airfield Management.

10.31. PAS Preventive Maintenance Inspection (PMI)

10.30.1. The OPR for PMI operations will notify Airfield Operations 48 to 72 hours prior to maintenance to coordinate aircraft taxi route and airfield restrictions.

10.30.2. AMOPS will publish a NOTAM to restrict aircraft from transitioning on the taxiways or overflying, as required by Security Forces and Munitions.

10.30.5. Munitions will advise Airfield Operations when normal operations may be resumed.

10.32. Alternate Tower Procedures

10.31.1. The Alternate Control Tower program is designed to provide the FW with an alternate means of recovering aircraft in the event of Tower evacuation. The Tower's alternate site is located on the hill north of taxiway November between the approach end of

RWY 05 and taxiway Whiskey. While transiting from the primary to alternate tower, runway operations will be suspended and the RAPCON will issue weather and airfield information to inbound aircraft. The SOF will relocate with the WS/SC to the alternate tower as a primary location, and their operations desk as an alternate.

10.31.2. If alternate tower procedures are approved for training purposes, Tower will remain manned to provide aerodrome oversight, backup coordination capabilities, and emergency response capabilities.

10.31.2.1. During an emergency situation, if the Tower is manned, control will immediately revert to Tower until emergency termination. The RAPCON will keep emergency aircraft on CH 13 and the Tower will relay landing clearance.

10.31.2.2. If the Tower is unmanned during real-world Alternate Tower Operations, the primary methods of relaying emergency information will be the Crash Net and the Ramp Net. Airfield Management will activate the SCN. The Watch Supervisor's phone, located in the Tower's evacuation kit, will be used as a means of secondary communication.

10.31.3. Airfield lighting will be set prior to evacuating the tower to the lowest visibility and/or ceiling forecasted and the Tower may request 48 CES/CEF to report to the vault for standby in the event they need to adjust airfield lighting intensity.

10.31.4. Automated Terminal Information System (ATIS) information will not be updated during alternate tower operations. All wind data will be issued as "ESTIMATE" RAPCON will issue current weather to inbound aircraft and to the alternate tower hourly, or upon receipt of new weather information.

10.31.5. Barrier configuration will remain in standard configuration for the runway in use during alternate tower operations. RSRS is authorized provided suitable distance remaining markers can be ascertained and at the Tower's discretion.

10.31.6. During inclement weather (IFR), activation of the alternate tower may not be suitable due to decreased visibility, leading to a reduction of situational awareness. The Tower WS/SC will coordinate with the SOF on whether alternate tower procedures will be activated, or aircraft will be instructed to divert. The SOF is the final authority on this decision and will collaborate with the OG/CC (or their delegated officials) and the WS/SC to make the appropriate decision based on the conditions.

10.31.7. RAPCON will provide 5 miles of separation between flights and will inbound aircraft at 15 flying miles to the airfield. Aircraft will recover via initial or straight in approach to a full-stop or as coordinated for training / improved procedural 'proof of concept' operations. All aircraft will recover via the same type of approach.

Chapter 11

RADAR OUT OF SERVICE OPERATIONS

11.1. Purpose. During EGUL RADAR outages, RAPCON is prohibited by the UK Civil Aviation Authority from providing any service other than BS within Class G airspace and cannot give general airspace activity or any other information likely to affect safety of flight. As a result, during RADAR outages, there is a high likelihood for aircraft diversions if the aircraft are unable to hold until the RADAR returns to service or RTB under VFR conditions.

11.2. Aircrew Responsibilities

11.2.1. There will be an increased level of risk when conducting local flying operations if RAPCON loses its RADAR. During an outage, aircraft would only be able to conduct a recovery into EGUL or EGUN with the assumption that they are responsible for:

11.2.1.1. Sequencing amongst all other formations and aircraft internal to each formation.

11.2.1.2. Deconfliction from all other traffic, specifically when limited or no service is provided by Swanwick Mil ATC.

11.3. RADAR Out Procedures for 48 FW Aircraft

11.3.1. Due to UK regulations, USAF radar controllers are unable to provide non-radar services. In the event of full RADAR failure at EGUL (all 3 feeds), the following guidelines are in place for all 48 FW aircraft:

11.3.1.1. Departures will not be authorized unless approved by the 48 OG/CC or designated representative. **NOTE:** Considerations such as weather, aircrew experience, real world operations, etc. will be taken into account prior to a decision.

11.3.1.1.1. If the 48 OG/CC approves departures, aircrew will maintain VFR until Swanwick Mil ATC can provide TS/DS.

11.3.1.2. Initial actions for airborne aircraft are to confirm recovery weather, field status, and 48 FW alternate.

11.3.1.3. Aircrew can expect that RAPCON will not provide any type of service other than Basic service.

11.3.1.4. If weather is >3,300 feet and 5,000 meters visibility and able to safely execute a descent to VMC for a VFR recovery, the aircraft should coordinate with Swanwick Mil ATC for a descent to Swanwick's Area Safe Altitude (3,300 feet). Once VMC, anticipate a frequency change to EGUL Tower. **NOTE:** MSA within 25NM of EGUL is: 2,400 feet.

11.3.1.4.1. On check-in with TWR, flight lead will report call sign, # in flight, position in Bearing (BRG)/DME or VFR reporting point if location is coincidental, and altitude in relation to the field using Lakenheath Altimeter (e.g. "Tower, Eagle 01, flight of two, checking-in, Point Charlie, 3,000 feet, field in sight"). Aircraft will report when reaching local visual reporting points.

11.3.1.5. If weather is <3,300 feet or <5,000 meters visibility, hold until the RADAR has returned to service and comply with ATC instructions. If no RADAR service becomes available, divert to alternate or VFR divert field NLT reaching alternate/VFR divert fuel.

Aircraft will contact Swanwick Mil ATC to coordinate for their emergency divert. **NOTE:** The SOF will designate an alternate other than MLD since they are affected as well.

11.3.1.6. If the 48 OG/CC approves IMC recoveries (e.g. in support of contingency operations or an emergency):

11.3.1.6.1. Coordinate with Swanwick Mil ATC for sequencing and anticipate a frequency change to TWR when commencing the approach.

11.3.1.6.2. No approach clearance will be given by RAPCON or Swanwick Mil ATC nor will they provide TS/DS below 3,300 feet.

11.3.1.6.3. Aircrew are responsible for their own navigation to the IAF during the recovery.

11.3.1.6.4. Upon check-in with TWR, aircraft will report their call sign, position in BRG/DME and altitude at three mandatory reporting points: IAF, 10 NM, and the FAF.

11.3.1.6.5. Aircrew are responsible for clearing their flight paths on the approach.

11.3.1.6.6. If the aircraft has to execute a missed approach, they will fly the published missed approach, free call Swanwick Mil ATC and coordinate to either reattempt the approach or divert as appropriate.

11.3.1.7. All aircraft will remain clear of all other MATZ and Controlled Airspace.

11.3.1.7.1. Swanwick Mil ATC can provide TS/DS Service down to 3,300 feet and BS below. Swanwick Mil ATC will not clear aircraft for an approach. RAF Marham Approach Control may be available to descend aircraft to 1,800 feet assuming they are open and task load permitting.

11.3.2. RAPCON will

11.3.2.1. Direct deactivation of STANTA in the event of a RADAR outage.

11.3.2.2. Instruct all aircraft on frequency to contact the appropriate agency based on tower pattern status.

11.3.2.3. Request Swanwick Mil ATC relay the new alternate.

11.3.2.4. Notify Swanwick Mil ATC that EGUN and EGUL are “Official Business Only”.

11.3.2.5. Coordinate with Tower and Swanwick Mil ATC to ensure arrival process is expedited.

11.3.3. SOF will

11.3.3.1. Attempt to notify all airborne aircraft of the RADAR outage.

11.3.3.2. Declare a VFR divert if the forecasted weather (BKN or OVC) is between 2,000 feet and 3,300 feet. Notify the new Alternate Airfield via any means possible to include requesting message relay via RAPCON, Swanwick Mil ATC, D&D Cell, Range Controllers, RTO, BOSS-MIDS Free Text and Practice Divert ATC agencies.

11.3.3.3. Designate an alternate other than MLD.

ARTHAUD.JACK.RYAN.1233678348
Digitally signed by ARTHAUD.JACK.RYAN.1233678348
Date: 2025.11.06 13:53:59 Z

JACK R. ARTHAUD
Brigadier General, USAF
Commander

Attachment 1

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Abbreviations and Acronyms

A/A—Air-to-Air
A/G—Air-to-Ground
AFM—Airfield Manager
AFI—Air Force Instruction
AFPD—Air Force Policy Directive
AFTO—Air Force Technical Order
AGE—Aerospace Ground Equipment
AGL—Above Ground Level
AIP—Aeronautical Information Publication
AIREVAC—Air Evacuation
AMOPS—Airfield Management Operations
AMXS—Aircraft Maintenance Squadron
AOB—Airfield Operations Board
AOF/CC—Airfield Operations Flight Commander
ASR—Airport Surveillance Radar
ATC—Air Traffic Control
ATD—Actual Time of Departure
ATIS—Automatic Terminal Information Service
ATS—Air Traffic Service
ATZ—Air Traffic Zone
AWACS—Airborne Warning and Control System
AWR—Air Weapons Range
BAMGIS—Bird Avoidance Model Geographic Information System
BAK—Barrier Arresting Kit
BASH—Bird Aircraft Strike Hazard
BRG—Bearing
BS—Basic Service
BWC—Bird Watch Condition
C2IMERA—Command and Control Incident Management Emergency Response Application
CADS—Centralized Aviation Data Service
CANP—Civil Aviation Notification Procedure
CAP—Civil Aviation Authority Publication

CES—Civil Engineering Squadron
CES/CC—Civil Engineering Squadron Commander
CES/CEF—Civil Engineering Squadron Fire Department
CES/CEOFP—Civil Engineering Squadron Power Production
CMA—Controlled Movement Area
CMATZ—Combined Military Aerodrome Traffic Zone
CMBT PACS—Combat Programmable Armament Control Set
CS—Communications Squadron
CSEL—Combat Survivor Evader Locator
CTOT—Calculated Takeoff Time
D&D—Distress and Diversion
DASR—Digital Airport Surveillance Radar
DME—Distance Measuring Equipment
DO—Director of Operations
DoD—Department of Defense
DP—Departure Procedure
DS—Deconfliction Service
DV—Distinguished Visitor
EGUL—RAF Lakenheath Airport Identifier
ELT—Emergency Locator Transmitter
EOD—Explosive Ordnance Disposal
EOR—End of Runway
ER—Emergency Room (hospital)
ERF—Emergency Recovery Frequency
ETA—Estimated Time of Arrival
ETD—Estimated Time of Departure
ETE—Estimated Time Enroute
EOT—End of Tour
EUCOM—United States European Command
FAA—Federal Aviation Administration
FAAO—Federal Aviation Administration Order
FAF—Final Approach Fix
FCF—Functional Check Flight
FDL—Fighter Data Link
FIR—Flight Information Region
FGS—Fighter Generation Squadron
FL—Flight Level
FLIP—Flight Information Publication
FMU—Flow Management Unit
FOD—Foreign Object Damage
FPCON—Force Protection Condition
FRZ—Flight Restricted Zones
FS/CC—Fighter Squadron Commander
FW—Fighter Wing
FW/CC—Fighter Wing Commander
FW/CCP—Fighter Wing Protocol

FW/CP—Fighter Wing Command Post
FW/CV—Fighter Wing Vice Commander
FW/CVN—Fighter Wing Advanced Programs
FW/SEF—Wing Flight Safety
GCI—Ground Control Intercept
GPS—Global Positioning System
HM—Her Majesty
HTI—High Tactical Initial
IAF—Initial Approach Fix
IAW—in accordance with
IC—Incident Commander
ICAO—International Civil Aviation Organization
IFG—In-Flight Guide
IFR—Instrument Flight Rules
ILS—Instrument Landing System
IMC—Instrument Meteorological Conditions
INS—Inertial Navigation System
JO—Joint Order
JTAC—Joint Terminal Attack Controller
KIAS—Knots Indicated Airspeed
LAKI—Lakenheath Instruction
LFA—Low Fly Area
LFE—Large Force Exercise
LKH—RAF Lakenheath
LOA—Letter of Agreement
LOP—Letter of Procedure
MAA—Military Aviation Authority
MARSA—Military Authority Assumes Responsibility for Separation of Aircraft
MAJCOM—Major Command
MDA—Managed Danger Areas
MDS—Mission-Design Series
MINCOM—Minimum Communication
MLD—RAF Mildenhall
MOC—Maintenance Operations Center
MoD—Ministry of Defense
MOG—Maximum on Ground
MPH—Miles per Hour
MSL—Mean Sea Level
MTRA—Military Temporary Reserve Airspace
MVA—Minimum Vectoring Altitude
MXG/CC—Maintenance Group Commander
MXG/MXOS—Maintenance Operations, Plans, Scheduling, and Documentation
NAMO—NCOIC, Airfield Management Operations
NATO—North Atlantic Treaty Organization
NLT—Not Later Than
NM—Nautical Mile

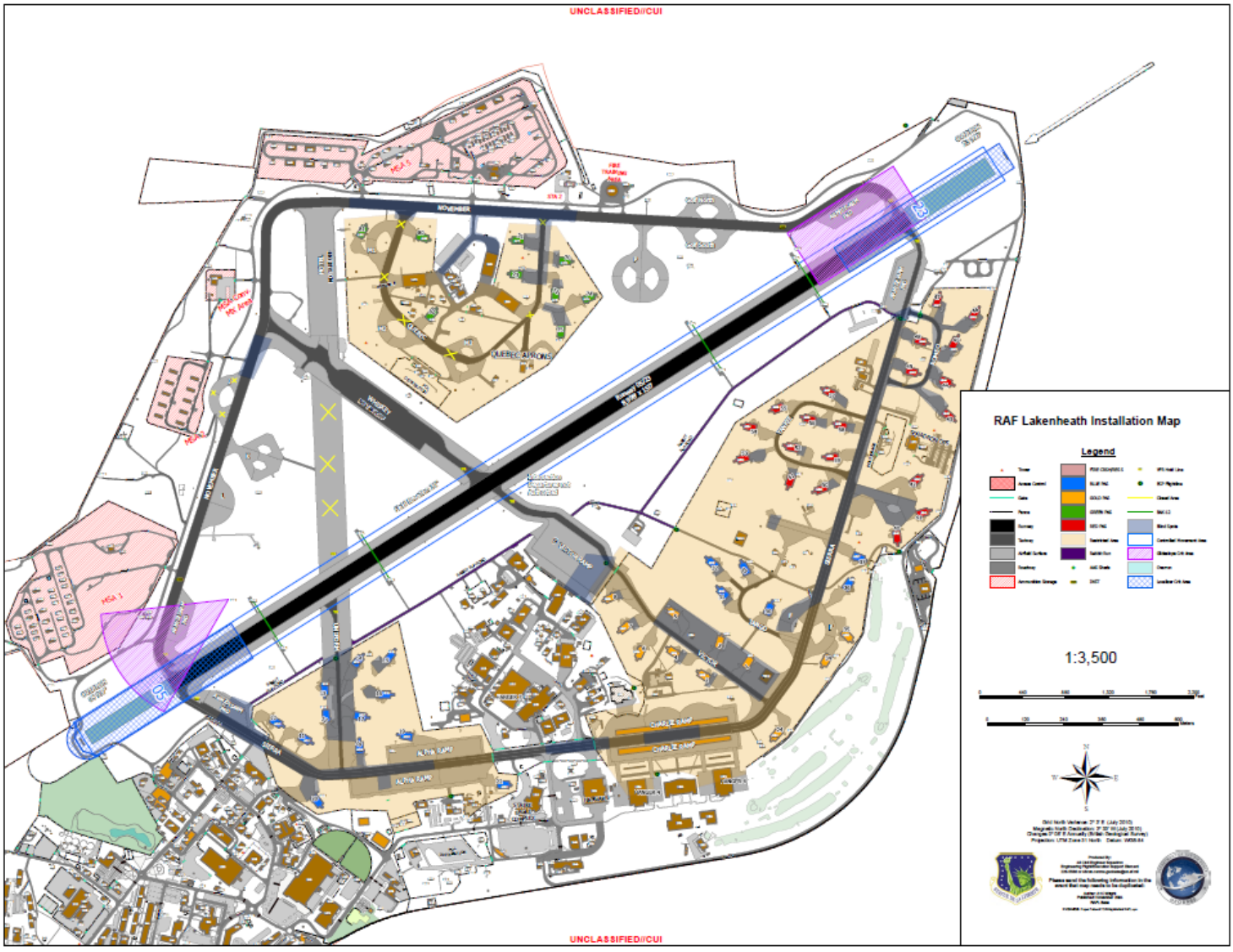
NAVAID—-Navigational Aid
NCOIC—Noncommissioned Officer in Charge
NOTAM—Notice to Airmen
OC—Officer Commanding
OG/CC—Operations Group Commander
OG/OGV—Operations Group Standardization and Evaluation
OPR—Office of Primary Responsibility
Ops Sup—Squadron Operations Supervisor
ORM—Operational Risk Management
OSS/CC—Operations Support Squadron Commander
OSS/OSA—Operations Support Squadron Airfield Operations Flight
OSS/OSAA—Operations Support Squadron Airfield Management
OSS/OSK—Operations Support Squadron Weapons and Tactics
OSS/OSAR—Operations Support Squadron RAPCON
OSS/OSAT—Operations Support Squadron Tower
OSS/OSO—Operations Support Squadron Current Operations
OSS/OSOS—FW Scheduling
OSS/OSW—Operations Support Squadron Weather Flight
OWS—Operational Weather Squadron
PAR—Precision Approach Radar
PAS—Protective Aircraft Shelter
PCAS—Primary Crash Alarm System
PEX—PATRIOT EXCALIBUR
PFO—Precautionary Flameout
PFS—Porous Friction Surface
PINS—Pipeline Inspection Notification System
PIREP—Pilot Weather Reports
POC—Point of Contact
PPR—Prior Permission Required
PTD—Pilot-to-Dispatch
RA—Regulatory Article
RAF—Royal Air Force
RAF CC—Royal Airforce Commander
RAPCON—RAF Lakenheath Radar Approach Control
RAWS—Radar, Airfield and Weather Systems
RCR—Runway Condition Reading
RQS—Rescue Squadron
RSRS—Reduced Same Runway Separation
RSC—Runway Surface Condition
RTB—Return to Base
RTO—Range Training Officer
RWY—Runway
SAAM—Special Assignment Airlift Mission
SARM—Squadron Aviation Resource Management
SC—Senior Controller
SCN—Secondary Crash Net

SFL—Sequenced Flashing Lights
SFS ECC—Security Forces Emergency Communications Center
SFO—Simulated Flame Out
SFS—Security Forces Squadron
SIPRNET—Secret Internet Protocol Router Network
SOF—Supervisor of Flying
SOP—Standard Operating Procedures
SQ/CC—Squadron Commander
STANTA—Stanford Training Area/Danger Area 208
STOVL—Short Takeoff and Vertical Landing
SUPER—Maintenance Superintendent
SVFR—Special Visual Flight Rules
Swanwick Mil—Swanwick Air Traffic Control Center Military
TA—Transient Alert
TACAN—Tactical Air Navigation
TCAS—Traffic Alert and Collision Avoidance System
TDY—Temporary Duty
TOLD—Takeoff and Landing Data
TRNG PACS—Training Programmable Armament Control Set
TS—Traffic Service
TWR—RAF Lakenheath Control Tower
TWY—Taxiway
UAS—Unmanned Aerial System
UHF—Ultra-High Frequency
UK—United Kingdom

Attachment 2

AIRFIELD DIAGRAM

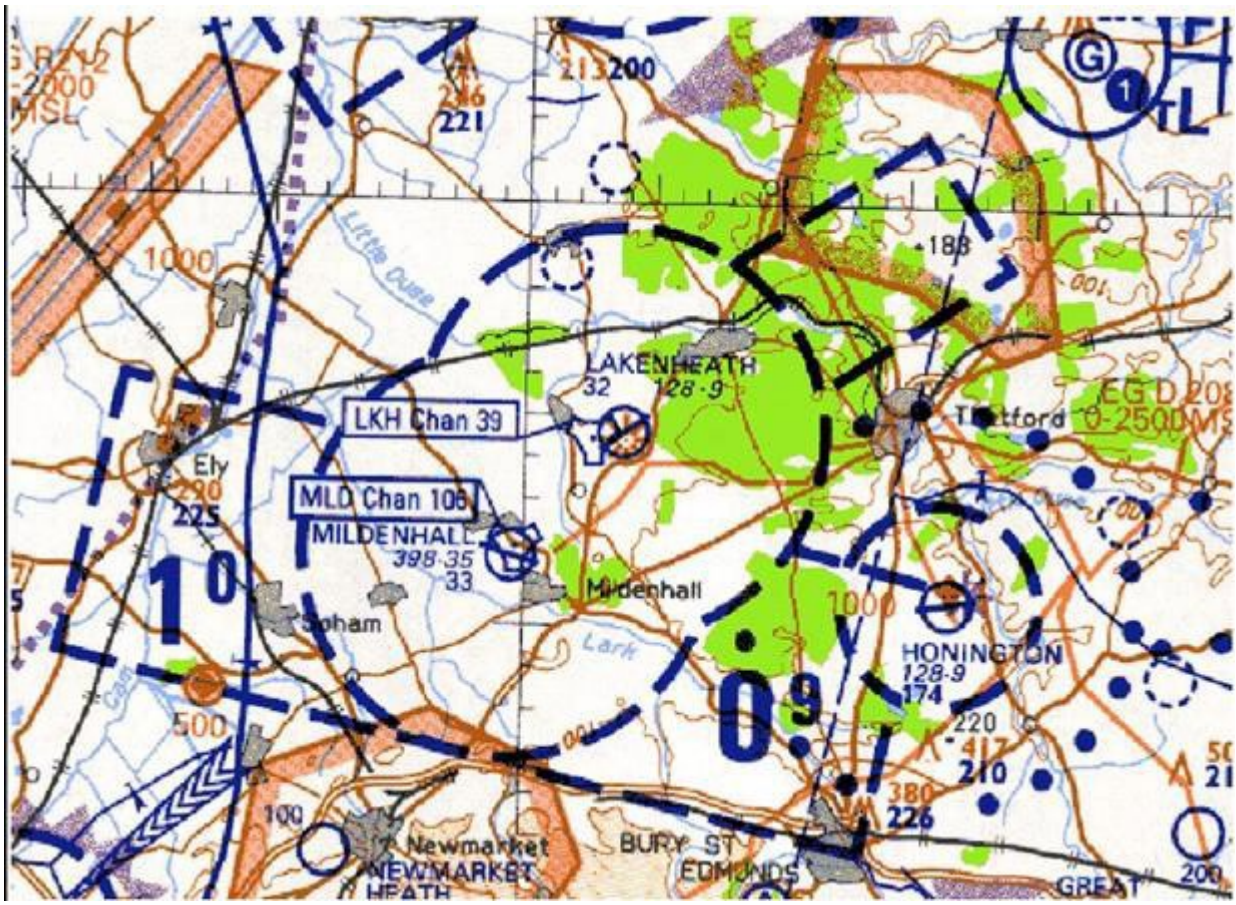
Figure A2.1. Airfield Diagram.



Attachment 3

COMBINED MILITARY AERODROME TRAFFIC ZONE (CMATZ)

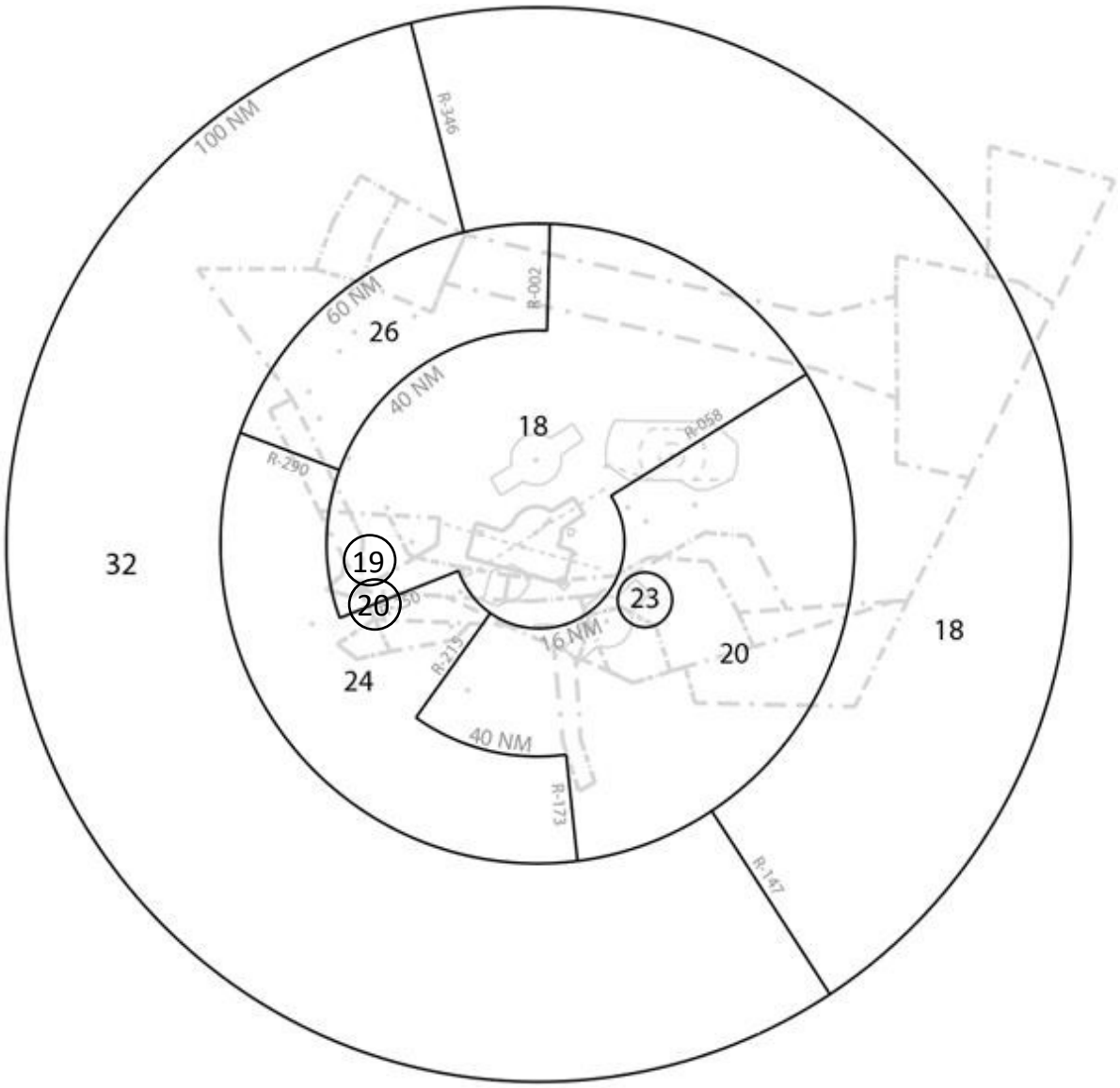
Figure A3.1. CMATZ.



Attachment 4

MINIMUM VECTORING ALTITUDE (MVA) CHART

Figure A4.1. MVA Chart.



Attachment 5

STEREO FLIGHT PLANS

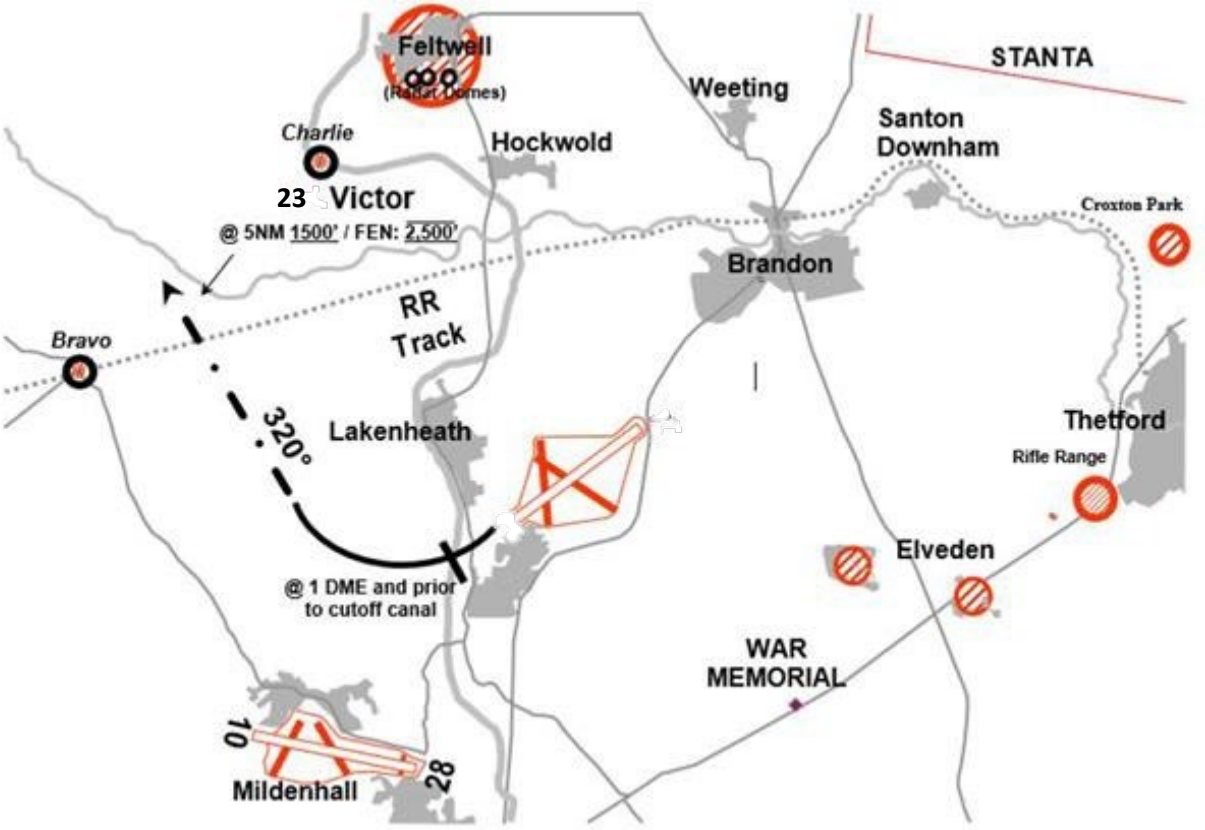
Table A5.1. Stereo Flight Plans.

FLIGHT PLAN	TYPE	ALT	ROUTING
LAKE ATA	IFR	FL170	VFR in LAK ATA - IAF
WASH ATA	IFR	FL170	VFR in WASH ATA - IAF
EAST ANGLIA	IFR	FL230	VFR in EAST ANGLIA MTRA - IAF
323 ALPHA	IFR	FL230	N53-00 E000-30-BAVDO-VFR in D323A-IAF
323 BRAVO	IFR	FL230	N53-00 E000-30-BAVDO-VFR in D323B-IAF
323 DELTA	IFR	FL230	N53-00 E000-30-VFR in D323D-IAF
323 ECHO	IFR	FL230	N53-13 E002-00-VFR in D323E-IAF
HOLBEACH (or) DONNA NOOK	IFR	FL065	VFR IN WASH RANGES – TERMINATION POINT LKH 325/36 (FOSDYKE BRIDGE)
VFR HI	VFR	FL130	VFR AREAS AS FILED - IAF
VFR LOW	VFR	013 MSL	LOW FLY AS BOOKED - IAF
VALE	IFR	FL260	GXE-VFR IN VALE AIAA-IAF
LEEMING	IFR	FL260	GXE-VFR LOW FLY AS BOOKED-IAF
NEWCASTLE	IFR	FL260	NEW - VFR LOW FLY AS BOOKED - IAF
LEUCHARS	IFR	FL310	LUK - VFR LOW FLY AS BOOKED - IAF
SCOTTISH	IFR	FL310	LUK - KSS - VFR LOW FLY AS BOOKED – LUK - LEE - IAF
WALES NORTH	IFR	FL140	LICHFIELD RC - VFR LOW FLY AS BOOKED - LICHFIELD RC - IAF
WALES HIGH	IFR	FL310	SAPCO - NITON - VFR LOW FLY AS BOOKED - NITON - SAPCO - IAF
WALES SOUTH	IFR	FL100	DAVENTRY RC - VFR LOW FLY AS BOOKED - DAVENTRY RC - IAF
LANDS END	IFR	FL240	WESTCOTT RC - GVN - SWINDON RC – VFR LOW FLY AS BOOKED – SWINDON RC –GVN - WESTCOTT RC – IAF
LOCH	IFR	FL310	LUK - KSS - N57-00 W005-00 - VFR LOW FLY AS BOOKED - LUK - LEE - IAF
HRA	IFR	FL310	MAM - LEE - LUK - NEVIS - VFR BEN 132052 - EGR 610 - KSS 010015 - LUK - LEE - IAF
DUTCH	IFR	FL290	MC9 - DLY DUTCH TRA 3A/6A - MC9 - IAF
VLIEHORS	IFR	FL230	NAVPI - MC2 - N52-54 E005-17 - DELAY - EHR4 - N53-22 E004-55 - IAF
FCF	IFR	FL100 B200	LKH 315/35 - DELAY EAST ANGLIA MTRA - LKH 015R – VFR IN D323C - IAF

Attachment 6

FIGHTER DEPARTURES

Figure A6.1. Fighter Departures.



23 VICTOR Min WX is 2500' (Fen: 3000') / 8 km

RWY 23 ONLY: Fly runway heading. At 1 DME and prior to the cutoff canal, turn right heading 320 degrees. Climb and maintain 2000' MSL. At 5 DME aircraft must be at or above 1500' MSL. **(2500' MSL Fen Restricted Pattern)**

LOCAL CLIMB-OUT PROCEDURES: Maintain 1000' MSL until departure end, then:

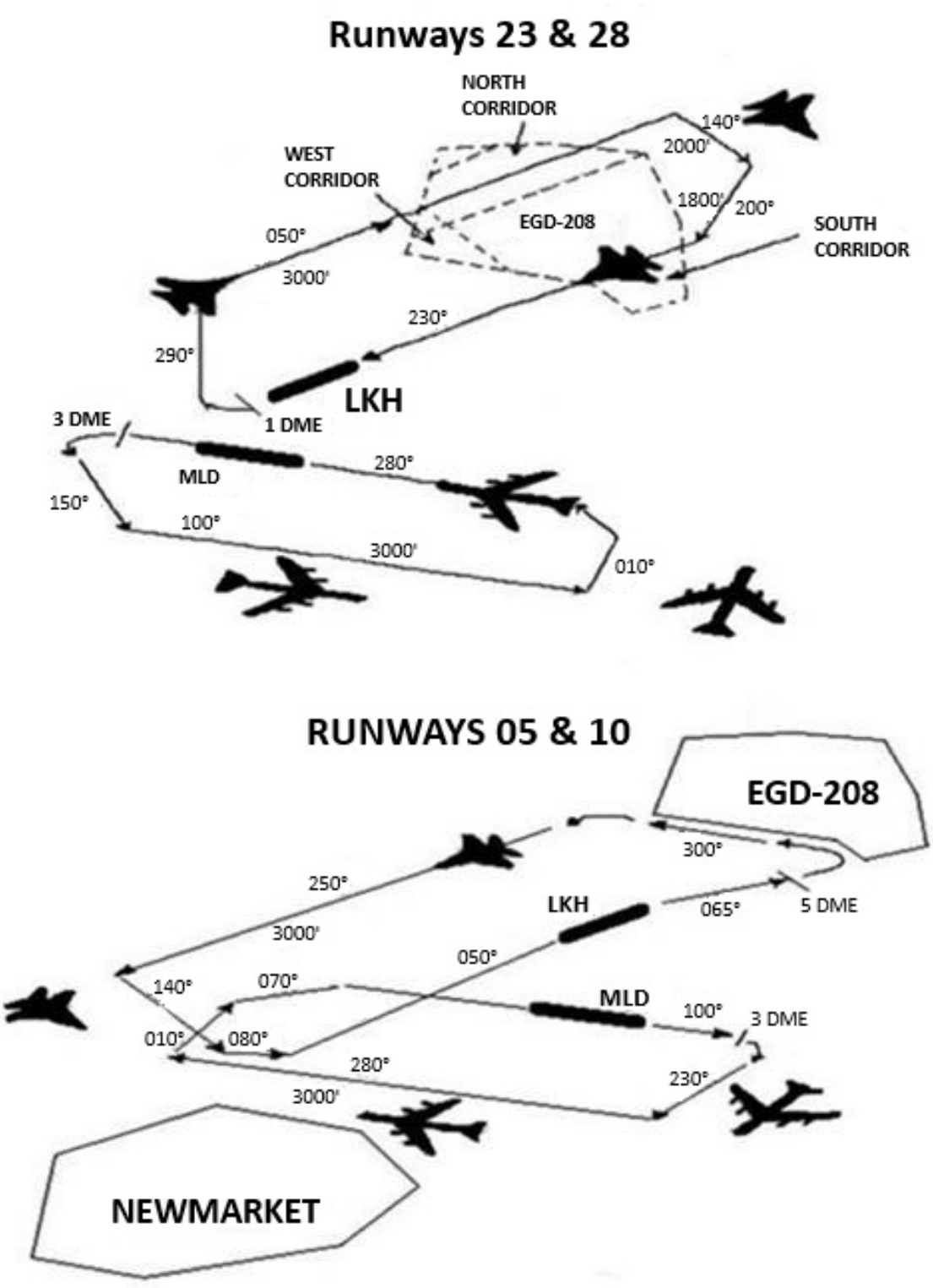
RWY 23: At 1 DME turn right 320 degrees. Climb to FL040.

RWY 05: At 1 DME turn right 075 degrees, at 4 DME turn left 310 degrees. Climb to FL040.

Attachment 7

RADAR TRAFFIC PATTERNS

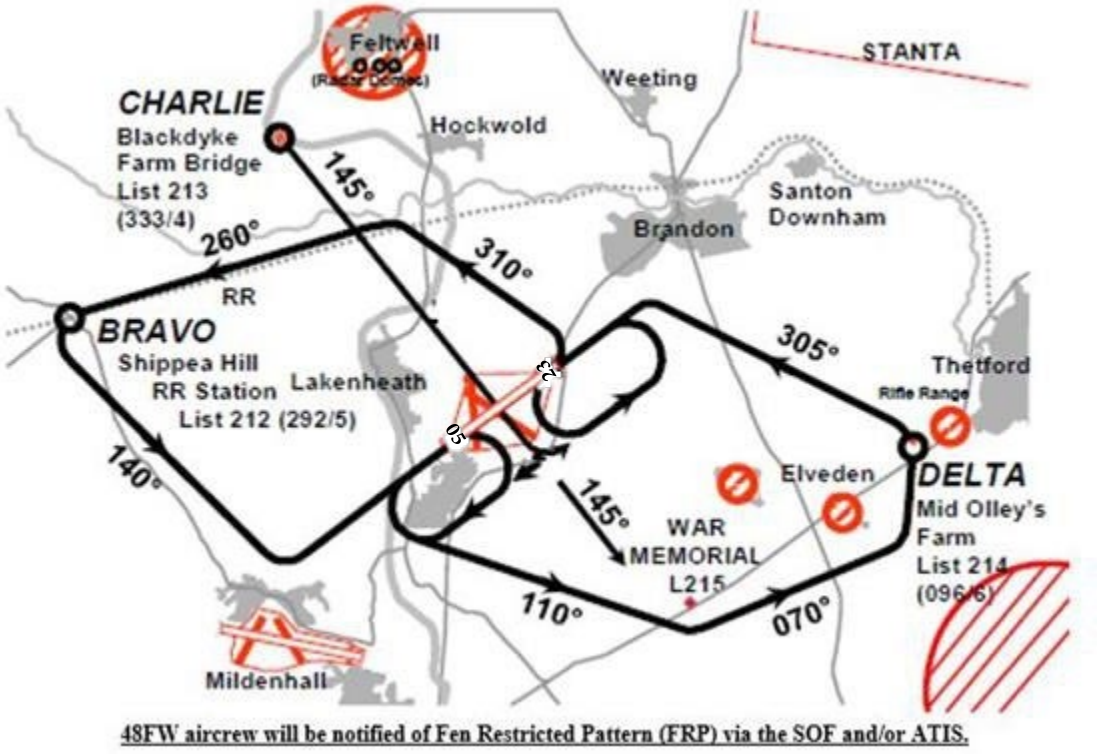
Figure A7.1. RADAR Traffic Patterns.



Attachment 8

FIGHTER ARRIVALS

Figure A8.1. Fighter Arrivals part _1 of 2.



48FW aircrew will be notified of Fen Restricted Pattern (FRP) via the SOF and/or ATIS.

Figure A8.2. Fighter Arrivals_part 2 of 2.

ALITUDES: RAPCON will bring fighters in at 2500' (3500' FRP @ PT CHARLIE). Pilot may descend to 2000' when inside the entry PT, past the fen (PT CHARLIE entries with FRP in effect), VFR, and able to clear own flight path. Descend to 1500' at INITIAL or DOWNWIND.

BRAVO: Request BRAVO to INITIAL with ATC. Rpt PT BRAVO and proceed direct 3 NM INITIAL. Avoid EGUN ATZ.

DELTA: Request DELTA to INITIAL with ATC. Rpt PT DELTA and proceed direct 3 NM INITIAL.

INITIAL: Rpt 3nm INITIAL. Do not overfly Brandon < 2500ft OR AVOID >0.5 NM

CHARLIE TO DOWNWIND ENTRY: (single-ship, 2-ship, or 2+2 only spread) Rpt PT CHARLIE with TWR. Do not overfly Lakenheath Village. Proceed to downwind. If denied, maintain altitude and re-enter at PT DELTA.

VFR STRAIGHT-IN PROCEDURES: If cleared from a VFR entry point by TWR, descend to 1000' MSL. Report a 3 NM final with intentions. Fighters may also be vectored or instructed to fly own navigation to intercept the extended centerline.

HIGH TAC INITIAL: 4 ship (2 + 2) authorized. Wingmen offset 1.5 NM north. FL050 –FL080. Report "field in sight" with ATC, expect transfer to TWR NLT 8 NM.

RE-ENTRY: After low approach, remain at or below 1000' until clear of overhead pattern. Climb to 2000' (3000' FRP for re-entries to PT BRAVO) and fly pattern as depicted. Report re-entry point. (FRP—Descend to 2000' at Bravo)

NOTES: Standard pattern airspeed: 300 KCAS

WX REQ'D: High Tac Initial: 500' above requested altitude / 5 km

BRAVO/DELTA VFR pattern entry: 3000'/5km

CHARLIE VFR pattern entry: 3000' (4000' FRP) / 8 km

Attachment 9

PFO AIRSPACE

Figure A9.1. PFO Airspace.

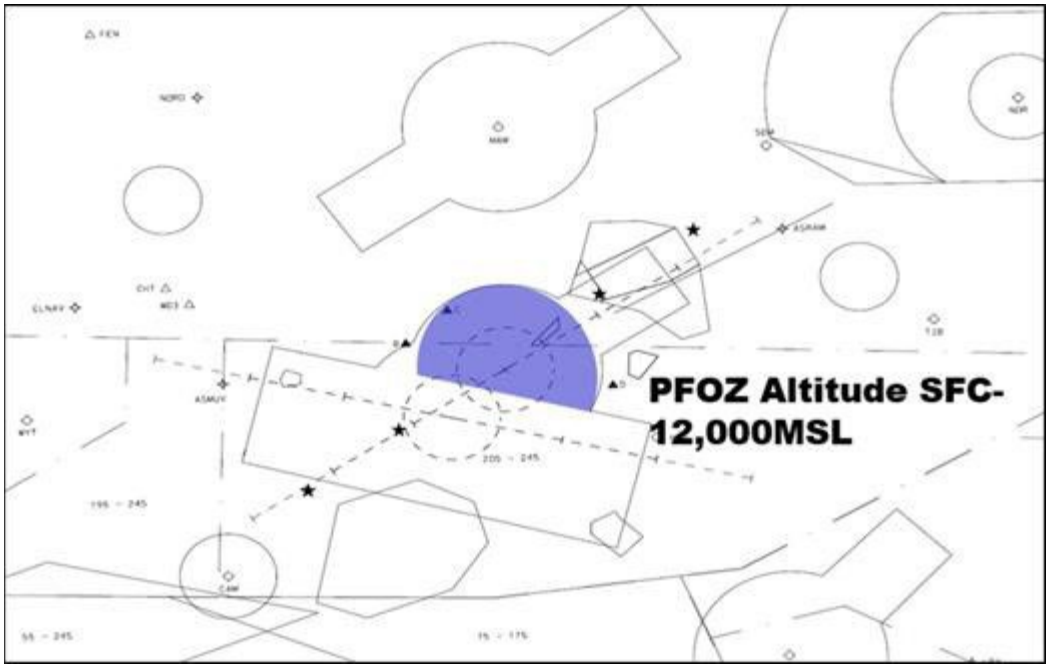


Figure A9.2. RWY 23 PFO Pattern.

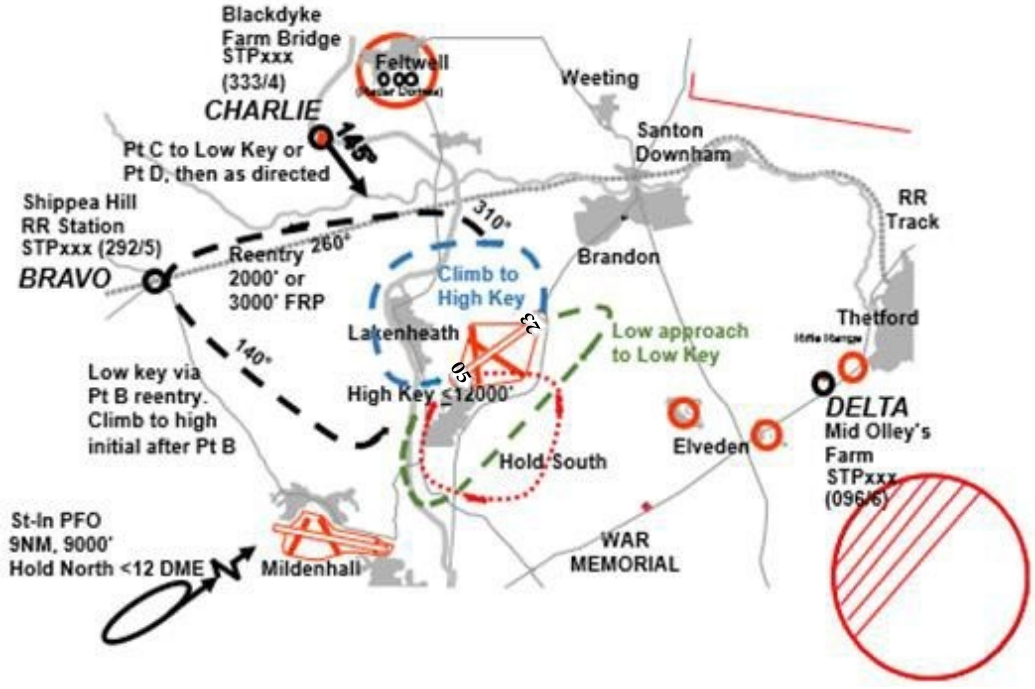
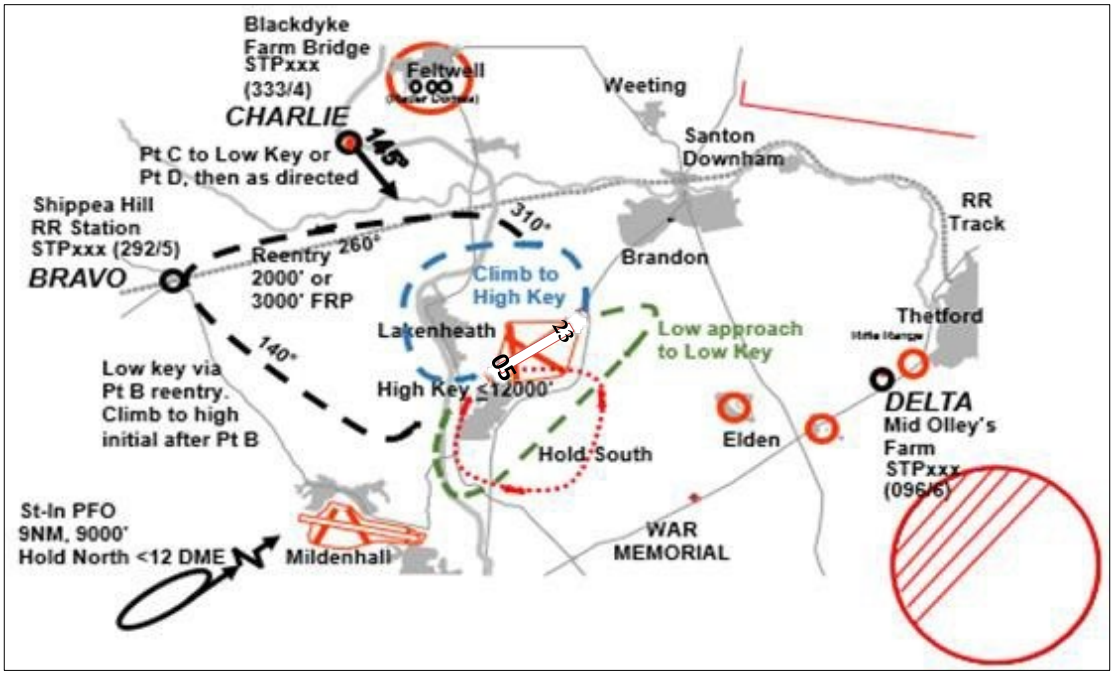


Figure A9.3. RWY 05 PFO Pattern.



Attachment 10

SURGE SECTORS

Figure A10.1. East Anglia Surge Sectors.

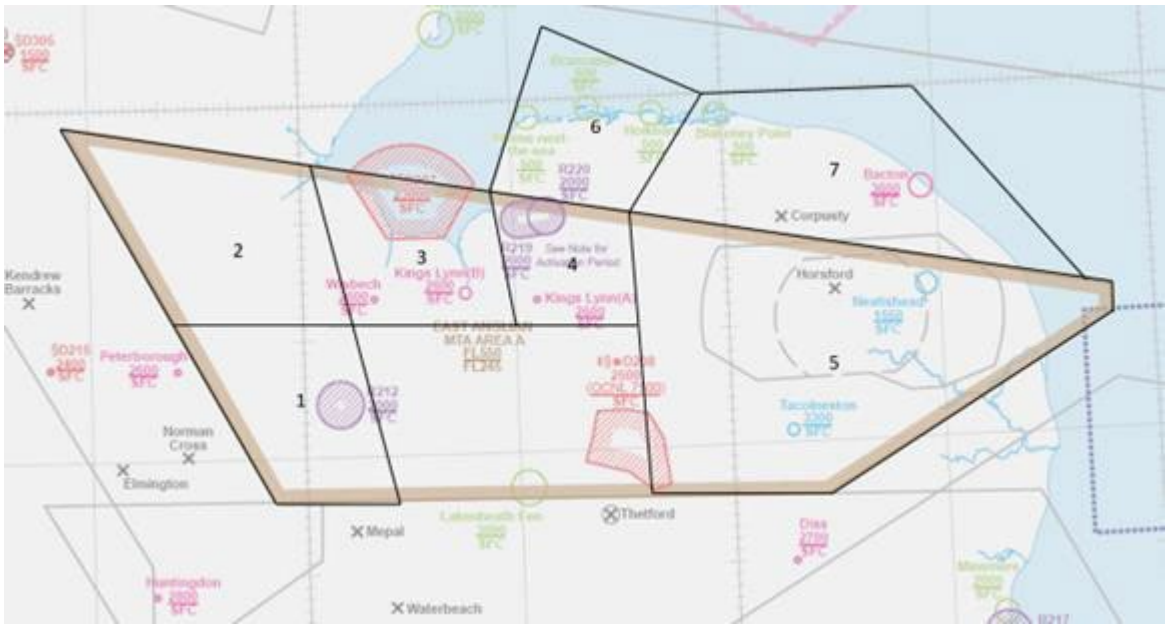


Figure A10.2. LAK and WASH ATA Sectors.