

**BY ORDER OF THE COMMANDER
RAF LAKENHEATH (USAFE)**

LAKENHEATH INSTRUCTION 11-2F-15EV3

15 JANUARY 2015

Flying Operations

LOCAL OPERATING PROCEDURES



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This instruction implements AFPD 11-2, *Aircrew Operations*. It interfaces with AFI 11-2F-15 Volume 3, *F-15 -- Operations Procedures*; and AFI 11-2F-15E Volume 3, *F-15E -- Operations Procedures*. It sets out local area operating procedures for F-15C/D and F-15E aircraft. It applies to all fixed-wing fighter units assigned to the 48th Fighter Wing (48 FW). Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*, prescribed by AFI 11-215, *USAF Flight Manuals Program (FMP)*; route AF Form 847s from the field through appropriate functional chain of command. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS).

SUMMARY OF CHANGES

This instruction has been substantially revised and must be completely reviewed. Multiple paragraphs that were redundant with parent Air Force Instruction (AFI) guidance were deleted. Major changes are as follows: Defines approval authority for cockpit camera and cell-phone use; defines source for host nation Notices to Airmen (NOTAMS); adds United Kingdom (UK) low fly references; adds Centralized Aviation Data Service (CADS) guidance; adds guidance for adjusted max abort; defines procedures for forward firing ordnance; adds guidance for practice strafe in East Anglia; adds procedures for low level operations in the Vale of York above Low Fly Area (LFA) 11; adds 1,000 feet Above Ground Level (AGL) coastline crossing restriction;

clarifies prohibited maneuvers in the vicinity of Norwich; changes local airspeed restriction over land to .95M; changes supersonic boom log entry requirements; defines airfield pattern altitudes; removed reference to F-15E formation landing; defines runway surface condition source for crosswind limits; adds local assumptions for use with training rules published in AFI 11-214, *Air Operations Rules and Procedures*; defines “hot gun” in the UK; adds off range laser restrictions; adds live weapons procedures; adds Foreign Object Damage (FOD) ingestion as a condition that prohibits taxi; clarifies stop and pin guidance for single runway operations; adds guidance for predictive lateral asymmetry calculations; updates hung and unsafe ordnance procedures; adds guidance for cockpit decompression; updates criteria for the delegation of waiver authority for anti-exposure suit usage; defines which air-to-surface ranges do not require anti-exposure suit usage.

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1. Program Compliance. All 48 FW assigned and attached fixed-wing fighter aircrew will comply with AFI 11-2F-15 Volume 3, or AFI 11-2F-15E Volume 3 (as applicable) and LAKENHEATHI 13-201, *Airfield Operations Procedures*. 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.

2. Aircrew Responsibility. This instruction 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.

3. Changes to Instruction. Submit changes to this instruction on an AF Form 847 to the 48th Operations Group Standardization and Evaluation Division (48 OG/OGV).

4. Aircraft Applicability. Paragraphs prefaced with (C) or (E) are applicable only to the F-15C/D or F-15E, respectively.

5. Applicability during Deployed Status. Deployed 48 FW units will comply with this instruction unless operational control is transferred to another U.S. or 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. Deviations require the 48th Operations Group Commander's (48 OG/CC) notification.

6. Waiver Authority. The 48 OG/CC, or deployed equivalent, is the waiver authority for procedures in this instruction. **Exceptions:** Cockpit media restrictions waiver (see paragraph 17.7), and anti-exposure suit waiver (see paragraph 49.2).

7. Command and Control.

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).

7.2. Flying units will advise 48th Operations Support Squadron Airfield Management (48 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. For cross-country sorties also notify the 48 FW Command Post (48 FW/CP).

7.3. The 48 FW/CP will provide positive command and control for all flights:

7.3.1. For off-station sorties in the United States European Command (EUCOM) Area of Responsibility, Actual Time of Departure (ATD), Estimated Time En route (ETE), and Actual Time of Arrival (ATA) must be passed to the 48 FW/CP.

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.

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 48 FW/CP. On DD Form 1801, *DoD International Flight Plan*, block 18, annotate, "RMK/PASS ATD-ETE-ATA TO EGUL YWYO." DD Form 1801 is prescribed by AFI 11-202 Volume 3, *General Flight Rules*.

7.3.4. The 48 FW/CP will pass off-station information to the respective squadron leadership and the 48 OG/CC.

7.4. The SOF has the authority to recall or divert flights, and has primary responsibility for command and control during in-flight emergencies.

7.5. Fighter Squadron Commanders' (FS/CC) verbal or written approval is required to take cameras and cell phones with cameras in the cockpit. AFI 11-202 Volume 3 restrictions must be followed if camera or cell phone usage is approved. This approval authority will not be delegated any lower than the FS/CC. In the absence of the FS/CC, approval authority reverts to the OG/CC. Cockpit camera usage requires notification of 48 FW Advanced Programs (48 FW/CVN). **Exception:** This paragraph does not apply to NATO air policing, air sovereignty spin-up, or operational air defense missions where camera use is explicitly directed or implied. In these cases, aircrew will receive training in the use of camera operations for these taskings.

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

8.1. UK NOTAMs

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

8.1.2. The Department of Defense (DoD) Defense Internet NOTAM Service (DINS) website does not provide current and correct NOTAMs for use within the UK and should not be used for local operations. The approved source for NOTAMS within the UK is the National Air Traffic Services Aeronautical Information Service (NATS AIS).

8.1.3. Low Fly NOTAMS: When planning to low fly in UK Low Fly Areas (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.

8.1.4. Snow NOTAMs (SNOWTAMs): These notices will be included (if applicable) as part of the NATS AIS NOTAMS.

8.2. 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.

8.3. Bird Activity. Available information regarding bird activity, to include: the UK Military Aeronautical Information Planning Document (UK Mil AIP), UK Mil AIP CD, UK Military Low Flying Handbook (UKMLFHB), UK low fly NOTAMs that mention bird activity, and the local bird watch condition as defined by 48 FW Plan 91-212, *Bird Aircraft Strike Hazard (BASH) 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.

8.4. 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.

8.5. 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 takeoff and landing data for the aircraft configuration IAW AFI 11-2F-15 Volume 3 or AFI 11-2F-15E Volume 3.

8.6. Operational Risk Management (ORM) Review. Flight leads will ensure they have accomplished an ORM review IAW squadron approved procedures and worksheets.

8.7. 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 Operations Supervisor (Ops Sup).

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

9. Flight Plans.

9.1. Local stereo flight plans are listed in LAKENHEATHI 13-201. To reduce delays in coordination with Swanwick Air Traffic Control Center Military (Swanwick Mil), Squadron Operations will notify 48 OSS/OSAA immediately upon flight plan changes (i.e., stereo/route changes, departure times, duration, number in flight).

9.2. 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.

9.3. Flight leads will ensure that the United States Air Forces in Europe (USAFE) Base Form 32, *Commander's Narrative*, is completed for all local sorties. These records will be maintained for one year then discarded.

9.4. Flights requiring a controlled takeoff time should contact ground control with request when calling for taxi.

10. 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.

10.1. When an alternate is not required, aircrew will plan on arriving at the Final Approach Fix (FAF) or Initial with AFI 11-2F-15 Volume 3 or AFI 11-2F-15E Volume 3 fuels (F-15C: 2,000 pounds, F-15E: 2,500 pounds). For nighttime operations, all aircraft will arrive with 3,500 pounds at the FAF.

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

10.3. 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, consider shutting down the left engine, and 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.

11. Preflight and Starting Procedures.

11.1. Personal item storage. On missions requiring personal luggage where travel pods are not authorized or available:

11.1.1. (C) Pilots will primarily use Bay 5, however the squadron may develop a plan with their maintenance unit to keep door 3L clear so pilots may store a “hit and run” backpack in case of a divert. When using door 3L, pilots must brief the ground crew and make sure all items will fit properly prior to engine start.

11.1.2. (E) Aircrew will primarily use the Video Tape Recorder (VTR) 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 AFTO Form 781A, *Maintenance Discrepancy and Work Document*, when personal items are stored in these locations. AFTO Form 781A is prescribed by TO 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policies, and Procedures*.

11.2. Aircrew will ensure a FOD check is performed in front of the aircraft out to the taxi line during preflight.

11.3. 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.

11.4. If trained Arm/De-arm crews are available, all ordnance pins will remain installed for taxi and will be removed in the arming area.

11.5. Verify a fireguard is manning a fire bottle and positioned near the aircraft for all engine starts.

11.6. When carrying chaff or flares, Countermeasures Dispenser (CMD) 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.

12. Taxiing, Arming, and De-Arming.

12.1. Taxi on the centerline and maintain 300 foot spacing at Royal Air Force (RAF) Lakenheath. Taxi direction in all hardened aircraft parking areas and loops will be clockwise; taxi direction on the Alpha and Charlie ramps will be counter-clockwise unless “back taxi” is approved by ground control IAW LAKENHEATHI 13-201.

12.2. Minimum runway condition reading (RCR) for taxi will be IAW AFI 11-2F-15 Volume 3 and AFI 11-2F-15E Volume 3.

12.3. Maximum taxi speed is 25 knots ground speed; use 15 knots ground speed maximum in congested areas. Turns will be made in IDLE. Sharp turns (more than 45 degrees of turn) should be initiated at 10 knots ground speed maximum.

12.4. Aircraft will take the first available arming spot flowing from the taxiway. Exit the arming area by turning towards the runway (RWY).

12.5. Aircraft with live forward-firing bullets, missiles, or rockets will primarily arm and de-arm in the south arming area for RWY 24. Additional arming locations for forward firing ordnance are the G and K loops, or on the RWY 24 north arming area.

12.6. There are currently no approved arm/de-arm locations for forward-firing bullets, missiles, or rockets at the RWY 06 EOR. Utilize Taxiway November (primary) or Taxiway Sierra (secondary) for transit between the RWY 06 EOR and the RWY 24 EOR for the purposes of arming and de-arming forward firing ordnance. Reference the 48th Operations Group F-15C/E Administrative Standards for preferred taxi flow.

12.7. All flights will notify Ground Control when they are “10 minutes prior” to takeoff. At this time, notify Ground Control if a formation takeoff is planned.

12.8. Flight leads will remain on ground frequency until receiving their squawk. All flight members will acknowledge upon receipt.

12.9. Before takeoff, flight leads will contact Squadron Ops for final words prior to changing the flight to discrete frequency.

12.10. Aircraft with expendables or carted stations will de-arm prior to taxiing to parking.

12.11. Aircraft will monitor Ground Control immediately upon exiting the RWY.

12.12. Take the first available de-arm spot exiting the RWY. Notify Ground Control “call sign, de-arm to parking location (i.e., PAS 20 or Alpha Ramp)” or “de-arm to hot pits” prior to pulling out of spot. Exit de-arm area by turning toward taxiway. On landing roll-out, if all de-arm spaces are full on the south side expect to turn to the north and hold. Once clear of the RWY, aircrew will contact ground and notify them of their location and intentions.

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

12.13.1. Intentional in-flight fuel dumping is not an abnormality, but aircrew must ensure dump valve has closed by observing fuel flow from dump mast stops and notify hot pit crew prior to hot pit refueling.

12.13.2. 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. **Note:** No prescribing publication is listed for the AFTO Form 781.

13. Hot Winch Procedures.

13.1. Establish two-way communication with ground personnel and shut down an engine, as directed by the crew chief, before winching begins. **Note:** The number one engine is preferred.

13.2. Two ground personnel must be present to conduct winching operations. Aircrew must ensure wing tip clearance at all times.

13.3. Ensure fire bottle has been repositioned prior to second engine shutdown.

14. Equipment Required for Flight.

14.1. (E) Embedded Global Positioning System/Inertial Navigation System (EGI) backup attitude platform must be operational for night or Instrument Meteorological Conditions (IMC).

14.2. Aircrew will ensure a recording medium is used on all flights. Authorized exceptions include cross-country, air show or fly-by, incentive and ferry flights.

15. Takeoff Procedures.

15.1. Minimum weather for takeoff will be 300 foot ceiling and 1,600 meter visibility or pilot weather category, whichever is higher.

15.2. 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.

15.3. 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.

15.4. Do not perform rolling formation takeoffs.

15.5. Maximum performance takeoffs will not be made at RAF Lakenheath, or off station, except for FCF and incentive flights. Additional exceptions require 48 OG/CC approval for takeoffs at RAF Lakenheath, or squadron commander approval when off station. Weather required for maximum performance takeoffs is 2,000 foot ceiling and 5,000 meters visibility with the ability to recover in Visual Meteorological Conditions (VMC). Accelerate to achieve 400 knots calibrated airspeed (KCAS) climbing to 500 feet AGL no later than 1 Nautical Mile (NM) past the departure end of the RWY. At 400 KCAS pull no greater than 5g's vertically until reaching 45-80 degrees nose high. Lead and level off at the assigned altitude.

15.6. After takeoff, notify Departure Control with “call sign, airborne passing two thousand, Deconfliction/Traffic Service.”

15.7. If two or more aircraft depart in non-standard formation, the last aircraft will also squawk the flight's assigned Mode 3 with Mode C code. Once rejoined to a standard formation, the last aircraft will strangle all modes.

15.8. It is imperative that no two aircraft ever fly with the same Mode S address. Aircraft transmitting Mode S should ensure they are in compliance with current 48 FW and USAFE Mode S usage plans.

16. Low Fly Restrictions.

16.1. Aircrew will not low fly in LFA 5 (Night LFA 5A), unless no other low flying area is available (due to weather or fuel considerations). **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 OG/CC and the 48 FW RAF Commander's (48 RAF CC) office.

16.1.1. (E) If a close air support (CAS) 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 OG/CC and the 48 RAF CC's office is not required in this case. The squadron Top-3

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, Top-3's will stress the importance of geographic deconfliction to mitigate noise complaints.

16.1.2. (E) If operating within 10 NM of RAF Marham or operating at Ministry of Defence (MoD) Sculthorpe, coordination with Marham Approach must be conducted prior to commencing dry strafe passes.

16.2. All aircrew will avoid the National Bird of Prey Centre outside Ross-on-Wye at position: N51-54.8 and W002-25.65, EA01 in Low Fly 4, by 3 NM and 2,000 feet AGL. **Note:** UKMLFHB restrictions and chart depictions are 1 NM and 1,000 feet AGL.

16.3. Aircrew will not tactically maneuver (threat reactions, target attacks, low altitude air-air intercepts) in LFA 11 while below 2,000 feet AGL. Aircrew planning tactical maneuvers or target attacks in the Vale of York Area of Intense Aerial Activity (AIAA) above 2,000 feet AGL must comply with the following restriction:

16.3.1. Aircrew must coordinate with Swanwick Mil or other controlling agency to provide "general handling" radar services in the Vale of York above 2000 feet AGL. 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.

16.4. Low fly in overwater Managed Danger Areas (MDAs) may be accomplished down to 1,000 feet Above Water Level (AWL). When operating below MDA segregated airspace, aircrew must be in possession of a current chart that shows the position of all oil platforms, Helicopter Protected Zones (HPZ), and Helicopter Main Routes (HMR).

16.5. During transition from overwater to overland flight, cross the coastline no lower than 1,000 feet AGL due to increased bird hazards.

16.6. Aircrew will reference the 48 FW BASH plan and the 48 FW In-flight Guide for additional bird related restrictions during low level flight.

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

17. Additional Restrictions.

17.1. Basic Fighter Maneuvers (BFM), Air Combat Maneuvers (ACM), or Advanced Handling Characteristics (AHC) will not be accomplished within 6 NM of Norwich, N52-38.3 E001-18.5.

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

17.3. 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.

17.4. 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.

17.5. 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 16.1.1 is approved.

17.6. Aircrew operating within UK airspace are permitted to interrogate Mode 4 only during: system checks, air-to-air (A/A) missions consisting of 2 versus 1 or greater, and higher headquarters (HHQ) exercises within UK airspace regardless of mission type. Mode 4 interrogations are not allowed in UK controlled airspace or within Class D and E airspace.

17.7. Cockpit media restrictions.

17.7.1. The waiver authority for cockpit media restrictions is the 48 FW Commander (48 FW/CC).

17.7.2. IAW Headquarters United States Air Forces in Europe Directorate of Air and Space Operations (HQ USAFE/A3) guidance, only 48 FW aircrew, unit-assigned intelligence, flight surgeon and USAFE Rangeless Instrumentation Training System (URITS)/Air Combat Maneuvering Instrumentation (ACMI)/P5 Combat Training System (P5 CTS) contractor personnel may view cockpit media from 48 FW aircraft.

17.7.3. Personnel approved to view cockpit media will only share media from their respective MDS aircraft with personnel from another MDS aircraft after having received 48 FW/CC approval obtained and documented through 48 FW/CVN. Wing F-15C/D aircrew and intelligence personnel, and 48 FW F-15E aircrew and intelligence personnel are approved to share cockpit media using existing 48 FW/CVN security restrictions and procedures.

17.7.4. Visiting aircrew and intelligence personnel will coordinate with 48 FW/CVN for approval prior to viewing 48 FW cockpit media. This does not include aircrew from other wings qualified in the same MDS aircraft as the host unit. Existing 48 FW/CVN security restrictions and procedures will be followed when visiting aircrew view 48 FW cockpit media and documented by 48 FW/CVN.

18. Supersonic Flight. 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 .95 Mach in any area not authorized for supersonic flight.

18.1. 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 coast line.

18.2. Supersonic flights at low level (below 2,000 feet AGL) over the sea within the UK Flight Information Region (FIR) are authorized with the restrictions listed in paragraph 18.1. In addition, maintain a radar/visual search to avoid the following:

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

18.2.2. Civilian or military transport aircraft: 6 NM.

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

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

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

19. Reporting of Breaches of Airspace or Speed Restrictions.

19.1. Any time a breach of UK supersonic restrictions, controlled airspace, or low fly rules occurs or is suspected, notify the squadron Director of Operations (DO), Ops Sup, or the SDO. For supersonic events, annotate the position, time, heading, airspace, altitude and attitude of the occurrence in the squadron sonic boom log. Ops Sups or SDOs will notify 48 OSS Current Operations (48 OSS/OSO, 226-2399) as soon as possible after being informed of the event.

19.2. If contacted by a Defence Flying Complaints Investigation Team (DFCIT) investigator about a potential breach, cooperate and ensure the squadron DO, 48 OSS/OSO, and USAFE-UK/A3 are aware an investigation is being conducted.

20. A/A Refueling.

20.1. For fuels accounting purposes, the following information needs to be annotated in the aircraft AFTO Form 781A.

20.1.1. Tanker call sign, home station, country of origin, and the offload received. **Note:** This information may be garnered from the tanker's tail flash or fuselage markings, or by a radio call (if the situation allows).

20.1.2. Any disparity between the amount that is given by the boom operator (if applicable) and the fuel gauge reading should be reported during debrief.

20.2. Mission Qualification Training aircrew will not perform A/A refueling single-ship, unless a squadron supervisor or instructor is in the aircraft.

21. Recovery.

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

21.2. Eagle Trail Recoveries. The 48 FW does not possess any Letters of Agreement for Radar trail recoveries at any airfield other than RAF Lakenheath.

21.3. Trail recoveries should be flown via an instrument or a diverse penetration established in trail prior to penetration.

21.4. If spacing was not established prior to the penetration, 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 final approach fix. If not briefed otherwise, wingmen will set 72 percent revolutions per minute (RPM) and slow to 240 KCAS until spacing is achieved.

21.5. Spacing for trail recoveries will be 1.5 to 2 miles.

21.6. If two or more aircraft arrive in non-standard trail formation to RAF Lakenheath, the last aircraft will also squawk the flight's assigned Mode 3 and Mode C beacon code. The last aircraft will begin squawking when told to contact RAF Lakenheath Approach by Swanwick Mil or when assigned a code from Lakenheath Radar Approach Control during a free call.

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

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

21.9. Multiple practice radar in-trail approaches that do not terminate with a full-stop landing must be conducted only in VMC. Expect a flight breakup and separate aircraft control from Air Traffic Control (ATC) after the initial radar trail approach.

22. Local Pattern Procedures.

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

22.2. Closed patterns on RWY 24 will be executed so as to avoid over flying the base hospital, commissary, schools, and housing. Aircrew desiring to re-enter at point Delta will avoid over flying the base by continuing straight ahead until past base housing and turn to be inside or over the canal that is between RAF Mildenhall and RAF Lakenheath. Do not extend into RAF Mildenhall's airspace or overfly Eriswell Village (.5 NM south of RAF Lakenheath base housing).

22.3. Pilots must request and be granted permission for an early turn out to point Delta. This turn must be executed above 500 feet AGL and not later than abeam the tower. Remain below 1,000 feet Mean Sea Level (MSL) until clear of inside downwind.

22.4. Closed patterns on RWY 06 will be executed prior to the airfield boundary (A1065). If unable, pilots will reenter at point Bravo. Avoid Brandon during the turn to Bravo.

22.5. In addition to published guidance in LAKENHEATHI 13-201, standard VFR traffic pattern procedures are as follows:

22.5.1. Aircraft established in the local pattern after a low approach that request re-entry via points Bravo or Delta shall fly the depicted pattern ground track published in the 48 FW IFG and climb and maintain 1,500 feet MSL unless advised otherwise by Tower.

22.5.2. If a pattern conflict requires a "break out", then, aircraft will turn away from the conflict, climb to 2,000 feet MSL, and follow tower instructions. Use caution for traffic entering from VFR reporting points at 2,000 feet MSL.

22.5.3. Aircraft flying under tower control while executing any non-standard pattern flow will fly at 2,000 feet MSL and follow tower instructions. Use caution for traffic entering from VFR reporting points at 2,000 feet MSL.

22.6. Do not fly simulated single engine overheads.

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

22.8. Standard “local climb-out” procedures for the radar pattern are as follows: Maintain at or below 1,000 feet MSL until departure end, then as follows:

22.8.1. For RWY 24: at 1 distance measuring equipment (DME), turn right to 360 degrees and climb to 3,000 feet MSL.

22.8.2. For RWY 06: turn right to 075 degrees and climb to 3,000 feet MSL, at 4 DME, turn left to 310 degrees. 30 degree bank turns are mandatory for noise abatement.

23. Landing Procedures. 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.

23.1. When conditions allow, align aircraft with the center of the RWY for landing. Considerations should be given to factors affecting landing, e.g., crosswind components, wind shear, vortices, and spacing behind other aircraft.

23.2. When utilizing reduced separation behind similar aircraft (F-15C/D and F-15E are considered similar aircraft for reduced separation), ensure proper distance and offset are included in the landing decision. Pilots should use alternate side landing to comply with LAKENHEATHI 13-201 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 RWY centerline. 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.

23.3. 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/or to prepare for cable engagement.

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

23.5. (C) Formation landings are only authorized if the RWY condition is “DRY/DRY” or “WET/DRY.”

23.6. 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.

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

23.8. Aircraft that have declared an emergency should expect to taxi clear of the RWY to the north side. Follow instructions from approach, tower, or the SOF to meet emergency responders in the appropriate location.

24. Radar Service.

24.1. To the maximum extent possible, flights will be under deconfliction service prior to entering IMC. **Exceptions:** Include AFI 11-214 guidance for IMC Training Rules during “IMC Only Rules”, “IMC Rules/UNLIMITED clear of clouds” and “IMC Rules/LIMITED clear of clouds”.

24.1.1. For the purpose of interpreting the IMC Rules guidance in AFI 11-214, UK airspace labeled as MDA (Managed Danger Areas), MTA (Military Temporary/Training Airspace), OTA (Operational Training Areas) or TRA (Temporary Reserve Airspace) will be considered Special Use Airspace (SUA). A segregated MDA will be considered comparable to a restricted area.

24.1.2. When using IMC Rules (and in IMC conditions) in a segregated MDA, aircraft can operate under any type of radar service (autonomous, general handling, traffic service, or deconfliction service). Maneuvering limitations based on Ground Controlled Intercept (GCI), Airborne Warning and Control System (AWACS), or Range Training Officer (RTO) availability are IAW AFI 11-214.

24.1.3. When using IMC Rules (and in IMC conditions) in a deconflicted MDA, MTA, OTA or TRA, aircraft must operate under deconfliction service while IMC to provide separation from non-player aircraft. Altitude changes and maneuvers must be coordinated with ATC. Maneuvering limitations based on GCI, AWACS, or RTO availability are IAW AFI 11-214.

24.2. Without prior permission from the MoD, all flights on weekends will be under Traffic Service as a minimum.

24.3. Airport Surveillance Radar (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 United States. 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.

24.4. Trail Formations of greater than 1 NM are referred to as “Stream Formations” in the UK. IAW UK MIL AIP En Route procedures, if a stream extends beyond 3 NM, the last aircraft should squawk the same as the flight lead, unless directed otherwise.

25. Night Vision Goggles (NVG).

25.1. For re-currency, the 48 OG/CC is the approval authority to select NVG instructors and squadron supervisors to be considered current upon completion of refresher NVG academics.

25.2. Flight leads will ensure NVG integration is briefed on sorties when NVGs are planned to be used. As a minimum, topics will cover the additional task prioritization concerns while flying with NVGs, visual illusions, spatial disorientation, aircraft deconfliction, and other night safety issues.

25.3. If there is an instructor or squadron supervisor in the formation, 48 FW aircrew may transition from Low Illumination (LI) training rules (TRs) to High Illumination (HI) TRs IAW AFI 11-214. An in-flight switch requires both LI and HI TRs be planned and briefed.

Prior to operating below Minimum Safe Altitude (MSA) and before a change to the illumination level, all aircraft in the formation must acknowledge the new illumination level over the radio. All aircrew will maintain vigilance in such scenarios and transition to LI TRs if conditions deteriorate.

25.4. MDS specific NVG policies:

25.4.1. (E) When flying below MSA, aircrew will use Terrain Following (TF) as a complementary system to the maximum extent possible. During periods of HI, aircrew will ensure they are above 1,000 feet AGL and verbalize inter-cockpit “above 1,000 feet” prior to maneuvering outside TF limits when below MSA.

25.4.2. (C) Aircrew will not operate below MSA at night.

26. Reduced Lighting and Lights Out Operations. Authorized IAW AFI 11-214, AFI 11-202 Volume 3 USAFE Supplement; UK Military Aviation Authority (MAA) Flying Regulation 2307 (1), *Rules of the Air*.

26.1. 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.

26.2. 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 ATA, WALES Military Training Area, and the East Anglian MTRA. All participating aircraft must squawk assigned Mode 3, Mode C, and Mode S.

27. Gun Procedures. Except for planned gun employment missions, the gun will be safe/cold. Refer to AFI 11-214 for gun training procedures. Avoid using the term “hot gun” outside the 48 FW, including operations at RAF Mildenhall. UK controllers and Mildenhall 352d Special Operations Group (352 SOG) personnel will assume there is a gun malfunction and will initiate emergency procedures. A 20mm gun that is capable of firing should be referred to as a “loaded gun.”

28. Simulated Gun Employment. When interpreting AFI 11-214 training rules for simulated gun employment, in order to consider the aircraft gun “safe” (or “cold”) IAW MDS specific TOs and checklists, the holdback tool (gun clearing sector tool) must be installed, the armament ground safety pin must be installed inside out and the rounds limiter must be set to >799 with “RDS LIMIT” selected on the rounds limiter switch. Simulated gun employment with the Master Arm hot is permitted if these conditions are met, even if rounds are loaded in the gun.

29. UK Restrictions.

29.1. The WASH and Lakenheath (LAK) ATAs 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 Air-to-Air Training Rules, within these areas.

29.2. 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 Area (ATA) if the forecast or observed winds are between 030 degrees and 130 degrees in the LAK ATA, between 310 degrees and 130 degrees in the WASH ATA, or in

any case where chaff may drift over land. Jamming and chaff are authorized on Spadeadam range and IAW UK Range Orders.

29.3. Use of flares over water is prohibited at night, unless Her 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).

30. Air-to-Ground (A/G) Range Procedures.

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

30.2. In planning all weapons deliveries, aircrew will refer to AFI 13-212, *Range Planning and Operations*, and the host nation's standing range orders.

30.3. 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.

30.4. When employing actual ordnance from Combat Programmable Armament Control Set (CMBT PACS), 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 (RCO) 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.

31. (E) A/G Off-Range Procedures.

31.1. 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.

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

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

31.2.2. The gun is "cold" IAW paragraph 28.

31.2.3. Following any CMBT PACS delivery, all aircraft will ensure TRNG PACS is selected and programmed IAW paragraph 31.1 before any off-range delivery.

31.3. Do not use Targeting Pod (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.

32. (E) Heavyweight Inert Weapons Procedures.

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

32.2. With a “cold” gun IAW paragraph 28, aircrew may Master Arm “hot” and employ simulated A/A ordnance provided:

32.2.1. The flight is within the confines of overwater Managed Danger Areas (MDA) or overwater Aerial Tactics Areas (ATA).

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

32.3. Off-Range A/G attacks with Master Arm “hot” are prohibited.

33. Live Ordnance Procedures.

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

33.2. Remain Master Arm “safe” until within the range confines, on a flight profile that complies with range restrictions, and cleared to release by the range control officer. Master Arm “hot” while off-range is prohibited until after all live ordnance has been confirmed expended via a battle-damage check.

34. Systems Malfunctions.

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

34.1.1. Utility hydraulics failure.

34.1.2. Nose gear steering failure.

34.1.3. Blown or flat tires.

34.1.4. Brake malfunctions or anomalies.

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

34.2.1. 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).

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

34.2.3. Known or suspected FOD ingestion.

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

35. Landing Gear Malfunctions. Aircraft experiencing unsafe gear indications after raising the gear on takeoff will make a reasonable attempt to visually inspect the gear prior to accomplishing the appropriate checklist procedures (TO 1F-15A-1CL-1, *Flight Crew Checklist*, or TO 1F-15E-1-2-1CL-1, *Flight Crew Checklist*). If the mission was continued, do another visual inspection of the affected aircraft, weather conditions permitting, prior to landing.

35.1. Annotate on the AFTO Form 781A any nose wheel shimmy that requires aft stick to counter its affects.

35.2. 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. If the nose gear is the affected gear, shutdown in EOR and get towed back to parking.

35.3. Aircraft with suspected or confirmed hot brakes will:

35.3.1. Notify the controlling agency and SOF and declare a ground emergency.

35.3.2. If in de-arm or on the runway, proceed to the closest designated hot brake area. The hot brake areas are the north side arm/de-arm area at the RWY 24 approach end and the Lima bubble. Reference the airfield diagram in the 48 FW IFG for specific locations.

35.3.3. If already established on Sierra taxiway or in a parking ramp and taxi to the designated hot brake areas is impractical or unsafe, find the nearest safe position away from personnel and remain there.

35.3.4. Park facing into the wind. Keep personnel clear of a 45 degree cone from the wheels out to 300 feet.

35.3.5. Follow emergency personnel instructions and shut down if directed by the fire chief.

36. Fuel Imbalances. Pilots will use the following guidance when writing up fuel imbalances:

36.1. Internal imbalance (for more than 5 minutes):

36.1.1. Info Note: 200-600 pounds (first occurrence).

36.1.2. Info Note (Repeat): 200-600 pounds (second consecutive occurrence).

36.1.3. Code 3: 200-600 pounds (third consecutive occurrence).

36.2. External imbalance:

36.2.1. Code 1: Less than 1,000 pounds.

36.2.2. Info Note: 1,000-1,500 pounds. **Note:** Up to 1,500 pound is normal, but will be written up for maintenance purposes.

36.2.3. Code 3: Greater than 1,500 pounds.

36.3. 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.

37. (E) Lateral Asymmetry. Prior to release of asymmetric A/G stores, predictive lateral asymmetry must be considered and applied to follow-on maneuvers.

38. Hung and Unsafe Ordnance Procedures.

38.1. For any unsafe gun, gun malfunction, hung heavyweight, or hung live ordnance, make every effort to release the ordnance on an approved range. If unable, safe all switches and recover to Lakenheath. Declare an emergency and notify the SOF.

38.2. The primary gun malfunction areas are Golf and Kilo pads pointed at the gun berms. If the gun berms are not available, use the RWY 24 south side de-arm area heading 243 degrees magnetic (i.e., pointing parallel to and down RWY).

38.3. Hung heavyweight training ordnance may be dearmed in the normal arming areas. Declare an emergency, avoid populated areas and land via a straight in approach. Due to

standard procedures for emergency response, expect to initially taxi to the north side holding areas until the emergency is terminated. Once cleared, cross to the south side for normal dearm.

38.4. Live hung ordnance must be de-armed in the Golf or Kilo loops. If returning to Lakenheath with live hung ordnance: declare an emergency, avoid populated areas, land via a straight in approach, and taxi to the north side for repositioning to Golf or Kilo.

38.5. A hung BDU-33 does not require an emergency to be declared and may be dearmed in the normal arming areas.

38.6. In the event of hung chaff or flares, aircrew should attempt to jettison all chaff and flares over water. If this is unsuccessful, aircrew will declare an emergency and return to base (RTB) via a straight-in approach avoiding populated areas to the maximum extent possible. After landing, taxi to the north side for repositioning to Golf or Kilo.

39. In-Flight Fuel Dumping. In addition to AFI 11-202 Volume 3, AFI 11-2F-15 Volume 3 and AFI 11-2F-15E Volume 3 guidance:

39.1. Fuel dump only for emergencies or to avoid landing distances that exceed available RWY length.

39.2. Dump at or above 10,000 feet AGL and over water, when time and conditions permit. Include the amount of fuel dumped in the AFTO Form 781A write up.

40. Jettison Areas, Procedures, and Parameters. Reference LAKENHEATHI13-201 and the 48 FW IFG.

41. Controlled Bailout Areas. Reference LAKENHEATHI13-201 and the 48 FW IFG.

42. Physiological Incidents. Contact the SOF if an aircrew member experiences a physiological incident during flight, including any cockpit decompression above Flight Level (FL) 180. The aircrew will be met by a flight surgeon from the 48th Aerospace Medicine Squadron, Flight Medicine Flight (48 AMDS/SGPF), immediately after clearing the RWY. Shut down the aircraft and turn it over to maintenance for impoundment.

42.1. 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 13,000 feet. Declare an emergency and shut down in EOR. Aircrew must be evaluated by Flight Medicine.

42.2. For loss of cabin pressure below 18,000 feet, follow checklist procedures and stay below 18,000 feet (13,000 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.

43. Local Weather Procedures. During Observed Induction Ice Potential Advisory (A1) conditions on the ground or in the air, aircrew should be alert for engine icing and use engine heat IAW TO 1F-15A-1, *Flight Manual*; or TO 1F-15E-1, *Flight Manual*.

44. Lightning within 5 NM Procedures.

44.1. 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.

44.2. Ops Sups should contact the SOF to determine the estimation of delay.

44.3. Airborne. 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.

44.4. If in a PAS or chocks before engine start or after landing, shutdown, exit aircraft and seek shelter. After engine start and before taxi, contact Ops Sup for guidance to shutdown or remain running.

44.5. Taxiing. Contact the SOF for guidance on whether to continue taxiing or hold your position.

44.6. Arming/De-arm area. You will not be armed. Hold position and contact the SOF. Do not use the aircraft intercom to communicate with ground personnel.

44.7. 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 shutdown. 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 shutdown.

44.8. Hot pit refueling. Immediately stop refueling, hold position and contact the SOF for guidance. Avoid using the intercom to communicate with ground personnel.

45. Lightning Strike. Perform a battle damage check, assess external/ internal damage to the aircraft. Declare an emergency and land as soon as conditions permit.

46. Unit Standards. Wing administrative and tactical standards will be published by the 48 OG. OPRs are 48 OG/OGV and 48 OSS Weapons and Tactics (48 OSS/OSK) respectively.

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

47.1. 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.

47.2. Foreign Clearance Guide (FCG) can be accessed at <https://www.fcg.pentagon.mil/fcg.cfm> and on the SIPRNET at <http://www.fcg.pentagon.smil.mil/>.

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

48. Search and Rescue Combat Air Patrol (SARCAP) Procedures. Reference the Search and Rescue Checklist in the 48 FW IFG.

49. Local Environmental Restrictions to Flight Operations.

49.1. Anti-exposure suits will be required for preplanned overwater flights when the water temperature is less than 60°F (15.5C), unless waived by the 48 OG/CC. Waiver requests should be coordinated through the SOF. Additionally, IAW AFI 11-301 Volume 1 USAFE Supplement, *Aircrew Flight Equipment (AFE) Program*, the use of the anti-exposure suit is waived for the following:

49.1.1. When the overwater portion of flight occurs only during an instrument approach or departure procedure and the aircraft is within power-off gliding distance to land.

49.1.2. Wear of exposure suit is waived for dual engine aircraft when the overwater portion of the flight occurs only while crossing the English Channel. This waiver does not apply in the event of subsequent use of offshore refueling tracks, ranges, and training areas.

49.2. If the water temperature ranges between 60°F (15.5C) and 55°F (12.8C), and the field temperature is 70°F (21.1C) or greater, the OG/CC delegates waiver authority for anti-exposure suit wear to squadron commanders. Squadron commanders will balance the risk of cold water exposure against the risks of dehydration and reduced G-tolerance caused by heat stress. In all cases, overwater flight without anti-exposure suit protection should still be avoided unless no other training airspace is available.

49.3. Anti-exposure suits are not required while on the following UK Air-to-Surface weapons ranges: Holbeach, Donna Nook, Pembrey, Cape Wrath, and Tain.

49.4. High winds and sea state: A verbal waiver (normally coordinated by the SOF) from the 48 OG/CC, or deployed equivalent, is required for over water tactical maneuvering when steady state winds exceed 25 knots and/or wave heights exceed 4 meters. The 48 OG/CC, or deployed equivalent, can waive winds to 30 knots and waves to 5 meters. This is not intended to restrict direct flight channel crossings.

ROBERT G. NOVOTNY, Colonel, USAF
Commander, 48th Fighter Wing

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

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AFI 11-2F-15 Volume 3, *F-15 -- Operations Procedures*, 18 September 2014

AFI 11-2F-15E Volume 3, *F-15E -- Operations Procedures*, 5 April 2013

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

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TO 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policies, and Procedures*

48th Operations Group F-15C/E Administrative Standards, 6 October 2014

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Allied Command Europe (ACE) Manual 75-2-1, "Fighting Edge"

AFI 13-212, *Range Planning and Operations*, 16 November 2007

TO 1F-15A-1CL-1, *Flight Crew Checklist*

TO 1F-15E-1-2-1CL-1, *Flight Crew Checklist*

TO 1F-15A-1, *Flight Manual*

TO 1F-15E-1-2-1, *Flight Manual*

TO 1F-15A-6CL-1, *Acceptance and Functional Check Flight Checklist*

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Department of Defense Foreign Clearance Guide, 10 February 2014

AFI 11-301 Volume 1 USAFE Supplement, *Aircrew Flight Equipment (AFE) Program*, 22 September 2009

AFI 11-418, *Operations Supervision*, 15 September 2011

AFI 11-418 Lakenheath Supplement, *Operations Supervision*, 14 June 2012

United Kingdom Range Orders

Prescribed Forms

USAFE Base Form 32, *Commander's Narrative*

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*

DD Form 1801, *DoD International Flight Plan*

AFTO Form 781A, *Maintenance Discrepancy and Work Document*

AFTO Form 781, *ARMS Aircrew/Mission Flight Data Document*

Abbreviations and Acronyms

A/A—Air-to-Air

A/G—Air-to-Ground

ACE—Allied Command Europe

ACM—Air Combat Maneuvers

ACMI—Air Combat Maneuvering Instrumentation

AF—Air Force

AFE—Aircrew Flight Equipment

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFPD—Air Force Policy Directive

AFRIMS—Air Force Records Information Management System

AFTO—Air Force Technical Order

AGL—Above Ground Level

AHC—Aircraft Handling Characteristics

AIAA—Area of Intense Aerial Activity

AMDS/SGPF—48th Aerospace Medicine Squadron, Flight Medicine Flight

APF—Air Procedures Flight

ASR—Airport Surveillance Radar
ATA—Actual Time of Arrival/Aerial Tactics Area/Aerial Training Area
ATC—Air Traffic Control
ATD—Actual Time of Departure
AWACS—Airborne Warning and Control System
AWL—Above Water Level
BAMGIS—Bird Avoidance Model Geographic Information System
BASH—Bird Aircraft Strike Hazard
BFM—Basic Fighter Maneuvers
CADS—Centralized Aviation Data Service
CANP—Civil Aviation Notification Procedure
CAS—Close Air Support
CMBT—Combat
CMD—Countermeasures Dispenser
CTS—Combat Training System
DFCIT—Defence Flying Complaints Investigation Team
DINS—Defense Internet NOTAM Service
DME—distance measuring equipment
DO—Director of Operations
DoD—Department of Defense
EGI—Embedded Global Positioning System/Inertial Navigation System
EOR—End of Runway
ETE—Estimated Time En route
EUCOM—United States European Command
FAF—Final Approach Fix
FCF—Functional Check Flight
FCG—Foreign Clearance Guide
FIR—Flight Information Region
FL—flight level
FMP—Flight Manuals Program
FOD—Foreign Object Damage
FS/CC—Fighter Squadron Commander

FW—48th Fighter Wing
FW/CC—48th Fighter Wing Commander
FW/CP—48th Fighter Wing Command Post
FW/CVN—48th Fighter Wing Advanced Programs
FW/SEF—48th Fighter Wing Flight Safety
GCI—ground controlled intercept
HHQ—higher headquarters
HI—High Illumination
HM—Her Majesty's
HMR—Helicopter Main Routes
HPZ—Helicopter Protected Zones
HQ USAFE/A3—Headquarters United States Air Forces in Europe Directorate of Air and Space Operations
HUD—Heads Up Display
IAW—in accordance with
IFG—48 FW In-Flight Guide
IMC—Instrument Meteorological Conditions
JTAC—Joint Terminal Attack Controller
KCAS—Knots Calibrated Airspeed
LAK—Lakenheath
LAKENHEATHI—Lakenheath Instruction
LFA—Low Fly Area
LI—Low Illumination
MAA—UK Military Aviation Authority
MDA—Managed Danger Areas
MDS—Mission Design Series
MFD—Multi Functional Display
MoD—Ministry of Defence
MSA—Minimum Safe Altitude
MSL—Mean Sea Level
MTA—Military Temporary/Training Airspace
MTRA—Military Temporary Reserve Airspace
NATS AIS—National Air Traffic Services Aeronautical Information Service

NM—Nautical Mile

NOTAM—Notices to Airmen

NVG—Night Vision Goggle(s)

OG/CC—48th Operations Group Commander

OG/OGV—48th Operations Group Standardization and Evaluation Division

OPR—Office of Primary Responsibility

ORM—Operational Risk Management

OSS/OSAA—48th Operations Support Squadron Airfield Management

OSS/OSK—48th Operations Support Squadron Weapons and Tactics

OSS/OSO—48th Operations Support Squadron Current Operations

OTA—Operational Training Areas

PACS—Programmable Armament Control Set

PAS—Protective Aircraft Shelter

PEX—PATRIOT EXCALIBUR

PINS—Pipeline Inspection Notification System

RAF—Royal Air Force

RAF CC—48th Fighter Wing Royal Air Force Commander

RCO—Range Control Officer

RCR—runway condition reading

RDS—Records Disposition Schedule/rounds

RPM—revolutions per minute

RTB—return to base

RTO—Range Training Officer

RWY—Runway

SARCAP—Search and Rescue Combat Air Patrol

SDO—Standby Duty Officer

SIPRNET—Secret Internet Protocol Router Network

SNOWTAM—Snow Notices to Airmen

SOF—Supervisor of Flying

SOG—352d Special Operations Group

SOP—Standard Operating Procedures

TF—Terrain Following

TFR—Terrain Following Radar

TO—Technical Order

TPOD—Targeting Pod

TR—Training Rules

TRA—Temporary Reserve Airspace

TRNG—Training

SUA—Special Use Airspace

UK—United Kingdom

UKLFS—UK Low Fly System

UK Mil AIP—UK Military Aeronautical Information Planning Document

UKMLFHB—UK Military Low Flying Handbook

URITS—United States Air Forces in Europe Rangeless Instrumentation Training System

URL—uniform resource locator

USAFE—United States Air Forces in Europe

VFR—Visual Flight Rules

VMC—Visual Meteorological Conditions

VTR—Video Tape Recorder