

# AIRSPACE CO-ORDINATION NOTICE

Safety and Airspace Regulation Group



ACN Reference:	Version:	Date:	Date of Original
2016-04-0042	1	11 March 2016	11 March 2016

## EXERCISE JOINT WARRIOR 161

### MILITARY EXERCISE

**Subject to NOTAM:** Yes (by Airspace Regulation)

Date(s) of activity/Validity:	Times (ALL TIMES UTC)
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9 – 22 April 2016	H24
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Vertical Limits:	Allocated Mode 3A (SSR):
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SFC – FL660	1501-1537, 2400-2477, 1700-1727
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Aircraft Details:	NDS Approved:
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8 x Typhoon, 7 x Hawk T1, 5 x F16, 1 x E3D, 1 x Sentinel, 1 x Voyager, 1 x Rivet Joint, 1 x E3A, 2 x P-8 Poseidon, 1 x CP-140 Aurora, 2 x P-3C Orion, 2 x Atlantique II, 3 x Merlin, 3 x Lynx, 3 x HH60G Pavehawk, 2 x MH-60R Seahawk, 1 x SH-60III Lamps, 1 x NH-90, 7 x DA-20 Falcon, 1 x DA42, 1 x S-61	Not Applicable.
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Event Sponsor(s):	Aircraft Operator(s):
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HQ Navy Command and HQ Air Command Via Joint Tactical Exercise Planning Staff (JTEPS) Northwood Headquarters, Sandy Lane, Northwood, Middlesex, HA6 3HP  Contact: Flt Lt Claire Stanley Tel (prior to Ex start): 01923 958 782 Tel (after Ex start): 01436 674321 Ext 4409	Multiple
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ATS Units/ Controlling Agencies:	Geographical Limits:
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Swanwick (Mil) – 01489 612943 Boulmer CRC – 01665 572311	
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For Exercise participants:  EAGLE/FALCON Safety – Frequencies available to Ex participants in SPINS.	
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Airspace Reservations:
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D801, D802, D803, D703, D510, D203, D113 A, B, NWMTA, D323 Complex, D509, D510, D512, D513 Complex, D601, D613 Complex, D701 Complex, D703, D710, D712, D801, D802, D803 and D809 Complex.
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ACN Issued by:
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Lt Cdr G Pugh RN, Airspace Regulator
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Civil Aviation Authority, 45-59 Kingsway, London WC2B 6TE  
Direct Dial: 0207 453 6599 Fax: 020 7453 6593  
Email: [AROps@caa.co.uk](mailto:AROps@caa.co.uk)

**SECTION 1: CO-ORDINATION ARRANGEMENTS (GENERAL)**

1. The pilot/operator is requested to telephone the ATC authorities at Section 2 prior to departure in order to notify or update the sortie details including area(s) of operation and planned levels (quoting the ACN Reference). A minimum of 24 hours' notice should be given unless specified in Section 2.
2. There may be other aircraft and/or activities outside Controlled/Regulated Airspace unknown to ATC.
3. The carriage of a serviceable transponder (including Mode 'C') has been specified.
4. The pilot will be responsible for obtaining all necessary ATC clearances and for maintaining R/T contact with appropriate ATC authorities.
5. The pilot/operator will be responsible for obtaining prior clearances to enter any UK Danger Areas affected by the flight profile from the appropriate Range Control Authority unless this is specifically detailed in Section 2.
6. Other Unusual Aerial Activities (UAAs) may be notified to SARG and may take place within the airspace encompassed by this survey. The pilot/operator is to ensure that UK Daily NOTAM Nav Warnings are consulted prior to each flight.
7. All flights within Controlled Airspace are subject to the requirements of a Flight Plan in accordance with UK AIP ENR1.10. The ACN Reference should be entered into Field 18 of the Flight Plan together with any relevant 'special handling' codes.
8. Flight prioritisation and Non-Deviating Status is in accordance with the information specified on the ACN Cover. Such status may be afforded to part or all of the flight – see Section 2.
9. Availability of an ATS from Swanwick (Mil) or Western Radar is subject to unit capacity, priorities and limitations of radar and radio coverage. Minimum pre-flight notification as per UK AIP ENR 1.6 unless otherwise specified in Section 2 of this ACN.

**PUBLICATIONS AND CHANGES**

10. The activity area may lie within Controlled and Uncontrolled Airspace as well as airspace reserved for military use. Aircrew are to thoroughly familiarise themselves with UK airspace structures and procedures, in particular those laid down within the UK Aeronautical Information Publication (UK AIP), ENR 1.1 and be fully conversant with UK Flight Information Services in accordance with UK CAP 493 (MATS Pt 1).
11. The CAA VFR 1:500,000 and 1:250,000 charts and the UK AIP ENR 5 depict some, but not all aviation activity sites and amendments should also be checked. Please refer to <http://www.nats-uk.ead-it.com>
12. This ACN details specific coordination essential to the activity taking place and does not remove the need for aircraft operators to comply with national flight planning and notification procedures. Pilots and ANSPs are required to ensure that all related aviation sites are aware of this planned activity and of subsequent changes not captured within this document.
13. The Sponsor or Event Organiser should co-ordinate any changes to this ACN with SARG quoting the ACN Reference at the top of the page.

**SECTION 2: CO-ORDINATION ARRANGEMENTS (SPECIFIC)**

14. **OVERVIEW.** Exercise JOINT WARRIOR 161 (Ex JW161) is a maritime, air and land exercise that will take place predominantly in Scotland (including the Western Isles, North West Approaches and the Borders region), north east England (including Spadeadam EWTR) and over the North Sea. The Exercise will incorporate maritime and land attack operations and air defence operations involving large formations of fast jet aircraft acting as aggressors and defenders in tactical packages. Up to 40 aircraft may take part simultaneously, some of which will launch and recover from NATO units afloat and in Europe. Air-to-air refueling, Maritime Patrol, Electronic Warfare (EW), Airborne Warning and Control (AWAC), Tactical Air Transport, surveillance and rotary wing aircraft will all operate in support. Air-to-surface, air-to-air, surface-to-surface and surface-to-air weaponry, target towing, electronic warfare measures, dispensing of chaff and firing of star shells and illuminates will also take place. Aircraft will engage in high-energy combat manoeuvres and may be unable to comply with the Rules of the Air.

15. The Exercise will be conducted in all weather conditions and participating aircraft **are to remain clear of all Controlled Airspace, unless under the control of an appropriate authority or when operating VFR in Class E airspace.** EXCON will ensure that the relevant Danger Areas, TRAs, Restricted Areas, Low Flying Areas and Operational Training Areas (OTAs) are booked and that the relevant Operating Authorities take appropriate notifying action. Additionally, and in order to minimise disruption to civilian ATC should activities be cancelled on any given day, EXCON will cancel any relevant bookings in order that suitable NOTAM action can be taken and the airspace made available to other users.

16. **Pressure Setting.** In the Ex JW Area of Operations participants are to operate on the UK Regional Pressure Setting (RPS), unless receiving a radar service from a unit that requires the aircraft to fly at a Flight Level for coordination. Further direction for participants is laid out in EX SPINS.

17. **Promulgation of Exercise Areas and Flexible Use of Airspace.** To facilitate the flow of GAT using the North Atlantic Route Structure EXCON will advise MABCC via email NLT 1200z on D-1 which airspace (FJA, MDAs, J Area and TRAs) will be used and whether a vertical restriction (defined as a Flight Level) may be applied to permit GAT overflight. MABCC is to brief the airspace requirements to Prestwick Centre Operations Supervisor. Airspace may only be booked in accordance with the requirements of the Air Tasking Order (ATO). Where a change no longer requires the use of a flight planning restriction, or an activity finishes ahead of schedule, EXCON is to ensure that the area is handed back at the earliest opportunity. Specifically EXCON is to inform MABCC should FJAs, J Areas, D809, D513, D613 or D323 are no longer required. Once airspace has been cancelled it cannot be resurrected for the remainder of that period.

18. **Fast Jet Areas (FJA).** Within the Scottish FIR/UIR, FJAs have been established as detailed below and extend from the surface to FL550 (unless capped at a lower Flight Level). When activated, intense aerial activity can be expected, with large formations of attack aircraft conducting high-energy evasive manoeuvres against opposing air defence aircraft. FJAs will be afforded the segregated status of Special Use Airspace between FL245 and FL550 for exercise participants, when active. Civilian and military non-exercise air traffic may be encountered in Class E and G airspace below FL245. If a FJA is activated outside of TRA published activation times MABCC are requested to extend the corresponding TRAs to match the activation times of the FJA. To deconflict any concurrent non-exercise activity in D701, and FJA South, a smaller area known as FJA South East can be activated.

a. FJA North. 594000N 0013000W - 591000N 0010000W - 580215N 0000948E - 574700N 0010000W - 574000N 0013100W - 574000N 0025821W - 581920N 0055243W - 595000N 0060149W - 594000N 0013000W.

b. FJA South. 575900N 0065200W - 574600N 0061000W - 563500N 0052200W - 560600N 0063000W - 561000N 0065400W - 564200N 0081500W - 575000N 0081500W - 575900N 0065200W.

c. FJA South East. 575600N 0072000W - 575900N 0065200W - 574600N 0061000W - 563500N 0052200W - 560600N 0063000W - 561000N 0065400W - 562028N 0072000W - 575600N 0072000W.

19. **FJA Operations.** Aircrew and control agencies are to note the following coordination procedures which will apply to the FJAs:

a. Prestwick Centre and Swanwick (Mil) North have agreed to the reservation of the FJAs on EXCON's guarantee that, FL245 and above, all Ex JW activity will be entirely contained within the confines of the reserved areas. To assist in airspace planning MABCC are to send North Atlantic Flow predictions to EXCON at D-5 with Prestwick Centre confirming North Atlantic Flow at D-1. EXCON agrees **to not activate both FJA North simultaneously with FJA South (a 30 minute buffer should be planned between subsequent activations although this may be waived dependant on time and day of activity and in discussion with Prestwick Centre)**, however, both FJA North and FJA South can be requested at 1200z providing one area is subsequently cancelled NLT D-1 1600z. **FJA South should not be activated in its entirety if non-Exercise activity is scheduled in D701.** CRC Boulmer will be the primary control agency within the segregated element of the FJAs (above FL245) and may delegate to other assets as appropriate.

b. **Tac C2 Agencies.** FJAs are segregated above FL245 when active. Tactical C2 units are cleared to provide air traffic services in accordance with their qualification. Tactical C2 units that are subject to communications jamming on their control frequencies may be granted approval to continue to provide control to air assets, iaw Daily SPINS and/or Unit Orders, whichever is the most restrictive.

c. **FJAs / J Area Emergency Access.** Prestwick Centre/Swanwick (Mil) North reserve the right to enter the FJAs or J Areas with any aircraft in emergency. In such circumstances, emergency aircraft will be instructed to Squawk Mode 3/A 75/76/7700 and, if under the control of Prestwick Centre, the Ops Supervisor will inform the Swanwick (Mil) North Supervisor of the intention to enter the area. The Swanwick (Mil) North Supervisor is requested to arrange for an 'All Stations' and, if necessary 'Cease Jamming' transmissions on 243.0 MHz stating the position and intentions of the aircraft. In the case of an aircraft being routed through a J area firing serial, EXCON is to be informed immediately in order that a cease fire order can be issued to the ship(s). Ex JW participants observing an Emergency squawk, or on being informed of an aircraft in emergency, in or approaching the FJA or live fire area are to remain well clear of the emergency aircraft and, if applicable, cease firing immediately.

d. **Aircrew/ATC Procedures Exiting FJAs/MDAs.** Prior to completion of an MDA / FJA serial, aircraft requiring a service in transit from Swanwick (Mil) are to pass their intentions to their Tac C2 agency at least 5 minutes prior to completion. The Tac C2 agency are to pre-note the appropriate Swanwick (Mil) Planner with the following details: callsign, number in formation, Flight Level, and aircraft intentions. The exception to this is when aircraft are being controlled by a Mar(ADU) platform.

e. **Maritime Fighter Controllers within FJAs.** Maritime Fighter Controllers are permitted to control within the FJAs in accordance with strict procedures in EX SPINS.

20. **Route Closures.** The following ATS routes and Conditional Routes will not be available or will be restricted during activation of the named FJAs as detailed at Para 5. Aircrew are to note that Helicopter Routes are not closed and airspace below FL195 (FL245 when TRAs are active) is NOT segregated, therefore, civilian and military traffic may enter the areas. Prestwick Centre has agreed to tactically re-route or vertically restrict GAT traffic above FL195/245 as required. AMC UK agrees to close the appropriate conditional routes. AMC UK will define the FJA and J Areas within the Integrated Flight Plan Processing System (via Network Management, Brussels) that will close these areas and the ATS Routes through them for flight planning purposes. Additionally, parts of the FJA South and Southeast airspace volumes are contained within Direct Route Airspace where no ATS routes are published. GAT traffic will be prohibited from filing direct routes through the FJAs by IFPS. Prestwick Centre will publish appropriate guidance to GAT operators to allow them to plan avoidance of the active FJAs. It is therefore imperative in the interest of Flexible Use of Airspace that, in the event that a FJA is not to be utilised above FL245, that EXCON contacts MABCC at the earliest opportunity to handback the airspace. These routes and/or Direct Route Airspace may subsequently be made available to GAT and the flight planning restrictions removed.

## a. FJA North

## UARs

UP60	FORTY –BAMRA - AKVIO
UP61	BAMRA – RATSU
UN593	NINEX – BAMRA
UN584	BAMRA – SUM
UZ107	BEREP - ADN

## CDRs

UL613	FINDO – GONUT
UL619	RIVOT – AKIVO
UN583	FORTY – STN
UM86	FORTY - AKIVO

## b. FJA South East

## Class E Airways

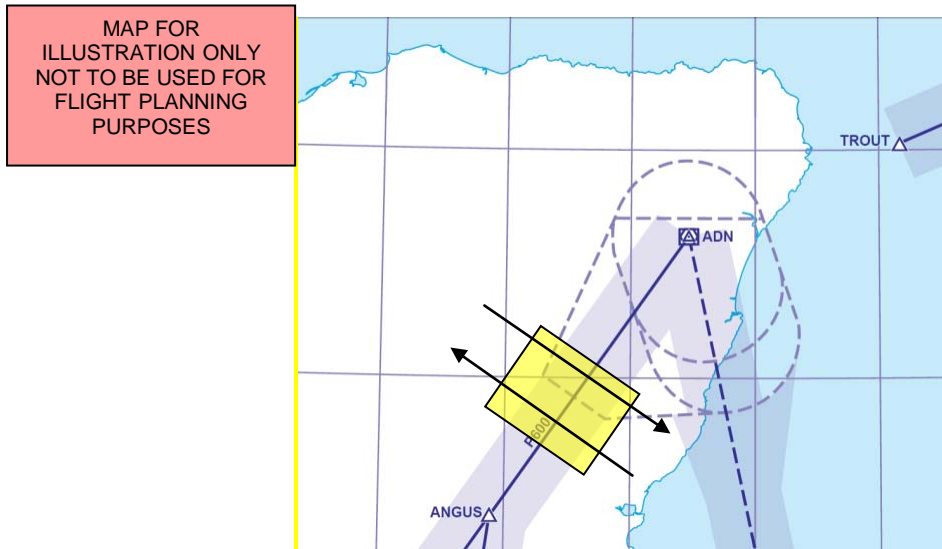
Y958	TOMBO - BRUCE
N580	TIREE - BRUCE

21. **High Seas Firings/Gunnery.** Missile firings and gunnery will take place in designated areas. Timings will be promulgated by EXCON by 1200z D-1. The areas will be subject to standard NOTAM action; however it is to be noted that they **do not attract Danger Area status** and are subject to standard clear range procedures. Firings may include towed aerial targets with maximum tow lengths of 23,000ft behind and 2000ft below the towing aircraft. The High Seas Firing/Gunnery areas are:

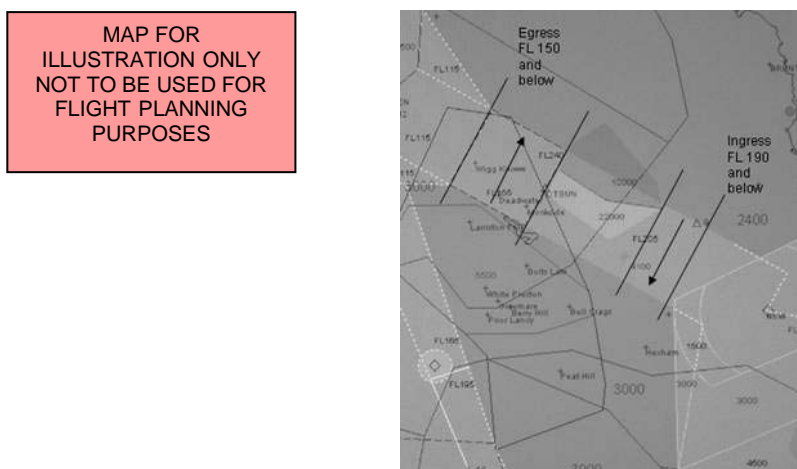
AREA	CO-ORDINATES	VERTICAL LIMITS (FT AMSL)	REMARKS
J1	571500N0094000W- 571500N0090931W- 570449N0081500W- 563000N0081500W- 563900N0094000W- 571500N0094000W	SFC-55000	When J1 is active FJA South and FJA South East are to be capped at FL290 to facilitate GAT flow. J1 is not to be activated prior to 0630 to facilitate Oceanic Traffic Flow
J1 Target Streaming Area	564200N0081500W- 561000N0065400W- 554400N0065400W- 563524N0090450W- 563000N0081500W- 564200N0081500W	SFC-19000	
<i>Supplementary J1 Target Streaming Area</i>	<i>574000N0073500W- 570449N0081500W- 571500N0090931W- 574000N0082000W- 574000N0073500W</i>	<i>SFC-19000</i>	<i>Contingency Option for this Exercise; only to be used if assets have to be based at Stornoway. Requires suppression of EGD701.</i>
J4	592400N0050000W- 590500N0050000W- 590500N0055712W- 592400N0055908W- 592400N0050000W	SFC-55000	
J4 Target Streaming Area	590500N0050000W- 591500N0050000W- 590700N004100W- 583500N004100W- 583500N004300W- 590000N004300W- 590500N0050000W	SFC-24000	
<i>Supplementary J4 Target Streaming Area</i>	<i>591500N 0055800W- 590500N 0055712W- 583200N 0055356W- 583200N 0061500W- 591500N 0061500W- 591500N 0055800W</i>	<i>SFC-24000</i>	<i>Contingency Option for this Exercise; only to be used if assets have to be based at Stornoway.</i>
J5	584432N0055510W- 590500N0055712W- 590500N0050000W- 585905N0050000W- 584432N0055510W	SFC-55000	
J6	583200N0050000W- 583200N0055356W- 584432N0055510W- 585905N0050000W- 583200N0050000W	SFC-55000	
ROZ FOX	584500N0053000W- 584500N0050000W- 583200N0050000W- 583200N0053000W- 584500N0053000W	SFC-55000	Live Firing Extension Area to West of Cape Wrath

22. **High Seas Firing.** Prestwick Centre has agreed the reservation of the J areas and ROZ FOX on the EXCON's guarantee that all Ex JW activity will be entirely contained within the reserved areas. Prestwick Centre will **endeavor** to route all GAT clear of missile/gunnery activities, however, aircrew are to be aware that these areas **do not attract Danger Area status and are subject to Clear Range Procedures.** **Note:** provided standard rules for separation and coordination can be adhered to, GAT may be routed above the streaming aircraft in the J1 and J4/5 streaming areas provided both the levels of the streaming aircraft and the towed target can be confirmed.
23. **Eagle Safety.** During air raids in the maritime environment a maritime Air Safety Cell will be established operating from the most geographically-appropriate ship. It will use the callsign EAGLE SAFETY. If EAGLE SAFETY is not operating, a subordinate unit callsign FALCON SAFETY will be established. Frequencies for EAGLE/FALCON SAFETY will be promulgated in EX SPINS.
24. **Close Air Support (CAS).** CAS may take place within notified Danger Areas (D801, D802, D803, D703, D510, D203, D113A,B) and in Uncontrolled Airspace within Military Training Areas (NWMTA, Loch Ewe and Loch Eriboll). All CAS areas will be subject to NOTAM action. EXCON is to endeavour to schedule all night CAS within notified Danger Areas.
25. **MPA Procedures West of 10W.** The JW MPA Area has been subdivided within the Shanwick Oceanic AOR, defined by the co-ordinates 600000N 0120000W - 553000N 0120000W - 553000N 0100000W - 600000N 0100000W. This area will be activated as required during the exercise. Traffic information specific to this area will be passed via the UK Maritime Air Operations Centre (UK MAOC), which is based at RAF Lossiemouth for JW161.
26. For Non-JW MPAs operating outwith the Exercise Area, UK MAOC will activate their area through Shanwick Oceanic in accordance with standing agreements. Hosting UK airbases will ensure that visiting crews have access to the appropriate documents.
27. **Newcastle and Teesside Airports.** Exercise participants are to ensure that they comply with the details concerning the airspace buffers and rules regarding operations in the vicinity of the Newcastle and Teesside CTZ. GAT routinely routes outside of Controlled Airspace into and out of Teesside and Newcastle Airports, therefore, aircrew are to remain extra vigilant whilst transiting through the airspace around these airports.
28. **Handback Procedures.** JTEPS EXCON (SO3 BM) at Faslane is the only authority to hand back JW airspace to appropriate agencies. If airspace is no longer required, aircrew are to hand it back through their appropriate operating authority, which is then to contact JTEPS SO3 BM.
29. **Jamming.** GPS, radar and communications jamming will take place, affecting frequencies bands A-J. **Control agencies experiencing jamming of an unacceptable level are to:**
- a. Contact EXCON Battlewatch Captain to request cease jamming. EXCON will confirm if jamming is taking place and will contact the relevant Jamming Control Agency as required.
  - b. If contact with EXCON cannot be established assistance may be sought from the Swanwick (Mil) North Supervisor on 01489 612943 (GPTN 95586 Ext 2943) or the Boulmer Master controller on 01665 572311. The UK NADOC Air Surveillance Officer (01494 494813/4/5) is an alternative contact in extremis for cease jamming.
  - c. All emergency cease-jamming calls are to be made on GUARD frequencies and crews are to monitor these frequencies for safety messages. For other non-emergency messages, the Jamming Safety frequency is Swanwick (Mil) Northwest UHF ICF (282.625 MHz or VHF 134.3MHz).
30. **Request for Closure of CDR P18 Airway.** It is requested that MABCC ensure that CDR P18 (Between NATEB and ADN) is closed for periods when there is Ex JW air activity in the area surrounding the airway during its published times of availability. EXCON is to ensure MABCC are aware of this requirement NLT 1200z D-1.

31. **GLESK Corridor.** A temporary radar corridor has been established through P600 south of Aberdeen with the following dimensions for the duration of the exercise; 5643N00250W-5651N00240W-5657N00255W-5648N00305W. Transits of P600 from east to west are to be made at FL140/240 whilst transits of P600 from west to east are to be made at FL130/230. Exercise aircraft departing or returning to Lossiemouth during the period of the exercise routing through P600 will be expected to route through this corridor in order to facilitate co-ordination with civil traffic departing and arriving into Aberdeen Airport. Crews are to contact Swanwick (Mil) North on published ICF frequencies no later than 5 minutes prior to entering the corridor. All aircraft will be subject to a Radar Service once inside the corridor and are not to enter the corridor unless a clearance has been obtained from Swanwick (Mil) North. Swanwick (Mil) North will coordinate with TAY Sector the use of the corridor for military transits. RAF Lossiemouth ATC are to provide rolling calls to Swanwick (Mil) North Planner via direct line for aircraft looking to use the Glesk Corridor.



32. **Spadeadam (D510) Operations.** To allow exercise Mode 3A code to be retained for ingress/egress, all Spadeadam Operations aircraft are to maintain clear of Controlled Airspace throughout. A clockwise system will be enforced from the north with aircraft entering from the north east FL190 and below and exiting to the north west FL150 and below. Crews are to contact Spadeadam Control on UHF 308.77 MHz no later than 3 minutes prior to ingress to ensure timely identification and co-ordination with civil traffic departing and arriving into Newcastle Airport. If entry to Controlled Airspace is required then the aircraft are to display Mode 3A code as directed by Spadeadam ATC.



33. NAIC Northolt is requested to forward NOTAM details to participating ships.