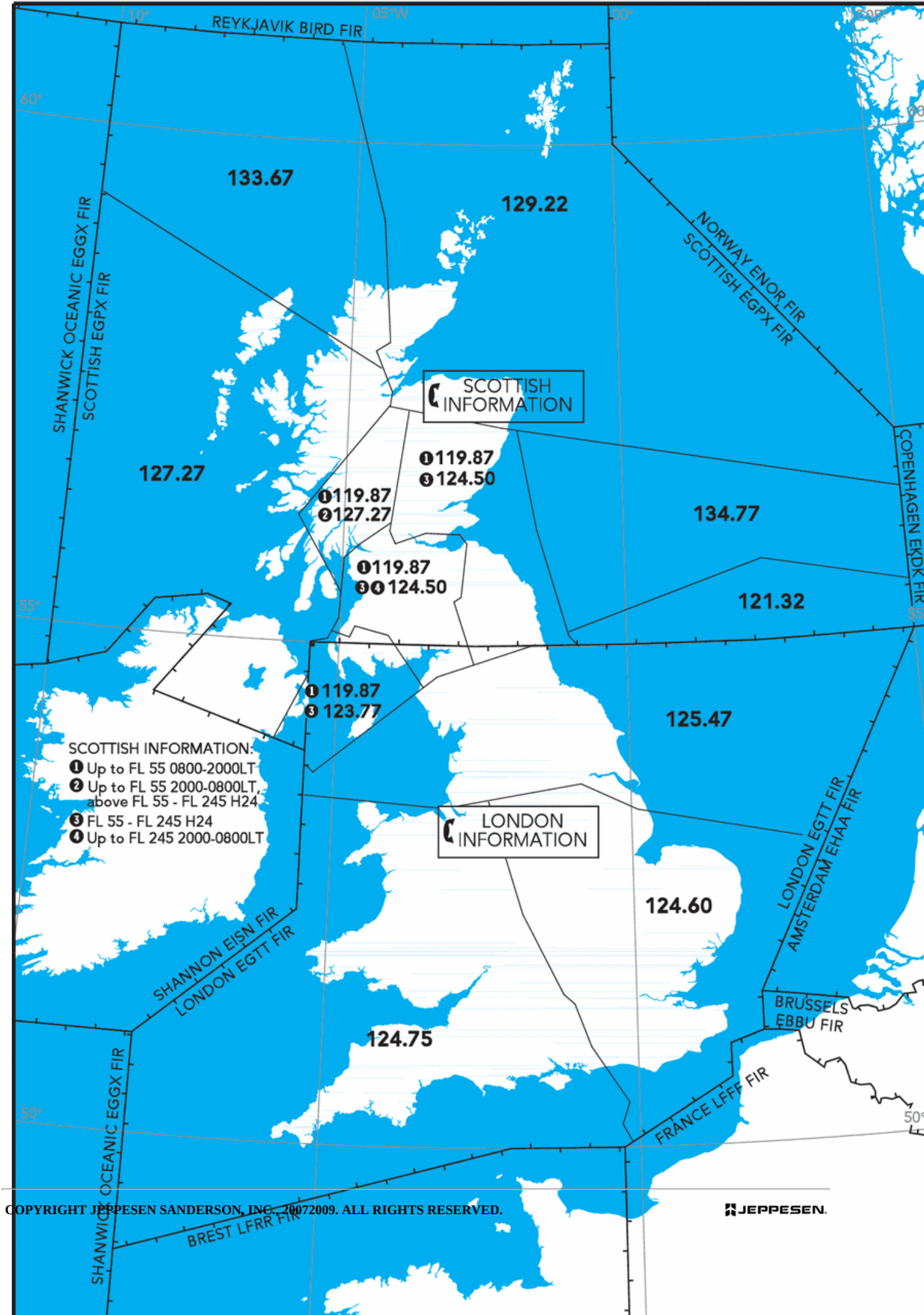
Revision Date: 20091225

2.3 Communications

2.3.1 Flight Information and Radar Service

2.3.1.1 Flight Information Service (FIS)

Flight Information Service (FIS) Frequencies



JEPPESEN

CHANGES: Editorial.

The call sign “SCOTTISH INFORMATION” will be used when no Control or Advisory Service is being provided. The call sign “SCOTTISH CONTROL” will be used when Control or Advisory Service is being provided.

ACFT operating in the Shetland area and experiencing difficulty in communicating with SCOTTISH INFORMATION may call SUMBURGH RADAR on 131.30 during its hours of operation.

2.3.1.2 ATS Surveillance Service Outside Controlled Airspace

2.3.1.2.1 Overview

The residual airspace within the UK Flight Information Regions (FIRs) and Shanwick FIR which lies outside Controlled Airspace and Advisory Routes (Classes (A) to (F)) is designated Class (G). The ICAO requirements for a Flight Information and Alerting Service are met in the UK FIRs through a suite of services, collectively known as the UK Flight Information Services (FIS), and are provided through the following provisions:

a. To participating flights arriving at, departing from and overflying ADs located within Class (G) airspace;

b. To ACFT within Advisory Radio Areas;

c. Lower Airspace Radar Services (LARS) and Military Middle Airspace Radar Services;

d. Area Control Centre (ACC) services, including the provision of service by ACC FISOs.

The UK FIS (Basic Service, Traffic Service, Deconfliction Service, Procedural Service) are detailed herein. Within the UK, the scope of FIS is met through the provision of a Basic Service.

2.3.1.2.2 Service Principles

Within Class (G) airspace, regardless of the service being provided, pilots are ultimately responsible for collision avoidance and terrain clearance, and they should consider service provision to be constrained by the unpredictable nature of this environment.

A pilot shall determine the appropriate service for the various phases and conditions of flight and request that service from the controller/FISO. An Alerting Service will be provided in association with all services.

Controllers will make all reasonable endeavours to provide the service that a pilot requests. However, due to finite resources or controller workload, tactical priorities may influence service availability. FISOs are not licensed to provide Traffic Service, Deconfliction Service, or Procedural Service.

Instructions issued by controllers/FISOs to pilots operating outside controlled airspace are not mandatory; however, the services rely upon pilot compliance with the specified terms and conditions so as to promote a safer operating environment for all airspace users.

Agreements can be established between a controller and a pilot such that the operation of an ACFT is laterally or vertically restricted beyond the core terms of the Basic Service or Traffic Service. Unless safety is likely to be compromised, a pilot shall not deviate from an agreement without first advising and obtaining a response from the controller.

There may be circumstances that prevent controllers from passing timely traffic information and/or deconfliction advice, e.g. high workload, areas of high traffic density, against unknown ACFT conducting high energy manoeuvres, or when traffic is not displayed to the controller or obscured by surveillance clutter. Controllers shall inform the pilot of known reductions in traffic information along with the reason and the probable duration; however, it may not always be possible to provide these warnings in a timely fashion.

2.3.1.2.3 Basic Service

Basic Service provides advice and information useful for the safe and efficient conduct of flights. This may include weather information, changes of serviceability of facilities, conditions at ADs, general airspace activity information, and any other information likely to affect safety. The avoidance of other traffic is solely the pilot's responsibility.

Basic Service is available under IFR or VFR and in any meteorological conditions.

Pilots should not expect any form of traffic information from a controller/FISO and the pilot remains responsible for collision avoidance at all times. However, on initial contact the controller/FISO may provide traffic information in general terms to assist with the pilot's situational awareness. This will not normally be updated by the controller/FISO unless the situation has changed markedly, or the pilot requests an update.

Basic Service is available at all levels and the pilot remains responsible for terrain clearance at all times.

Unless the pilot has entered into an agreement with a controller to maintain a specific course of action, a pilot may change heading, route, or level without advising the controller. A controller will not issue specific heading instructions; however, generic navigational assistance may be provided on request.

2.3.1.2.4 Traffic Service

Traffic Service is a surveillance based ATS, where in addition to the provisions of a Basic Service, the controller provides specific surveillance derived traffic information to assist the pilot in avoiding other traffic.

Traffic Service is available under IFR or VFR and in any meteorological conditions. If a controller issues a heading and/or level that would require flight in IMC, a pilot who is not suitably qualified to fly in IMC shall inform the controller and request alternative instructions.

The controller will pass traffic information on relevant traffic, and update the traffic information if it continues to constitute a definite hazard, or if requested by the pilot. However, high controller workload and RTF loading may reduce the ability of the controller to pass traffic information, and the timeliness of such information. Whether traffic information has been passed or not, a pilot is expected to discharge his collision avoidance responsibility without assistance from the

controller. If after receiving traffic information, a pilot requires deconfliction advice, an upgrade to Deconfliction Service shall be requested.

Subject to ATS surveillance system coverage, Traffic Service may be provided at any level and the pilot remains responsible for terrain clearance at all times.

A pilot may operate under his own navigation or a controller may provide headings and levels for the purpose of positioning, sequencing or as navigational assistance. If a heading or level is unacceptable to the pilot he shall advise the controller immediately. When operating under own navigation, pilots may alter course as required; however, unless safety is likely to be compromised, pilots shall not change their general route or manoeuvring area without first advising and obtaining a response from the controller. When following an ATC heading, unless safety is likely to be compromised, a pilot shall not change heading without first advising and obtaining a response from the controller.

2.3.1.2.5 Deconfliction Service

A 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 deconfliction advice.

A Deconfliction Service is available under IFR or VFR and in any meteorological conditions. The controller will expect the pilot to accept headings and/or levels that may require flight in IMC. A pilot who is not suitably qualified to fly in IMC shall not request a Deconfliction Service unless compliance permits the flight to be continued in VMC.

A controller will provide traffic information, accompanied with a heading and/or level aimed at achieving a planned deconfliction MNMs. High controller workload or RTF loading may reduce the ability of the controller to pass such deconfliction advice; furthermore, unknown ACFT may make unpredictable or high-energy manoeuvres. Consequently, controllers cannot guarantee to achieve these deconfliction MNMs; however, they shall apply all reasonable endeavours. The avoidance of traffic is ultimately the pilot's responsibility.

The pilot shall inform the controller if he elects not to act on the controller's deconfliction advice, and therefore accepts responsibility for initiating any subsequent collision avoidance against that particular conflicting ACFT.

A Deconfliction Service will only be provided to ACFT operating at or above a terrain safe level, unless on departure from an AD when climbing to a terrain safe level, or when following notified instrument approach procedures. If a controller detects a confliction when an ACFT is departing from an AD and climbing to the terrain safe level, or when following notified instrument approach procedures, traffic information without deconfliction advice shall be passed. However, if the pilot requests deconfliction advice, or the controller considers that a definite risk of collision exists, the controller shall immediately offer such advice.

Unless safety is likely to be compromised, a pilot shall not change heading or level without first obtaining approval from the controller.

2.3.1.2.6 Procedural Service

A Procedural Service is a non surveillance ATS where, in addition to the provisions of a Basic Service, the controller provides instructions, which if complied with, shall achieve deconfliction MNMs against other ACFT participating in the Procedural Service. Neither traffic information nor deconfliction advice can be passed with respect to unknown traffic.

A Procedural Service is available under IFR or VFR and in any meteorological conditions. The controller will expect the pilot to accept levels, radials, tracks and time allocations that may require flight in IMC. A pilot who is not suitably qualified to fly in IMC shall not request a Procedural Service unless compliance permits the flight to be continued in VMC.

A Procedural Service is available at all levels and the pilot remains wholly responsible for terrain clearance at all times.

A controller will provide deconfliction instructions by allocating levels, radials, tracks, time restrictions, approach clearances and holding instructions, or use pilot position reports, aimed at achieving a planned deconfliction MNMs. The pilot shall inform the controller if he elects not to act on the controller's deconfliction advice, and therefore accepts responsibility for initiating any subsequent collision avoidance against the ACFT in question and any other ACFT affected.

The controller will provide traffic information on conflicting ACFT being provided with a Basic Service and those where traffic information has been passed by another ATS unit; however, there is no requirement for deconfliction advice to be passed, and the pilot is wholly responsible for collision avoidance.

Unless safety is likely to be compromised, a pilot shall not change level, radial, track, or time restriction without first obtaining approval from the controller. If a level, radial, track, or time restriction is unacceptable to the pilot, he shall advise the controller immediately.

2.3.1.2.7 London Control - Requests for Deconfliction Service or Traffic Service

In order to avoid excessive RTF conversations on the frequencies used by 'London Control', pilots who intend to request such a service from 'London Control' are to make their initial request on the London Information frequency appropriate to their geographical position. The Flight Information Service Officer will co-ordinate with the appropriate Radar Sector and subsequently inform the pilot whether or not a Deconfliction Service or Traffic Service can be provided and, if so, on what frequency.

Pilots should note that no Deconfliction Service or Traffic Service will be available on any London Control Frequency below FL 70. In any case a serviceable transponder will be a pre-requisite for either service.

2.3.1.3 Lower Airspace Radar Service (LARS)

2.3.1.3.1 Availability of Service

The service is available to all ACFT flying outside Controlled Airspace up to and including FL 95, within the limits of radar/radio cover. The service will be provided within approximately 30 NM of each participating ATS Unit.

Unless a participating ATS Unit is H24, the service will normally be available Mon-Fri 0800-1700LT in winter and in summer.

However, as some participating Units may remain open to serve evening, night or weekend flying, pilots are recommended to call for the service irrespective of the published hours of ATS. If no reply is received after three consecutive calls, it should be assumed that the service is not available.

LARS will not normally be available from non-H24 Units at weekends and during public holidays.

Pilots intending to operate above FL 95 will be advised to contact an appropriate Air Traffic Control Radar Unit (ATCRU) and request a Deconfliction Service or Traffic Service. However, as VHF frequencies at Military ATCRUs are not continuously monitored unless in use, civil pilots may ask controllers to arrange a frequency on which to call the appropriate Unit.

2.3.1.3.2 Procedures

Pilots intending to use the Lower Airspace Radar Service should note the participating ATS Units close to their intended track and comply with the following procedures:

a. When within approximately 40 NM of a participating ATS Unit, establish two-way radio contact on the appropriate frequency, using the phraseology:

   "... (participating ATS unit), this is ... (ACFT call sign), request Lower Airspace Radar Service."

b. The controller may be engaged on another frequency, pilots may, therefore, be asked to "stand-by for controller". When asked to go ahead, pilots should pass the following information:
   1. Call sign and type of ACFT;
   2. estimated position;
   3. heading;
   4. Flight Level or Altitude;
   5. intention (next reporting/turning point, destination etc.);
   6. request for Deconfliction Service or Traffic Service.

c. Maintain a listening watch on the allocated frequency.

d. Follow advice issued by controllers, or if unable to do so, advise controller of non-compliance.

e. Advise the controller when the service is no longer required.

NOTE:

Reporting of flight conditions is not required unless requested by controllers.

The ACFT will be identified and the pilot so informed before radar service is given.

Under a Deconfliction Service or Traffic Service, participating LARS ACFT will be given the service in accordance as described above.

Whenever possible, ACFT will be handed over from controller to controller in an area of overlapping radar cover and pilots told to "Contact" the next Unit. When this cannot be effected, pilots will be informed of their position and advised which Unit to call for further service.

If a pilot wishes to enter Controlled Airspace, even though he may be in receipt of a LARS beforehand, he remains responsible for obtaining the required clearances before entry. LARS controllers may assist in obtaining clearance, if workload permits, but pilots must be prepared to carry out this task independently.

2.3.1.3.3 Terrain Clearance

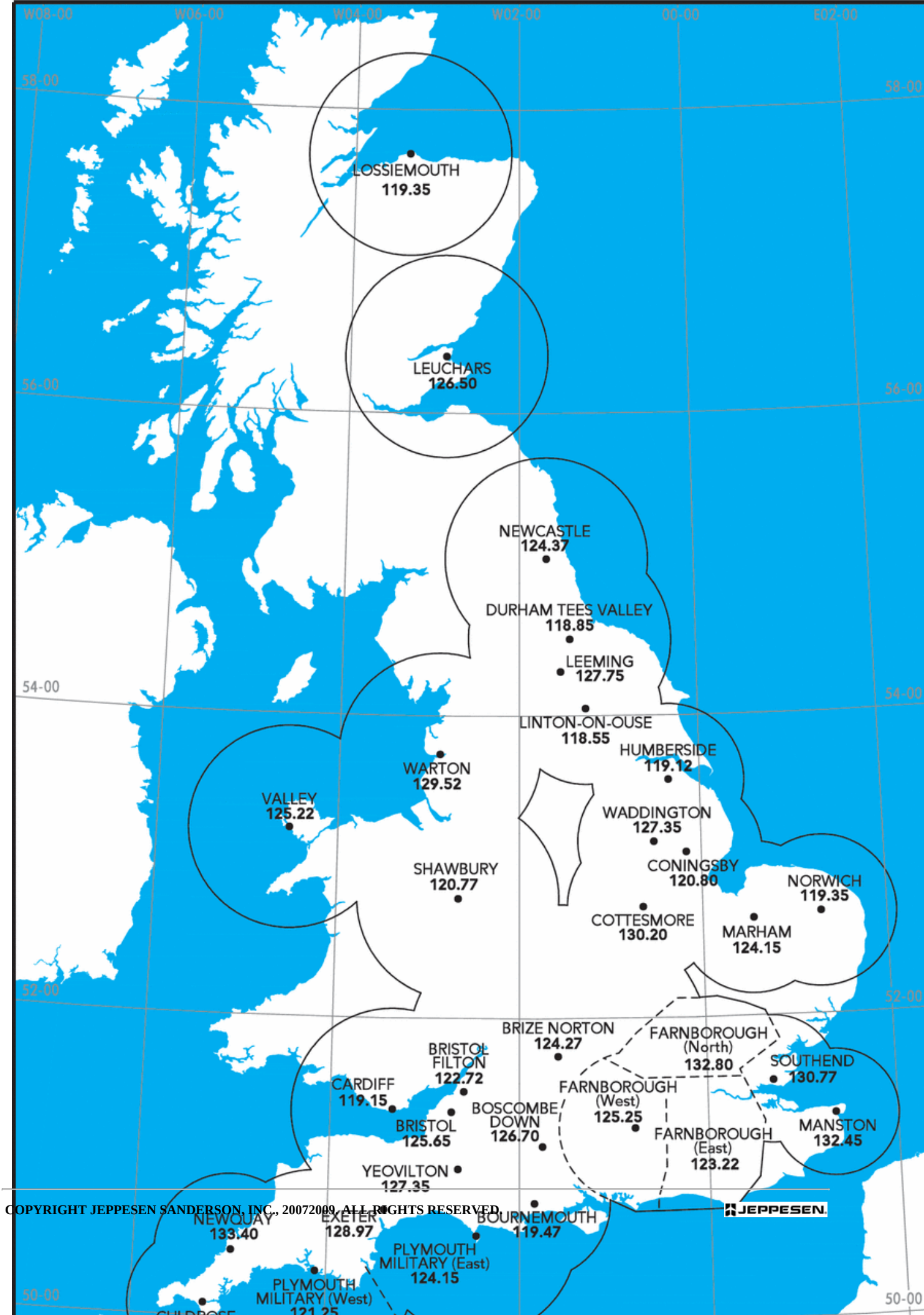
Terrain clearance will be the responsibility of pilots. However, LARS units will set a level or levels below which a Deconfliction Service is to be refused or terminated.

2.3.1.3.4 Advice to Pilots

The provision of LARS is at the discretion of the controllers concerned, because they may be fully engaged in their primary tasks. Therefore, occasionally, the service may not be available.

2.3.1.3.5 Participating ATS Units

Lower Airspace Radar Service (LARS)



CHANGES: CARDIFF chgd - Eff 14 Jan: MANSTON & PLYMOUTH chgd.

Participating ATS Units

Aerodrome/Unit	Coordinates	Availability
BOSCOMBE DOWN	N51 09 W001 45	Mon-Fri 0900-1700LT.
BOURNEMOUTH	N50 47 W001 51	0800-2000LT.
BRISTOL	N51 23 W002 43	H24.
BRISTOL FILTON	N51 31 W002 35	Mon-Fri 0800-1800LT, O/T Bristol.
BRIZE NORTON	N51 45 W001 35	0900-1700LT.
CARDIFF	N51 24 W003 21	0600-2300LT.
CONINGSBY	N53 06 W000 10	Mon-Fri 0800-1700LT.
COTTESMORE	N52 44 W000 39	Winter: Mon-Thu 0830-1730LT, Fri 0830-1700LT; Summer: Mon-Thu 0830-1800LT, Fri 0830-1700LT.
CULDROSE	N50 05 W005 15	Mon-Thu 0830-1700LT or SS, Fri 0830-1400LT.
DURHAM TEES VALLEY	N54 31 W001 26	0900-1800LT.
EXETER	N50 44 W003 25	Winter: Mon-Fri 0700-0200LT (next day), Sat 0800-1700LT, Sun 0830-0100LT (next day); Summer: Mon-Fri 0700-0200LT (next day), Sat 0630-2100LT, Sun 0800-0100LT (next day).
FARNBOROUGH (West)	N51 17 W000 47	0800-2000LT.
FARNBOROUGH (East)	N51 17 W000 47	0800-2000LT.
FARNBOROUGH (North)	N51 17 W000 47	0800-2000LT.
HUMBERSIDE	N53 34 W000 21	Sun-Fri 0630-2015LT, Sat 0630-2000LT.
LEEMING	N54 18 W001 32	Mon-Thu 0800-1800LT, Fri 0800-1700LT.
LEUCHARS	N56 22 W002 52	H24.
LINTON-ON-OUSE	N54 03 W001 15	Mon-Thu 0730-1715LT, Fri 0730-1700LT.
LOSSIEMOUTH	N57 42 W003 20	Mon-Fri 0900-1700LT.
MANSTON	N51 21 E001 21	0900-1700LT.
MARHAM	N52 39 E000 33	Mon-Thu 0800-2359LT, Fri 0800-1800LT.
NEWCASTLE	N55 02 W001 41	H24.
NEWQUAY	N50 26 W005 00	0600-2200LT.
NORWICH	N52 41 E001 17	Mon-Fri 0900-1700LT.
PLYMOUTH MILITARY[1]	N50 19 W004 07	Mon-Thu 0800-1700LT, Fri 0800-1400LT.
PLYMOUTH MILITARY[1]	N50 34 W002 27	Mon-Thu 0800-1700LT, Fri 0800-1400LT.
SHAWBURY	N52 48 W002 40	Winter: Mon-Fri 0830-1700LT; Summer: Mon-Fri 0830-1730LT.

Aerodrome / Unit	Coordinates	Availability
SOUTHEND	N51 34 E000 42	0900-1800LT.
VALLEY	N53 15 W004 32	Mon-Thu 0800-1800LT, Fri 0800-1700LT.
WADDINGTON	N53 10 W000 31	Mon-Thu 0800-2359LT, Fri 0800-1700LT.
WARTON	N53 45 W002 53	Mon-Thu 0730-1900LT, Fri 0730-1700LT.
YEOVILTON	N51 00 W002 39	Mon-Thu 0830-1700LT, Fri 0830-1400LT.
[1] The PLYMOUTH MILITARY East and West LARS areas are divided at the western edge of AWYs N864/N862.		

2.3.1.3.6 Bristol Filton and Bristol LARS

Due to the impracticalities caused by the position of the Bristol Controlled Airspace with regard to the LARS area served by Bristol Filton, it has been agreed that during the op hr for Bristol Filton LARS the following procedures apply:

N of a line between the M5 Bridge over the River Avon and the M4 junction 18 pilots will receive the service from Bristol Filton, S of this line pilots will receive the Service from Bristol.

Pilots calling either one of these units in the others agreed area of responsibility will be instructed to contact the appropriate unit.

2.3.1.3.7 Farnborough LARS

The boundaries shown on the LARS chart purely indicate the extent of the AVBL service and do not infer that Farnborough LARS will be the controlling Authority for the crossing of either Controlled Airspace or Military ATZs.

2.3.1.4 Military Middle Airspace Radar Service

2.3.1.4.1 Availability of Service

This service is available to all ACFT flying outside Controlled Airspace in the UK FIRs between FL 100 and FL 190 and within active TRAs, EXC for flight along Advisory Routes and within the Sumburgh Flight Information Service Area (FISA). This service is subject to Unit capacity.

The Military Air Traffic Control Radar Units (ATCRU) providing this service together with their boundaries are depicted on the Military Middle Airspace Radar Chart (see following chart). This chart also shows the RTF operating frequency on which this service is normally provided and a telephone number for pre-flight contact.

Participating ACFT must be equipped with a serviceable transponder.

2.3.1.4.2 Type of Service

The service provided will be a Deconfliction Service or Traffic Service (for details refer to section 2.3.1.2).

2.3.1.4.3 Procedures

The military Units providing the Middle Radar Advisory Service have a VHF Initial Contact Frequency (ICF).

Captains of ACFT requiring a radar service S of N54 within the London Air Traffic Control Centre (LATCC) (Mil) area of responsibility and N of N54 within the Scottish Air Traffic Control Centre (ScATCC) (Mil) area of responsibility are to pre-notify their intended flight details to LATCC (Mil)/ScATCC (Mil) by one of the following methods:

Pre-Flight Notification - Flight Plans (preferred method): Not less than 30 MIN in advance, including address EGWDZQZX (LATCC Mil), resp. EGZYOATP (ScATCC Mil), giving point & time at which a radar service is required to commence (Item 18) and entry/exit point of the area (Item 15).

NOTE:

If a flight is planned to enter any Controlled Airspace (CAS) within the LATCC (Mil) area, resp. ScATCC (Mil) area of responsibility and a service is required before joining or after leaving CAS, both parts of the route may be entered in Item 15 of the same flight plan. In this case both EGZYIFPS and EGWDZQZX (LATCC Mil), resp. EGZYOATP (ScATCC Mil) must appear as addressees.

Pre-Flight Notification - Military Prenote (if filing of a FPL was not possible pass details in following order):

1. Call sign;
2. number of ACFT & type;
3. PSN & time at which service should commence;
4. speed & flight level at commencement of service;
5. route (with speed & level changes);
6. PSN of leaving the delineated area;
7. DEST (ICAO location indicator);

by TEL to LATCC (Mil) Main Flight Plan Reception Section (ATOTN, Ext. 67 10), resp. to ScATCC (Mil) Supervisor Assistant (Tel: (0 12 94) 65 51 81) at least 15 MIN before service is required.

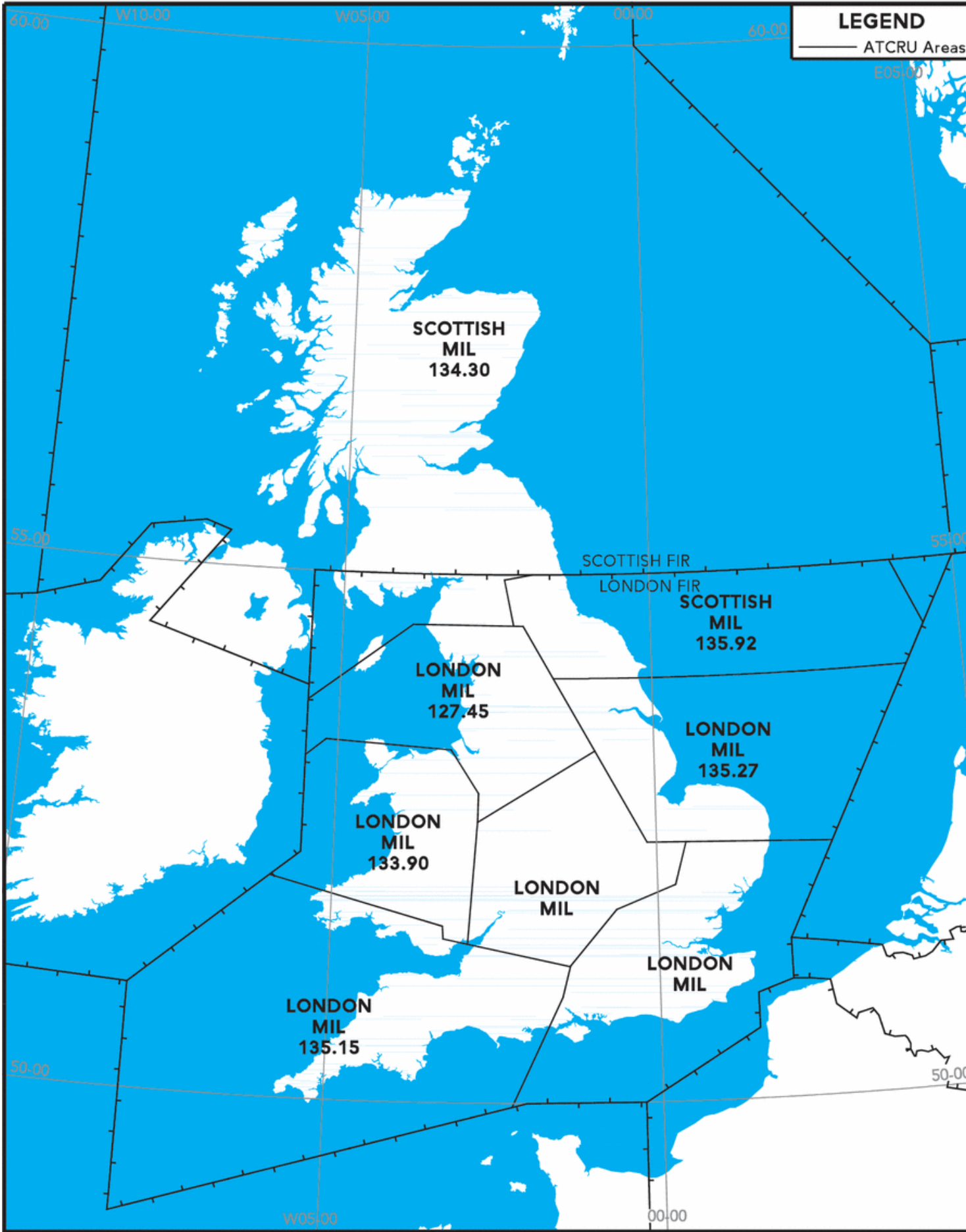
In-Flight Notification - Air Filing (exceptionally, if neither form of the preceding pre-flight notifications has been made): The flight details may be notified in flight by radio to:

1. ATCRU at least 15 MIN in advance;
2. LATCC (Mil) / ScATCC (Mil) at least 5 MIN in advance, passing the details listed in b. above.

NOTE:

Changes to pre-flight notifications are to be passed to LATCC (Mil) / ScATCC (Mil) as soon as possible by amended flight plan if time permits or by telephone. In-flight notifications are to be passed as soon as possible by RTF.

Military Middle Airspace Radar Service



Unit and Callsign	Operating hr	Initial Contact Freq (ICF)	Telephone Number
London Air Traffic Control Centre Military (LONDON MIL)	H24	127.45, 133.90, 135.15 & 135.27	(0 1489) 61 24 17 (0 1489) 61 24 08
Scottish Air Traffic Control Centre	H24	134.30 &	(0 12 94) 65 51 80

2.3.2 Transponder Settings

2.3.2.1 Carriage of SSR Transponder

A Secondary Surveillance Radar (SSR) Mode S transponder shall be operated within:

- United Kingdom Airspace at and above FL 100;
- The vertical and lateral bounds of the London Terminal Control Area (TMA);
- The Scottish TMA between 6000' and FL 100;
- The vertical and lateral bounds of the London Stansted TMZ.

In all other airspace, it is recommended that pilots operate an SSR transponder with pressure-altitude reporting enabled in order to facilitate detection of their ACFT by collision avoidance systems and ATC radar. Under the transition arrangements for the implementation of Mode S in UK airspace, it is expected that Mode A/C transponders will continue to be operated alongside Mode S transponders until 31 March 2012.

2.3.2.2 Mode A Conspicuity Code

When operating at and above FL 100 pilots of ACFT select the relevant Mode A conspicuity code (7000 - General conspicuity code) and Mode C pressure-altitude reporting mode of the transponder except:

- When receiving a service from an ATS Unit or Air Surveillance and Control System Unit which requires a different setting;
- When circumstances require the use of one of the Special Purpose Mode A codes or one of the other specific Mode A conspicuity codes assigned in accordance with the UK SSR Code Assignment Plan.

When operating a SSR equipped ACFT below FL 100 in circumstances where the operation of SSR transponders is not mandatory, pilots should select the relevant Mode A conspicuity code (7000 - General conspicuity code) and the Mode C pressure-altitude reporting mode of the transponder.

NOTE:

Pilots are warned of the need for caution when selecting Mode A conspicuity codes in the 70XX codes due to the proximity of the Special Purpose Mode A codes.

2.3.2.3 Codes in Use

0010 - This code may be used when flying in the vicinity of the Birmingham Control Zone/Area when the pilot is monitoring BIRMINGHAM RADAR.

0012 - This code may be used when flying in the vicinity of London Heathrow/London City/London Gatwick Control Zones/Areas and monitoring THAMES RADAR/GATWICK DIRECTOR.

0013 - This code may be used when flying in the vicinity of London Luton/London Stansted Control Zones/Areas and monitoring either LUTON RADAR or ESSEX RADAR.

6170 - This code may be used when flying in the vicinity of Doncaster Sheffield Control Zone/Area when the pilot is monitoring DONCASTER RADAR.

7366 - This code may be used when flying within 5 NM of the Manchester CTR and monitoring the MANCHESTER RADAR. Pilots squawking 7366 will receive no ATC service.