

Safety Regulation Group



CAP 774

UK Flight Information Services

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Safety Regulation Group



CAP 774

UK Flight Information Services

12 June 2008

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Foreword

1 Introduction and Applicability

In the UK, Air Traffic Services Outside Controlled Airspace (ATSOCAS) are provided by many civilian and military Air Traffic Service (ATS) providers to a variety of airspace users including Commercial Air Transport (CAT) operators, General Aviation (GA) and military pilots. The suite of services detailed in this document together form the UK Flight Information Services (FIS). With effect from 12 March 2009, these services (excluding aerodrome services) will be the only ATS provided in Class F/G airspace within the UK Flight Information Region (FIR). Therefore this document is equally applicable to all civilian and military pilots, who operate in Class F/G airspace, and to all controllers/Flight Information Service Officers (FISOs) who provide an ATS to them. Where notified, the UK FIS are also provided to aircraft in airspace where the background airspace classification may be other than Class F/G, e.g. active Managed Danger Areas and Temporary Reserved Areas.

2 Purpose and Scope

The overall purpose and scope of this document is to:

- provide a single set of clearly defined procedures for use by all controllers/FISOs and pilots;
- provide guidance material to support the procedures to enable common and consistent application of the services;
- ensure that the responsibilities of the controller/FISO and the pilot are clearly defined, particularly with regard to collision avoidance and terrain clearance; and
- ensure that UK FIS regulations are published in one single policy document to prevent divergence of procedures.

3 Relationship to ICAO Standards and Recommended Practices

ICAO defines FIS as *'a service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights'*. Within the UK, the scope of FIS, as defined in ICAO Annex 11, is met through the definition of a Basic Service. However, additional information and/or advice to airspace users are provided to meet their specific requirements in UK Class G airspace, and the requirements of ICAO Air Traffic Advisory Service in Class F airspace. The suite of services together form the UK FIS as detailed in this document.

4 Document Structure

Within this document, regulations are paragraph numbered. Associated guidance material is provided in italics below a regulation where appropriate.

5 Interpretation of Words

To avoid any misunderstanding within this document, certain words are to be interpreted as having specific meanings when they are the operative words in an instruction.

'shall' and 'must'	mean that the instruction is mandatory.
'should'	means that it is strongly advisable that an instruction is carried out; it is recommended or discretionary. It is applied where the more positive 'shall' is unreasonable but nevertheless a controller/FISO/pilot would have to have good reason for not doing so.
'may'	means that the instruction is permissive, optional or alternative, e.g. 'a controller may seek assistance...' but would not if he did not need it.
'will'	is used for informative or descriptive writing, e.g. 'pilots will file...', is not an instruction to the controller.

6 Gender

In the interests of simplicity, any reference to the masculine gender can be taken to mean either male or female.

7 Duty of Care

In association with the development of the procedures within this document, a formal review of liability, negligence and duty of care in ATS provision has been jointly conducted by CAA, MOD, Airport Operators' Association (AOA) and NATS legal experts. This process has generated guidance for controllers/FISOs as detailed at Appendix A. The procedures in this document have been produced with this guidance in mind.

8 Regulatory Oversight

Development oversight of UK FIS is vested in the Airspace and Safety Initiative (ASI) programme under the leadership of one of its sub-groups, the Air Traffic Management Standards Working Group, which is co-chaired by Head of Air Traffic Standards Division (Safety Regulation Group, CAA) and Deputy Assistant Chief of Staff – ATC Availability (HQ Air Command). Regulatory oversight is the responsibility of the CAA and MOD and any amendment to these procedures is subject to joint agreement being reached.

9 Enquiries

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Glossary and Abbreviations

1 Glossary

A

Aerodrome	Any area of land or water designed, equipped, set apart or commonly used for affording facilities for the landing and departure of aircraft. (ANO)
Aircraft	Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface. (ICAO)
Air Traffic Advisory Service	A service provided within advisory airspace to ensure separation, in so far as is practical, between aircraft which are operating on IFR Flight Plans. (ICAO)
Alerting Service	A service provided to notify appropriate organisations regarding aircraft in need of search and rescue aid, and assist such organisations as required. (ICAO)
Altitude	The vertical distance of a level, a point or object considered as a point, measured from mean sea level. (ICAO)
ATC Surveillance Minimum Altitude Area	A defined area in the vicinity of an aerodrome, in which the minimum safe levels allocated by a controller vectoring IFR flights with Primary and/or Secondary Radar equipment have been predetermined. (CAP 777)
ATC Unit Terrain Safe Level	The applicable level as published in ATC unit procedures, that ensures IFR terrain clearance requirements. (CAA/MOD) <i>Note: This may include: ATC Surveillance Minimum Altitude Areas, Radar Vector Charts, ADR levels, en-route ATC safety altitudes or sector safety altitudes.</i>
Air Traffic Service	A generic term meaning variously, flight information service, alerting service, air traffic advisory service, air traffic control service (area control service, approach control service or aerodrome control service). (ICAO)
Airspace and Safety Initiative	A Joint CAA, NATS, AOA, GA and MOD effort to investigate and tackle the major safety risks in UK airspace.

C

Controller	A generic term encompassing: civil and MOD air traffic controllers, ASACS weapons controllers, and any other military personnel who are trained, authorised and certified to provide some or all of the suite of services that comprise UK FIS. (CAA/MOD)
Controlled Airspace	An airspace of defined dimensions within which air traffic control service is provided in accordance with the airspace classification. (ICAO)
Co-ordination	Co-ordination is the act of negotiation between two or more parties each vested with the authority to make executive decisions appropriate to the task being discharged. (CAP 493)

D

Deconfliction Advice	Advice issued by a controller to pilots, aimed at achieving notified deconfliction minima from other traffic in Class F/G airspace. (CAA/MOD)
Deconfliction Instruction	Instruction issued by a controller to pilots in receipt of a Procedural Service, which if complied with, shall achieve deconfliction minima against other aircraft participating in the Procedural Service. (CAA/MOD)
Deconfliction Minima	The defined vertical, lateral or time minima relevant to the provision of UK FISs. (CAA/MOD)

F

Flight Level	A surface of constant atmospheric pressure, which is related to a specific pressure datum, 1013.2 mb, and is separated from other such surfaces by specific pressure intervals. (ICAO)
--------------	--

H

Heading	The direction in which the longitudinal axis of an aircraft is pointed, usually expressed in degrees from North (true, magnetic or compass). (ICAO)
Height	The vertical distance of a level, a point or an object considered as a point, measured from a specified datum. (ICAO)

I

Identification	The situation which exists when the position indication of a particular aircraft is seen on a situation display and positively identified. (ICAO)
Instrument Meteorological Conditions	Meteorological conditions expressed in the terms of visibility horizontal and vertical distance from cloud, less than the minima specified for visual meteorological conditions. (AIP)

L

Level	A generic term relating to the vertical position of an aircraft in flight and meaning variously height, altitude or flight level. (ICAO)
-------	--

P

Primary Radar	A radar system that uses reflected radio signals. (ICAO)
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Q

Quadrantal Cruising Level	Specified cruising levels determined in relation to magnetic track within quadrants of the compass. (AIP)
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R

Radial	A magnetic bearing extending from a VOR/VORTAC/TACAN. (AIP)
--------	---

S

Surveillance System A generic term meaning variously, ADS-B, PSR, SSR or any comparable system that is used to determine the position of an aircraft in range and azimuth. (CAA/MOD)

T

Track The projection on the earth's surface of the path of an aircraft, the direction of which path at any point is usually expressed in degrees from North (true, magnetic or grid).

Traffic Information Information issued by a controller to alert a pilot or controller to other known or observed air traffic which may be in proximity to the position or intended route of flight. (CAP 493)

U

Unknown Traffic Traffic, the flight details and intentions of which are not known to the controller/FISO. (CAA/MOD).

V

Visual Meteorological Conditions Meteorological conditions expressed in terms of visibility, horizontal and vertical distance from cloud, equal to or better than specified minima. (AIP)

2 Abbreviations**A**

ACC Area Control Centre
 ADS-B Automatic Dependant Surveillance Broadcast
 ADR Advisory Route
 AIP Aeronautical Information Publication
 AOA Airport Operators' Association
 ASACS Airborne Surveillance and Control System
 ASI Airspace and Safety Initiative
 ATC Air Traffic Control
 ATM Air Traffic Management
 ATSOCAS Air Traffic Services Outside Controlled Airspace
 ATZ Aerodrome Traffic Zone

C

CAA Civil Aviation Authority
 CAT Commercial Air Transport

F

FIR	Flight Information Region
FL	Flight Level
FIS	Flight Information Service(s)
FISO	Flight Information Service Officer
ft	Foot (feet)

G

GA	General Aviation
----	------------------

I

ICAO	International Civil Aviation Organisation
IFR	Instrument Flight Rules
IMC	Instrument Meteorological Conditions

M

MOD	Ministry of Defence
-----	---------------------

N

NM	Nautical Miles
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P

PSR	Primary Surveillance Radar
-----	----------------------------

R

RTF	Radiotelephony
-----	----------------

S

SSR	Secondary Surveillance Radar
-----	------------------------------

T

TACAN	Tactical Air Navigation
-------	-------------------------

U

UTC	Co-ordinated Universal Time
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V

VFR	Visual Flight Rules
VMC	Visual Meteorological Conditions
VOR	VHF Omni-directional Range
VORTAC	VHF Omni-directional Range Tactical Air Navigation Aid

Chapter 1 Service Principles

1 Introduction

It is essential that the Service Principles are read in conjunction with the specific services as they underpin and apply equally across the suite of UK FIS.

2 Flight Outside Controlled Airspace

Within Class F and 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. The Class F and G airspace environment is typified by the following:

- It is not mandatory for a pilot to be in receipt of an ATS; this generates an unknown traffic environment;
- Controller/FISO workload cannot be predicted;
- Pilots may make sudden manoeuvres, even when in receipt of an ATS.

3 The Services

The specific services (Basic Service, Traffic Service, Deconfliction Service, Procedural Service) are designed to cater for a wide variety of airspace users and tasks and shall be applied consistently by controllers/FISOs and pilots.

The UK FIS specify the varying degrees of traffic information and deconfliction instructions or advice that controllers/FISOs pass to assist the pilot in discharging his responsibility for collision avoidance. The service definitions also include terrain clearance requirements in order for specific services to be provided and the occasions when controller/FISOs shall not provide headings or levels.

The conditions for the provision of the FIS and deconfliction in Class F/G airspace are not predicated on flight rules. Therefore, the pilot of a VFR flight may request any of the services, which shall be provided in accordance with the service definitions, including the specified deconfliction minima as per an IFR aircraft.

4 Service Provision

Controllers shall make all reasonable endeavours to provide the service that a pilot requests. However, due to finite ATS provider resources or controller workload, tactical priorities may influence ATS availability or its continued provision. Therefore, a reduction in traffic information may have to be applied, and in some circumstances an alternative service may have to be provided in order to balance overall ATS requirements. FISOs are not licensed to provide Traffic Service, Deconfliction Service, or Procedural Service. Therefore, pilots should not request any of these services from a FISO unit.

FISO units are established to provide services at notified aerodromes and Area Control Centres (ACC), and can be identified by the RTF suffix 'Information', e.g. 'London Information'.

5 Compliance Requirements

The service definitions and conditions described in this document are inherently agreed as part of the request for, and provision of, that 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.

6 Agreements

Agreements can be established between a controller (not a FISO due to limits of the licence) and a pilot on a short-term tactical basis, such that the operation of an aircraft is laterally or vertically restricted beyond the core terms of the Basic Service or Traffic Service. This is for the purposes of co-ordination and to facilitate the safe use of airspace, particularly those airspace users with more stringent deconfliction requirements. In agreeing to a course of action, pilots must take into account their responsibilities as defined under the Rules of the Air, including that for terrain clearance. 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. Controllers shall remove restrictions as soon as it is safe to do so.

Agreements may be made which restrict aircraft to a specific level, level band, heading, route, or operating area.

Controllers should be aware that not all requests for an agreement will be accepted and they should try to take account of the pilot's operating requirements whenever possible. Consequently, controllers should avoid excessive or unnecessary use of agreements and be prepared to act accordingly if an agreement is not met.

7 Appropriate Type of Service

A pilot shall determine the appropriate service for the various phases and conditions of flight and request that service from the controller/FISO. If a pilot fails to request a service, the controller/FISO should normally ask the pilot to specify the service they require, apart from the following circumstances:

- FISOs will only provide a Basic Service;
- Controllers at approved ATC Units that do not have surveillance equipment available will routinely apply a Procedural Service to aircraft carrying out IFR holding, approach and/or departure procedures;
- IFR aircraft that have flight planned to operate on Air Traffic Advisory Routes (ADR) shall be provided with services as detailed at Appendix B.

8 Standard Application of Service

Fundamental to the provision of the FIS outside controlled airspace is the standard application of the services to prevent the boundaries between the services becoming confused. Agreement to provide a service and acknowledgement of that level of service by a controller/FISO and pilot respectively, establishes an accord whereby both parties will abide with the definitions of that service as stated herein. Once an accord has been reached the controller/FISO shall apply that service as defined. If a pilot subsequently requires elements of a different service, a new accord shall be

negotiated. Where there is a need for local procedures to be promulgated that are at variance to CAP774, these will be subject to regulatory approval.

By incorporating elements of another service to that agreed, there is a danger that pilots will come to routinely expect those elements as a part of that service. This could lead to pilots requesting an inappropriate service for the flight profile or flight conditions in the future. Therefore, pilots should not expect, nor ask, controllers/FISOs to provide any element of another service; likewise, controllers/FISOs should not offer nor provide elements of any other services.

9 Reduced Traffic Information/Deconfliction Advice

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 aircraft conducting high energy manoeuvres, or when traffic is not displayed to the controller. Controllers shall inform the pilot of 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.

In high workload situations, which may not always be apparent from RTF loading, it may not be possible for controllers to always provide timely traffic information and/or deconfliction advice. High workload situations may not necessarily be linked to high traffic density.

High traffic density can cause difficulty interpreting ATS surveillance system data and may affect RTF loading or controller workload to the extent that the controller is unable to pass timely traffic information and/or deconfliction advice on all traffic.

Where aircraft are operating close to the lateral and/or vertical limits of solid ATS surveillance system cover, or close to a radar overhead, there is the potential for conflicting traffic to be detected late. Similarly, there is potential for aircraft to be undetected or detected late in known areas of poor surveillance performance, permanent echoes, weather clutter or when the controller suspects the performance of the ATS surveillance system is degraded.

Where primary radar is unavailable, and SSR alone is used to provide an ATS, non-transponding aircraft will not be detected. An SSR only service may be provided only if approved by the relevant authority.

10 Alerting Service

An Alerting Service shall be provided in association with all UK FIS.

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Chapter 2 Basic Service

1 Definition

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

Basic Service relies on the pilot avoiding other traffic, unaided by controllers/FISOs. It is essential that a pilot receiving this service remains alert to the fact that, unlike a Traffic Service and a Deconfliction Service, the provider of a Basic Service is not required to monitor the flight.

2 Provision

Controllers and FISOs may provide a Basic Service. Controllers may utilise ATS surveillance system derived information in the provision of a Basic Service. A FISO shall not utilise surveillance-derived data to provide traffic information when providing a Basic Service. The use of surveillance equipment by FISOs for other specific tasks is subject to regulatory approval.

3 Flight Rules and Meteorological Conditions

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

Pilots should be aware that Basic Service might not be appropriate for flight in IMC when other services are available.

4 Identification

A controller may identify an aircraft to facilitate co-ordination or to assist in the provision of generic navigational assistance, but is not required to inform the pilot that identification has taken place.

Identification of an aircraft in receipt of a Basic Service does not imply that an increased level of service is being provided or that any subsequent monitoring will take place.

5 Traffic Information

Pilots should not expect any form of traffic information from a controller/FISO, as there is no such obligation placed on the controller/FISO under a Basic Service outside an Aerodrome Traffic Zone (ATZ), 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. A controller with access to surveillance derived information shall avoid the routine provision of traffic information

on specific aircraft, and a pilot who considers that he requires such a regular flow of specific traffic information shall request a Traffic Service. However, if a controller/FISO considers that a definite risk of collision exists, a warning may be issued to the pilot.

Traffic information in general terms could include warnings of aerial activity in a particular location, e.g. "Intense gliding activity over Smallville".

In order to comply with the Rules of the Air Regulations 2007 (as amended) with regard to flight within an ATZ, specific and, where appropriate, updated traffic information will be provided to aircraft operating in an ATZ.

6 Deconfliction

Whether traffic information has been passed or not, a pilot is expected to discharge his collision avoidance responsibility without assistance from the controller/FISO.

7 Terrain

Basic Service is available at all levels and the pilot remains responsible for terrain clearance at all times. Agreements may be made with pilots to fly at any level, without the requirement for a reminder of terrain clearance responsibility to be passed to the pilot.

8 Headings

Unless the pilot has entered into an agreement with a controller to maintain a specific course of action, a pilot may change heading or routeing without advising the controller. Other than for the purposes of identification, a controller shall not issue specific heading instructions; however, generic navigational assistance may be provided on request. The controller is not obliged to provide such assistance and the pilot must not rely on its provision as part of a Basic Service.

Generic navigational assistance may include information relative to the position of significant navigational features and information on routeings as requested by the pilot. If the controller has access to an ATS surveillance system and has the capacity, he may facilitate the provision of generic navigational assistance by identifying the aircraft and providing suggested track information. Additionally, bearings utilising direction finding equipment, i.e. QDM/QTE, may be provided subject to ATC equipment capability. Alternative routeings may be suggested to assist the pilot in remaining clear of notified airspace reservations, e.g. "Suggest re-route to the west to remain clear of active danger area".

9 Levels

Unless the pilot has entered into an agreement with a controller to maintain a specific level or level band, a pilot may change level without advising the controller/FISO.

Chapter 3 Traffic Service

1 Definition

A 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. Controllers may provide headings and/or levels for the purposes of positioning and/or sequencing; however, the controller is not required to achieve deconfliction minima, and the avoidance of other traffic is ultimately the pilot's responsibility.

2 Provision

A Traffic Service shall only be provided by a controller with access to an ATS surveillance system.

3 Flight Rules and Meteorological Conditions

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.

Pilots should be aware that a Traffic Service might not be appropriate for flight in IMC when other services are available.

4 Identification

The controller shall identify the aircraft, inform the pilot that he is identified, and maintain identity. If identity is lost the pilot shall be informed and the controller shall attempt to re-establish identity as soon as practicable.

5 Traffic Information

The controller shall pass traffic information on relevant traffic, and shall 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.

Traffic is normally considered to be relevant when, in the judgement of the controller, the conflicting aircraft's observed flight profile indicates that it will pass within 3NM and, where level information is available, 3000 ft of the aircraft in receipt of the Traffic Service. However, controllers may also use their judgement to decide on occasions when such traffic is not relevant, e.g. passing behind or within the parameters but diverging. Controllers shall aim to pass information on relevant traffic before the conflicting aircraft is within 5NM, in order to give the pilot sufficient time to meet his collision avoidance responsibilities and to allow for an update in traffic information if considered necessary.

Distances displayed on ATS surveillance systems can be at variance to the actual distances between aircraft due to the limitations in accuracy of surveillance systems. Furthermore, some aircraft may not be displayed at all by ATS surveillance systems.

6 Deconfliction

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. The controller shall make all reasonable endeavours to accommodate this request as soon as practicable and provide deconfliction advice at the earliest opportunity.

When providing headings/levels for the purpose of positioning and/or sequencing or as navigational assistance, the controller should take into account traffic in the immediate vicinity, so that a risk of collision is not knowingly introduced by the instructions passed. However, the controller is not required to achieve defined deconfliction minima.

7 Terrain

Subject to ATS surveillance system coverage, Traffic Service may be provided below ATC unit terrain safe levels; however, pilots remain responsible for terrain clearance at all times. Other than when following a notified instrument flight procedure, a pilot requesting to descend below the ATC unit terrain safe level shall be reminded that he remains responsible for terrain clearance.

8 Headings

A pilot may operate under his own navigation or a controller may provide headings for the purpose of positioning, sequencing or as navigational assistance. If a heading is unacceptable to the pilot he shall advise the controller immediately. Unless safety is likely to be compromised, a pilot shall not change route, manoeuvring area, or deviate from an ATC heading without first advising and obtaining a response from the controller, as the aircraft may be co-ordinated against other airspace users without recourse to the pilot. Controllers shall only instigate heading allocations when the aircraft is at or above an ATC unit's terrain safe level. However, if pilots request a heading from the controller whilst operating below the ATC unit terrain safe level, this may be provided as long as the controller reminds the pilot that he remains responsible for terrain clearance.

9 Levels

Pilots may select their own operating levels or may be provided with level allocations by the controller for the positioning and/or sequencing of traffic or for navigational assistance. If a level is unacceptable to the pilot he shall advise the controller immediately. Unless safety is likely to be compromised, a pilot shall not change level or level band without first advising and obtaining a response from the controller, as the aircraft may be co-ordinated against other airspace users without recourse to the pilot. Levels allocated by controllers shall be terrain safe in accordance with the ATC unit's terrain safe levels, unless an agreement is reached with the pilot, or such levels form part of VFR clearances for aerodrome arrival or to enter controlled airspace that by necessity require flight below the unit terrain safe levels; in such circumstances, the instruction shall be accompanied by a reminder that the pilot remains responsible for terrain clearance.

Chapter 4 Deconfliction Service

1 Definition

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 issues headings and/or levels aimed at achieving planned deconfliction minima against all observed aircraft in Class F/G airspace, or for positioning and/or sequencing. However, the avoidance of other traffic is ultimately the pilot's responsibility.

2 Provision

A Deconfliction Service shall only be provided by a controller with access to an ATS surveillance system.

3 Flight Rules and Meteorological Conditions

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.

Pilots that do not require ATC deconfliction advice or deconfliction minima to be applied should not request a Deconfliction Service.

4 Identification

The controller shall identify the aircraft, inform the pilot that he is identified, and maintain identity. If identity is lost, the pilot shall be informed and the controller shall attempt to re-establish identity as soon as practicable.

5 Traffic Information

The controller may, subject to workload, pass traffic information on deconflicted traffic in order to improve the pilot's situational awareness.

6 Deconfliction

A controller shall provide traffic information, accompanied with a heading and/or level aimed at achieving a planned deconfliction minima.

The deconfliction minima against unco-ordinated traffic are:

- 5NM laterally (subject to surveillance capability and regulatory approval); or
- 3000 ft vertically and, unless SSR Mode 3A indicates that the Mode C data has been verified, the surveillance returns, however presented, should not merge. (Note: Mode C can be assumed to have been verified if it is associated with a

deemed validated Mode A code. The Mode C data of aircraft transponding Mode 3/A code 0000 is not to be utilised in assessing deconfliction minima).

The deconfliction minima against aircraft that are under the control of the same controller, or that have been subject to co-ordination, are:

- 3NM laterally (subject to surveillance capability and regulatory approval); or
- 1000 ft vertically; or
- 500 ft vertically (subject to regulatory approval).

High controller workload or RTF loading may reduce the ability of the controller to pass deconfliction advice and the timeliness of such information. Furthermore, unknown aircraft may make unpredictable or high-energy manoeuvres. Consequently, it is recognised that controllers cannot guarantee to achieve these deconfliction minima; however, they shall apply all reasonable endeavours.

The pilot shall inform the controller if he elects not to act on the controller's deconfliction advice. The pilot then accepts responsibility for initiating any subsequent collision avoidance against that particular conflicting aircraft. However, the controller is not prevented from passing further information in relation to the conflicting traffic if in his opinion it continues to constitute a definite hazard.

Distances displayed on ATS surveillance systems can be at variance to the actual distances between aircraft due to the limitations in accuracy of surveillance systems. Consequently, lateral deconfliction minima may have to be greater than the minimums specified above as detailed in a Unit's regulatory approval. Furthermore, some aircraft may not be displayed at all by ATS surveillance systems.

7 Terrain

A Deconfliction Service shall only be provided to aircraft operating at or above the ATC unit's terrain safe level, unless on departure from an aerodrome when climbing to the ATC unit's terrain safe level, or when following notified instrument approach procedures. In all other circumstances, if a pilot requests descent below ATC unit terrain safe levels, controllers shall no longer provide a Deconfliction Service but should instead, subject to surveillance and RTF coverage, apply a Traffic Service and inform the pilot. If a controller detects a confliction when an aircraft is below the ATC unit terrain safe level whilst departing from an aerodrome and climbing to the ATC unit 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 as follows:

- For aircraft on departure, controllers shall provide avoiding action advice and a terrain warning.
- For aircraft conducting pilot interpreted instrument approaches, controllers shall provide avoiding action advice and an associated terrain safe level to climb to or fly at. It is assumed that conformity with such advice will necessitate repositioning.
- For aircraft being provided with Ground Controlled and Surveillance Radar Approaches:
 - If the terrain safe area for the procedure is known to the controller or indicated on the surveillance display, avoiding action may be passed without an associated climb instruction, as long as the controller ensures that the

aircraft remains within the terrain safe area, and the turn instruction is such that the controller considers that the approach can be continued without the need for repositioning.

- If the controller anticipates that the avoiding action turn will result in flight outside the terrain safe area or the approach not being able to be completed, a terrain safe level to fly at will also be provided, and repositioning will be necessary.

When aircraft are in the initial stages of departure or on final approach, due to limited aircraft manoeuvrability, controllers need to balance the safety impact of passing deconfliction advice at these critical stages of flight against the risk of collision presented by conflicting aircraft. Consequently, deconfliction minima do not apply in these constrained circumstances and avoiding action is instead aimed at preventing collision. Furthermore, controllers need to be aware of the high flight deck workload that is likely to be present in the event of avoiding action which is at variance to the published missed approach procedure being followed.

The procedures regarding deconfliction advice to aircraft on initial departure and final approach are designed to cater for 'pop up' conflicts over which the controller has no advance warning due to the uncontrolled nature of Class G airspace. Controllers should attempt to co-ordinate and deconflict observed traffic prior to allowing either the departure of an aircraft that is expected to require Deconfliction Service, or the final approach of an aircraft that is already receiving a Deconfliction Service.

Where aircraft are transferred to the Aerodrome Controller once established on final instrument approach, ATC units should use internal ATC liaison processes to ensure that warnings of conflicting traffic are passed in a timely fashion to the pilot.

8 Headings

A pilot may operate under his own navigation or a controller may provide headings for the purpose of positioning, sequencing, navigational assistance, or to achieve deconfliction minima. If a heading is unacceptable to the pilot he shall advise the controller immediately. Unless safety is likely to be compromised, a pilot shall not change heading without first obtaining approval from the controller, as the flight profile may have been co-ordinated against other airspace users without recourse to the pilot.

9 Levels

Controllers will normally provide level allocations for positioning, sequencing, navigational assistance, or to achieve deconfliction minima. If a level is unacceptable to the pilot, he shall advise the controller immediately. Unless safety is likely to be compromised, a pilot shall not change level without first obtaining approval from the controller, as an aircraft's flight profile may be co-ordinated against other airspace users without recourse to the pilot.

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Chapter 5 Procedural Service

1 Definition

A Procedural Service is an ATS where, in addition to the provisions of a Basic Service, the controller provides vertical, lateral, longitudinal and time instructions, which if complied with, shall achieve deconfliction minima against other aircraft participating in the Procedural Service. Neither traffic information nor deconfliction advice can be passed with respect to unknown traffic.

A Procedural Service does not require information derived from an ATS surveillance system. Therefore, due to the ability for autonomous flight in Class F/G airspace, pilots in receipt of a Procedural Service should be aware of the high likelihood of encountering conflicting traffic without warnings being provided by ATC.

Pilots flying in the vicinity of aerodromes, ATS routes, or navigational aids where it is known that a Procedural Service is provided, are strongly encouraged to attempt to establish RTF contact with the notified ATS provider.

2 Provision

A Procedural Service shall only be provided by controllers at ATC units with Regulatory approval to provide such a service. Controllers at ATC units that do not have surveillance information available may routinely apply Procedural Service to pilots of aircraft carrying out IFR holding, approach and/or departure procedures without the need to first elicit the pilots' requirements; however, for other flights the type of service required is to be confirmed.

Not all ATC units are able to provide a Procedural Service. However, Procedural Service is most commonly available from ATC units without surveillance equipment that also have notified IFR arrival, departure or en-route procedures. At such units, Procedural Service offers the greatest protection to pilots.

Subject to Regulatory approval, controllers at ATC units that are equipped with surveillance equipment may also provide a Procedural Service. This is most frequently applied to aircraft previously in receipt of a surveillance service where track identity may not be maintained, or when surveillance equipment is not available.

3 Flight Rules/Meteorological Conditions

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.

Pilots should be aware that under a Procedural Service, high reliance is placed on the pilot's ability to accurately follow radial, track and time allocations to achieve planned deconfliction minima. Therefore, pilots who are not able to accept such allocations should not request a Procedural Service.

In order to balance overall ATS requirements (as detailed in Service Principles) controllers may not be able to provide a Procedural Service to aircraft that are flying purely by visual references, due to either airspace availability constraints and/or the significant controller workload that such a situation is likely to generate in attempting to achieve deconfliction minima. In such circumstances, the controller may only be able to provide a Basic Service.

4 Identification

Aircraft do not need to be identified in order for a Procedural Service to be provided.

Controllers may allocate a notified SSR Mode 3/A conspicuity code to assist adjacent surveillance equipped ATC units in ascertaining that the aircraft is in receipt of a service from the particular ATS provider. In such circumstances, the issuance of such a code does not constitute the provision of a surveillance service.

5 Traffic Information

The controller shall provide traffic information, if it is considered that a confliction may exist, on aircraft 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. The controller may, subject to workload, also provide traffic information on other aircraft participating in the Procedural Service, in order to improve the pilot's situational awareness.

Under a Procedural Service, the controller has no ability to pass traffic information on any aircraft that he is not in communication with, unless he has been passed traffic information by another ATS unit.

6 Deconfliction

A controller shall provide deconfliction instructions by allocating levels, radials, tracks, and time restrictions, or use pilot position reports, aimed at achieving a planned deconfliction minima from other aircraft to which the controller is providing a Procedural Service in Class F/G airspace.

The deconfliction minima are:

- 1000 ft vertically; or
- 500 ft vertically where levels are allocated in accordance with the quadrantal rule (or otherwise when subject to regulatory approval); or
- those lateral and longitudinal criteria listed in CAP 493 as lateral and longitudinal separation standards.

High controller workload or RTF loading may reduce the ability of the controller to pass deconfliction advice, and the timeliness of such information.

In the event that an aircraft that requires a Procedural Service makes contact with the controller whilst already within the deconfliction minima, controllers shall pass traffic information to all affected aircraft. In such circumstances, it is recognised that controllers cannot guarantee to achieve deconfliction minima; however, they shall apply all reasonable endeavours to do so as soon as practical.

Deconfliction advice cannot be provided against unknown aircraft.

The pilot shall inform the controller if he elects not to act on the controller's deconfliction advice, and the pilot then accepts responsibility for initiating any subsequent collision avoidance against the aircraft in question and any other aircraft affected. However, the controller is not prevented from passing further information in relation to the conflicting traffic if in his opinion it continues to constitute a definite hazard.

Controllers may, subject to workload, initiate agreements (as defined in Service Principles) with pilots of aircraft under a Basic Service to restrict their flight profile in order to co-ordinate them with aircraft in receipt of a Procedural Service. However, controllers shall limit the occasions on which they make such agreements to those where it is clear that a confliction exists, and only when controller workload permits.

Pilots must remain alert to the fact that whilst in receipt of a Procedural Service, they may encounter conflicting aircraft about which neither traffic information nor deconfliction advice have been provided. Additionally, the adequacy of ATC deconfliction advice relies on compliance by pilots, and in the non-surveillance environment ATC are unable to recognise when pilot position reports are inaccurate or incorrect.

7 Terrain

A Procedural Service is available at all levels and the pilot remains wholly responsible for terrain clearance at all times. However, if a pilot wishes to operate below ATC unit terrain safe levels, unless on departure from an aerodrome when climbing to the ATC unit's terrain safe level, or when following notified instrument approach procedures, controllers shall advise the pilot of the terrain safe level and remind him of his terrain responsibilities.

8 Lateral, Longitudinal and Time Restrictions

A controller may provide radials, tracks, or time restrictions, for the purpose of positioning, sequencing, navigational assistance, or to achieve deconfliction minima. If a radial, track, or time restriction is unacceptable to the pilot, he shall advise the controller immediately. Unless safety is likely to be compromised, a pilot shall not change radial, track, or time restriction without first obtaining approval from the controller, as the flight profile may have been co-ordinated against other airspace users without recourse to the pilot. Where a controller uses geographical or airspace reporting points to determine and provide lateral deconfliction between flights, the pilot shall ensure, to the best of his ability, that requested or required position reports are accurate.

9 Levels

Controllers will normally provide level allocations for positioning, sequencing, navigational assistance, or to achieve deconfliction minima. If a level is unacceptable, the pilot shall advise the controller immediately. Unless safety is likely to be compromised, a pilot shall not change level without first obtaining approval from the controller, as an aircraft's flight profile may be co-ordinated against other airspace users without recourse to the pilot.

For flight on ADRs, controllers shall normally allocate levels in accordance with quadrantal cruising levels.

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Chapter 6 Phraseology

1 Introduction

This Chapter contains examples of RTF phraseology that are specific to the provision of the UK FIS. CAP 413 contains a complete set of RTF phraseology and should be used as the master source document.

2 Agreements

Agreements can be established between a controller and a pilot on a short term tactical basis. Examples of the RTF used to initiate such an agreement are as follows:

ATC: *'(Aircraft identity), request maintain Flight Level 50 for co-ordination'.*

Pilot: *'Maintain Flight Level 50, (aircraft identity)';* or

Pilot: *'Negative, (aircraft identity)'.*

ATC: *'(Aircraft identity), request not above Flight Level 90 for co-ordination'.*

Pilot: *'Not above Flight Level 90, (aircraft identity);* or

Pilot: *'Negative, (aircraft identity)'.*

ATC: *'(Aircraft identity), request turn right heading 050 degrees for co-ordination'.*

Pilot: *'Turn right 050 degrees, (aircraft identity)';* or

Pilot: *'Negative, (aircraft identity)'.*

ATC: *'(Aircraft identity), request route via Smallfield for co-ordination'.*

Pilot: *'Route via Smallfield, (aircraft identity)';* or

Pilot: *'Negative, (aircraft identity)'.*

ATC: *'(Aircraft identity), request operate no further west of your current position for co-ordination'.*

Pilot: *'No further west of current position, (aircraft identity)';* or

Pilot: *'Negative, (aircraft identity)'.*

3 Reduced Traffic Information

When providing surveillance derived services, there may be circumstances that prevent controllers from passing timely traffic information and/or deconfliction advice. Controllers shall inform the pilot of reductions in traffic information along with the reason, and the probable duration (if known), as follows:

- ATC: *'(Aircraft identity), reduced traffic information due to controller workload'.*
- ATC: *'(Aircraft identity), approaching an area of high traffic density, possible late warning of traffic for the next 10 miles'.*
- ATC: *'(Aircraft identity), reduced traffic information, SSR only'.*
- ATC: *'(Aircraft identity), reduced traffic information from the left for the next 10 miles due to the limits of surveillance coverage'.*

4 Generic Traffic Information

When providing a Basic Service, the controller/FISO may provide traffic information in general terms to assist with the pilot's situational awareness. Non-exclusive examples of such generic information are as follows:

- ATC/FISO: *'(Aircraft identity), gliding activity over Smallville'.*
- ATC/FISO: *'(Aircraft identity), multiple aircraft known to be operating 15 miles north of Smallville'.*
- ATC/FISO: *'(Aircraft identity), PA28 estimating CPT at 25, altitude 2000 feet'.*
- ATC/FISO: *'(Aircraft identity), fast jet reported routing from Smallville to Midtown below altitude 500 feet'.*
- ATC/FISO: *'(Aircraft identity), helicopter conducting power line inspection 5 miles north of Borton below altitude 500 feet'.*

5 Surveillance Derived Traffic Information

Surveillance derived traffic information shall be passed in the following format: *'(Aircraft identity), traffic (relative bearing), (distance), (direction of flight), (level if known)'.* Where the SSR Mode 3 code allocation indicates that the Mode C data has not been verified, the phase 'indicating' is to be included. Relative bearings are routinely passed in terms of the 12 hour clock; however, if the aircraft under service is established in a turn, the relative position of the conflicting traffic should be passed in relation to cardinal points, e.g. northwest, south. Where clock codes are used to provide the relative bearing, the prefix left/right is optional. Examples of such traffic information are:

- ATC: *'(Aircraft identity), traffic 10 o'clock, 6 miles, crossing left to right, 2000 feet above'.*
- ATC: *'(Aircraft identity), traffic west, 5 miles, tracking east, indicating 1000 feet below'.*
- ATC: *'(Aircraft identity), traffic right 2 o'clock, 8 miles, converging, no height information'.*

When traffic information is provided on other aircraft that are also under ATC control or that have been co-ordinated, the controller may include this information so as to improve the pilot's situational awareness:

ATC: *'(Aircraft identity), traffic 1 o'clock, 8 miles, opposite direction, co-ordinated 1000 feet above'*.

6 Surveillance Derived Deconfliction Advice

Traffic information on conflicting unknown traffic, accompanied with a heading and/or level shall be provided to aircraft under Deconfliction Service as follows:

ATC: *'(Aircraft identity), traffic 11 o'clock, 8 miles, crossing left to right, indicating 1000 feet above, if not sighted turn left heading 210 degrees'*.

Pilot: *'Left heading 210 degrees, (aircraft identity)'; or*

Pilot: [If the pilot elects not to take the avoiding action] *'(Intentions, e.g. visual/VMC continuing, etc.), (aircraft identity)'*.

ATC: *'(Aircraft identity), traffic 12 o'clock, 10 miles, opposite direction, 2000 feet below, if not sighted climb Flight Level 110'*.

Pilot: *'Climb Flight Level 110, (aircraft identity)'; or*

Pilot: [If the pilot elects not to take the avoiding action] *'(Intentions, e.g. visual/VMC continuing, etc.), (aircraft identity)'*.

When the controller considers that more immediate action is required by the pilot, avoiding action advice may be passed by ATC ahead of the traffic information, for example:

ATC: *'(Aircraft identity), avoiding action turn right immediately heading 340 degrees, traffic 12 o'clock, 7 miles opposite direction, no height information'*.

Pilot: *'Right heading 340 degrees, (aircraft identity)'; or*

Pilot: [If the pilot elects not to take the avoiding action] *'(Intentions, e.g. visual/VMC continuing, etc.), (aircraft identity)'*.

ATC: *'(Aircraft identity), avoiding action descend immediately Flight Level 90, traffic 2 o'clock, 5 miles, crossing right to left, indicating Flight Level 120'*.

Pilot: *'Descend Flight Level 90, (aircraft identity)'; or*

Pilot: [If the pilot elects not to take the avoiding action] *'(Intentions e.g. visual/VMC continuing, etc.), (aircraft identity)'*.

If a controller detects a confliction when an aircraft is below the ATC unit terrain safe level whilst departing from an aerodrome and climbing to the ATC unit terrain safe level, 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 as follows:

ATC: *'(Aircraft identity), avoiding action with terrain alert, turn left immediately heading 180 degrees, traffic 12 o'clock, 5 miles opposite direction, indicating 2000 feet'*.

If a controller detects a confliction when an aircraft is conducting a pilot interpreted instrument approach, controllers shall provide avoiding action advice and an associated terrain safe level to climb to or fly at as follows:

ATC: *'(Aircraft identity), avoiding action, turn left immediately heading 230 degrees, climb altitude 2000 feet, traffic 2 o'clock, 2 miles converging indicating 1000 feet'.*

7 Traffic Service – Headings Below ATC Terrain Safe Levels

If a pilot receiving a Traffic Service requests a heading from the controller whilst operating below the ATC unit terrain safe level, this may be provided as long as the controller reminds the pilot that they remain responsible for terrain clearance, as follows:

Pilot: *'(Aircraft identity), request a heading for Seaton'.*

ATC: *'(Aircraft identity), taking your own terrain clearance, suggest right heading 120 degrees'.*

Pilot: *'My own terrain clearance, right heading 120 degrees, (aircraft identity)'.*

8 Traffic Service – Descent Below ATC Unit Terrain Safe Levels

Other than when following a notified instrument flight procedure, a pilot requesting to descend below the ATC unit terrain safe level under a Traffic Service shall be reminded that he remains responsible for terrain clearance as follows:

Pilot: *'(Aircraft identity), request descent to altitude 1000 feet'.*

ATC: *'(Aircraft identity), taking your own terrain clearance, descent approved'.*

Pilot: *'My own terrain clearance, descent approved, (aircraft identity)'.*

9 Traffic Service – ATC Level Allocations Below ATC Unit Terrain Safe Levels

When providing a Traffic Service, levels allocated by controllers shall be terrain safe in accordance with ATC unit terrain safe levels, unless an agreement is reached with the pilot or such levels form part of VFR clearances for aerodrome arrival or to enter controlled airspace that by necessity require flight below the ATC unit terrain safe levels. In such circumstances, the instruction shall be accompanied by a reminder that the pilot remains responsible for terrain clearance as follows:

ATC: *'(Aircraft identity), can you accept flight at altitude 1500 feet for coordination?'.*

Pilot: *'Affirm, (aircraft identity)'.*

ATC: [Subject to agreement being reached] *'(Aircraft identity), taking your own terrain clearance, report level altitude 1500 feet'.*

Pilot: *'My own terrain clearance, report level altitude 1500 feet, (aircraft identity)'.*

ATC: *'(Aircraft identity), (VFR clearance for aerodrome arrival or to enter controlled airspace)'.*

Pilot: *'(Read back of clearance), (aircraft identity)'.*

ATC: *'(Aircraft identity), taking your own terrain clearance, report (level/not above), (aerodrome or controlled airspace clearance altitude)'.*

Pilot: *'My own terrain clearance, report (level/not above), (aerodrome or controlled airspace clearance altitude), (aircraft identity)'.*

10 Deconfliction Service – Descent Below ATC Unit Terrain Safe Level

If a pilot requests descent below ATC unit terrain safe levels, controllers shall no longer provide a Deconfliction Service but should instead, subject to surveillance and RTF coverage, apply a Traffic Service, as follows:

Pilot: *'(Aircraft identity), request descent to altitude 1000 feet'.*

ATC: *'(Aircraft identity), Traffic Service, taking your own terrain clearance, descent approved'.*

Pilot: *'Traffic Service, my own terrain clearance, descent approved, (aircraft identity)'.*

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Appendix A Duty of Care

1 Background

In association with the development of the procedures within this document, a formal review of liability, negligence and duty of care in air traffic service provision has been jointly conducted by CAA, MOD, AOA and NATS legal experts. This process has generated guidance for ATS providers, and their personnel, as detailed below. The procedures in this document have been produced with this guidance in mind.

2 Common Law

“Common law” is a judge-made law, which has built up through the courts over the centuries; it is distinct and separate from laws made by statute (i.e. Acts of Parliament). Under common law a person is under a general obligation to take **reasonable care** to avoid acts or omissions that he can reasonably foresee as being likely to damage something or injure someone to whom he owes a duty of care. If there is a breach of this general obligation and damage or “loss” results, the person who has been injured or suffered property damage will be able to make a “negligence claim” for compensation. For a negligence claim to be viable, a claimant must prove that:

- a person has been negligent (i.e. has failed to take reasonable care); and
- loss or injury is suffered by some other person as a result; and
- the negligent person owed a duty of care to the claimant who has suffered loss or injury.

Common law is applicable to ATS personnel in the delivery of their core work task, in the same way that it is applicable to all other professions and members of the public in their general conduct and day-to-day activities.

In interpreting common law in relation to the provision of ATS, it would be unwise to rely on specific examples, as each case has to be taken on its own unique merit and circumstances.

3 Establishing Whether a Duty of Care is Owed

To decide if a duty of care is owed by one person to another, the courts will consider the three criteria which were set out in the 1990 case of *Caparo Industries v Dickman*:

- First the loss suffered must have been “reasonably foreseeable”;
- Second, there must be “proximity” between the claimant and the person who has been negligent. This means that the person who is alleged to have been negligent was in a position to exercise some control over the events that have led to the claimant’s loss.
- Third, it must be fair, just and reasonable to impose a duty of care.

Controllers/FISOs clearly owe duty of care to flight crew, passengers, and the general public on the ground, in the delivery of an ATS. However, the depth and boundaries of this duty of care cannot be defined in advance for each specific scenario and situation, as they will vary depending on the exact circumstances at the time, including: the type of airspace, type of ATS, dynamics of the situation (i.e. how ‘foreseeable’ was the event?). The only time that these factors will ultimately be decided upon is in court when examining the specifics of the situation under scrutiny.

4 How Should the Duty of Care be Discharged?

Establishing whether or not there is a duty of care is however only the first step. The next question is how to discharge that duty of care (i.e., how careful do you have to be?). Although every case depends upon its particular facts, there is one key question that normally arises: is there any relevant set of standards or procedures? If there is, the issue of whether or not a person has discharged his duty of care is likely to be heavily influenced by whether or not he has complied with those relevant standards and procedures. If there are no relevant standards or procedures, it may be more difficult to establish whether or not a person has acted appropriately.

Duty of care requirements have been a primary consideration in the production of the procedures in this document and, where possible, specific actions have been published that are considered to meet these requirements. However, the nature of the ATS task in Class F/G airspace means that it is not possible to be totally prescriptive about all actions to be taken, particularly with regard to unknown traffic and the passing of advice and warnings on high risk conflictions to pilots who have requested lower level services (i.e. Basic Service and Traffic Service). Consequently, there is a need for controllers/FISOs to remain free to use their professional judgement to determine the best course of action for them to take for any specific situation.

A crucial element of duty of care is achieved through controllers/FISOs making all reasonable endeavours to provide the level of service that a pilot requests. Due to the nature of the unknown traffic environment, it is inevitable that there will be occasions when controllers are unable to meet in full the service definitions that a pilot expects, (i.e. due to limited surveillance capability, workload, or traffic density). In these situations, any reductions should be made clear to the pilot, and this ability is catered for in the Service Principles for these air traffic procedures. However, these actions, taken either tactically by a controller or as a strategic measure by an ATS provider, should be in response to justifiable limitations.

5 Vicarious Liability and Indemnity for Acts in the Course of Employment

An employee will be indemnified by their employer if they are sued under a civil claim of negligence for anything they do (or fail to do) as part of the proper fulfilment of their duties as an employee. In addition, the employer is in any event generally liable for the acts and omissions of its employees (known as "vicarious liability"). However, an individual employee remains personally responsible so far as any criminal, regulatory or employment consequences are concerned. What this means is that anyone who thinks they have suffered damage as a result of something done by an employee in the course of their employment has choices: they can sue that employee as an individual; they can sue the employer; or sue both the individual and the employer. If the individual is sued, either alone or jointly with the employer, for anything they do (or fail to do) as part of the proper fulfilment of their duties as an employee, that employee is entitled to look to the employer to indemnify him.

ATS providers need to have an ongoing process to provide assurance that they have taken all reasonable steps to ensure their staff are meeting their duty of care requirements. The effective implementation and use of Quality and Safety Management Systems are means of generating such assurance.

In addition to ATS providers, the CAA/MOD also discharge a Duty of Care in the way it exercises its regulatory duties, which include establishing and monitoring ATS standards.

Appendix B Service Provision on Air Traffic Advisory Routes

1 Introduction

Aircraft that have flight planned to operate IFR on an ADR (Class F airspace) are considered to be participating in an Air Traffic Advisory Service as defined by ICAO. In order to meet this definition, and to ensure that the most effective use of available Air Traffic Management network resources is made, bespoke UK services are applied which utilise the suite of UK FIS.

Air Traffic Advisory Service is not provided as a specific ATS in the UK.

2 Air Traffic Services

The following services are to be provided to aircraft that have flight planned to operate IFR on ADRs, without the need to elicit the pilot's requirements in advance:

- A Deconfliction Service should be provided wherever possible.
- A Procedural Service shall be provided in the absence of a Deconfliction Service.
- A Traffic Service may be provided in addition to a Procedural Service.

The definition of an ICAO Air Traffic Advisory Service is met through the provision of a Procedural Service or a Deconfliction Service.

A Deconfliction Service enables the provision of surveillance derived traffic information and deconfliction advice on unknown aircraft to be passed, which are not available under a Procedural Service.

There are occasions where, although it is not possible for a Deconfliction Service to be provided, surveillance derived information may still be available. In such circumstances, the provision of a Traffic Service in addition to a Procedural Service, ensures that the definition of an ICAO Air Traffic Advisory Service is met whilst also enabling traffic information on unknown aircraft to be provided.

3 Use of Surveillance in the Provision of a Procedural Service

Although the provision of a Procedural Service does not require a surveillance system, controllers may utilise surveillance derived traffic information as follows:

- Traffic may be identified and surveillance systems used to confirm deconfliction minima and level occupancy.
- Where a Traffic Service is being provided in addition to a Procedural Service, traffic information should be passed on all relevant unknown aircraft in accordance with the terms of a Traffic Service.

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