

DASC Heads up

5-07

13 November 2007

Airspace Safety Initiative (ASI) and Changes to Air Traffic Control Services Outside Controlled Airspace (ATSOCAS)

The ASI was established to capture safety issues associated with operations in Class G airspace with a view to enhancing safety through awareness campaigns and changing procedures. One such major change agreed by the ASI, is the forthcoming change to ATSOCCAS. Key dates:

- 14 Dec 07 - Consultation period ends.
- 18 Jan 08 - Ratified final version of CAP 774 issued (proposed date).
- 28 Jan 08 - ATSOCCAS briefing CD issued (to be utilised as the source training aid).
- 14 Apr 08 - Proposed implementation date for new ATSOCCAS.

Flight Information Service (FIS), Radar Information Service (RIS) and Radar Advisory Service (RAS) will go and be replaced by other more suitably named services. These DRAFT new services can be found on the MoD intranet DASC web-site home page under 'Hot Topics' alternatively you can view the full Regulatory Impact Assessment (RIA) with embedded draft changes to ATSOCCAS, on the CAA web-site: <http://www.caa.co.uk/default.aspx?catid=1496>. If you are professional aircrew, recreational aircrew or controller of aircraft (ATC/FC/AC etc), you are strongly advised to have a look at the proposed new services, in particular if you have a training responsibility. The ASI Communications and Education Programme (ACEP) has been established, (formed of committee members from right across the aviation community), whose function is to communicate the ASI safety initiatives and changes. By agreeing a single message, thereby ensuring commonality across all elements of aviation, the ACEP will publish material on the aviation safety web site: www.aviationsafety and through all other available aviation media. DASC provides the MoD representation on the ACEP and will be working with Commands to develop the military education programme.

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NATS Safety Bulletin 2 021007 – Multi-Carrier Effect

NATS has recently undertaken an investigation into the operating characteristics of the Air-Ground-Air communications network following a number of 'Loss of Communications' reports.

In common with many other European ANSPs, NATS uses a method of radio transmission where the same signal is radiated simultaneously from up to five separate radio stations. This transmission system is used to provide area coverage by extending the effective range of the operating frequency.

Detailed testing showed that despite meeting the published minimum performance specifications, some airborne radio equipment is susceptible to spontaneous receiver muting when subjected to multiple transmissions.

Operations in European and UK airspace can be subjected to localised phenomena referred to as the 'Multi Carrier Effect'. The effect is usually observed by aircrews as an apparent 'hole in coverage'. The principle defining symptom of 'Multi Carrier Effect' is that all Air Traffic Control to Pilot communication is inhibited, while Pilot to Air Traffic and Pilot to Pilot calls operate normally.

The condition can be identified when routine RT traffic from other aircraft can be heard but any corresponding ATC commands are inaudible. Similarly, aircrews can recognise the condition when ATC apparently fails to respond to repeated calls from the aircraft.

Performance data was acquired from a number of representative equipment types during NATS programme of airborne radio evaluation. The data showed that equipment design practice ensures "Multi Carrier Effect" can only occur when the received signal level is below a pre-determined threshold.

There is potential for aircrew experiencing 'Multi Carrier Effect' to inadvertently cut in on other transmissions. Good RT discipline remains essential.

In the event of a suspected occurrence, it is suggested that aircrew should make contact with Air Traffic Control via another aircraft using an Air to Air relay call.

Following any suspected event, aircrew and ATC observations should be reported to CAA (SRG) via the MOR scheme using CAA form 1261 – reports should include the following details: - Date, Time, Callsign, Aircraft type, Frequency, Position, Altitude, Aircraft heading and Duration of event.

'Multi-Carrier Effect' is characterised when the airborne receiver suddenly becomes insensitive to ATC transmissions.

It is possible in some cases that certain non-user adjustments can be made to the aircraft radio equipment to improve aircraft receiver sensitivity to ATC multi-carrier transmissions. Refer to the radio equipment manufacturer for further information.

Aviation Safety Management System (SMS) – Changes

Aviation SMS Regulation and Guidance. Effective 1 Nov 07, JSP 550 regulation 445 (Defence Aviation Safety Management Systems) was revised. The regulation sets the requirement for defence aviation organizations to have an Aviation SMS and summarises the elements to be contained therein to ensure consistency across the DASMS. The regulation signposts to 2 supporting documents that are available on the DASC intranet website:

- a. **ASMS Manual and Audit Guide.** Sets out the ASMS criteria to be embodied within each subordinate system in order to demonstrate consistency with the strategic level DASMS. In addition, the Manual details the DASMS Strategic Audit process.
- b. **MARSB Operating Manual.** Describes the strategic level of the DASMS and explains the MARSB governance structure and processes. Published in draft pending formal MARSB endorsement.

Notes:

1. Organisations without access to the intranet are advised to contact DASC to obtain a copy.
2. Any queries on the revised documentation should be addressed to SO1 ASM, Wg Cdr Gill Rossiter on 95271 Ext 7607.