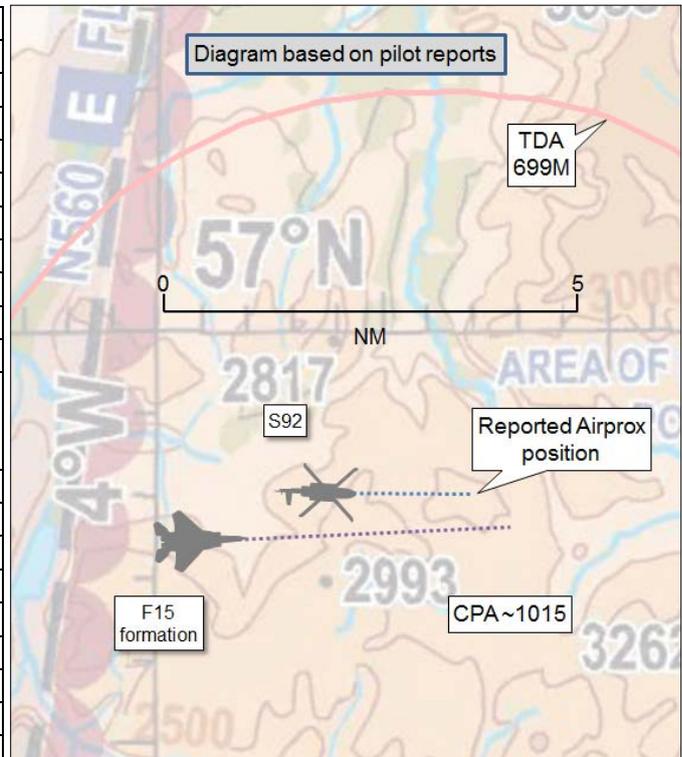


AIRPROX REPORT No 2016032

Date: 03 Mar 2016 Time: 1015Z Position: 5658N 00353W Location: ivo Glen Feshie

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	S92	F15 formation
Operator	SAR	Foreign Mil
Airspace	Scottish FIR	Scottish FIR
Class	G	G
Rules	VFR	VFR
Service	None	None
Altitude/FL	NK	NK
Transponder	A, C, S	A, C, S
Reported		
Colours	White, red	Grey
Lighting	Landing, tail, nav, strobe, anti-col	Anti-col, nav
Conditions	VMC	VMC
Visibility	50km	>10nm
Altitude/FL	3000ft	500ft
Altimeter	RPS (1003hPa)	agl
Heading	090°	080°
Speed	95kt	450kt
ACAS/TAS	TCAS II	Not fitted
Alert	None	N/A
Separation		
Reported	0ft V/0.5nm H	Not seen
Recorded	NK	



THE S92 PILOT reports that he was conducting a SAR operation in the Glen Feshie area of the Cairngorm Mountains, making blind calls on the VHF low-level common frequency. A Temporary Danger Area (TDA) of radius 6nm up to 5,500ft had been established. It was designated as TDA 699M and was centred on position 5657N 00354W, valid from 0600hrs (30min before their planned take-off) until 1800hrs on 3 Mar 16. At about 1015, he saw a fast-jet in the 12 o'clock position at about 1.5nm at the same level. All eyes were quickly deployed and the other 3 aircraft were spotted coming down the right-hand side at about 0.5nm displacement at the same level. The fast-jets had approached from the 6 o'clock position and they were identified by their twin tails as being F15s. The S92 pilot made a call on UHF Guard frequency and the F15 formation leader responded to the call. The S92 pilot advised them of where they were and that they had just flown through a TDA. They responded that they were at 17000ft, he thought, which was not accurate because as they responded to the call they were about 2000ft above and climbing rapidly through about 5000ft. NMOC Air Cell had made an entry into Centralised Aviation Data Service (CADS) for the S92 prior to their departure from Inverness, and when the S92 pilot spoke to them after the flight, they reported that they could see on CADS that the F15 formation flight path was through the TDA.

He assessed the risk of collision as 'Low'.

THE F15 FORMATION LEADER PILOT reports that he was conducting a low flying mission in LFA 14, flying at 500ft agl, and 450kt from west to east. At 1015, they received a call on Guard that they were inside NOTAM'ed airspace. They began an immediate climb to 7000ft amsl and exited the 'Low Fly structure'. They then responded to the call on guard and discovered they had flown close to an S92 helicopter. The F15 formation did not have any NOTAM'ed airspace on their charts. Upon further investigation, it was discovered that the F15 formation had created their route prior to creation of the S92 NOTAM. The squadron weapons duty officer had then put the route into CADS after the

NOTAM was created and the conflict was acknowledged; however, the conflict had not been passed to the F15 formation prior to takeoff. Low-flying entry calls and position calls were made every 5 minutes during the mission on the UHF low-level common frequency.

He assessed the risk of collision as 'Low'.

Factual Background

The weather at Inverness was recorded as follows:

METAR EGPE 030950Z 26005KT 9999 FEW030 05/02 Q1003=
 METAR EGPE 031020Z 26009KT 9999 FEW030 SCT042 05/02 Q1002=

Analysis and Investigation

UKAB Secretariat

The S92 and F15 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard¹. If the incident geometry is considered as overtaking then the S92 pilot had right of way and the F15 pilots were required to keep out of the way by altering course to the right². The F15 crews were required to avoid the promulgated NOTAM.

Comments

USAFE

As a result of this Airprox, the squadron has put new procedures in place to ensure that crews are made aware of all conflicts and, in particular, of any relevant NOTAMs received after the completion of mission planning and prior to take off.

Summary

An Airprox was reported when an S92 and an F15 formation flew into proximity at about 1015 on Thursday 3rd March 2016. All pilots were operating under VFR in VMC, not in receipt of an ATS.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots and a report from the appropriate operating authority.

Board members first discussed the chronology of events and, after some discussion, agreed that the TDA had probably been established before the F15 formation crews had walked to their aircraft. Members wondered why the formation had therefore apparently been unaware of the TDA NOTAM, and expressed surprise that they were allowed to walk to their aircraft without the TDA CADS conflict being notified to them. Military aircrew members stated that, irrespective of CADS usage, it was essential that relevant NOTAMs were fully briefed before takeoff, and that this was a mandatory requirement for users of the UK Low-Flying System. Some military members speculated that it appeared that some USAFE crews might be using CADS only as a low-flying notification tool, whereas its actual purpose was to be used as a planning tool, primarily for increased situational awareness of potential airspace conflicts between aircraft, but also to provide information such as late NOTAMs. Board members opined that it appeared that the F15 formation planning and flight authorisation process had not included a last check of NOTAMs by the crews flying the sortie before they walked to their aircraft; therefore, after further discussion, the Board resolved to recommend that

¹ SERA.3205 Proximity.

² SERA.3210 Right-of-way (c)(3) Overtaking.

'HQ USAFE review their NOTAM notification procedures' in order to ensure that this was a prominent feature of their operations.

Turning to the S92 pilot, members noted that he had been conducting SAR Ops within the notified TDA, and had initially seen an F15 in his 12 o'clock, moving away, followed by visual acquisition of the other 3 F15s to his right as they overtook. The Board noted also that, being in a protected TDA, the S92 pilot would understandably have been focusing his attention on the task at hand rather than on lookout, and that this may have accounted for the fact that he had not seen the initial F15 until it was well past him.

In assessing the cause and risk of the incident, the Board noted that the F15 crews did not see the S92 at all, and that the S92 pilot did not see the F15s until close to, or after, CPA (and hence could not increase separation before CPA, effectively a non-sighting). The Board therefore agreed that the non-sighting by the F15 crews and effective non-sighting by the S92 pilot was the cause of the Airprox. Notwithstanding, members also agreed that had the F15 crews been aware of the TDA they would not have flown into proximity with the S92, and hence that the lack of information concerning the TDA and their flying through it were both contributory factors. Members then discussed the risk at length, being careful to consider only the actual risk of collision rather than the issue of infringement of the TDA. Some members had the view that, at 0.5nm, the separation as reported might not be considered unduly close and that there had been no risk of collision. Others felt that the overtake speed of the F15 formation, along with the lack of any visual sighting, had resulted in a collision being avoided only through providence. Ultimately, after a protracted debate, the majority of members agreed that there had been a risk of collision and that safety margins had been much reduced below the norm.

PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause:</u>	A non-sighting by the F15 formation members and effectively a non-sighting by the S92 pilot.
<u>Contributory Factors:</u>	<ol style="list-style-type: none"> 1. The F15 formation flew through the TDA. 2. Their planning process did not give the F15 crews information about the TDA.
<u>Degree of Risk:</u>	B.
<u>Recommendations:</u>	HQ USAFE review their NOTAM notification procedures.