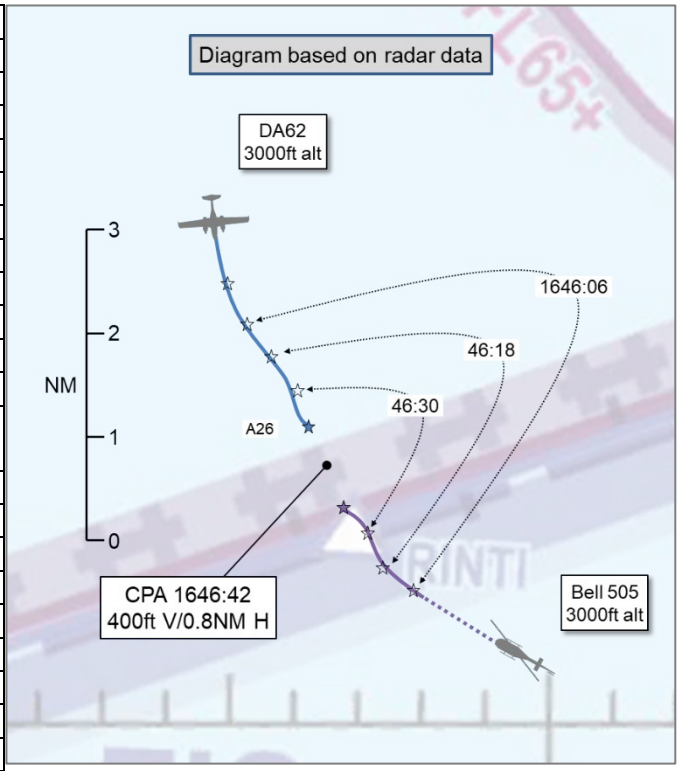
AIRPROX REPORT No 2023090

Date: 17 May 2023 Time: 1647Z Position: 5101N 00138E Location: 13NM SE DVR VOR

PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2
Aircraft	DA62	Bell 505
Operator	Coast Guard	Civ Comm
Airspace	London FIR	London FIR
Class	G	G
Rules	VFR	VFR
Service	Basic	Basic[1]
Provider	London Info	London Info
Altitude/FL	2600ft	3000ft
Transponder	A, C, S+	A, C, S+
Reported		
Colours	Red/white	Black
Lighting	Strobe, position, landing	Anti-col
Conditions	VMC	VMC
Visibility	>10km	>10km
Altitude/FL	3000ft	3000ft
Altimeter	QNH (NK hPa)	QNH (NK hPa)
Heading	LH orbit	325°
Speed	115kt	120kt
ACAS/TAS	TAS	TCAS I
Alert	'Traffic'	None
Separation at CPA		
Reported	500ft V/1.5NM H	200ft V/1 NM H
Recorded	400ft V/0.8NM H	



THE DA62 PILOT reports established in a surveillance orbit, searching for a missing vessel, when traffic was seen on the Pilot Flight Display. It was at the same height and heading directly towards them. They took avoiding action by increasing the turn rate and descending hard to avoid and became visual. In the turn and descent the TAS called "Traffic, Traffic" and the target turned yellow. As they were recovering from the avoiding action, London Information gave them Traffic Information on a rotary-wing aircraft.

The pilot assessed the risk of collision as 'Medium'.

THE BELL 505 PILOT reports routing according to their flight plan from [departure airfield abroad] to [destination]. They entered the London Flight Information Region at RINTI at an altitude of 3000ft. They were subsequently cleared by London information to proceed directly to the DVR VOR. The transponder remained on throughout the flight and they observed an aircraft on TCAS flying 1000ft below them. The aircraft crossed their course at a safe distance from right-to-left and subsequently made a left turn, crossing their course again from left-to-right, but this time at a lower altitude and distance of about 1NM in a steep descent. They maintained visual contact with the aircraft and continued monitoring it on the TCAS display. They had been monitoring the situation closely using TCAS and had always maintained a safe distance.

The pilot assessed the risk of collision as 'Low'.

THE LONDON INFORMATION FISO reports that a Coastguard patrol aircraft was receiving a Basic Service whilst operating over the English Channel. This was a common flight and the aircraft routed along the length of the Channel for several hours. At approximately 1645, a helicopter pilot requested

[1] Reported as a Traffic Service but not available with London Information.

a Basic Service crossing the Channel northbound. Noticing that they were at a similar level, the FISO passed relevant Traffic Information to each pilot. The pilot of the helicopter reported visual and the Coastguard pilot reported they had evaded the helicopter with TCAS. No Airprox was reported on frequency by either pilot. Subsequently, they were informed that an Airprox report had been filed by the pilot of the [DA62 C/S].

Factual Background

The weather at Calais Marck was recorded as follows:

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METAR LFAC 171700Z AUTO 06011KT CAVOK 14/08 Q1028=
METAR LFAC 171630Z AUTO 07012KT CAVOK 14/07 Q1028=
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Analysis and Investigation

NATS Ltd Occurrence Investigation

[DA62 C/S], a Diamond DA62, was conducting coastguard operations over the English Channel at 3000ft. The pilot was in receipt of a Basic Service from London FIS.

The pilot of [Bell 505 C/S], a Bell 505 helicopter, called on the London FIS frequency at 1645:18. The pilot reported operating in accordance with their flight plan from [departure airfield] to [destination], at 3000ft. The London FISO requested the present position of [Bell 505 C/S] which was reported as RINTI. The pilot was instructed to squawk 1177 and was advised that they were in receipt of a Basic Service. The pilot read back the squawk, 1177, at 1646:53.

Traffic Information was passed to the pilot of [DA62 C/S], commencing at 1647:10, stating, “just come on frequency in the vicinity of RINIS [sic] is a Bell five-oh-five helicopter, three thousand feet, inbound to [their destination].”.

The pilot of [DA62 C/S] reported, “that’s only just seen. We’ve just had a TAS warning and taken evading action. [Bell 505 C/S] was the registration I think.”.

Complementary Traffic Information was passed to the pilot of [Bell 505 C/S], who reported, “We’ve got them in sight. There was no factor. We’ve got TCAS on board.”.

There was no mention of an Airprox by either pilot.

Analysis of the radar replay indicated that [DA62 C/S] turned left and commenced descent at 1646:38, prior to the initial communication with [Bell 505 C/S] being concluded. At this time, the aircraft were laterally separated by 1.0NM. (Figure 1).

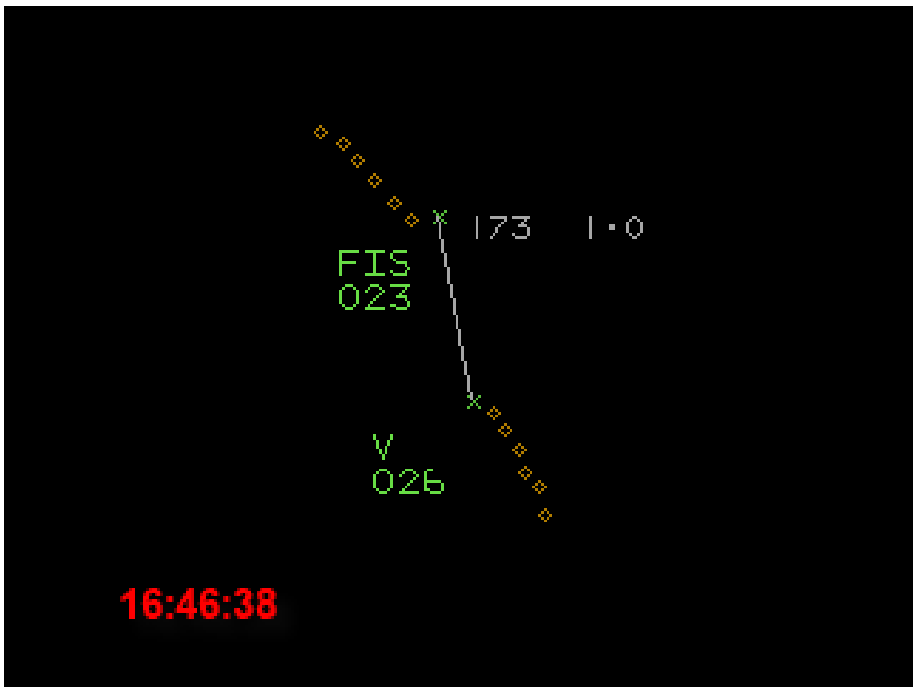


Figure 1

Note: At this time, [DA62 C/S] was displaying 'FIS' (squawking 1177), with [Bell 505 C/S] displaying 'V' (squawking 7000).

On the radar update prior to Figure 1, [DA62 C/S] was indicating the same altitude as [Bell 505 C/S], displayed on the radar as FL026.

Closest point of approach occurred at 1646:42 and was measured on the Multi-Track Radar as 0.9NM and 300ft. (Figure 2)

Figure 2

UKAB Secretariat

Independent analysis of the NATS radar replay was conducted by the UKAB Secretariat, where separation at CPA was assessed to have been 0.8NM horizontally and 400ft vertically.

The DA62 and Bell 505 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard.[2] If the incident geometry is considered as head-on or nearly so then both pilots were required to turn to the right.[3]

Summary

An Airprox was reported when a DA62 and a Bell 505 flew into proximity near RINTI at 1647Z on Wednesday 17th May 2023. Both pilots were operating under VFR in VMC, both in receipt of a Basic Service from London Information.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots, radar photographs/video recordings, GPS data, a report from the London Information FISO involved and a report from the appropriate operating authority. Relevant contributory factors mentioned during the Board's discussions are highlighted within the text in bold, with the numbers referring to the Contributory Factors table displayed in Part C.

Board members agreed that the DA62 pilot had likely been startled to a degree by their late situational awareness of the proximity of the Bell 505 and that that had resulted in a steep descent, but that the Bell 505 pilot had been fully aware of the DA62 and that normal separation in Class G airspace had pertained. The following factors were assessed to have been contributory to the Airprox:

CF1: The London Information FISO was not required to monitor the aircraft or provide deconfliction advice.

CF2: The DA62 pilot had late situational awareness of the Bell 505.

CF3: The DA62 pilot was concerned by the proximity of the Bell 505.

CF4: The DA62 TAS issued a warning.

PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

Contributory Factors:

	2023090			
CF	**Factor**	**Description**	**ECCAIRS Amplification**	**UKAB Amplification**
	Ground Elements			
	• Situational Awareness and Action			
1	Contextual	• ANS Flight Information Provision	Provision of ANS flight information	The ATCO/FISO was not required to monitor the flight under a Basic Service
	Flight Elements			
	• Situational Awareness of the Conflicting Aircraft and Action			
2	Contextual	• Situational Awareness and Sensory Events	Events involving a flight crew's awareness and perception of situations	Pilot had no, late, inaccurate or only generic, Situational Awareness
3	Human Factors	• Unnecessary Action	Events involving flight crew performing an action that was not required	Pilot was concerned by the proximity of the other aircraft
	• Electronic Warning System Operation and Compliance			
4	Contextual	• Other warning system operation	An event involving a genuine warning from an airborne system other than TCAS.	

Degree of Risk: E.

[2] (UK) SERA.3205 Proximity.
[3] (UK) SERA.3210 Right-of-way (c)(1) Approaching head-on.

Safety Barrier Assessment[4]

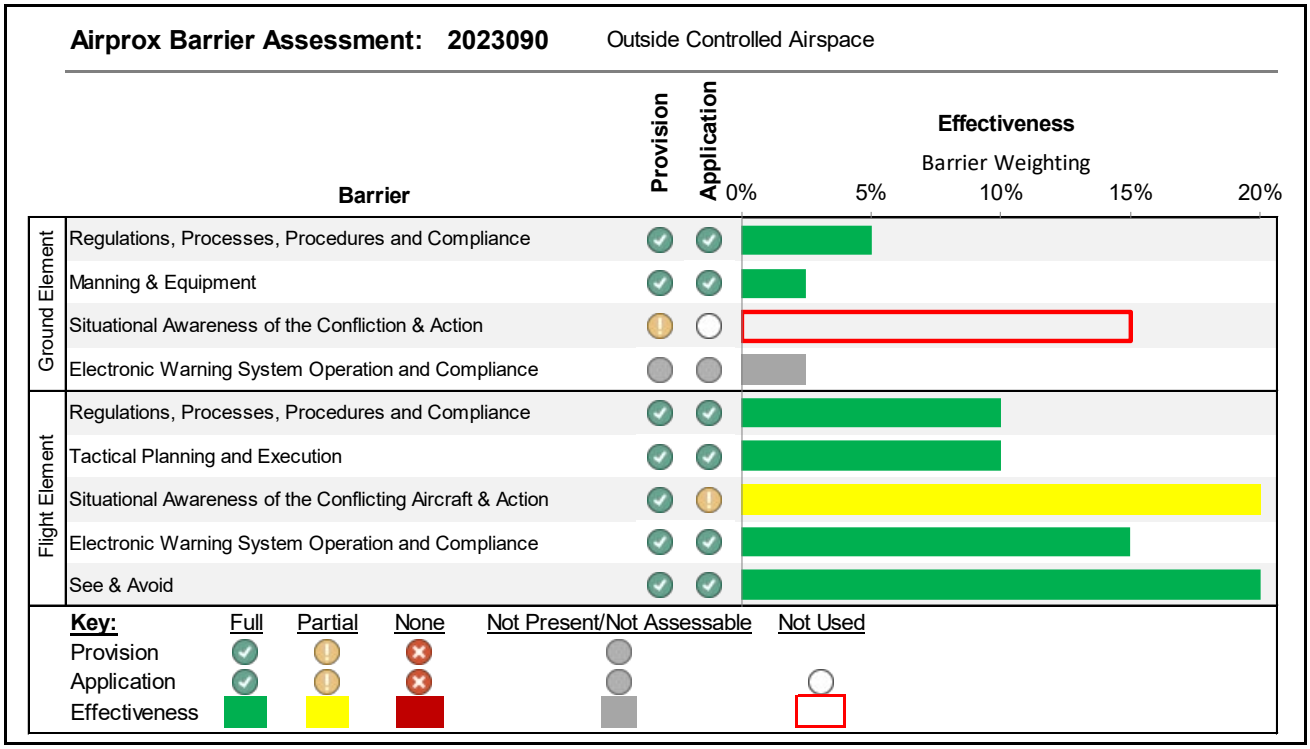
In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

Ground Elements:

Situational Awareness of the Confliction and Action were assessed as **not used** because the London Information FISO was not required to monitor the aircrafts' tracks or take action in the case of proximity.

Flight Elements:

Situational Awareness of the Conflicting Aircraft and Action were assessed as **partially effective** because the DA62 pilot had late situational awareness on the Bell 505 and was concerned by its proximity.



[4] The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the UKAB Website.