# **AIRPROX REPORT No 2023135**

Date: 26 Jun 2023 Time: 1209Z Position: 5125N 00213W Location: Wadswick

# PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

Recorded	Aircraft 1	Aircraft 2	CITCHILL
ircraft	Sky Ranger	DR400	North Diagram based on radar data
Operator	Civ FW	Civ FW	Mraxall )
Airspace	London FIR	London FIR	
Class	G	G	(FOIO.
Rules	VFR	VFR	Biddestone
Service	None	Listening Out	DR400
Provider	Wadswick Traffic	Bristol Radar	AL DAY LENNIS
Altitude/FL	2000ft	1800ft	
Transponder	A, C, S	A, C, S	1207:50
Reported			A20 ***
Colours	Red/white	White/red	A19 \$ 08:02 / NMC
Lighting	Not fitted	Landing/taxi, nav,	08:14 - A19 A22 X
		strobes	A21
Conditions	VMC	VMC	08:26 A18
/isibility	>10km	>10km	A21 A22 Sky Rang
Altitude/FL	1450ft	1600ft	CPA 1208:38
Altimeter	QNH (1020hPa)	QNH (1019hPa)	200ft V/<0.1NM H
Heading	190°	200°	No stor
Speed	70kt	100kt	A16 37/
ACAS/TAS	PilotAware	Not fitted	VIVEADO
Alert	Information	N/A	* WADSWICK Whitle
	Separation		
Reported	50ft V/100m H	200ft V/100m H	
Recorded 200ft V/<0.1NM H			

THE SKY RANGER PILOT reports inbound to Wadswick with five aircraft in a loose group when they noticed another aircraft displayed via their TAS and another pilot also called it out from [their] EC. They assumed the other aircraft was also inbound to Wadswick but nothing was heard on the radio. They could see from the TAS display that there was some vertical separation so they continued with reduced descent [rate]. They thought that perhaps they should have broken off the approach but with four aircraft behind that 'would cause chaos'. They only gained visual contact as the other aircraft passed below the right wing at somewhat closer range than anticipated. They remained unclear whether the other aircraft was in [the Wadswick] circuit or heading south; it subsequently transpired to be the latter.

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

**THE DR400 PILOT** reports in transit to Brown Shutters Farm. They identified another aircraft 200ft above and 300ft to the left in the vicinity of Wadswick. They turned right away from the aircraft, descended and 'waggled wings' to advise the other pilot they had seen them. They were the faster aircraft and avoiding action took them away from possible conflict. There was no indication from the other aircraft that they had seen them.

The pilot assessed the risk of collision as 'None'.

# **Factual Background**

The weather at Bristol was recorded as follows:

METAR EGGD 261220Z AUTO 26017KT 9999 NCD 19/10 Q1022= METAR EGGD 261150Z AUTO 26016KT 9999 NCD 19/10 Q1022=

# Analysis and Investigation

#### **UKAB Secretariat**

The Sky Ranger and DR400 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard. 1 If the incident geometry is considered as overtaking then the Sky Ranger pilot had right of way and the DR400 pilot was required to keep out of the way of the other aircraft by altering course to the right.<sup>2</sup> An aircraft that is obliged [...] to keep out of the way of another shall avoid passing over, under or in front of the other, unless it passes well clear and takes into account the effect of aircraft wake turbulence.<sup>3</sup> An aircraft operated on or in the vicinity of an aerodrome shall conform with or avoid the pattern of traffic formed by other aircraft in operation.4

### Summary

An Airprox was reported when a Sky Ranger and a DR400 flew into proximity at Wadswick at 1209Z on Monday 26th June 2023. Both pilots were operating under VFR in VMC, neither in receipt of a FIS.

# PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available consisted of reports from both pilots and radar photographs/video recordings. 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.

The Board first considered the DR400 pilot's actions and felt that they could reasonably have planned to give the airfield at Wadswick a wider berth or have transited at an altitude that afforded vertical separation from traffic joining the circuit at Wadswick (CF1). In the event, members felt that the DR400 pilot had not avoided the pattern of traffic there (CF2) and wondered whether they had assimilated that their route could bring them into proximity with circuit traffic at Wadswick (CF3). It was also felt that the Sky Ranger pilot could have taken more proactive action on the basis of the situational awareness generated by their TAS information (CF5). They agreed with the Sky Ranger pilot that they should have broken off their approach, perhaps by climbing to avoid the DR400, and commented that such action would have been unlikely to perturb the pilots joining behind them. Although the Sky Ranger pilot had had a degree of situational awareness, the DR400 pilot had had only such generic situational awareness as was afforded by the marking of Wadswick airfield on their chart (CF4). While the Sky Ranger pilot hadn't seen the DR400 until at about CPA, effectively a non-sighting (CF7), and the DR400 pilot had only seen the Sky Ranger at a late stage (CF6), members felt that their avoiding action and the recorded separation at CPA was such that any risk of collision had been averted, Risk C.

### PART C: ASSESSMENT OF CONTRIBUTORY FACTORS AND RISK

#### Contributory Factors:

2023135 CF **Factor** Description **ECCAIRS Amplification UKAB Amplification Flight Elements** • Tactical Planning and Execution Events involving flight crew not making a Insufficient sufficiently detailed decision or plan to **Human Factors** Inadequate plan adaption 1 Decision/Plan meet the needs of the situation Events involving flight crew not to Did not avoid/conform with the · Monitoring of 2 **Human Factors** appropriately monitoring the environment pattern of traffic already formed Environment

<sup>&</sup>lt;sup>1</sup> (UK) SERA.3205 Proximity.

<sup>&</sup>lt;sup>2</sup> (UK) SERA.3210 Right-of-way (c)(3) Overtaking.

<sup>&</sup>lt;sup>3</sup> (UK) SERA.3210 Right-of-way (c).

<sup>&</sup>lt;sup>4</sup> (UK) SERA.3225 Operation on and in the Vicinity of an Aerodrome.

3	Human Factors	Pre-flight briefing and flight preparation	An event involving incorrect, poor or insufficient pre-flight briefing			
	Situational Awareness of the Conflicting Aircraft and Action					
4	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		
	Electronic Warning System Operation and Compliance					
5	Contextual	Other warning system operation	An event involving a genuine warning from an airborne system other than TCAS.			
	• See and Avoid					
6	Human Factors	Identification/ Recognition	Events involving flight crew not fully identifying or recognising the reality of a situation	Late sighting by one or both pilots		
7	Human Factors	Monitoring of Other Aircraft	Events involving flight crew not fully monitoring another aircraft	Non-sighting or effectively a non- sighting by one or both pilots		

Degree of Risk: C.

# Safety Barrier Assessment<sup>5</sup>

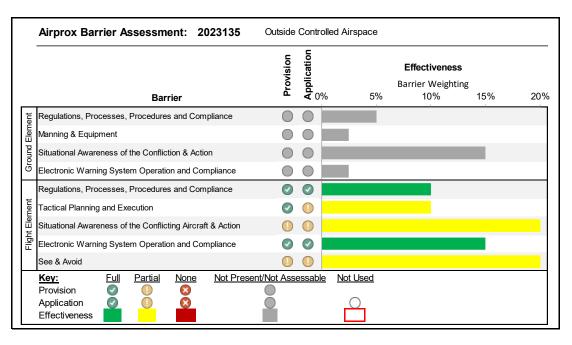
In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that the key factors had been that:

# Flight Elements:

**Tactical Planning and Execution** was assessed as **partially effective** because the DR400 pilot chose to transit in the vicinity of Wadswick airstrip at about circuit height.

**Situational Awareness of the Conflicting Aircraft and Action** were assessed as **partially effective** because although the Sky Ranger pilot's TAS warned of the DR400, the DR400 pilot only had generic situational awareness of traffic from the position of Wadswick airstrip on their chart.

**See and Avoid** were assessed as **partially effective** because the Sky Ranger pilot saw the DR400 at such a late stage that it could be considered effectively a non-sighting and the DR400 pilot saw the Sky Ranger at a late stage, albeit thereafter taking effective avoiding action.



<sup>&</sup>lt;sup>5</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the UKAB Website.