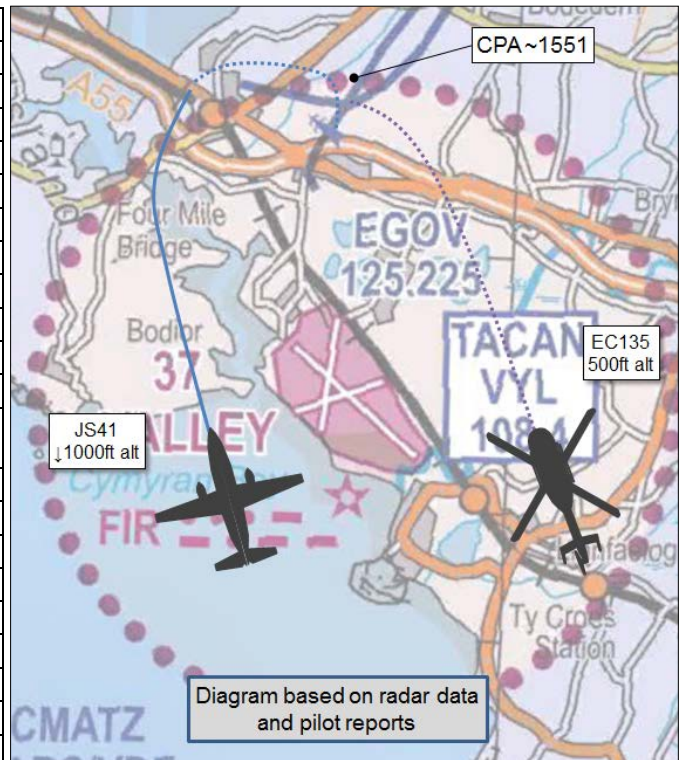


**AIRPROX REPORT No 2017114**

Date: 07 Jun 2017 Time: 1551Z Position: 5317N 00432W Location: Valley

**PART A: SUMMARY OF INFORMATION REPORTED TO UKAB**

Recorded	Aircraft 1	Aircraft 2
Aircraft	JS41	EC135
Operator	CAT	HEMS
Airspace	Valley ATZ	Valley ATZ
Class	G	G
Rules	VFR	VFR
Service	Aerodrome	Aerodrome
Provider	Valley	Valley
Altitude/FL		
Transponder	A, C, S	
<b>Reported</b>		
Colours	Company	Red, Green
Lighting		Landing, HISL, Nav
Conditions	VMC	VMC
Visibility	10km	
Altitude/FL	1000ft	500ft
Altimeter	QFE (1014hPa)	QFE
Heading	Base leg	330°
Speed	160kt	120kt
ACAS/TAS	TCAS II	TCAS
Alert	TA	TA
<b>Separation</b>		
Reported	NR	NR
Recorded	~300ftV/0.5nmH	



**THE VALLEY SUPERVISOR** reports that during a low-intensity flying period a civilian JS41 was positioned by Valley App for a downwind visual join as an Air Ambulance was approaching the MATZ from the SE to cross the ATZ to attend an incident 7nm N Valley. He went from the ACR to the VCR in time to see the JS41 wide-downwind to RW19, indicating 1000ft on the ATM. At the same time, the Air Ambulance was approaching the airfield boundary from the SE, indicating 700ft. It was immediately evident to him that, from the aircraft positions, the Air Ambulance would be crossing the approach lane at the same time as the JS41 would be on finals. He asked the ADC what his plan was, but the controller was content that he didn't have to do anything because he had given Traffic Information to both pilots. The Supervisor was not happy with this lack of positive control and therefore told the ADC to extend the JS41 downwind until the Air Ambulance had crossed the approach lane. Before the instruction was passed, the JS41 began to turn finals so the supervisor instructed the ADC to send the JS41 around not below 1000ft. Both aircraft appeared visibly to pass very close to each other in the approach lane, with the Air Ambulance slightly below.

**THE VALLEY ADC** reports that RW19RH was in use, App had pre-noted a scheduled JS41 inbound, and also informed him of an Air Ambulance helicopter routing to an incident N of the airfield. The JS41 was positioning for a downwind join, although he wasn't informed of that at first and had been expecting a recovery from the west; the App controller had deconflicted the helicopter and the JS41 laterally. The JS41 pilot called downwind and, at the same time, the Air Ambulance pilot called as he approached the airfield boundary. He gave the helicopter pilot the QFE and told him about the aircraft downwind. He also called the helicopter to the JS41 pilot; in order to paint a picture to the pilot, he called it a couple of times. He was expecting the JS41 to turn finals earlier than he did, and the Supervisor, who was present in the VCR asked him to confirm with the pilot that he was turning finals. The Air Ambulance pilot called at 750ft on the QFE, north of the A55, and, at this point, the JS41 turned inbound and so he called the helicopter traffic to it again. By now the Supervisor was

instructing him to relay instructions to the pilots. The Air Ambulance had priority, and had called that he had the JS41 on TCAS. The JS41 called visual with the helicopter at 2nm, but the Supervisor declared that the JS41 should be sent around not below 1000ft. The JS41 went around and landed from his second approach.

**THE JS41 PILOT** reports that he was on a visual approach to RAF Valley, ATC instructed them to join downwind for RW19. On the downwind leg, ATC informed them of an Air Ambulance helicopter to the north of the field tracking south (he thought), which he said he would look for. ATC then instructed them to turn finals; at this point they were positioned too close in and so did not turn. ATC again instructed them to turn finals, which this time they were ready for and therefore started to turn onto base leg. As they started to turn finals, they received a TCAS TA, both crew members immediately looked out and saw the Air Ambulance passing through the extended centreline and continue, passing behind. ATC then instructed them to go-around. The first officer asked ATC to confirm that they wanted them to go-around, which ATC did, and so they initiated the go-around. ATC then asked whether they were visual with the traffic, to which they replied they weren't because the traffic was behind them. They continued with the go-around and landed from the next approach. The captain had since spoken to Valley ATC, who advised that they were filing an Airprox. In the pilot's opinion at no point was there any risk of collision and both crew members were visual with the traffic as they turned finals. In suggestions for preventative action he noted that RAF ATC personnel should be made aware of the size of civilian aircraft circuits.

**THE EC135 PILOT** reports that it was a routine mission and the details did not particularly stand out as extraordinary. He did not believe that an Airprox occurred, nor did he or his crew feel in any way threatened by the proximity of the other aircraft. He was on the Valley tower frequency en-route to an incident 7nm NW of Valley. From his recollection, the other aircraft was also on the Valley frequency. He understood the intentions of the other aircraft, and believed that the other pilot also understood his intentions and both had, and had called, visual contact with each other. He knew the other pilot was trying to line-up for RW19, so he banked starboard by 30° to give them room for their manoeuvre. He was therefore somewhat surprised to hear the controller tell the other pilot to go around because they had already passed one another.

He assessed the risk of collision as 'None'.

## **Factual Background**

The weather at Valley was recorded as follows:

METAR EGOV 071550Z 18021KT 9999 -RA FEW010 OVC060 13/11 Q1010 BLU TEMPO SCT010 GRN=

## **Analysis and Investigation**

### **Military ATM**

Radar replays were unable to identify the aircraft involved; however, although not able to provide corresponding timings, stills taken from the Precision Approach Radar (PAR) display screen are able to show the relative positions of the two aircraft and are included below.

At Figure 1, the JS41 is shown turning final, at a range of approximately 3.5nm and 800ft, and the EC135 in transit on an opposite direction track at approximately 750ft, maintaining to the east of the extended centreline.

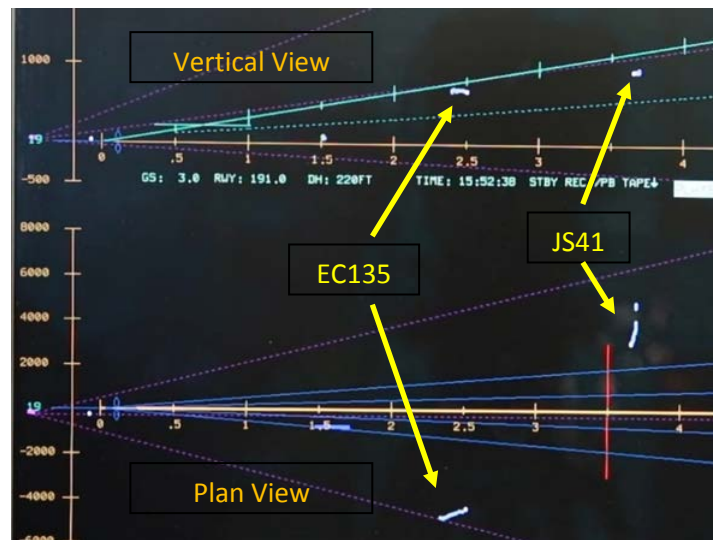


Figure 1

At Figure 2, the JS41 continues turning inbound while the EC135 appears to alter course to the right.

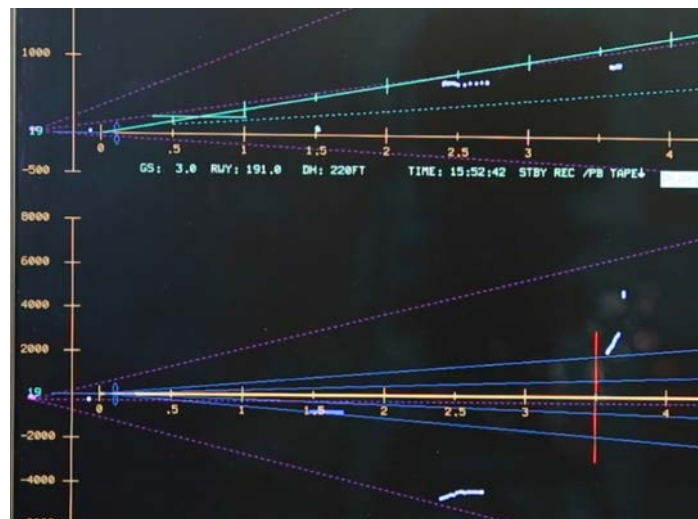


Figure 2

At Figure 3, the JS41 continues inbound while the EC135 appears to descend slightly. The 2 aircraft are offset by approximately 2nm.

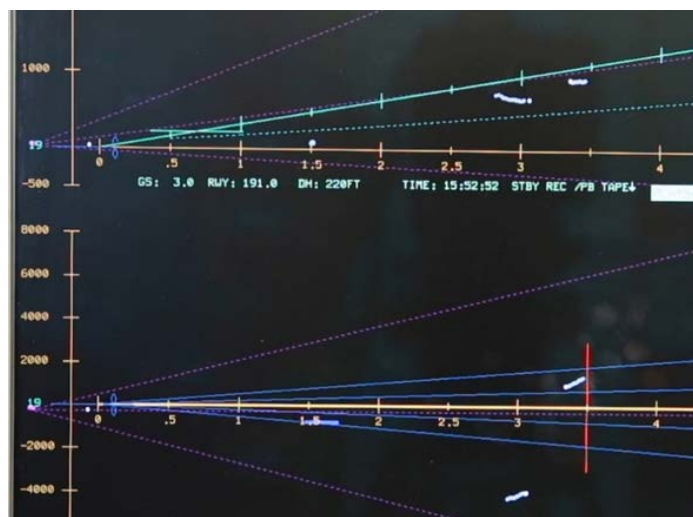
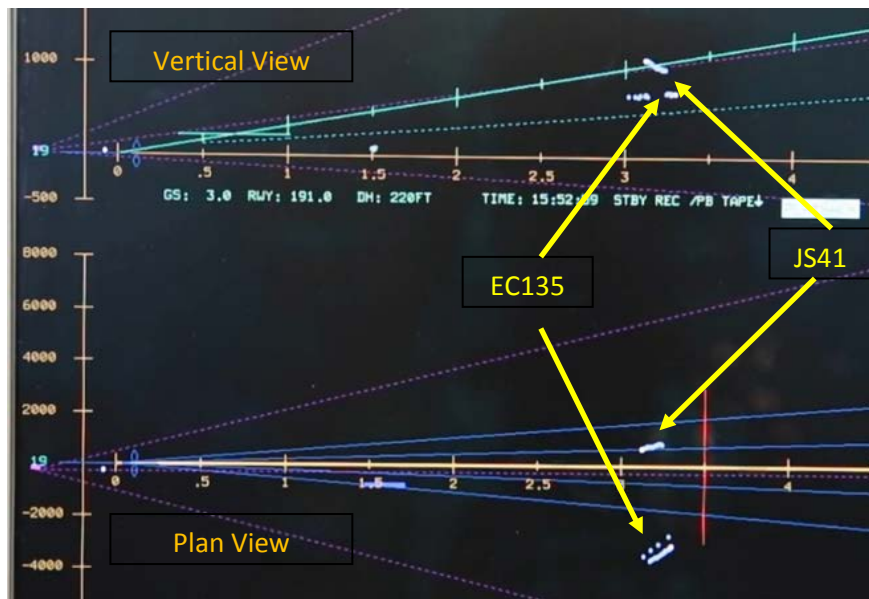


Figure 3

At Figure 4 the JS41 was instructed to go around at circuit height, at which stage the two aircraft had passed each other and had approximately 0.5nm lateral separation.



When the EC135 checked in with the Tower controller, the pilot stated that he had the JS41 on TCAS, and the Tower controller subsequently informed the EC135 pilot that the JS41 was downwind to land, with the EC135 response most likely indicating that he was visual with the traffic downwind (word 'visual' not in transcript).

As the JS41 began to turn base leg, the Tower controller instructed the pilot to position for a straight in approach and passed Traffic Information on the EC135. When the JS41 pilot called final, the Tower controller asked if he was visual with the EC135, to which the JS41 pilot responded that he was 'looking'.

The Valley Supervisor, who was listening to the Tower frequency, was not content with the perceived lack of separation between the two aircraft. He believed that more positive control should have been exercised, and told the Tower controller to instruct the JS41 to extend downwind until the EC135 had crossed the approach lane. At that time, the JS41 began to turn final, therefore the Supervisor told the Tower controller to instruct the JS41 to go around at circuit height (1000ft QFE, with the EC135 at 750ft QFE). The JS41 pilot questioned the instruction and informed the Tower controller that he was visual with the EC135 (and that the 2 aircraft had passed each other), but the Tower controller reaffirmed that the JS41 should go around.

The visual circuit is a VFR environment in which pilots are required to take their own separation from other aircraft. The Valley Tower controller passed Traffic Information to both pilots and was aware that the EC135 pilot was visual with the JS41. He had full situational awareness, as did both pilots, and all three parties were content with the situation. However, the Valley Supervisor was concerned about the proximity of the two aircraft. There was no requirement for the Tower controller to act iaw the Supervisor's direction, however, doing so in this case was not detrimental to air safety.

### UKAB Secretariat

The JS41 and EC135 pilots shared an equal responsibility for collision avoidance and not to operate in such proximity to other aircraft as to create a collision hazard<sup>1</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<sup>2</sup>, which the EC135 pilot did.

<sup>1</sup> SERA.3205 Proximity.

<sup>2</sup> SERA.3225 Operation on and in the Vicinity of an Aerodrome.

## Summary

An Airprox was reported when a JS41 and an EC135 flew into proximity at 1545 on Wednesday 7th June 2017. Both pilots were operating under VFR in VMC, and in receipt of an Aerodrome Service from Valley.

### **PART B: SUMMARY OF THE BOARD'S DISCUSSIONS**

Information available consisted of reports from the pilots of both aircraft, transcripts of the relevant RT frequencies, radar photographs/video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC and operating authorities.

The Board first discussed the role of ATC in this Airprox. Members noted that the Airprox had been reported by the Valley Supervisor despite the fact that neither the pilots involved, nor the controller, thought there had been any concerns. The Board were nonetheless clear that, if he had concerns for the safety of the aircraft then he was correct to act in order to resolve the situation that he perceived; better to have acted unnecessarily than to allow a situation to continue when he was not comfortable with their proximity. As it happened, the ADC was less concerned by the incident; he had heard the pilots call visual with each other, and was content that they were both fully aware of the situation. That said, when the Supervisor instructed him to issue the go around clearance, he did so. At this point, Board members discussed at some length who had primacy in the final decision to issue the go-around instruction. Some members opined that human factors would naturally lead the controller to do as he was being asked by his supervisor, particularly because in the military environment there was likely to be a rank differential. RAF Members told the Board that, in theory at least, this wasn't the case because controllers were taught to speak up and that supervisors could in fact be of lower rank to the controller. Nonetheless, the military controller representative commented that the incident had prompted a discussion within the Military ATM Headquarters, and the Board were informed that the RAF Supervisor role was to provide oversight to the controlling cadre, providing advice and guidance, but it was not normally considered that they should issue operational orders, except in extremis. The military controller representative went on to comment that HQ ATM staff would issue further guidance to ATM teams to remove any ambiguity. Members noted that, in this particular case, the controller was being asked to perform a task that was ultimately safe; although the controller could have questioned his supervisor, the instruction to go-around would not make the situation more dangerous and therefore the Board could understand why the controller acted accordingly. In discussing the supervisors actions, the Board cautioned against overriding his controller without having the full knowledge of the facts (that both pilots had called visual), and some members wondered whether he had made an initial decision on arrival in the Tower that he had allowed to become entrenched in the face of changing circumstances (confirmation bias). Nevertheless, they were keen to point out that too often in such incidents people become bystanders, watching the situation unfold without acting; it was commendable that the supervisor had made a decision and acted upon it, and the Board would not wish to discourage such action.

The pilots were both content with the situation; they had received Traffic information from the controller, had electronic conspicuity, and could see each other. The EC135 pilot had adjusted his flight path to ensure he went behind the JS41, allowing it to make its approach. Therefore, the JS41 pilot was somewhat bemused to be told to go-around when he knew the EC135 was already behind him; nevertheless, after querying the instruction, he did so.

In determining the cause of the Airprox, the Board quickly agreed that the situation was best described simply as the Valley Supervisor being concerned by the proximity of the two aircraft. They agreed with the pilots' assessment of the Airprox; because they had both been visual with each other, and the EC135 had routed ~0.5nm behind the JS41, this was normal operations, risk Category E.

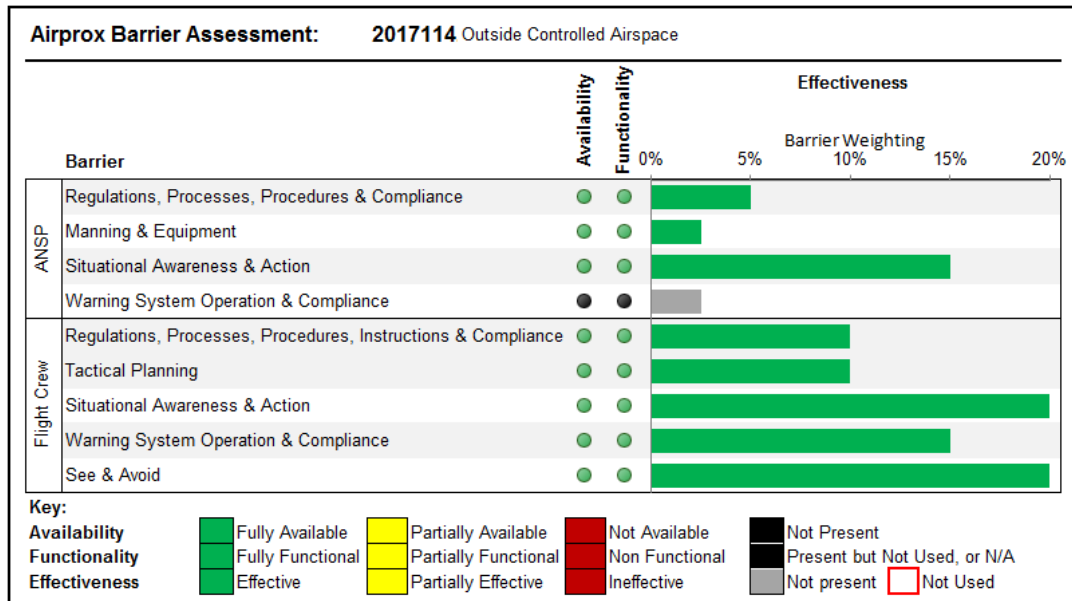
**PART C: ASSESSMENT OF CAUSE AND RISK**

Cause: The Valley Supervisor was concerned by the proximity of the aircraft.

Degree of Risk: E.

Safety Barrier Assessment<sup>3</sup>

In assessing the effectiveness of the safety barriers associated with this incident, the Board concluded that all of the barriers had been fully effective.



<sup>3</sup> The UK Airprox Board scheme for assessing the Availability, Functionality and Effectiveness of safety barriers can be found on the [UKAB Website](#).