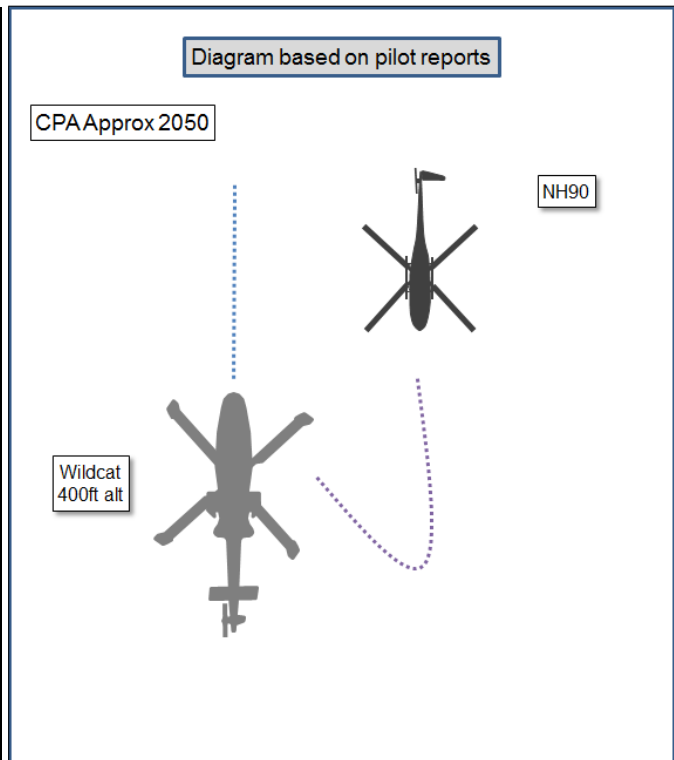


**AIRPROX REPORT No 2016027**

Date: 07 Mar 2016 Time: 2050Z Position: 4949N 00425W Location: Plymouth Exercise Areas

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

Recorded	Aircraft 1	Aircraft 2
Aircraft	Wildcat	NH90
Operator	RN	Foreign Mil
Airspace	Plymouth Exercise Areas	Plymouth Exercise Areas
Class	Danger Area	Danger Area
Rules	VFR	VFR
Service	None	None
Provider	Plymouth	
Altitude/FL	NK	NK
Transponder	A,C,S	NK
<b>Reported</b>		
Colours	Grey	
Lighting	Anti-cols, Nav	Strobes, 'position lights'
Conditions	VMC	VMC
Visibility	30km	>10km
Altitude/FL	400ft	
Altimeter	RPS (1015hPa)	
Heading	350°	
Speed	NR	
ACAS/TAS	Not fitted	
<b>Separation</b>		
Reported	200ft V/0m H	
Recorded		NK



**THE WILDCAT PILOT** reports that he was operating as part of a SURFEX [Surface Warfare Exercise involving ships] and was receiving a service from the ship involved with the exercise. He had been in contact with Plymouth(Mil) to negotiate clearances outside of those already agreed for the exercise. Once he had completed his tasking he checked on the position of the other aircraft involved before descending to complete some internal training in the aircraft in a portion of the exercise area. They were operating VMC, so the height clearance was not above 1100ft, but at this stage the exercise tasking was complete. The student crew identified the anti-collision lights of another aircraft in their vicinity, so they asked Plymouth(Mil) if they had any transponding aircraft in the area. Their reply was negative, but they informed the pilot that they could see a primary-only contact. Plymouth(Mil) contacted a foreign military ship that was also participating in the exercise to try to ascertain whether they had any aircraft airborne and they were informed that they did. Once their internal training serial was completed, the Wildcat crew decided to return to the ship. They were at 400ft and saw the other aircraft pass down the starboard side at a similar height on a reciprocal track. Plymouth(Mil) gave Traffic Information but, shortly afterwards, the aircraft passed below the nose of the Wildcat at an estimated 200ft amsl. They reported the Airprox to Plymouth(Mil).

He assessed the risk of collision as 'Low'.

**THE NH90 PILOT** reports that he had been operating on a mission with the Wildcat acting as his opposition and, at the end of the mission, he was returning to his ship. Due to a limited availability of radio sets in his aircraft, he only had communication with his ship, so he delegated communication with Plymouth(Mil) to the controller on the ship who passed traffic updates from Plymouth(Mil) to them. The visibility was good, and he was aided by NVGs so he was visual with the Wildcat at all times. At the end of the mission both aircraft ended up in the same area and, as they were returning to their ship, it looked like the Wildcat was following them in whichever direction they took, this was

likely to be because both mother-ships were in a similar position. To 'confirm' that the opponent was following them, he took a 360° turn to position the aircraft in the 9 o'clock position of the Wildcat. All the lighting on the NH90 was switched on, so the crewmembers were convinced that the Wildcat pilot was perfectly visual with their aircraft. Therefore, it was a surprise when the Wildcat started a left turn towards them. They realised later that Plymouth(Mil) were not fully aware of their position, despite their having a fully functional transponder.

**THE PLYMOUTH(MIL) CONTROLLER** reports that the Wildcat was under the control of HMS Monmouth, but monitoring the Plymouth(Mil) frequency whilst he was participating in a Surface Warfare Exercise within the Plymouth danger areas. Towards the end of the exercise, the Wildcat was on a northerly heading, returning to the ship, when the pilot asked whether there were any other aircraft operating within the danger areas. The controller informed the pilot that he was not aware of any, and nothing was showing on radar. Shortly afterwards the pilot reported that he was visual with the anti-cols of another aircraft in his 1 o'clock at a range of 3nm. The controller could then see a primary-only radar return in the reported position, and passed on this information to the pilot. Now aware of this primary contact, the controller passed updated Traffic Information as the contact appeared to pass down the right-hand-side of the Wildcat, on a southerly heading and 1nm away. As the unknown contact reached the 5 o'clock position from the Wildcat, it appeared to reverse course back onto a northerly heading and, after a while, the Wildcat pilot reported that it had just flown underneath him by approximately 200ft, and that he would be filing an Airprox. It was believed that the other aircraft could have been operating from the foreign military ship also participating in the exercise, but because it was an 'opposing force' it was operating on a different frequency.

He perceived the severity of the incident as 'Medium'.

## **Factual Background**

The weather at Yeovilton was recorded as follows:

METAR EGDY 072050Z AUTO 16001KT 9999 NCD M01/M02 Q1015=

## **Analysis and Investigation**

### **Navy HQ**

The second aircraft in this Airprox has been identified as a Dutch NH90 operating from HMNLS De Ruyter which was participating in the same surface warfare exercise as HMS Monmouth. The serial was documented in the FOST Weekly Practice Program (WPP) which allocates the subdivided Plymouth, Portland and Portsmouth Danger Areas to assets undertaking FOST training. Both the RN Wildcat and Dutch NH90 were allocated to this airspace, and Plymouth Military Radar reported that advance liaison between the 2 crews had taken place.

No DASOR has been raised by HMS Monmouth in response to this Airprox. The Wildcat reports being VMC throughout the serial and was visual with the NH90. Under a "NATO Broadcast" service from Monmouth, the aircraft controller was under no obligation to pass traffic information; 2 way comms/radar are not required. A NATO Broadcast is defined as:

A form of aircraft mission control used in the absence of full capability or if the tactical situation precludes close or lose control, in which tactical/target information is passed to enable the aircraft to accomplish the assigned task. The controlling unit, when possible, provides adequate warnings of hazards, but the aircraft commander is responsible for aircraft navigation and collision avoidance. Two way communications are not pre requisite for this type of control.

Although operating in an active danger area, the Wildcat was VMC and both the Wildcat and NH90 were permitted to be in that airspace. Both aircrew knew of the other due to prior liaison and notification in the WPP. The Wildcat was not receiving an ATS from Plymouth(Mil) but traffic

information was passed when requested. Vertical separation between the aircraft was assessed as 200ft, the Wildcat pilot was visual with the NH90 and assessed the risk of collision as Low.

## **UKAB Secretariat**

The Wildcat and the NH90 helicopter 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>. The incident occurred at low-level and consequently did not show on the NATS radars, therefore the exact geometry and separation is not known.

## **Summary**

An Airprox was reported when a Wildcat and an NH90 helicopter flew into proximity at 2050 on Monday 7<sup>th</sup> March 2016. The Wildcat pilot was operating under VFR in VMC, and listening out on the Plymouth(Mil) frequency and on the ship's exercise frequency. The NH90 was also VFR in VMC and was listening out on his ship's frequency, who were in contact with Plymouth(Mil) and passing on traffic updates to them.

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

Information available consisted of a report from the Wildcat, transcripts of the relevant RT frequencies, a report from one of the air traffic controllers involved, and reports from the appropriate ATC and operating authorities.

The Board first discussed the actions of the Wildcat pilot, it was clear that the Wildcat pilot had been cleared into the exercise areas, and was receiving a NATO Broadcast Service from the ship. Without an HMS Monmouth controller report it was impossible to know whether the controller was aware of the other helicopter in the region; however, it was clear that a NATO Broadcast Service did not provide any form of separation between aircraft, participating or otherwise. Therefore, it was wholly the responsibility of both helicopter pilots to maintain their own separation. The Wildcat pilot had sought information from Plymouth(Mil), and the Board commended the Plymouth(Mil) controller for pro-actively monitoring the Wildcat and giving Traffic Information on the unknown aircraft even though he wasn't providing an ATS.

The NH90 pilot was visual with the Wildcat at all times and didn't perceive there to be a problem. Having finished the exercise, he was returning to his ship and believed the Wildcat to be doing the same. He thought that Plymouth(Mil) would be able to see his transponder and would know who he was. The Board could not be certain why that was not the case and speculated that it may have been because the transponder was unserviceable, the aircraft was too low, or it was just in an area of poor SSR coverage. However, it was clear that Plymouth could not see the squawk, and therefore could not positively identify the NH90 to the Wildcat. The Wildcat pilot was communicating directly with Plymouth(Mil), although not receiving a service, and the NH90 pilot said that his ship was communicating with Plymouth(Mil) on his behalf. However, the Board were informed that Plymouth(Mil) were only manned that evening because of fixed-wing flying and had no input into the control of the exercise, having heard the Wildcat call on their frequency, they tried to assist him, but without direct knowledge of the exercise traffic they were unaware of the position of the NH90 and only able to offer generic Traffic Information.

The Board understood that both aircraft were participating in a common exercise, had conducted liaison, would have been aware of the limitations of the exercise areas and height restrictions therein, and were both entitled to operate there. It seemed to some members that the liaison between the pilots had not been sufficiently comprehensive to cover what would occur after the exercise had terminated, and how they would de-conflict from each other during their respective recoveries. If such liaison had been made, this incident would have been avoided; the fact that the liaison was not comprehensive meant that this could very easily have resulted in a more serious and wholly

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

avoidable encounter. Nevertheless, the NH90 pilot had reported that he was visual with the Wildcat at all times, and so the Board determined the cause to be that the Wildcat pilot had been concerned by the proximity of the NH90. The risk was assessed to be Category C, there had been no risk of collision due to the fact that the NH90 pilot had the Wildcat in sight at all times.

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

Cause: The Wildcat pilot was concerned by the proximity of the NH90.

Degree of Risk: C.