## AIRPROX REPORT No 2010067



## PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

**THE TORNADO PILOT** reports that he was operating as No2 in a pair of Tornado GR4 ac with all lights switched on and squawking 7002 with Mode C. They were operating in Pembrey Range conducting dive attacks on an LOA of 240° to Target 4. While in the left hand base turn for a 5° dive attack, climbing slowly through 1100ft and passing through a heading of 010° at 420kt they nearly collided with a light ac, thought to be a PA28. They first saw the light ac at a distance estimated as 300m; it had a white top surface with a blue underside, was in straight and level flight and was tracking 020° at 1400ft amsl. He took avoiding action by overbanking to 135°, pulling to 4G and they passed about 200ft below and slightly left of the ac. Both crewmembers had been looking into the turn and the PA28 had been obscured by the canopy arch.

He assessed the risk as being very high.

The unit retained the HUD tape but was not able to supply a copy in a form viewable by the UKAB.

**THE PA28 PILOT** reports that they were first made aware of the Airprox incident 4 months after the event. He was with another pilot and they both fly predominantly in the locality of their home base Swansea. That being the case detail of individual flights is hard to recall, especially if nothing occurs to make any flight particularly noteworthy.

When in the Pembrey area, he always makes a point of not flying below 1500ft, as there is a bird sanctuary on the estuary.

They were flying on the day of the incident and at the reported time. On that day they initially flew at varying heights round the Gower Peninsular [10nm SE of Pembrey] and then turned N over Llanelli [2nm SE of the incident position] to intersect the Towy Valley E of the town of Carmarthen where they turned up the Valley before heading over Ammanford towards Swansea, maintaining a listening watch with Swansea A/G and squawking with Mode C, he thought.

UKAB Note (1): The recording of the Burrington radar intermittently shows the 2 Tornados operating in Pembrey Range squawking 7002 with Mode C. No other ac can be seen in the area during the period.

**HQ AIR (OPS)** comments that the dimensions of a Danger Area do not protect the aircraft operating there and they will often manoeuvre outside of the protected area. Regardless of the level of workload when flying VFR all crews must maintain a good lookout and continuously clear their flight path, especially in the vicinity of an air weapons range.

UKAB Note (1): There was a 4 month delay in contacting the PA28 pilot, much of which was caused the by inaccurate/incomplete information being passed to the RAC that there were no Swansea based ac in the Pembrey area at the time. When eventually traced, the pilot was on holiday but responded promptly on his return.

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

Information available included reports from the pilots of both ac, a radar recording, and a report from the Tornado operating authority.

The Board noted that the incident took place in Class G Airspace outside Danger Area D118 where both ac had an equal right to operate. The HQ Air Member briefed the Board that the small lateral dimensions of D118 are appropriate to the weapons cleared for use there; aircraft transiting close by the range are likely to encounter military aircraft joining, departing or conducting weaponry patterns outside the lateral boundary of the Danger Area.

Range weaponry training is a high workload exercise requiring aircrew to concentrate on acquiring and aiming at the target and conducting challenge and response checks. In this case the pilot reported that both crewmembers had been looking into the turn towards the target and had not seen the PA28 until after it emerged from behind the canopy arch. While accepting this, Members observed that the crew still had a responsibility to see and avoid other airspace users.

Members were surprised that the PA28 pilot, being locally based, was apparently not fully aware of the high level of military traffic in Pembrey Airfield/Range and Gower area. Recent experience is that the level of fast jet traffic using the range remains high and there has been a slight increase in the level of rotary wing traffic.

In this incident the PA28 pilot did not see the Tornado and the Tornado crew did not see the PA28 in time to take early avoidance; Members considered this to be the cause of the incident and further, a combination of this and the relative proximity of the two ac had led to a reduction of normally accepted safety standards.

## PART C: ASSESSMENT OF CAUSE AND RISK

<u>Cause</u>: Non-sighting by the PA28 pilot and a late sighting by the Tornado crew.

Degree of Risk: B.