

AIRPROX REPORT No 2012017

Date/Time: 16 Feb 2012 1115Z

Position: 5334N 00331W (3nm NE
Douglas Platform - elev
146ft)

Airspace: Liverpool Bay HTZ (*Class: G*)

Reporting Ac Reported Ac

Type: AS365 P68

Operator: CAT Civ Comm

Alt/FL: 1000ft↓ 1350ft
QNH (1027hPa) QNH (1027hPa)

Weather: VMC CLBC VMC CLBC

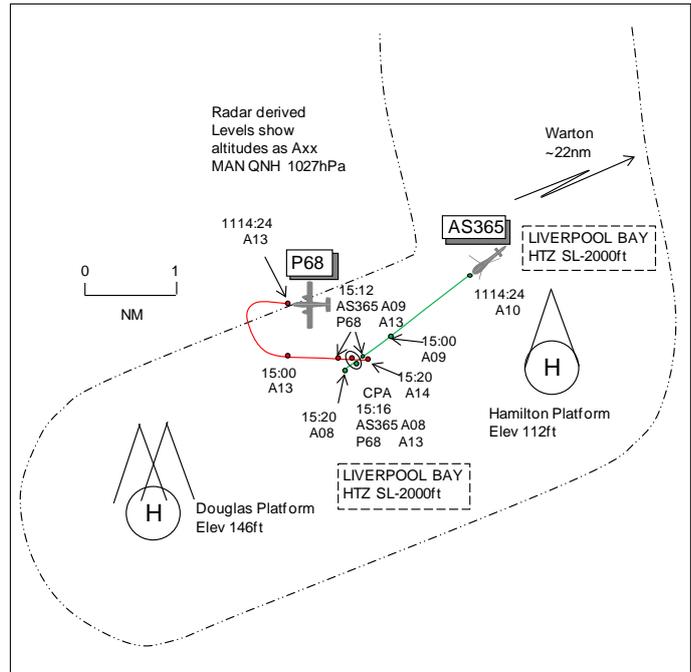
Visibility: >10km 10km

Reported Separation:

300ft V/Nil H 800ft V/400m H

Recorded Separation:

500ft V/0.1nm H



PART A: SUMMARY OF INFORMATION REPORTED TO UKAB

THE AS365 PILOT reports en-route from Blackpool to Douglas Platform, VFR and in receipt of a BS from Warton Radar on 129.525MHz, squawking 0467 with Modes S and C; TCAS 1 was fitted. The visibility was >10km flying 3000ft below cloud in VMC and the helicopter was coloured red/grey with nav, anti-collision and strobe lights all switched on. With approximately 15nm to run to the rig heading 239° at 135kt and 1000ft QNH 1027hPa they noticed an ac on ACAS in the vicinity of Douglas Platform. This ac was manoeuvring between their level and 300ft above as they approached. They asked Warton if they were working the ac but were told that it was working Liverpool and that Warton would contact Liverpool for further information. They saw the ac at about 10nm range and as they approached Douglas with about 5nm to run the ac turned towards them on an intercepting track. At this point a TCAS TA was generated and they started their descent to the Platform and watched as the high-wing twin-engine ac overflew them about 300ft directly above. He assessed the risk as medium/high. Warton subsequently requested the ac to move onto their frequency and it became clear that the other ac's pilot was unaware of the HPZ sic HTZ (Helicopter Traffic Zone).

THE P68 PILOT reports flying a local sortie from Hawarden, VFR and in receipt of a BS from Liverpool on 119.85MHz, then Warton on 129.525MHz, squawking 0260 with Modes S and C. The visibility was 10km flying 2500ft below cloud in VMC and the ac was coloured white/blue with wing and tail strobes switched on. He was giving Liverpool 'Operations Normal' calls every 30min and the incident occurred when he was on Line 8 of his aerial survey heading 090° at 140kt level at 1350ft QNH 1027hPa. About 2-3nm N of Douglas Platform he saw an AS365 about 2nm away on a converging/crossing track about 500ft below and watched it pass underneath by 800ft, descending, heading in the opposite direction about 400m away; he did not consider the helicopter to have been a threat. Liverpool ATC asked him to call Warton and the controller said that he should not be operating in that area so he broke-off the survey line and moved from the area.

THE P68 DEPUTY CHIEF PILOT comments that the company has had a root and branch investigation into the circumstances surrounding this Airprox which was viewed as a serious incident. A new extensive low-flying brief, including SMS, covering all aspects of the company's operations has been written and is being reviewed by the CAA. The P68 pilot has been involved fully in the

investigation and is committed to ensuring that a repeat of his mistake will not recur. It came to light that the pilot had been using the Southern Area 1:500000 map so had he been using the correct chart this incident in all probability would not have happened. While on the day he was complying with ATC instructions he was obviously speaking to the wrong ATSU. The pilot is fully aware of the implications of using the wrong chart but by way of mitigation he stated that the changeover from the Northern to Southern chart was very close to where the ac was operating. The HTZ was in the top RH corner of the survey square. On reflection it is clear that the correct chart was the Northern Area 1:500000 and although the pilot did have both charts in the ac on the day he used the incorrect one. Since this incident the company have amended their survey brief so that any ACN/NOTAM generation is considered, the flights will contact Warton midweek and Blackpool at weekends by telephone before commencing the survey and have 2-way radio contact with them during the flight.

THE WARTON LARS/APPROACH CONTROLLER reports working the AS365 as it transited from Blackpool to the Liverpool Bay Rigs. The helicopter was flying at 1000ft QNH 1026 under a BS and as it was about 5nm E of the HTZ the controller was aware of a 0260 radar contact travelling W'bound and did not consider this contact to be traffic to the AS365. The controller then dealt with other traffic to the SE of Warton and another flight near DCS. On the next scan of the Liverpool HTZ the controller saw a 0260 contact approximately 3nm from, and 400ft above, the AS365 and passed TI to its crew. The crew mentioned they had seen it on their TCAS and expressed surprise that the ac was in the HTZ. The controller contacted Liverpool Approach who informed LARS that the ac was under a BS so Liverpool Approach were asked to free-call the ac to the Rigs frequency of 122.375MHz in order to obtain permission to fly within the HTZ. A colleague then took over the position and the off-going controller made further enquiries, establishing the other ac, a P68, was on a survey flight. The P68 pilot called LARS stating that he was unable to make contact with the rigs frequency before he was told to vacate the HTZ.

ATSI reports that the Airprox occurred at 1115:16, in Class G airspace, 26nm SW of Warton and within the boundary of the designated Helicopter Traffic Zone (HTZ) of the Liverpool Bay Gas Field. The AS365 was operating on a VFR flight from Blackpool Airport to the Douglas Platform situated in the Liverpool Bay Gas Field and in receipt of a BS from Warton Approach. The P68 was operating VFR off the N Wales coast to conduct an Aerial Survey at an altitude of 1300ft and was in receipt of a BS from Liverpool Radar.

The UK AIP Page ENR1-6-7-9 (30 Jun 11) describes off-shore operations in the Liverpool Bay area as follows:

- '3 Morecambe Bay and Liverpool Bay Gas Fields - Helicopter Support Flights.
 - 3.1 Permanent platforms positioned on the Morecambe Bay and Liverpool Bay Gas Fields are shown at ENR 6-1-15-7.
 - 3.2 Helicopter Traffic Zone (HTZ)
 - 3.2.1 A Helicopter Traffic Zone (HTZ), established as notification of helicopters engaged in platform approaches, departures and extensive uncoordinated inter-platform transit flying, is established around the Morecambe Bay and Liverpool Bay Gas Fields. An HTZ consists of the airspace from sea level to 2000ft amsl contained within the tangential lines, not exceeding 5nm in length, joining the neighbouring circumferences of circles 1.5nm radius around each individual platform helideck.
 - 3.3 Airspace Structure – Morecambe Bay.....
 - 3.4 Airspace Structure – Liverpool Bay
 - 3.4.1 The helicopter support land base is Blackpool Airport. Low level flights, normal operating height 1000ft amsl on the Blackpool QNH, operate daily between Blackpool Airport and the helidecks. Transit height to/from the Lennox platform is 500ft amsl. Flights between helidecks are normally conducted between 500ft and 1000ft.
 - 3.4.2 The route structure is:
 - (a) Blackpool to Gate G (534449N 0030441W) to Hamilton (533357N 0032716W);
 - (b) Blackpool to Gate G to Lennox (533719N 0031037W).
- Note: Routes are bi-directional.

3.4.3 Helicopter traffic information is available from Warton Approach during the Warton ATC published hours of operation. Outside these hours, information is available from Blackpool Approach.

3.4.4 Gas release and burn-off operations may take place at any time without prior notification from off-shore gas installations.'

(Rigs operated by BHP Petroleum and RTF Traffic and LOG 122.375MHz).

In the RT transcript reference is made to Helicopter Protected Zone (HPZ). These were renamed Helicopter Traffic Zones (HTZ) on 8 April 2010. CAA ATSI had access to the following: RT recording from Liverpool and Warton ATC. NATS Area radar recording, Warton ATSU radar recording, written report from both pilots, Warton controller written report.

Warton and Liverpool METARs:-

METAR EGNO 161050Z 27014KT 9999 BKN044 08/06 Q1026=

METAR EGGP 161050Z 28011KT 9999 SCT046 08/06 Q1027=

At 1055:30, the P68 flight contacted Liverpool Approach and reported on task conducting an aerial survey in the Rhyl/Prestatyn area, off the N Wales coast at an altitude of 1300ft for a period of 3hr. The Liverpool controller agreed a BS, allocated a squawk 0260 and passed the Liverpool QNH 1027. The P68 pilot advised that he would give an 'Ops' call every 30min and reported commencing the survey.

At 1104:20, the AS365 flight, on departure from Blackpool, contacted Warton Approach, reporting in the climb to 1000ft. The Warton controller agreed a BS and passed the Warton QNH 1026.

At 1113:16, Warton radar recording shows the P68 N of the Douglas Platform, on the boundary of the HTZ, tracking W and indicating an altitude of 1200ft. The AS365 is shown entering the HTZ to the NE of the Hamilton Platform, indicating an altitude of 900ft. The distance between the 2 ac is 5nm.

At 1113:42, the Liverpool controller warned the P68 pilot to look out for traffic approaching from the NNE, squawking the rig conspicuity code (0467) and indicating 1000ft unverified. The P68 pilot reported looking out for the traffic.

At 1113:47, the Warton controller warned the AS365 pilot about traffic, 12 o'clock at a range of 3nm at 1300ft manoeuvring over the rigs showing a squawk allocated by Liverpool. The AS365 pilot advised Warton that the other aircraft [P68] was in a Protected Helicopter Area [AIP refers to Helicopter Traffic Zone]. The radar recording shows the 2 ac on reciprocal tracks at a range of 2.5nm, with the P68, indicating an altitude of 1300ft and the AS365, indicating an altitude of 900ft. The P68 is then observed to commence a L turn and track W.

At 1114:25, after a discussion with Liverpool, the Warton controller advised the AS365 pilot that the P68 was conducting an Aerial Survey. In response the pilot reported that the P68 was turning back towards them and said it would be helpful if the ac was on the company frequency [Rig RTF 122.375MHz]. The radar recording shows the P68, 2.1nm W of the AS365, turning onto an E'ly track. The 2 ac then track towards each other on converging headings.

[UKAB Note (1): By 1115:12, the radar recording shows the AS365 at altitude 900ft in the P68's 12 o'clock range 0.3nm, the P68 at altitude 1300ft. The next sweep at 1115:16 is the CPA, the tracks of the 2 ac having crossed, the P68 indicating an altitude of 1300ft with the AS365 indicating an altitude of 800ft in its 0130 position range 0.1nm. The next radar sweep shows the P68 now at 1400ft and the AS365 at 800ft as the 2 ac begin to diverge.]

At 1115:50, the AS365 pilot requested the registration of the P68 from the Warton controller and reported that the P68 had flown directly towards the helicopter at about 300-400ft above. The Warton controller informed the pilot that the P68 was shortly to come onto the Warton frequency.

The radar recording shows the AS365 helicopter landing at the Douglas Platform at 1117:33 and the P68 tracking E/W indicating an altitude of 1300ft.

At 1120:40, the Liverpool controller (at the request of Warton) requested that the P68 pilot contact the Liverpool Bay Rig frequency 122.375MHz. Shortly afterwards at 1122:40 the P68 pilot reported back on frequency reporting 'no response' from the Rig frequency. The AS365 pilot subsequently reported that the P68 flight had called on the Rig frequency but using the 'Warton' c/s. At 1125:40 the Liverpool controller instructed the P68 pilot to squawk 7000 and contact Warton Radar.

At 1126:35, the P68 flight contacted Warton and the pilot was asked whether he had been authorised to operate in the Rigs protected zone. The P68 pilot responded 'negative'. The controller agreed a BS allocating a squawk 3642. As part of the survey the P68 pilot indicated a requirement for tracks backwards and forwards until clear of the area and asked for permission to continue. The Warton controller responded that this couldn't be approved without prior authorisation and should really have been arranged before getting airborne. The P68 pilot advised that he would continue the survey work nearer to the shore and commented that he didn't have 'that helicopter area' on his chart. The P68 pilot then reported changing back to the Liverpool frequency.

When the AS365 helicopter reported airborne from the rigs returning to Blackpool the controller advised the pilot that the P68 did not have the HPZ on his chart and had been advised he wasn't allowed in. This was acknowledged by the AS365 pilot.

As a result of this incident, the Warton ATSU issued a bulletin to remind controllers of the status of the HTZs as described in the UK AIP. Warton also indicated that it is common practice for Warton controllers to remind pilots operating sorties off-shore that they should remain clear of the Liverpool HTZs. Warton considered it likely that over a period of time, this may have pre-disposed controllers into believing that pilots required permission to enter the area, when this was not the case.

It was not clear if the P68 pilot was aware of the off-shore operations, the Rig RTF frequency or the helicopter information available from Warton Approach specified in the UK AIP. The HTZ is not restricted or protected airspace and there seems to have been a misunderstanding by the controller regarding the status of the HTZ (referred to as HPZ). This resulted in the controller refusing permission for the P68 to continue in the area of the Gas Rigs.

Both flights were in receipt of a BS from 2 separate units. As indicated in the AIP, it would have been more appropriate for the P68 pilot to have contacted Warton to receive a service and additional information on helicopter activity in the area. The P68 pilot advised the Liverpool controller about survey work "just off the N Wales coast in the vicinity of Rhyl and Prestatyn". It may not have been obvious to the Liverpool controller that the P68 was going to operate in the vicinity of the Rigs. Both controllers gave a warning to their respective ac. CAP774, UK Flight Information Services, Chapter 2, Page 1, Paragraph 1, and 5, state:

'A Basic Service is an ATS provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights. This may include weather information, changes of serviceability of facilities, conditions at aerodromes, general airspace activity information, and any other information likely to affect safety. The avoidance of other traffic is solely the pilot's responsibility.

Pilots should not expect any form of traffic information from a controller/FISO, as there is no such obligation placed on the controller/FISO under a Basic Service outside an Aerodrome Traffic Zone (ATZ), and the pilot remains responsible for collision avoidance at all times. However, on initial contact the controller/FISO may provide traffic information in general terms to assist with the pilot's situational awareness. This will not normally be updated by the controller/FISO unless the situation has changed markedly, or the pilot requests an update. A controller with access to surveillance-derived information shall avoid the routine provision of traffic information on specific aircraft, and a pilot who considers that he requires such a regular flow of specific traffic information shall request a Traffic Service. However, if a controller/ FISO considers that a definite risk of collision exists, a warning may be issued to the pilot.'

After the Airprox, when it became apparent that the P68 was likely to be in conflict, a number of factors led to further misunderstanding.

- a) The P68 was asked to contact the Rig RTF frequency 122.375MHz but appears to have used the 'Warton' callsign on that frequency. Receiving no response the P68 pilot returned to the Liverpool frequency.
- b) The Warton controller seems to have been unclear regarding the status of the HTZ, referring to the HPZ and the requirement for prior authorisation.

CAP774, Chapter 1, Page1, Paragraph 2, states:

'Within Class F and G airspace, regardless of the service being provided, pilots are ultimately responsible for collision avoidance and terrain clearance, and they should consider service provision to be constrained by the unpredictable nature of this environment.'

The Airprox occurred when the AS365 and P68 flights, whilst in receipt of a BS, came into close proximity when operating in Class G airspace within the Liverpool Bay Gas Field HTZ. There was no requirement for the controllers to monitor the flights but each passed a warning to their respective ac.

A number of factors were considered to be contributory:-

- a) The 2 flights were operating in the same area but operating on separate frequencies.
- b) The P68 pilot appears not to have been familiar with the guidance promulgated in the UK AIP regarding off-shore operations in the vicinity of the Liverpool Bay Gas Field.
- c) The P68 pilot reported operating off the N Wales coast in the vicinity of Rhyl and Prestatyn. It was not obvious to the Liverpool controller that the P68 intended to operate in the vicinity of the Liverpool Bay Gas field.

PART B: SUMMARY OF THE BOARD'S DISCUSSIONS

Information available included reports from the pilots of both ac, transcripts of the relevant RT frequencies, radar video recordings, reports from the air traffic controllers involved and reports from the appropriate ATC authorities.

It was clear to Members that there were some misunderstandings within both cockpits of the subject ac and in Warton ATC. The AS365 pilot was apparently expecting more protection within the HTZ than was available; a HTZ is not an ATZ nor is it exclusive to helicopter traffic. The HTZ is Class G airspace where the presence of helicopters is highlighted for other users but with no ATC service available; the frequency is manned by ground personnel and is licensed for administrative and logistic purposes associated with safe offshore operations. The procedures followed by helicopter operators whilst flying within the HTZ were established by local agreement, there being no procedures promulgated for traffic transiting a HTZ. Similarly, the P68 pilot was unaware of the HTZ, owing to poor pre-flight planning, and was using the wrong chart during the survey flight. However, there was no reason for the P68 to be excluded from the Class G HTZ; the pilot did not need to contact any ATSU during the survey portion of the flight. That said, had the P68 pilot noted the HTZ's existence from the Northern Area chart, he would have been cross-referred to the AIP entry which mentions the availability of TI from either Warton or Blackpool ATSUs. The Board agreed it would be good airmanship to contact the relevant ATSU for TI whenever flying in a HTZ. Warton ATC erroneously believed that permission/authorisation was required for transiting traffic to enter the HTZ and that the P68 flight, without 'clearance' to be there, must vacate the HTZ. Given the Class G status of the airspace, both pilots were responsible for maintaining their own separation from other ac through see and avoid. In the end both flights, although under a BS from 2 different ATSUs, received a traffic warning on each other. This warning enhanced the P68 pilot's SA and enabled him to visually acquire the approaching helicopter about 2nm away and, he estimated, 500ft below; content that no action was necessary; he watched it pass well below by 800ft. Meanwhile the AS365

pilot already had a 'heads-up' on the P68 from his ACAS but was concerned that there was 'unknown' traffic within the HTZ. The AS365 pilot saw the P68 manoeuvring at about 10nm range and when the P68 turned onto an E'ly track a TCAS TA was generated. The AS365 pilot elected to descend to increase separation estimating the ac crossed with 300ft separation. The radar recording shows the converging ac initially separated by 300ft; they cross 0.1nm apart and separated by 500ft vertically. Members agreed that the visual sightings by both crews had ensured that any risk of collision had been effectively removed and, as there was no requirement on the P68 pilot to participate in procedure or contact an ATSU, the Board concluded that this had been a sighting report in a HTZ where normal procedures, safety standards and parameters pertained.

PART C: ASSESSMENT OF CAUSE AND RISK

Cause: Sighting report in a HTZ.

Degree of Risk: E.