

INCIDENT

Aircraft Type and Registration:	Agusta AW139, G-VINB	
No & Type of Engines:	2 Pratt & Whitney Canada PT6C-67C turboshaft engines	
Year of Manufacture:	2012 (Serial no: 31398)	
Date & Time (UTC):	20 January 2017 at 1627 hrs	
Location:	Ravenspurn North Platform, North Sea	
Type of Flight:	Commercial Air Transport (Passenger)	
Persons on Board:	Crew - 2	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	None	
Commander's Licence:	Airline Transport Pilot's Licence	
Commander's Age:	43 years	
Commander's Flying Experience:	6,035 hours (of which 1,964 were on type) Last 90 days - 99 hours Last 28 days - 20 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

After reporting for duty, a change in the flying programme resulted in a requirement for the crew to fly a seven-sector shuttle at short notice. Whilst the commander reviewed the technical log and discussed some issues with the engineering department, the co-pilot completed the flight planning. The initial plan was to refuel on West Sole Alpha platform but the flight crew surmised that the seven sectors could be completed with round trip fuel. While re-planning the flight, the fourth destination was incorrectly inserted as Ravenspurn North platform rather than Ravenspurn Alpha platform. The error was not noticed and the flight proceeded to land at Ravenspurn North platform, whose helideck was not manned.

History of the flight

The flight crew reported for a base duty standby period at Norwich at 1155 hrs and 1200 hrs, respectively, expecting a 1630 hrs departure. However, freezing fog in the morning had disrupted the flying programme. On arrival, the crew were informed they were required for a departure as soon as possible for a seven-sector shuttle, including refuelling and shutting down on West Sole Alpha platform. The crew then discussed the route and completed the planning accordingly. Initially, no payload information was available as the customer's flight planning sheet had not yet arrived.

When the customer's flight planning sheet was issued, which detailed the payload, the crew realised that the flight could be completed without refuelling offshore. As a result, the co-pilot re-planned the seven sectors while the commander went to review the aircraft's technical log. While doing so, he was also asked to advise the engineering department on a technical defect with another helicopter.

While re-planning, Ravenspurn Alpha was transposed to Ravenspurn North on the operator's fuel planning sheet for sector four. Once the commander returned to join the co-pilot, the crew rebriefed. The routing was correct on the customer supplied flight planning sheet but the error on the fuel planning sheet was not noticed.

The aircraft departed Norwich and the first three sectors were completed without incident. The crew then carried out a rotors-running turnaround on West Sole Alpha platform, during which they received radio calls regarding the payload on the final, seventh sector and the manifests for the fourth and fifth sectors. Whilst the co-pilot was dealing with the payload request, the commander programmed the FMS. The crew were also aware that another helicopter was inbound, to land on the helideck.

On departing the West Sole Alpha platform, the helicopter proceeded to the Ravenspurn field. The co-pilot made a radio call to request helideck availability from the Ravenspurn Field Helicopter Landing Officer (HLO) but only used the word "Ravenspurn" when providing the name of the platform on which the crew intended to land, instead of "Ravenspurn North". The HLO responded: "Ravenspurn Alpha deck is available, standing by on the north side". However, the crew did not pick up on the discrepancy between their intended destination and the clearance and carried out an approach and landing to Ravenspurn North. There was no helideck crew present, as required by the operator, and a radio call alerted the crew to the fact they had landed on Ravenspurn North rather than Ravenspurn Alpha, where they were expected (Figure 1).

Once the crew realised their mistake, they remained rotors running and requested a helideck crew, in accordance with the procedure in the operator's Operations Manual. Once the helideck crew were in place, the helicopter departed for the Ravenspurn Alpha platform.

The remaining sectors were completed without incident.

Procedures

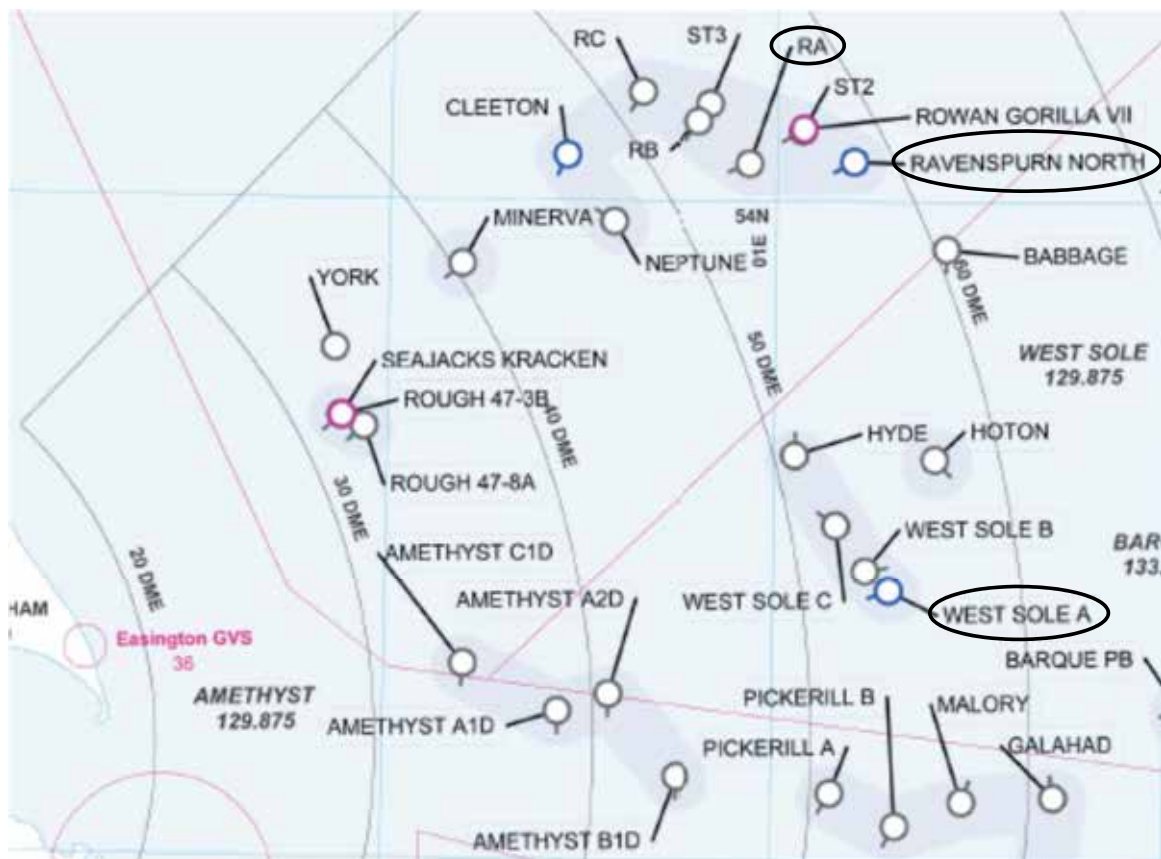
Fuel planning is completed on the operator's AW139 flight planning software, which uses a drop-down menu for the selection of each destination. The fuel plan is supplemented by a flight planning sheet, which is supplied by the customer and lists the payload for each sector. This is generated by a system called Vantage, which companies use across the North Sea to generate payload information for operators.

The operator's flight planning software and Vantage use codes rather than the full name of platforms. However, the codes used by the operator's flight planning software, and the helicopter's systems, differ from those used by Vantage. This complicates any crosschecking of the flight plan, as a decode is required. On the operator's and helicopter's systems, the

code used for Ravenspurn Alpha was RA but Vantage used RAVA. Similarly, Ravenspurn North was RVN versus RAVN.

The initial plan for the seven-sector task included a shutdown and refuelling on West Sole Alpha, with the onward sectors detailed on a second flight plan. On this occasion, the flight planning sheet, with the payload information, arrived after the first fuel plan had been completed.

Once the crew had the payload information, they realised that they could complete the trip without refuelling offshore. Re-planning involved re-ordering the destinations into one flight plan, rather than the initial two. This involved the co-pilot selecting the destinations using the drop down menu and it was during this process that the destination for sector four was mis-selected as Ravenspurn North (RVN) rather than Ravenspurn Alpha (RA).



©RigMap

Figure 1

Rig map of the Ravenspurn Field (Ravenspurn Alpha is denoted as RA)

Analysis

Once the crew received their tasking for the multi-sector day, they began flight planning. They were hampered by a lack of onward payload information, which, when it did arrive, meant they could complete all the sectors without the requirement to refuel offshore. This

resulted in rapid re-planning by the co-pilot, while the commander was otherwise occupied checking the helicopter's technical log and advising the engineering department about another helicopter. This lessened the time the crew had together to check the new flight plan, leading to the incorrect destination for the fourth sector not being identified. Contrary to their expectation, there was also time pressure from the moment the crew reported for duty, due to the weather which had disrupted operations that morning.

The flight crew abbreviated the name of the installation in R/T transmissions from "Ravenspurn North" to "Ravenspurn". As a result, neither the flight crew nor the HLO identified that the helicopter was heading for Ravenspurn North, which had an unmanned helideck, rather than Ravenspurn Alpha where they were expected. The HLO did use "Ravenspurn Alpha" in his transmission on the helideck availability but the discrepancy was not picked up, perhaps due to confirmation bias.

Conclusion

An error at the flight planning stage led the crew to land on an unmanned helideck. There were a number of occasions when the error could have been picked up; briefing before departure from Norwich, crosschecking the flight plan and payload information, during the radio calls with the Ravenspurn HLO and in programming the FMC. These opportunities were missed through perceived time pressure, differences in codes and possibly confirmation bias in the crew.

Once the mistake was realised, the crew correctly followed the operator's procedures, waiting on the deck with rotors running until the helideck was manned and they received permission to depart.

Safety actions

The operator carried out a prompt internal investigation into the incident and identified a number of potential safety actions. The following are of relevance to this report:

1. *Carry out a Flight Planning Software review for robustness and ease of use.*
2. *Carry out a review of the destination nomenclatures used for planning applications and software.*
3. *Reiterate to all crews the importance of clear and unambiguous communications.*
4. *Reiterate to crews the importance of re-briefing all aspects of the flight when a significant change has been applied.'*