

**ACCIDENT**

<b>Aircraft Type and Registration:</b>	28-5ACF Super Catalina, N9767	
<b>No &amp; Type of Engines:</b>	2 x Pratt & Whitney R-1830 piston engines	
<b>Year of Manufacture:</b>	1943	
<b>Date &amp; Time (UTC):</b>	24 September 2011 at 1205 hrs	
<b>Location:</b>	Gublusk Bay, Enniskillen, Northern Ireland	
<b>Type of Flight:</b>	Private	
<b>Persons on Board:</b>	Crew - 3	Passengers - 4
<b>Injuries:</b>	Crew - None	Passengers - None
<b>Nature of Damage:</b>	Right elevator damaged	
<b>Commander's Licence:</b>	Airline Transport Pilot's Licence (A)	
<b>Commander's Age:</b>	62 years	
<b>Commander's Flying Experience:</b>	18,000 hours (of which 400 were on type) Last 90 days - 50 hours Last 28 days - 20 hours	
<b>Information Source:</b>	AAIB Field Investigation	

**Synopsis**

The Catalina landed in the vicinity of Gublusk Bay, Lower Lough Erne, turned into wind and shut down its engines. It then drifted back into a yacht causing damage to the Catalina's right elevator. Despite a pilot's briefing, different expectations remained between the Catalina crew and marshal boat crews as to how the Catalina was intending to moor up, with the Catalina crew expecting that after they shut down the engines a 'tug boat' would tow them to the mooring, and the marshal boat crew expecting the Catalina to taxi to the mooring under its own power.

**Background**

The Fermanagh Seaplane Festival was held at Gublusk Bay, Lower Lough Erne, a World War II Catalina base, over three days, with the main event taking place on 24 and 25 September 2011. This was the second such event to be held at Lough Erne, with the previous event having taken place two years earlier. Eight aircraft participated in this year's event: five float planes, a Twin Seabee and two Catalina flying boats. One of the Catalinas was on the UK register and operated by a UK licensed crew; the other (N9767) was French owned, on the American register and operated by a French and Dutch crew. The UK Civilian Aviation Authority were content that the event, as advertised, did not constitute '*an airshow*', and so no permission was required for the organisers to hold the event.

The UK operated Catalina arrived at St Angelo Airport, Enniskillen, before the event and the crew were taken on a marshal boat to familiarise themselves with the area that they would be using. The UK Catalina operated on the water in an independent manner; the crew's normal procedure involved water taxiing the aircraft under its own power to a mooring buoy, and then securing the aircraft to it. They did not normally require any assistance from tug boats. The UK Catalina had a modification which permitted the independent lowering of the landing gear legs, which increased the aircraft's manoeuvrability on the water. The crew spent some time before the event practising their procedures, whilst being observed by people who had agreed to participate in crewing boats for the main event.

The event organiser had arranged for a fleet of around ten marshal boats, and three divers, to be available. On the Thursday evening before the event, the Chief Marshal held a safety briefing for all the personnel involved in the water operations. This briefing included a look at the UK registered Catalina where the boat crews familiarised themselves with the position of the Catalina's mooring equipment and the divers became familiar with the position and operation of the doors and escape hatches. The boat crews also received training on how to provide assistance to float planes, should the need arise and were briefed to approach aircraft only in an emergency.

The French owned aircraft, N9767, and its crew, flew from France and arrived at St Angelo Airport, Enniskillen on the Friday afternoon before the event. The aircraft had recently been returned to an airworthy condition after a lengthy restoration program. The aircraft had not been operated on the water for more than ten years and, with the exception of the Dutch

commander, the crew had limited experience of water operations. The commander gained his water experience when operating a Dutch Catalina. The standard operating procedure for the Dutch Catalina, in anything other than calm water conditions, was for the aircraft to taxi into a suitable location near its support boats, where it would shut down and then be towed by tug boat to the aircraft's mooring buoy. The tug boats would not approach the aircraft until the engines had been shut down. This was a passive procedure for the flight crew of the Catalina as the boat crew would attach the lines and then moor the aircraft to the buoy. N9767 and the Dutch Catalina did not have the aircraft modification which permitted independent lowering of the landing gear legs, and hence were less manoeuvrable on the water.

### **Weather**

The weather situation over Northern Ireland was characterised by a moderate and partly unstable south-westerly flow, with the stability of the atmosphere decreasing towards the western side of Northern Ireland, this instability causing occasional showers. In the area of St Angelo, the observations indicated that there was scattered to broken cloud cover, with a main base at around 3,500 ft agl. Visibility was generally more than 20 km.

The wind at 2,000 ft was south-westerly at 25 kt with the surface wind being from 190° at 15 kt, with a risk of gusts of 20-25 kt around any showers.

### **Pilot's brief**

At 0800 hrs on the Saturday morning, a brief for all the participants was held. The brief covered weather, ramp procedures, refuelling and any other business. Specific details on how the Catalina was to moor up were not covered during this brief. The participants

were reminded that the boat crews had received training on the aircraft that were expected at the event throughout the day. The intention for the two Catalinas was for N9767 to take up its mooring on the water for 1030 hrs, and one hour later the UK registered Catalina would take up its mooring nearby. After the briefing N9767's commander completed a familiarisation trip on a marshal boat, with the Chief Marshal, around the area the Catalinas would be operating. It was agreed that one of the Catalina's French ground crew would accompany the Chief Marshal on his marshal boat, during the event. During the familiarisation trip the commander was shown the location of the mooring buoy, upwind access, departure routes and potential hazards but the need for a tug boat to tow the Catalina to the mooring, or how the Catalina was to be tied to the mooring was not discussed. N9767 was unable to make its planned mooring time, and so it was planned for it to arrive at the event about half an hour after the UK registered Catalina.

After briefings and discussions, the marshal boat crews expected that N9767 would taxi to the mooring buoy, in a similar manner to the UK registered Catalina, and that the French ground crewman would then assist the aircraft crew in securing the aircraft to the mooring. However, N9767's crew thought it was understood that they would shut down in the area of the moorings and be towed to the mooring buoy by the marshal boats.

### **History of the flight**

The UK registered Catalina flew across to the festival areas, and self-moored as expected on its buoy at the agreed time of 1130 hrs. The flight crew described the conditions on the water as demanding, because of the prevailing wind.

N9767 was airborne shortly before 1200 hrs with seven persons on board: a crew of three, three journalists and in the co-pilot's seat, a war veteran, with over 1,200 hours as a commander of Catalinas. The aircraft performed a flypast of the festival, followed by a touch-and-go. The aircraft then landed again on the water and taxied into Gublusk Bay, towards the mooring buoy. When the Dutch commander could see small boats in his vicinity, he turned his aircraft into wind and shut down, to await the tug crews to tow the aircraft to the mooring buoy.

The marshal boat crews, the crew of the other Catalinas, and many other witnesses were surprised to see the engines on N9767 shut down and they assumed it must have a problem. The Chief Marshal with N9767's ground crewman were the first on the scene, and after a brief conversation they attempted to attach a line to N9767. The French ground crewman spoke limited English and the Chief Marshal could not speak French. Communications between the French ground crewman and the aircraft crew were predominately in French. Eventually a line was attached, but as they tried to take N9767 under tow, the line fell into the water and became tangled in the boat's propeller. The ground crewman then tried to prevent the boat from becoming separated from the Catalina, and ended up falling into the water. Another marshal boat arrived on scene and went to the aid of the ground crewman in the water, but its propeller also became tangled in the line, rendering the boat helpless. A third marshal boat arrived, but it was unable to prevent N9767 from drifting towards a moored yacht. Because of the proximity of small boats, N9767 was unable to restart its engines, and so it continued to drift backwards into the moored yacht, damaging its right elevator. (See Figure 1)



**Figure 1**

The Catalina contacting the yacht

### Recorded data

Video and photographic evidence shows N9767 entered Gublusk Bay at approximately 1205 hrs and, at about 100 m from its intended mooring point, it turned into wind, shutting down its engines at 1206 hrs. At this point there was a small rib in the vicinity of the Catalina, but this was not one of the dedicated marshal boats. Approximately one minute after the engines on N9767 were shut down the first marshal boat had arrived, and 15 seconds later the front hatch

on the Catalina opened and the co-pilot began to communicate with the crew of the first marshal boat. Two minutes and thirty seconds later the Catalina's elevator made contact with the moored yacht.



**Figure 2**

Damage to the Catalina's elevator

### **Comment**

The accident was as a result of different expectations, by the Catalina crew and the marshal boat crews, on how the aircraft was to moor up following landing. This could have been resolved during the pilot's brief, held on the morning of the event.