



Department of the Interior

Lessons Learned



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Subject: Devil is in the Detail

Area of Concern: All Aviation Activities

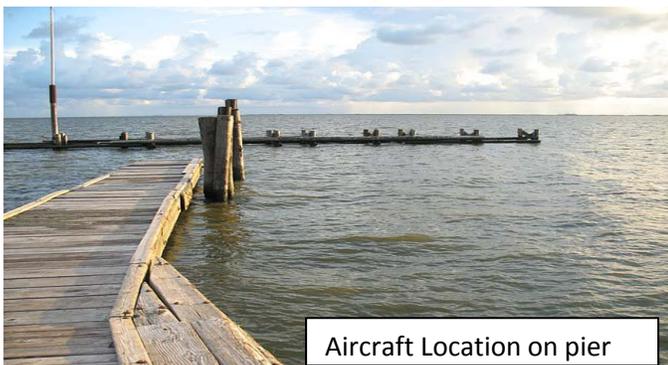
Distribution: All Float Plane Operators

Discussion: When people say that “the devil is in the details”, they mean that small things that are often overlooked during the planning phase can cause serious problems later on.

On July 26, 2010, a Soloy Cessna 206 was being launched from a commercial marina using two ground personnel to push the aircraft away from the dock with a 14 knot quartering headwind blowing away from the dock. The pilot elected to have the ground crew hold the aircraft by the forward strut until the engine was started and then push the aircraft away from the dock. There were no handling ropes attached to the aircraft and the water rudders were not extended in the water. The engine was started but the ground crew was unable to push the aircraft far enough from the dock and the aircraft quickly weathercocked into the wind. As a result, the aircraft possessed insufficient speed to provide the pilot with any control of the aircraft and began to drift. When the pilot realized the aircraft was about to hit the vertical wood pilings located in front of the aircraft, he immediately shut down the engine. The spinner and free-wheeling propeller struck the piling, bending one blade and denting the spinner cap.

Preflight planning. When the mission is repetitive or fairly benign, pilot complacency or overconfidence usually begins with preflight planning responsibilities resulting in abbreviated or overlooked items. Every flight should begin the same - with thorough and professional preflight planning. Even a minor event like this can have costly consequences such as sudden stoppage inspection, possible engine change, overhaul, propeller replacement, and lost aircraft availability. The next page contains a generic briefing guide that can be modified to fit every mission.

Risk assessment of primary & alternative actions. A thorough risk assessment of the mission to include all phases of launch and recovery should be completed as part of the preflight planning process. In this incident, further risk assessment should have been given to the location of the aircraft on the dock, the location of the wooden pilings/obstructions, wind direction/velocity, and departure route.



Aircraft Location on pier



Pilings struck by aircraft

Subject: Devil is in the Detail

A Briefing Guide should be used to ensure critical areas are not overlooked. Here's an example:

FLOATPLANE BRIEFING GUIDE

Overview

Weather

Winds / altimeter / air & water temp / DA / H2O current and surface condition

Start / Taxi

handling ropes / ground personnel: roles & responsibilities / surface & subsurface obstructions / H2O depth / maneuvering restrictions

Takeoff

Departure

Enroute / Flight Following

Recovery

Primary / Divert

Fuel Management

Communication

Emergencies / Malfunctions / SAR

MVFR / Bird Strike / NORDO

Crew currency / proficiency / crew day

Debrief

FINANCIALS

Engine inspection:	\$18,000
Propeller repair & OH	\$10,000
Gearbox, driveshaft & Flex disc OH	\$12,000
Truss inspection & build up	\$ 5,000
R&R Engine (2)	\$ 2,500
Shipping	\$ 3,000
Barge transport	\$ 8,500

Current cost: \$59,000

Intangible Costs: 6 weeks (and counting) of an unavailable asset to perform missions.



/s/ Keith C. Raley

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