

RECORD OF	<input checked="" type="checkbox"/> VISIT	<input type="checkbox"/> CONFERENCE OR	<input type="checkbox"/> TELEPHONE CALL	TIME	DATE
NAME (S) OF PERSON (S) CONTACTED OR IN CONFERENCE AND LOCATION					07/30/2012
Sergeant Scott Goddard, Crow Wing County Sheriff's Office [REDACTED]					[REDACTED]
					SYMBOL
					INITIALS
SUBJECT					
Technical assistance in the investigation of aircraft accident.					
Toman Jack Jr, Skystar Kitfox 4, S/N CUU-007, N602JT					
DIGEST					
Aircraft was located on a flatbed trailer at the Crow Wing County's Highway Maintenance Facility in Brainerd, Minnesota. Photographs were taken and downloaded onto Inspector Morris' "O" drive. Damage to the aircraft indicates that it struck the water nose and right wing first and at a steep angle. Significant damage to the aircraft includes; The right wing's forward and rear spars were broken approximately 3 feet from the root, The forward fuselage was compressed upward and back, folding at approximately the forward edge of the seats, The empennage was compressed downward at midpoint between the cabin and tail, The main landing gear was folded back under the fuselage.					
Aircraft's structure was inspected for fatigue failures and no indications were found. Damages found exhibit compressional and torsional stresses with ductile overload associated with impact with the water. Structural components of the wings and fuselage were accounted for.					
Flight control systems were accounted for. Failures in the push pull rods were in the areas associated with the structural failure with the same indications of (continued pg 2)					
CONCLUSION, ACTION TAKEN, OR REQUIRED					
DATE	TITLE	SIGNATURE			
7/31/2012	ASI	[REDACTED] Rob Rutan			

DIGEST (CONT.):

compressional stresses and ductile overload sustained by impact. Left flaperon showed signs of compressive stress in the skin and structural failure of the bonding and rivets at the outboard edge. The left flaperon's spar was found to be disbonded from the internal structure. The Right Flaperon, including the spar was severely damaged from impact forces.

The fuel system was inspected from the wing root areas where the lines has been cut to facilitate wing removal, to the carburetors with no discrepancies noted. Lines were disconnected at the pump and found to be full of water. Inline fuel filter checked okay. Fuel selector was in the on position. Engine controls were inspected and found to have continuity. Throttle control was found in the idle (full aft) position and the control lock hand tight. Carburetors were at idle. Choke was not on. I was unable to move the control handle, even with exerted effort, leading me to contend that the throttle was pulled back and the engine running at idle when it impacted the water.

The engine's cowling and cooling system radiator was not present. This inspection was limited to only being able to provide a general visual inspection of the engine and its components. A more detailed inspection will require removal of the engine and teardown testing in a controlled environment. As the firewall was pressed into the back of the engine, visual inspection of the ignition stator/mag wheel was limited. Findings are as follows:

Engine's general condition was good with damage limited to what would have been associated with the impact.

Crankshaft did not rotate.

Magnetic plug was not removed.

#2 top plug removed, checked okay. Engine found to be filled with water.

Mag switch operative. Found in off position.

Ignition coil pack broken from mounts but otherwise okay. Wires/caps check okay.

Carburetor, intake, exhaust systems show good general condition.

Lubrication system shows good general condition. Dipstick shows full. (Water showing at tip of stick)

Coolant tank and hoses show good general condition with exception of missing radiator.