



MEMORANDUM FOR RECORD

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Air Safety Investigator
Eastern Region

Date: 07/27/2023
Subject: Wreckage Examination
NTSB Case Number: ERA23LA261

On July 25 and 26, 2023, the wreckage of N87RT was examined at Florida Air Recovery in Jacksonville, Florida.

Examination of the wreckage revealed that the airplane was substantially damaged.

Wings

Multiple areas on both wings displayed crush and compression damage to the wing leading edges, and slats. The slats were in an extended position, the flight spoilers / speed brakes were deployed, and the flaps were fully down, with the left wing inboard flap partially separated from its mounting position. The mid spar received damage during the accident sequence.

Empennage

The horizontal stabilizer, vertical stabilizer rudder and elevator displayed no damage.

Engines and Nacelles

The engines displayed foreign object damage, and the nacelles displayed crush and compression damage.

Landing Gear

The nose landing gear had collapsed rearward, had contacted the bottom of the fuselage, and was stuck in the bottom of the fuselage.

The left main landing gear had broken in half at the oleo strut and was separated from its mounting location. The right main landing gear had collapsed.

Fuselage

During the nose gear collapse the nose landing gear which was mounted to Frame 0 (The forward pressure bulkhead) tore open the bulkhead and came in contact with the 121 AL Service Door (which is used to gain access to the control pedestal and instrument panel in the pressurized section of the airplane) and pushed it inward damaging the door, and Frame 1.

Guidance Materials

Review of published guidance materials found in the airplane during the examination revealed that:

- The RVSM Manual was out of date.
- The AFM was Revision 4 (was within date) but was not in the cockpit.
- The Operational Instructions Manual Revision 12 (was within date) but was not in the Cockpit.
- The Loading Manual was Revision 2 dated 10/20/1988 but was supposed to be Revision 3 dated 01/18/1990 and was not in the cockpit.
- The MMEL was Revision 6 dated 11/19/2009 (within date) but was not in the cockpit.
- Two Flight Safety Falcon 10/100 Normal Checklists (One on the PIC side and One on the SIC side) found in the cockpit, were marked as Revision 4, but did not address procedures or use of the thrust reversers. They were also marked "FOR TRAINING PURPOSES ONLY."
- Two Flight Safety 10/100 Emergency / Abnormal Checklists found in the cockpit did not Address procedures or use of the thrust reversers. They were also marked "FOR TRAINING PURPOSES ONLY."
- A SimuFlight Falcon 10 Cockpit Reference Handbook was found in the cabin of the airplane which contained reference to the thrust reversers, but it was not in the cockpit and was not allowed for use in flight operations.