



RECORD OF EXAMINATION

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NTSB Accident Number: CEN19FA104
Aircraft: Israel Aircraft Industries Westwind 1124, N4MH

Narrative:

The airplane was located about 1,472 feet down and 209 feet west of runway 18.

There was no evidence of soot or fire.

The nose and main landing gear were locked into the extended position. The cockpit landing gear control handle was bent left and nearly flush with the instrument panel and was positioned toward the top limit of travel allowed by the handle's housing, which sustained impact damage.

Flight control continuity from the control surfaces to the cockpit controls was confirmed. The left- and right-wing flaps were extended. The cockpit flap selector handle was in an approximate mid-range position. The flap selector handle was bent toward the left and a piece of the right side of the handle was missing. The housing surrounding the flap selector handle sustained impact damage.

The left- and right-wing flap inboard actuators were extended about 9 $\frac{3}{4}$ inches, and the outboard actuators were extended about 6 $\frac{1}{2}$ inches. Extension measurements were taken from a dark colored area consistent with dirt/grease at the aft end of the pistons to the actuator housing. The dark colored area was about $\frac{1}{2}$ inch in length.

The left and right engines were attached to their respective pylons, which were attached to the fuselage. Both engines' fan spinners exhibited circumferential scoring. Both engines' fan blades exhibited chordwise scratches and leading-edge damage. Both engines' bypasses, bypass exhausts, and engine exhaust areas contained earthen debris consistent in color with that of the earth near the accident site.

The left T/R had a data plate with the following information:

Manufacturer: Grumman Aerospace Corp
Partn Number: C41B30213-3
Serial Number: 120
Model: 1124
Date: 7 77

The left T/R door was unlatched and open, and the right T/R was closed and latched. The right and left side L-shaped latch hooks that retain the T/R doors did not display bending or tearing. The left T/R actuator was extended about 5 7/8 inches and the right T/R was extended about 6 5/8 inches.

The throttle quadrant sustained impact damage, and the throttle control levers were bent toward the right. The throttle quadrant's surrounding housing sustained impact damage. The throttle control levers were in the shutoff position and the T/R controls were in the stowed position. Engine control continuity was confirmed from the cockpit throttle quadrant to the left and right engine fuel control units. Left and right T/R control continuity from the throttle quadrant to the T/R doors was confirmed. The T/R (arm) switches were in the ON position.

The T/R hydraulic accumulator dial indication was about 700 psi.

The airplane was not equipped with a nose landing gear ground contact switch to preclude in-flight operation of the T/R. IAI Service Letter WW-2419, dated September 30, 1977, Thrust Reverser Arming Activation, provided instructions for the removal of the nose gear contact switch, at the aircraft owner's discretion.

Electrical testing of the T/R left and right stow micro switches within the cockpit throttle quadrant revealed the left stow switch did not operate within design specifications. Disassembly of the left and right stow switch revealed evidence of arc wear due to ageing.

The left seat pilot was unbuckled except for one strap that was connected to the unguarded rotary buckle. The unbuckled straps were not torn through, and the unbuckled strap metal latches were not deformed or torn through. Testing of the buckle was performed by holding two straps inserted into the buckle and striking the buckle backside onto a concrete floor. After several strikes, the one of the belts became unlatched from the buckle.

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