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Title : Failure of Elevator Hinge Pins of
Pilotless Target Aircraft

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Keywords : Pilotless target aircraft, elevator, hinge pin, connecting flange,
cadmium plating, hydrogen embrittlement

Abstract : During refurbishing of a pilotless target aircraft after a sortie,
the hinge pins which connect the elevator to a connecting flange
was found broken on both port and starboard sides. These pins
had been cadmium plated. Electron fractography indicated that
the failure of the pins was due to hydrogen embrittlement. Also
the hinge pins did not conform to material specifications.