

Fig.1

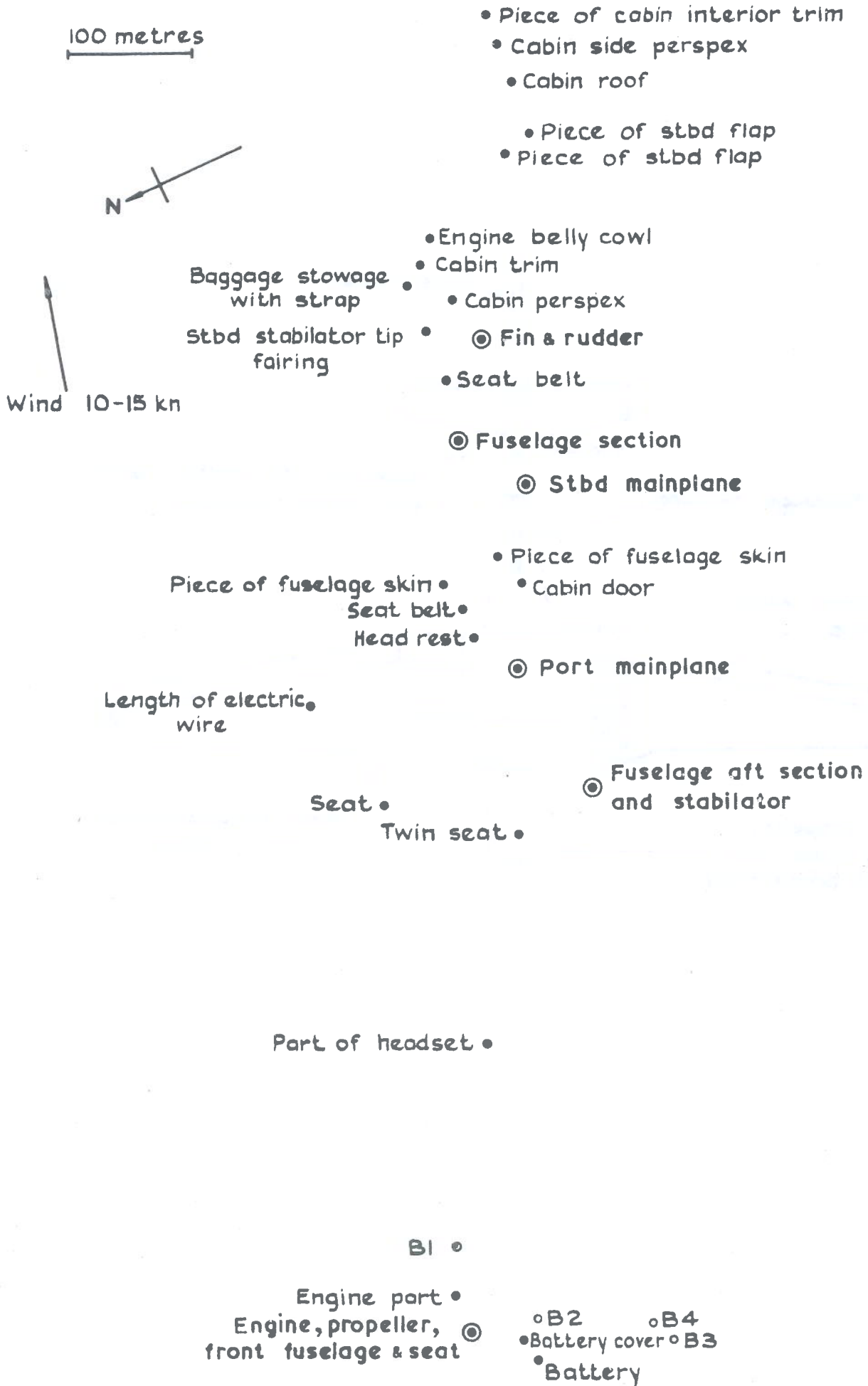


Fig.1 Wreckage trail

Fig.2

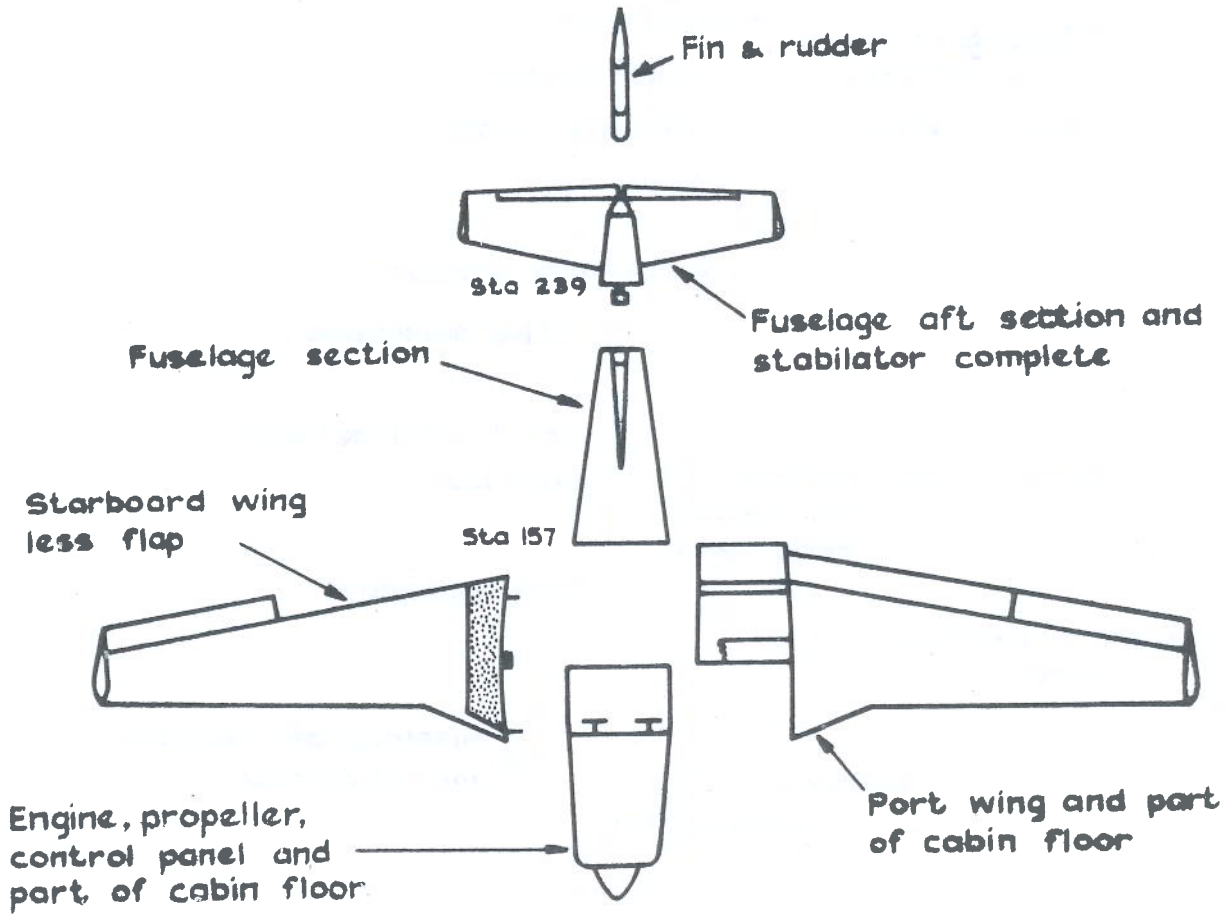


Fig.2 Major portions of wreckage

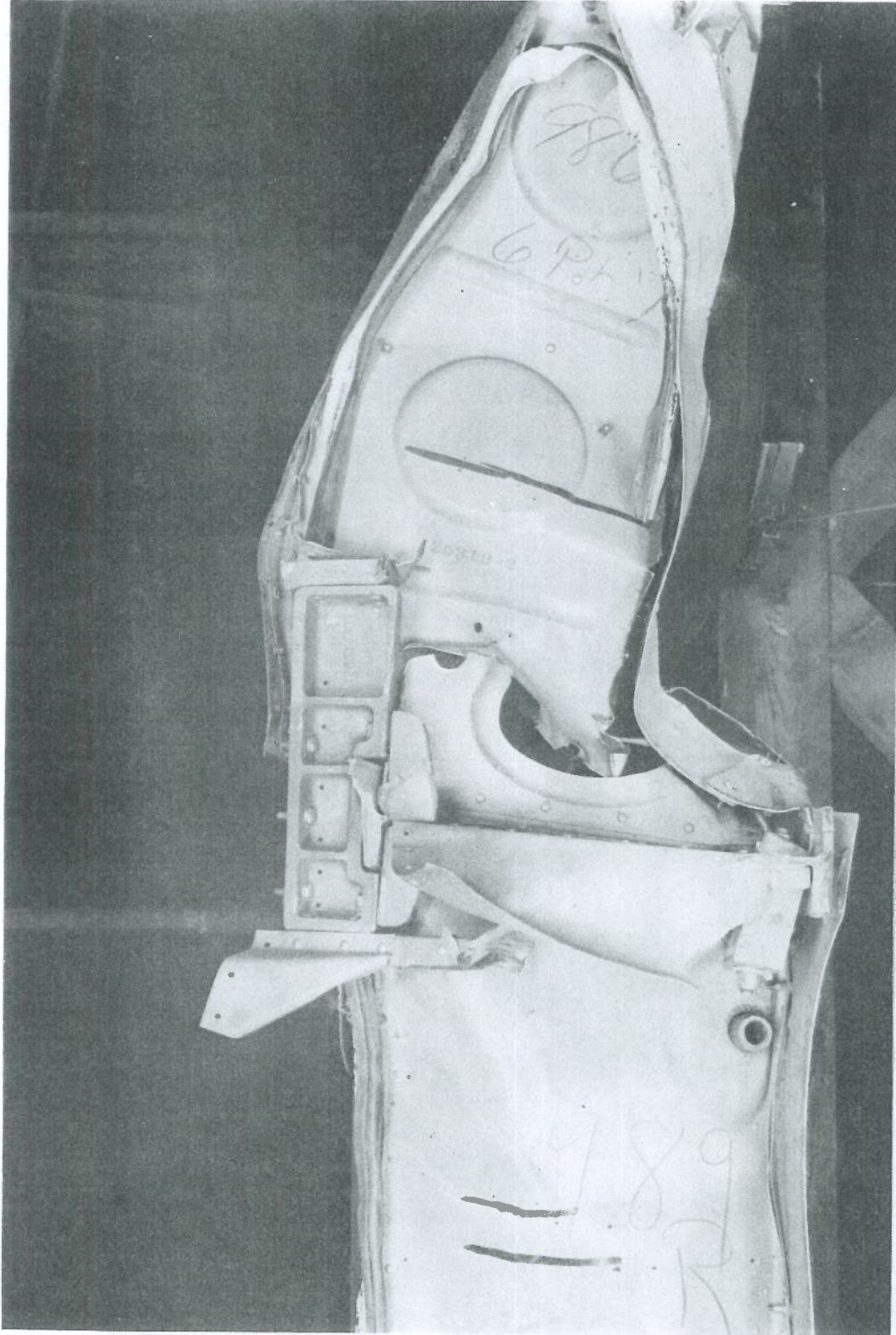


Fig.3 Starboard mainplane root end spar failures

Fig.4

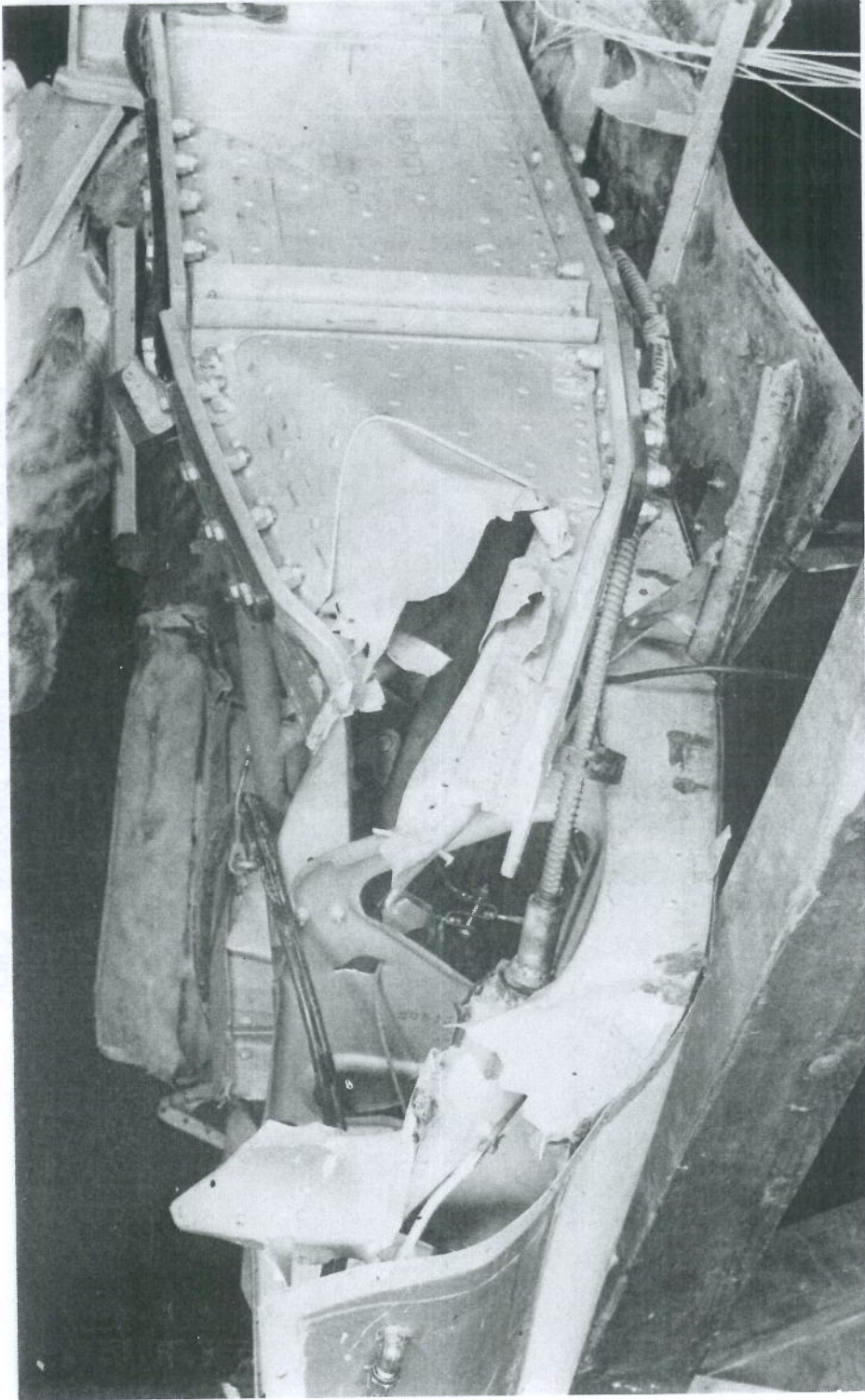


Fig.4 Mainspar centre joint viewed from front

Fig.5

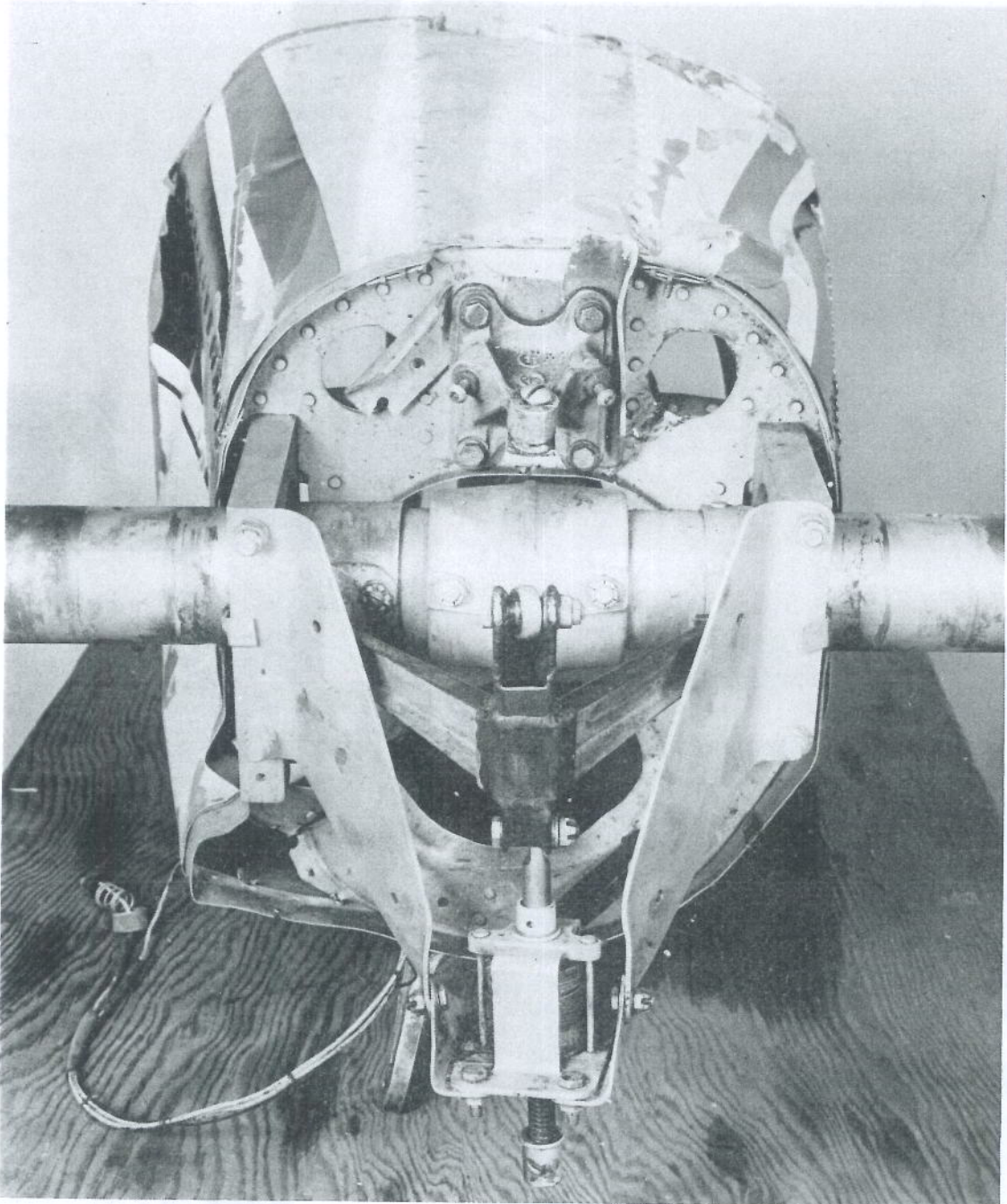


Fig.5 Fuselage aft section after removal of stabilator and fairings

Fig.6

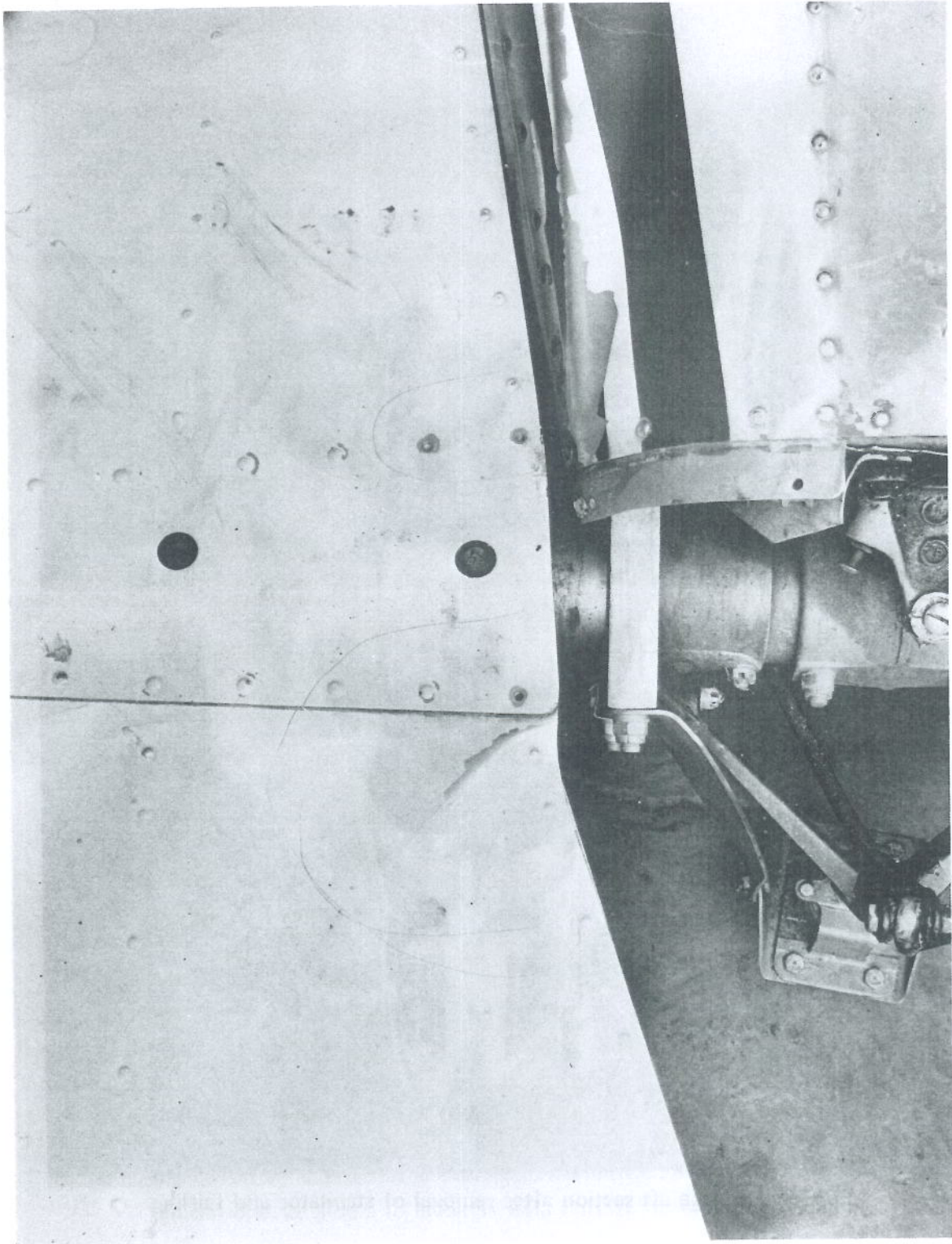


Fig.6 Stabilator port half attachment

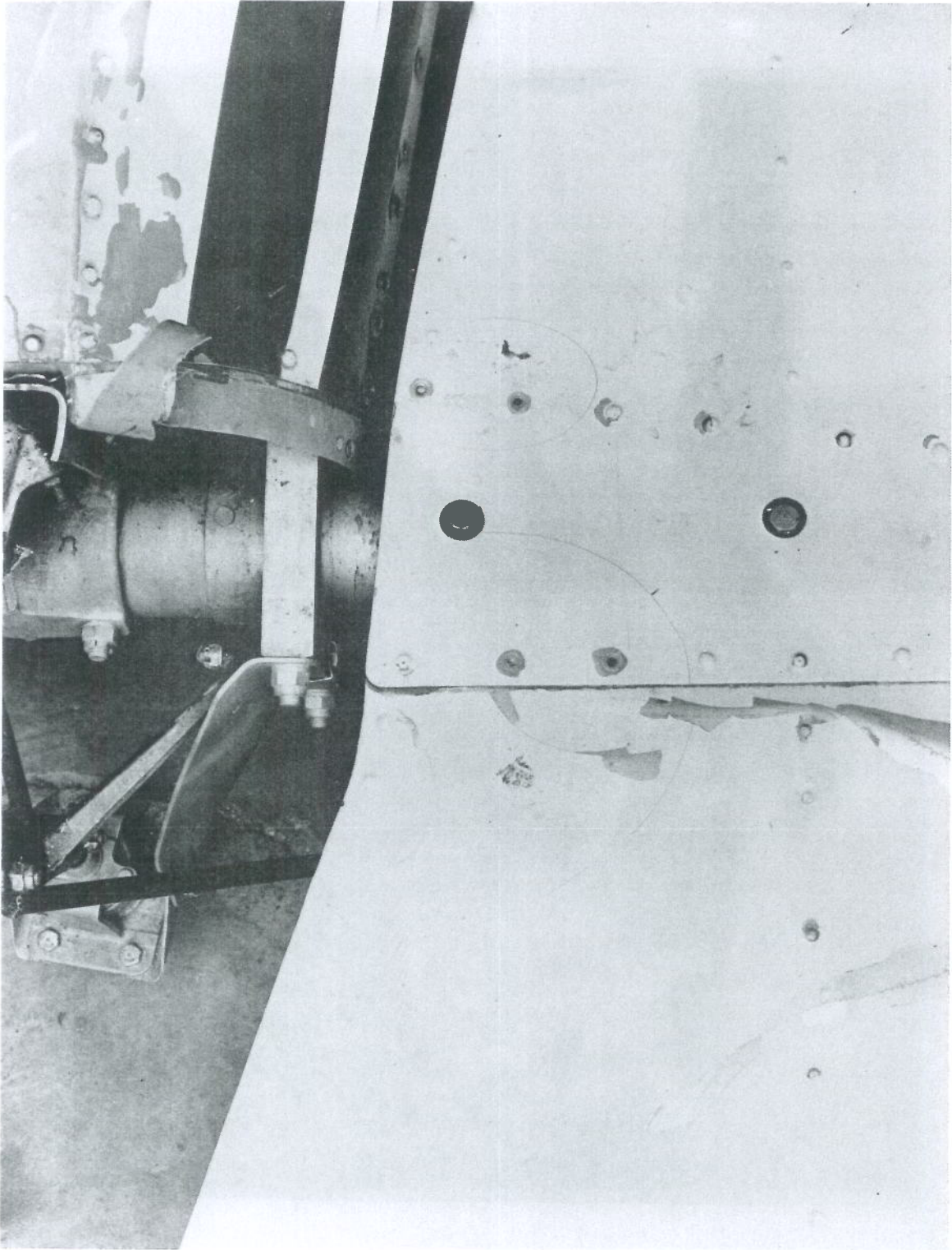


Fig.7 Stabilator starboard half attachment

Fig.8



Fig.8 Stabilator port half spar failure — inboard



Fig.9

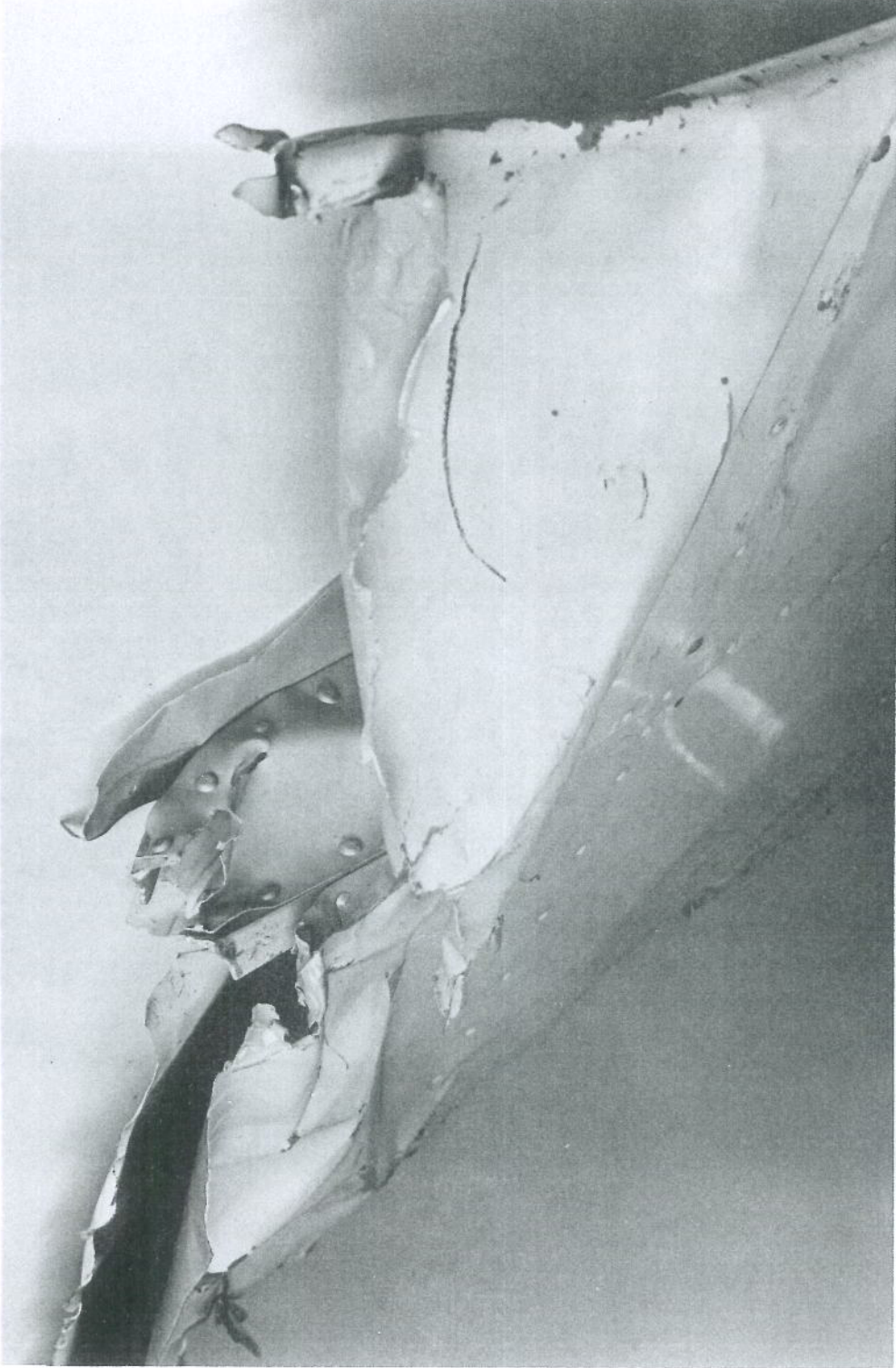


Fig.9 Stabilator port half spar failure — outboard

Fig.10

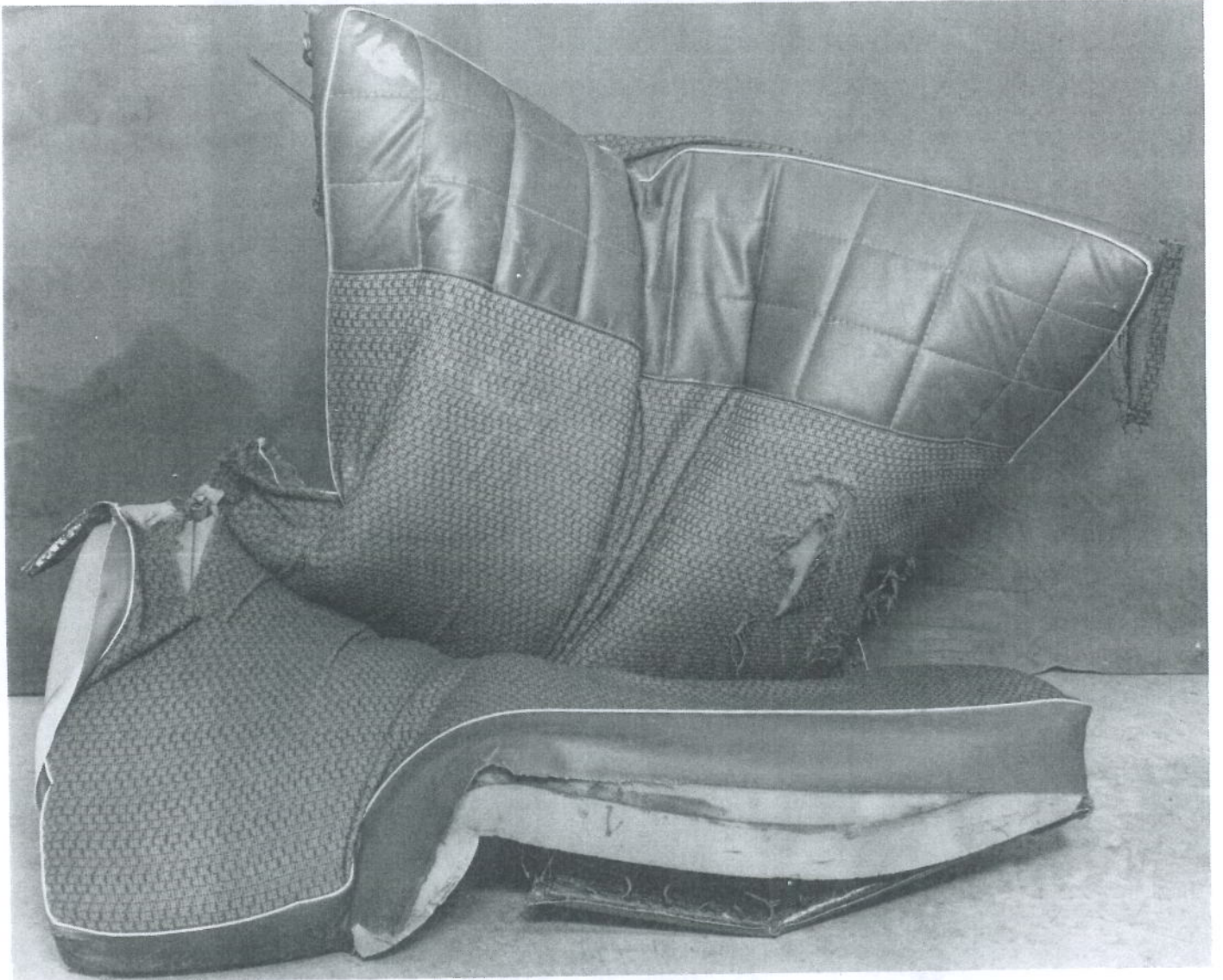


Fig.10 Twin rear seat

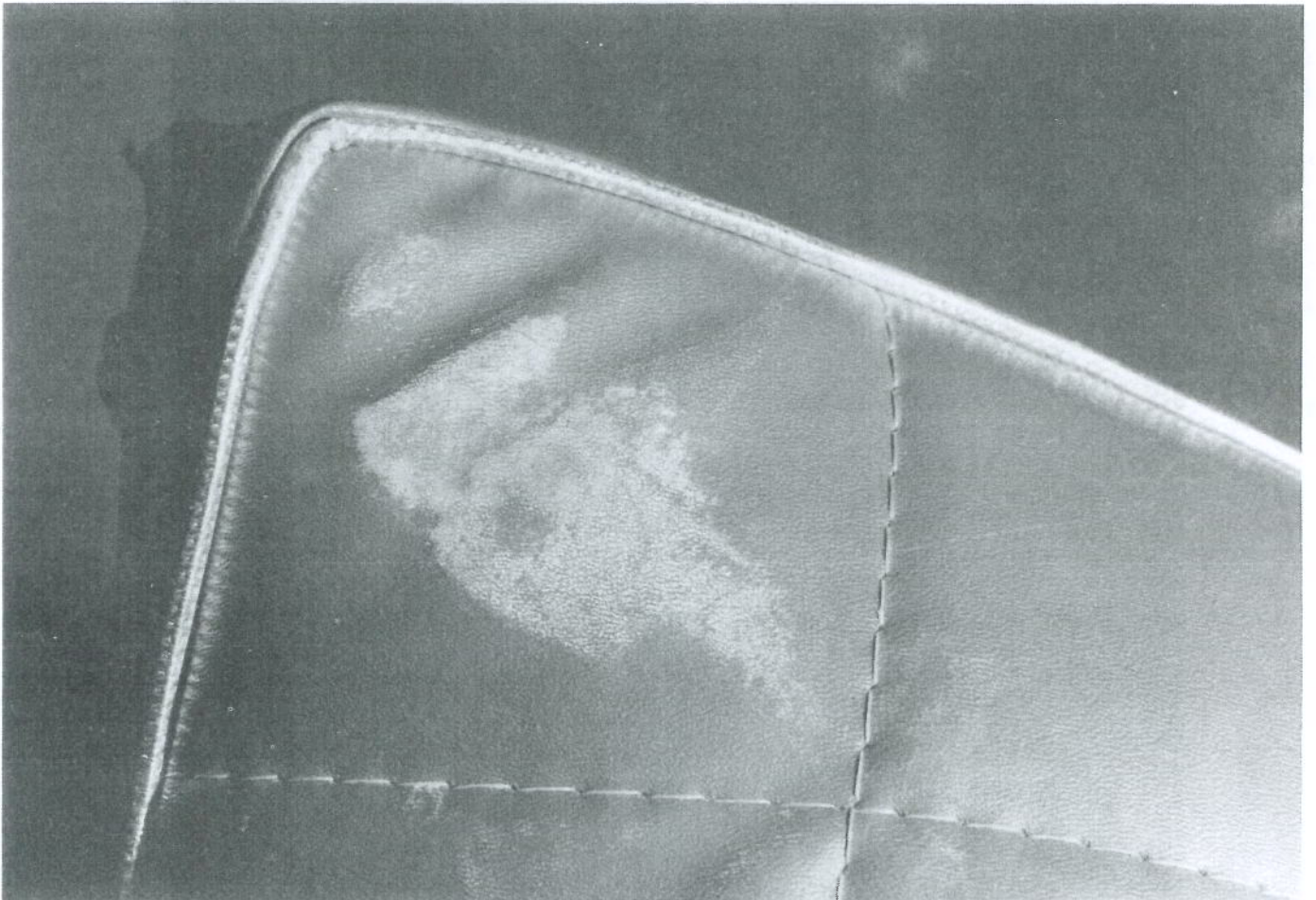


Fig.11 Paint mark on twin seat

Fig.12



Fig.12 Seat corner fitting stabilator leading edge damage

Fig.13



Fig.13 Resulting seat position

Fig.14

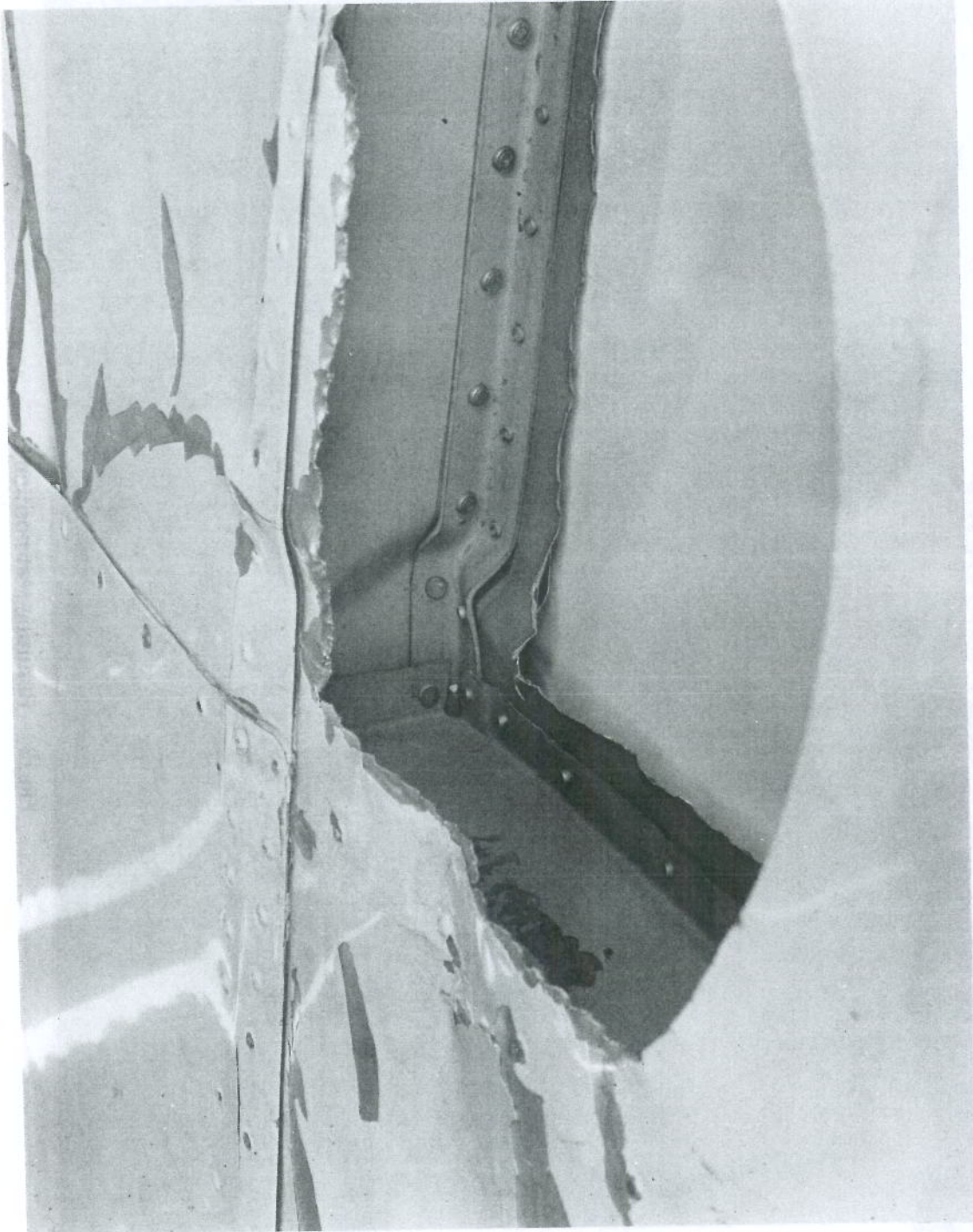


Fig.14 Stabilator starboard half spar damage caused by twin seat

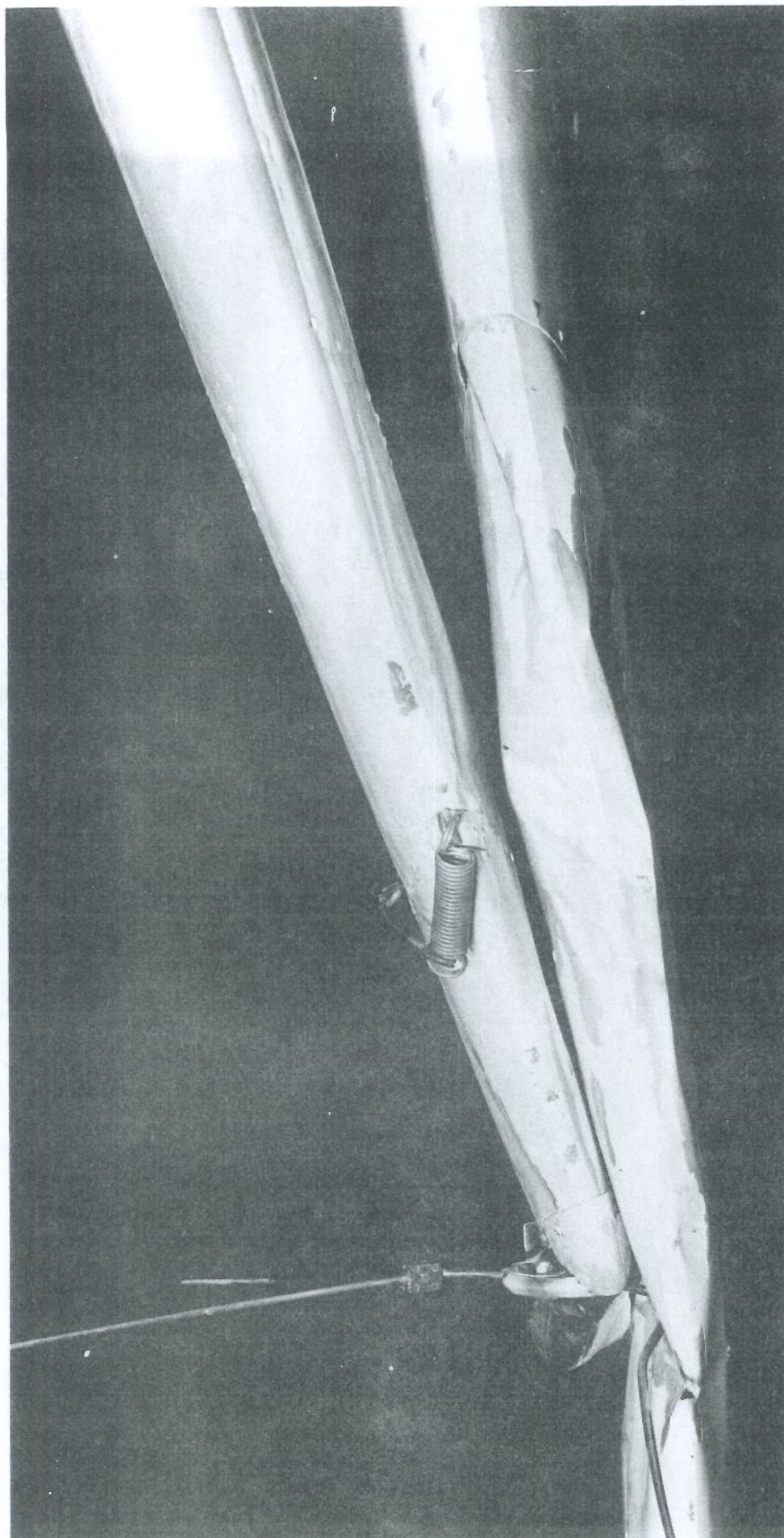


Fig.15 Fin and position on striking stabilator starboard half

Fig.16

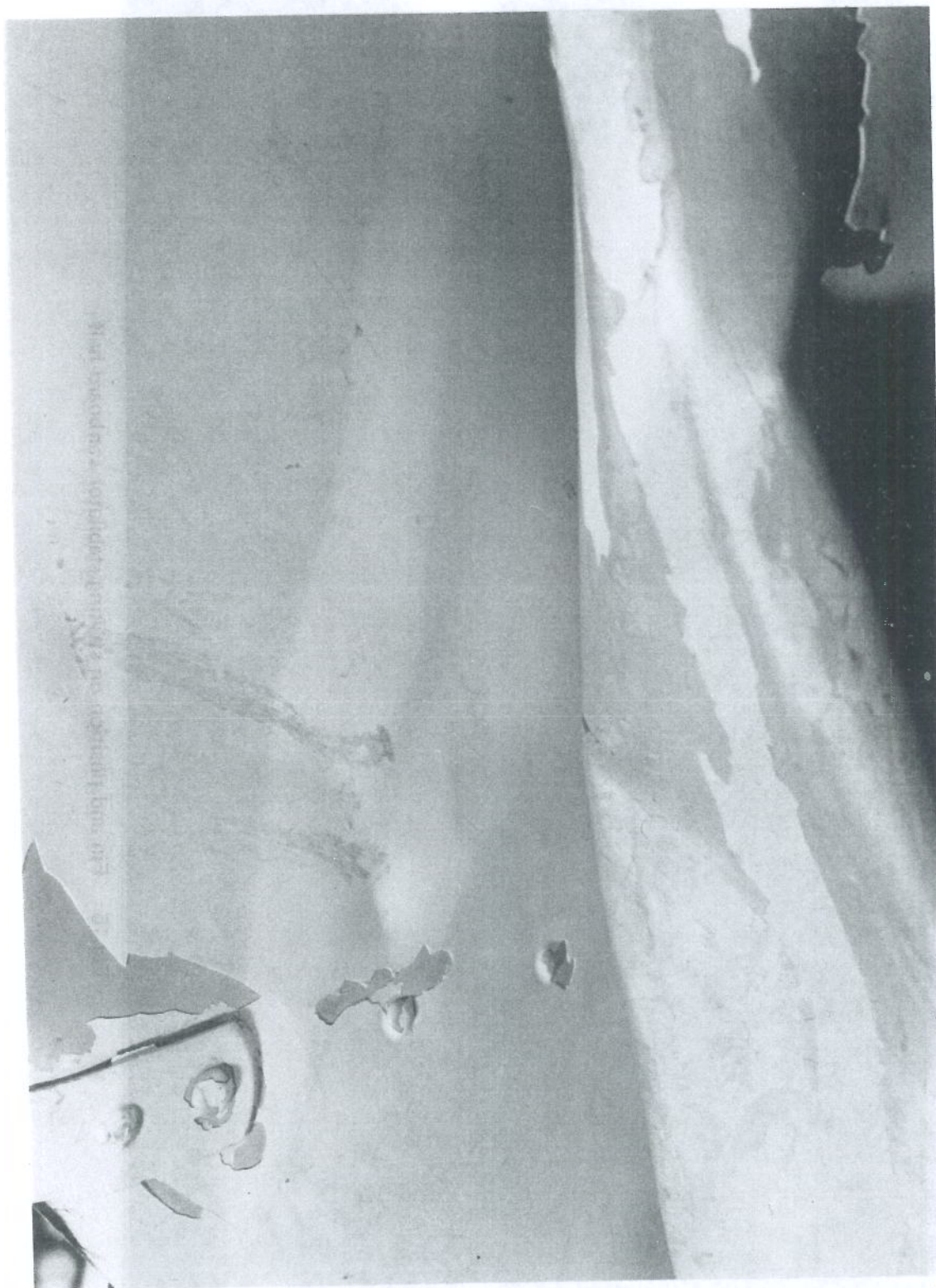


Fig.16 Smear on fin from stabilator leading edge damage



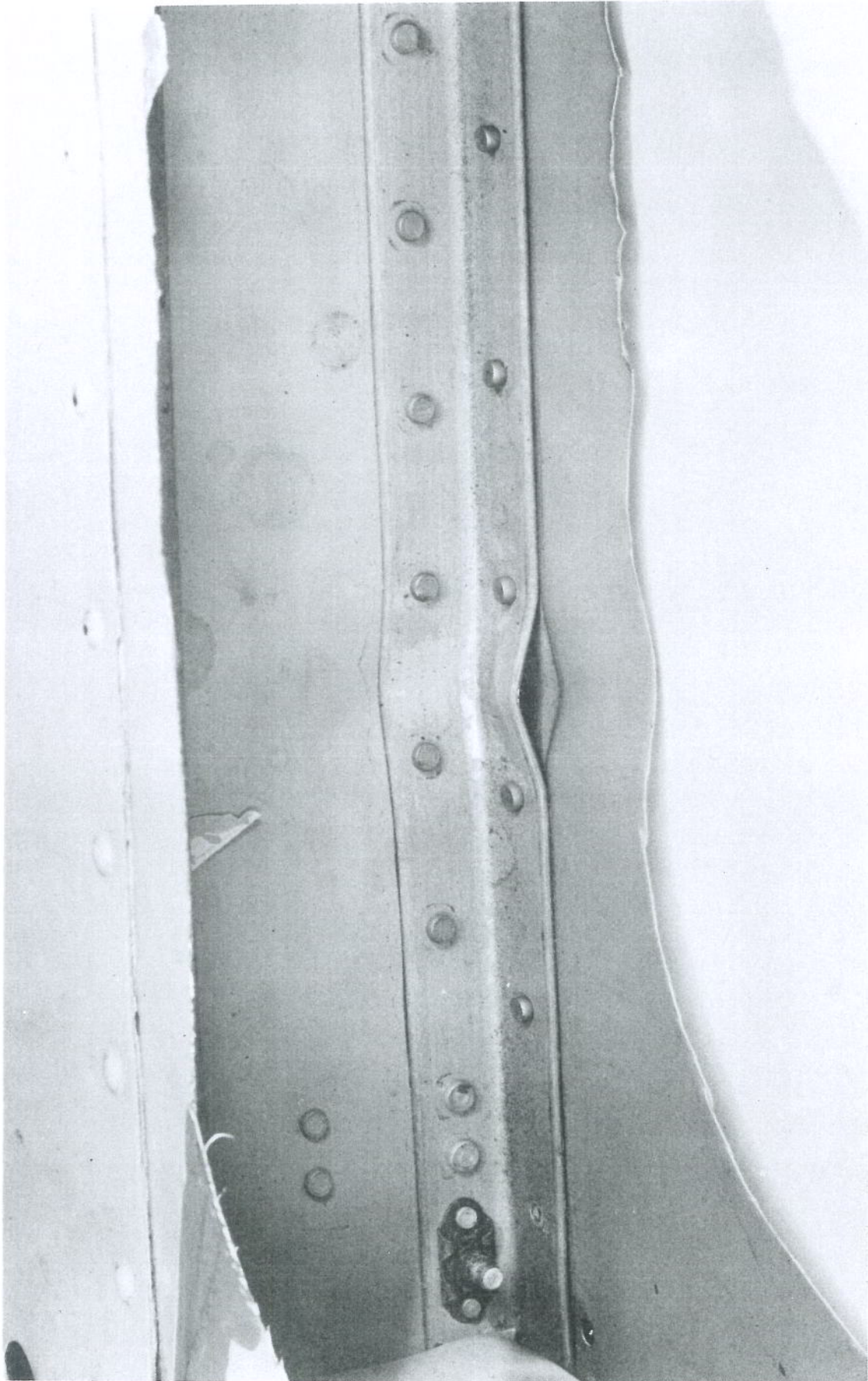


Fig.17 Stabilator starboard half lower spar boom damage

AIR REGISTRATION BOARD

TELEPHONE NO. REDHILL 65966  
TELEX: 27100  
TELEGRAMS & CABLES: BORDAIR REDHILL

ALL COMMUNICATIONS TO BE  
ADDRESSED TO THE SECRETARY

BRABAZON HOUSE,  
REDHILL,  
SURREY.

Your ref:

Our ref: ACC 1810/

Date 20th July, 1971

Dear Sirs,

PIPER PA24-250 AND 260 SERIES AIRCRAFT ONLY  
RECOMMENDED SPEED LIMITATION

There have been recent reports of vibration and shake of the control column at speeds approaching the never exceed speed.

Pending the results of investigations now in progress pilots of these aircraft should not fly at speeds in excess of 200 m.p.h. I.A.S. for normal flying. This speed of 200 m.p.h. I.A.S. should be achieved but not exceeded in lieu of the certificated Vne in flight tests to the ARB airworthiness flight test schedule. A placard showing this speed limitation must be affixed to the aircraft clearly in the view of the pilot.

A number of factors are being considered as possible contributors to this problem. Correct cable tensions in the stabilator control system are important and must be maintained. Similarly wear and loose movement in the stabilator tab actuating mechanism must be eliminated. The tab hinges must not be slack, neither of course should they be overtight. Any wear in the tab hinges must be rectified by the only approved repair scheme which is replacement of the complete section of worn hinge.

Balancing of the stabilator is important, and should be done following any repairs or repainting of the stabilator. Unless recently re balanced, the stabilator on your aircraft should be checked for balance as soon as convenient, but in any case not later than the next renewal of the certificate of airworthiness. The same remarks apply in relation to the calibration of the airspeed indicator.

Any occurrence of buzz or vibration which might be associated with the stabilator should be reported immediately to the Air Registration Board at the above address. Telephone extension 371, 372, or 262.

Any future change to this situation will be notified to you.

An acknowledgement of this letter would be appreciated, and for your convenience a slip is attached herewith.

Yours faithfully,

J.F. Templeton  
for Secretary

PIPER  
Airworthiness Directive  
Volume I

72-22-5 Piper. Amdt 39-1545. Applies to PA-24, PA-24-250 and PA-24-260 airplanes certificated in all categories.

To prevent possible adverse airplane vibration effects, accomplish the following:

1 Within the next 10 hours in service after the effective date of this Airworthiness Directive, unless already accomplished, attach the following operating limitation placard near the airspeed indicator in full view of the pilot:

- a. For PA-24 type airplanes, 'Do not exceed 188 mph cas (Vne)'.
- b. For PA-24-250 and PA-24-260 type airplanes, 'Max structural cruising: 167 mph cas (Vno). Do not exceed 188 mph cas (Vne)'.

2 Within three (3) months after the effective date of this Airworthiness Directive, accomplish either:

- a. An alteration of the red radial Vne line and the cautionary yellow arc of the airspeed indicator to reflect the airspeeds noted in 1 above in accordance with an FAA-approved alteration; or
- b. An alteration of the rudder in accordance with Piper Service Kit No 760705 or an FAA-approved equivalent alteration and an alteration of the airspeed instrument in accordance with an FAA-approved alteration to reflect the following speed restrictions:

Vne of 202 mph (cas) for PA-24; of 203 mph (cas) for PA-24-250 and PA-24-260

Vno of 180 mph (cas) for PA-24-250 and PA-24-260.

3 FAA approved alterations must be approved by the Chief, Engineering and Manufacturing Branch, FAA, Eastern Region.

This amendment is affective October 31, 1972.