Chapter 6 PROCEDURE FOLLOWING HAZARDOUS INCIDENTS

LIST OF CONTENTS

	Para.
Introduction	1
General	3

APPENDICES

	App.
Heavy landing	1
High drag loads on undercarriage during ground manoeuvres	1A
After excessive 'G' loading	2
Lightning strikes	3
Procedure following emergency stop	4
◀ *Arrester hook landing with one abnormal main undercarriage*	5 ▶

Introduction

1. For the purpose of these instructions, a hazardous incident is one which could result in damage to an aircraft although the damage may not be immediately apparent.

2. The information in this chapter and its appendices should be applied when an aircraft has been subjected to an incident and the captain or pilot of the aircraft has reported the fact on the Aircraft Servicing Form, and before the aircraft is again certified serviceable for flight. The checks listed are additional to any routine servicing that may be due.

General

3. The type of damage which may occur and which should be looked for when carrying out the operation 'Examine for damage' is as follows :—

(1) Insecurity of attachments.

(2) Cracks in, or fracture of, structure and components.

(3) Corrosion or contamination.

(4) Structure distortion or skin wrinkling.

(5) Defective or missing rivets.

(6) Chafing, scoring, or fraying.

(7) Broken locking devices.

4. The appendices detail renewals and adjustments that may be made; renewal is not to be commenced until all the examinations called for have been completed and the overall damage assessed.

APPENDIX 1
Heavy Landing

Item No.	Item	Operation
1.	Access Panels. (*a*) Main spar joints, (*b*) Rear spar joints, (*c*) Undercarriage jack attachments. (*d*) Nose wheel undercarriage jack. (*e*) Nose undercarriage attachments.	Remove as necessary.
2.	Shock Absorber Struts. (*a*) Port and starboard. (*b*) Nose.	(i) Examine for signs of bottoming. (ii) Examine for oil leakage. Serious leakage indicates gland failure and entails fitting a serviced strut. (iii) Check for normal extension. (iv) Examine shock absorber legs and stub axle for cracks.
3.	Ground equipment.	(i) Position jacks and jacking pads. (ii) Raise aircraft. (iii) Support tail with trestle.
4.	Undercarriage. (*a*) Port and starboard. (*b*) Nose.	Examine, by feel, for excessive fore and aft movement and side play.
	(*c*) Shock absorber struts. (*d*) Nose undercarriage pivot tube. ◀ (*e*) Main undercarriage pivot pins. ▶	(i) Examine all lugs for cracks and distortion. (ii) Examine end fittings for signs of movement, stripping of threads and shearing of rivets.
5.	Undercarriage Down Locks. (*a*) Port and starboard. (*b*) Nose.	Examine for distortion, damage and correct locking.
6.	Main spars and skin in vicinity of undercarriage ◀ pivot fittings. ▶ *(Port and Starboard)*	(i) Examine for buckling, distortion and wrinkling. (ii) Examine for defective rivets. (iii) Examine spar attachments at wing roots for signs of movement, loose or sheared bolts and fracture.
7.	Mainplane ribs F1 and G in vicinity of wheel well. *(Port and Starboard)*	(i) Examine for buckling, distortion and wrinkling. (ii) Examine for defective rivets.
7A.	Mainplane, undercarriage pivot fittings.	Examine for cracks [by NDT technique CSDE/HUNTER/ULT/9 (RAF) or NATEC/HUNTER/ULT/4 (RN) – confirm defect indications with NDT technique CSDE/HUNTER/EDD/4A (RAF) or NATEC/HUNTER/EDD/3A (RN)] around circumference of machined faces into which the bearing cap retaining studs are screwed.
7B.	Main undercarriage main fittings.	Examine for cracks [by NDT techniques CSDE/HUNTER/EDD/6A (RAF), CSDE/HUNTER/ULT/5 (RAF) and CSDE/HUNTER/EDD/9 (RAF) or NATEC/HUNTER/EDD/4 (RN), NATEC/HUNTER/ULT/1 (RN) and NATEC/HUNTER/EDD/6 (RN)] .

Item No.	Item	Operation
8.	Mainplane attachment fittings. *(Port and Starboard)*	Examine for cracks, distortion and signs of shearing of bolts.
9.	Torque Links. (*a*) Port and starboard undercarriages. (*b*) Nose strut.	Examine for cracks, distortion and signs of shearing of bolts.
10.	Nose undercarriage.	Examine box structure around leg attachment points for buckling, fracture and defective rivets or bolts.
11.	Nose wheel self-centring mechanism.	Examine, by operation, for correct functioning.
12.	Undercarriage Retraction Jacks. (*a*) Port and starboard. (*b*) Nose.	(i) Examine rams for bowing. (ii) Examine attachment fittings for signs of movement and defective bolts. (iii) Examine spar flanges in vicinity for distortion and defective bolts and rivets.
13.	(*a*) Main undercarriage leg fairings. *(Port and Starboard)* (*b*) Main undercarriage wheel doors. *(Port and Starboard)* (*c*) Nose wheel doors.	Examine for distortion, damage and security of attachment.
14.	Tail bumper pad.	Examine pad and fuselage skin in the vicinity for buckling and damage.
15.	Fuselage skin in vicinity of transport joint.	Examine for defective rivets and wrinkling.
16.	(*a*) Main wheels. (*b*) Nose wheel.	(i) Remove for Bay Servicing. (ii) Examine axles for cracks, distortion and damage.
17.	Main wheels *(Port and Starboard)*	(i) Check for correct tyre pressures of serviced wheels. (ii) Refit valve cap. (iii) Fit wheels. (iv) Examine for freedom of rotation.
18.	Nose wheel.	(i) Check for correct tyre pressure. (ii) Refit valve cap. (iii) Fit wheel. (iv) Examine for freedom of rotation.
19.	This Item is applicable only if static deflection is incorrect. If the shock absorber strut is to be charged in a hanger and the outside temperature differs from the hanger temperature, refer to the relative equipment manual. Nose undercarriage shock absorber strut.	(i) Charge the strut in accordance with instructions in the relative equipment manual.

Item No.	Item	Operation
20.	(*a*) Main undercarriage.	(i) Check backlash in the main wheel door lock operating mechanism (*Sect. 3, Chap. 5*). (ii) Check setting of main wheel door locks (*Sect. 3, Chap. 5*). (iii) Check adjustments of leg fairing lock (*Sect. 3, Chap. 5*). (iv) Check adjustment of microswitches at leg fairing and wheel door locks (*Sect. 3, Chap. 5*). (v) Carry out functional check of wheel doors, checking indicator lights (*Sect. 3, Chap. 5*). (vi) Pump wheel door right down to the full handpump pressure to ensure internal locks of undercarriage jacks have re-engaged and wheel door jack lever returns to the top position (*Sect. 3, Chap. 5*).
	(*b*) Nose undercarriage.	Check the adjustment of the nose wheel door locks (*Sect. 3, Chap. 5*).
	(*c*) Main and nose undercarriage.	(i) Remove safety locks. (ii) Carry out full hydraulic retraction tests, using test rig.
◀ 21.	Main Undercarriage shock absorber struts. (*Port and starboard*).	Top up as necessary. (A.P.1803E, Vol. 1, Sect. 2.) ▶
22.	Ground equipment.	(i) Remove tail trestle. (ii) Lower aircraft. (iii) Remove all jacks, jacking pads and trestles clear from aircraft.
◀ 23.	Main Undercarriage shock absorber struts. (*Port and starboard*).	Check for normal and equal extension. ▶
24.	All access panels and fairings.	Refit.
25.	Aircraft generally.	Ensure all tools, rags and other materials used during Airframe Servicing have been removed from the aircraft.

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