Chapter 6

PROCEDURE FOLLOWING HAZARDOUS INCIDENTS

CONTENTS

LIST OF APPENDICES

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 is to be applied when an aircraft has been subjected to an incident and the captain or the pilot of the aircraft has reported the fact, and before the aircraft is again certified serviceable for flight. The examinations scheduled for hazardous incidents are additional to any routine servicing that may be due.

3. The term 'examine' as used in the servicing procedures associated with this chapter means to look for the following.-

Cracks and fractures
Distortion and wrinkling
Loose and missing rivets, bolts, etc.
Broken locking devices
Insecure attachments
Loose clips
Discolouration due to heat or leaking fluids
Corrosion, deterioration and contamination
Chafing, scoring, fraying and wear

4. Repairs, renewals and adjustments are not to be commenced until all the examinations called for have been completed and the overall damage assessed and categorised.

Appendix 1

Heavy landing

AIRFRAME

Servicing notes

1. The examinations and checks called for in this servicing, are to be carried out and signed for by a Senior N.C.O., assisted by tradesmen as required.

2. Unless otherwise stated, damage found as a result of this servicing is to be assessed and repaired in accordance with A.P. 101B-1902-6A (Repair and Reconditioning Instructions).

3. This schedule has been compiled to cover damage resulting from any type of heavy landing, therefore, discretion is to be exercised with regard to the extent to which its contents are applied.

WARNING . . .

Before any of the instructions contained in this schedule are carried out, ensure that the appropriate ground safety precautions are observed, i.e., check that the alighting gear is locked in the DOWN position, ground safety locks and struts fitted, and that the hydraulic and brake systems are in accordance with the instruction given in Sect.2, Chap.1 of this book.

4. The following examination procedure should be carried out after an aircraft heavy landing has been reported:-

SCHEDULE OF CHECKS

Item No.	Item	Operation
1	Ground equipment	(a) Position jacks and raise the aircraft.
		(b) Position wing steadying trestles.
		(c) Position nose trestle. Refer to Sect.2, Chap.4 for these operations.
2	Main wheels	(a) Remove the wheels and despatch for bay servicing.
		(b) Examine axles for damage.
		(c) Examine bogie fittings for damage and inspect in accordance with S.I./Vulcan/107C.
3	Main undercarriage bogie trimmer	Examine for oil leaks and damage. If oil leakage is found a serviced trimmer unit is to be fitted.

Schedule of checks (continued)

Item No.	Item	Operation
4	Shock absorber	Examine for oil leaks and damage. If oil leakage is found a serviced strut is to be fitted.
5	Torque links	Examine for damage, distortion and sheared bolts.
6	Lower strut	Examine for bow and damage and sheared bolts at attachment points.
7	Bracing tubes	Examine for bow and damage and sheared bolts at attachment points.
8	Down lock assembly	Examine for correct operation and freedom from obstruction.
Main Undercarriage Bay		
9	Pivot tube attachments	(a) Examine the housing cap for damage. (b) Examine bolts for bowing and shearing. If damage exists fit new or serviceable items.
10	Main pivot attachments	As item 9(a) and (b).
11	Main attachment and drag link bearing beams	(a) Examine for damage. (b) Examine attachment bolts for bowing and shearing.
12	Cross member	Examine as 11 including distortion and signs of movement.
13	Retraction jack	Examine for oil leaks. If oil leakage is found a serviceable jack is to be fitted.
14	Wheel bay structure	(a) Examine the outboard engine and undercarriage ribs for distortion and skin wrinkling and loose or sheared rivets or bolts. (b) Examine engine access door attachments for distortion and malalignment. (c) Examine stringer attachment brackets in the roof structure for sheared bolts or rivets. (d) Examine roof structure and wing skin for buckling, distortion, loose or sheared rivets or bolts.

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Schedules of checks (continued)

Item No.	Item	Operation
14.	Wheel bay structure (continued)	(e) Carefully examine the bulkhead at the rear of each undercarriage bay for buckling, distortion and loose and sheared rivets and bolts. Special care must be taken during the examination in the region of attachment angles to main ribs and at the diamond-shaped gusset plates. If any damage is apparent from operations (a) to (e) the aircraft is to be offered for full damage assessment. (f) Examine the side load strut attachment lugs on the main undercarriage bearing beams and carry out a crack detection test on the lugs. (g) Examine the side load strut for damage, bowing and for loose ferrules and tie rods. Carry out a crack detection test on the end sockets. *NOTE . . .* *If it is found necessary to remove the side load strut to carry out operations (f) and (g), ensure that the end of strut with four pairs of ferrules is attached to the outboard bearing beam when refitted.* ◀ (h) (i) Examine the main undercarriage beam attachment bolts for tightness. The special bolts along the end of the bearing cap end of the beam must for torque loaded as follows:- Inboard bearing beam . . . . . 27–33lb.ft. Outboard bearing beam. . . . . 39–47lb.ft. (ii) On the inboard bearing beam, check all the 3/8in. dia. bolts, with the exception of the top eight, for tightness. The bolts should not turn with the application of a torque load of 4 lb.ft. to the head of the bolt. (iii) Where looseness of 3/8in. dia. bolts has occurred ALL bolts are to be tightened as given below:- *NOTE . . .* *Where not more than two bolts are loose in every 6in., measured vertically (i.e. not more than 50 per cent of the total, evenly scattered over the length of the beam but with not more than three bolts adjacent) rectification may be deferred until the next scheduled engine removal subject to the repetition of item (L) (ii) at each Check Servicing.* ▶

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Schedules of checks (continued)

Item No.	Item	Operation
14.	Wheel bay structure (continued)	(iv) Render the aircraft system safe and remove the appropriate engines, port and/or starboard, as necessary. (v) Gain access from the engine bay by removal of a local area of fireproof skinning and tighten all 3/8in. dia. attachment bolts by applying a torque load of 11–13lb. ft. to the nuts. (j) Examine the retracting stay bearing beam attachment bolts for tightness. The bolts along the top of the bearing beam must be torque loaded as follows:- Inboard bearing beam . . . . . 22–28lb.ft. Outboard bearing beam. . . . . 18–22lb.ft.
15.	Undercarriage doors and fairings	(a) Examine for local buckling and distortion. (b) Examine connecting rods for bow and damage. (c) Examine for security of attachment to surrounding structure. (d) Examine attachment bolts for bow and shearing. (e) Examine locking mechanism for correct functioning. On completion of other replacements fit serviceable wheel.
16.	Main wheels	Examine for correct operation and freedom from obstruction during retraction test to instructions given in Sect.3, Chap.6 of this book.
Main Undercarriage		
17.	(a) Retracting (b) Up and down locks (c) Doors and fairings	
Nosewheel Undercarriage		
18.	Nosewheel	(a) Remove wheels for bay servicing. b) Examine the splined axle for damage. (c) Examine the bearings for smooth running.
19.	Shock absorber	Examine for oil leaks and damage. If oil leakage is found a serviced item is to be fitted.

Schedule of checks (continued)

Item No.	Item	Operation
20.	Drag stay	(a) Examine for damage and signs of bow.
		(b) Examine attachment fittings for signs of movement and sheared bolts.
21.	Main fitting attachment	(a) Examine the pivot bearings for damage and shearing of bolts.
		(b) Examine for cracks.
22.	Retraction jack.	(a) Examine for bowing.
		(b) Examine attachment fittings for signs of movement and shearing of bolts.
		(c) Examine for oil leaks. If oil leakage is found a serviceable jack is to be fitted.
23.	Upper retracting struts	(a) Examine for distortion and damage.
		(b) Examine for shearing of bolts.
		(c) Examine the torque tube and cross shaft for distortion and damage and shearing of bolts.
24.	Down lock assembly	Examine for correct operation.
25.	'Y' Member	Examine as in Item 23(a) and (b).
Nose Wheel Bay		
26.	Undercarriage bearing beams	(a) Examine for damage and distortion.
		(b) Examine upper and lower pivot brackets and bearings for damage and shearing of attachment bolts.
		(c) Examine attachment of side support beams for damage and shearing of bolts.
27.	Bearing beam fore and aft diffusion members - top	Examine for damage and distortion and shearing of rivets or bolts.

Schedule of checks (continued)

Item No.	Item	Operation
28.	Rear pressure bulkhead	Examine for skin buckling, sheared or loose rivets and cracks. If such damage is apparent the aircraft must be offered for full damage assessment.
29.	Wheel bay structure	Examine stringer bracket and frame attachments for damage and loose or sheared bolts and rivets. If such damage is apparent the aircraft must be offered for full damage assessment.
30.	Nose wheels	On completion of other replacements fit serviceable wheels.
Nose Undercarriage		
31.	(a) Retracting (b) Up and down locks	Examine for correct operation and freedom from obstruction during retraction test to instructions in Sect.3, Chap.6 of this book.
32.	Tank bay skin	Remove the underwing access panels in the vicinity of No.3 and 4 tanks and examine the fuel tank bay skins, as far as is possible, for cracking (S.T.I./Vulcan/148).
Centre Section		
33.	(See item 5, App.2)	
▶ 34.	Rear spar web attachment brackets and bolts inboard and outboard of Rib 162.5	Examine in accordance with S.I./Vulcan/137 and 146.
35.	Ground equipment	(a) Lower the aircraft. (b) Remove jacking equipment from vicinity of aircraft. ◀

SCHEDULE OF CHECKS (continued)

Item No.		Item		Operation
ECU mountings				
		REFER TO AP 101B-1902-1A, COVER 2, SECT 4, CHAP 1, PARA 106 TO 110		
36.	(a)	Para 106 (Preparation for Removal)		Carry out items (1), (2), (3), (5), (7), (8), (9), (13) Disconnect Oil Separator Outlet Duct Disconnect and remove Jet-pipe Cooling Duct and Expanding Connection
		Para 107 (ECU Removal Equipment)		OBSERVE
		Para 108 (3 Point Hoisting)	OR	Carry out items (1) to (9) inclusive
		Para 109 (4 Point Hoisting)		Carry out items (1) to (10) inclusive
		Para 110 Removal items		Carry out items (1), (2) and (3)
	(b)	Bearing Mounting Bolts and Quick Release Pins		(Examine Bearing Assembly Bolt, Trunnion Mounting Bolts, and Quick Release Pins for Distortion, (Stepping, or Excessive Wear) Where signs of damage/wear to these items exist, it will be necessary to complete all other disconnections advised in Para 106 instructions and lower ECU, following the procedure detailed in Para 110 and examine ECU Bays in accordance with Para 111 (Item (1))
	(c)	Repeat for each ECU Position		Carry out instructions at 36 (a) and 36 (b)
	(d)	Re-connections and Re-installation		Carry out the reverse of all procedures given, Para 106 to Para 110 and complete ECU installation in accordance with Para 111 (Heading Subject Reference) Items (1) to (11) refer

Appendix 2

EXCESSIVE 'G' LOADING

1. Where excessive accelerations are recorded the Schedule of Checks must be carried out when called for in Table 1.

SCHEDULE OF CHECKS

Item No.	Item	Operation
Centre Section		
1.	All bomb bay formers.	(i) Examine webs for wrinkling.
		(ii) Examine web stiffeners for fractures.
		(iii) Examine for loose and pulled rivets.
2.	All bomb bay former to rib 63.5 attachment brackets, if flying with cracked brackets.	Examine in accordance with S.I./Vulcan/85 (S.P.724).
3.	Top surface skin.	(i) Examine for wrinkling, especially between chordwise stiffeners over the engine air intake.
		(ii) Examine for wrinkling, between the spars in the region of rib 162.5.
		(iii) Examine for loose and pulled rivets.

NOTE . . .

After normal high 'G' loading a chordwise crease may occur in the top skin above the air intake structure, immediately outboard of No.2 tank bay. This slight crease is considered acceptable and does not warrant repair action.

4.	Bottom surface skin.	(i) Examine corners of access panel cut-outs and N.A.C.A. intakes for cracks.
		(ii) Examine for diagonal buckling, cracks and loose and pulled rivets in outer skin of jet pipe tunnel below the rear spar jet pipe rings.

SCHEDULE OF CHECKS (continued)

Item No.	Item	Operation
4 (continued)		(iii) Examine for cracks and loose and pulled rivets in the area of the front spar joint to rib 63.5. The area is approximately one foot aft of the front spar forward to former 49.5 and along the front spar to approximately three feet outboard of rib 63.5.
		(iv) Examine the area near the rear engine bulkhead joint to rib 162.5 in accordance with S.I./Vulcan/77 (S.P.631).
		(v) Examine skin generally for wrinkling and loose and pulled rivets.
5.	Lower inboard joint between rear undercarriage bay bulkhead and rib 162.5.	Examine in accordance with S.I./Vulcan/82 (S.P.721).
6.	Angles attaching centre beam to rib 162.5.	Examine in accordance with S.I./Vulcan/104.
7.	Outboard web rib 162.5 (pre Mod.2277 A and B)	Examine in accordance with S.I./Vulcan/72B (S.P.630).
8.	Bolts passing through bottom boom rib 162.5 between front and rear spars with the exception of web to boom attachment bolts.	Examine for tightness and possible stretch.
▶ 9.	Rear spar web attachment brackets and bolts inboard and outboard of rib 162.5.	Examine in accordance with S.I./Vulcan/137 and 146.
Main plane		
10.	Top surface skin.	(i) Examine for wrinkling between the nose ribs of the inboard leading edge of outboard main plane section.
		(ii) Examine for buckling and loose and pulled rivets, especially in the area above the main undercarriage bay rear bulkhead.
11.	Bottom surface skin.	(i) Examine generally for buckling and loose and pulled rivets.
		(ii) Examine corners of access panel cut-outs. ◀

SCHEDULE OF CHECKS (continued)

Item No.	Item	Operation
12.	Leading edge butt straps No.3 to 13 inclusive, if known to be cracked from previous examination.	Examine in accordance with S.I./Vulcan/91A (S.P.700).
13.	Leading edge between nose ribs 240 and 352 inclusive.	(i) Examine skin for wrinkling. (ii) Examine for loose and pulled rivets securing skin to nose ribs and intercostals.
14.	Outer wing leading edge flexible joint.	Examine in accordance with S.I./Vulcan/57D (S.P.697) (Ardrox test only).
15.	Main undercarriage outboard rib 340.096 (pre Mod.2200).	Examine in accordance with S.I./Vulcan/73 (S.P.624).
16.	Rear spar bottom boom immediately outboard of rib 162.5. (pre Mod.2222)	Examine in accordance with S.I./Vulcan/87F.
17.	Inter-spar ribs immediately outboard of fuel tank bays.	Examine webs for wrinkling at pressed lightening holes.
18.	Fuel tank bay skinning	(i) Remove all removable access panels, in undersurface of wing, port and starboard, between the outboard undercarriage rib and rib 618.186. (ii) Remove the bungs from the fourteen $^{3}/_{4}$ in. inspection holes in the undersurface of the wing, port and starboard, between the outboard undercarriage rib and rib 618.186. (iii) Inspect tank bay skin panels using the access panels, inspection holes, introscopes and mirrors. *Note . . .* *Additional inspection facilities are provided by ¾ in. diameter holes in the web of rib 460.436 at No.4 and 6 tank sump access panels, a $^{5}/_{8}$ in. diameter hole in the web of rib 600.436 at No.5 tank sump access panel and a $^{5}/_{16}$ in. diameter hole in the web of rib 600.436 at No.7 tank sump access panel.*

SCHEDULE OF CHECKS (continued)

Item No.	Item	Operation
18. (continued)		(iv) Where isolated cracks not exceeding two inches in length are found, the ends of the cracks are to be marked and the aircraft may continue to fly subject to local arrangements which ensure inspection every 25 flying hours. (v) Where cracks exceeding two inches or where two or more cracks are found in any one tank bay the aircraft must be regarded as unserviceable. Repair in accordance with advice from the manufacturer.

▶

TABLE 1

READINGS AT WHICH EXCESSIVE 'G' CHECK REQUIRED

Mk.18A Fatigue Meter Post Mod.VUO265	Indicating Accelerometer	Excessive G Checks Reqd.
(a)	(b)	(c)
Increase in number of 2.65 G counts since last flight		Yes
No increase in number of 2.65 G counts since last flight		No
	Pilot reports 2G	Yes plus check on Mk.18A meter

1

Appendix 2A

EXCESSIVE NEGATIVE 'G' LOADING

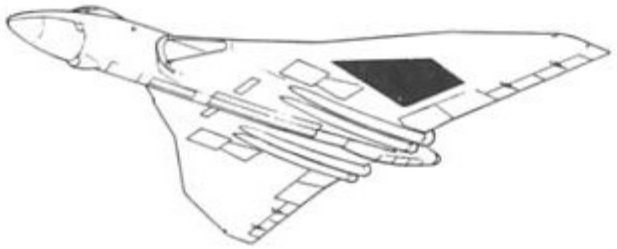
1. When negative 'g' in excess of 0.8 is recorded the following checks are to be carried out. Any damage found is to be reported to the relevant authority, together with the value of negative 'g' recorded, the aircraft weight and the bomb bay load at the time of the incident.

SCHEDULE OF CHECKS

Item No.	Item	Operation
1.	Main undercarriage doors and adjacent structure	Examine for evidence of butting, paying particular attention to the following areas:- (i) Between the forward edge and the undercarriage bay forward bulkhead. (ii) Between the inboard edge and rib 162.5, near the aft corner.
2.	Lower surface skin below the engine air intakes	Examine for evidence of buckling, paying particular attention to the following areas:- (i) The forward inboard corner of the RAT bay (port side) and the corresponding locality on the starboard side. (ii) The perimeters of the wing anti-icing system access panels, situated under No.2 and No.3 engine intake tunnels immediately forward of the front spar.
3.	Lower surface mainplane skin between ribs 576 and 436 (see fig.1)	Examine for evidence of buckling, paying particular attention to the following areas:- (i) Stringer 17 outboard of rib 478.

SCHEDULE OF CHECKS (continued)

Item No.	Item	Operation
		(ii) Stringer 13 adjacent to panels 'E' and 'K'
		(iii) The intersection of stringer 22, rib 576 and the rear spar
Note . . . If at this stage no damage has been found, there is no need to proceed further with the checks. If damage is found continue with items 4 and 5.		
4.	Bottom surface 7 swg skin panels (see fig.2 items annotated 'A')	Examine for evidence of buckling, particularly adjacent to the front spar.
5.	Chordwise joints at ribs 576 and 618 aft of the rear spar	Examine for evidence of rivet movement and pulling.
Note . . . If at this stage no damage has been found, there is no need to proceed further with the checks. If damage is found continue with item 6.		
6.	Fuselage upper skin above the length of the bomb bay	Examine for evidence of buckling.



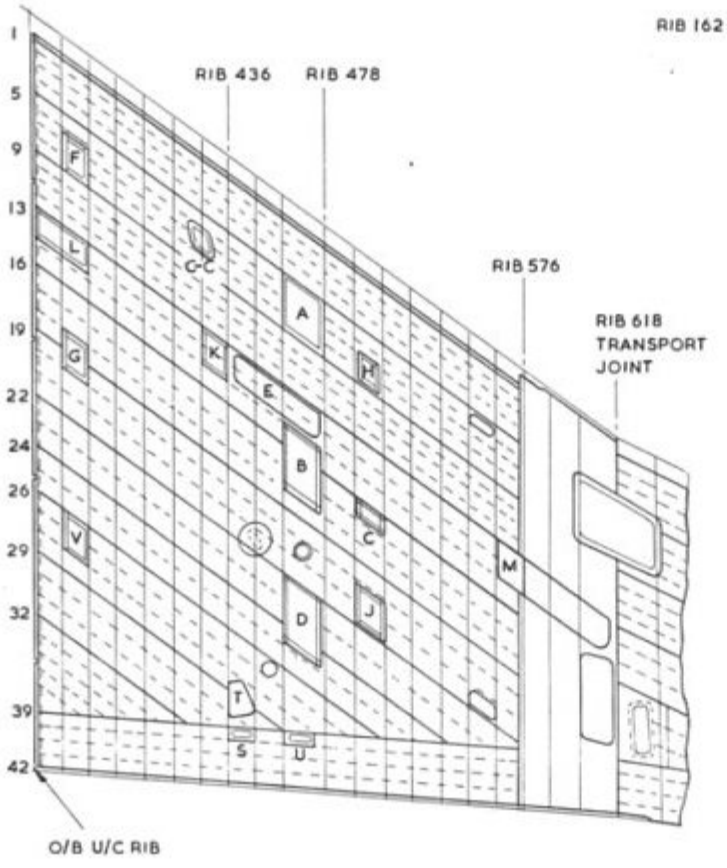
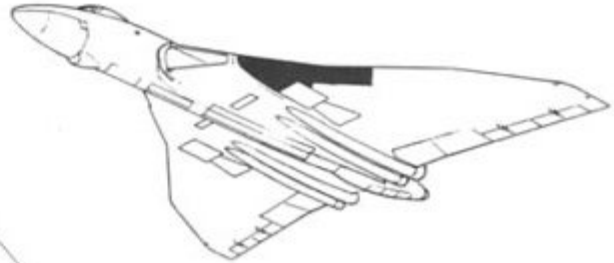


Fig.1 Mainplane - lower surface skin



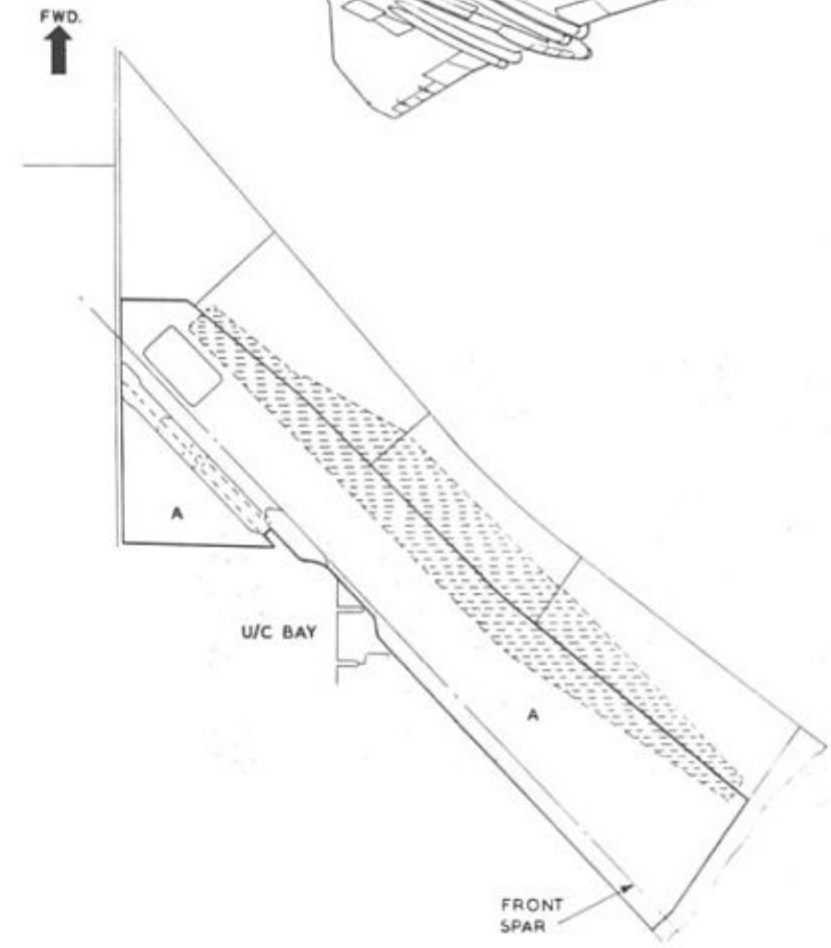


Fig.2 Leading edge skins - lower surface

Appendix 3

PROCEDURE FOLLOWING EMERGENCY STOP, VIOLENT BRAKING OR OVERHEATING OF WHEELS.

AIRFRAME

WARNING...
Tyres of overheated wheels may burst at any time, therefore keep clear until wheels have cooled to ambient temperature.

Before any of the instructions contained in this schedule are carried out, ensure that the landing gear is locked in the DOWN position and that the ground safety locks and struts are fitted (Sect.2. Chap.1).

Servicing notes.

1. The examinations and checks called for in this servicing are to be carried out and signed for by a Senior N.C.O. assisted by tradesmen as required.

2. Unless otherwise stated, damage found during this servicing is to be assessed and repaired in accordance with A.P.101B-1902-6A (Repair and Reconditioning Instructions).

3. When using this servicing schedule, exercise discretion regarding the extent its contents are applied; for instance, if wheel overheating is due to prolonged but steady braking then a change of wheels and brakes and an examination for heat damage to axles and brake hoses is all the servicing required.

PREPARATION

Item No.	Item	Operation
1	Aircraft	Jack as for retraction test (Sect.2, Chap.4).
2	Hydraulic servicing trolley	Connect to aircraft (Sect.3, Chap.6).

SCHEDULE OF CHECKS

Item No.	Item	Operation
1	Aircraft	Look for obvious damage.
2	Wheels, brake units and Maxarets	Remove and bay service.
3	Axles	Examine, particularly for heat damage.
4	Brake pipes	Examine, particularly for heat damage.
5	Main landing gear units	(a) Look for fluid leaks and obvious damage. (b) Examine main attachments in wheel bay, particularly for cracks. (c) Examine wheel bay structure, particularly for cracks and loose and distorted rivets. (d) Examine torque links, particularly for distortion. (e) Examine struts and bracing tube, particularly for bowing. (f) Check down-lock mechanism for correct operation. (g) Examine bogie frame, particularly for cracks between rear axle attachment lugs. (h) Examine main fitting, particularly for cracks down centre of top front face. *NOTE . . .* *Cracks may be minute, therefore careful examination is necessary (refer to S.I. Vulcan 71A and 107E).*
6	Nose landing gear unit	(a) Look for fluid leaks and obvious damage. (b) Examine splined axle. (c) Check axle bearings for smooth running.

SCHEDULE OF CHECKS (continued)

Item No.	Item	Operation
		(d) Check down-lock mechanism for correct operation.
		(e) Examine all main members and attachment fittings.
		(f) Examine shock absorber, particularly for cracking around the undercut in upper end of piston rod (S.I./Vulcan/47).
		(g) Examine steering jack attachments.
		(h) Examine nose wheel bay, particularly for cracks and loose and distorted rivets.
7.	Brake parachute jettison hook	Examine if parachute streamed at excessive speed.
8.	Bay serviced wheels, brakes and Maxarets	Fit
9.	Brake pipes	Connect
10.	Brakes	Check operation
11.	Tyre pressures	Check
12.	Landing gear	(a) Operate as slowly as possible and check for fouls.
		(b) Check normal operation ensuring indicator lights operate satisfactorily (Sect.3, Chap.6).
▶ Centre section		
13.	(only applicable after high speed aborted take-off or one wheel off taxiway in soft ground).	Examine rear spar web attachment brackets and bolts inboard and outboard of rib 162.5 in accordance with S.I./Vulcan/137 and 146. ◀

SCHEDULE OF CHECKS (continued)

COMPLETION

Item No.	Item	Operation
▶ 1.	Hydraulic servicing trolley	Disconnect from aircraft.
2.	Aircraft	Remove from jacks. ◀

Appendix 4

Lightning Strikes

General

1. The effect of a lightning strike on an aircraft can vary from negligible to catastrophic failure. The main factors which determine the amount of damage sustained are:

a. The electrical energy of the lightning discharge.

b. The materials with which the airframe surfaces are made.

c. The protection designed into the aircraft.

Strong magnetic fields can be induced which may result in compass errors particularly if ferrous metals are in the vicinity of the compass or detector.

2. The parts of an aircraft most frequently struck are the extremities such as wing tips, control surfaces, nose and tail fuselage, fin and tail plane. Protuberances, aerials, probes and pitot heads are also vulnerable.

3. The lightning discharge travels over the surface of a metal skinned aircraft and in non-metallic aircraft is conducted in a similar way by the use of bonding strips embedded in, or attached to, the surface skinning. If the charge has passed between a control surface or other hinged surface and the main structure then large electrical charges will have passed through the points of attachment. Evidence of this will be entry or exit marks on the surface and possibly burn marks at the attachment points.

4. The points of entry and exit of the lightning discharge on metal skins may be identified by small circular holes of approximately $^1/_8$ in dia. either in a cluster or scattered over a large area of the aircraft surface. More frequently however the effect will be blistering, or possibly bubbling in the case of pressurized compartment skins. The likelihood of actual penetration depends on skin thickness and the energy of the strike. Surface rivet and screw heads may also be burnt. The possibility of internal damage may be ruled out.

5. For non-metallic surfaces the damage can be more severe. Loss of fibre glass panels and large holes in radomes being a possible effect. In these cases the likelihood of ingress of debris into intakes and hinge lines must be considered.

6. Cases have been reported where the electrical energy of the strike has entered the aircraft electrical system via navigation lights, probe lights and pitot heads. Damage is usually evident at the point of entry and can extend through wiring to electrical components and connections.

Examination procedure

7. Whenever a lightning strike is reported or suspected the aircraft must be examined for damage and other adverse effects. The requirements of AP 3158, Vol 2, leaflet B.22 for compass checks must also be met. The procedure detailed in the following schedule of checks must be carried out as soon as possible.

SCHEDULE OF CHECKS

Item No.	Item	Operation
N.B.	Volume 4/5, Part 1, Book 2, Section 1 Safety and Servicing Notes are to be complied with before the work detailed below is commenced.	
	AIRFRAME	
1.	Fuselage exterior surface	Look for:- (a) Pin holes. (b) Blisters. (c) Bubbling. (d) Burns to rivet and screw heads.
2.	Windscreen frame	Look for burn marks at frame to fuselage joints.
3.	Main planes Tail planes Fin	Look for:- (a) Pin holes. (b) Blisters. (c) Burns to rivet and screw heads. Pay particular attention to tips and trailing edges.
4.	Radomes and plastic covers	Look for damage. *NOTE . . .* *If holed or missing an examination for foreign object damage is to be carried out.*
5.	External tanks, stores and pylons (Air monitoring)	Look for damage.
6.	Aerials, probes and protuberances	

SCHEDULE OF CHECKS (cont'd)

Item No.	Item	Operation
7.	Rudder	(i) Look for:-
8.	Ailerons	(a) Pin holes.
9.	Flaps	(b) Blisters.
10.	Air brakes	(c) Scorch marks across hinges and operating rods/levers.
11.	Trim and balance tabs	(ii) Carry out functional checks and ensure smooth operation.

NOTE . . .
Indications of high electrical charges having passed across hinges or actuator attachments will indicate a need for closer examination of hinge bearings for pitting or actuators for internal leakage.