Chapter 6 FLYING CONTROLS

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ILLUSTRATION

Introduction

1. With the exception of the changes described in this Chapter, the flying controls on post-Mod 1188 aircraft remain as described and illustrated in AP 101B-1202-1B, Cover 1, Sect 6, Chap 6. Differences introduced by subsequent modifications are as follows:

2. On post-Mod 1750, pre-Mod 1803 aircraft, the control circuit for the air brakes is modified. This provides an interlock for the countermeasures dispenser system by the introduction of a relay C on panel B-B, which is operated by the 'in' limit microswitch.

AIR BRAKES

Emergency operation – out

3. Selection of the air brakes standby selector switch to OUT, completes a circuit from fuse C8 to relay C on junction box R-G and via the emergency circuit isolating microswitch to the out solenoid of the emergency selector valve.

4. Relay C energizes and contacts C3 close to complete the circuit from fuse A11 to the general services hydraulic control relays (AP 101B-1202-1B, Cover 1, Sect 6, Chap 12).

5. Extension of the hydraulic jack opens the air brakes until the standby switch is released and returns under spring pressure to the OFF (centre) position, or the jack reaches the limit of its travel. Movement of the switch to the OFF position disconnects the supply from the open solenoid of the emergency selector valve which holds the air brakes at the required intermediate position.

6. The initial operating movement of the air brakes closes the contacts of the 'in' limit microswitch which energizes relay C on panel B-B. Contacts C2 close to complete a hold-on circuit via the closed contacts C2 of relay R-G. Contacts C3 of relay R-G remain closed maintaining the d.c. supply to the general services hydraulic system.

Emergency operation – in

7. Selection of the air brakes standby switch to IN completes a circuit from fuse C8 via contacts C1 of relay R-G and the emergency isolating switch, to the 'in' solenoid of the emergency selector valve.

8. Selection of the standby switch to the OFF position while the air brakes are in motion, disconnects the supply to the 'in' solenoid of the emergency selector valve, holding the air brakes in the required intermediate position.

9. When the air brakes reach the fully closed position, the 'in' limit microswitch disconnects the circuit to relay C on panel B-B which de-energizes and contacts C2 open, removing the hold-on supply to relay C on panel R-G. The de-energization of relay C on panel R-G is delayed after the air brakes reach the closed position by a capacitor connected across the relay coil, which allows a period sufficient for the air brakes jack to lock.

10. The remainder of the hydraulic system reverts to normal, unless there is an automatic emergency, but the air brakes hydraulic release valve must be manually reset on the ground before an air brake normal selection can be made (AP 101B-1202-1A, Cover 2, Sect 3, Chap 6L).

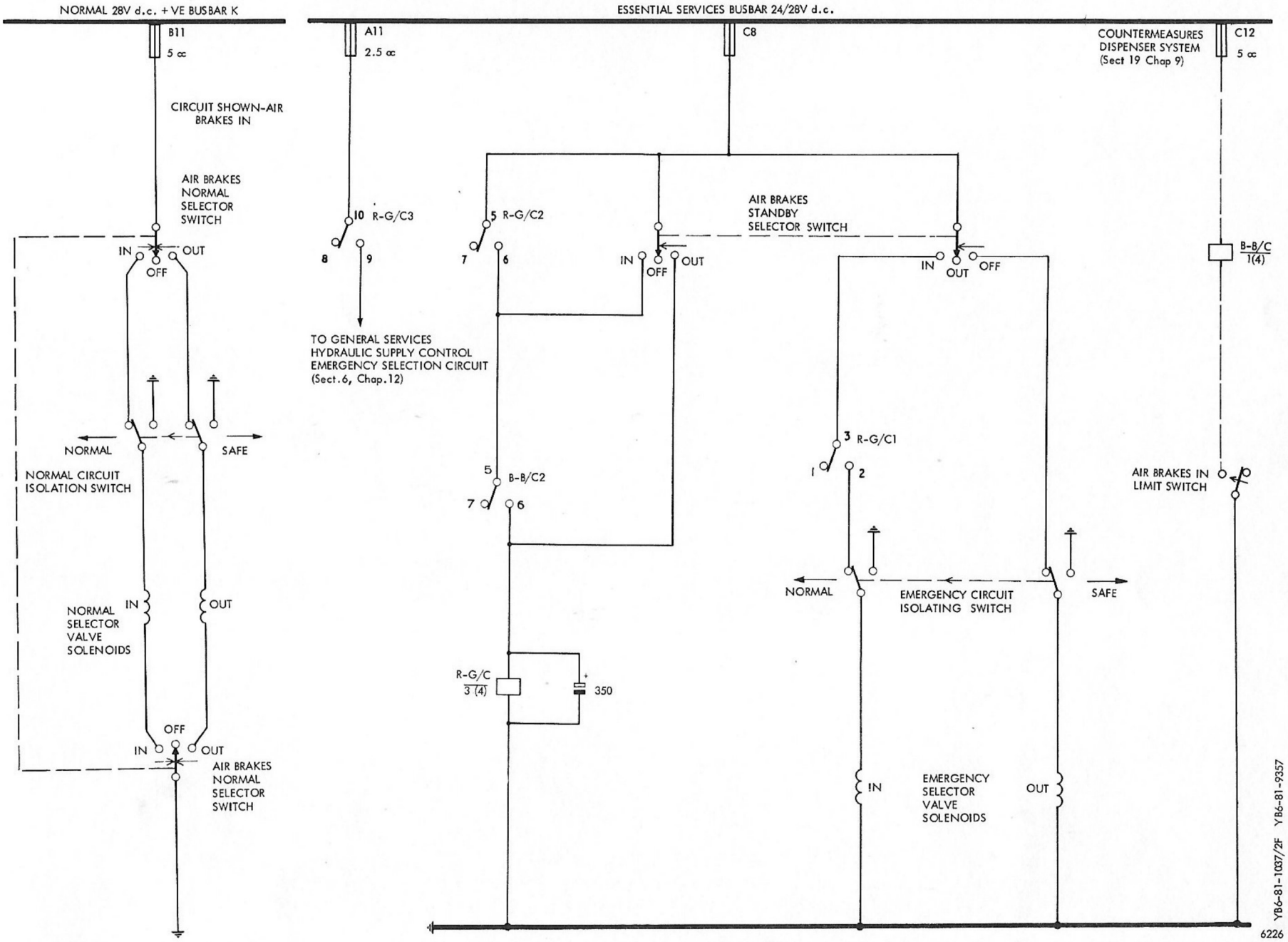

Fig. 1 Air brakes (post-Mod 1750, pre-Mod 1803) - theoretical

(Fig. title amended)