

Chapter 10

ARI-23272 AUTOMATIC AIRBORNE RADIO RELAY

LIST OF CONTENTS

	Para	SERVICING	Para
<i>Introduction</i>	1		
DESCRIPTION AND OPERATION			
<i>General</i>	2		
<i>Description</i>	3		
<i>Operation</i>	4		
<i>Power supplies</i>	7		
		<i>General</i>	8
		REMOVAL AND INSTALLATION	
		<i>General</i>	9

LIST OF ILLUSTRATIONS

	Fig
<i>Interconnecting box patch panel</i>	1
<i>Block schematic diagram</i>	2
Routing charts	
<i>ARI-23272</i>	3 (1) and (2)

Introduction

1. This chapter deals with ARI-23272 which is an automatic airborne radio relay (Autocat) that may be fitted to the Vulcan B2 aircraft.

DESCRIPTION AND OPERATION**General**

2. The installation consists of the following basic units:-

- (1) Control unit
- (2) Relay unit
- (3) Interface unit (referred to an Inter-connecting box).

Description

3. Autocat enables simultaneous reception and re-transmission of radio messages in and between the HF, VHF and UHF wavebands. The communications link can be ground/air/ground, ground/air/air or air to air. The range over which successful relay can be achieved is consistent with the normal range of the communications equipment being utilized.

Operation

4. The operation of the Autocat utilizes the RTI (ARI-23143/1), RT2 (ARI-18124/2 and the HF (ARI-23090) installations. Any two of these equipments may be selected at any one instance.

5. Autocat has only one operating control this is the relay function switch on the control

unit which provides selection of the desired relay programme, this may be either V/UHF to UHF or V/UHF to HF. The function switch bears the following notation: OFF: RT1/RT2; RT1/HF and RT2/HF.

6. Figures 1, 2 and 3 show the interconnections and schematic layout for the installation.

Power supplies

7. Selection of a relay programme applies a 28 volt dc power supply to the Autocat units and lights the green RLY ON lamp LP4, on the Autocat control unit.

WARNING ...

Service personnel are warned that voltages in excess of 30V ac and 50V dc can be lethal.

SERVICING

General

8. The servicing of the system consists of regular testing of the circuits and components at the periods stated in the AP 101B-1902-4.

All components should be frequently checked for security and plugs, sockets and terminal blocks, should be examined for damage and ingress of dirt and moisture.

REMOVAL AND INSTALLATION

General

9. Access to all units is straightforward. When if it necessary to remove or replace any units, secure all loose connectors to the adjacent aircraft structure.

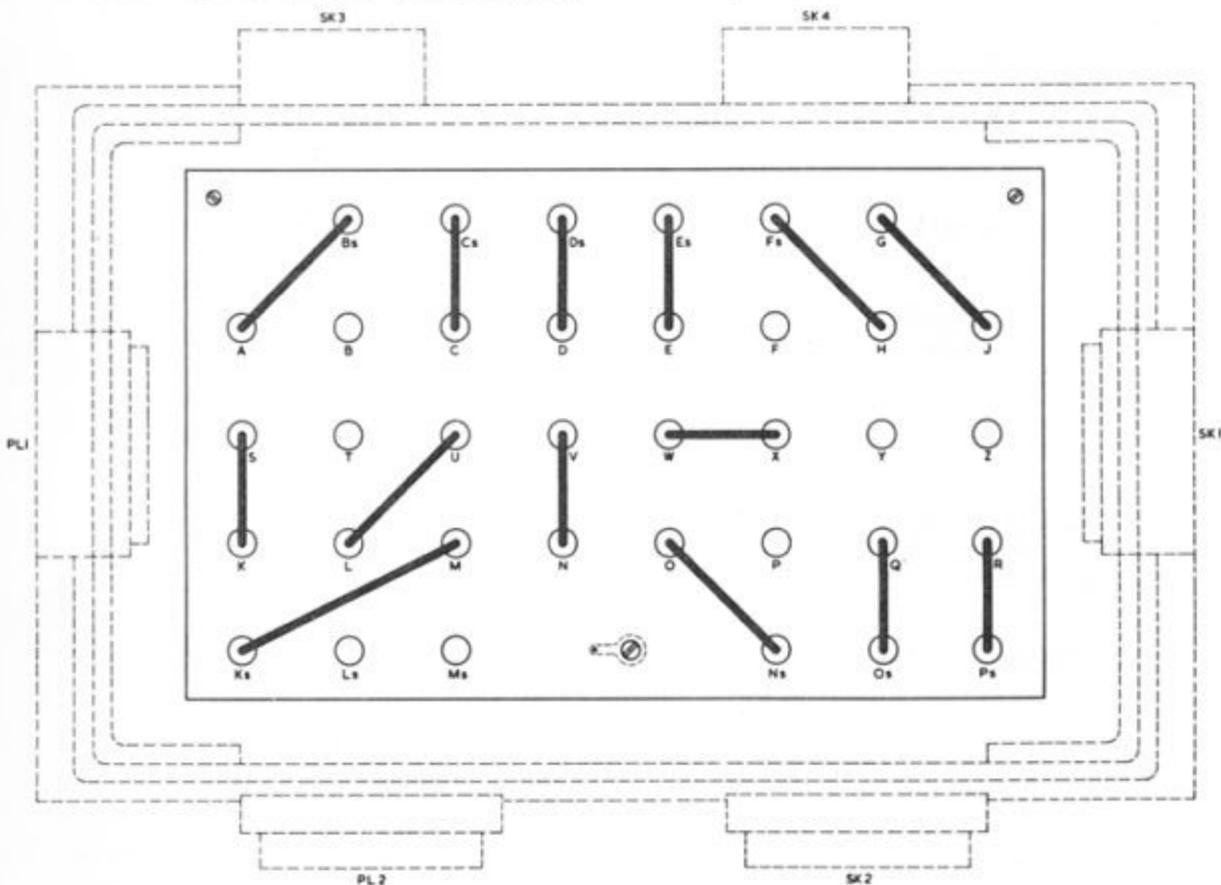
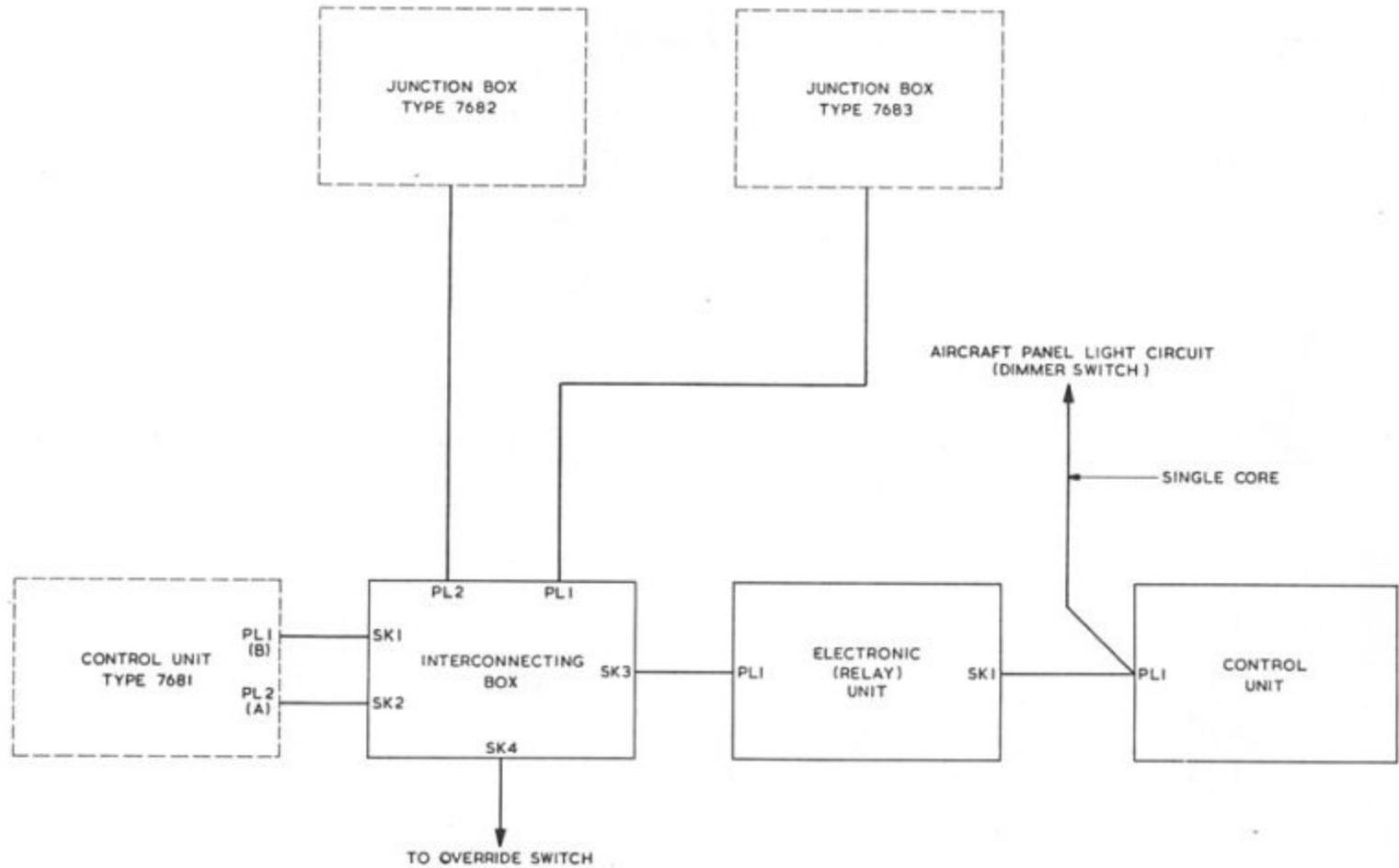


Fig.1 Interconnecting box patch panel



NOTE
ITEM WITHIN THE BROKEN LINE 'BOXES'
DO NOT FORM PART OF ARI23272.

19917

Fig. 2 Block schematic diagram.

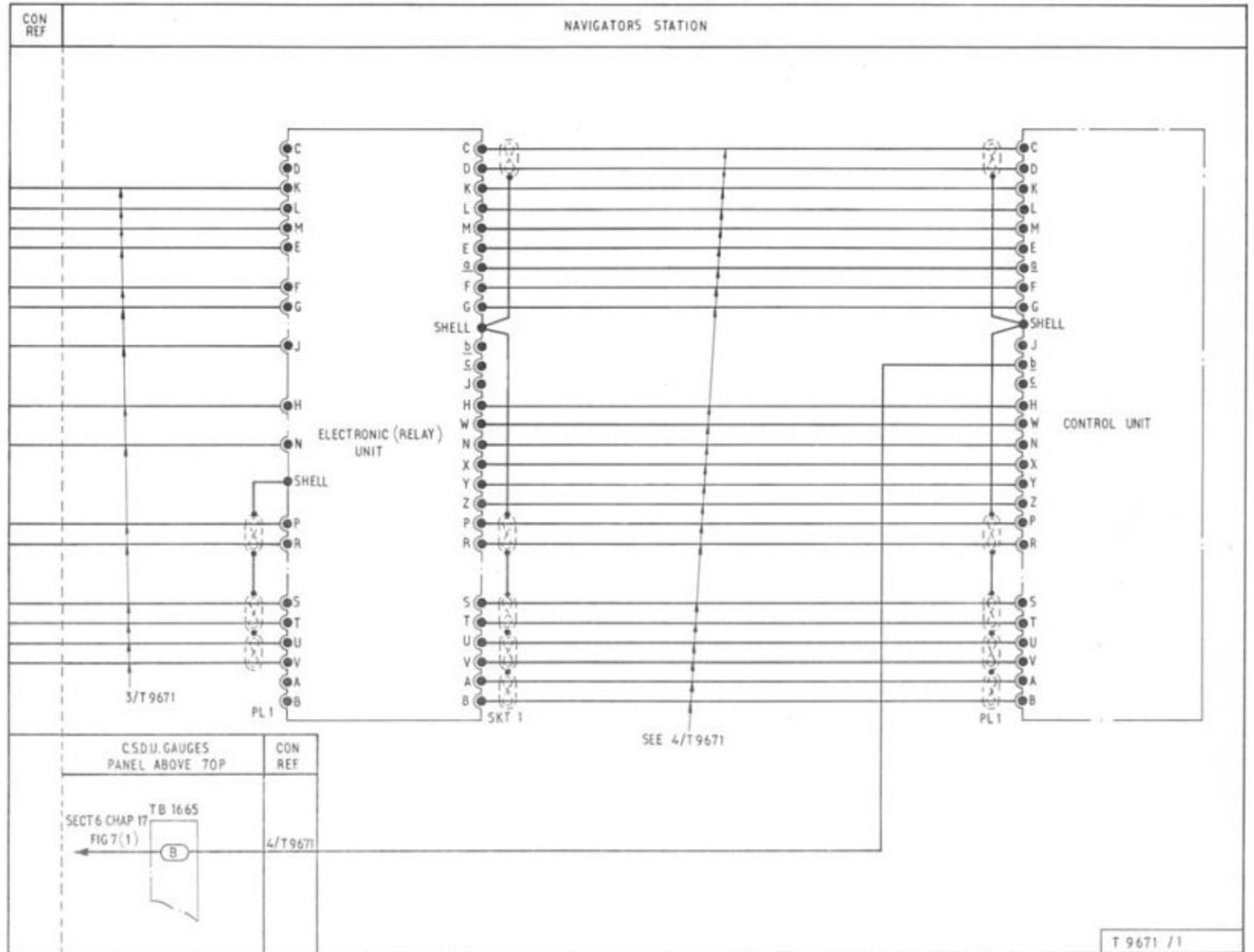


Fig 3 (2) ARI 23272

This file was downloaded
from the RTFM Library.

Link: www.scottbouch.com/rtfm

Please see site for usage terms,
and more aircraft documents.

