WIRING CHANGES TO KING AUDIO SYSTEM INSTALLATION (KNA – 20) TO PREVENT INADVERTENT RADIO TRANSMISSIONS (CO G50)

1. PLANNING

A. Effectivity

(1) Aircraft Affected

All N22 and N22B Aircraft fitted with customer option G50 and not modified to Nomad Mod N97 standard.

(2) Spares Affected

Nil.

B. Reason

On the KMA20 a selection to a transmitter, (e.g. HF COM), will be caused to transmit (even though the P.T.T. button is not depressed) if the "Pilot Audio" circuit breaker is tripped, whilst the receivers are powered.

C. Description

An existing wire between two relays is removed and replaced by a diode. A diode on one relay is rewired to prevent erroneous operation during the relay pull in.

D. Compliance

The wiring changes are to be incorporated at the next 100 hourly inspection or within 3 months.

E. Approval

The rework described herein has been approved by the D.O.T. Designated Engineering Representative at G.A.F.

F. Manpower

Approximately 1 manhour.

G. Material, Price and Availability

To be procured from local sources.

H. Tooling Price and Availability

None.

Page No	1	2	3	4
Rev No	0	0	0	0



I. Weight and Balance

Nil change.

J. References

None.

K. Publications Affected

Wiring diagram Manual.

2. ACCOMPLISHMENT INSTRUCTIONS



ENSURE ALL ELECTRICAL POWER IS OFF AND THAT THE BATTERY IS DISCONNECTED. ELECTRICALLY GROUND THE AIRCRAFT.

- A. Remove the King KMA 20 Audio Control from the centre instrument panel.
- B. Unscrew the connector at the rear of the KMA 20 mounting tray. (2 relays are mounted on a bracket fixed to back of connector and marked Relay 1 and 2).
- C. Loosen the engine instrument panel and move it aside sufficient to be able to reach KMA 20 connector and reposition it in front of the instrument panel for access.

NOTE

Take specific care when handling RAYCHEM cables which are extremely brittle and easily broken.

- D. Unfasten the cover over the plug and unscrew relay bracket to gain access. Refer Fig. 2.
- E. Unplug relays from the mounting socket to prevent relay damage during rework of relay wiring.

NOTE

Note relay positions are marked 1 and 2 adjacent to them on the bracket.

- F. Remove the wire from relay one socket pin 3 (RL1/3) to relay 2 socket pin 6 (RL2/6). Install diode (IN645 or IN646) between RL2/6 and RL1/3 with the anode at RL1/3 Ref., Fig. 2.
- G. On RL2 transfer the diode attachment wire on Pin 2 to Pin 5 with the anode connection retained at Pin 3. Ref. Fig. 2.
- H. Carry out continuity checks and functionally test.
- I. Reassemble/refit relays 1 and 2, connector, KMA 20 and instrument panel.
- J. Functionally check flight controls for range and freedom of movement



3. MATERIAL INFORMATION

A. Parts Required per Aircraft

New Part No	Qty	Description	Old Part No
IN645	1	Diode	
IN646	1	Diode (alt)	

B. Parts Required to Modify Spares

Nil.

C. Remove Parts

New Part No	Description	Instruction/Disposition
RZ173A22	Wire	Scrap

4. SPECIAL TOOLS & EQUIPMENT

Nil.

5. RECORDING ACTION

Record Compliance with this Service Bulletin which incorporates the intent of G.A.F. Nomad Mod N264 in the airframe log book.



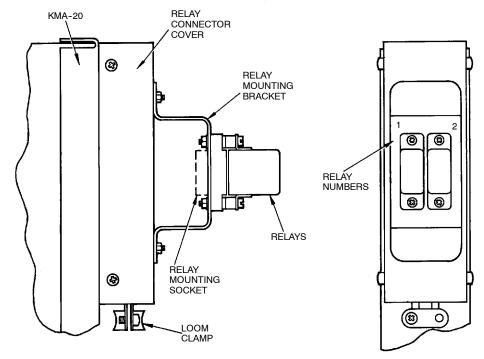


Figure 1

