

Record of revisions:

REV:	ECO	Description	Approved:
1		Change from passenger swap to parallel interface	Picou
2		Correct Newark P/N on Mil Spec switch	Picou

Annex A,
PMA7000MS-CAP
Installation Manual

**Copilot/Observer
Transmit Exchange
Wiring**

**RS ENGINEERING[®]
INCORPORATED**

9800 Martel Road, Lenoir City TN 37772

Title: CAP Observer/Copilot Wiring Annex

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Written By: Gary Picou

Checked By:

Approved By:

Date: 8/21/2000

Date:

Date:

Purpose:

The purpose of this document is to provide interconnect information to add a transmit position (observer) to share the COM 3 transceiver if necessary.

Applicability

This applies only to PMA7000MS-CAP versions.

Components required

K1 and K2-	Potter & Brumfield KHS-14D11-24
Diodes-	1N4004 (or Equiv.) (3 ea.)
Switch-	SPDT Momentary, Center off
	Mil-Spec = 11TW1-7
	Industrial = 11TS15-7
	Standard = 7105SYZQE

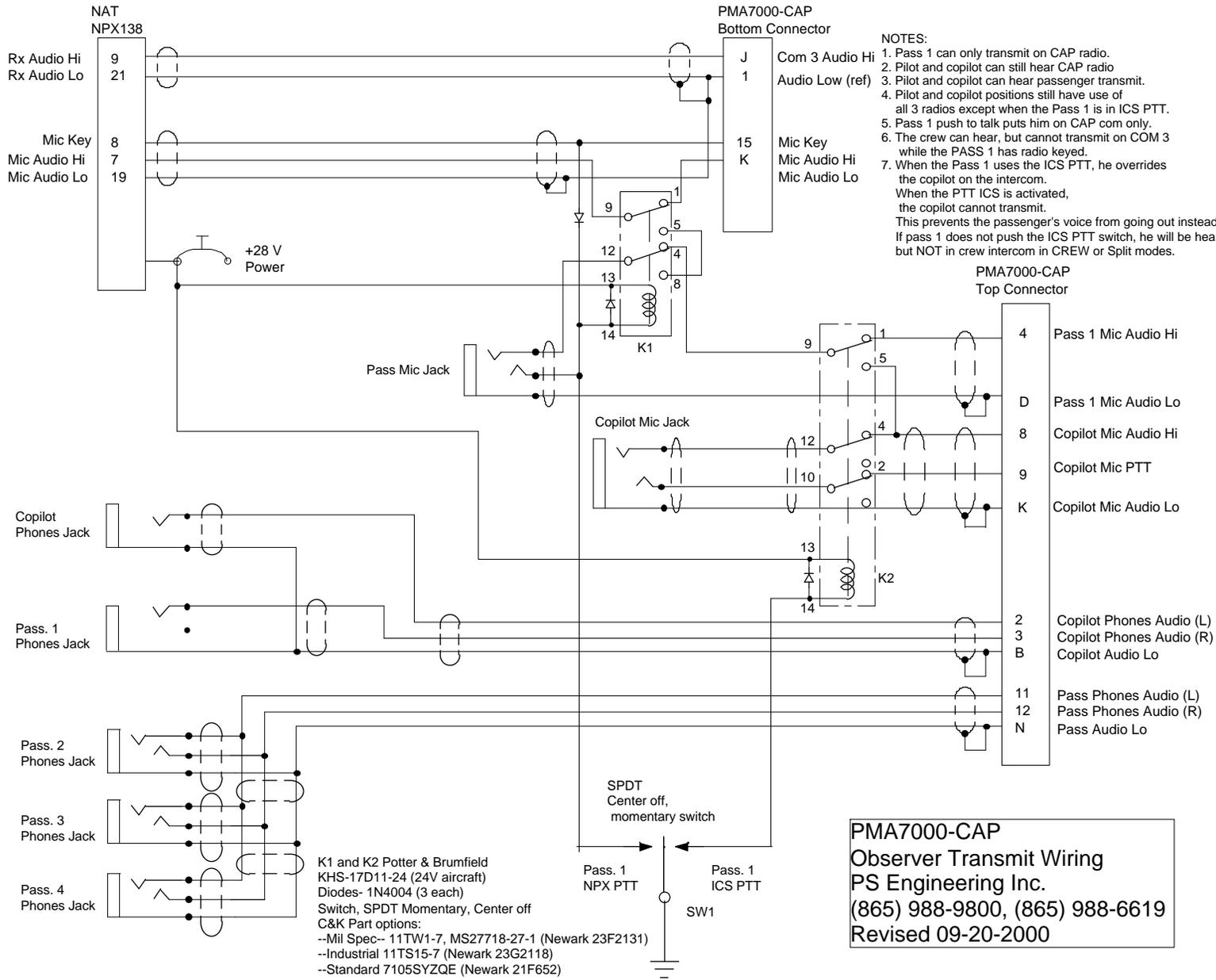
Limitations

All wires must be Mil-Spec. Use 2-, 3- and 4- conductor wire with shield as indicated. Use insulating washers on all jacks to prevent ground loops. Connect shields at unit only.

This drawing is for reference only. PS Engineering, Inc. makes no guarantee that this interconnect will work in all cases.

Operational notes

1. Pass 1 can only transmit on CAP radio.
2. Pilot and copilot can still hear CAP radio
3. Pilot and copilot can hear passenger transmit.
4. Pilot and copilot positions still have use of all 3 radios except when the Pass 1 is in ICS PTT.
5. Pass 1 push to talk puts him on CAP com only.
6. The crew can hear, but cannot transmit on COM 3 while the PASS 1 has radio keyed.
7. When the Pass 1 uses the ICS PTT, he overrides the copilot on the intercom.
 - a. When the PTT ICS is activated,
 - b. the copilot cannot transmit
 - c. This prevents the passenger's voice from going out instead of the copilot's.
 - d. If pass 1 does not push the ICS PTT switch, he will be heard on the passenger intercom, but NOT in crew intercom in CREW or Split modes.



K1 and K2 Potter & Brumfield
KHS-17D11-24 (24V aircraft)
Diodes- 1N4004 (3 each)
Switch, SPDT Momentary, Center off
C&K Part options:
--Mil Spec-- 11TW1-7, MS27718-27-1 (Newark 23F2131)
--Industrial 11TS15-7 (Newark 23G2118)
--Standard 7105SYZQE (Newark 21F652)