



MAJOR REPAIR AND ALTERATION

(Airframe, Powerplant, Propeller, or Appliance)

US Department of Transportation
Federal Aviation Administration

Form Approved
OMB No. 2120-0020
For FAA Use Only
Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each violation (Section 901 of Federal Aviation Act of 1958).

1. Aircraft	Make <p style="text-align: center;">Ryan</p>	Model <p style="text-align: center;">Navion B</p>
	Serial No. <p style="text-align: center;">NAV-4-2313B</p>	Nationality and Registration Mark <p style="text-align: center;">N5413K</p>
2. Owner	Name (As shown on registration certificate) <p style="text-align: center;">Putney, William W III Rodgers, Gail C</p>	Address (As shown on registration certificate) <p style="text-align: center;">5780 Balmoral Drive Oakland, CA 94619</p>

3. For FAA Use Only

The data identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43, Section 43.7

05-29-03 *[Signature]*

DATE SIGNATURE OAK-FSDO

4. Unit Identification

5. Type

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	----- (As described in Item 1 above) -----				X
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address Pierre Borduas 875A Island Dr. #253 Alameda, CA. 94502	B. Kind of Agency <input checked="" type="checkbox"/> U.S. Certificated Mechanic <input type="checkbox"/> Foreign Certificated Mechanic <input type="checkbox"/> Certified Repair Station <input type="checkbox"/> Manufacturer	C. Certificate No. <p style="text-align: center; font-size: large;">A.P. 2020552 I.A.</p>
---	--	---

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Date <p style="font-size: large; font-family: cursive;">6-2-03</p>	Signature of Authorized Individual <p style="font-size: large; font-family: cursive;"><i>P. Borduas</i></p>
---	--

7. Approval for Return To Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is APPROVED REJECTED

BY	FAA Fit. Standards Inspector	Manufacturer	<input checked="" type="checkbox"/>	Inspection Authorization	Other (Specify)
	FAA Designee	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection <p style="font-size: large; font-family: cursive;">6-2-03</p>	Certificate or Designation No. A.P. 2020552 I.A.	Signature of Authorized Individual <p style="font-size: large; font-family: cursive;"><i>P. Borduas</i></p>
--	---	--

NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. Description of Work Accomplished

(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

Description of alteration: This alteration removes audio switches and relays and a Bendix/King marker beacon receiver and installs a PS Engineering model PMA7000M-S Audio Selector Panel/Marker Beacon Receiver/Intercom System.

Description of work: The old marker beacon receiver and audio switching system and their wiring was removed and discarded. Installation of PMA700M-S was accomplished according to PS Engineering "PMA7000M-S Installation and Operation Manual" (manual number 200-070-0012). The PMA700M-S is mounted in the instrument panel at location 8d (see attached dwg N5413K Panel). Connections to other devices are shown in attached drawing N5413K Audio.

The existing marker beacon receiver antenna was reused for this alteration.

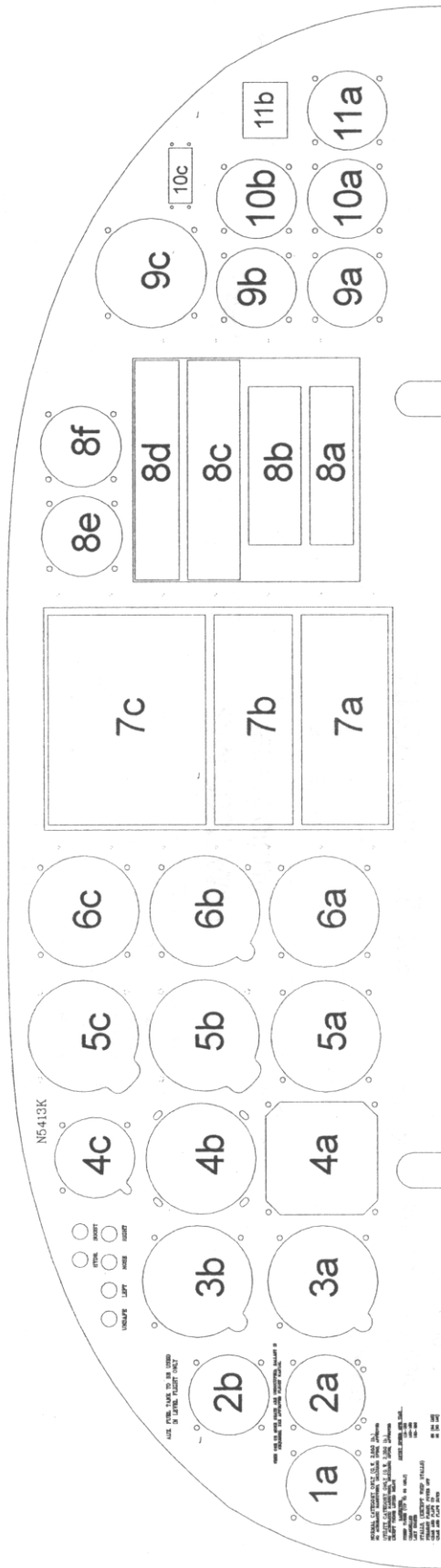
A dedicated 3A circuit breaker (Klixon PN: 7277-2-10) circuit breaker located in the switch panel to the left of the pilot labeled "Audio Panel" provides power to the PMA700M-S. Connections to aircraft power comply with 23.1365 "Electrical cables and equipment" (a, d, e) and 23.1357 "Circuit protective devices". After installation a check for interactions with other systems was made to comply with 23.1309 (a)(1).

The total aircraft system electrical load does not exceed 80% of the generating capacity after this alteration.

A new weight and balance measurement in accordance with 43.13 chapter 10 has been done which includes this alteration

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

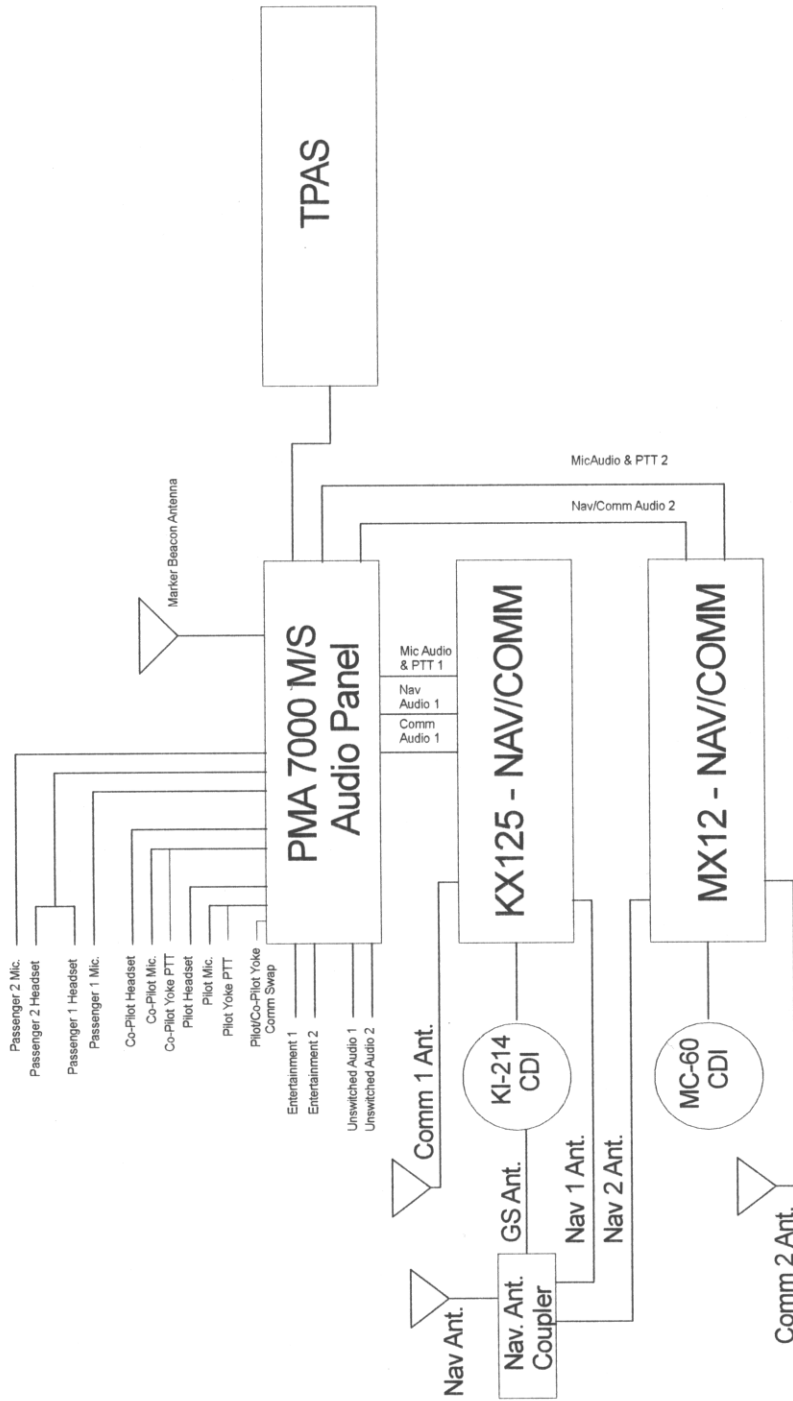
- 1) **Introduction:** See above (Form 337 section 8).
- 2) **Description:** See above (Form 337 section 8).
- 3) **Control:** Complete operational information is included in the PS Engineering "PMA7000M-S Installation and Operation Manual" (manual number 200-070-0012).
- 4) **Servicing information:** Not applicable.
- 5) **Maintenance Instructions:** Not applicable.
- 6) **Trouble shooting information:** Not applicable.
- 7) **Removal and replacement information:** The unit can be removed from its tray by turning the allen head screw in the middle of the unit's face plate counterclockwise. When free it can be pulled out.
- 8) **Diagrams:** Not applicable.
- 9) **Special inspection requirements:** Not applicable.
- 10) **Application of protective treatments:** Not applicable.
- 11) **Data:** No structural fasteners were used in the installation of this unit.
- 12) **List of special tools:** No special tools are required to install or maintain any components associated with this alteration.
- 13) **For commuter category aircraft:** Not applicable.
- 14) **Recommended overhaul periods:** Not applicable.
- 15) **Airworthiness Limitation Section:** Not applicable.
- 16) **Revision:** A letter will be submitted to the local FSDO with a copy of the revised FAA Form 337 and revised ICA. The FAA inspector accepts the change by signing Block 3 of the 337.



Material: 6061-T6
 Thickness: 0.100"
 Finish: Low reflectivity powder coating

Reg: N5413K		REV 1.0	
SN: NAV-4-2313B		DWG NO. NAV-2452781-13888	
SIZE A	FSCM NO.	DATE 22 May, 2003	SHEET 1 of 1
SCALE 1:5		DATE 22 May, 2003	

N5413K Panel



Reg: N5413K

SN: NAV-4-2313B

N5413K - Audio

SIZE	FSCM NO.	DWG NO.	REV
A		NAV-2452787.14244	1.0
SCALE	NA	Date	May 27, 2003
		SHEET	1 of 1