U.S. Department of Transportation
Federal Aviation Administration

MAJOR REPAIR AND ALTERATION
(Airframe, Powerplant, Propeller, or Appliance)

Form Approved
OMB No. 2120-0020

For FAA Use Only
Office Identification
WP-27 MB

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 such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: Republic	Model: RC-3
	Serial No.: 1000	Nationality and Registration Mark: N5166B
2. Owner	Name *(As shown on registration certificate)*: Davey Darrell L Davey Deborah A	Address *(As shown on registration certificate)*: 6613 Santa Rosa Rd Camarillo Ca 93012-5672

3. For FAA Use Only

Sinking Alarm

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

22 Sep 99 — [signature] — OAK-FSDO
DATE — SIGNATURE

4. Unit Identification / **5. Type**

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

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Kenneth L. Thompson PO Box 411 Vineburg, Ca. 95487	✓ U.S. Certificated Mechanic ☐ Foreign Certificated Mechanic ☐ Certificated Repair Station ☐ Manufacturer	545767051

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	Signature of Authorized Individual
9-22-99	Ken Thompson

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 Flt. Standards Inspector	☐ Manufacturer	✓ Inspection Authorization	Other *(Specify)*
☐ FAA Designee	☐ Repair Station	☐ Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
9-22-99	552273581	[signature] Douglas P. Smith

FAA Form 337 (12-88)

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.

~~Republic RC-3 N5186B Ser.# 1000~~

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

2. Description: Installed Kenair model KA SA1Sinking Alarm. Alarm main unit P/N KA SA1-1 installed to panel light rheostat housing support behind instrument panel with 2 ea. AN525-632 screws. Water detection sensors P/N KA SA1-4 bonded to bottom of fuselage with PRC 1422 B2 polysulfide compound in each water compartment. Alarm/ Speaker P/N KA SA1-2A (2ea.) are rated at 8 ohms for outdoor use, mounted in wing (reference fig.3). Alarm control panel P/N KA SA1-3 mounted to bottom instrument panel on a spring loaded swing out mount with latch to hold control panel in stowed position. Electrical power is taken from hot buss before master switch and is protected by a 5 amp circuit breaker Potter and Brumfield P/NW23X1A1G5. Work done in accordance with AC 43.13 1A, ch.2, sec. 3, para. 95 thru 97, 99, 100, fig. 2.17, fig.2.28, Ch. 11, section 2, para.424, 429, section 3, para. 442, 443, 445 thru 451, fig. 11.7a, section 7, para. 514 thru 520.

3. Control, operation information: Reference KA SA1 Sinking Alarm Operating Instructions Form KA SA1

4. Servicing information: None

5. Maintenance instructions: Must be inspected annually in accordance with FAR 43 appendix D and FAR part 91.

6. Trouble shooting information: N/A

7. Removal and replacement information: None

8. Diagrams: None

9. Special inspection requirements: None

10. Application of protective treatments: None

11. Data: None

12. List of special tools: None

13. For commuter category aircraft: N/A

14. Recommended overhaul periods: No additional overhaul time limitations

15. Airworthiness limitation section: Control panel placarded "Use when moored only"

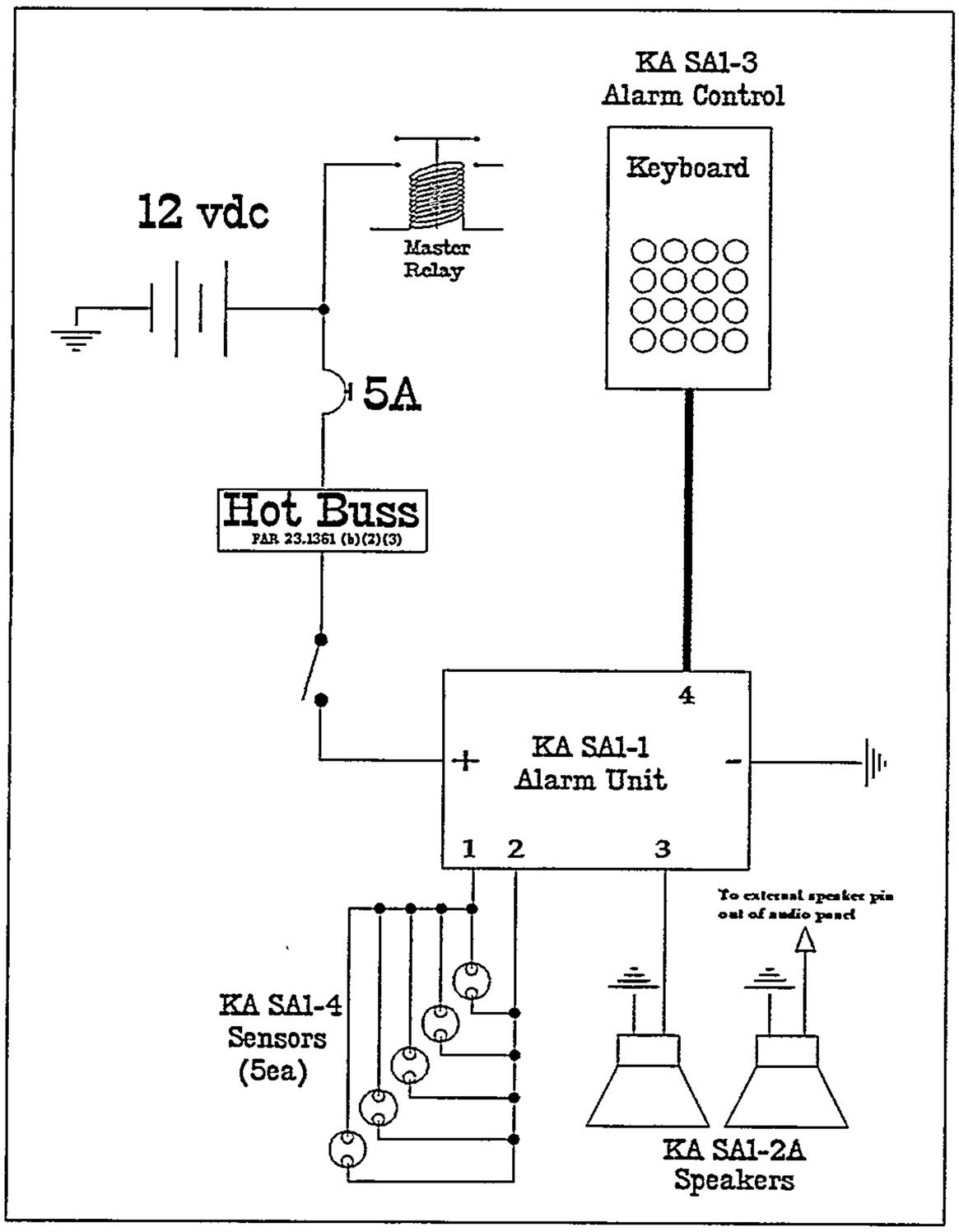
16. Revision: A letter will be submitted to the local FSDO with a copy of the revised FAA form 337

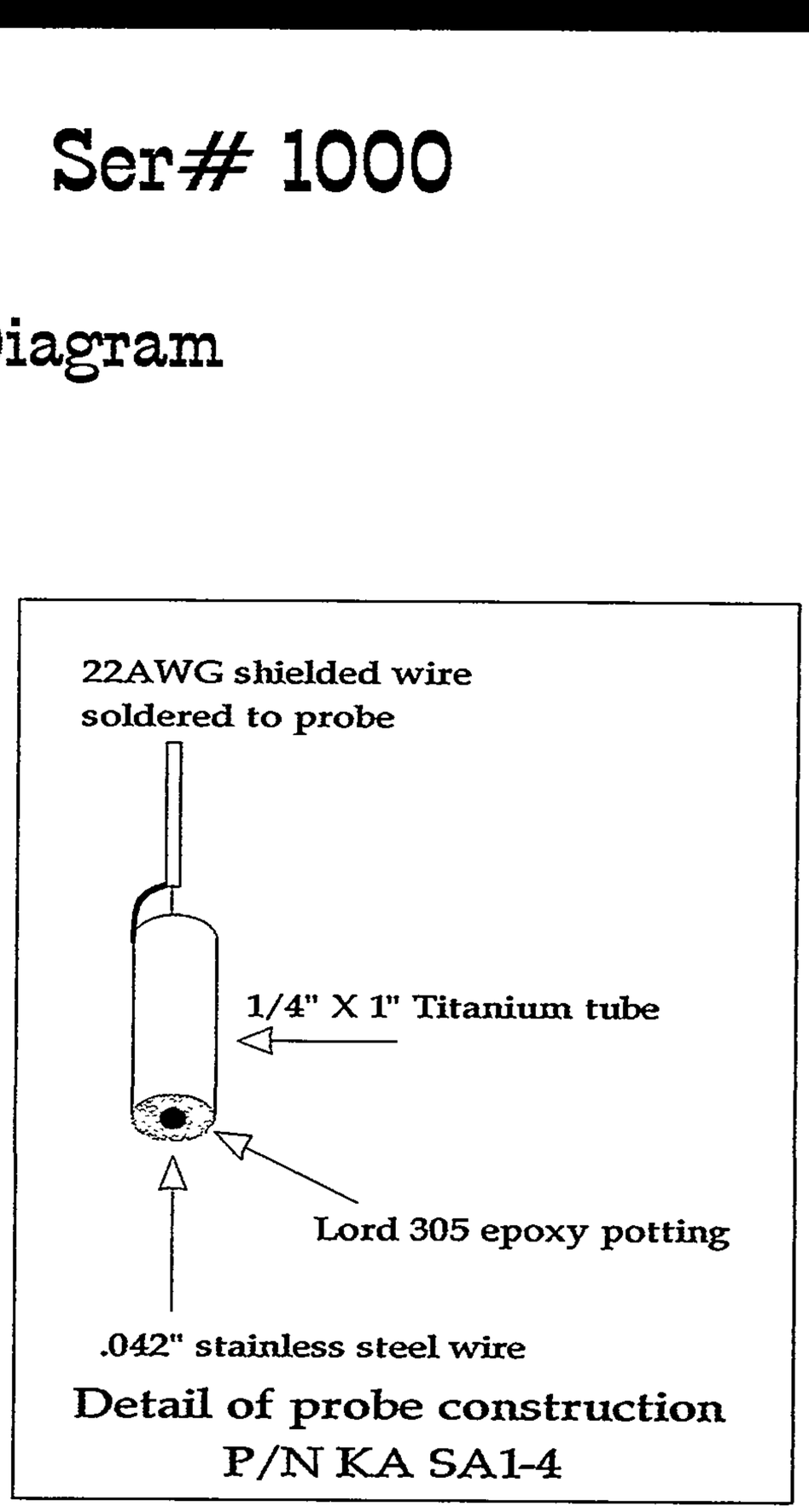
☒ Additional Sheets Are Attached

*U.S.GPO:1994-568-012/00019

Republic RC-3 N5166B Ser# 1000

Sinking Alarm
Electrical Installation Diagram





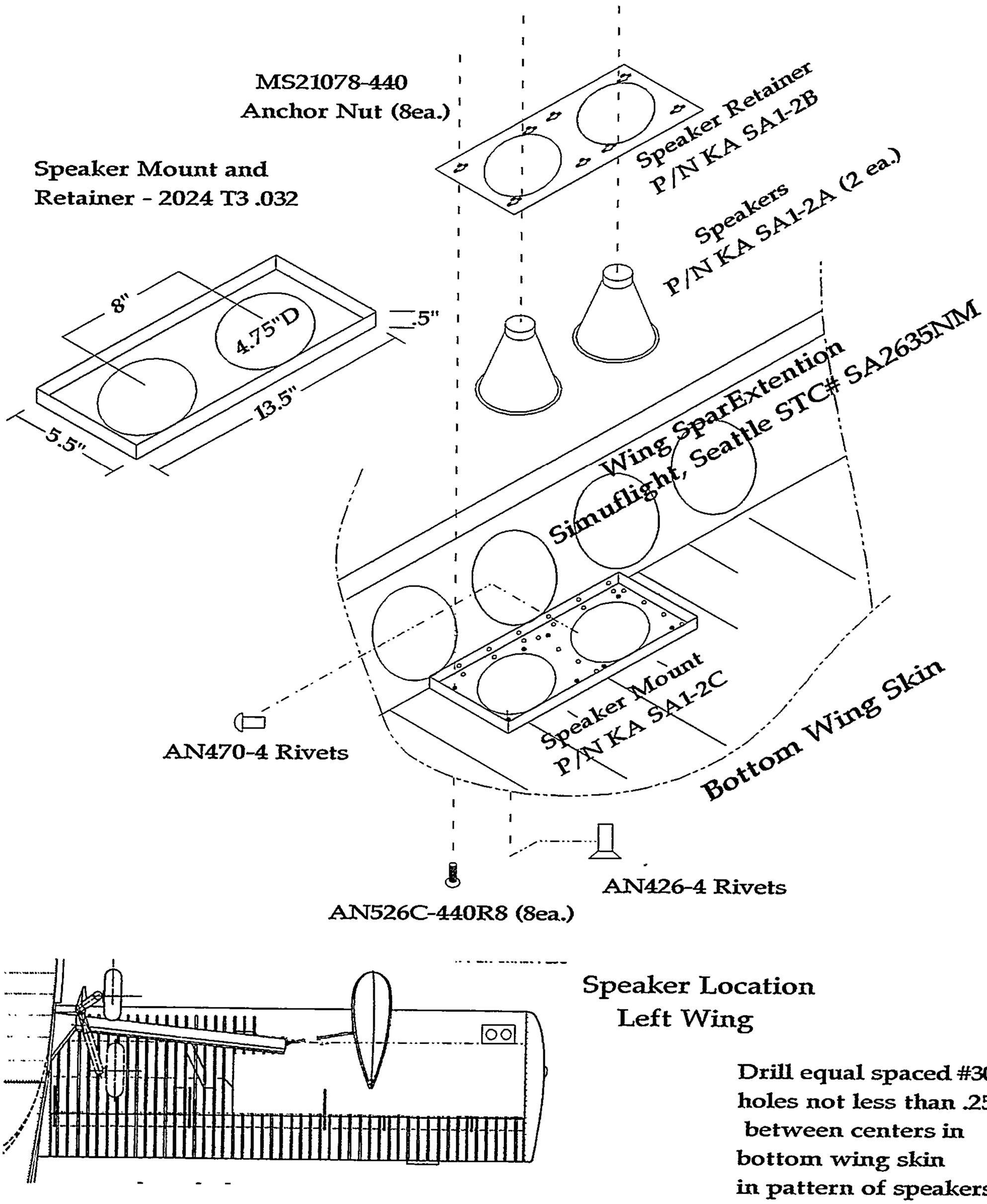
Detail of probe construction
P/N KA SA1-4

Electrical Materials List

Circuit Breaker	Potter & Brumfield W23X1A1G5
Wire - unshielded	MIL-W-22759/16 22 AWG
Wire - sheilded	MIL-C-27500 22 AWG
Wire - ribbon	Alpha type 3583/14 flat cable 28 AWG
Switch	AN3021-2 SPST

9-22-99

KA SA1 Sinking Alarm Wing Speaker Installation Details



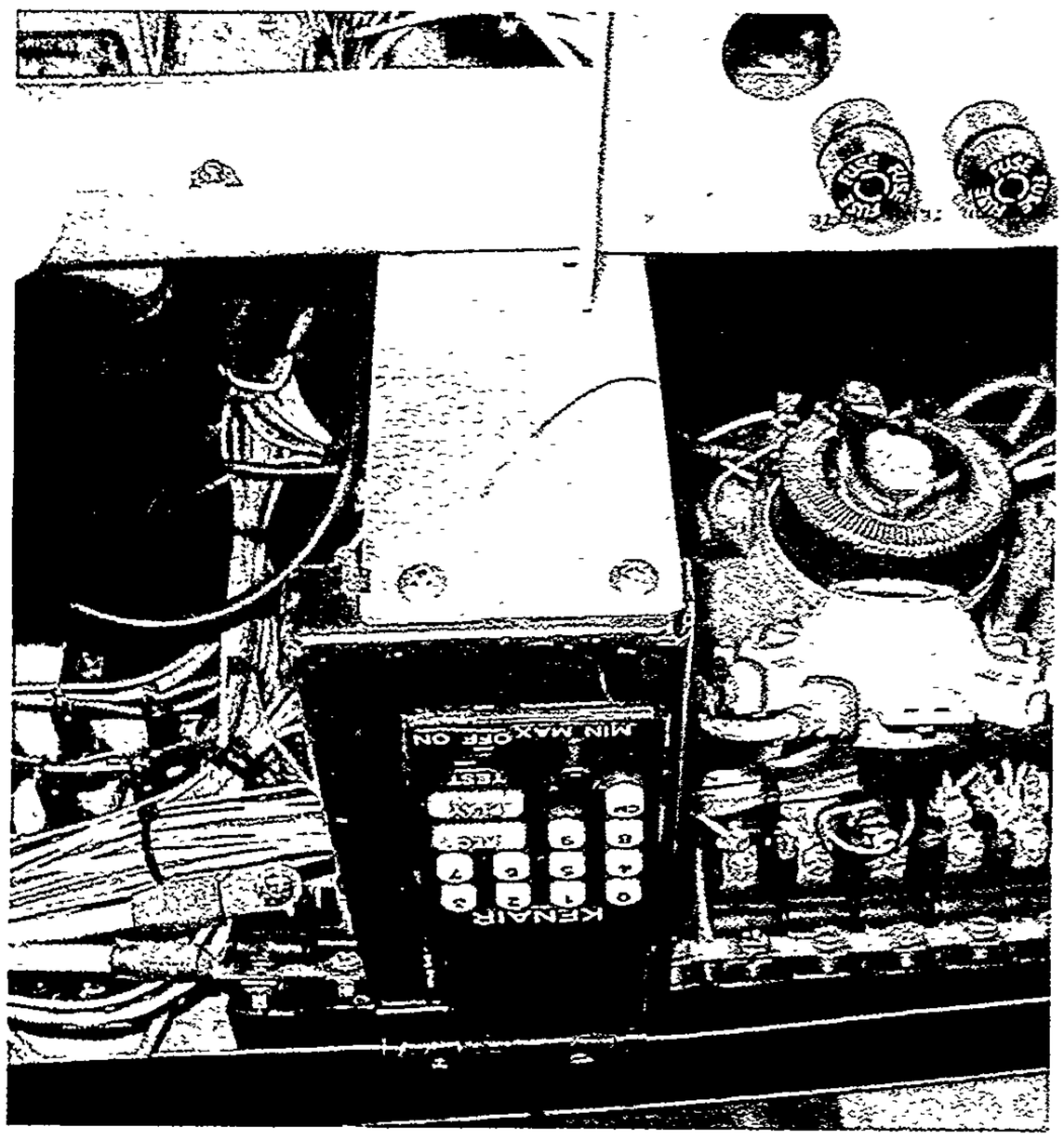
Speaker Location
Left Wing

Drill equal spaced #30 holes not less than .250" between centers in bottom wing skin in pattern of speakers for speaker grill

Fig. 3

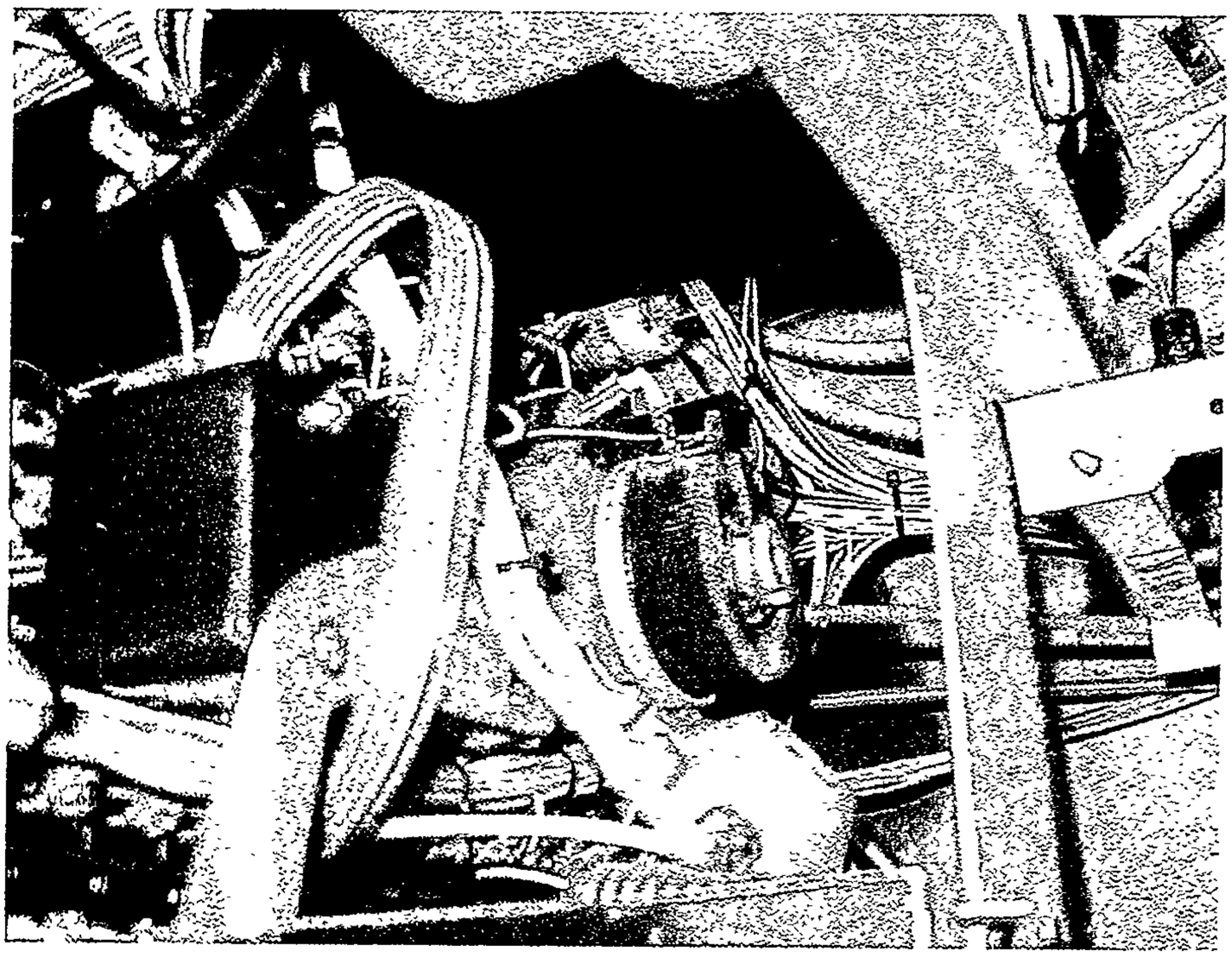
9-22-99

RC-3 N5166B S/N 1000



KA SA1-3 Control Keypad under instrument panel in stowed position

Rear control panel support fabricated from .040 2024 T3 aluminum and attached to instrument panel cross brace with 2ea. AN525-632 screws and AN364-632 nuts



KA SA1-1 Warning Unit installation behind instrument panel

Control panel latch and spring details and Warning Unit installation details

9-22-99