



US 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

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 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 Seabee
	Serial No. 129	Nationality and Registration Mark N87567
2. Owner	Name (As shown on registration certificate) Ostronik KC	Address (As shown on registration certificate) 101425 Overseas Hwy #822 Key Largo FL 33037

3. For FAA Use Only

The technical data identified herein has been found to comply with applicable airworthiness requirements and is hereby approved for use only on the above described aircraft, subject to conformity inspection by a person in FAR 43.7

MAY 31 2005

Don Wallace
FAA Inspector NM F888-81

DATE

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 Don Wallace 122 East Stadium Lane Grapeview WA 98546	B. Kind of Agency	C. Certificate No. 552-76-1362
	<input checked="" type="checkbox"/> U.S. Certified Mechanic	
	<input type="checkbox"/> Foreign Certified Mechanic	
	<input type="checkbox"/> Certified Repair Station	
<input type="checkbox"/> Manufacturer		

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 December 31, 2004	Signature of Authorized Individual <i>Don Wallace</i>
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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 8/25/2014	Certificate or Designation No. 37365627	Signature of Authorized Individual <i>Don Wallace</i>
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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.)

Installed Piper pilot and copilot seats assy. PN 79337 and seat rails PN 62557. Seat rails installed to same structure as originals. Seat rails incorporate travel stops to prevent inadvertent aft travel of seat. Installation similar to N6102K Ser. 285 (see attached FAA Form 337 dated 01-30-01).

Seats and seat rail / cabin floor supporting structure was load tested to equivalent loads for original installation ref. Republic Hull and Cabin Stress Analysis Report E-17-2 (see attached excerpt titled "Analysis of Intermediate Deck For Front & Rear Seat Loads"). 170 LBS pilot load (Normal Category) was substituted for 190 LBS pilot load (Utility Category). This aircraft is restricted to Normal Category limitations by wing modification STC SA2635NM. Single pilot load was used as original two seat rails carried both pilot and co-pilot seats. This modified seat installation uses two individual seats each seat supported by two seat rails.

300 LBS aft load (ultimate elevator reaction load) was applied approximately 22.5 inches above the floor at the seat back centroid. No adverse stress or deflection was noted in either the seat or seat support structure.

1049 LBS down load (combined pilot weight, 170# + seat weight, 14# X 5.7 G) was applied to seat bottom. No adverse stress or deflection was noted in either the seat or the seat support structure.

I have determined that this data is appropriate to the product being altered, is directly applicable to the alteration and is not contrary to the manufacturers data. This alteration does not require any change to the approved maintenance and inspection procedures for this aircraft.

Weighed aircraft prepared weight and balance report (see weight and balance and equipment list dated 12-20-04)

-----END-----

The technical data identified herein has been found to comply with applicable airworthiness requirements and is hereby approved for use only on the above described aircraft, subject to conformity inspection by a person in FAR 43.7

MAY 31 2005
DATE

N8756T
[Signature]
FAA Inspector NM-FSDO-01

Additional Sheets Are Attached

APPROVED
 AIRFRAME & APPLIANCE
 ENGINEERING DIVISION (1-301)
 BY A. H.
 DATE July 24, 1947

REPORT E-17-2

HULL AND CABIN STRESS ANALYSIS
 AND APPENDIX
 REPUBLIC "SEA BEE" AMPHIBIAN
 MODEL RC-3-1

This report has been examined and to the best of my knowledge and belief demonstrates compliance with all applicable portions of the Civil Air Regulations, Part 03, Amendment 03-0 dated November 9, 1945.

REV.	Pg No.	DATE.
APPENDIX	A-1 TO A-16	10/20/46
REV A	2, 4, 33a, 34, 37b, 39, 42	10/20/46
REV. B	PAGE 66A	12/9/46
REV. C	ADDED PAGE 80	1/22/47
REV D	ADDED Pg A17-A20	3/14/47
REV E	Pg 4, 44, 45	4/23/47
APPENDIX II	ADDED Pg A21-A24	6/30/47

W. I. Stogitz
 W. I. Stogitz,
 Authorized, CAA Engrg. Representative No. 1-1

PREPARED BY T. C. Adams
 T. C. ADAMS

PREPARED BY A. R. Norris
 A. R. NORRIS

CHECKED BY A. R. Norris
 A. R. NORRIS

APPROVED BY A. E. Bayajian
 A. E. BAYAJIAN

MAR 15, 1946

ANALYSIS OF INTERMEDIATE DECK FOR FRONT & REAR SEAT LOADS. DWG. No. 17F12003.

THE FRONT PORTION OF THE DECK IS SUBJECTED TO SEAT LOADS DUE TO BOTH FLIGHT LOADS (G.G L.F) AND CONTROL OPERATIONAL LOADS - (300 LB REACTION AGAINST SEAT BACK.)



THE FRONT SEATS ARE MOUNTED ON A SINGLE FRAME, BUT HAVE INDIVIDUAL CUSHIONS.

- 1) THE MAX DOWN LOAD OCCURS IN UTILITY CATEGORY FLIGHT COND WITH G.G L.F. PILOT & FRONT OCCUPANT WEIGH 190 LBS EACH. FRONT SEAT WEIGHT IS APPROXIMATELY 36 #.

TOTAL LD ON FRONT SEAT SUPPTS = $(190 \times 2 + 36) \times G.G = 2740 \text{ #}$

WITH THE C.G. OF WGT APPROX BETWEEN THE SUPPTS

LOAD / SUPPT POINT = $2740 / 4 = 685 \text{ #}$

- 2) LOAD DUE TO 300# ULT LOAD AGAINST SEAT BACK.

$CMA = 0$

$\frac{300 \times 22.5}{12.75} = 530 \text{ #}$

DOWN LOAD NOT CRITICAL

UP LOAD TAKEN INTO SUPPT A.

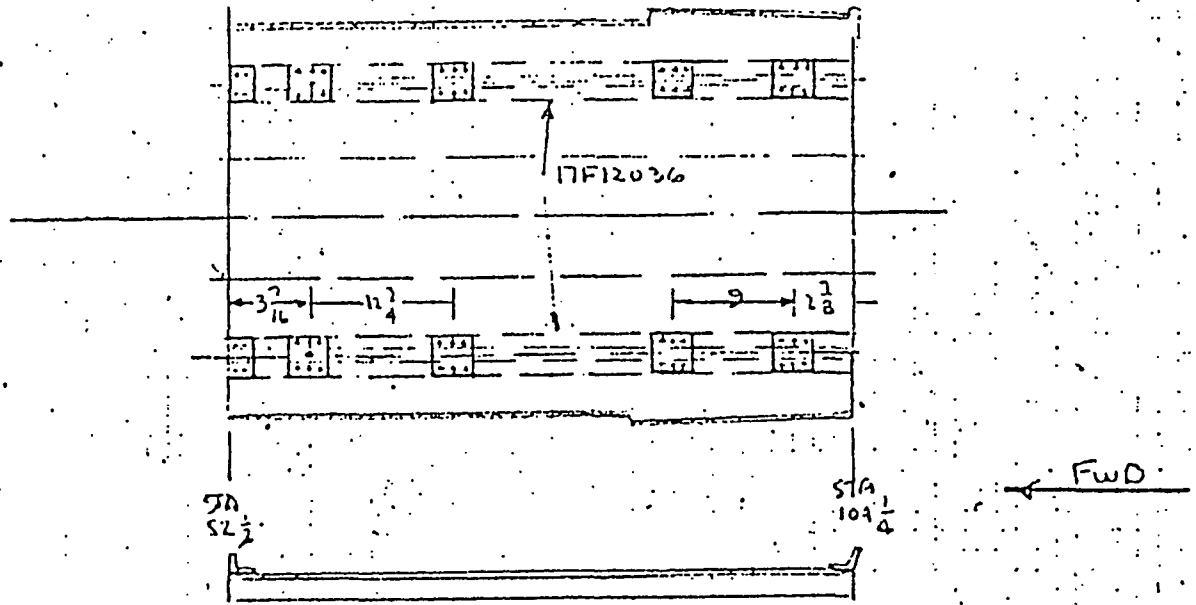
- 3) THIRD LOADING CONSISTS OF ALL FOUR PASSENGERS IN PLANE (170# CA) UNDER L.F = $3.8 \times 1.5 = 5.7$.

TOTAL LOAD ON FRONT SUPPTS = $(170 \times 2 + 36) \times 5.7 = 2140 \text{ #}$

" " REAR " = $(170 \times 2 + 27(\text{SEAT WGT})) \times 5.7 = 2090 \text{ #}$

ANALYSIS OF CABIN FLOOR FOR PASSENGER & PILOT LOADS

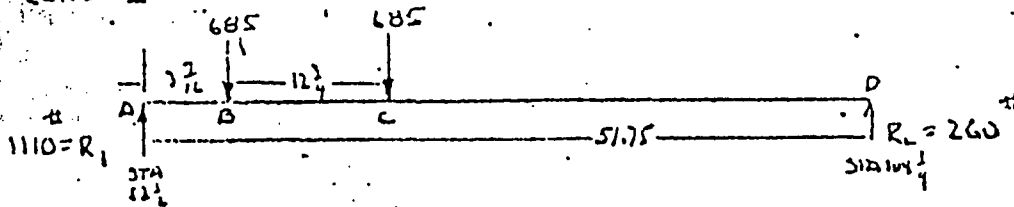
MAX FLIGHT LOAD FACTOR = 6.6 (UTILITY CAT.)
 = 5.7 (NORMAL CAT.)



AN ASSUMPTION IS MADE THAT ALL THE LOADS FROM THE SEATS ARE CARRIED INTO THE HULL FRAMES THRU THE HAT SECTIONS 17F12036. THIS PUTS THE HAT-SKIN COMBINATION IN BENDING. THE REACTIONS WILL BE AT STA 52 1/2 & 104 1/4 THRU THE CLIP ATTACH AT 52 1/2 & THE CONNECTION AT 104 1/4 TO THE DECK ANGLE 17F12051.

FROM PAGE 68

COND I



COND II

