



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

FAA Inspector NMF8888

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.
	<input checked="" type="checkbox"/>	U.S. Certificated Mechanic	552-76-1362
	<input type="checkbox"/>	Foreign Certificated Mechanic	
	<input type="checkbox"/>	Certificated 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
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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 08-25-2014		Certificate or Designation No. 37365627	Signature of Authorized Individual 		

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.)

Fabricated and installed Simuflight aft fuselage bulkhead modification and rerouted aileron cables (Ref. S.T.C.SA5711NM) in accordance with Simuflight Report SP 7000 and drawings:

- SP 7000 sheet 1 (Bulkhead frame installation)
- SP 7001 sheets 1 & 2 (Details of bulkhead frame)
- SP 7100 sheet 1 (Pulley installation)
- SP7101 sheet 1 (Aileron pulley relocation)
- SP7200 sheet 1 (Baggage floor installation)
- SP7201 sheets 1, 2 & 3 (Baggage floor details)

Fabricated and installed rear seat in conjunction with bulkhead modification per the following:

- Installed rear seat using same airframe attach points as original installation
- Seat belt attach points unchanged from original installation
- Basic seat dimensions and configuration same as original
- Seat constructed per drawing WEA-7500 (see attached) using Fibrelam 2000 panel per Boeing BMS 4-20C (see attached description)
- Seat was load tested to ultimate normal category load condition X 1.5 as per original seat (see Republic Report E-17-2 attached).
- Seat was load tested in accordance with CAR 3.390 (Seats and Births) and CAR 3.386 (Emergency Provisions, Protection)
- Seat installation identical to 398CM (see FAA Form 337 dated 2-20-98) and N12CX (see FAA Form 337 dated 7-22-93)

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 / STC holders data. This alteration does not require any change to the approved maintenance and inspection procedures for this aircraft. Weighed aircraft and 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

N87567
[Signature]
FAA Inspector NM-FSDO-01

Additional Sheets Are Attached

**CIBA-GEIGY
COMPOSITE MATERIALS**

Fibrelam[®] 2000

***Woven Graphite
Panels for
Aircraft Flooring***

Description • Fibrelam 2000/Woven Graphite is a lightweight, advanced composite floor panel designed specifically for aircraft. Panels are constructed with woven graphite facesheets bonded to high strength aramid honeycomb. CIBA-GEIGY weaves the graphite fabric and manufactures the laminating resins, the honeycomb and the adhesives for these panels, and fabricates these materials into the finished product. Standard sections are 48 x 144 inches. Other sizes are available on special order.

- Features** • Outstanding strength to weight ratio
- Weight of 0.42 and 0.54 pounds/square foot with panel shears of 480 and 800 pounds respectively
 - 40% to 60% weight savings over aluminum
 - Noncorroding
 - Excellent burn through resistance, superior to aluminum
 - Special order sizes ready for installation

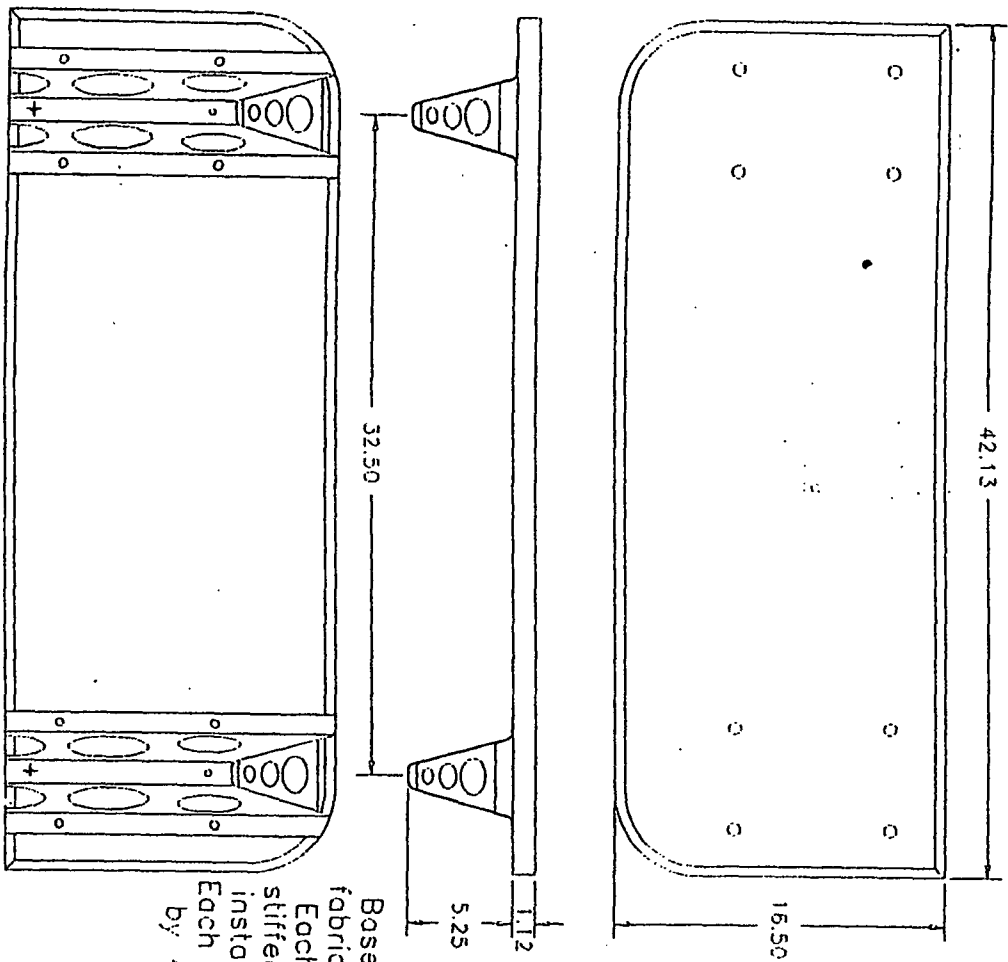
Applications • Approved as flooring by major airlines and aircraft manufacturers. Fibrelam 2000/Woven Graphite is also well suited for use in other panel applications such as bulkheads, galleys and lavatories.

Grade Panels

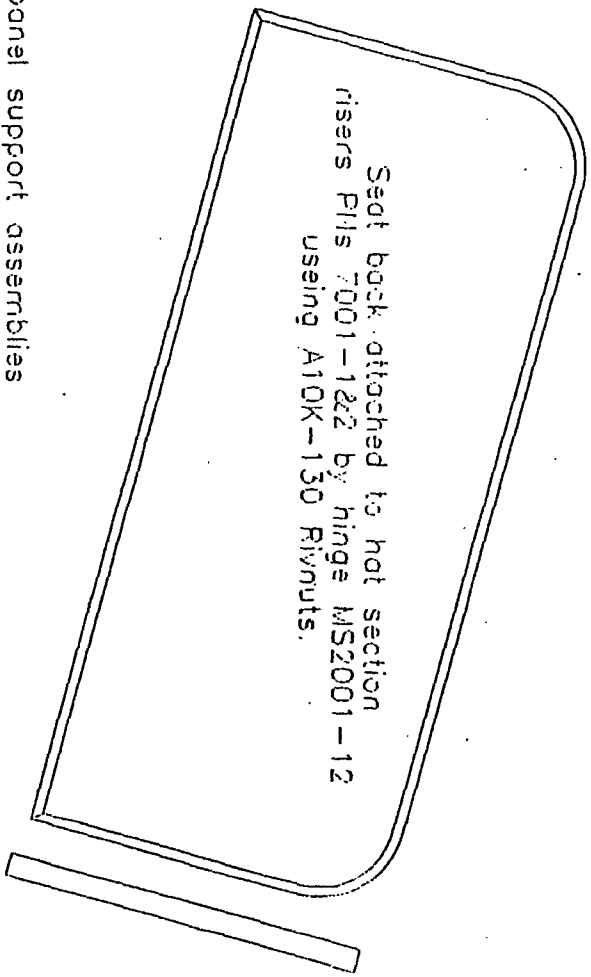
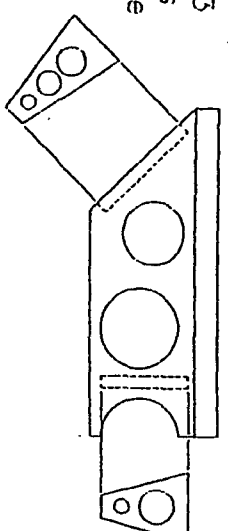
Panels weigh 0.42 lb/ft² and are used primarily for lower traffic areas on aircraft such as under seats.

Grade Panels

Panels weigh 0.54 lb/ft² and are particularly suitable for high traffic areas on aircraft such as aisles, galleys, lavatories and entrance ways.



Base panel support assemblies fabricated from .063 2024 T-3. Each assembly incorporates 2 stiffener ribs of .050 2024 T-3 installed with AN470AD-4 rivets. Each assembly attached to base by 4 AN3 bolts and threaded honeycomb inserts.



Seat base and back panels constructed from two layers of CIBA-GEIGY Fibrelam 2000 BAC 4-40, Rev.C, Type III. Panel edges trimmed with 2024 T-3 channel extrusion #AND10137-1102

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	24, 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-

PREPARED BY T. C. Adee
 T. C. ADEE

PREPARED BY G. R. Norris
 G. R. NORRIS

CHECKED BY G. R. Norris
 G. R. NORRIS

APPROVED BY A. Z. Bayajian
 A. Z. BAYAJIAN

MAR 15, 1946

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

THE FRONT PORTIONS 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 SUPTS = $(190 \times 2 + 36) \times G.G = 2740 \#$

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

LOAD / SUPT POINT = $2740 / 4 = 685 \#$

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

$CMA = 0$

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

DOWN LOAD NOT CRITICAL
UP LOAD TAKEN INTO SUPPT A.

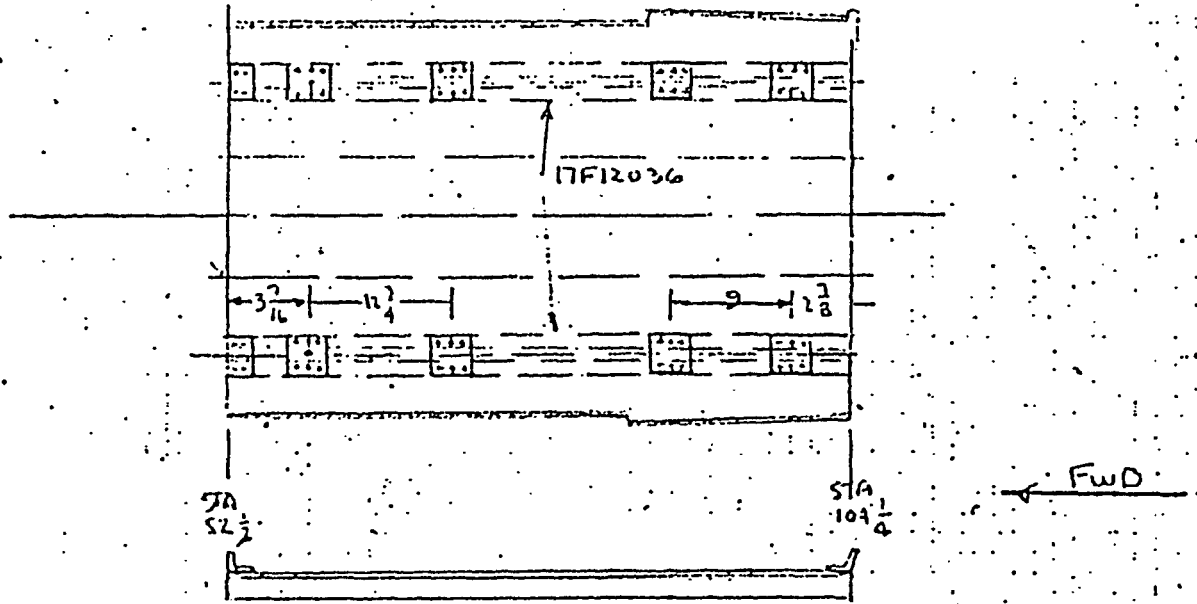
- 3) THIRD LOADING CONSISTS OF ALL FOUR PASSENGERS IN PLANE (170# CA) UNDER L.F = $3.8 \times 1.5 = 5.7$.

TOTAL LOAD ON FRONT SUPTS = $(170 \times 2 + 36) \times 5.7 = 2140 \#$

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

ANALYSIS OF CABIN FLOOR FOR PASSENGER & PILOT LOADS

MAX FLIGHT LOAD FACTOR = 6.6 (UTILITY CAT)
 = 5.7 (MILITARY 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

