

BANDEIRANTE

EMBRAER BANDEIRANTE (EMB 110)

Accessories Required For Smokejumping:

Primary Vertical Anchor:

MEDC-732- Vertical Anchor Cable for  
Bandeirante\*

\*An identical anchor to MTDC-732 can be  
provided as an Embraer factory installation.  
This anchor is shown on Embraer drawing  
110K1-948-11-05 (6 sheets, No Rev.)

STC Strength: 2,000 pounds

STC #: SA1577NM

Secondary Horizontal Anchor:

The approved anchor is an Embraer design that  
is available as an Embraer factory option.  
This anchor is shown on Embraer drawings:

Sheet 1 of 3, 110K1-948-10 Rev.N

Sheet 2 of 3, 110K1-948-10 Rev.N

Sheet 3 of 3, 110K1-948-10 Rev.L

Strength: 750 pounds

STC #: NA (Factory Installation)

Floor Platform & Handrails,

Jump Step & Attachment:

MEDC-739- Floor, Platform & Smokejumper Step  
& Bracket for Bandeirante Aircraft

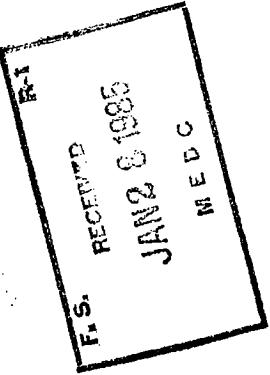
22 January 1985

018/TA/84-MH

U.S. Forest Service  
Equipment Development Center  
Building 1  
Fort Missoula  
Missoula, Montana 59801

Attn: Dave Pearce

Dear Mr. Pearce,



Please find enclosed nine (9) sets of blueprints, pertaining to modification of Embraer EMB 110 aircraft, to a smokejump configured aircraft.

Blueprints are numerically identified as follow:

- |  |                         |
|--|-------------------------|
| 1 of 3 Sistema para salto de paracaidistas | 110K1-948-10 Rev.N      |
| 2 of 3 Sistema para salto de paracaidistas | 110K1-948-10 Rev.N      |
| 3 of 3 Sistema para salto de paracaidistas | 110K1-948-10 Rev.I      |
| 1 of 6 Cabo Vertical Installation          | 110K1-948-11-05 No Rev. |
| 2 of 6 Cabo Vertical Installation          | 110K1-948-11-05 No Rev. |
| 3 of 6 Cabo Vertical Installation          | 110K1-948-11-05 No Rev. |
| 4 of 6 Cabo Vertical Installation          | 110K1-948-11-05 No Rev. |
| 5 of 6 Cabo Vertical Installation          | 110K1-948-11-05 No Rev. |
| 6 of 6 Cabo Vertical Installation          | 110K1-948-11-05 No Rev. |

Please inspect drawings for accuracy and content. Your comments regarding drawings would be appreciated.

If you have any further questions, do not hesitate to contact me at your convenience.

Sincerely,

*Mike Hamilton*

Mike Hamilton  
Technical Representative

MH/s1.  
Encl.

United States of America

Department of Transportation - Federal Aviation Administration

# Supplemental Type Certificate

Number SA1577NM

This certificate, issued to: United States Forest Service  
Building #1 - Fort Missoula  
Missoula, Montana 59801

confirms that the change in the type design for the following product with the limitations and conditions  
therefor as specified herein meets the airworthiness requirements of Part 23 of the Federal Aviation

Regulations. Also, see Type Certificate Data Sheet for additional certification basis.

Original Product — Type Certificate Number: A2150

Make: Empresa Brasileira de Aeronautica S.A.

Model: Embraer Bandeirante EMP-110P1 and EMP-110P2

Description of Type Design Change:

Installation of static-line anchor-cable in accordance with FAA sealed Drawing No.  
MEDC-732 dated July 1983, FAA approved March 16, 1984 or subsequent approved revisions.

### Limitations and Conditions:

This approval should not be extended to other aircraft of this model on which other  
previously approved modifications are incorporated unless it is determined that the  
interrelationship between this change and any other previously approved modification  
will introduce no adverse effect upon the airworthiness of the aircraft.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered,  
rendered suspended or terminated at date as otherwise established by the Administrator of the  
Federal Aviation Administration.

Date of application: July 5, 1983

Date received:

Date of issuance: March 16, 1984

Date amended:



By direction of the Administrator  
*Woodford R. Boyce*

Woodford R. Boyce, (Signature) Manager  
Denver Aircraft Certification Office  
Northwest Mountain Region, Aurora, Colorado  
(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

NORTHWEST MOUNTAIN REGION  
Denver Aircraft Certification Office  
10455 East 25th Avenue - Suite 307  
Aurora, Colorado 80010  
(303) 340-5575 or 5578

March 23, 1984

Mr. Lee I. Northcutt, Director  
Missoula Equipment Development Center, USFS  
Building #1 - Fort Missoula  
Missoula, Montana 59801

Dear Mr. Northcutt:

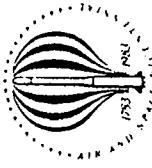
Project No. A976NMD-S

We have received and reviewed your drawings received by us on January 18 and March 15.

With these data and the conformity inspection and test results of August 17, 1983, performed in Fairbanks, Alaska; you have satisfactorily demonstrated compliance with the applicable certification regulations. Accordingly, we have enclosed Supplemental Type Certificate SA1577NM, installing static-line vertical anchor cable in the Embraer Bandeirante EMP-110P1 and EMP-110P2, and a Federal Aviation Administration sealed copy of Sheet #1 of your top drawing.

This STC is official FAA approval of your installation and may be used to authorize identical installations on other aircraft of the same model, subject to the limitations noted on the certificate. It may be transferred or otherwise made available to another party by means of a licensee arrangement in accordance with Federal Aviation Regulations (FAR) 21.47. You are requested to advise this office within 30 days after the transfer when you transfer or grant licensee rights to the STC in order that we may take the necessary recording or reissuance action.

As recipient of this approval, except as provided in FAR 21.3(d), you are required to report any failure, malfunction, or defect in any product or part manufactured by you that you have determined has resulted or could result in any of the occurrences listed in FAR Part 21.3(c). The report should be communicated initially by telephone to the Manager, Denver Aircraft Certification Office, telephone number (303) 340-5575, within 24 hours after it has been determined that the failure has occurred. In addition, written notification to the Manager, ANM-170D, at the above address is required. FAA Form 8330-2 (Malfunction or Defect Report) or any other appropriate format is acceptable in transmitting the required details.



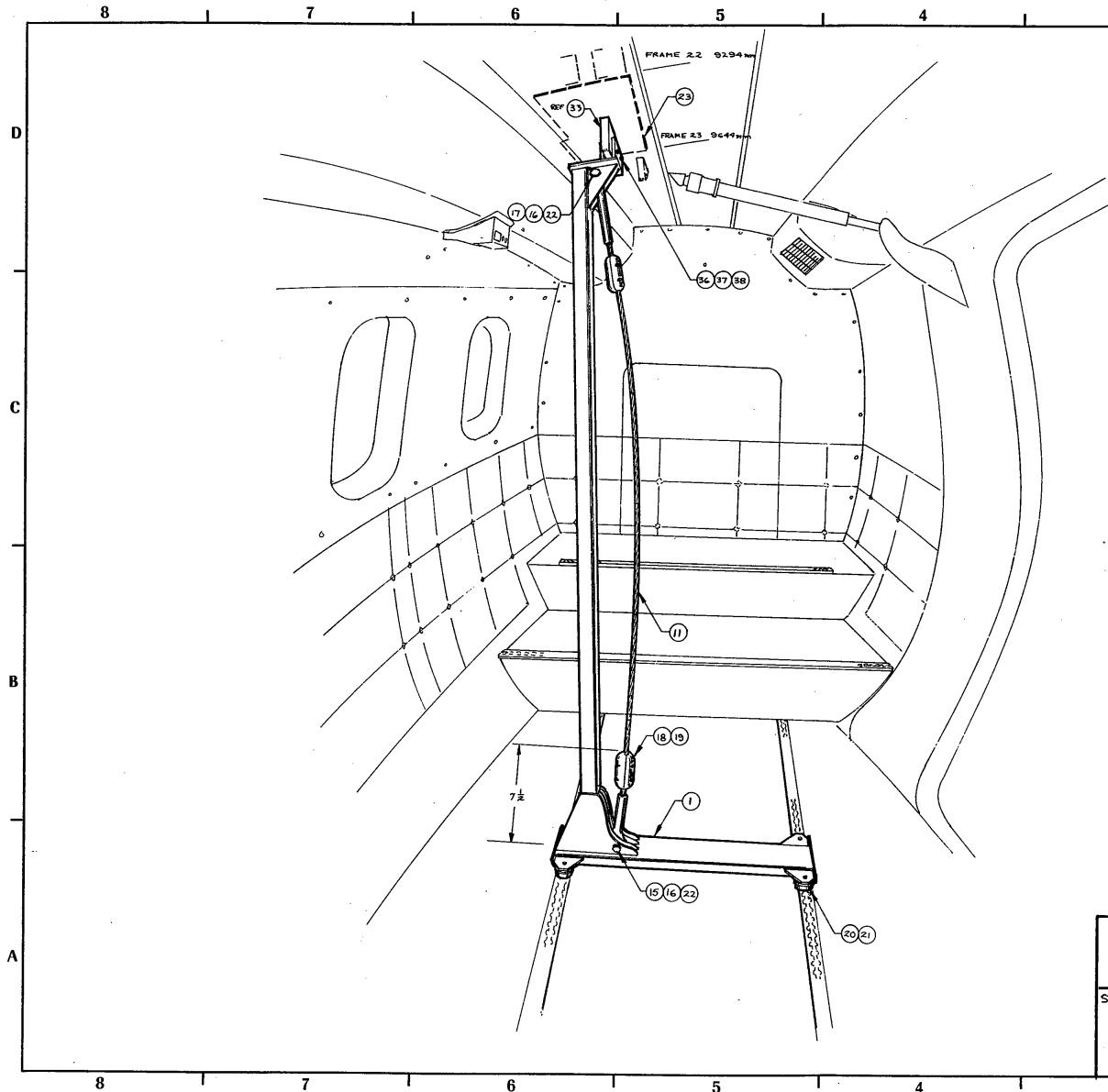
Edward Warren: First American Aloft

If you plan to manufacture replacement or modification parts for sale in conformance with approved data listed on the Certificate, you are required to comply with FAR 21.303. A Parts Manufacturer Approval (PMA) may be issued under the provisions of FAR 21.303(d) when you submit a statement certifying that you have established a fabrication inspection system as required by FAR 21.303(h). The identification requirements for parts produced under a PMA are in FAR 45.15. Your statement may be in letter form, with a reference to the STC number, and should be addressed to: Federal Aviation Administration, Denver Aircraft Certification Office, 10455 E. 25th Avenue, Suite 307, Aurora, Colorado 80012.

Sincerely,

*Woodford R. Boyce*  
Woodford R. Boyce  
Manager, Denver Aircraft  
Certification Office

Enclosures



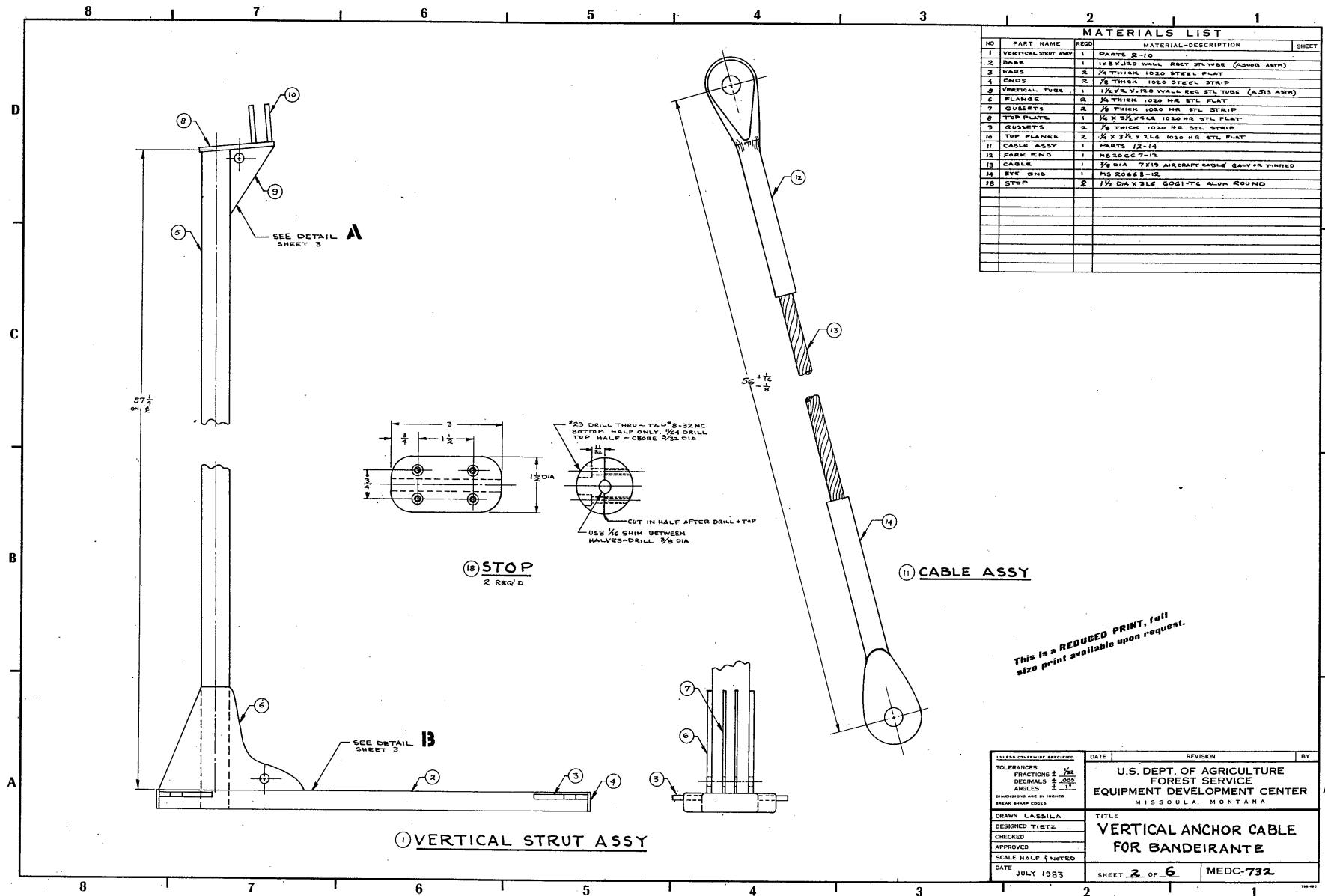
MATERIALS LIST			
NO	PART NAME	REQD	MATERIAL-DESCRIPTION
1	VERTICAL STRUT ASSY	1	PARTS 2-10
11	CABLE ASSY	1	PARTS 12-14
16	BOLT	1	AN 8-32
16	NUT	2	AN 310-8
17	STOP	1	PART 17-18
18	STOP	2	PART 18
19	SCREWS	8	4-32 NC X 1/8" LC SOCKET NO-CAP SCREW
20	DOUBLE SWD	4	AEROGUARD #32119
21	WASHER	4	PLAIN WASHER 1 3/16"OD X 1/16"ID X 1/8"THICK
22	PIN	2	MS 24465-302 COTTER PIN
23	UPPER SUPPORT	1	PARTS 24-35
26	BOLT	2	AN 8-18
37	NUT	2	AN 310-5
38	PIN	2	MS 24465-153

NOTES:

- ALL WELDS SHALL COMPLY WITH FAA PUBLICATION EA-AAC 45.13-1A & 2A LATEST REVISION CHAPTER 2, SECTION 2. WELD SYMBOLS ARE ACCORDING TO AMERICAN STANDARD WELDING SYMBOLS. THE ANCHOR AND CABLE ARE TO BE MADE BY OR UNDER THE SUPERVISION OF FAA CERTIFIED AIRCRAFT MECHANIC.
- THE CABLE AND ENDS ARE TO BE SWAGED IN ACCORDANCE TO FAA PUBLICATION EA-AAC 45.13-1A & 2A LATEST REVISION CHAPTER 4, SECTION 1.
- POSITION VERTICAL CABLE ASSY TO ALLOW OPENING THE IN-FLIGHT DOOR. ALSO THE STATIC LINE ROUTED OUT THE DOOR OPENING IS TO CLEAR THE IN-FLIGHT DOOR EDGE AND CONTACT ONLY THE PART OUTSIDE EDGE OF IN-FLIGHT DOOR OPENING. THEN DRILL HOLES IN ANCHOR (PART 33) TO MATCH VERTICAL STRUT ASSY FOR BOLT (PART 34).
- BOLTS PARTS 16, 17 AND 32 SHALL NOT BE SHORTER THAN SPECIFIED NOR USED WITH WASHER'S BECAUSE THE BRACKETS MUST NOT BE COMPRESSED.
- LOCATE TOP STOP TO ACCOMMODATE OPERATIONAL CONSIDERATIONS.
- THE VERTICAL STRUT ASSY SHALL BE PRIMED AND PAINTED.

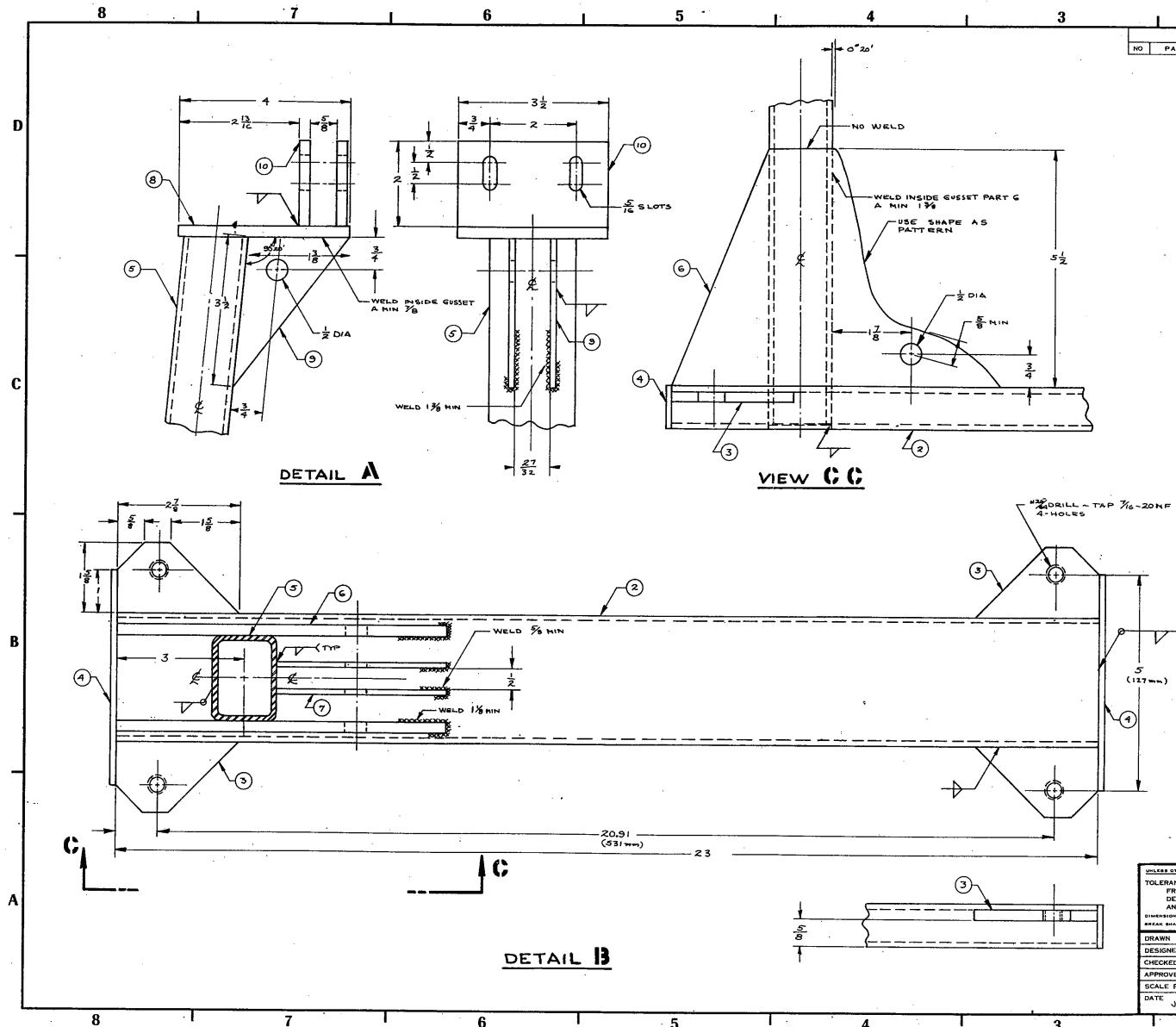
This is a REDUCED PRINT, full size print available upon request.

STC NO. SA1577NM MARCH 16, 1984 2000 LB	UNLESS OTHERWISE SPECIFIED DIMENSIONS IN INCHES DRAWN BY: LASSILA DESIGNED BY: TISZTE CHECKED BY: APPROVED BY: SCALE: NONE DATE: JULY 1983	DATE: _____ REVISION: _____ BY: _____ U.S. DEPT. OF AGRICULTURE FOREST SERVICE EQUIPMENT DEVELOPMENT CENTER MISSOULA, MONTANA TITLE: VERTICAL ANCHOR CABLE FOR BANDEIRANTE SHEET 1 OF 6 MEDC-732
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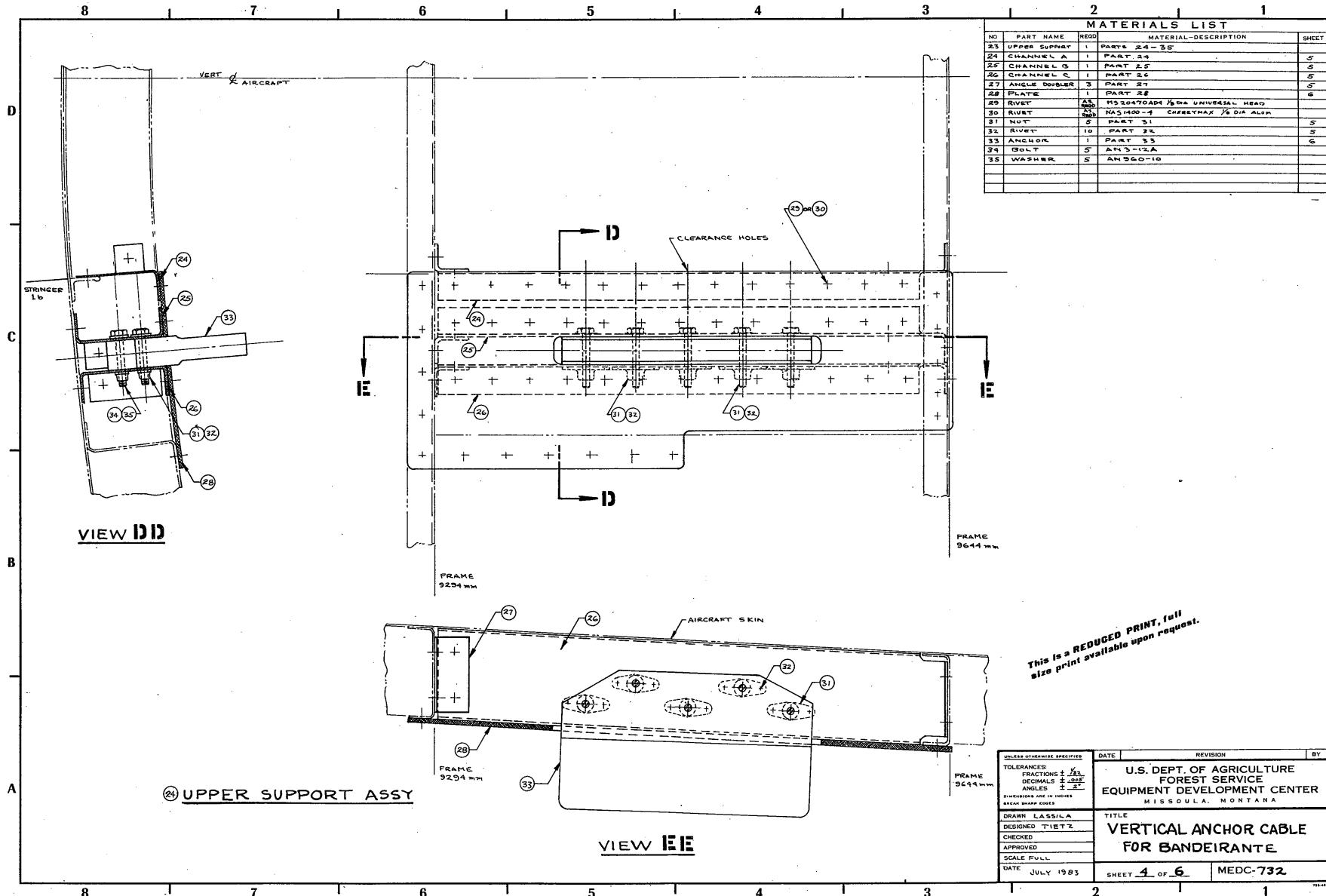
**MATERIALS LIST**

NO	PART NAME	REQD	MATERIAL-DESCRIPTION	SHEET
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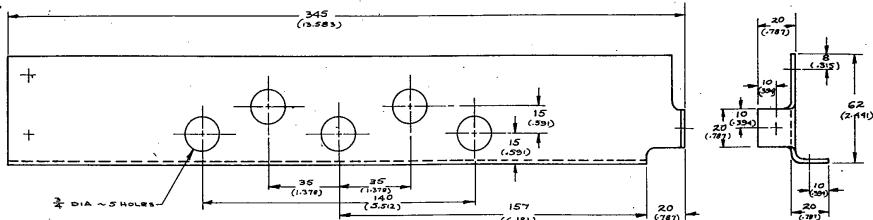


This is a REDUCED PRINT, full size print available upon request.

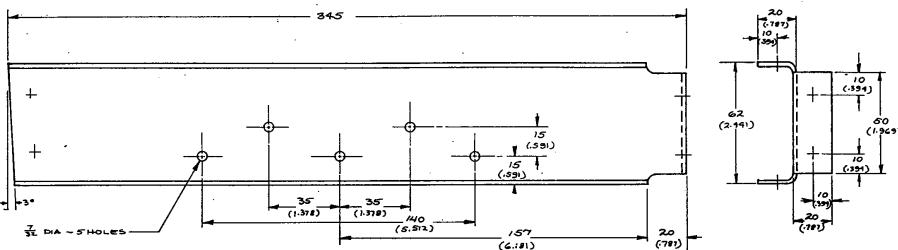
UNLESS OTHERWISE SPECIFIED	DATE	REVISION	BY
TOLERANCES DIMENSIONS $\pm \frac{1}{2}$ DECIMALS $\pm .005$ ANGLES $\pm 1^\circ$	U.S. DEPT. OF AGRICULTURE FOREST SERVICE EQUIPMENT DEVELOPMENT CENTER MISSOULA, MONTANA		
SIMILAR PARTS ARE IN INCHES SPECIAL SHAPES CODES			
DRAWN LASSILA	TITLE		
DESIGNED TIEZT	VERTICAL ANCHOR CABLE		
CHECKED	FOR BANDEIRANTE		
APPROVED			
SCALE FULL			
DATE JULY 1983	SHEET <u>3</u> OF <u>6</u> MEDC-732		



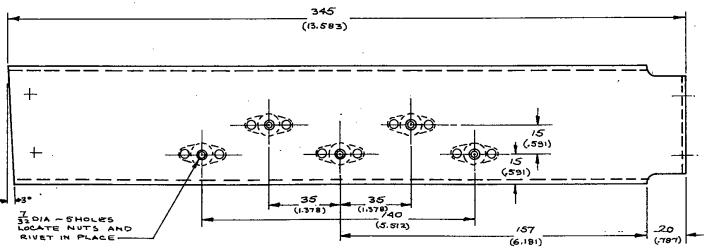
MATERIALS LIST			
NO.	PART NAME	REQD.	MATERIAL DESCRIPTION
24	CHANNEL A	1	.080 THICK 2024-T3 ALUM
25	CHANNEL B	1	ALLOY SHEET
26	CHANNEL C	1	
27	ANGLE DOUBLER	3	
32	RIVETS	10	MS 21078-3 HS 204262A03-5



②4 CHANNEL A



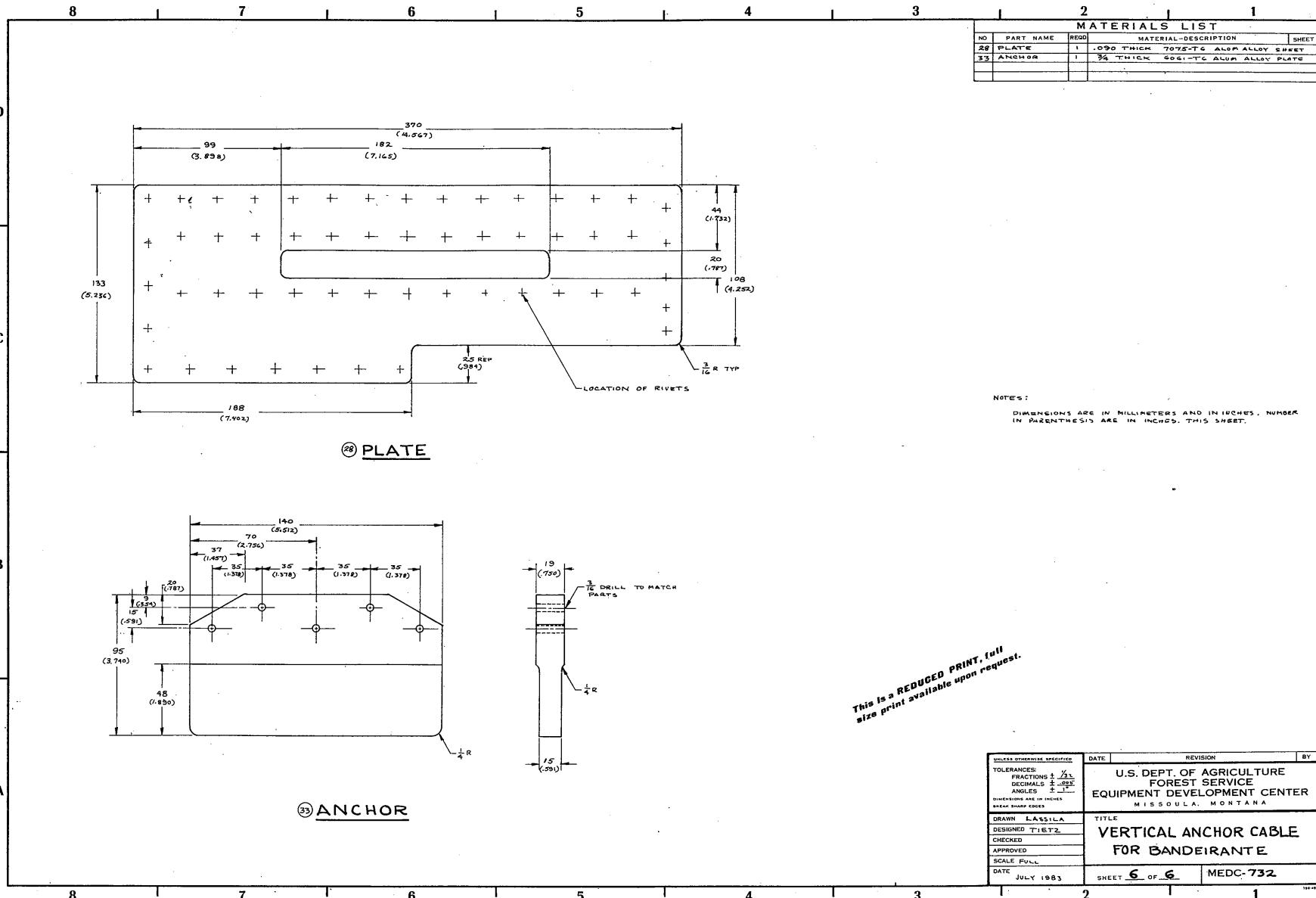
(25) CHANNEL B

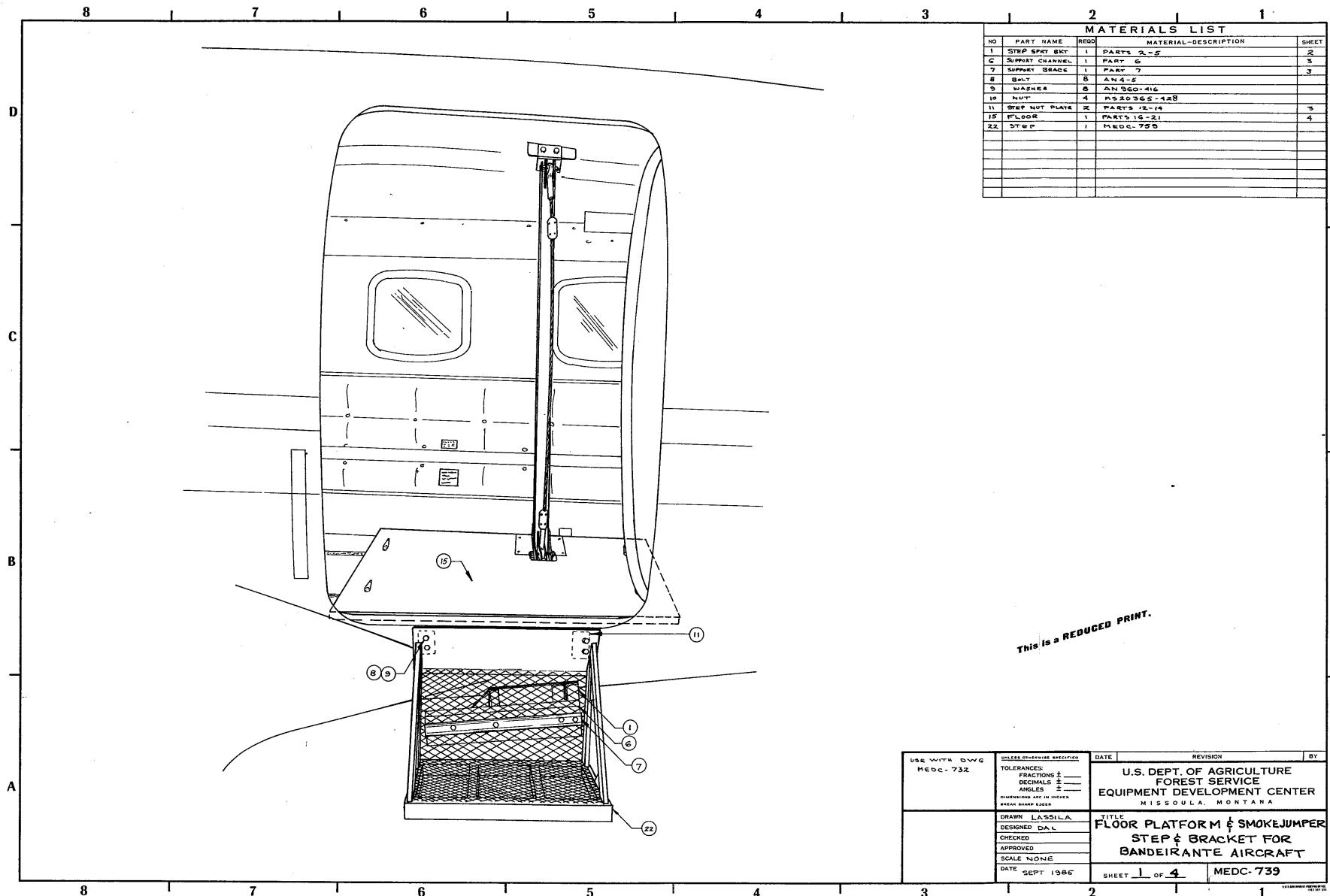


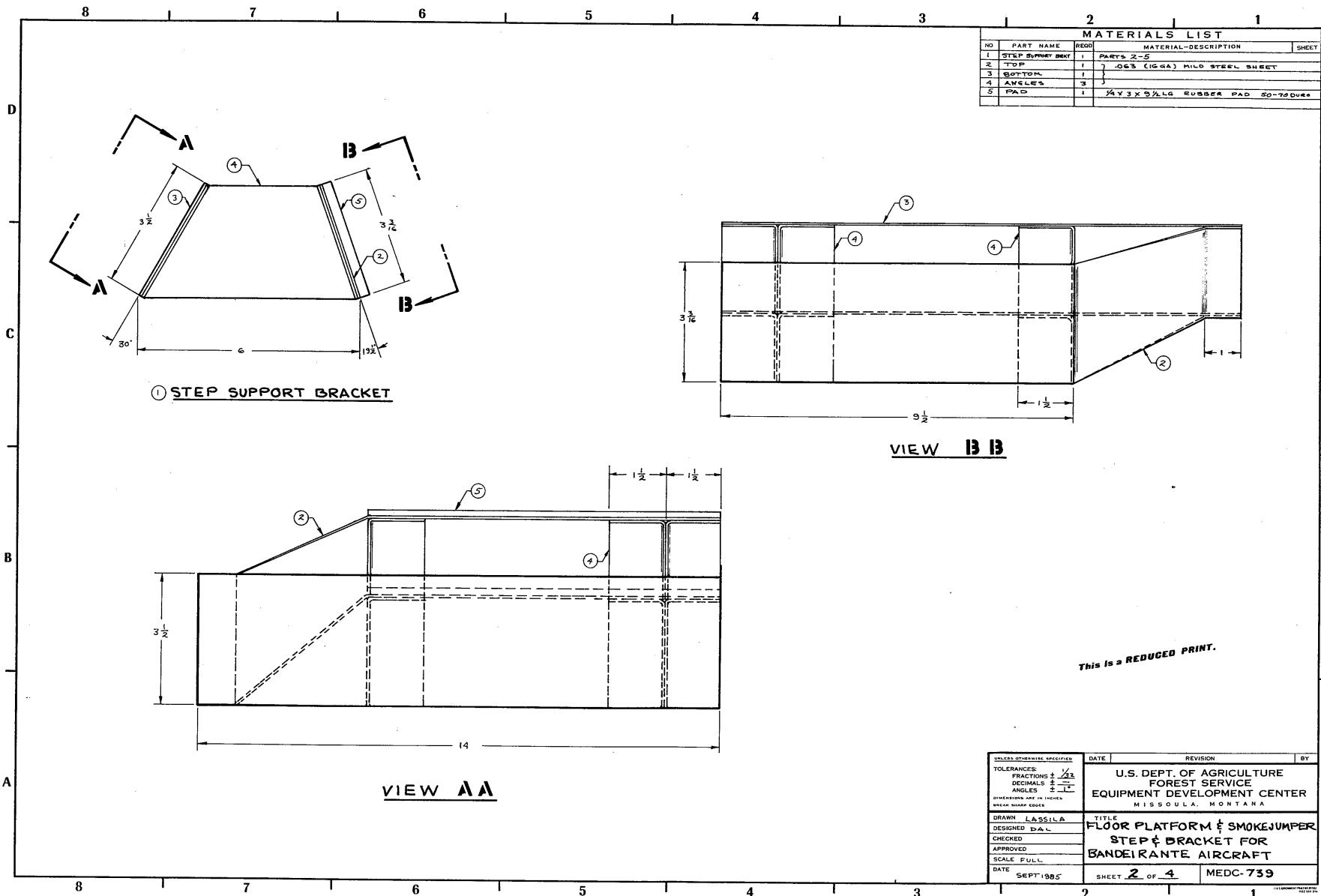
②6 CHANNEL C

This is a REDUCED PRINT, full  
size print available upon request.

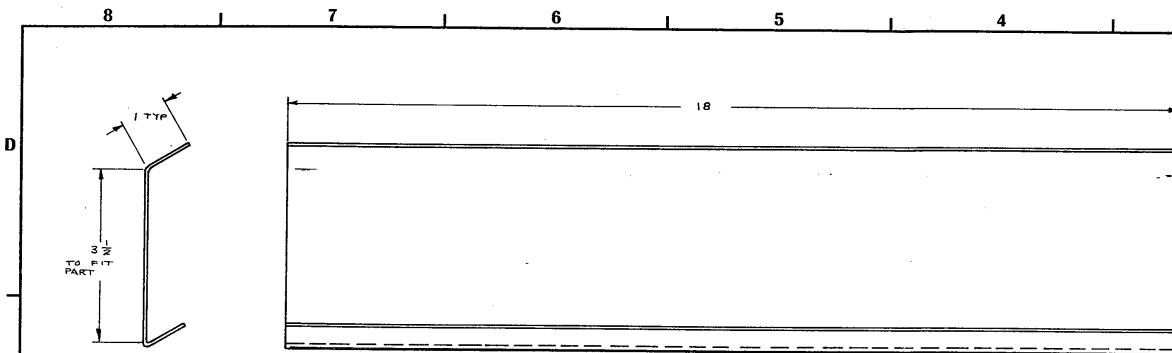
UNLESS OTHERWISE SPECIFIED	DATE	REVISION	BY
TOLERANCES: FRACTIONS $\pm \frac{1}{32}$ DECIMALS $\pm .005$	U.S. DEPT. OF AGRICULTURE FOREST SERVICE EQUIPMENT DEVELOPMENT CENTER MISSOULA, MONTANA		
DIMENSIONS ARE IN INCHES BREAK SHARP EDGES			
DRAWN LASILLA	TITLE		
DESIGNED TIETZ	VERTICAL ANCHOR CABLE		
CHECKED	FOR BANDEIRANTE		
APPROVED			
SCALE FULL			
DATE JULY 1983	SHEET <u>5</u> OF <u>6</u>	MEDC-732	







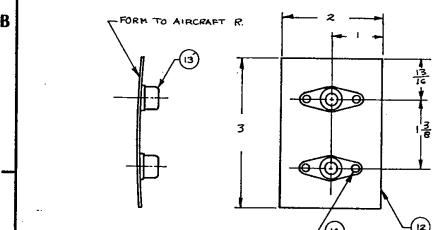
MATERIALS LIST				
NO.	PART NAME	RECD.	MATERIAL-DESCRIPTION	SHEET
6	SUPPORT BRACE	1	.062 THICK GОСІ-ТА АЛУМ АЛЮВ СЛІТ	1
7	SUPPORT BRACE	1	.063 THICK (16GA) MILD STEEL STRIP	1
12	STEP NUT PLATE	2	PARTS 12-14	1
13	NUTS	1	.063 THICK GОСІ-ТА АЛУМ АЛЮВ СЛІТ	1
14	RIVETS	8	M5 Z.0126 A03-5'	1



⑥ SUPPORT CHANNEL



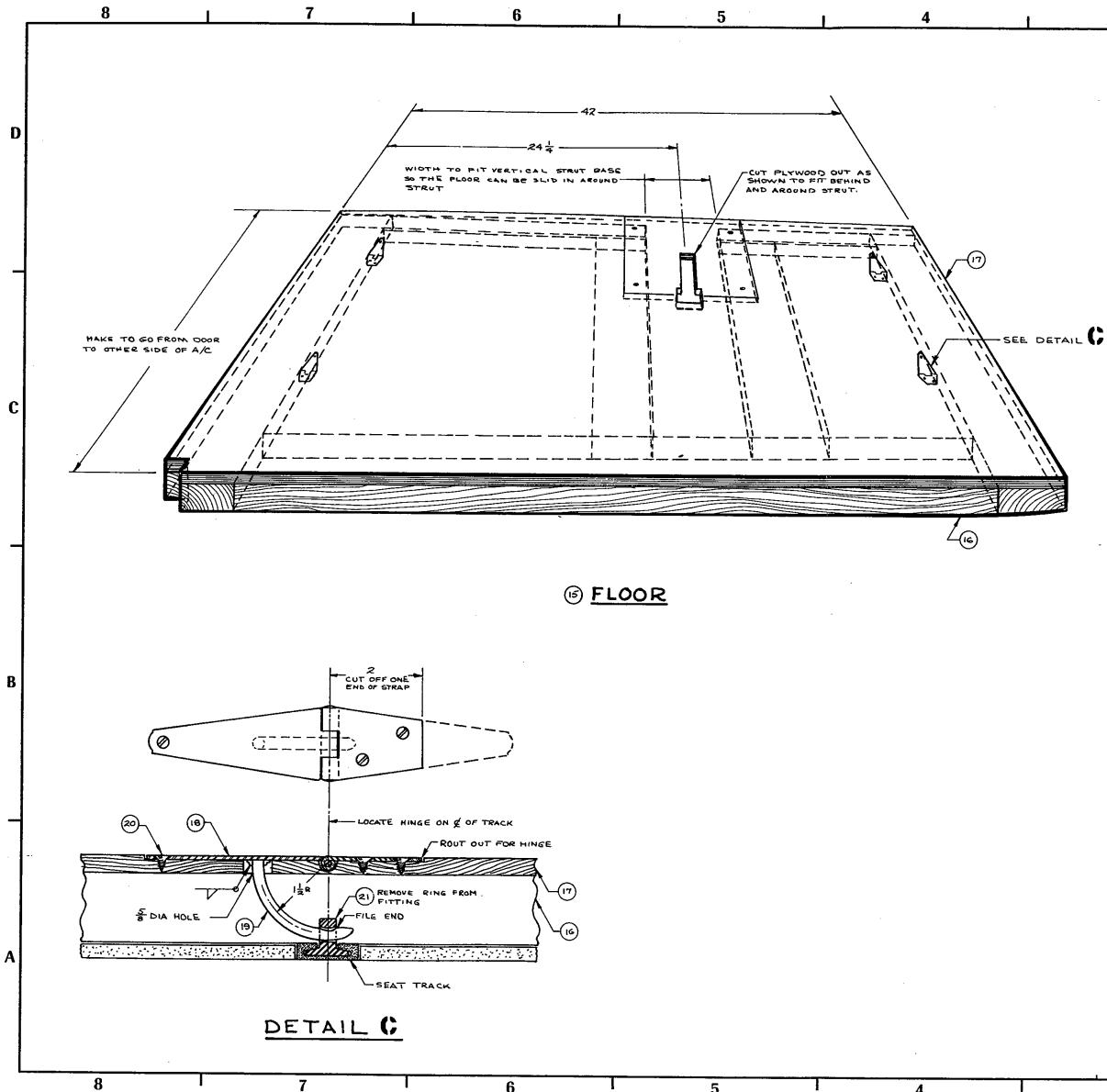
⑦ SUPPORT BRACE



⑪ STEP NUT PLATE

This is a REDUCED PRINT.

UNLESS OTHERWISE SPECIFIED	DATE	REVISION	BY
TOLERANCES	U.S. DEPT. OF AGRICULTURE FOREST SERVICE EQUIPMENT DEVELOPMENT CENTER MISSOULA, MONTANA		
FRACTIONS $\pm \frac{1}{16}$			
DECIMALS $\pm .005$			
ANGLES $\pm 3^\circ$			
DIMENSIONS IN INCHES			
MECHANICAL SHARP EDGES			
DRAWN, LASSIL, A	TITLE		
DESIGNED, DA-L	FLOOR PLATFORM & SMOKEJUMPER		
CHECKED	STEP & BRACKET FOR		
APPROVED	BANDEIRANTE AIRCRAFT		
SCALE FULL			
DATE	SEPT 1985		
	SHEET	3	OF 4
	MEDC-739		



MATERIALS LIST			
NO	PART NAME	REQD	MATERIAL-DESCRIPTION
15	FLOOR	1	PARTS IC-2J
16	BASE	1	WOOD 2X4 FIR OR PINE
17	TOP	1	3/8" A/C EXT PLYWOOD
18	HINGE	4	STRAP HINGE STEEL
19	RODS	4	1/4" DIA. STAINLESS MILD STL.
20	SCREWS	12	1/8" X 1 1/2" WOOD SCREWS
21	DOUBLE STUD	4	AEROGIP #32151 DOUBLE STUD/LOW PROFILE

UNLESS OTHERWISE SPECIFIED	DATE	REVISION	BY
TOLERANCES FRACTIONS $\pm$ DECIMALS $\pm$ ANGLES $\pm$ DIMENSIONS ARE IN INCHES BREAK SHARP EDGES	U.S. DEPT. OF AGRICULTURE FOREST SERVICE EQUIPMENT DEVELOPMENT CENTER MISSOULA, MONTANA		
DRAWN LASSILA DESIGNED DAL CHECKED APPROVED SCALE NONE	TITLE FLOOR PLATFORM & SMOKEJUMPER STEP & BRACKET FOR BANDEIRANTE AIRCRAFT		
DATE SEPT 1985	SHEET 4 OF 4	MEDC-739	