

SEECHEPART 90,
qq. 100 £ 200

BEECH 90

Accessories Required For Smokejumping:

Primary Floor Anchor:

MEDC-617- Anchor cable for Beech 90, 99, 100,
& 200 & Nomad N24A Series Aircraft
STC Strength: 2,000 pounds
STC #: SA566NW

Other Accessories:

MEDC-643- Handrail & Wind Deflector for Beech
90, 99, 100, & 200 Series Aircraft
MEDC-644 Floor Panels for Beechcraft 90, 99,
100 & 200 Series Aircraft

Jump Step & Attachment:

Jump step not used on Beech 90

Note: There is no secondary anchor design for the Beech 90.

BEECH 99A

Accessories Required For Smokejumping:

Primary Floor Anchor:

MEDC-617- Anchor cable for Beech 90, 99, 100,
& 200 & Nomad N24A Series Aircraft
STC Strength: 2,000 pounds
STC #: SA566NW

Secondary Anchor:

MTDC-809- Horizontal Anchor Track for Beech
99A
STC Strength: 750 pounds
STC #: SA4047NM

Other Accessories:

MEDC-643- Handrail & Wind Deflector for Beech
90, 99, 100, & 200 Series Aircraft
MEDC-644 Floor Panels for Beechcraft 90, 99,
100 & 200 Series Aircraft

Jump Step & Attachment:

MEDC-759- Stepbasket (universal), Smokejumper
Aircraft
MEDC-794- Universal Step Strut
MEDC-785 Jump Step Attachment Points, Beech
99

Note: The Beech 99 requires a door brace
between the aft air stair door and the
forward jump door. Contact MTDC for
information about this accessory.

KING AIR 200

Accessories Required For Smokejumping:

Primary Floor Anchor:

MEDC-617- Anchor cable for Beech 90, 99, 100,
& 200 & Nomad N24A Series Aircraft
SRC Strength: 2,000 pounds
SRC #: SA566NW

Secondary Anchor:

Other Accessories:

MEDC-643- Handrail & Wind Deflector for Beech
90, 99, 100, & 200 Series Aircraft
MEDC-644 Floor Panels for Beechcraft 90, 99,
100 & 200 Series Aircraft

Jump Step & Attachment:

MEDC-759- Stepbasket (universal), Smokejumper
Aircraft
MEDC-794- Universal Step Strut
Note: Contact MTDC for information about
step attachment configuration for the King
Air 200.

United States of America
Department of Transportation - Federal Aviation Administration

Supplemental Type Certificate

Number SA566NW

This certificate, issued to U. S. Forest Service

certifies that the change in the type design for the following product with the limitations and conditions therefore specified herein meets the airworthiness requirements of Part * of the * regulations.

Original Product — Type Certificate Number: No. SA566NW for list of approved aircraft models and applicable airworthiness regulations.
Model:

Regulations.

*See attached Master Eligibility List (MEL) No. SA566NW for list of approved aircraft models and applicable airworthiness regulations.

Description of Type Design Change: Installation of a Parachute Deployment Static Line Attachment System in accordance with U.S. Forest Service Specification and Installation Instructions; and Drawing MEDC-617, Sheets 1 and 2.

NOTE: The static line and anchors are attached to the Beech (Aeroquip) R.H. Seat track.

Limitations and Conditions: The approval of this change in type design applies basically to the above model aircraft only. 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 of those other previously approved modifications will introduce no adverse effect upon the airworthiness of that aircraft. A copy of this Certificate, Addendum No. SA566NW, and MEL No. SA566NW shall be maintained as part of the permanent records for the modified aircraft.

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

Date of application: January 25, 1978

Date of issuance: March 27, 1978

Date issued:

Date amended: July 14, 1982



By direction of the Administrator
Mark E. Baldwin, (Signature) Chief,
Denver-Aircraft Certification Field 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.



DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
NORTHWEST MOUNTAIN REGION
Denver Aircraft Certification Field Office
10455 East 25th Avenue - Suite 307
Aurora, Colorado 80010
(303) 340-5302 or 5569

July 14, 1982

USDA Forest Service
Equipment Development Center
Building 1, Fort Missoula
Missoula, Montana 59801

Gentlemen:

Project No. A687RM-S

We have satisfactorily completed our evaluation of the amendment to Supplemental Type Certificate (STC) SA566NW. The STC has been amended to increase the maximum allowable load on the static line anchor cable to 2420 pounds. Also, Item II on the Master Eligibility Listing (MEL) was amended to include the Beech Model Series 100 aircraft. The specification and installation instructions have also been amended to increase the load to 2420 pounds and include a statement concerning the slack in the cable assembly.

A copy of the amended certificate, MEL, and installation instructions are enclosed. Please return your previously issued STC to this office for cancellation.

As recipient of this approval, except as provided in Federal Aviation Regulations (FAR) Part 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 and subsequently in writing to the Chief, Denver Aircraft Certification Field Office, ANM-170D, at the telephone number and address indicated above. This first contact shall take place within 24 hours after it has been determined that the failure required to be reported has occurred. Federal Aviation Administration Form 8330-2 (Malfunction or Defect Report) or any other appropriate format is acceptable in transmitting the required details.

If you plan to manufacture or sell parts for installation on type certified aircraft, please review FAR Part 21.303 which is applicable to replacement and modification parts. Applications for Parts Manufacturer Approval

may be made in letter form, listing the following information: (1) part name, (2) part number, (3) STC number, (4) model or type certificated product on which the part will be installed, and (5) a statement certifying that a fabrication inspection system has been established in accordance with FAR Part 21.303(h). This application should be mailed to the address indicated above.

Sincerely,



Mark E. Baldwin
Chief, Denver Aircraft
Certification Field Office

3 Enclosures

Supplemental Type Certificate

(Continuation Sheet) July 14, 1982

Number SA566NW

SUPPLEMENTAL TYPE CERTIFICATE ADDENDUM NO. SA566NW

The conditions and limitation of Type Certificate Data Sheet Nos 3A20, A14CE and A24CE apply except where superseded by the following:

This Supplemental Type Certificate Data Sheet, which is part of STC SA566NW, prescribes the conditions and limitations under which the product for which the STC was issued meets the airworthiness requirements of the Federal Aviation Regulations:

- SUPPLEMENTAL TYPE CERTIFICATE HOLDER: United States Forest Service
I. BEECH MODEL SERIES 90, 99, 100 AND 200 AS MODIFIED BY STC SA566NW

Airframe: No change

Engines: No change

Performance: No change

Limitations: No change

Placards: The following PLACARDS must be located near the Cargo Door that reads:

- (1) THE MAXIMUM ALLOWABLE LOAD ON THE STATIC LINE ATTACH CABLE IS 2420 POUNDS IN A TYPICAL PARACHUTE DEPLOYMENT CONFIGURATION
- (2) THE CABLE STOP MUST BE ADJUSTED ALONG THE LENGTH OF THE CABLE SO THAT THE PARACHUTE DEPLOYMENT BAG CANNOT TRAIL AFT OF THE HORIZONTAL STABILIZER

NOTE: A determination was made that Supplemental Type Certificate SA566NW does not effect aircraft performance; therefore, no Airplane Flight Manual Supplement change was deemed necessary.

-END-

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 F.A.R. 27.47.

SPECIFICATION AND INSTALLATION INSTRUCTION
FOR SMOKEJUMPER STATIC LINE ANCHOR CABLE FOR
BEECHCRAFT MODELS 90, 99, 100, AND 200 SERIES AIRCRAFT

Part	Load
Static Line Anchor Cable	2420# <u>1/</u>
1/	Load applied in a typical parachute deployment configuration with static line routed through the carabiner on the rear anchor.

Parts are fabricated as illustrated in drawing MEDC-617 sheets 1 and 2. All welding is by the arc process. Assembled anchor units are installed in the aircraft right hand seat track with the one using Part 24, side brace, placed opposite the door used for jumper deployment. Cable length between anchors shall be of adequate length to allow all jumpers to attach their deployment static line without having to move aft in the cabin. This will facilitate emergency evacuation. The cable assembly shall be installed with 4 inches of slack measured in extreme spread. Part #18 the cable stop must be adjusted along the length of the cable so the parachute deployment bag cannot trail aft of the horizontal stabilizer.

All assemblies fabricated from steel are to be painted with zinc chromate P-27 or equivalent corrosion protecting prior to installation in the aircraft.

Amended July 14, 1982

FA APPROVED

MASTER ELIGIBILITY LISTING NUMBER SA566NW

FOR

PARACHUTE DEPLOYMENT STATIC LINE ATTACHMENT SYSTEM

U.S. FOREST SERVICE

DATE: March 27, 1978

ITEM	AIRCRAFT MAKE	AIRCRAFT MODEL	ORIGINAL TYPE CERTIFICATE NUMBER	CERTIFICATION BASIS FOR ALTERATION	FAA SEALED DRAWING/ DRAWING LIST		AFM SUPPLEMENT NUMBER/ DATE	MEL AMENDMENT DATE
					NUMBER	REV.		
	Beech	65-90, 65-A90, 65-A90-1 65-A90-2 65-A90-3 65-A90-4 B90, C90, E90	3A20 (Rev.32)	CAR 3 eff. May 15, 1956 w/Amendments (See T.C. 3A20 page 24 for details)	U.S. Forest Service Dwg. No. MEDC-617 (Sheets 1 & 2)			
I	Beech	99, 99A, A99 A99A, B99, 100 A100, A100A, A100C, B100	A14CE	Part 23, dated 2/11/65 w/Amendments (See T.C. A14CE, page 15 for details)				July 14, 1982
II	Beech	200, A200, 200T	A24CE	Part 23, dated 2/1/65 w/Amendments (See T.C. A24CE, Page 6 for details)				
V	Beech	H18, E18S, C-45G, C-45H	A-765	CAR 03, 11-13-45 CAR 3, 11-1-49 as amended by 3-14	U.S. Forest Service Dwg. No. MEDC-617, Sheets 1 and 2			April 12, 1979



DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
NORTHWEST MOUNTAIN REGION
Denver Aircraft Certification Field Office
10455 East 25th Avenue - Suite 307
Aurora, Colorado 80010
(303) 340-5302 or 5569

July 29, 1982

USDA Forest Service
Equipment Development Center
Building 1, Fort Missoula
Missoula, Montana 59801

Gentlemen:

Project No. A687RM-S

We have satisfactorily completed our review of your drawing, MEDC-617, revision D, sheets 1 and 2.

Sheet 1 has been revised since the issuance of the amendment to Supplemental Type Certificate (STC) SA566NW, dated July 14. This revision added the length of the anchor cable and changed Note 3 to increase the cable assembly slack from 4 to 6 inches. This change on the drawing necessitates an amendment to the Specification and Installation Instruction.

Enclosed is a Federal Aviation Administration approved copy of the Specification and Installation Instruction, dated July 29, 1982, and drawing MEDC-617. Please return your previously issued STC to this office for cancellation.

Sincerely,

R. R.
R. Boyce
AUG 2 1992
MEDC

Woodford R. Boyce
Woodford R. Boyce
Acting Manager, Denver Aircraft
Certification Field Office

2 Enclosures

SPECIFICATION AND INSTALLATION INSTRUCTION
FOR SMOKEJUMPER STATIC LINE ANCHOR CABLE FOR
BEECHCRAFT MODELS 90, 99, 100 AND 200 SERIES AIRCRAFT

Part

Static Line Anchor Cable

2420# 1/

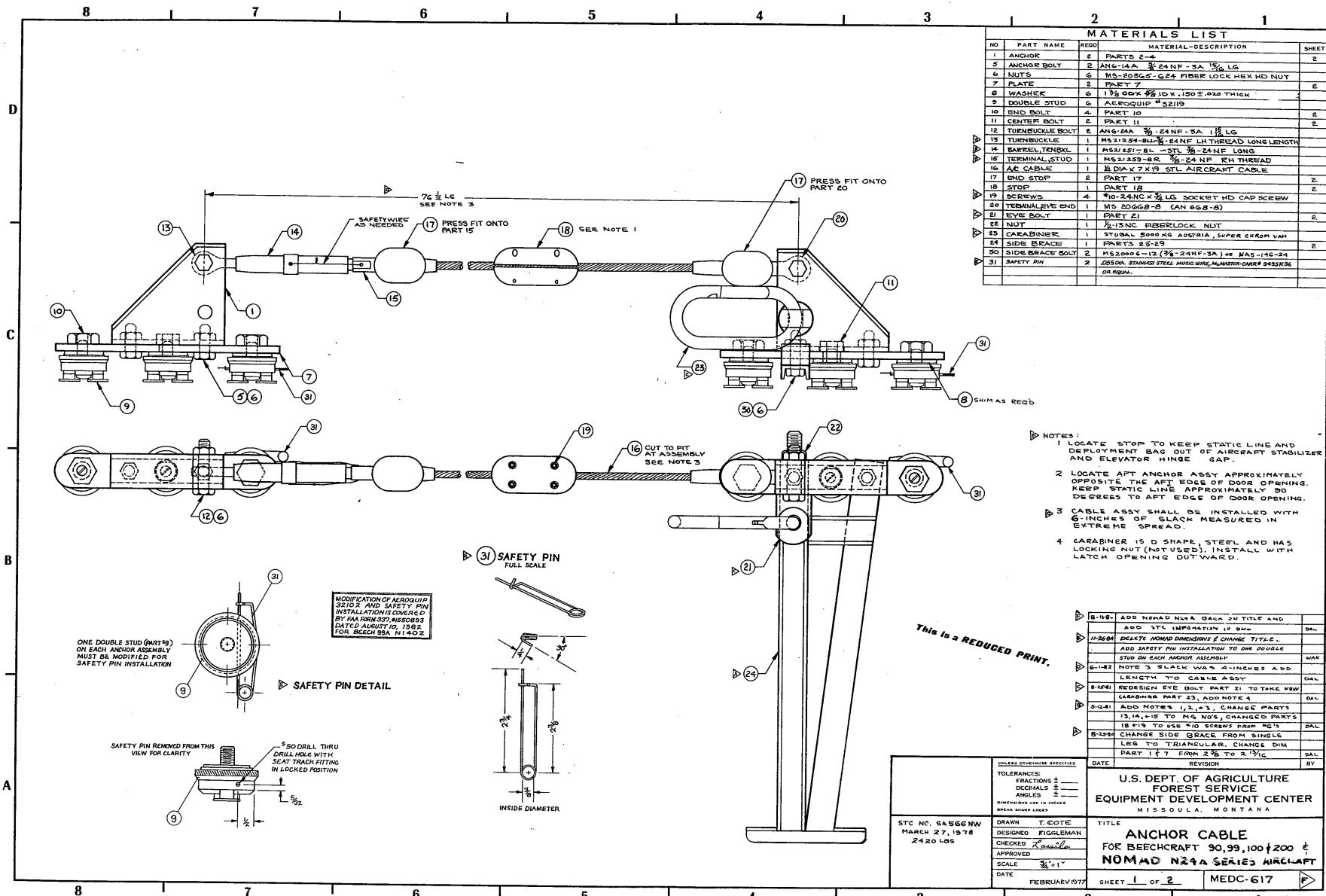
1/ Load applied in a typical parachute deployment configuration with static line routed through the carabiner on the rear anchor.

Parts are fabricated as illustrated in drawing MEDC-617 sheets 1 and 2. All welding is by the arc process. Assembled anchor units are installed in the aircraft right hand seat track with the one using Part 24, side brace, placed opposite the door used for jumper deployment. Cable length between anchors shall be 76 1/2 inches. The cable assembly shall be installed with 6 inches of slack measured in extreme spread. Part #18, the cable stop, must be adjusted along the length of the cable so the parachute deployment bag cannot trail aft of the horizontal stabilizer.

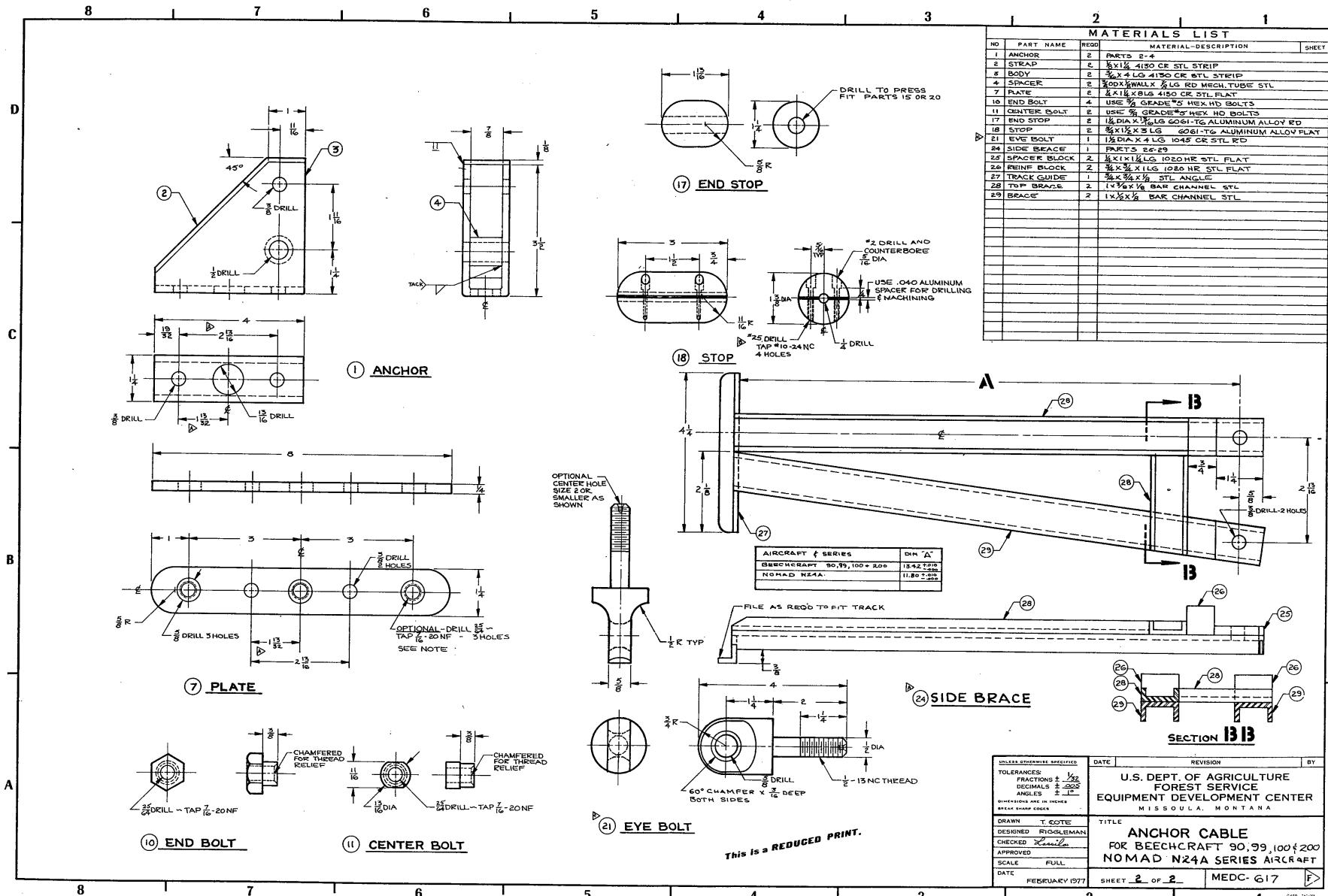
All assemblies fabricated from steel are to be painted with zinc chromate P-27 or equivalent corrosion protection prior to installation in the aircraft.

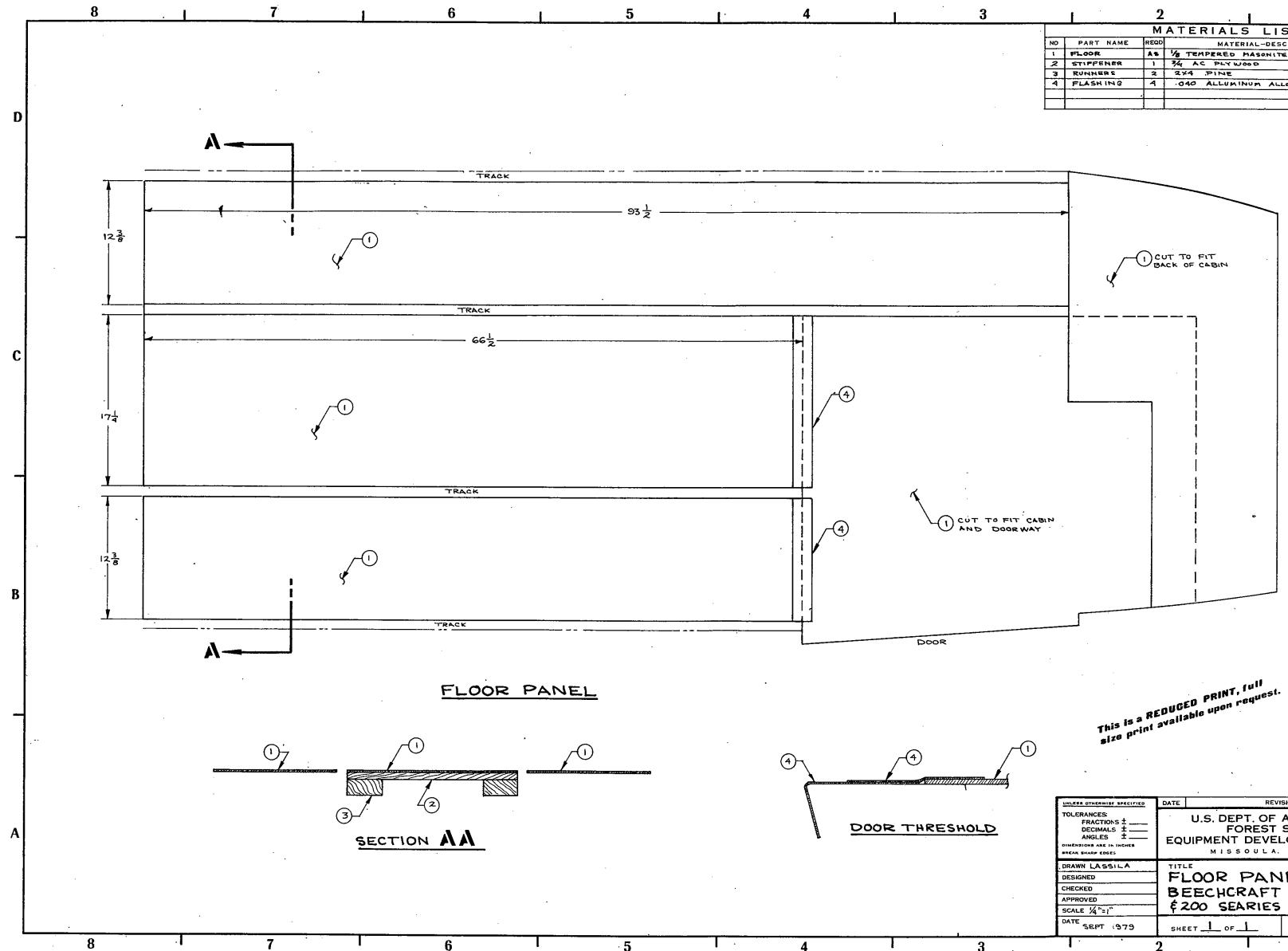
Amended July 14, 1982

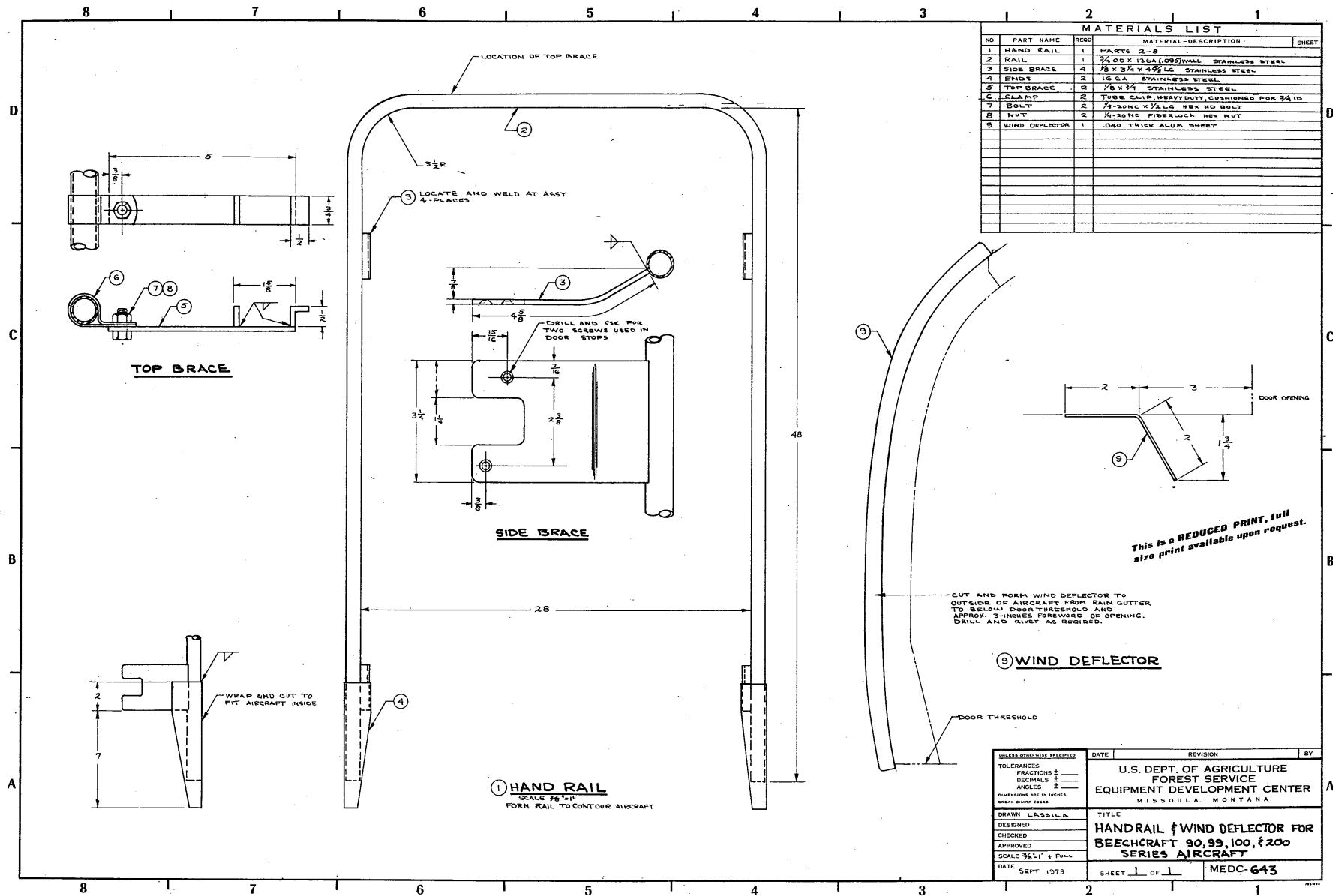
Amended July 29, 1982



MATERIALS LIST			
NO.	PART NAME	REQD	MATERIAL DESCRIPTION
1	ANCHOR	2	PARTS 2-4
2	STRAP	2	3/16 X 1/2 LG 4150 CR STL STRIP
3	BODY	2	3/4 X 4 LG 4150 CR STL STRIP
4	SPACER	2	3/8X1/2X1/2 LG RD MEC.H.TUBE STL
5	PLATE	2	2 1/16 X 8LG 4150 CR STL FLAT
6	END BOLT	4	USE 1/4 GRADE #8 HEX HD BOLTS
7	CENTER BOLT	1	1/2 DIA X 1 LG 1045 CR STL RD
8	END STOP	2	1/8 DIA X 1/2 LG GOGGI-TG ALUMINUM ALLOY RD
9	STOP	2	1/4 X 1/2 LG 1020 HR STL FLAT
10	SIDE BRACE	1	PARTS 26-29
11	SPACER BLOCK	2	1/4 X 1/2 LG 1020 HR STL FLAT
12	REINF BLOCK	2	3/8 X 3/8 X 1 LG 1020 HR STL FLAT
13	TRACK GUIDE	1	3/8 X 3/8 ST ANGLE
14	BRACE	2	1/4 X 1/2 BAR CHANNEL STL
15	GRACE	2	1 1/8 X 1/2 BAR CHANNEL STL







United States of America
Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

Number SA4047NM

This certificate, issued to USDA Forest Service
Missoula Technology and Development Center
certifies that the change in the type design for the following product with the limitations and conditions
thereof as specified herein meets the airworthiness requirements of Part 23 of the Federal Aviation
Regulations.

Original Product—Type Certificate Number A14CE

Make: Beech

Model: 99A

Description of Type Design Change:
Installation of horizontal anchor track and tether system for cargo
spotter.

Limitations and Conditions:

1. 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, suspended, revoked, or terminated at the time established by the Administrator of the Federal Aviation Administration.

Date of application: October 31, 1988

Determined:

Date of issuance: April 25, 1989

Decided:



By direction of the Administrator
Mick Moritz

MICHAEL H. BORFITT, (Signature) Supervisor
Denver Aircraft Certification Field 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 Field Office
10455 East 25th Avenue, Suite 307
Aurora, Colorado 80010
(303)370-5575

April 25, 1989

USDA Forest Service
Missoula Technology and Development Center
Building No. 1, Ft. Missoula
Missoula, Montana 59801

Project No. ANM-100D-0188

Gentlemen:

We have completed our evaluation of your supplemental Type Certificate (STC) project and find that you have satisfactorily demonstrated compliance with the applicable certification regulations. Accordingly, we have enclosed STC No. SA4047NM dated April 25, 1989, for the installation of a horizontal anchor track and tether system for cargo spotter in a Beech Model 99A.

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 your local 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 by 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 21.3(c). The report should be communicated initially by telephone to the Supervisor, Denver Aircraft Certification Field 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 Supervisor at the above address is required. FAA Form 8010-4, Malfunction or Defect Report, or any other appropriate format is acceptable in transmitting the required details.

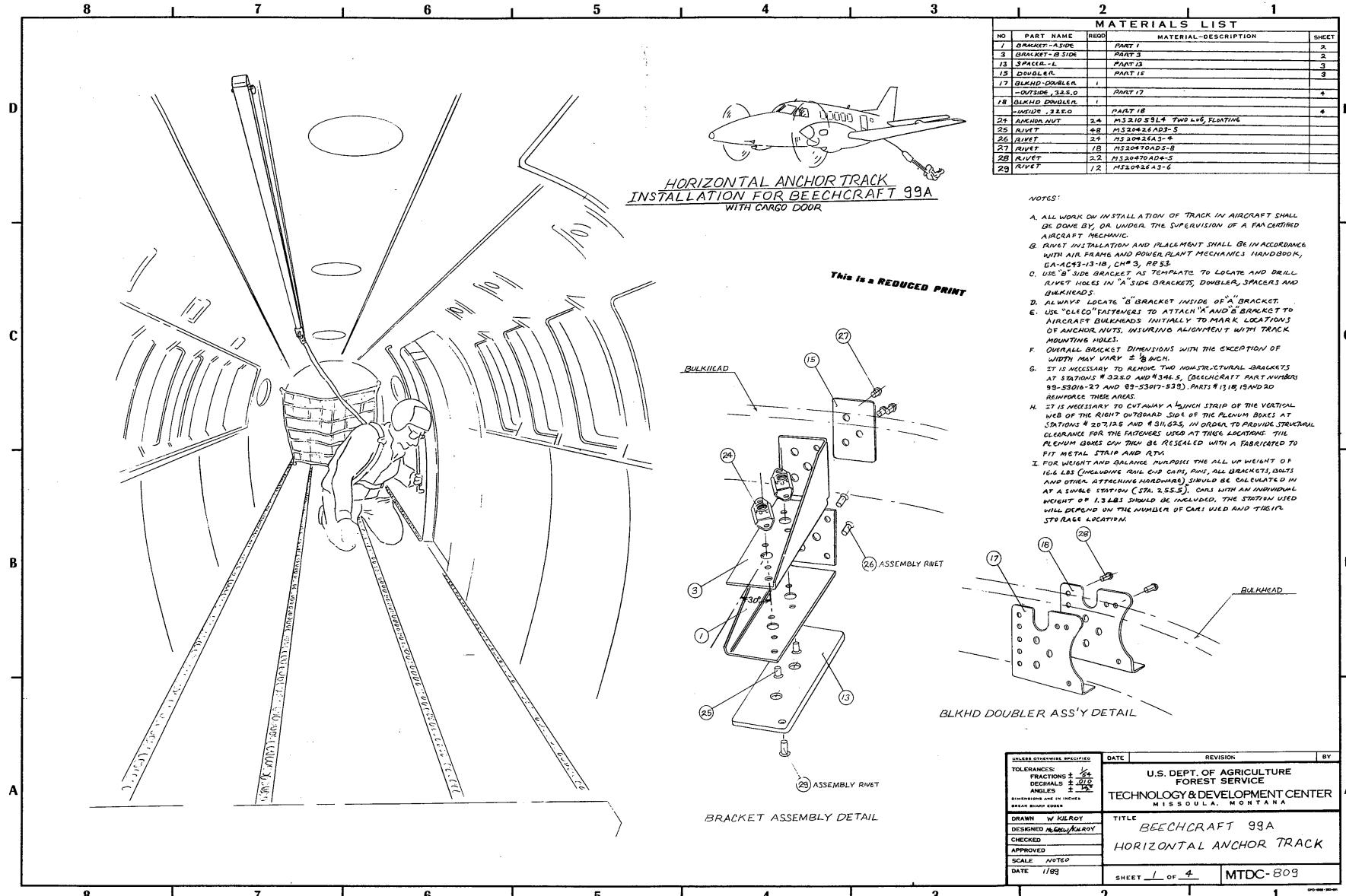
If you plan to manufacture replacement or modification parts for sale in conformance with approved data listed on the Certificate, you are required to comply with FAR Part 21.303. A Parts Manufacturer Approval (PMA) may be issued under the provisions of FAR 21.303(d) when you submit a statement certifying 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 mailed to the address indicated above.

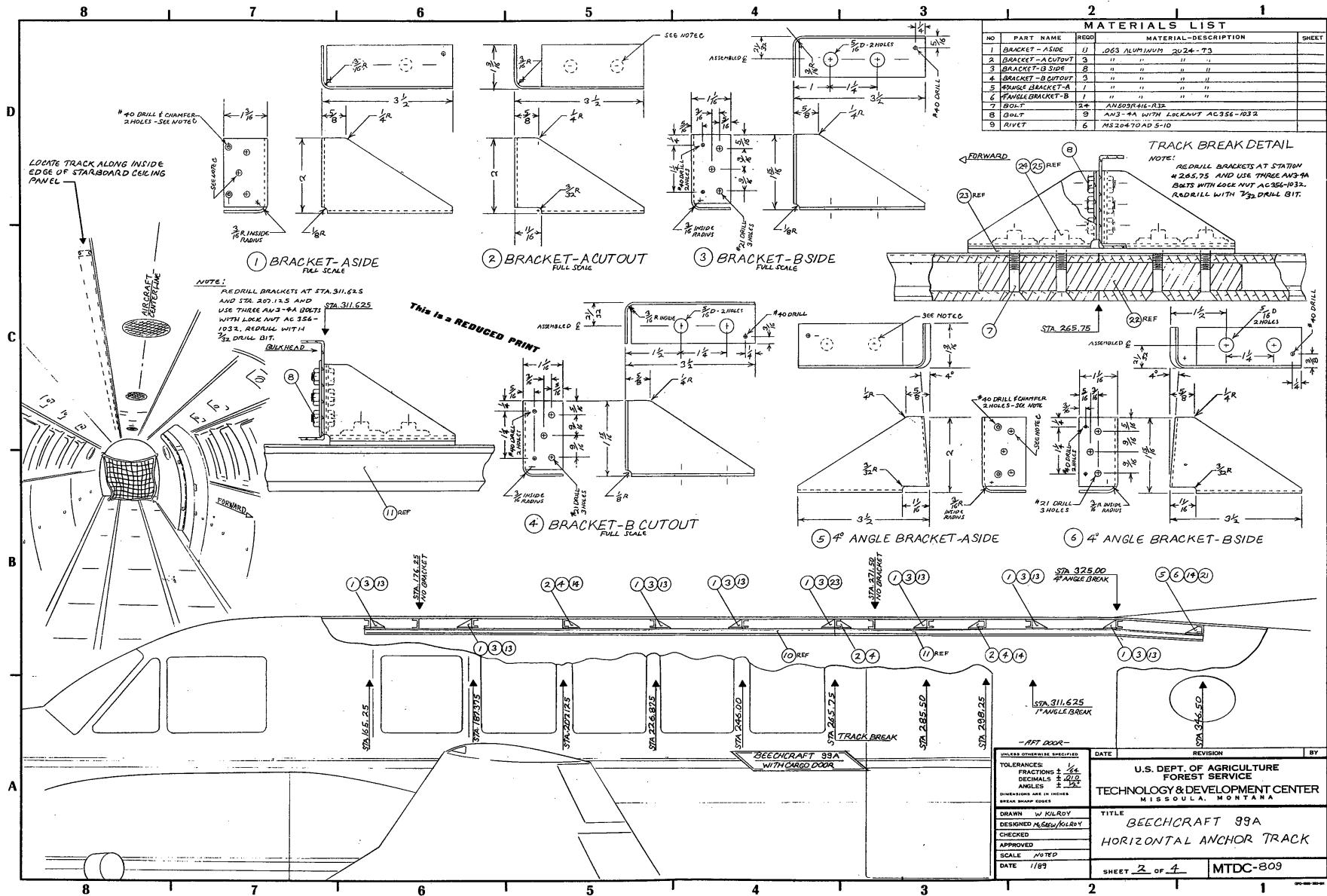
sincerely,



Michael H. Borfitz
Supervisor, Denver Aircraft Certification
Field Office

Enclosure





MATERIALS LIST		ITEM DESCRIPTION	SHEET
NO	PART NAME	REGO	
10	FOWARD TRACK	1	1/2X12 ANGEL 800/122 HARD BACK ANODIZED UNPOLISHED, WITH 4 1/2 IN. CARM EXTENDED BALL
11	ATT TRACK	1	1/2X12 ANGEL 800/122 HARD BACK ANODIZED UNPOLISHED, WITH 4 1/2 IN. CARM EXTENDED BALL
12	SAFETY END CAP	2	1/2X12 BLOCK NYLON
13	SPACER L	2	1/8 PLATE 6061-T6 ALUMINUM
14	SPACER R	2	1/8 PLATE 6061-T6 ALUMINUM
15	DOUBLE RR	10	0.63 2024-T3 ALUMINUM
16	STOP PIN	2	3/8 X 1 PUNCH CUP GUIDE RELEASE HITCH PIN, MCMASTER CARM # 9820A180.

TRACK MATERIAL:

ASTM GOOS-T5
 YIELD STRESS (MPA) ... 35,000 PSI
 ULTIMATE STRESS (MPA) ... 38,000 PSI

HARDNESS:

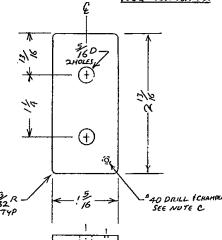
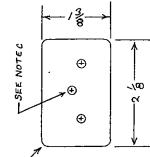
BRAINELL (MPA) ... 72-80 BHN
 SOKO-10 RANDALL

ALTERNATIVE:

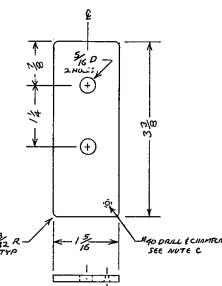
ROCKWELL (HRB) ... 38-42 R_g

HARDNESS TEST EACH TRACK PRIOR TO INITIAL INSTALLATION TO INSURE THAT MATERIAL MEETS MINIMUM REQUIREMENTS.

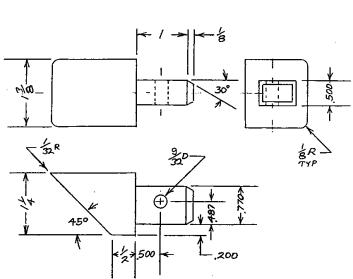
NOTE:
ANTAL TRACK UNDRILLED AND BLACK ANODISED IS AVAILABLE
FROM:
EURO MARINE TRADING, INC.
64 HALSEY STREET #27
NEWPORT, RI 02840
(401) 849-0060



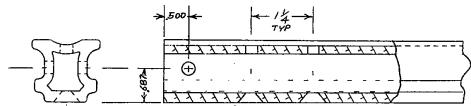
(15) DOUBLE
FULL SCALE



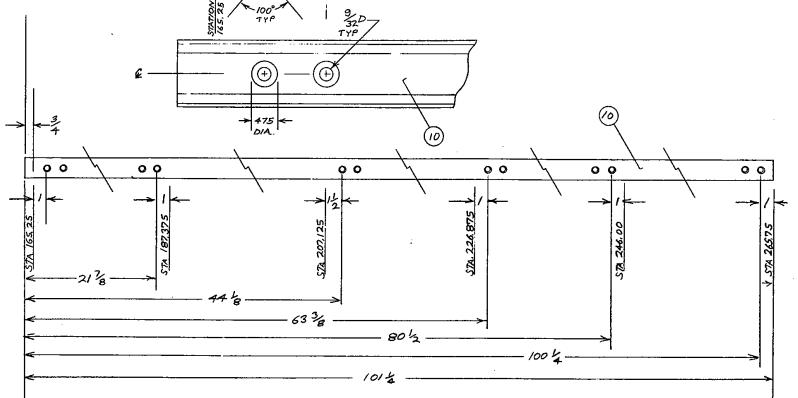
(13) SPACER - L
FULL SCALE



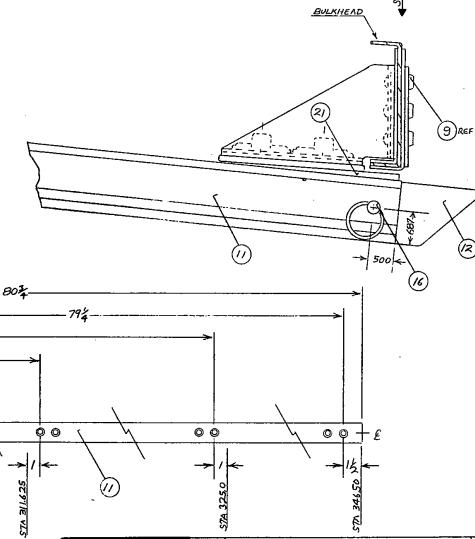
TRACK MOUNTING HOLE DETAIL
FULL SCALE



TRACK MOUNTING HOLE LOCATION DETAIL

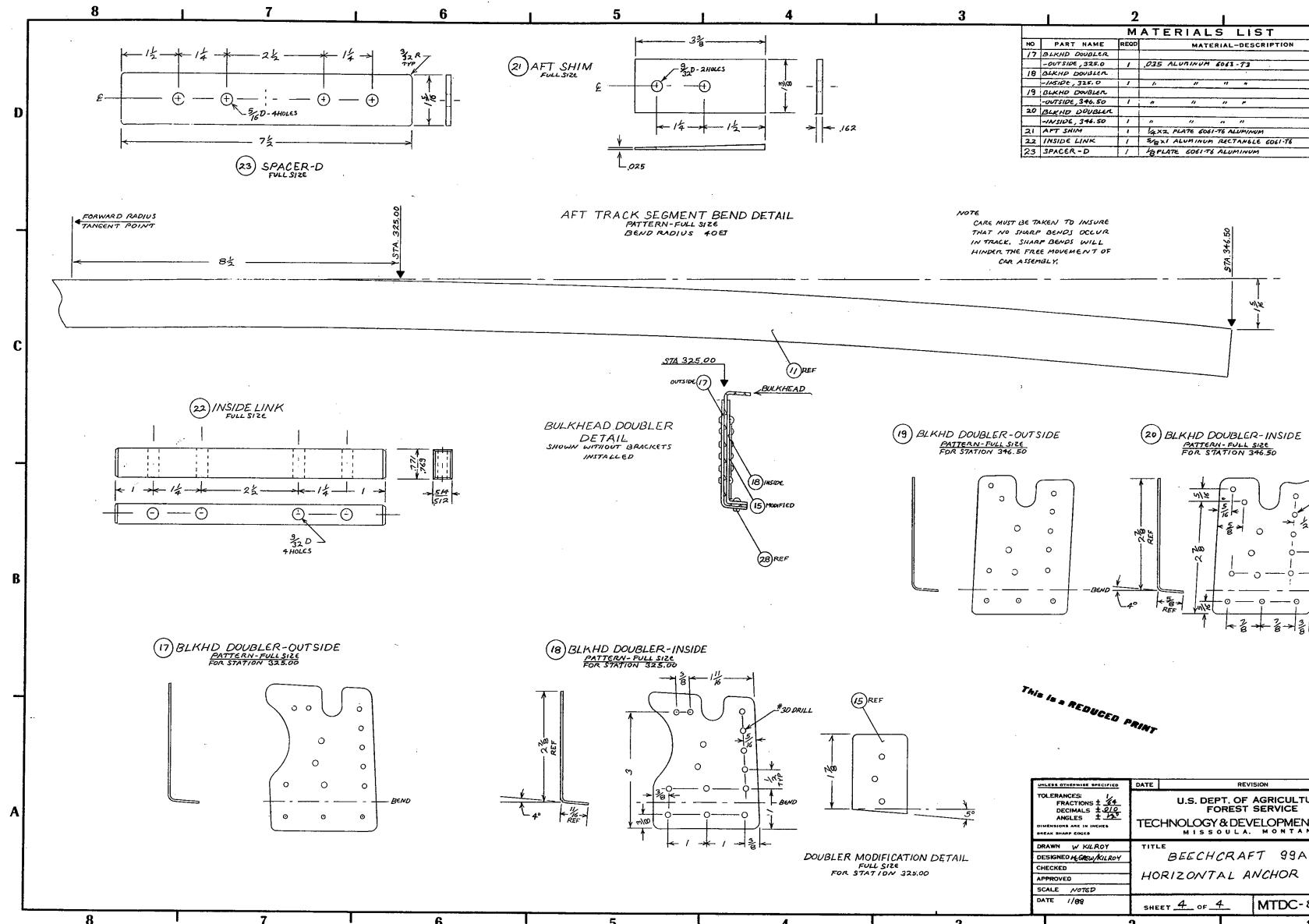


NOTE: THESE DIMENSIONS COINCIDE WITH THE BULKHEAD LOCATIONS AS NOTED IN 99A BEECHCRAFT DRAWINGS. THERE MAY BE VARIATIONS BETWEEN DIFFERENT AIRCRAFT. MEASURE EACH AIRCRAFT BEFORE LOCATING AND DRILLING HOLES.

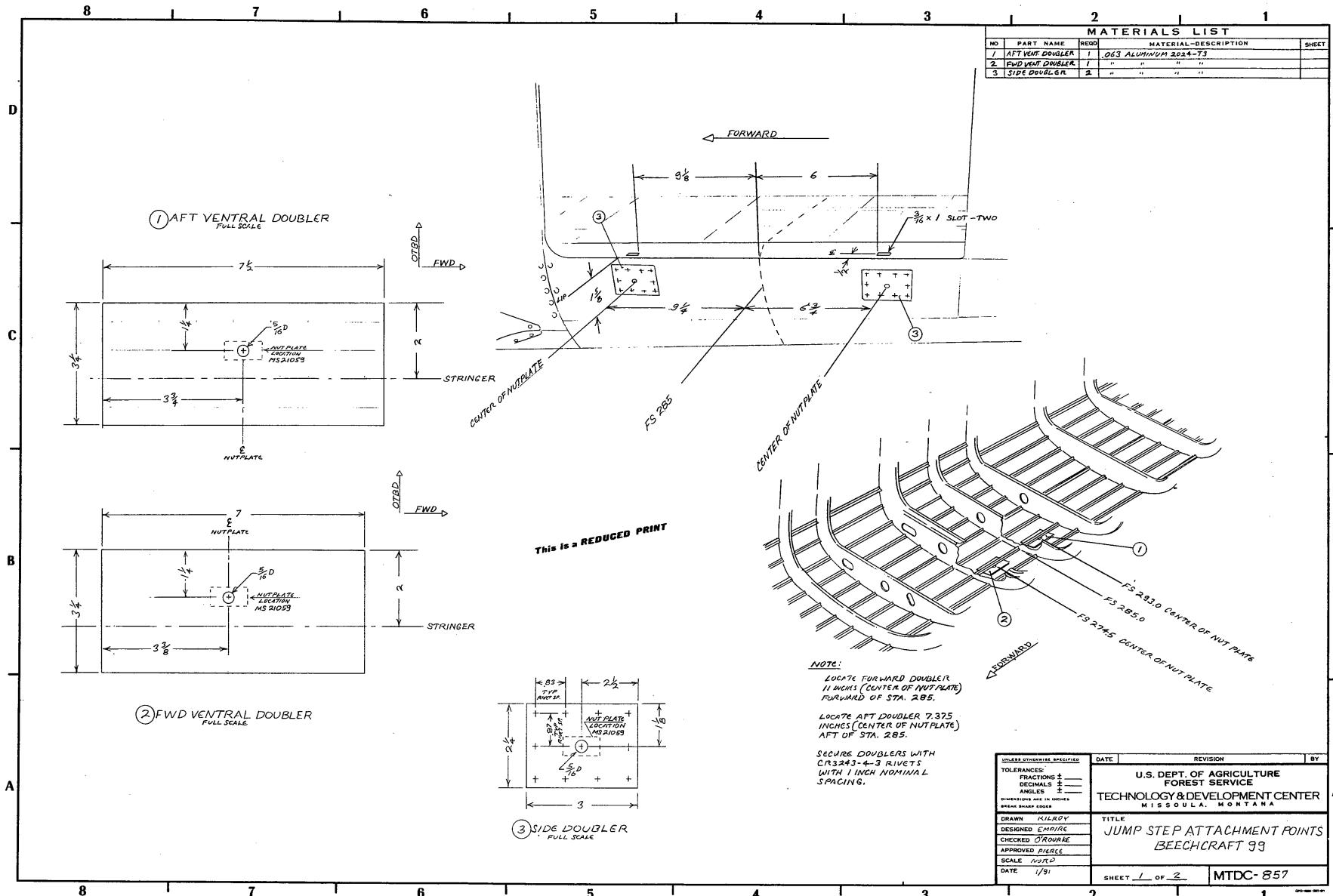


UNLESS OTHERWISE SPECIFIED		DATE	REVISION	BY
TOLERANCES:		U.S. DEPT. OF AGRICULTURE FOREST SERVICE		
FRACTIONS & % DECIMALS & .000 ANGLES & 0.0000		TECHNOLOGY & DEVELOPMENT CENTER MISSOULA, MONTANA		
DIMENSIONS ARE IN INCHES BEND SHARP EDGES				
DRAWN W KILROY DESIGNED BY <i>Calvin Kilroy</i>		TITLE: BEECHCRAFT 99A HORIZONTAL ANCHOR TRACK		
CHECKED APPROVED SCALE 1/2000				
DATE 1/85		SHEET 3 OF 4 MTDC-809		

MATERIALS LIST			
NO.	PART NAME	REQD.	MATERIAL DESCRIPTION
17	BLKHD DOUBLER	1	.025 ALUMINUM 6061-T6
18	BLKHD DOUBLER	1	.025 ALUMINUM 6061-T6
19	BLKHD DOUBLER	1	.025 ALUMINUM 6061-T6
20	BLKHD DOUBLER	1	.025 ALUMINUM 6061-T6
21	AFT SHIM	1	.025 PLATE 6061-T6
22	INSIDE LINK	1	.025 ALUMINUM RECTANGLE 6061-T6
23	SPACER-D	1	.025 PLATE 6061-T6



DATE	REVISION	BY
U.S. DEPT. OF AGRICULTURE FOREST SERVICE TECHNOLOGY & DEVELOPMENT CENTER MISSOULA, MONTANA		
TITLE BEECHCRAFT 99A HORIZONTAL ANCHOR TRACK		
SHEET 4 OF 4 MTDC-809		



MATERIALS LIST			
NO.	PART NAME	REQD.	MATERIAL-DESCRIPTION
4	JUMP BASKET HOOK	2	1/8 PLATE STEEL 10-20 HOT ROLLED
5	STRUT	2	UNIVERSAL STEP STRUT-MTDC DWG# 794
6	STEP	1	STEP BASKET (UNIVERSAL)-MTDC DWG# 759
7	CAP SCREW	2	ANH-5A
8	CAP SCREW	4	ANH-7A

