

TDC-3

Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

Number ST00372DE

This certificate, issued to **Missoula Technology & Development Center
USDA Forest Service
Ft. Missoula, Building #1
Missoula, Montana 59801**

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 4B of the Civil Aviation Regulations.

Original Product—Type Certificate Number: A-669
Make: McDonnell Douglas
Model: DC-3

Description of the Type Design Change:

Installation of smokejumper equipment (Primary Cable Anchor Assembly, Horizontal Tether Anchor Assembly, Cargo Floor Anchor Assembly, Jump Door Handrail, and Communication Guard Assembly) in accordance with Master Drawing List TDC-3, Rev. B, dated February 4, 1999 or later FAA approved revision.

Limitations and Conditions:

1. STC SA4840NM must be installed on aircraft prior to this modification.
2. Approval of this change in type design applies to the above model aircraft only. This approval should not be extended to 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, including changes in type design, will introduce no adverse effect upon the airworthiness of that aircraft.
3. A copy of this Certificate must be maintained as part of the permanent records for the modified aircraft.
4. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

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

Date of application: April 28, 1998

Date reissued:

Date of issuance: February 4, 1999

Date amended:



By direction of the Administrator

Ronald F. May (Signature) Manager
Northwest Mountain Region
Denver Aircraft Certification Office

(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**

TRANSPORT AIRPLANE DIRECTORATE

Denver Aircraft Certification Office

26805 E. 68th Avenue., Room 214

Denver, Colorado 80249

Phone: (303) 342-1080 Fax: (303) 342-1088

February 4, 1999

Mr. Dick Karsky
Missoula Technology & Development Center
USDA Forest Service
Ft. Missoula, Building #1
Missoula, Montana 59801

Ref: Supplemental Type Certificate (STC) No. ST00372DE
Project No. ST1567DE-T

Dear Mr. Karsky:

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 your STC No. ST00372DE, dated February 4, 1999, which indicates our approval for the installation of smokejumper equipment (Primary Cable Anchor Assembly, Horizontal Tether Anchor Assembly, Cargo Floor Anchor Assembly, Jump Door Handrail, and Communication Guard Assembly) on McDonnell Douglas DC-3 aircraft.

This STC is official Federal Aviation Administration (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. If you grant licensee rights or transfer of the STC, you are requested to advise your local FAA office within 30 days in order that we may take the necessary recording or reissuance action.

In accordance with Federal Aviation Regulation (FAR) 21.3, and as a recipient of this certificate, you are required to report any failure, malfunction, or defect, except as provided in FAR 21.3(d), in any product or part manufactured by you or your contracted suppliers, and which you have determined has resulted or could result in any occurrences listed in FAR 21.3(c). The report should be communicated initially by telephone to the Manager, Denver Aircraft Certification Office, telephone no: (303) 342-1080, within 24 hours after it has been determined a failure has occurred and followed up with a written notice to the address shown above. FAA form 8010-4 Malfunction or Defect Report, or other appropriate format is acceptable in transmitting the required details.

"Expect Excellence"

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 you have established the 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 reference to STC ST00372DE, and should be addressed to the address indicated below:

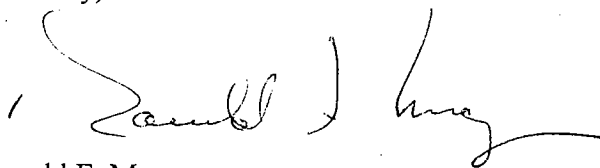
Federal Aviation Administration
Seattle Manufacturing Inspection District Office, ANM-108S
2500 E. Valley Road, Ste. C2
Renton, WA 98055

You, as the STC holder, are responsible for any design changes necessary to correct unsafe conditions as well as for submitting those design changes to this office for approval. This requirement is contained in FAR 21.99. In addition, you are required to advise this office of any change of address or ownership.

Also, FAR 21.50 requires that maintenance procedures for continued airworthiness, as applicable to this change in type design, be made available to the operator at the time the aircraft is returned to service.

By accepting this certificate, you acknowledge that you have read and understand your responsibilities as an STC holder.

Sincerely,

A handwritten signature in black ink, appearing to read "Ronald F. May". The signature is fluid and cursive, with a long horizontal stroke at the end.

Ronald F. May
Manager, Denver Aircraft Certification Office

Enclosure(s)

TDC-3

Accessories Required For Smokejumping:

Primary Overhead Anchor

Cable:

MTDC-884 - Horizontal Anchor Assembly, Primary
Strength: 2,000 pounds
STC#: ST00372DE

Secondary Overhead Anchor

Cable:

Basler Turbo Conversions* dwg #5130 (15 sheets)
Strength: 750 pounds
STC#: ST00372DE

*Basler Turbo Conversions Inc.

P.O. Box 2305

Oshkosh, WI 54903-2305

(414)-236-7820

Cargo Floor Mount Anchor

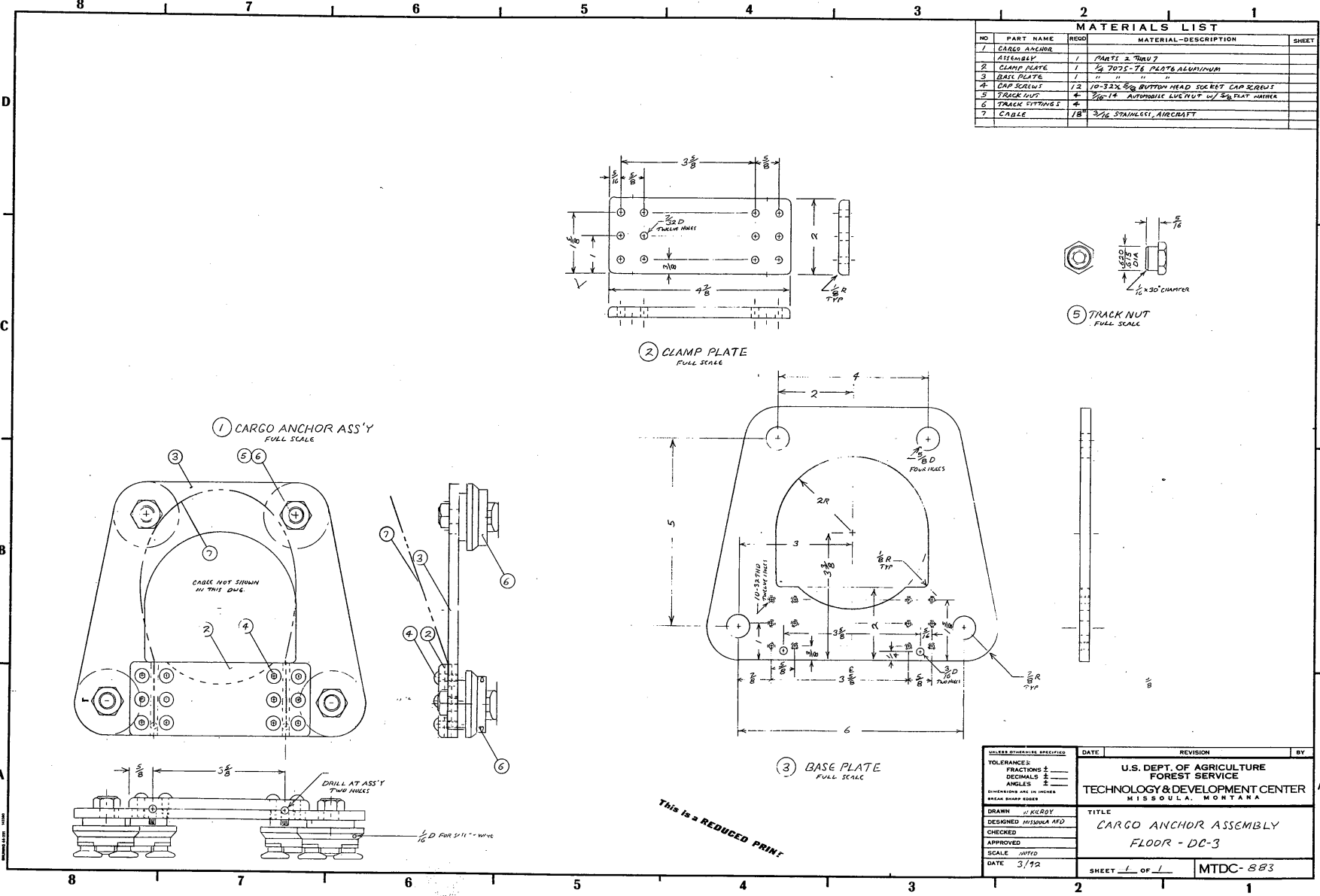
Cable:

MTDC-883 - Cargo Anchor Assembly Floor: DC-3
Strength: 750 pounds
STC#: ST00372DE

Handrails:

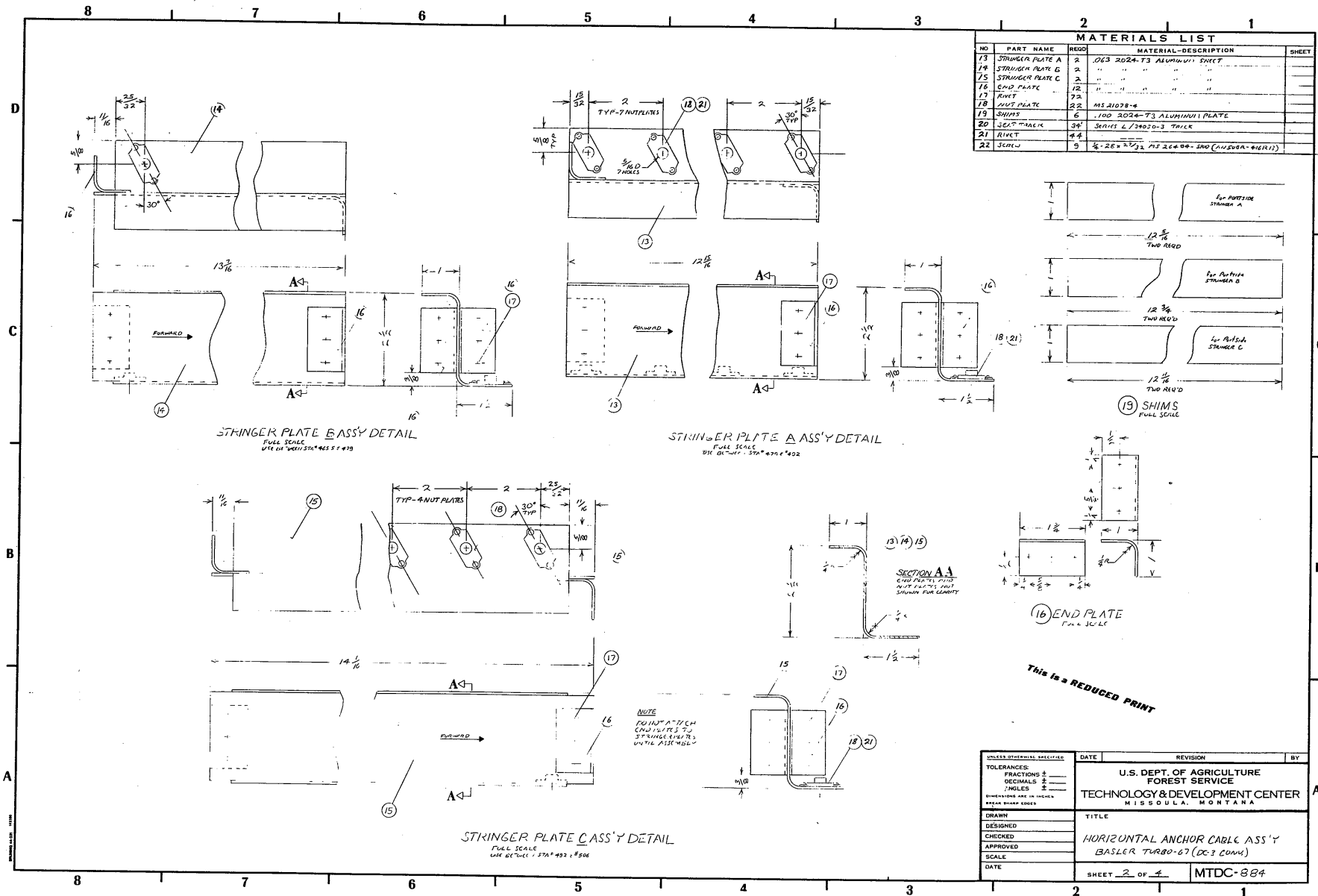
MTDC-885 - Handrail & Communication Box Guard

Revised February 1999



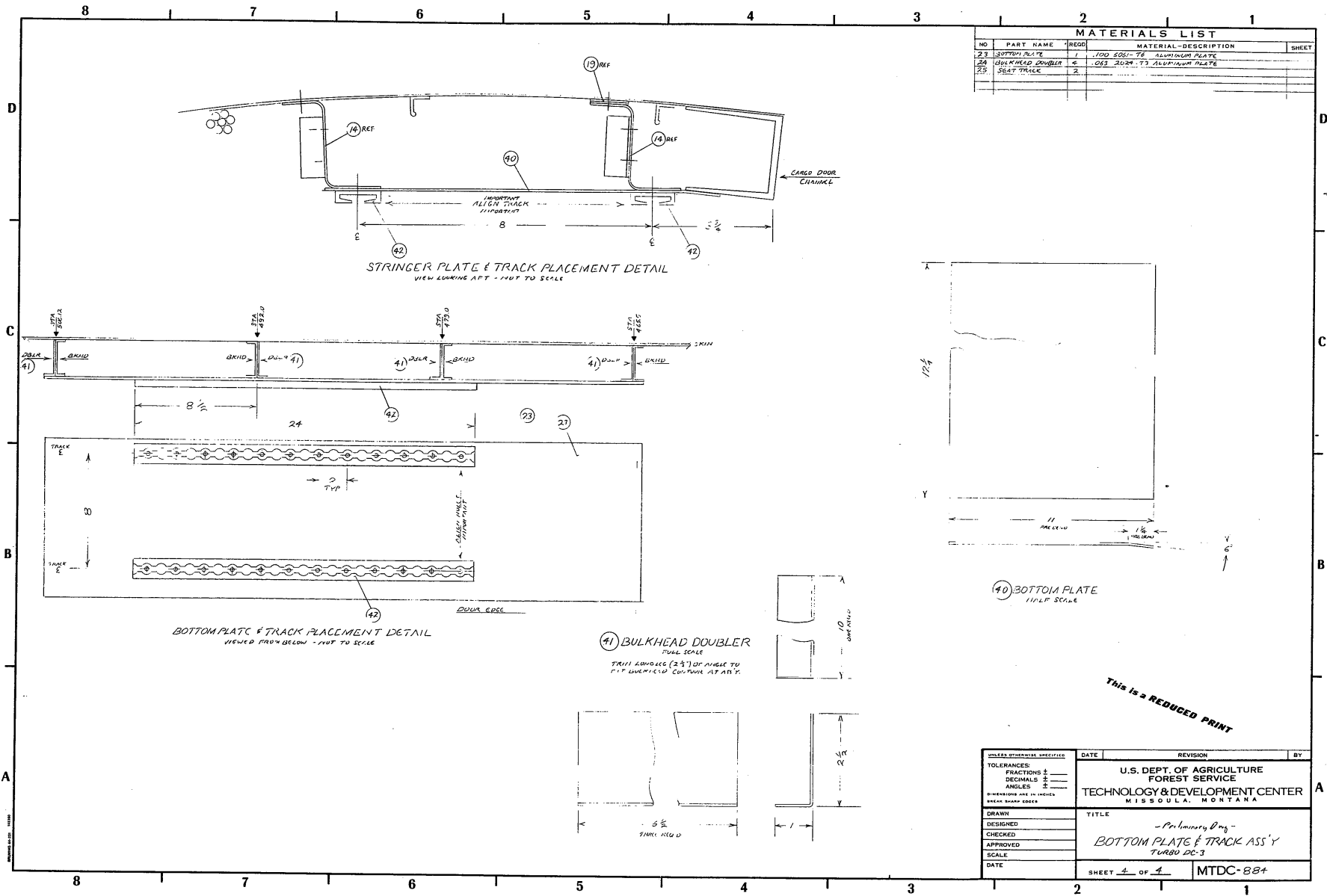
MATERIALS LIST			
NO	PART NAME	QTY	MATERIAL-DESCRIPTION
1	CARGO ANCHOR ASSEMBLY	1	PARTS 2 THRU 7
2	CLAMP PLATE	1	1/8" 7075-T6 PLATE ALUMINUM
3	BASE PLATE	1	"
4	CAP SCREWS	12	1/4" X 3/16" BOTTOM HEAD SOCKET CAP SCREWS
5	TRACK NUT	4	3/16" X 1/4" AUTOMATIC LOCK NUT W/ 3/16" FLAT ANGLE
6	TRACK FITTINGS	4	"
7	CABLE	18'	3/16" STAINLESS AIRCRAFT

UNLESS OTHERWISE SPECIFIED	DATE	REVISION	BY
TOLERANCES: FRACTIONS 1/16" DECIMALS 0.005" ANGLES 1/2° DIMENSIONS ARE IN INCHES BREAK SHARP EDGES			
DRAWN: J. KELROY DESIGNED: MISSOURA APD CHECKED: APPROVED: SCALE: NOTED DATE: 3/12	U.S. DEPT. OF AGRICULTURE FOREST SERVICE TECHNOLOGY & DEVELOPMENT CENTER MISSOULA, MONTANA		
TITLE		SHEET 1 OF 1	
CARGO ANCHOR ASSEMBLY FLOOR - DC-3		MTDC-883	



MATERIALS LIST			
NO	PART NAME	REQD	MATERIAL-DESCRIPTION
13	STRINGER PLATE A	2	1063 2024-T3 ALUMINUM SHEET
14	STRINGER PLATE B	2	" " " " " " " "
15	STRINGER PLATE C	2	" " " " " " " "
16	END PLATE	12	" " " " " " " "
17	RIB	72	" " " " " " " "
18	END PLATE	22	MS 21078-4
19	SHIMS	6	100 2024-T3 ALUMINUM PLATE
20	SCREW	34	SERIES L/34020-3 TRAIL
21	RIB	44	" " " " " " " "
22	SCREW	9	1/2-28 x 1 1/2 MS 26690-240 (ALUSUB-416R11)

UNLESS OTHERWISE SPECIFIED	DATE	REVISION	BY
TOLERANCES: FRACTIONS ± DECIMALS ± ANGLES ±			
DIMENSIONS ARE IN INCHES SHARP SHARP EDGES			
DRAWN		TITLE	
DESIGNED			
CHECKED			
APPROVED			
SCALE			
DATE			
		U.S. DEPT. OF AGRICULTURE FOREST SERVICE TECHNOLOGY & DEVELOPMENT CENTER MISSOULA, MONTANA	
		HORIZONTAL ANCHOR CABLE ASS'Y BASLER TURBO-67 (DC-3 CONV)	
		SHEET 2 OF 4	MTDC-884

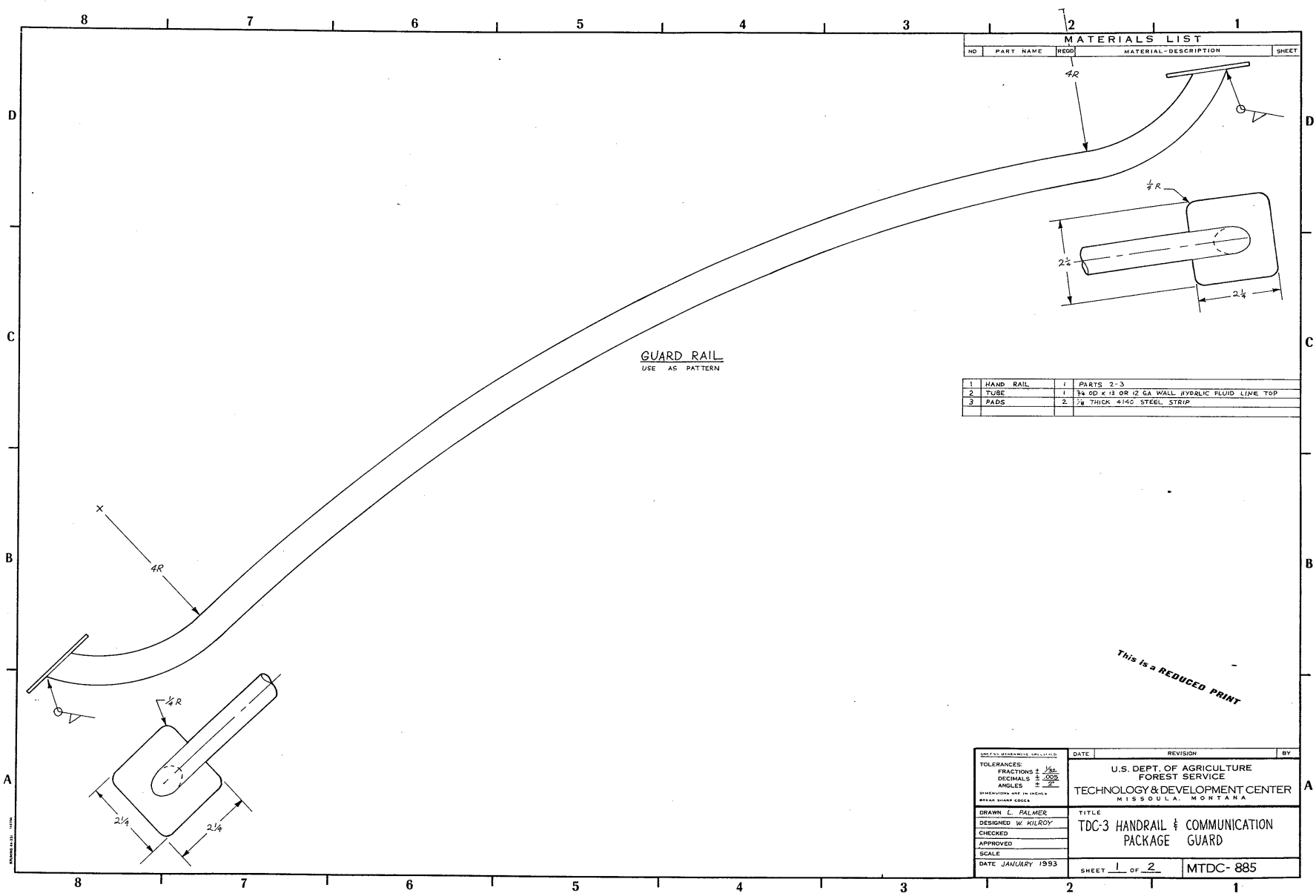


MATERIALS LIST				
NO	PART NAME	QTY	RECD	MATERIAL DESCRIPTION
23	BOTTOM PLATE	1		1.000 5081-76 ALUMINUM PLATE
24	BULKHEAD DOUBLER	4		1.063 2024-T3 ALUMINUM PLATE
27	STEEL TRACK	2		

(40) BOTTOJA PLATE
1/16" SCALE

This is a REDUCED PRINT

UNLESS OTHERWISE SPECIFIED	DATE	REVISION	BY
TOLERANCES: FRACTIONS 1/16" DECIMALS 0.005" ANGLES 1/2°			
DIMENSIONS ARE IN INCHES UNLESS SHOWN OTHERWISE			
DRAWN			
DESIGNED			
CHECKED			
APPROVED			
SCALE			
DATE			
U.S. DEPT. OF AGRICULTURE FOREST SERVICE TECHNOLOGY & DEVELOPMENT CENTER MISSOURI, MONTANA			
TITLE - Preliminary Draw - BOTTOM PLATE & TRACK ASS'Y TURBO DC-3			
SHEET 4 of 4		MTDC-884	



GUARD RAIL
USE AS PATTERN

MATERIALS LIST

NO	PART NAME	QTY	MATERIAL-DESCRIPTION	SHEET
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1	HAND RAIL	1	PARTS 2-3	
2	TUBE	1	3/4 OD X 13 OR 12 GA WALL HYDRAIC FLUID LINE TOP	
3	PADS	2	7/8 THICK #140 STEEL STRIP	

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DATE	REVISION	BY

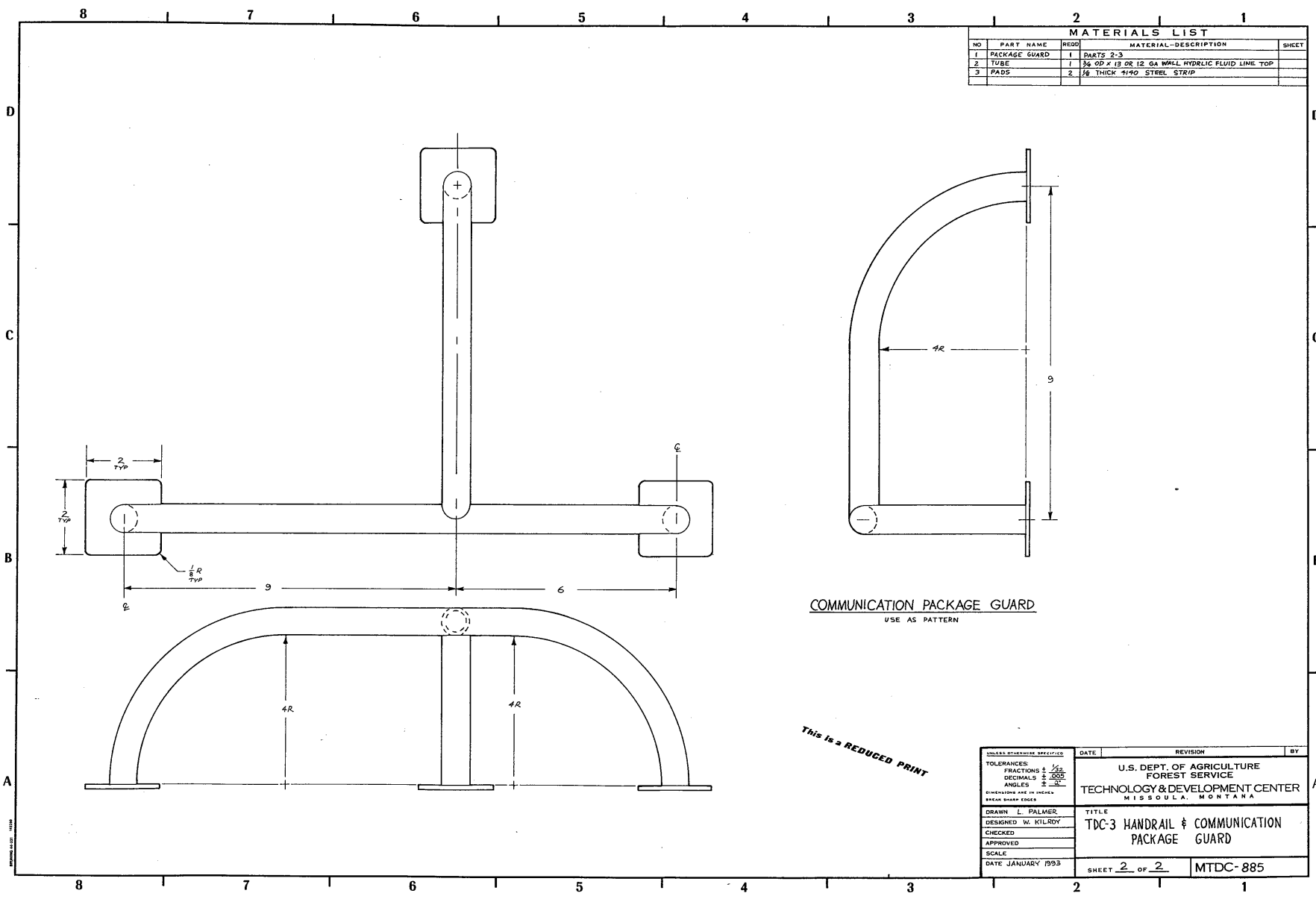
U.S. DEPT. OF AGRICULTURE
FOREST SERVICE
TECHNOLOGY & DEVELOPMENT CENTER
MISSOULA, MONTANA

DRAWN L. PALMER
DESIGNED W. KILROY
CHECKED
APPROVED
SCALE
DATE JANUARY 1993

TITLE
TDC-3 HANDRAIL & COMMUNICATION
PACKAGE GUARD

SHEET 1 OF 2
MTDC- 885

UNLESS OTHERWISE SPECIFIED
TOLERANCES:
FRACTIONS ± 1/32
DECIMALS ± .005
ANGLES ± 2°
DIMENSIONS ARE TO CENTER
SHARP CORNERS



MATERIALS LIST			
NO	PART NAME	QTY	MATERIAL-DESCRIPTION
1	PACKAGE GUARD	1	PARTS 2-3
2	TUBE	1	3/4 OD x 1/2 OD 12 GA WALL HYDRAULIC FLUID LINE TOP
3	PADES	2	1/8 THICK 1/40 STEEL STRIP

COMMUNICATION PACKAGE GUARD
USE AS PATTERN

This is a REDUCED PRINT

UNLESS OTHERWISE SPECIFIED	DATE	REVISION	BY
TOLERANCES: FRACTIONS ± 1/32 DECIMALS ± 0.005 ANGLES ± 30'			
DIMENSIONS ARE IN INCHES RADIUS SHARP EDGES			
DRAWN L. PALMER DESIGNED W. KILROY CHECKED APPROVED		U.S. DEPT. OF AGRICULTURE FOREST SERVICE TECHNOLOGY & DEVELOPMENT CENTER MISSOULA, MONTANA	
SCALE DATE JANUARY 1953		TITLE TDC-3 HANDRAIL & COMMUNICATION PACKAGE GUARD	
		SHEET 2 OF 2	MTDC-885