

Attachment H
First Article Inspection Results
Beacon Assembly



INSPECTION REPORT (SIDE A)

FIRST ARTICLE YES ☒ NO ☐

(Ref. Work Instructions FTL.QUA.310-02 and FTL.QUA.430-10)

Page 1 of 1

Program or Project: SLB 406 Work Order: P.O. 55016 Contract No: 55016

Part or Assy. Name: ANTENNA ASSEMBLY Part No: A3-06-2053-001

Serial Number(s): Quantity Inspected: 1 Revision Level: (-)

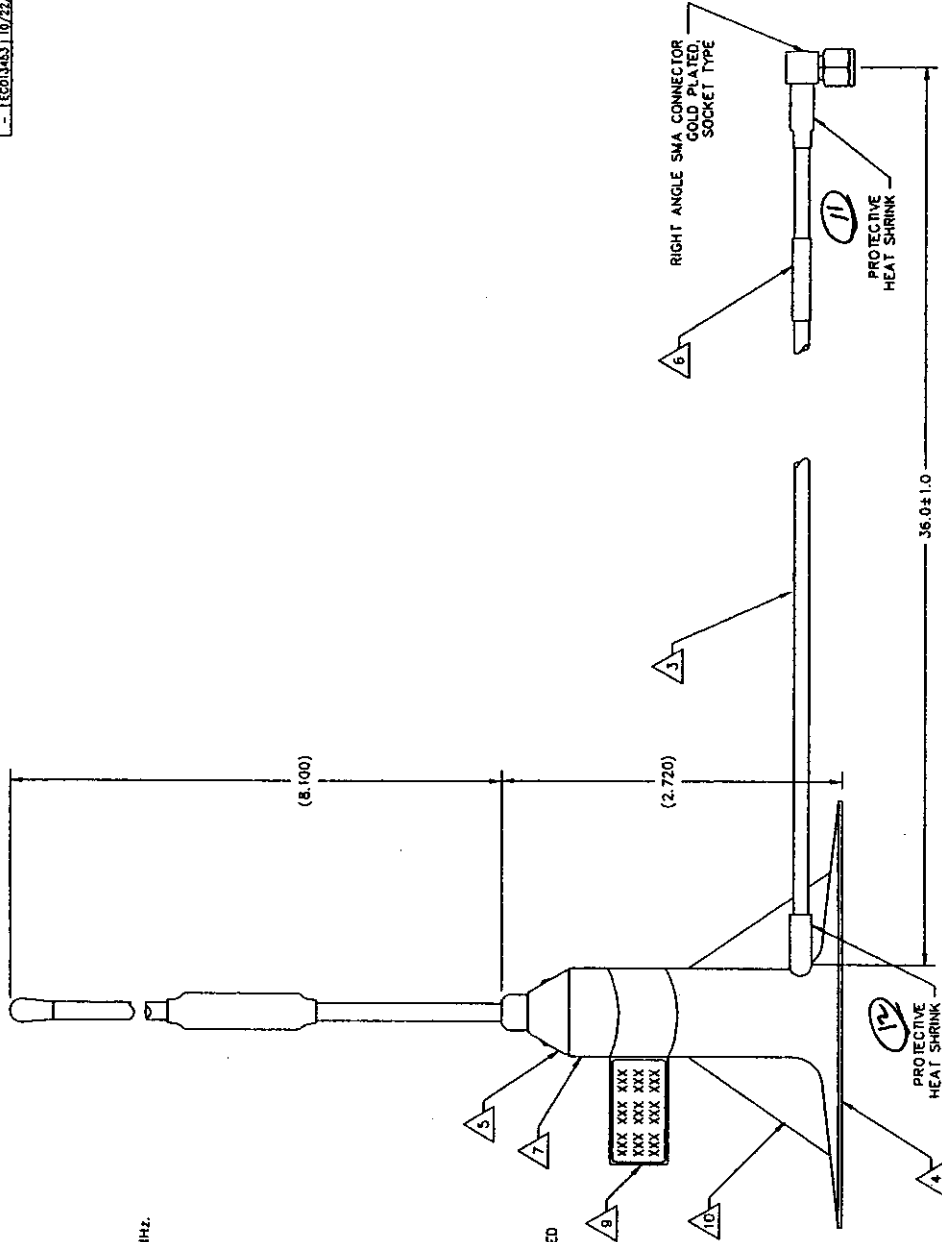
Inspect/ Test Point No	Inspection/Test Instructions, References, Equipment	Method*			Inspector's Section		
		V	W	I	Acc. Stamp	Inspection Date	Remarks/Recommendations Note: Do not stamp acceptance if item does not meet requirement.
—	This is to update from Rev 01 to Rev (-).						
NOTE 8	Antennary to meet note 2 after immersion to depth of one meter in water, for one hour with antenna installed on beam.				(DME A)	2/20/03	For Information
9	Use DME Part Number A1-20				(DME A)	2/20/03	For Information
10	Antenna boot, DME Part number A1-25				(DME A)	2/20/03	For Information
11	Protective heat shrink				(DME A)	2/20/03	present
12	Protective heat shrink				(DME A)	2/20/03	present

*V - Verify W - Witness I = Inspect

NOTICE IS HEREBY GIVEN THAT ALL DATA CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE. THIS DOCUMENT IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE. IT IS UNCLASSIFIED AND RECLASSIFIED. PART OF THE INFORMATION CONTAINED HEREIN SHALL BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN AUTHORIZATION OF DME CORP.

Notes:

- 1 DME CORPORATION REQUIRES APPROVAL OF CHANGES IN THE DESIGN OR MANUFACTURING PROCESS OF THIS ITEM, PRIOR TO IMPLEMENTATION.
- 2 BASIC SPECIFICATIONS:
 OPERATIONAL FREQUENCIES: 121.5 MHz, 243.0 MHz AND 406.028 MHz.
 NOMINAL INPUT IMPEDANCE: 50 OHMS
 MAXIMUM VSWR AT RESONANCE: 1.5:1 (14dB RET LOSS)
 POWER RATING: 2 WATTS CW (CONTINUOUS)
 OPERATING TEMPERATURE: -20°C TO +55°C
 STORAGE TEMPERATURE: -40°C TO +85°C
 DC IMPEDANCE BETWEEN CENTER AND OUTER CONDUCTOR SHOULD BE > 10M OHMS
- 3 COAXIAL WIRE SHALL BE PER M17/113-RG316 OR EQUIVALENT.
 CABLE COLOR: BLACK.
- 4 GROUND PLANE SHALL BE WELL ADHERED TO BASE OF ANTENNA. NO SHARP PROTRUSIONS THAT COULD CAUSE A PUNCTURE OF THE INFLATABLE ARE ALLOWED ON THIS SURFACE.
- 5 THE INSERT SHALL BE BONDED INTO THE RUBBER BOOT.
- 6 PERMANENTLY IDENTIFY ANTENNA WITH DME PART NUMBER "P3-03-0040-001, FAA TSO-C126".
- 7 FERRITE BEADS TO BE INTERNAL TO ANTENNA BOOT.
- 8 ANTENNA ASSY TO MEET NOTE 2 AFTER IMMERSION TO DEPTH OF ONE METER IN WATER, FOR ONE HOUR WITH ANTENNA INSTALLED ON BEACON.
- 9 USE DME PART NUMBER A1-20-0564-001.
- 10 ANTENNA BOOT, DME CORPORATION P/N A1-25-0070.



APPROVED SOURCES OF SUPPLY		
SUPPLIER DATA		
DME DASH CODE	PART NUMBER	NAME AND ADDRESS
-001 (P001)	UL-4060-1111	MYERS ENGINEERING INT. (NEI) FT. LAUDERDALE, FL

-001

SOURCE CONTROL DRAWING		
UNLESS OTHERWISE SPECIFIED	DME CORPORATION	8850 NW 18TH TERRACE FT. LAUDERDALE, FL 33309
SPECIFIED DIMENSIONS ARE IN INCHES		
TOLERANCES ON DIMENSIONS		
2 PLACE 1 3 PLACE DECIMAL DECIMAL		
FRACTIONS ±1/8		
ANGLES ±1°		
SCALE: 1" = 1"		
SHEET 1 OF 1		

NONCONFORMING MATERIAL REPORT

1 of 1

NMR Number: A175221

GENERAL INFORMATION: (PART/ASSEMBLY SEGREGATED WITH NMR)

Part Nomenclature/Name: ANTENNA ASSY	Part Number: A3-06-2053-001	Rev: (-)	Serial Number: NA	Prev. NMR: 164630	Program/Job No: COMM	Department: REC	FRACAS yes ☒	Report No:
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RECEIVING INSPECTION INFORMATION:

Supplier Number: 5295	Supplier Name: MYERS ENGINEERING	PO Number: 55016	Receiver Number: 175221	Receiver Date: 28-Jan-03	RI Qty Recv: 27	RI Qty Insp: 5	RI Qty Rejected: 27
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IN-PROCESS INSPECTION INFORMATION:

WO No. - Seq.:	Inspection Work Inst:	Test Procedure Number:	New WO Number:	IP Qty Recv: 0	IP Qty Insp: 0	IP Qty Rejected: 0
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Nonconformance:

REF: NOTE 6, "PERMANENTLY IDENTIFY..." THE I.D. NUMBER IS MISSING. 5 OF 5 PCS SAMPLED

NON CONFORMING
PART/ASSEMBLY IF NOT
SAME AS THAT SEGREGATED
WITH NMR.

Non segreg Name/Nomenclature:

Non segreg Part Number:

Non segreg Revision:

Non segreg Serial Number:

OTHER
MATERIAL
AFFECTED

I	N	I	N	I	N	I	N
P	S	T	E	I	F		
R	O	C	K				

Defect Codes (QTY): 20, (27)

Initiator: JOHN WISE	Date Initiated: 31-Jan-03	Area Engineer: CARREY HENRY	Engineer Date of Signature: <i>[Signature]</i> 1/31/03
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Disposition:

24U.

REINSPECT	☐	☐	☐	☐
RETEST	☐	☐	☐	☐
RETROFIT	☐	☐	☐	☐
NONE	☐	☐	☐	☐

Affected Part Numbers:

RTV RTV Qty: ☒	UAI UAI Qty: ☐	Rework Rework Qty: ☐	Repair Repair Qty: ☐	Scrap Scrap Qty: ☐	Scrap Cost:	Responsibility DME ☐ Supplier ☒
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MRB Quality Rep: Date: <i>[Signature]</i> 1/31/03	MRB Quality Rep: Date:	MRB Engineering Rep: Date:	MRB Mnfg Rep: Date:	MRB Customer Rep: Date:
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Corrective Action:

Cause:

Corrective Action:

Scar

Responsible Department: <i>Purch.</i>	Due Date:	Completion Date:	Accepted By:	Date:	SCAR Number:
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Follow Up:

Quality Closure Rep:	Quality Closure Date:
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MYERS ENGINEERING INTERNATIONAL, INC.

PO Box 670070, Coral Springs, FL. 33067-0002

Tel: 954-345-5000 / Fax: 954-345-5005

Certificate Of Compliance

January 28, 2003

Sold To: *DME Corporation*
 6830 North West 16th Terrace
 Fort Lauderdale, Florida 33309

Description Of Materials :

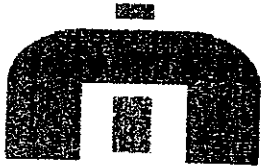
Antenna, Triple Frequency (406.0/243.0/121.5 MHz.) This Antenna requires a ground plane
Model Number: UL-4060-T111 / DME A3-06-2053

Quantity: 27 S/N: (0086-0112)

Purchase Order Number: 55016

The above Material conforms to MEI drawing Number UL-4060-T111 Rev. C. This Antenna requires a ground plane for proper operation.

Steven Myers
President
Myers Engineering International, Inc.



Myers Engineering International, Inc.

Return/Loss Chart

Project Name:

DME Triple Frequency (UL-4060-T111)

Date: 22 JAN 03

Date & Unit Code	RL (db) 121.5 MHz	RL (db) 243.0 MHz	RL (db) 406.0 MHz	Water Activation Test	STATUS Pass/Fail
1) 03 JAN #0086	-32	-20	-20	✓	Pass
2) 0087	-30	-32	-22	✓	Pass
3) 0088	-27	-27	-19	✓	Pass
4)					Pass
5)					Pass
6)					Pass
7)					Pass
8)					Pass
9)					Pass
10)					Pass
11)					Pass
12)					Pass
13)					Pass
14)					Pass
15)					Pass
16)					Pass
17)					Pass
18)					Pass
19)					Pass
20)					Pass

Tested By:

H. L. L. L.

MYERS ENGINEERING INTERNATIONAL, INC.

PO Box 670070, Coral Springs, FL 33067-0002

TEL 954-345-5000 / Fax 954-345-5005



Myers Engineering International, Inc.

Return/Loss Chart

Project Name:

DME Triple Frequency (UL-4060-T111)

Date: 24 JAN 03

Date & Unit Code	RL (db) 121.5 MHz	RL (db) 243.0 MHz	RL (db) 406.0 MHz	Water Activation Test	STATUS Pass/Fail
1) 1/3 JAN #0089	-34	-27	-16	✓	Pass
2) 0090	-29	-25	-19	✓	Pass
3) 0091	-24	-22	-18	✓	Pass
4) 0092	-27	-27	-17	✓	Pass
5) 0093	-26	-27	-17	✓	Pass
6) 0094	-30	-29	-17	✓	Pass
7)					Pass
8)					Pass
9)					Pass
10)					Pass
11)					Pass
12)					Pass
13)					Pass
14)					Pass
15)					Pass
16)					Pass
17)					Pass
18)					Pass
19)					Pass
20)					Pass

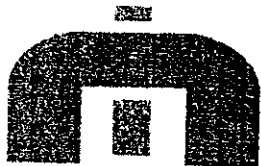
Tested By:

H. Kella

MYERS ENGINEERING INTERNATIONAL, INC.

P.O. Box 61810, Scottsdale, AZ 85067-0002

Tel: 480-344-5000 / Fax: 480-344-5005



Myers Engineering International, Inc.

Return/Loss Chart

Project Name:

DME Triple Frequency (UL-4060-T111)

Date: 27 JAN 03

Date & Unit Code	RI (dB) 121.5 MHz	RI (dB) 243.0 MHz	RI (dB) 406.0 MHz	Water Activation	STATUS
				Test	Pass/Fail
1) 05 JAN 0095	-30	-25	-16	✓	Pass
2) 0096	-30	-22	-18	✓	Pass
3) 0097	-34	-25	-18	✓	Pass
4) 2098	-27	-26	-20	✓	Pass
5) 0099	-27	-23	-14	✓	Pass
6) 0100	-30	-25	-19	✓	Pass
7) 0101	-36	-24	-18	✓	Pass
8) 0102	-30	-24	-14	✓	Pass
9) 0103	-32	-28	-16	✓	Pass
10) 0104	-36	-28	-16	✓	Pass
11) 0105	-26	-21	-18	✓	Pass
12) 0106	-22	-21	-19	✓	Pass
13) 0107	-26	-22	-16	✓	Pass
14) 0108	-32	-23	-17	✓	Pass
15) 0109	-24	-23	-17	✓	Pass
16) 0110	-36	-20	-19	✓	Pass
17) 0111	-35	-24	-17	✓	Pass
18) ✓ 0112	-26	-19	-17	✓	Pass
19) 0113	N/A				Pass
20) 0114	N/A				Pass

Tested By:

Hklll

MYERS ENGINEERING INTERNATIONAL, INC.

10070 Central Springs, FL 33067-0001

TEL: 954-545-5000 / FAX: 954-545-5005

UNITED CORPORATION

6830 N.W. 16th Terrace
Ft. Lauderdale, FL 33309
(954) 975-2100

SHIP TO

Myers
To: Mr. Myers

☐ SHIPMENT NOTICE

☒ DEBIT MEMO

No. 17350

DATE *2-3-03*

OUR P/O NO. *55016*

JOB ORDER NO. _____

REASON FOR SHIPMENT: ☐ SHIPMENT
☒ RETURN

☐ COLLECT

SHIPPED VIA

☐ UPS

☒ OUR DELIVERY BILL LADING NO. _____

☐ PREPAID

☐ PICK UP

OTHER _____

DATE SHIPPED _____

QUANTITY	PART NO.	DESCRIPTION	QUANTITY SHIPPED	UNIT PRICE	TOTAL PRICE
<i>27</i>	<i>A-3-06-2053-001, 165-</i>	<i>See NMR A175221</i>		<i>48.85</i>	<i>1318.95</i>
		<i>Attached.</i>			

SIGNED BY _____

ISSUED BY *[Signature]*

PACKING LIST



INSPECTION REPORT (SIDE A)

FIRST ARTICLE YES NO

(Ref. Work Instructions FTL.QUA.310-02 and FTL.QUA.430-10)

Page 1 of 2

Purchase Order No: 53152

Instruction No:

Program or Project: SRB406 Work Order:

Contract No:

Part or Assy. Name: ANTENNA ASSEMBLY

Part No:

Serial Number(s): Quantity Inspected:

Revision Level: 01

Prepared by: DAVE VALEO Date: 4-25-02 Approved by:

Date:

Inspect/ Test Point No	Inspection/Test Instructions, References, Equipment	Method*			Inspector's Section		
		V	W	I	Stamp	Date	Remarks/Recommendations
1	DME CORPORATION ...	✓			(14 DME A)		FOR INFORMATION
2	BASIC SPECIFIC ...	✓			(14 DME A)		FOR INFORMATION
3	COAXIAL WIRE ...	✓			(14 DME A)		CAN NOT VERIFY WIRE MARK M17/172 SHOULD BE M17/113 *
4	GROUND PLANE ...	✓			(14 DME A)		VISUAL
5	THE INSERT ...	✓			(14 DME A)		
6	PERMANENTLY ...	✓			(14 DME A)		
7	FERRITE BEADS ...	✓			(14 DME A)		FOR INFORMATION
8	RIGHT ANGLE SMA CONNECTOR ...	✓			(14 DME A)		CONFORMS

V - Verify W - Witness I = Inspect

INSPECTION REPORT (SIDE B)

FIRST ARTICLE YES NO

(Ref. Work Instructions FTL.QUA.310-02 and FTL.QUA.430-10)

Page 2 of 2

Purchase Order No: 53152

Instruction No:

Program or Project: SRBAOL

Contract No:

Part or Assy. Name: ANTENNA ASSEMBLY

Part No: A3-06-2053-00

Serial Number(s): **Quantity Inspected:**

Revision Level: 01

Prepared by: DAVE VALEO Date: 4-25-02 Approved by:

Date:

[illegible]

1 PC BTVT
2 PCs
ACC. PER
MUR*
161345

MYERS ENGINEERING INTERNATIONAL, INC.

PO Box 670070, Coral Springs, FL 33067-0002
Tel: 954-345-5000 / Fax: 954-345-5005

Certificate Of Compliance
April 22, 2002

Sold To: *Dme Corporation*
6830 North West 16th Terrace
Fort Lauderdale, Florida 33309

Description Of Materials :

Antenna, Tripple Resonance (This Antenna requires a ground plane)
Model Number: UL-4060-T111,
Quantity: 3
Purchase Order Number: 53152

The above Material conforms to MEI drawing Number UL-4060-T111.

Steve Myers
President
Myers Engineering Int'l., Inc

NONCONFORMING MATERIAL REPORT

NMR Number: 1 of 1
A161345

GENERAL INFORMATION: (PART/ASSEMBLY SEGREGATED WITH NMR)

Part Nomenclature/Name:	Part Number:	Rev:	Serial Number:	Prev. NMR:	Program/Job No:	Department:	FRACAS	Report No:
ANTENNA ASSEMBLY	A3-06-2053-001	01	NA	NA	SRB-406	REC	yes ☒	

RECEIVING INSPECTION INFORMATION:

Supplier Number:	Supplier Name:	PO Number:	Receiver Number:	Receiver Date:	RI Qty Recv:	RI Qty Insp:	RI Qty Rejected:
5295	MYERS ENGINEERING	53152	161345	25-Apr-02	3	3	3

IN-PROCESS INSPECTION INFORMATION:

WO No. - Seq:	Inspection Work Inst:	Test Procedure Number:	New WO Number:	IP Qty Recv:	IP Qty Insp:	IP Qty Rejected:
				0	0	0

Nonconformance:

1) NOT PER NOTE # 3, WIRE CABLE MARKED M17/172 SHOULD BE M17/113. 2) 36.0 +/- 1.0 DIM. MEASURES DOWN TO 34-3/4 INCH, 1 OF 3 PCS. SEE ATTACHED FAI REPORT.

Shipped # 17038
5/8/02

NON CONFORMING PART/ASSEMBLY IF NOT SAME AS THAT SEGREGATED WITH NMR.

Non segreg Name/Nomenclature:

Non segreg Part Number:

Non segreg Revision:

Non segreg Serial Number:

Defect Codes (QTY):

Initiator:	Date Initiated:	Area Engineer:	Engineer Date of Signature:
DAVE VALEO	26-Apr-02	CARREY HENRY	<i>[Signature]</i> 4/29/02

Disposition:

1) UAI

RTV 1 @ 34.75"

3) Verify antenna is functional @ 406.028 MHz - RTV. IF OK UAI. IF NOT RTV. Supplier to written response.

Verified with supplier that ant. is functional @ 406.028 MHz

RTV	RTV Qty	UAI	UAI Qty	Rework	Rework Qty	Repair	Repair Qty	Scrap	Scrap Qty	Scrap Cost
☒	1	☐		☐		☐		☐		

PMR Quality Rep:	Date:	MRB Quality Rep:	Date:	MRB Engineering Rep:	Date:	MRB Mfg Rep:	Date:	MRB Customer Rep:	Date:
<i>[Signature]</i>	5/7/02	<i>[Signature]</i>	5/7/02	<i>[Signature]</i>	5/7/02	<i>[Signature]</i>	5/7/02		

OTHER MATERIAL AFFECTED	I N P R O C	I N S T O C K	I N T E S T	I N F I E L D
REINSPECT	☐	☐	☐	☐
RETEST	☐	☐	☐	☐
RETROFIT	☐	☐	☐	☐
NONE	☐	☐	☐	☐

Affected Part Numbers:

14-02 Responsibility DME ☒ Supplier ☒

Corrective Action:

Cause:

Corrective Action:

1) ENG. TO REVISE A3-06-2053 TO CLARIFY CHARACTERISTICS

Responsible Department:	Due Date:	Completion Date:	Accepted By:	Date:	SCAR Number:
PMR/ENG	6/7/02		<i>[Signature]</i>	5/7/02	

Quality Closure Rep:	Quality Closure Date:



FIRST ARTICLE PRODUCT APPROVAL FORM

This form is used for approval/disapproval of first article unit(s) or sample(s) of the DME part number referenced below, submitted by the vendor identified. All applicable information below **MUST** be filled out and two copies of this document shall be circulated for review and disposition by Quality, Engineering and Manufacturing Engineering and then returned to THOMAS WEBER.
Buyer/Subcontract Administrator (please print)

Vendor Name: MYERS ENGRG.
Part Number: A3-06-2053-001 Revision Level: 01
Description: ANTENNA ASSY.
Purchase Order Number: 53152
Mold No.: _____ Cavities: _____

The above part(s) as submitted: (check appropriate box)

☐ Complies to our specification

☐ Meets all requirements. Engineering documentation to follow.

☒ Does not comply with our specification.

Explanation: See attached FAI form.

Quality Assurance: Dana Valer
Engineering: Steve Kier
Purchasing: James Weber
Manufacturing Eng.: _____

Date: 4-26-02
Date: 4-26-02
Date: 4-26-02
Date: _____

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REVISIONS			
REV	ECO	DATE	APPROVAL
01	ECO13155		

Notes:

DME CORPORATION REQUIRES APPROVAL OF CHANGES IN DESIGN OR MANUFACTURING PROCESS OF THIS ITEM, PRIOR TO IMPLEMENTATION.

2. BASIC SPECIFICATIONS:

OPERATIONAL FREQUENCIES: 121.5, 406 AND 243 MHz
 NOMINAL INPUT IMPEDANCE: 50 OHMS
 MAXIMUM VSWR AT RESONANCE: 2.0 (9dB RET LOSS)
 POWER RATING: 2 WATTS CW (CONTINUOUS)
 OPERATING TEMPERATURE: -20°C TO +55°C
 STORAGE TEMPERATURE: -40°C TO +85°C
 DC IMPEDANCE BETWEEN CENTER AND OUTER CONDUCTOR SHOULD BE $\geq 10M$ OHMS

3. COAXIAL WIRE SHALL BE PER MIL-17/113-RG316 OR APPROXIMATE EQUIVALENT.

4. GROUND PLANE SHALL BE WELL ADHERED TO BASE OF ANTENNA WITH NO SHARP PROTRUSIONS THAT COULD CAUSE A PUNCTURE. THE INFLATABLE ARE ALLOWED ON THIS SURFACE.

5. THE INSERT SHALL BE SECURELY BONDED INTO THE RUBBER

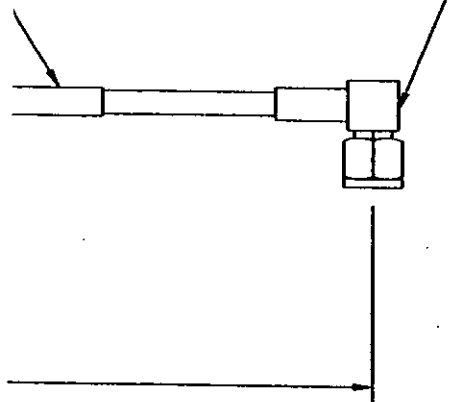
6. PERMANENTLY IDENTIFY ANTENNA WITH DME PART NUMBER "P3-03-00xx-001 REV []" AND CURRENT REVISION OF P3-03-00xx.

7. FERRITE BEADS TO BE INTERNAL TO ANTENNA BOOT.

PN MARKING S/B

P3-03-0040-001 REV. 01

8. RIGHT ANGLE SMA CONNECTOR
 GOLD PLATED,
 SOCKET TYPE



APPROVED SOURCES OF SUPPLY				SUPPLIER DATA		ORCE CONTROL DRAWING	
DME DASH	CAGE CODE	PART NUMBER	NAME AND ADDRESS	LESS OTHERWISE SPECIFIED	DME CORPORATION		
-001	OP001	UL-4060-T111 REVISION A	MYERS ENGINEERING FT. LAUDERDALE, FL	IN INCHES	6830 NW 16TH TERRACE FT LAUDERDALE, FL 33309		
				TOLERANCES ON DIMENSIONS ARE	TITLE		
				PLACE 3 PLACE DECIMAL	ANTENNA ASSEMBLY, TRIPLE FREQUENCY		
				±0.03	REV. 01		
				ACTIONS ±1/8	B 55827 A3-06-2053		
				ANGLES ±1°	SCALE NONE WT N/A SHEET 1 OF 1		