

A P P E N D I X I I

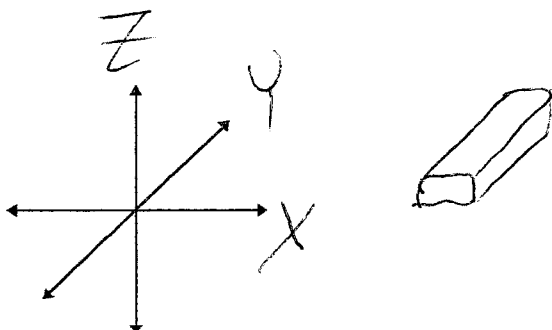
T E S T E Q U I P M E N T L I S T S
A N D
T Y P I C A L T E S T S E T U P P H O T O S

T h e t o t a l n u m b e r o f p a g e s i n
t h i s A p p e n d i x i s 1 1

TEST DATA

DATE STARTED 7-10-03	CUSTOMER MMI	TECHNICIAN (SIGNATURE) <i>R. Smith</i>
DATE COMPLETED 7-10-03	SPECIMEN DESCRIPTION PLB	ENGINEER (SIGNATURE) <i>Martin R. Barth</i>
TEMPERATURE (LABORATORY) 75 °F	TYPE OF TEST VIBRATION & BUMP	ENGINEER
HUMIDITY (LABORATORY) 50 %	TEST SPECIFICATION NOTED	PARAGRAPH NUMBER
SPECIMEN NUMBER NOTED	2 pcs.	JOB NUMBER 23283-0714447

DEFINITION OF AXES



EQUIPMENT LIST

EQUIPMENT DESCRIPTION	MANUFACTURER	MODEL NUMBER	I. D. NUMBER	CALIBRATION LAST	CALIBRATION DUE
Vibration Controller	Data Physics	DP560	EA#1234	5-22-03	11-22-03
Shaker	LDS	DP550	0335	4-21-03	10-21-03
Amplifier	LDS	V894	130	Prior To Test	
Charge Amp.	Endevco	DPA 60K	131	Prior To Test	
		2721B	ER77	2-19-03	8-19-03
Accelerometer	Endevco	7702A-50	11286	5-16-03	11-16-03

JOB NUMBER 23283-6714447

EQUIPMENT LIST

TEST DESCRIPTION	EQUIPMENT DESCRIPTION	MANUFACTURER	MODEL NUMBER	I.D. NUMBER	CALIBRATION LAST	CALIBRATION DUE
CHAMBER	SINGLETON	SCCH#23	SCCH#23-23575	REFERENCE		
CHART RECORDER	PARTLOW	411000000021-043	91831509	2-3-03		8-3-03
URINOMETER FLOAT	SQIBB	421521	LOT # 1100092996	FACTORY SET		
BROMTHYMOL BLUE	VWR SCIENTIFIC	VW3393-2	LOT # 1260	VERIFIED MONTHLY		
BI-COLOR TEST KIT	LaMOTTE CHEMICAL	PP-BTB	N/A	REFERENCE		
THERMOMETER	VWR SCIENTIFIC	61222-586	A/N 1240	7-18-02		7-18-04
GRADUATED CYLINDER	PYREX	3022	N/A	FACTORY SET		
CHAMBER (P/E Conditioning)	Tender	JR	0316			
Digital THERMOMETER	OMEGA	HAZ1	TA97283	4-4-03		10-4-03

ENVIRONMENT ASSOCIATES, INC

JOB NUMBER: 23283-0714447

EQUIPMENT LIST

TEST DESCRIPTION: *PREP*

EQUIPMENT DESCRIPTION	MANUFACTURER	MODEL NUMBER	I.D. NUMBER	LAST CALIBRATION	CALIBRATION DUE
BENCH TOP	E.A.	CG2A 6 INCHES	N/A	FACTORY SET PER:	CUSE SPEC.
PUSH PULL RULER	STANLEY	16 FT.	N/A	FACTORY SET	
ANGLE LOCATOR	JOHNSON	700	N/A	FACTORY SET	N/A
<i>CHAMBER</i>	<i>THERMOTRON</i>	<i>TS-8-22-30C</i>	<i>0203</i>	<i>---</i>	<i>---</i>
<i>CHART RECORDER</i>	<i>HONEYWELL</i>	<i>DR4200</i>	<i>C6414</i>	<i>6-2-03</i>	<i>12-2-03</i>

THICKNESS OF WOOD. 6 1/2 INCHES.
 WEIGHT OF WOOD 70 LBS.
 ON CONCRETE SLAB

ENVIRONMENT ASSOCIATES, INC

JOB NUMBER 23283-0714447

EQUIPMENT LIST

TEST DESCRIPTION: LEAKAGE & IMMERSION

EQUIPMENT DESCRIPTION	MANUFACTURER	MODEL NUMBER	I.D. NUMBER	LAST CALIBRATION	CALIBRATION DUE
CHAMBER	TENNEY	15STR	6922	N/A	N/A
CHART RECORDER	HONEYWELL	DR4502	593	2-3-03	8-3-03
CHAMBER	ENVIROTRONICS	ET-8-2-3	285215	REFERENCE	REFERENCE
CHART RECORDER	PARTLOW	4100	86F0277	6-1-03	12-2-02
PUSH PULL RULER	LUFKIN	10 FT. / 3 M	HV1023CME	FACTORY	SET

ENVIRONMENT ASSOCIATES, INC

JOB NUMBER 23283-0714447

EQUIPMENT LIST

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CHAMBER	TENNEY	15STR	6922	N/A	N/A
CHART RECORDER	HONEYWELL	DR4502	593	2-3-03	8-3-03
CHAMBER	ENVIROTRONICS	ET-8-2-3	285215	REFERENCE	REFERENCE
CHART RECORDER	PARTFLOW	4100	86F0277	6-2-02	12-2-02
PUSH PULL RULER	LUFKIN	10 FT / 3 M	HV1023CME	FACTORY	SET



TYPICAL TEST SETUP



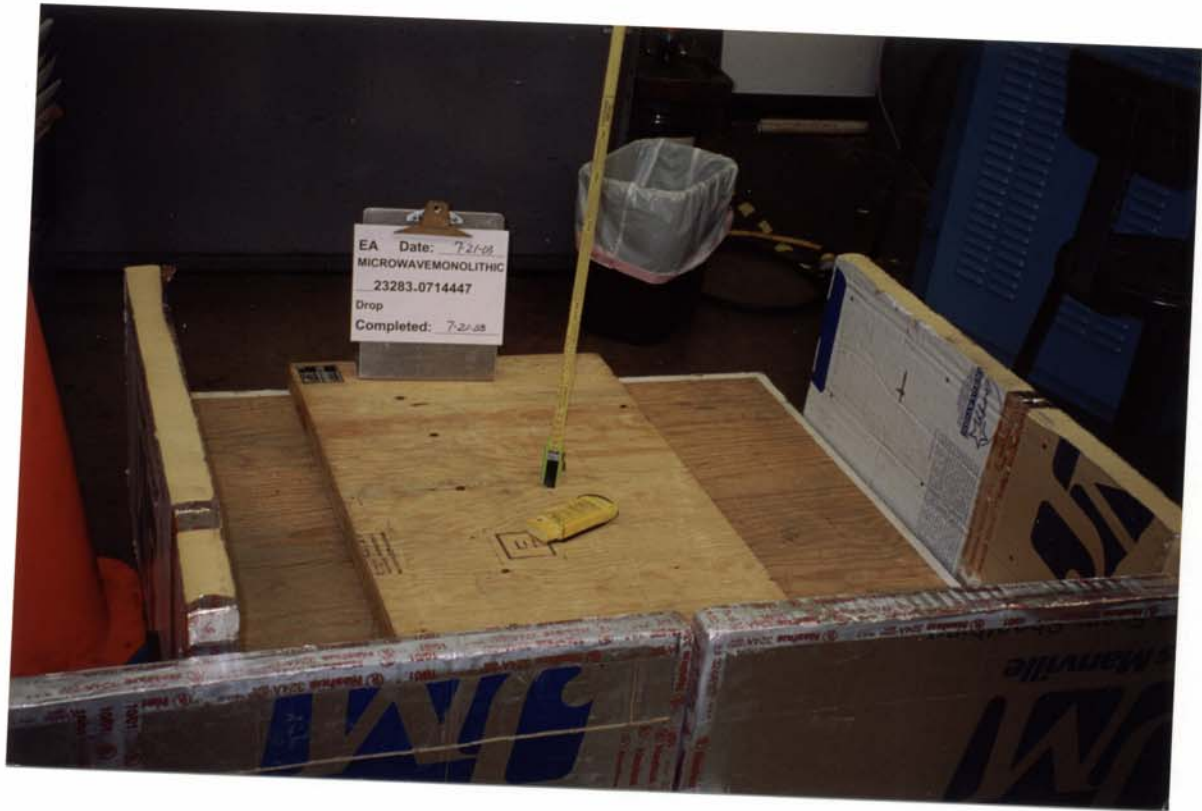


TYPICAL TEST SETUP





TYPICAL TEST SETUP





TYPICAL TEST SETUP





TYPICAL TEST SETUP



A P P E N D I X I I I

N O T I C E O F T E S T D E V I A T I O N

**T h e t o t a l n u m b e r o f p a g e s i n
t h i s A p p e n d i x i s 3**

**ENVIRONMENT
ASSOCIATES**

Notice Of Test Deviation

Our Job No.: 23283-0714447
Deviation No.: 1
P. O. Number: 83277

To: MICROWAVE MONOLITHICS
Attention: DANIEL SIU
Test Specimen: PERSONAL LOCATOR BEACON
Part Number: MBT040600/MBT040600GP
Specification: RTCM PAPER 76-2002/SC110-STD
Deviation Reported To: DANIEL SUI
Date: 7-24-03
Reported By: BOB COITEUX

Serial Number(s): 263,264
Paragraph: A.7.0.

Via: TELECOM

Specification Requirements:

SAMPLES TO BE EXPOSED TO 1: 1 HR. AT +65C 2: IMMEDIATELY REMOVE FROM +54C AND SUBMERGE IN WATER AT +20C, 100mm DEPTH AND MAINTAIN FOR 48 HOURS. 3: REMOVE FROM +20C WATER AND SUBMERGE IN WATER AT A DEPTH OF 1 METER. 4: REMOVE AND PERFORM ALIVENESS TEST AFTER WIPING OFF SAMPLES.

Description of Deviation:

S/N 264 DID NOT PASS ALIVENESS TEST. (NO GREEN LIGHT). ALSO NOTED WAS THE CAP HOLDING THE ANTENNA HAD A LARGE CRACK WHICH WAS NOT NOTED PREVIOUSLY.

Corrective Action Taken:

SAMPLES TO BE RETURNED TO CUSTOMER FOR FINAL INSPECTION ,EVALUATION AND DETERMINATION OF TESTING.

Specimen Disposition:

TO BE DETERMINED BY CUSTOMER.

Comments/Recommendations:

Test Witness:
Representing:

Technician:
Test Engineer:
Quality Manager:

[Signature]
Martin R. Butler

Distribution: Customer
Contacts
QC



Microwave Monolithics Incorporated

2263 Ward Avenue, Simi Valley, California 93065
(805)584-MMIC • (805)584-6642 • FAX:(805)584-9594

July 25, 2003

Environmental Associates, Inc.
Attn. Mr. Robert Coiteux, Laboratory Manager
9604 Variel Avenue
Chatsworth, California 91311

Re: Failure Analysis, model #MBT040600GP serial #264

We have concluded our failure analysis on this unit. The results are summarized here.

- 1) There is no apparent damage to the unit housing. The crack on the cap that you observed is a cosmetic issue. The cap still functions properly for holding the antenna in storage. Nor would this in any other way affect the operation of the beacon, since the cap has to be removed prior to activation.
- 2) When we opened the housing, we discovered that an internal wire was inadvertently pinched between the environmental gasket and the corresponding sealing surface. The wire actually intruded into one of the screw holes, essentially defeating the environmental seal. This is a randomly-occurring assembly mistake and not a design problem. We have also instituted changes in assembly and quality-assurance procedures so this will never happen again.

We have corrected the problem with unit #264 and are submitting it to you for retesting.

If there is any question, please do not hesitate to call me.

Sincerely yours,

Daniel Siu