

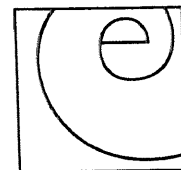
Description	Action	due date
<p>I) Baseline review and TRR for vibration</p> <p>See Annex 1 DSRI summary</p> <p>1) Configuration status, Instrument, S/W, EGSE according to MPS manufactured and documented:</p> <ul style="list-style-type: none"> - Detector: INT-MP-JM-125 - DFEE: INT-MP-JM-215 <p>S/W Rev.: 4.0</p> <p>EGSE: Set. No.2.</p> <p>Mechanical Dimensions and CoG have been verified in DSRI prior the test-campaign.</p> <p>2) Documentation status, Procedures valid for JEM-X FM1</p> <ul style="list-style-type: none"> - Vibration Test Procedure IN-TP-JEM-0007/issue1, Rev.3 - EMC Test Procedure, IN-TP-JM-0002/issue3. Rev.1 - TV Test procedure, IN-TP-JEM-0008/issue1, Rev.1 <p>Variations will be red marked on the as-run test procedures</p> <p>3) Functional pre-test:</p> <p>Last functional full performance test has been performed in DSRI prior start of the campaign:</p> <p>The functional Test, consist of electrical calibration, noise test and data taking.</p> <p>During the different test-steps / axis a short functional test (subset) will be performed; sequence is attached to the test procedure.</p> <p>4) NCR-, RfW status</p> <p>RfW: IN-WV-JEM-0003 for H-field is not approved yet by ESTEC, no impact on the test planned.</p> <p>Complete NCR status list applicable for JEM-X in annex 2.</p> <p>No NCR open related to the instrument verification.</p> <p>IN-NC-JEM-1038 is related to the ISSW, no impact on the test.</p> <p>5) Vibration facility status, instrumentation plan,</p> <p>Accelerometer and thermocouple locations are specified in the test procedures.</p> <p>Facility readiness review held, see annex 3:</p> <p>Important open issue is an acceptable footprint of the 80 kN shaker. It is under investigation and a new decision shall be made at 17.00 hours.</p>	<p>Facility Readiness</p>	<p>See delta review</p>

Description	Action Certificate	due date
The Facility Readiness Certificate is outstanding.		
6) Test-plan, test-schedule Vibration fixture installation and dry-run, X- axis, Y-axis, Z-axis		
7) Open work, AOB Facility Readiness Certificate with the closure of the open actions. Installation of accelerometers on test specimen according to procedure. Calibration Source to be verified by safety department, see also DSRI provided Source Data Sheet in annex 4 .	performed	
8) Conclusion Pending the facility readiness JEM-X is ready to start for the vibration test.	Open,	see IV) for delta TRR vibration
II) TRR for EMC test		
Agenda		
1) Status, reason for change to EMC tests 2) Facility status 3) Test schedule 4) AOB, conclusion		
1) Status, reason for change to EMC tests During the shaker verification activities a serious problem had been found, shaker maintenance is required. Due to the fact that a repair is not immediately possible it has been decided to start the EMC tests. The EMC facility was in the position to prepare and verify the test configuration by 22.08.2001. JEM-X can move at 15.00 Hours into the facility.		
2) Facility status The facility readiness review has been held today, no open issues which could have an impact on the test have been identified, see annex 5		
3) Test- schedule The test will start after set up of the EGSE and the detector on		

Description	Action	due date
<p>V) PTR for Vibration</p> <p>Agenda</p> <ol style="list-style-type: none"> 1) Test configuration, deviations 2) Tests performed, deviations 3) Test Results 4) NCR's, open work 5) AOB, 6) Conclusion <ol style="list-style-type: none"> 1) Test configuration, deviations <p>The JEM-X FM1 configuration is as described in section I), no modification / change during the test performed with the 70 (80) KN shaker.</p> <p>The instrument was always lifted out of the test fixture prior changing of the vibration axis.</p> <p>The accelerometer configuration was as outlined in the test procedure and corresponded with the QM test performed.</p> <p>Details will provided in the facility data report.</p> 2) Tests performed, deviations <p>The sequence of the test was as planned X-, Y-, Z-axis, except the intermediate level random runs, were performed as proposed by the test facility (-9, -6, -3,5 dB for 10 sec each level).</p> <p>The instrument performance verification performed after sinus and after random run per axis, as requested in the test procedure.</p> <p>On low level run, 1Z abort (positive line abort) at 150 Hz. Tolerance band changed to + 6dB. The new run was performed successfully.</p> <p>The plots of the aborted run will not be part of the facility data report.</p> 3) Test Results <p>- Mechanical tests:</p> <p>The plots prior 1. low level run per axis with after each high level sin run and with each next Random run have been compared and have shown no significant frequency shift.</p> <p>The annex 8 shows a comparison, it includes the low level sinus prior start of the axis and after Random, deviations are less than 3.6 %. No shift detected prior and after sinus run.</p> <p>Test requirements for frequency shift is less than +/- 5% and amplitude variations is less than +/- 10%.</p> <p>- Functional Verification:</p> <p>No change has been found during the different functional tests (electrical calibration and data taking (back-ground test)). All</p> 		

Description	Action	due date
<p>electrical functions have been verified and satisfying. When ever feasible noise level test performed. This test is very time consuming (1 count per second), results are satisfactory. Also a final noise test performed.</p> <p>No change of house keeping parameters prior and after test.</p> <p>Different plots of the functional; performance test, see Annex 9</p>		
<p>5) NCR's open work</p> <p>No open work or tests. No NCR raised.</p>		
<p>6) AOB</p> <p>Modified test-fixture and improved MGSE lifting device was satisfactory for handling the instrument.</p> <p>Facility Data Report will be provided in 6 copies for the test report and 3 copies of the annex (accelerometer reports) within 4 weeks.</p>		
<p>6) Conclusion</p> <p>All mechanical and electrical data are recorded. Test was performed in a very short time and successful. Environmental test can continue with the TV test.</p>		
<p>Note:</p> <p>The EMC ESD test has been performed successfully on the EM detector connected to the QM DFEE. See INT-MN-39863 for the TRR and PTR.</p>		

Minutes of Meeting

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Meeting Date: 20/08/01

Sheet: 1 of 5

+ *minutes*

Place: ESTEC, Room

Subject: Facility readiness review for the JEM-X FM1 vibration test

Agenda:

1. Test Item & Requirements..... 2
2. Planning..... 2
3. Responsibilities..... 2
4. Test Equipment & Facility Configuration..... 2
5. Instrumentation..... 3
6. Facility Maintenance Status..... 3
7. Preparation status..... 3
8. NCRs & Open actions..... 3
9. Procedures & Documentation..... 4
10. Safety, Security & Cleanliness..... 4
11. AOB..... 4
12. Conclusion..... 4
- Action item initiation sheet..... 5

Organisation	Participants Name	Organisation	Distribution Name
ESTEC/TOS-MTC	JP. Vessaz <i>Vessaz 20/8-1</i>		ETS secretary, participants + ...
ETS/TM	W. Teichert <i>W. Teichert</i>	ESTEC/TOS-MTP	A. Popovitch
ETS/QAM	P. Cosio	TOS - QAM	J. Pinel
		Prepared by: Ph Cosio	<i>[Signature]</i>
		Date: 20/08/01	

1. TEST ITEM & REQUIREMENTS

The aim of the Facility Readiness Review is to agree the readiness of the 80 kN shaker for the xyz vibration test program.

The test item is JEM-X FM1 in its configuration for the sine vibration test.

The objectives of the test is:

- to perform the xyz vibration test, according to the procedure described in the specific procedure **ETS/INST/VIB/050**

2. PLANNING

The following planing is foreseen:

21/08/2001 TRR

22/08/2001 Start test

24/08/2001 End test

3. RESPONSIBILITIES

Test manager : J.P. Vessaz

Test Engineer / Control console : W. Teichert

MDH operator : R. Braeken

Facility operator : R.Voorbach / H.D. Slaar

MDH training S. Scharfenberg

4. TEST EQUIPMENT & FACILITY CONFIGURATION

The vibration test will be performed using the 80kN shaker facility. The specimen is fixed on the shaker via a JEM-X dedicated adapter. For the X-axis vibration, the adapter is mounted on the top of the shaker in vertical position. For the lateral axes the adapter is mounted on one slip table.

5. INSTRUMENTATION

The vibration input level has to be controlled by 4 pilots. Four tri-axial co-pilots have to be installed close to the pilots.

3 tri-axial test point will be glued to the specimen at a location, which is specified in doc ref: **IN-TP-JEM-0007**.

6. FACILITY MAINTENANCE STATUS

The Facility Maintenance Status Reports are attached as follows:

- Vibration Maintenance records (see annex A)
- MDH Maintenance records (see annex B)

All maintenance activities have been performed according to maintenance plan

The Facility Calibration Status Reports are attached as follows:

- MDH Calibration records (see annex C)

All equipment in use for this test is in validity period of calibration

7. PREPARATION STATUS

The preparation work related to this test is to get all relevant maintenance & calibration done in due time before the 21 August 2001 (see actions 1&2).

Prior to the TRR, the pre-test will be perform and the results will be hand over to the customer.

8. NCRs & OPEN ACTIONS

There are 7 relevant NCRs (see annex D):

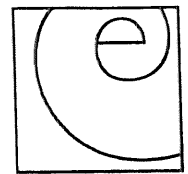
00-756	Status ->	Database correctness has been verified by the TM prior to the FRR
01-786	Status ->	No impact on the test. Sufficient spares availables
01-810	Status ->	Operator briefing will take place (see action 4)
01-811	Status ->	Check actions / potential impact (see action 5)
01-837	Status ->	Covered by the specific procedure
01-842	Status ->	No impact on the test. Available power is sufficient for JEM-X test.
01-846	Status ->	Covered by the specific procedure

ETS Technical Manager

9. PROCEDURES & DOCUMENTATION

ETS/INST/VIB/050
IN-TP-JEM-0007

Specific operation procedure for JEM-X vibration test
JEM-X FM1 vibration test procedure.



10. SAFETY, SECURITY & CLEANLINESS

- Safety action plan Radioactivity of the calibration sources to be checked as well as to inform operators in regard of the attendance of beryllium parts. (see actions 6&7).

- Cleanliness Class 100.000
- Temperature $21^{\circ}\text{C} \pm 3^{\circ}\text{C}$
- Humidity $40\% < H < 60\%$

11. AOB

Status of cranes: - No need

Status of buildings: - No relevant problem linked to the vibration area
- UPS 1,2 & 3 in adequate maintenance status

Agreement on the insurance status:

The customer requirements in matter of insurance shall be checked in regard of the level of insurance ETS as contracted for the test item (see action 8)

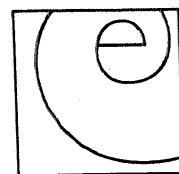
12. CONCLUSION

The FRR board agrees that the facility is ready for testing providing that the action list attached is completed.

Minutes of Meeting

Meeting Date: 20/08/01

Sheet: 5 of 5

ACTION ITEM INITIATION SHEETets
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Action Nr.	Title and Description	Due Date	Actionee
1	To complete 80kN shaker vertical foot-print	21/8/2001	W. Teichert
2	To make post maintenance check on TEAC recorder	21/8/2001	R. Braeken
3	To execute pre-test with JEM-X adapter	21/8/2001	W. Teichert
4	To organise operator briefing on opened actions NCR 01-810	21/8/2001	W. Teichert
5	To check open action of the NCR 01-811	21/8/2001	W. Teicher/ Ph Cosio
6	To check radioactivity of the calibration sources	21/8/2001	ADM-GTS
7	To organise an operator briefing / radioactive sources + beryllium attendance	21/8/2001	W. Teichert
8	To check the insurance level taken for the vibration test	21/8/2001	Ph Cosio

ID No.	Item	Title	Date last	Date next	Validity months	Hours left	Status
VIBRATIONS							
Fixed							
140 kN interface							
VIB/1/5.1	Single head expander	Flatness measurement	08-Feb-01	07-Feb-02	12		IN
140 kN system M							
VIB/1/1.1	Shaker M	Mechanical check	06-Jun-01	06-Dec-01	6		IN
VIB/1/1.10	Shaker M+ SHE	SHE footprint	19-May-00	18-May-01	12	not used	OUT
VIB/1/1.11	Ampli M	Mechanical and electrical check	31-Jul-01	31-Oct-01	3		IN
VIB/1/1.12	Ampli M	Air cooling check	31-Jul-01	31-Oct-01	3		IN
VIB/1/1.13	Ampli M	Amplifier internal check	01-Apr-01	01-Oct-01	6		IN
VIB/1/1.14	Ampli M	Footprint	01-Apr-01	01-Apr-02	12		IN
VIB/1/1.15	Ampli M	filter replacement	01-Apr-01	01-Apr-02	12		IN
VIB/1/1.16	System M VPDU calibration	calibration	01-Apr-01	01-Apr-02	12		IN
VIB/1/1.2	Shaker M current lead	Body internal inspection	06-Jun-01	06-Dec-01	6		IN
VIB/1/1.3	Shaker M	supplier maintenance.	06-Jan-99	05-Jan-03	48		IN
VIB/1/1.4	Shaker M	Following up supplier maintenance.	06-Jan-99	05-Jan-03	48		IN
VIB/1/1.5	Shaker M	Vertical footprint	01-Oct-00	01-Oct-01	12		IN
VIB/1/1.6	Shaker M cooling	Mechanical check	17-Aug-01	17-Nov-01	3		IN
VIB/1/1.7	Shaker M cooling	Annual maintenance	24-Nov-00	23-Nov-01	12		IN
VIB/1/1.8	Shaker M cooling	Temp.- sensor verification	01-Feb-01	01-Feb-02	12		IN
VIB/1/1.9	Shaker M cooling	Water renewal	17-Aug-01	17-Nov-01	3		IN
140 kN system P							

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ID No.	Item	Title	Date last	Date next	Validity months	Hours left	Status
VIB/1/2.1	Shaker P	Mechanical check	28-May-01	28-Nov-01	6		IN
VIB/1/2.10	Shaker P + SHE	SHE footprint	31-Mar-89	26-Mar-90	12	not used	OUT
VIB/1/2.11	Ampli P	Mechanical and electrical check	31-Jul-01	31-Oct-01	3		IN
VIB/1/2.12	Ampli P	Air cooling check	31-Jul-01	31-Oct-01	3		IN
VIB/1/2.13	Ampli P	Amplifier internal check	01-Apr-01	01-Oct-01	6		IN
VIB/1/2.14	Ampli P	Footprint	01-Apr-01	01-Apr-02	12		IN
VIB/1/2.15	Ampli P	filter replacement	01-Apr-01	01-Apr-02	12		IN
VIB/1/2.16	System P VPDU calibration	calibration	01-Apr-01	01-Apr-02	12		IN
VIB/1/2.2	Shaker P current lead	Body internal inspection	28-May-01	28-Nov-01	6		IN
VIB/1/2.3	Shaker P	supplier maintenance.	01-Oct-99	01-Oct-03	48		IN
VIB/1/2.4	Shaker P	Following up supplier maintenance.	01-Oct-99	01-Oct-03	48		IN
VIB/1/2.5	Shaker P	Vertical footprint	01-Oct-00	01-Oct-01	12		IN
VIB/1/2.6	Shaker P cooling	Mechanical check	31-Jul-01	31-Oct-01	3		IN
VIB/1/2.7	Shaker P cooling	Annual maintenance	25-Nov-00	24-Nov-01	12		IN
VIB/1/2.8	Shaker P cooling	Temp.- sensor verification	01-Feb-01	01-Feb-02	12		IN
VIB/1/2.9	Shaker P cooling	Water renewal	31-Jul-01	31-Oct-01	3		IN
70 kN interface							
VIB/1/6.2	Oil pump	Maintenance	07-Feb-01	06-Feb-02	12		IN
VIB/1/6.3	70 kN slip table	Mechanical check	07-Feb-01	06-Feb-02	12		IN
VIB/1/6.4	70 kN slip table	Flatness measurement	06-Feb-01	05-Feb-02	12		IN
70 kN system							
VIB/1/3.1	Shaker 7t	Mechanical check	15-Jun-01	15-Dec-01	6		IN
VIB/1/3.10	Ampli 70 kN	Mechanical and electrical check	31-Jul-01	31-Oct-01	3		IN
VIB/1/3.11	Ampli 70 kN	Air cooling check	31-Jul-01	31-Oct-01	3		IN
VIB/1/3.12	Ampli 70 kN	Amplifier internal check	01-Apr-01	01-Oct-01	6		IN

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ID No.	Item	Title	Date last	Date next	months left	Status
VIB/1/3.13	Ampli 70 kN	Footprint	01-Apr-01	01-Apr-02	12	IN
VIB/1/3.14	Ampli 70 kN	filter replacement	01-Apr-01	01-Apr-02	12	IN
VIB/1/3.15	70 kN System VPDU calibration	calibration	01-Apr-01	01-Apr-02	12	IN
VIB/1/3.2	Shaker 7t	supplier maintenance.	13-Oct-99	12-Oct-03	48	IN
VIB/1/3.3	Shaker 7t	Following up supplier maintenance.	13-Oct-99	12-Oct-03	48	IN
VIB/1/3.4	Shaker 7t	Vertical footprint	01-Aug-00	01-Aug-01	12	OUT
VIB/1/3.5	Shaker 7t cooling	Mechanical check	31-Jul-01	31-Oct-01	3	IN
VIB/1/3.6	Shaker 7t cooling	Annual maintenance	06-Feb-01	05-Feb-02	12	IN
VIB/1/3.7	Shaker 7t cooling	Temperature sensor calibration	01-Feb-01	01-Feb-02	12	IN
VIB/1/3.8	Shaker 7t cooling	Water renewal	31-Jul-01	31-Oct-01	3	IN
VIB/1/3.9	Shaker 7t + slip table	Horizontal footprint	11-Oct-00	10-Oct-01	12	IN
Cleanroom						
VIB/1/7	Cleaning	Cleaning Level II for Fh004, Fh008 & Finna	06-Jul-01	06-Jan-02	6	IN
MSH interface						
VIB/1/4.1	Dual Head Expander	Visual Inspection	02-Feb-01	01-Feb-02	12	IN
VIB/1/4.2	Dual Head Expander	Flatness	05-Oct-00	04-Oct-01	12	IN
VIB/1/4.4	Large Slip Table	Annual maintenance	08-Feb-01	07-Feb-02	12	IN
VIB/1/4.5	Large Slip Table	Flatness measurement	15-Feb-01	14-Feb-02	12	IN
Multi shaker						
VIB/1/4.3	MSH + DHE	Vertical footprint	20-Jan-01	19-Jan-02	12	IN
VIB/1/4.6	MSH + LST	Horizontal footprint	01-Dec-00	01-Dec-02	12	IN
Variable						
140 kN interface						
VIB/2/5.1	140 kN slip table	supplier maintenance	01-Oct-00	18-Feb-99	99	OUT
VIB/2/5.2	Single Head Expander	supplier maintenance	21-Jun-93	08-Aug-01	99	OUT
VIB/2/5.3	140 kN slip table	Flatness measurement	27-Dec-91	27-Dec-92	99	OUT

to be completed
or 20/18

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ID No.	Item	Title	Date last	Date next	Validity months left	Status
140 kN system M						
VIB/2/1.15	Ampli M	supplier maintenance	01-Oct-00	01-Dec-09	99	IN
140 kN system P						
VIB/2/2.15	Ampli P	supplier maintenance	01-Oct-00	01-Jan-09	99	IN
70 kN interface						
VIB/2/6.1	70 kN slip table	supplier maintenance	22-Jun-93	09-Aug-01	99	OUT
70 kN system						
VIB/2/3.15	Ampli 70 kN	supplier maintenance	01-Oct-00	01-Jan-09	99	IN
MSH interface						
VIB/2/4.2	Dual Head Expander	VMS maintenance	01-Oct-00	19-Jul-02	99	IN

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ID No.	Item	Title	Date last	Date next	Validity months	Hours left	Status
MECHANICA							
Fixed							
<i>Calibration Bench</i>							
MDH/1/1.1	Reference accelerometer	Calibration	15-Jan-01	14-Jan-02	12		IN
MDH/1/1.2	Reference accelerometer	Following up calibration	15-Jan-01	14-Jan-02	12		IN
MDH/1/1.3	Accelerometer bench	Verification	15-Jan-01	14-Jan-02	12		IN
<i>Data Acquisition</i>							
MDH/1/2.1	SICOS charge amplifiers	Calibration	16-Aug-01	16-Aug-02	12		IN
MDH/1/2.2	SICOS charge amplifiers	Following up calibration	16-Aug-01	16-Aug-02	12		IN
MDH/1/2.3	SICOS charge amplifiers	Post calibration check	16-Aug-01	16-Aug-02	12		IN
MDH/1/2.4	SICOS Charge amplifiers	Maintenance	15-Jan-01	14-Jan-02	12		IN
MDH/1/2.5	SICOS Charge amplifiers	Following up maintenance	15-Jan-01	14-Jan-02	12		IN
MDH/1/2.6	SICOS Charge amplifiers	Post maintenance check	14-Jan-01	13-Jan-02	12		IN
MDH/1/2.7	SCADAS Filter & Sampling device	Calibration	16-Aug-01	16-Aug-02	12		IN
MDH/1/2.8	SCADAS Filter & Sampling device	Following up calibration	16-Aug-01	16-Aug-02	12		IN
MDH/1/3.1	Straingauge bridge	Calibration	16-Aug-01	16-Aug-02	12		IN
MDH/1/3.2	Straingauge bridge	Following up calibration	16-Aug-01	16-Aug-02	12		IN
MDH/1/3.3	FMON Front-end	Calibration	16-Aug-01	16-Aug-02	12		IN
MDH/1/3.4	FMON Front-end	Following up calibration	16-Aug-01	16-Aug-02	12		IN
MDH/1/3.5	HP instruments	Maintenance/calibration	23-Mar-01	23-Sep-01	6		IN
MDH/1/3.6	HP instruments	Following up maintenance	23-Mar-01	23-Sep-01	6		IN
MDH/1/3.7	HPIB clocks	Battery check	23-May-01	23-Nov-01	6		IN

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ID No.	Item	Title	Date last	Date next	Validity months	Hours left	Status
<i>Recording/ Printing</i>							
MDH/1/4.1	Recorder Yokogawa	Calibration	16-Mar-00	16-Mar-01	12	} 1 calibrated recorder available	OUT
MDH/1/4.2	Recorder Yokogawa	Following up calibration	16-Mar-00	16-Mar-01	12		OUT
MDH/1/4.3	TEAC tape recorders	Maintenance/calibration	29-Jun-01	29-Jun-02	12		IN
MDH/1/4.4	TEAC tape recorders	Following up maintenance	29-Jun-01	29-Jun-02	12		IN
MDH/1/4.5	TEAC tape recorders	Post maintenance check	28-Jun-00	28-Jun-01	12	to be completed	OUT on 20/8
MDH/1/4.6	VERSATEC hard copier	Maintenance	03-Mar-99	03-Sep-99	6		OUT } not used
MDH/1/4.7	VERSATEC hard copier	Following up maintenance	03-Mar-99	03-Sep-99	6		OUT
<i>Software</i>							
MDH/2/5	HP1000 Computer	Software B/U after mod. RTE	20-Dec-97	19-Dec-98	12	not relevant	OUT
<i>Vibco</i>							
MDH/1/5.1	VIBCO Filter	Calibration	16-Aug-01	16-Aug-02	12		IN
MDH/1/5.2	VIBCO Filter	Following up calibration	16-Aug-01	16-Aug-02	12		IN
MDH/1/5.3	VIBCO Charge amplifier	Calibration	16-Aug-01	16-Aug-02	12		IN
MDH/1/5.4	VIBCO Charge amplifier	Following up calibration	16-Aug-01	16-Aug-02	12		IN
MDH/1/6.1	LMS console	Calibration	27-Sep-99	27-Sep-01	24		IN
MDH/1/6.2	LMS console	File calibr. quality record	27-Sep-99	27-Sep-01	24		IN
<i>Vibco / Software</i>							
MDH/2/3	LMS console	Software B/U after mod.CADA-X	16-May-98	22-Nov-00	12	} not relevant	OUT
MDH/2/4	DynaWorks	Software B/U after mod. Dynaworks	12-Aug-97	12-Aug-99	12		OUT

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Calibration status MUR

MANUFACTUR	TYPE	INVENTORY	DESCRIP	WHO_CALIB	LAST_CALIB	CAL_PERIOD	CALIB until	ACTION	Status
DIFA	MF16	37180	VIBCO filter	DIFA	16-Aug-01	12	16-Aug-02		IN
DIFA	MF16	46285	QFLEX DIFA (standalone equipme	DIFA	16-Aug-01	12	16-Aug-02		IN
DIFA	MF40	41775	Straingauge bridge (DSP4)	DIFA	16-Aug-01	12	16-Aug-02		IN
DIFA	MF40	42191	SICOS IV (Charge amplifier)	DIFA	16-Aug-01	12	16-Aug-02		IN
DIFA	MF40	42192	SICOS QRMS	DIFA	16-Aug-01	12	16-Aug-02		IN
DIFA	MF64	37732	SICOS I (Charge amplifier)	DIFA	16-Aug-01	12	16-Aug-02		IN
DIFA	MF64	44559	SICOS II (Charge amplifier)	DIFA	16-Aug-01	12	16-Aug-02		IN
DIFA	MF64	44560	SICOS III (Charge amplifier)	DIFA	16-Aug-01	12	16-Aug-02		IN
DIFA	SC212-0	48503	Charge amplifier	DIFA	16-Aug-01	12	16-Aug-02		IN
DIFA	SC212-1	47345	SCADAS II FMON (standalone equ	DIFA	16-Aug-01	12	16-Aug-02		IN
DIFA	SC64 64	44636	SCADAS III (filter & sampling dev.)	DIFA	16-Aug-01	12	16-Aug-02		IN
DIFA	SC64 64	44637	SCADAS II (filter & sampling dev.)	DIFA	16-Aug-01	12	16-Aug-02		IN
DIFA	SC6464	41710	SCADAS IV (filter & sampling dev.)	DIFA	16-Aug-01	12	16-Aug-02		IN
DIFA	SC6464	42827	SCADAS I (filter & sampling dev.)	DIFA	16-Aug-01	12	16-Aug-02		IN
Endevco	2210 FM1	None	Charge Amplifiers (2) Blue & Black	NMI	30-Dec-99	12	30-Dec-00	} not used	OUT
Endevco	2270	None	Vib. Xducer	NMI	30-Dec-99	12	30-Dec-00		OUT
Endevco	2270/221	None	Vib. Xducer w/Amplifier (Black)	NMI	30-Dec-99	12	30-Dec-00		OUT
Endevco	2270/221	None	Vib. Xducer w/Amplifier (Black)	NMI	30-Dec-99	12	30-Dec-00		OUT
H.P.	3325A	24562	Synthesizer 3325A	H.P.	04-Jul-01	12	04-Jul-02		IN
H.P.	3455A	27793	Digital Multimeter	H.P.	16-Jun-01	6	16-Dec-01		IN
H.P.	3455A	28553	Digital Multimeter	H.P.	16-Jun-01	6	16-Dec-01		IN
H.P.	3456A	24377	Digital Multimeter 6.5 digits (accel.	H.P.	16-Feb-01	12	16-Feb-02		IN
H.P.	35650A	48034	PARAGON A620840	H.P.	23-Sep-99	24	23-Sep-01		IN

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MANUFACTUR	TYPE	INVENTORY	DESCRIP	WHO_CALIB	LAST_CALIB	CAL_PERIOD	CALIB until	ACTION	Status
H.P.	35655A	None	8-Channel input Module (VIBCO) (H.P.	23-Sep-99	24	23-Sep-01		IN
H.P.	35655A	None	8-Channel input Module (VIBCO)	H.P.	23-Sep-99	24	23-Sep-01		IN
H.P.	35655A	TBC	8-Channel input Module (VIBCO)	H.P.	23-Sep-99	24	23-Sep-01		IN
H.P.	35656A	None	DAC Module (VIBCO)	H.P.	23-Sep-99	24	23-Sep-01		IN
H.P.	35656A	None	DAC Module (SPARE) (VIBCO)	H.P.	23-Sep-99	24	23-Sep-01		IN
H.P.	4262A	24032	LCR meter	LEP	27-Apr-01	12	27-Apr-02		IN
H.P.	44702B	41655A	High Sp. Voltmeter (incl in 3852A)	H.P.	02-Jul-01	12	02-Jul-02		IN
H.P.	5335A	32150	Universal counter	H.P.	07-Dec-00	12	07-Dec-01		IN
H.P.	5335A	41887	Universal counter	H.P.	16-Jun-01	12	16-Jun-02		IN
H.P.	5335A	53619	Universal counter	H.P.	10-Jul-00	12	10-Jul-01	currently loaned to Therm	OUT
H.P.	5335A	53649	Universal counter	H.P.	27-Jun-00	12	27-Jun-01	currently loaned to Therm	OUT
M.I.I	904T	32738	Tesla meter	LEP/SIMAC	25-Aug-00	12	25-Aug-01		IN
TEAC	XR-7000	45880	Recorder TEAC	SIMAC	14-Aug-01	12	14-Aug-02		IN
TEAC	XR-7000	47998	Recorder TEAC	SIMAC	15-Aug-01	12	15-Aug-02		IN
TEAC	XR-7000	50059	Recorder TEAC (SFM)	SIMAC	29-Jun-01	12	29-Jun-02		IN
TEAC	XR-7000	50060	Recorder TEAC	SIMAC	15-Aug-01	12	15-Aug-02		IN
TEAC	XR-7000	50725	Recorder TEAC	SIMAC	13-Aug-01	12	13-Aug-02		IN
TEAC	XR-7000	50726	Recorder TEAC	SIMAC	13-Aug-01	12	13-Aug-02		IN
TEAC	XR-7000	51645	Recorder TEAC (SFM)	SIMAC	29-Jun-01	12	29-Jun-02		IN
Yokogawa	OR1400	28547	Recorder Yokogawa	LEP	06-Mar-01	12	06-Mar-02		IN
Yokogawa	OR1400	93848	Recorder Yokogawa	LEP	16-Mar-00	12	16-Mar-01	not used	OUT

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NCR_Report (Short format)

NCR# Facility

Title

Classification
Major MRB Closed A B

99 659	MDH	MDH video interface defect	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
200 719	MDH	Charge amplifier settings of vibco notching channels were wrong by a factor of 10. As a consequenc	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
200 756	MDH	Wrong updating of the database "MAINT&CAL"	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
201 786	MDH	HP power supply No 45316, 42262, 37689, 42385) fall down	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
201 796	MDH	DSP data acquisition did not start during METOP SM accoustic noise test	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
201 810	MDH	Lost of DSP3 fundamental data due to failure during transfert to the main system (RTE)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
201 811	MDH	High vibration level during self check (Wrong setting of the VIBCO level)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
201 837	MDH	Wrong connecting of vibco channels	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
201 846	MDH	Filter boards set wrongly during LL excitation run.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NCR_Report (Short format)

Classification

Major MRB Closed

A B C

Title

NCR# Facility

99 636	Shaker 70 kN	Deviation of the 70 kN shaker dynamic response in the frequency range of its axial resonance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
99 644	Shaker 70 kN	During dismounting of the 70kN shaker, a water-bubble has been found on the cooling pipe of the bot	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
201 842	Shaker 70 kN	Power module failed during sine vibration test run and caused hard shut down of the amplifier with ba	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

INT-17K-38280

JEM-X FM1 Vibration Tests Protoflight Level ESTEC 27-29 August 2001

			1-st Eigen Freq.		2-st Eigen Freq.		3-st Eigen Freq.		
			[Hz]	[g]	[Hz]	[g]	[Hz]	[g]	
X-Axis	RUN1X								RUN5X
		DFEE	280	0.75	530	4.9	1000	3.7	
		MAIN FRAME	280	1.3	530	13	740	0.9	
		COLLIMATOR RING	280	1.3	530	14	680	1.5	
Y-Axis	RUN1Y								RUN5Y
		DFEE	150	0.6	220	0.63	770	10	
		MAIN FRAME	150	6.1	230	10.5	290	0.9	
		COLLIMATOR RING	150	5.5	230	10.5	290	0.85	

req.	2-st Eigen Freq.			3-st Eigen Freq.	
$\Delta \%$	$\Delta \%$	$\Delta \%$	$\Delta \%$	$\Delta \%$	$\Delta \%$
-4.16667	-2.91262	-4.25532	-0.50251	-12.1212	
7.142857	-1.92308	-18.1818	-1.36986	9.090909	
13.33333	-1.92308	0	0	-7.14286	
0	4.347826	8.695652	0	9.090909	
-3.38983	-7.27612	12.5	0	-12.5	
-8.16667	-4.54545	12.5	0	-6.25	

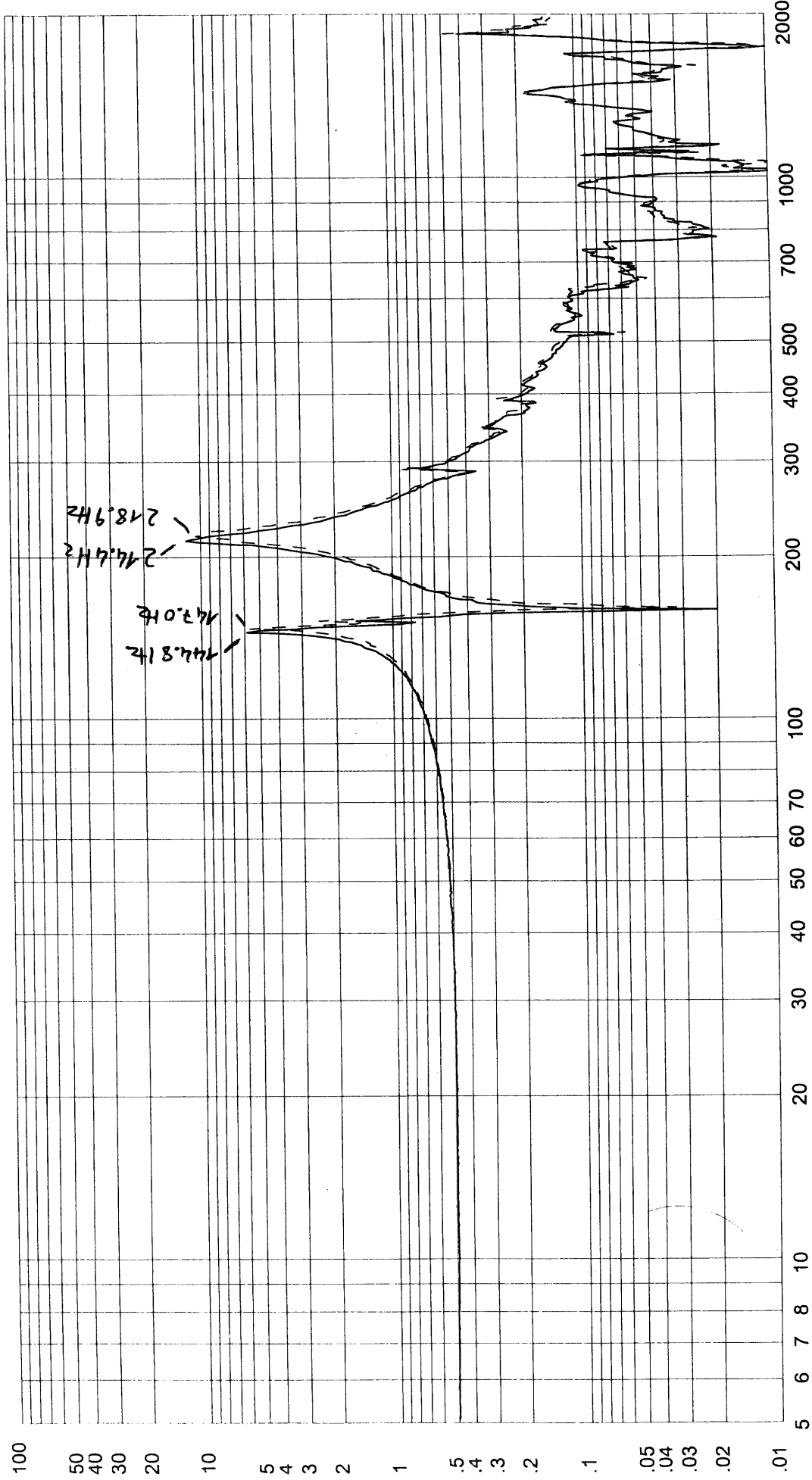
26%

	1-st Eigen Freq.		2-st Eigen Freq.		3-st Eigen Freq.		1-st Eigen F
	[Hz]	[g]	[Hz]	[g]	[Hz]	[g]	
DFEE	280	0.72	515	4.7	995	3.3	0
MAIN FRAME	280	1.4	520	11	730	0.99	0
COLLIMATOR RING	280	1.5	520	14	680	1.4	0
DFEE	145	0.6	230	0.69	770	11	-3.44828
MAIN FRAME	144.8	5.9	214.4	12	290	0.8	-3.59116
COLLIMATOR RING	150	5.2 0.6	220	12	290	0.8	0

ESTEC TOS MTT JEM_X Test Number : 3558

Sine Fundamental

TEST POINT : TP8 Y



Runs 5Y 3Y##

LL SINE 0.

Vib Axis Y

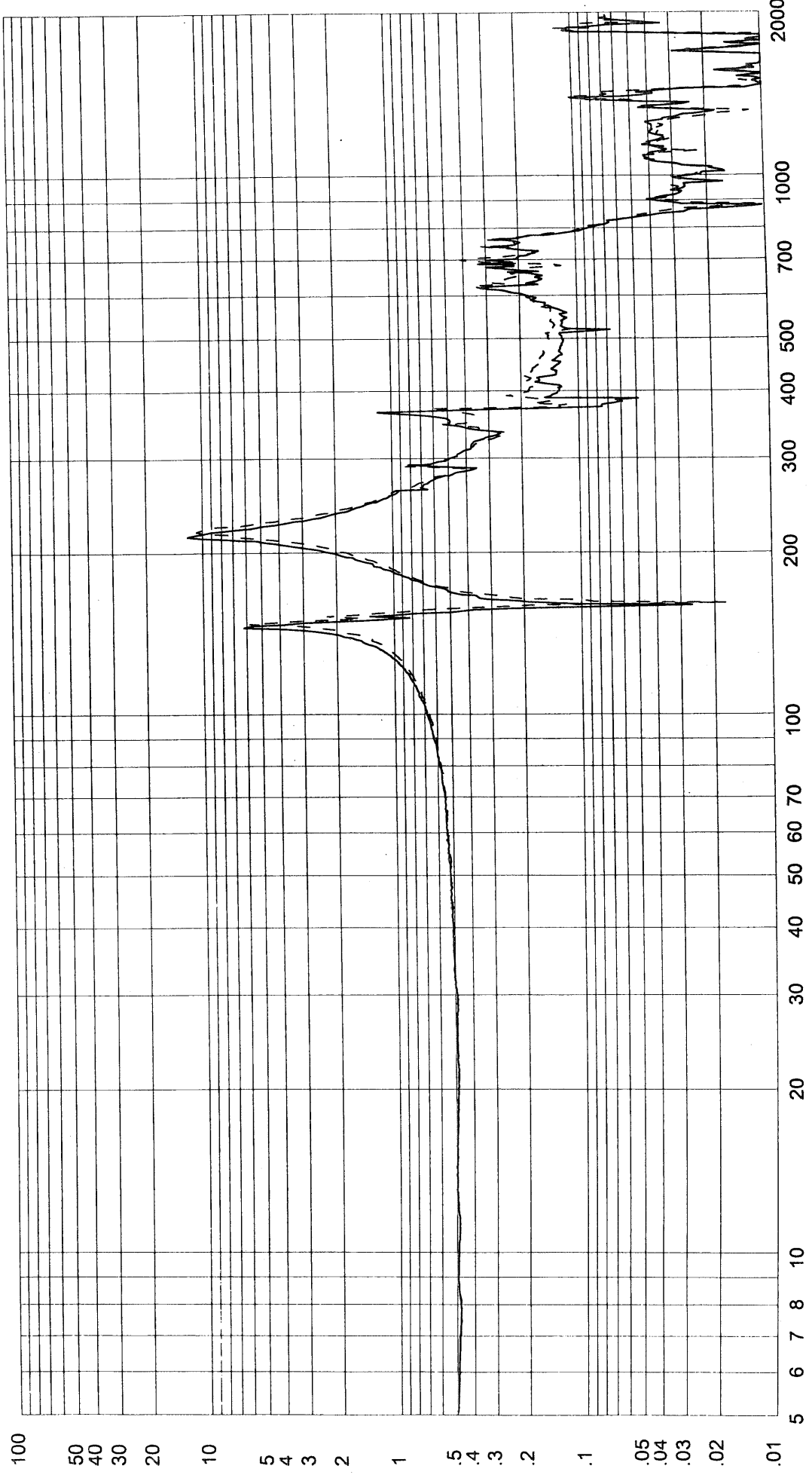
Date

Chan # 16

ESTEC TOS MTT JEM_X Test Number : 3558

Sine Fundamental

TEST POINT : TP9 Y



Runs 5Y 3Y##

LL SINE 0.

Vib Axis Y

Date

Chan # 19