GEM TN-92-157
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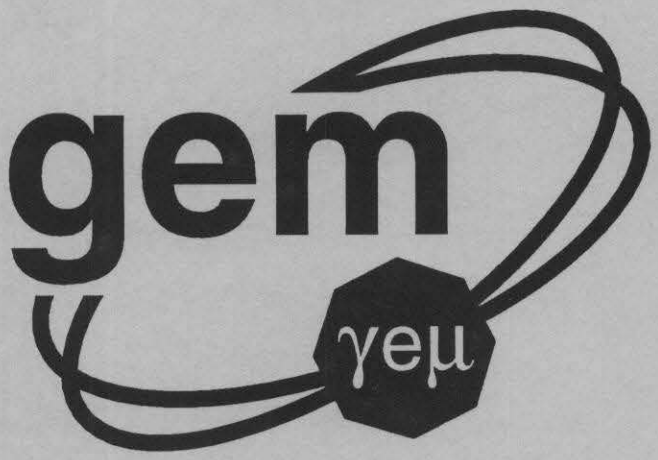

Maintenance Procedures for the Texas Test Rig Laboratory

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Abstract:

This procedure is to establish general maintenance requirements for the TTR.

SSC LABORATORY PROCEDURE	NUMBER GEM-TN-92-157	REV	PAGE 1 of 2
	EFFECTIVE DATE	SUPERSEDES	
	SPONSORING FUNCTION GEM		
	APPROVED BY DRAFT		
SUBJECT Maintenance Procedures for the Texas Test Rig Laboratory			

1.0 PURPOSE

This procedure is to establish general maintenance requirements for the TTR.

2.0 SCOPE

The scope of this procedure is limited to the routine maintenance of the TTR and the Test Chambers.

3.0 DEFINITIONS

EPO	- Emergency Power off
SSCL	- Superconducting Super Collider Laboratory
Test Chamber	- one of many detection chambers that are to used in the TTR
TTR	- Texas Test Rig

4.0 PROCEDURE

This procedure addresses the maintenance requirements peculiar to the TTR. Routine or normal maintenance shall be performed on an "as required" basis (e.g., general housekeeping, fire extinguishers, fire sprinkler system, room lighting, etc.)

Note: GEM-TN-92-152, TTR Emergency Procedures, shall be followed as the situation warrants.

4.1 Monthly maintenance requirements

4.1.1 Perform leak check per GEM-TN-92-155, TTR Leak Check Procedure for Test Chambers, for all test chambers in the TTR and the laser experiment.

4.1.2 Check all electrical wiring for fraying, chafing, etc.

4.1.3 Check all gas system tubing for cuts, chafing, unusual wear, etc.

Note: Repair or replace equipment as required. Documentation of the performance of this inspection and any maintenance action shall be record in the Applicable TTR Test Chamber Log Book.

4.2 Quarterly maintenance requirements

4.2.1 Perform all monthly maintenance requirements.

4.2.2 Verify that the Emergency Power Off (EPO) functions properly.

4.2.3 Test and calibrate the Enmet and the Houston gas detection systems.

Note: Repair or replace equipment as required. Documentation of the performance of this inspection and any maintenance action shall be record in the Applicable TTR Test Chamber Log Book.

4.3 Annual maintenance requirements

4.3.1 Perform all quarterly maintenance requirements.

4.3.2 Perform pressure test on laser experiment gas chamber (recertification).

4.3.3 Perform vacuum test on gas mixing chambers (3 each) and the laser experiment gas chamber (recertification).

4.3.4 Replace the seals, blades, springs, gaskets and filters for each of the vacuum pumps. (Edwards maintenance kit #A371-01-800).

4.3.5 Check to verify there is no water penetration from the roof.

4.3.6 Inspect gas system components to include regulators, back flow valves, pressure relief valves and high flow shut off valves.

4.3.7 Verify all TTR electronics are recalibrated per SSCL procedures and requirements (e.g., oscilloscopes, flow meters, pressure meters, etc.)

Note: Repair or replace equipment as required. Documentation of the performance of this inspection and any maintenance action shall be record in the Applicable TTR Test Chamber Log Book.

5.0 RESPONSIBILITIES

It is the sole responsibility of the TTR Project Manager to ensure the proper implementation of this procedure.

6.0 REFERENCES

GEM-TN-92-155 TTR Leak Check Procedures
GEM-TN-92-152 TTR Emergency Procedures
Applicable TTR Test Chamber Log Book

7.0 RECORDS

Records of leak checks of the Test Chamber gas system shall be fully documented in accordance with GEM-TN-92-155, TTR Leak Check Procedures. These records may be an entry in the appropriate TTR Test Chamber Log Book.