



Goddard Procedural Requirements (GPR)

DIRECTIVE NO.	<u>GPR 8730.6</u>	APPROVED BY Signature:	<u><i>Original Signed By</i> <i>M. Ryschkewitsch</i></u>
EFFECTIVE DATE:	<u>January 05, 2006</u>	NAME:	<u>Edward J. Weiler</u>
EXPIRATION DATE:	<u>January 05, 2011</u>	TITLE:	<u>Director</u>

COMPLIANCE IS MANDATORY

Responsible Office: 300/Office of Systems Safety and Mission Assurance

Title: **ELECTROSTATIC DISCHARGE (ESD) CONTROL**

PREFACE

P.1 PURPOSE

This document establishes a GSFC Electrostatic Discharge (ESD) control program that complies with ANSI/ESD S20.20-1999.

P.2 APPLICABILITY

This GPR applies to all organizations within the Goddard Space Flight Center (GSFC) where electronic components for flight applications, including engineering and test models and Ground Support Systems are tested, assembled, inspected, stored, or otherwise processed. These requirements are recommended for other applications where ESD sensitive parts are handled.

Special requirements may exist that are not covered by or are not in conformance with the requirements of this document. Engineering documentation shall contain the details for these requirements, and shall take precedence over conflicting portions of this document.

P.3 AUTHORITY

NASA Cancellation Notice for NASA-STD-8739.7, Electrostatic Discharge Control
[http:// www.hq.nasa.gov/office/codeq/doctree/cancelled/esdcancel.pdf](http://www.hq.nasa.gov/office/codeq/doctree/cancelled/esdcancel.pdf)

P.4 REFERENCES

ANSI/ESD S20.20-1999: Standard for the development of an ESD Control Program for the Protection of Electrical and Electronic Parts, Assemblies, and Equipment (Excluding Electrically Initiated Explosive Devices).

NASA-STD-8739.7(Canceled), Electrostatic Discharge Control (Excluding Electrically Initiated Explosive Devices).

P.5 CANCELLATION

N/A

CHECK THE GSFC DIRECTIVES MANAGEMENT SYSTEM AT
<http://gdms.gsfc.nasa.gov> TO VERIFY THAT THIS IS THE CORRECT VERSION PRIOR TO USE.

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P.6 SAFETY

Properly maintained equipment is essential to the safety of those using it. Calibrated inspection, measurement and test equipment is essential to the effective and safe processing of flight hardware and the ultimate safe and effective performance of our flight projects. The safety of all personnel working in Electrostatic Discharge (ESD) controlled areas is dependent on the proper grounding of the facility and of the common ground points (see WM-001), and the proper maintenance and operation of all safety equipment such as Ground Fault Circuit Interrupters (GFCIs), and shall be in compliance with the resistance requirements of WM-001 for all dissipative surfaces.

P.7 TRAINING

1. GSFC-WM-001 GSFC Workmanship Manual for ESD Control describes the training program compliant to ANSI/ESD-S20.20. Training in GSFC-WM-001 is available from NASA Manufacturing Technology Transfer Center (NMTTC); use the appropriate “Workmanship Training” link at <http://workmanship.nasa.gov>

2. Personnel working in designated ESD controlled areas shall have a current training certification to one of the following:

- GSFC-WM-001
- NASA-STD-8739.7
- Another ANSI/ESD-S20.20 compliant system with documentation from Code 300 indicating that the certification is acceptable.

Note: Training Certification to GSFC-WM-001 satisfies contractual requirements for certification to NASA-STD-8739.7 (Canceled).

P.8 RECORDS

Record Requirements are as stated in GSFC-WM-001

P.9 METRICS

Code 300 shall collect and analyze the data obtained from certifications, re-certifications, audits, and inspections of laboratories for the purpose of improving the ESD control program.

P.10 DEFINITIONS

See GSFC-WM-001 Workmanship Manual for Electrostatic Discharge Control.

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PROCEDURES

In this document, a requirement is identified by “shall,” a good practice by “should,” permission by “may” or “can,” expectation by “will,” and descriptive material by “is.”

1. The Office of Systems Safety and Mission Assurance shall maintain GSFC-WM-001 in accordance with the requirements of GPR 1410.2 Configuration Management.
2. Laboratory managers shall clearly designate ESD controlled areas.
3. Personnel working in ESD controlled areas shall have current ESD training certification in accordance with P7.
4. GSFC personnel shall comply with the requirements of GSFC-WM-001 Workmanship Manual for Electrostatic Discharge Control when working in designated ESD controlled areas.
5. Laboratory managers and personnel working in an ESD controlled area shall ensure that visitors have a current ESD training certification in accordance with P7 or are escorted by personnel with a current ESD training certification.

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CHANGE HISTORY LOG

Revision	Effective Date	Description of Changes
Baseline	01/05/2006	Initial Release