



**NASA TECHNICAL  
STANDARD**

National Aeronautics and Space Administration  
Washington, DC 20546

**NASA-STD 8739.3  
CANCELLATION  
NOTICE**

**Soldered Electrical Connections**

NASA Memo (NM) 8730-98, Change to NPD 8730.5, NASA Quality Assurance Program Policy, dated October 17, 2011, cancelled NASA-STD 8739.3.

NM 8730-98 adopted IPC J-STD-001ES, Joint Industry Standard, Space Applications Electronic Hardware Addendum to J-STD-001E Requirements for Soldered Electrical and Electronic Assemblies as meeting or exceeding the requirements in NASA-STD 8739.3.

Cancellation of NASA-STD 8739.3 Approved:

Terrence W. Wilcutt  
Chief, Safety and Mission Assurance

Date

**APPROVED FOR PUBLIC RELEASE – DISTRIBUTION IS UNLIMITED**

**NASA Interim Directive (NID): Change to NPD 8730.5, NASA Quality Assurance Program Policy**

Adoption of IPC J-STD-001ES, Joint Industry Standard, Space Applications Electronic Hardware Addendum to J-STD-001E Requirements for Soldered Electrical and Electronic Assemblies

Cancellation of NASA-STD-8739.2, Workmanship Standard for Surface Mount Technology,

Cancellation of NASA-STD-8739.3, Soldered Electrical Connections

**Background:**

In response to the 1995 Office of Management and Budget (OMB) Circular A-119 on Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities, the NASA Workmanship Standards Program has confirmed that the IPC J-STD-001ES, Joint Industry Standard, Space Applications Electronic Hardware Addendum to J-STD-001E Requirements for Soldered Electrical and Electronic Assemblies, contains a requirements set that meets or exceeds that provided by both NASA-STD-8739.2, Workmanship Standard for Surface Mount Technology, and NASA-STD-8739.3, Soldered Electrical Connections. The Workmanship Standards Program has also confirmed that the training courses offered by the IPC<sup>1/</sup> for the J-STD-001ES meet NASA's needs for soldering operator, inspector, and local trainer certification.

**Policy:**

With this NID, NASA cancels NASA-STD-8739.2, Workmanship Standard for Surface Mount Technology, and NASA-STD-8739.3, Soldered Electrical Connections, and adopts J-STD-001ES for new programs and projects. Chapter 10 of IPC J-STD-001ES does not apply.

The applicable NASA policy that requires the use of workmanship standards is NPD 8730.5, Attachment A, paragraph 3.b. With this NID, NPD 8730.5, Attachment A, paragraph 3.b. is replaced in its entirety with the following:

“b. Electrical, electronic, and electromechanical parts workmanship standards: NASA-STD 8739.1, Workmanship Standard for Staking and Conformal Coating of Printed Wiring Boards and Electronic Assemblies; J-STD-001ES, Joint Industry Standard, Space Applications Electronic Hardware Addendum to J-STD-001E Requirements for Soldered Electrical and Electronic Assemblies (Chapter 10 of IPC J-STD-001ES does not apply); NASA-STD 8739.4, Crimping, Interconnecting Cables, Harnesses, and Wiring; NASA-STD 8739.5, Fiber Optics Terminations, Cable Assemblies, and Installation; ANSI/ESD S20.20, Protection of Electrical and Electronic Parts, Assemblies and Equipment (Excluding Electrically Initiated Explosive Devices) (Requirement 60407).”

Please direct any questions you may have to my lead for Workmanship Standards policy, Mr. Brian Hughitt, at (202) 358-1572 or by email at [brian.hughitt-1@nasa.gov](mailto:brian.hughitt-1@nasa.gov).

  
Terrence W. Wilcutt  
Chief, Safety and Mission Assurance

17 OCT 2011  
Date

Note 1: IPC is the registered trademark name of the industry standards body which owns and manages the J-STD-001 soldering standard. Refer to <http://www.ipc.org>.