

Standard

Qualification and Quality Requirements for Space Solar Panels

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Standard

Qualification and Quality Requirements for Space Solar Panels

Sponsored by

American Institute of Aeronautics and Astronautics

Approved

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Abstract

This standard establishes the quality requirements and provides methods for establishing the qualification of solar panels. Section 7 describes specific tests necessary to ensure the quality and reliability of solar panels intended for space application. Section 8 describes specific solar panel characterization tests necessary to characterize the performance of solar panels intended for space application. Section 9 describes the quality requirements for panels to be qualified to this standard. Section 11 describes the reporting format for the qualification tests in Section 7 and the data sheet characterizations in Section 8.

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Foreword

Before 2004, no comprehensive standard on space solar panel qualification was available. This document was developed to provide a “gold standard” for space solar panel qualification, with provisions included to supplement industry ISO 9001 standards for quality. The basis for this document was “Qualification and Quality Requirements for Space Solar Panels,” TOR **2004(8583)-3557**, drafted by Brad Reed of the Solar Array Section of the Engineering and Technology Group at the Aerospace Corporation. Improvements were made to the TOR by additions and deletions based on the experience of the committee. However, as a ground rule certain requirements in the TOR could not be deleted or altered.

The individuals that participated in the process with greater than 20% attendance are listed below. Primary authors are indicated with an asterisk.

Scott Billets*	Lockheed Martin Space Systems Company
Brad Clevenger	Emcore Photovoltaics
Navid Fatemi	Emcore Photovoltaics
Craig Flora	Ball Aerospace & Technologies Corporation
Robert Francis*	The Aerospace Corporation
Edward Gaddy (Co-Chair)*	NASA Goddard Space Flight Center
Alec Garcia	The Aerospace Corporation
Steven Gasner*	Lockheed Martin Space Systems Company
Jennifer Granata*	The Aerospace Corporation (for AFRL)
Bao Hoang*	Space Systems/Loral
Pam Johnson*	Ball Aerospace & Technologies Corporation
Rick Kettner	General Dynamics/Spectrum Astro Space Systems
Mark Kruer	Northrop Grumman Space Technology
Jerry Kukulka*	Spectrolab, Inc.
Michael Piszcor	NASA Glenn Research Center
Brad Reed (Chairman)*	The Aerospace Corporation
Abbas Salim*	Lockheed Martin Space Systems Company
Surya Kumar Sharma*	Emcore Photovoltaics
Paul Stella	Jet Propulsion Laboratory, California Institute of Technology
C.M. Chantal Toporow*	Northrop Grumman Space Technology
Robert Walters	U.S. Naval Research Laboratory
Henry Yoo	Air Force Research Laboratory

At the time of approval, the voting members of the AIAA Solar Panels Committee on Standards were:

Brad Clevenger	Emcore Photovoltaics
Craig Flora	Ball Aerospace & Technologies Corporation

Jay Fodor	The Boeing Company
Robert Francis	The Aerospace Corporation
Edward Gaddy (Co-Chair)	NASA Goddard Space Flight Center
Steve Gasner	Lockheed Martin Space Systems Company
Bao Hoang	Space Systems/Loral
Alan Jones	Able Engineering Company
Rick Kettner	General Dynamics/Spectrum Astro Space Systems
Jerry Kukulka	Spectrolab, Inc.
Paul Stella	Jet Propulsion Laboratory, California Institute of Technology
C.M. Chantal Toporow	Northrop Grumman Space Technology
Robert Walters	U.S. Naval Research Laboratory
Henry Yoo	Air Force Research Laboratory

The above consensus body approved this document in August, 2005.

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Introduction

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