

Excellence in Aerospace since 1943

WHAT IS P-STAT?

P-Stat is an acronym for Precipitation Static. P-Stat is a form of electrical discharge usually caused by flying in rain, snow, dust, or clouds that can cause interference with navigation and communication equipment and systems.

HOW TO PROTECT AGAINST P-STAT?

- Use the correct number of Quality DG Static Dischargers
- Ensure Dischargers are in their specified location on the aircraft
- Ensure Dischargers are properly bonded on the aircraft

HOW DO STATIC DISCHARGERS WORK?

Static dischargers have a lower corona voltage threshold than the aircraft structure and go into corona before the structure goes into corona. This static charge is bled through the high resistance (6-200 Megohms) discharger, and thus the corona spark is decoupled from the aircraft by approximately 60+ db compared to no dischargers.

WHY IS BONDING IMPORTANT?

When a part of the aircraft (such as an access panel or inspection plate) is not bonded, a difference in voltage levels can exist between the two surfaces. As a result of this potential difference, sparking can be induced across the two unbonded sections of the aircraft. The energy associated with the spark is coupled into the aircraft antennas; this causes noise which can interfere with the navigation and communication systems.



REMEMBER:

Electrostatic problems can only be corrected with:

- The correct number of quality dischargers
- Proper installation on the aircraft
- Utilization of discharger placement diagrams specified for your aircraft
- Proper bonding of retainers and metals on the aircraft



Detailed installation prints are available from Dayton-Granger, Inc. for most aircraft.

Dayton-Granger, Inc. | 3299 SW 9th Avenue | Fort Lauderdale, FL 33315 | Tel. (954) 463-3451 | Email: sales@daytongranger.com | www.daytongranger.com

The information contained herein is subject to change without notice. This document features products and data to which Dayton-Granger, Inc. ("DG") maintains proprietary rights. The granting of access to this document does not convey ownership rights to the information contained herein nor a license to use this information to manufacture or reverse engineer DG's products or create variants thereof. Copyright 2021 Dayton-Granger, Inc.

