

#### PRODUCT APPLICATION NOTE

## **Airport Operations & Infrastructure Protection**



# **Electrical Protection for Airport Operations**

Ensure unparalleled reliability and availability of your electrical equipment and operational infrastructures with Strikesorb® technology field proven in airport applications worldwide.

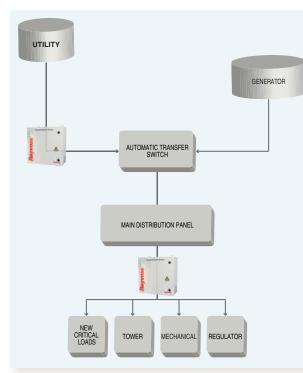


Figure 1: A typical airport installation can protect critical electronics from devastating surges in voltage.

Critical systems in the airport environment are sensitive to power surges and exposure to transient overvoltages which can lead to high failure rates and costly repairs. In response, Raycap's Rayvoss surge protection systems provide the ultimate electrical protection to airport systems, and in February 2009 the U.S. Federal Aviation Administration (FAA) awarded Raycap an exclusive five year contract for the supply of its Rayvoss Surge Protective Device (SPD).



# **The Challenge**

What is the most effective way to protect sensitive electronic equipment at airports from the devastating effects of transient voltage surges? The causes may be from the heavy loads turning on and off, from lightning strikes, and/or from operational failure of fuses or circuit breakers. All of these are phenomena which can occur frequently inside large facilities. When electrical system failures occur, airports are faced with the cost of maintenance, labor and lost revenues. And when critical systems are offline, the entire airport operation and passenger safety is in jeopardy.



# Solution

Raycap can provide a stable electrical environment and virtually eliminate the losses caused by electrical overvoltages with the use of its Strikesorb units. Raycap's Rayvoss<sup>®</sup> Surge Protective Devices (SPD's) are trusted by the U.S. Federal Aviation Administration (FAA) to protect sophisticated electrical equipment required to safely track and route aircraft within U.S. air space. Once installed, Rayvoss SPD's featuring their

Strikesorb, the surge suppression module found at the core of Rayvoss systems, is a high surge capacity protection element able to efficiently manage high energy transient currents. Rayvoss systems offer maintenance-free protection and are perfectly suited for mission-critical applications in rugged environments.

Mr. Curry Peterson Project Manager Wells Global

unique Strikesorb® technology effectively protect missioncritical systems such as air traffic control towers and centers, remote shelters housing critical landing systems, long range radar facilities, ground radar systems, runway lighting facilities, weather and radar facilities, among others. In addition, Rayvoss systems are deployed to safe guard the airport's main and emergency electrical distribution panels, as well as a myriad of other airport operations and services,

such as security, video or audio systems inside the area of the airport.

### Conclusion

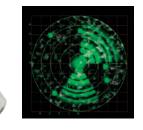
Airport managers know that providing a safe environment is the most critical factor in effective operations, and that protecting sensitive missioncritical equipment from catastrophic failure and ensuring the reliability and availability of all mandatory functions is key to a successful airport operation.



Rayvoss Family of Products



Figure 2: Rayvoss installation inside engine generator shelter.





- Maintenance-free operation
- Safe operation: No smoke, fire or explosion
- Unique capability to withstand multiple high-energy transients
- Low let-through voltage, therefore providing excellent protection compared with competitive SPD products
- Class I/Class II compliant SPD per IEC 61643-11
- Global standards compliance: UL 1449 4<sup>th</sup> Edition, IEC, IEEE, NEMA
- 10 year global product warranty



Figure 3: The Rayvoss Surge Protective Device (SPD) protects the incomimg power for the localizer shelter.

Raycap is a trusted partner, providing maintenance-free electrical protection solutions for mission-critical applications in hundreds of thousands of installations worldwide. For a detailed presentation on how Raycap's Strikesorbbased solutions can protect your airport operations, contact us today!



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