Photovoltaic panel installation on aircraft

Overview

Airports can harness solar power through the installation of solar panels on terminal buildings and hangars, generating electricity to meet their energy demands. Solar energy can also be used for ground transportation and lighting systems, further reducing the carbon footprint. The Federal Aviation Administration (FAA) published a final policy aimed at ensuring that airport solar projects don't create hazardous glare. The policy applies to proposed solar. In a recent article we explored the opportunities to produce zero-emission aircraft, but another avenue airports are exploring, is supporting renewable energy generation developments on their aerodromes, such as installing solar panels. However, solar panels can cause solar reflections, often known. ions on the ground as well as in the air. It is therefore of critical importance that the development of solar photovoltaic developments does not significantly hinder the view from a co trol tower's visual control room (VCR). 13 Figure 7: Distribution of electricity consumption within a typical Airport. 13 Figure 8: Snapshot of. Incorporating solar energy into the airport environment, along with microgrid technology, is becoming a strategic priority for many airports, as it helps offset utility power during peak hours and generates revenue in areas that are otherwise undeveloped.

© 2026 LUP Microgrid Laboratory & Technology - All rights reserved

Article Content

Impact of photovoltaic installations on aviation safety

This article is addressed to aviation safety community and the designers of the PV projects, with the aim of preventing risks and finding a ...

FAA Issues Policy on Solar Projects on Airports

As such, the agency encourages an airport to conduct sufficient analysis before installing a solar energy system. The FAA is also withdrawing the recommended tool for measuring the ocular ...

Balancing Solar Energy Generation and Pilot Safety at ...

Solar reflections can impact pilots and cause safety concerns, and locating solar developments on airports can heighten this risk. In this article we ...

Solar flight

Our flagship programme, Zephyr, is a high-altitude pseudo-satellite that is powered exclusively by solar power. Known as a high-altitude platform station (HAPS), it ...

Airport Solar PV Implementation Guidance Document

Developing PV systems in airports also requires special considerations and studies to be carried out to address some of the unique aviation challenges such as solar glare, compliance to operational ...

Solar and Microgrid Installations: Essential Insights for ...

Navigating the complexities of solar installation at airports can be daunting, as many are unsure where to begin or overlook crucial factors. This ...

Impact of photovoltaic installations on aviation safety

Air traffic and air traffic control services will be better protected from safety risks, and investors in PV systems will have much greater confidence that their installations will co-exist well ...

Solar Energy in the Aviation Industry

Airports can harness solar power through the installation of solar panels on terminal buildings and hangars, generating electricity to meet their energy demands. ...

CAST Aerodrome Safeguarding Guidance Note

A key safety concern when considering a solar photovoltaic panel development on- or off-aerodrome is related to the reflection of sunlight off the photovoltaic panels commonly referred to as glint and glare.

© 2026 LUP Microgrid Laboratory & Technology - All rights reserved

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: https://www.lup.edu.pl
Email: info@lup.edu.pl
Phone: +48 512 478 936
Address: ul. Marszałkowska 10, 00-001 Warsaw, Poland

This document is for informational purposes only. Specifications subject to change without notice.

© 2026 LUP Microgrid Laboratory & Technology - All rights reserved