

# MILITARY AIRFIELD LIGHTING SYSTEMS FOR DEMANDING INDUSTRY

<https://solutions4ga.com/tactical-airfield-lighting-for-demanding-military/>

Airplanes take off and land in every corner of the world. The vast majority of normal air operations take place at civil and military airports equipped with permanent lighting systems, specially designed for use at night and with limited visibility. However, in a small percentage, but due to mass air traffic, a very large number of cases, aircraft use temporary runways, illuminated only for a few days, weeks or months. Often these are military airports situated next to their bases, used as distant temporary bases for training or, unfortunately, operational purposes. They can also be civil airports designed to support various humanitarian missions to help victims of natural disasters (earthquakes, floods, volcanic eruptions, hunger). Permanent airports are also subject to renovation, repair and modification when the use of fixed lighting is – for various reasons – for some time impossible.

***Investing in such cases in a traditional cable lighting system is completely unprofitable, and above all, for prosaic reasons – lack of any technical possibilities – impossible.***



However, we know that every day, in many parts of the world, numerous local and temporary airports begin (or end) operations. So, how to solve the problem of temporary lighting of such an airfield?

## MILITARY GETS THE BEST

Leaving this aside, it is a fact that the most important investor, main recipient and user of new technologies and innovative scientific and technical solutions is the army and its needs. They always demand the best and almost always get the best. The same is true for the innovative method used for temporary lighting of take-off and landing sites. On the example of a very specific [solution](#) proposed, and successfully implemented by S4GA for aviation branch of the Armed Forces of the Argentine (Spanish: Fuerza Aérea Argentina, FAA). This is an example of a successful combination of meeting the high requirements of the ordering party (FAA) with both Trailer features and performance.

### Designed for Extreme Operating Conditions

A regular SUV pulling military airfield lighting trailer which was delivered a few hours earlier by a transport plane appears at a temporary airport already in operation. The trailer weighs approximately 2.5 tones and is suitable for both air and road transport. The stainless steel chassis and the powder-coated aluminum body are extremely weather-resistant. It will not rust in any weather conditions. Just keep them clean, roughly.



***The compact trailer contains everything you need to illuminate an airfield in accordance with ICAO Annex 14. Portable lights and trailer itself meet all international aviation standards. All products are certified.***

### Runway Lights and Mobile PAPI in a Trailer

The Argentinean operator quickly deploys 86 lamps and 2 portable full PAPI systems in their designated locations. If supplied without PAPI system, trailer capacity is immediately increased to 132 x portable airfields lights. The airport is ready for night and LVP operations. The trailer is its maintenance center, full prepared for functionality, operation, supervision and control.



The sources of power for this particular trailer are two diesel generators and a traditional electric grid 110-230 VAC connection (if available). Diesel generators charge power banks. Power bank in the meantime provides power to portable PAPI ensuring up to 90 minutes of continuous PAPI operation.

Recharging of airfield lights is done here through contactless charging ports. Charging starts immediately after connection and lasts about 8 hours. The traditional way of charging – via cables – is also available as per Customer's request.

### **Remote Control of Military Airfield Lighting**

To activate the lights, a Handheld Controller is used. The Controller allows to operate airfield lighting system remotely, set up lights brightness and select operating modes for each group of lights (maximum 5 groups). Control over AGL is also possible from the Trailer through built-in Control & Monitoring System.

The same C&M system provides another useful Trailer feature – automatic light failure reporting. If any of the lights have low battery level or the light does not work, the authorized operator is notified about the issue via SMS.



### **ADVANCED AIRFIELD GROUND LIGHTING FOR MILITARY**

The example of the Argentinean portable airfield lighting trailer shows that S4GA is able to meet the really high requirements of this type of customer. As has been said before, the military always gets the best. For less demanding civilian applications, another trailer model is offered: equipped with remotely controlled portable airfield lights and generators. Dimensions of a Trailer are due to change depending on the scope of equipment stored in a Trailer and options selected by a Customer.

***Temporary airfield lighting system implemented with the help of the Trailer is reliable, effective and very flexible. Materials and technologies used for production guarantee the quality and appropriate for the aviation industry level of reliability.***

When a temporary air base, somewhere in Argentina's pampas, closes its operations, the Argentinean operator will collect all the lamps, place them in the trailer, prepare it for air or wheel transport and report on the readiness of the device to work in any other place. Very practically