



**OUR PURPOSE.  
YOUR MISSION.**

**Expeditionary Lighting  
Challenges for the Military**

Patrick Shipp  
Energy Category Manager



# ADS: You Have Problems, We Have Solutions

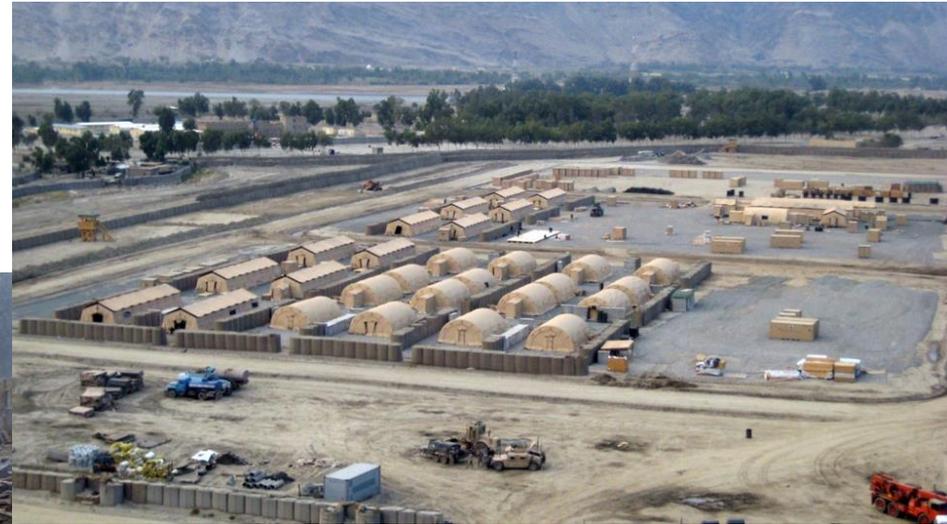
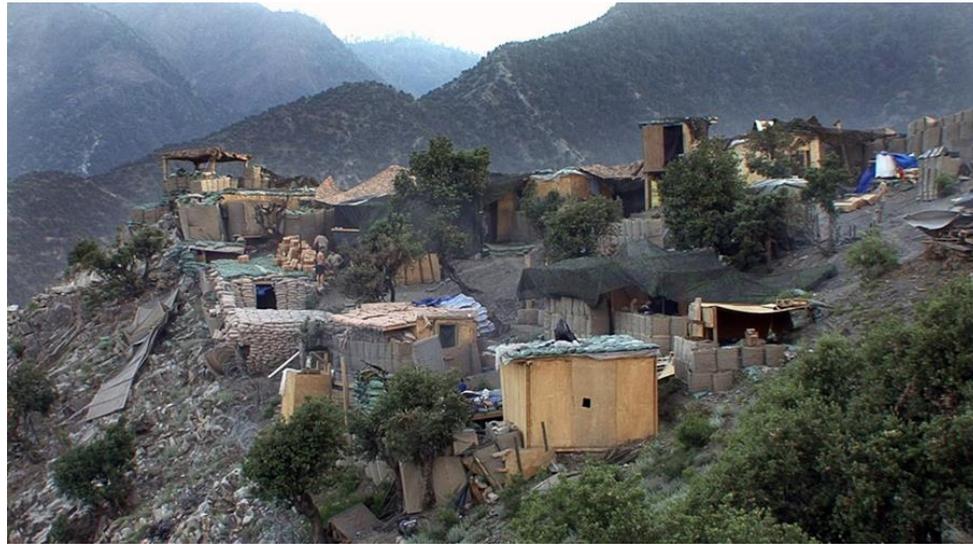
## Distributor of COTS and MCOTS items to the Federal government

- *Who's the is guy at the podium, and what does he know about anything?*
- Patrick Shipp, Energy Category Manager
  - ADS, Inc
    - Manages a portfolio of power generation, storage, and distribution products; aimed at increasing customer energy efficiency and resiliency
  - US Department of Energy, Office of Renewable Energy and Energy Efficiency
    - Program Analyst
    - Federal Energy Management Program



# Expeditionary Operations

## Setting up Operations Where There is No Existing Infrastructure



# LSA, FOB, COP

## All have different lighting requirements:

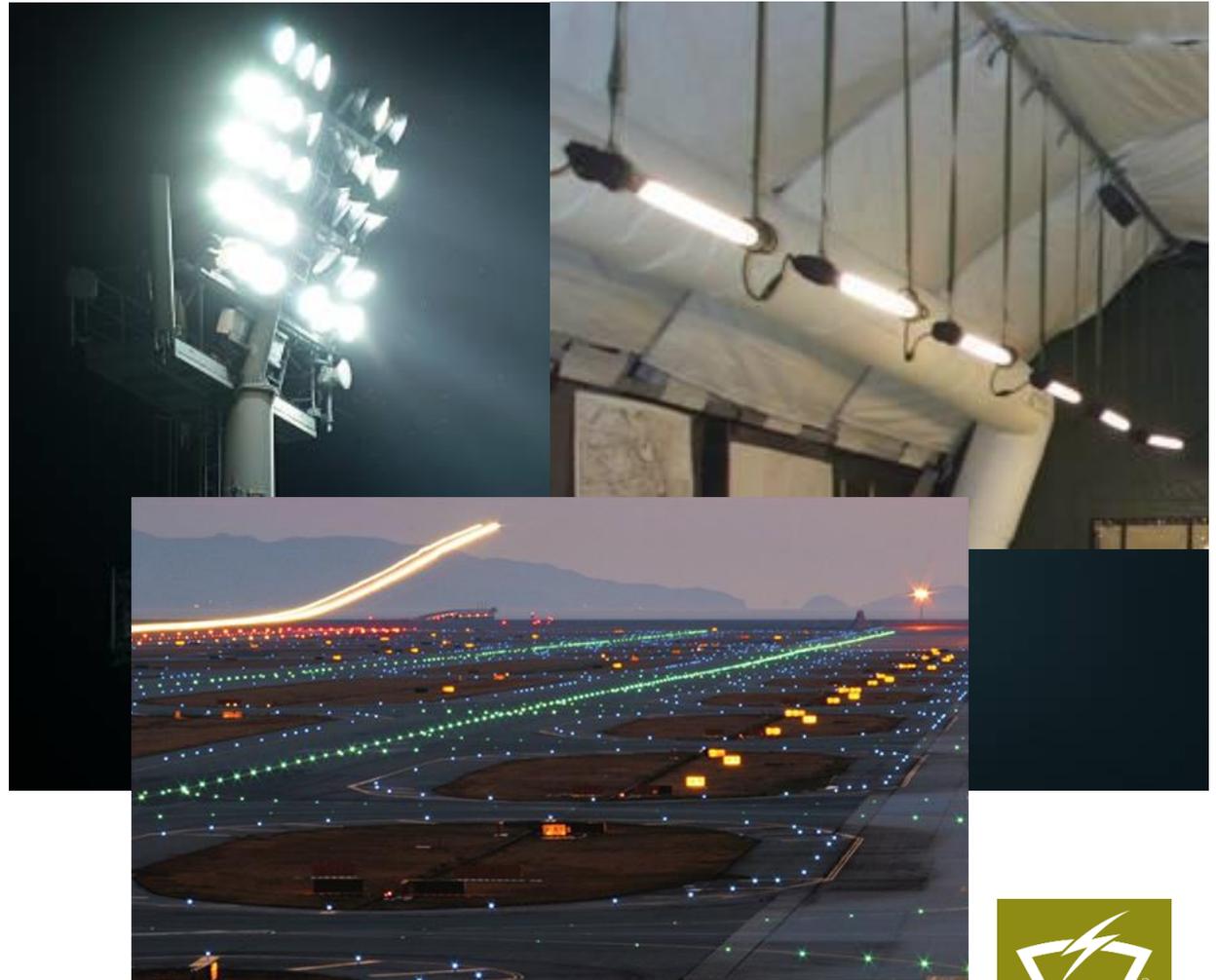
- Size of the area to be lit
- Number of personnel
- Restrictions on lighting/light discipline
- Fuel availability
- Hours of use



# Lighting for Security and Safety

## Takes on many forms:

- Wide area lighting
- Tents
  - Billeting
  - Command and Control
  - MWR
  - Dining
- Security Lighting
  - Entry Control Points
  - Vehicle Inspection Areas
  - Perimeter Lighting
- Airfield Operations
  - Runways
  - Helipads



# Requires Logistical Support

It has to get there somehow, somehow:

- Delivery of the lights
- Placement
- Fuel
- Maintenance



# Logistical Support is a Challenge

**Not as easy as a trip to the hardware store:**

- Replacement parts
- POL for maintenance and operations
- Maintenance and refueling personnel



# Industry Innovations

## Commercial solutions transferred to the military:

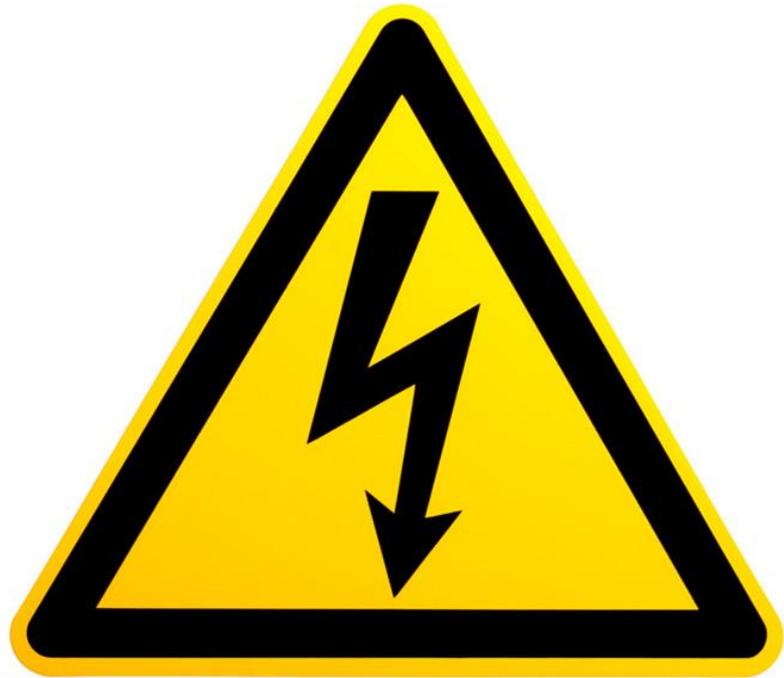
- LEDs
- Hybrid lighting systems
- Solar options
- Battery storage



# Drawbacks

Cracking a few eggs to make the perfect omelet:

- Cost
- Electronics, not lights
- Fuel consumption still an issue



Questions...

