



**Portable Helipad Systems**

**The Complete Portable Heliport &  
Equipment Solution**



# PORTAPAD HELIPAD SYSTEM

- A strong, safe, reusable helicopter landing platform for unprepared areas.
- Minimal environmental impact, Aluminium is 95% recyclable.
- Improves operational safety.
- Rapid installation with little or no site preparation on virtually any terrain.
- Safe, strong and reliable platform adds to helicopter landing safety.
- Elevated deck keeps rotors and tail rotors safely above ground personnel.
- Perimeter Safety Netting included.
- Easily relocated without loss of initial investment.





# OPERATIONAL SAFETY

Since the beginning of helicopter operations, military, civil and commercial users have been plagued by ground related accidents. Yearly, the toll of fatalities caused by the tail and main rotors rises, as has the number of helicopters that have been damaged or lost after hitting ground obstacles upon landing.

The Portapad is designed as a tool to assist in eliminating many of the causes of these accidents, plus provide the means for positive passenger control and greater utilization of the helicopter.

The Portapad design height allows safe zones to be created where otherwise, for example, if landing directly on the ground, they would be unavailable. Personnel can move freely about the landing zone, allowing passengers as well as supplies to be staged directly at the landing site for faster loading and quicker but safer turn-around times. The elevation provided by a helicopter landing on the Portapad means that personnel are considerably less likely to unintentionally contact the tail rotor even when the Portapad is on a level surface.





# ECONOMICS OF USE

A helicopter must have a landing site. There are many options in finding or constructing such a location. The concept of the Portapad is that of a tool that has the versatility to go into an area, at a known cost and for a known timeframe and come out of that area with a complete salvage of the initial investment.

It does not require extensive training of personnel or maintenance to install and operate.

It does provide quick, safe and efficient landing sites in a variety of terrains under the toughest conditions.

It can save lives, prevent costly accidents and.





# PORTABLE HELIPORT

## Technical Details

- 6.1m x 6.1m deck for helicopters of 7,000kg or less max. gross weight.
- 9.15m x 9.15m deck for helicopters of 7,000kg. or less max. gross weight.





# PORTABLE HELIPORT GENERAL

The Portapad Heliport is a lightweight portable landing platform with a square deck and nine legs of adjustable length. Portapad is constructed of 6000 series aluminium with stainless steel fasteners. The deck employs structural beams to support the helicopter with a solid extruded aluminium plank between the beams for a landing surface.

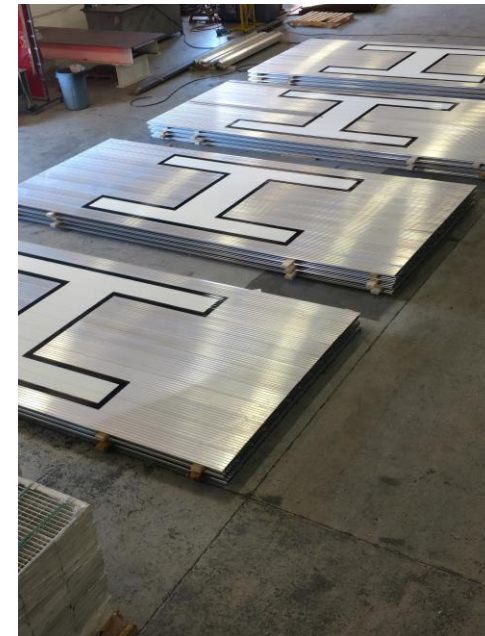
The aluminium legs fit into castings at the deck and are braced by beams. Leg length can be easily adjusted. Foot pads attach to the legs, enhance their ability to conform to irregular surfaces. Nuts, bolts and other fasteners are stainless steel. The Heliport can be painted, or sign-written for advertising purposes and is made of aluminium for maximum corrosion resistance.





# SPECIFICATIONS

- Maximum Helicopter Landing Weight 7,000kg (heavier on application).
  - Portapad will support static load of 8,150kg.
  - Portapad Weight Approx. 2,500kg (6.1m) 3,500kg (9.15m)
- Deck Dimensions 6.1m x 6.1m, 9.15m x 9.15m or larger on application.
- Height of Deck Surface Above Level Ground: adjustable from 350mm
  - Number of Legs: 9
  - Foot Pad Dimensions 400mm x 400mm
- Slope Capability – Heliport can be adjusted to suit terrain





**Stairs**



**Safety Net Bracket**



**Adjustable Leg**







## MIL-Star® Portable Tactical Airfield Lighting System with NVG compatible IR



MIL-Star® rechargeable battery powered LED helipad lighting system is designed for fast deployment and use by advancing military forces in temporary and emergency situations. Provides safe and effective marking at designated or ad-hoc helicopter landing zones.

### Remote Pilot Control

MIL-Star® are pilot activation enabled and fitted with an 868 MHz (915 MHz in the USA) UHF transceiver.

Each light or set of lights can be programmed, interrogated and controlled by wireless commands.

MIL-Star® can be switched on from the aircraft using an in case Mobile Lighting Controller transceiver operational via VHF at line-of-sight ranges in excess of 10km.

MIL-Star® can be operated remotely via a PC/Tablet with the USB-UHF transceiver.

### Tried and Trusted

MIL-Star® portable lighting systems are used by:

- The United Nations peacekeeping mission in Mali
- The United Nations peacekeeping mission Central African Republic
- The Philippine Navy
- The Bangladeshi Army
- The Mexican Navy

Deployed on a global scale with other operators in the United Kingdom, the USA, Russia, Mozambique, Kenya, The United Arab Emirates, Malta, The Philippines and Japan.



## Helicopter Landing Solutions for Humanitarian, HEMS and Border Control Operations

Our product range, as described below, provides a cost-effective approach, shapes the most realistic and technically high-scoring offer while keeping safety as a number one priority. The success of the humanitarian, HEMS and Border Control operations consulting approach has already been seen in Central African Republic, Mali, Papua New Guinea, United States of America, United Kingdom and various other countries worldwide often in demanding yet highly visible environments.

The Portapad solution provides a low maintenance and cost-effective network opportunity for Customs and Border Control agencies, HEMS, Police, Aerial Fire-fighting and other services

Portapad is used by the **US Customs and Border Protection** at a network of **15 remote locations**.

Our industry-leading products combine to form a portable 24/7 helicopter landing system. FEC Heliports family of products are designed to integrate seamlessly.

### ***A strong, safe, reusable, and portable helicopter landing platform for unprepared areas***

- *Cost-effective with low relocation costs.*
- *Significantly reduces brownout and increases protection from Foreign Object Debris (FOD).*
- *Reliable Aluminium platform adds to helicopter landing safety.*
- *Virtually maintenance-free – all parts are constructed of non-corrosive alloy or stainless steel*





## Cheltenham Festival – U.K. Horse Racing Event

Cheltenham Festival is a one of the pinnacle horse racing events in the U.K. and attended by thousands. A key part of the event is the safe arrival and departure of its patrons by air and U.K. GMT daylight hours mean that leaving after 6pm requires night operational heliport equipment. FEC provided the approach, touch down and lift off heliport lighting at the festival, working in conjunction with Helipad - part of the Hai Air Group and approved resellers of FECHW Products.

The festival ran from the 12th to 15th March during which Helipad serviced a total of over 600 movements through the provision of a 300m x 50m lit FATO, 5 x 18m lit TLOFs, ATC Tower, Fire & Rescue Service, Fueling, Terminal building and Bentley Concierge Services.

An improved portable heliport lighting solution was required for the duration of the event, enabling full night operations. Our solution was to provide HEMS-Star® portable lighting systems, set on 50% Intensity with steady green on the FATO and steady white on TLOFs. We deployed the lights during the noon to 14:00 helipad downtime period each day with automatic sunset switching mode illuminating the system at dusk (circa 18:00). On steady green or white the HEMS-Star® have a run time of over 12 hours. This was more than adequate for the required night operational availability of the Cheltenham heliport, with last movements of the day around 21:00-21:30.





## Morobe Mining - Wafi-Golpu Joint Venture (WGJV) – Medivac Papua New Guinea

We have supplied two (2) Portapads to the Wafi-Golpu Project in Papua New Guinea predominately for worker/ supplies transportation and Medivac to and from remote locations.

***A successful medivac at the Wafi-Golpu Project sites has saved the life of a mother and child.***

Lupito Russell, 24, from Bavaga Village started labour contractions on July 24, and three days later she was rushed to the Wafi Health Subcenter in a life-threatening situation.

Wafi-Golpu Joint Venture's Health Extension Officer, Philip Dulau, and the clinic's Community Health Worker (CHW), Robert Kitumga, assessed the condition and identified that the mother and baby were in danger due to the complication and immediately raised the alarm.

Mr Dulau with quick assistance from WGJV's community affairs and, emergency response contacted Manolos, the helicopter company contracted by the Morobe Provincial Government to conduct medevac in rural areas of the province.

Lupito was airlifted from the WGJV camp which has a **Portable Helipad** in situ, to ANGAU Memorial General Hospital, where she was admitted. Under the professional care of the ANGAU medical staff, Lupito delivered a healthy baby boy on July 27.

Mr Kitumga thanked WGJV for their assistance, use of the **Portapad** system and Morobe Provincial Government for the medevac program, which has saved many lives since its inception.





# MIL-Star®: United Nations (UN) Mali Humanitarian Peace Keeping Mission

## Provision of 18 Cases of FEC MIL-Star® Portable Tactical Airfield Lighting System with NVG compatible IR

The United Nations Multidimensional Integrated Stabilization Mission in Mali is a United Nations peacekeeping mission in Mali. **MINUSMA** was established on 25 April 2013 by United Nations Security Council Resolution 2100 to stabilise the country after the Tuareg rebellion of 2012. It was officially deployed on 1 July, and regrettably has become the UN's most dangerous peacekeeping mission, with 204 peacekeepers killed out of a force of about 15,000.

**MINUSMA** has 23 no Rotary Wing Air assets deployed throughout the Mali region.

MIL-Star® rechargeable battery powered LED helipad lighting system is designed for fast deployment and use by advancing military forces in temporary and emergency situations.

The MIL-Star® system provides safe and effective marking at designated ad-hoc helicopter landing zones across the fleet of rotary aircraft serving in **MALI**.

The MIL-Star® contributes to humanitarian and peace-keeping efforts of the **UN** mission forces by improving night operations marking of helicopter landing zones that can be identified at night from distances up to 10 Miles (16km).

MIL-Star® are pilot activation enabled and can be controlled via the aircraft PTT (VHF Radio) Air to Ground control operational at line-of-sight ranges in excess of 10km.





## HEMS Station® Solar Plus: Scottish Ambulance Service

HEMS Station® Solar Plus installed for use by SASAA and Search & Rescue Operations in the surrounding area, as a designated secondary landing site, for day and night operations

### Glenforsa, Isle of Mull, Scotland, UK:

- Supports Extended Operating Hours
- Improved Regional Coverage in Low-Visibility/Night Ops
- Reliable Lighting Solution with Remote SMS System Monitoring
- Low Maintenance and Support Required
- Faster Response Times to Nearest Trauma Unit
- Ultimately, Supports Extended Patient Care

*“The Scottish Ambulance Service uses Glenforsa Airfield on Mull as a landing site for its helicopters 24hrs a day and undertakes in the region of 60 transfers per year from there. In February 2018 in order to improve our responsiveness and resilience FEC Heliports installed a HEMS Station at the airfield. The features of the HEMS Station allow us to ensure that the HEMS Star lights are continually charged using solar power. The status of the lights can be checked by SMS texts, whenever required, and hence are always ready to be deployed when required. In the 6 months of operations, at Glenforsa, we have had no issues with the installation and have received excellent customer service and support from FEC.”*

**Rob Dalziel, SRP  
Regional Air Ambulance Manager**





## PAD Star® Solar Plus: East Anglia Air Ambulance (EAAA) - Addenbrookes Hospital Helipad

### Application:

PAD Star® Solar Plus installed for use by EAAA and Air Ambulances in the surrounding regions, upgrading the existing helipad lighting system and providing a reliable, fully supported solution to maintain extended day and night operational hours.

### Location:

Addenbrookes Hospital, Cambridge, UK

### Benefits:

- Entirely Solar Powered System (Fully autonomous)
- Includes 18' Internally Illuminated LED Wind Cone with Inbuilt Dusk to Dawn Obs. Light
- Secure IP65 Rated Cabinet Housing for Manual/UHF Controllable Lighting Control Unit
- VHF Air-to-Ground Remote Controlled from Aircraft at over 10km (Line of Sight)
- Low Maintenance and Remote Support Capability via UHF
- SMS Connectivity and System Monitoring Available
- Quick to Install - Fully Installed, Tested and Operational within a Week
- PAD-Star®: FEC Heliports Latest Generation of Wired LED Helipad Lighting solutions

*"The East Anglian Air Ambulance (EAAA) needed an urgent replacement for the lighting system at our region's major regional trauma unit; Addenbrookes hospital when the existing system failed. The FEC Heliports solar powered option was ideally suited to the site and in a number of ways represented a step up from the old system with no reliance on the hospital infrastructure and services and with reliable on-call back up from FEC Heliports. It was quick to install and test and was on-line in a matter of weeks from our initial order. The company has been responsive and flexible to our needs and we are looking forward to developing more helipad lighting solutions with them in the future."*

**Alan Ward - Aviation Advisor  
East Anglia Air Ambulance**





## Helicopter usage for Humanitarian, Civil Protection and Peacekeeping Missions

While the helicopter has always been central to emergency operations, be they humanitarian, civil protection or peacekeeping missions, today's context makes aid agencies more likely to rely on specialised operators with helicopters featuring high standards in **safety, availability and efficiency** combined with high quality, tried and tested, lighting for helicopter landing sites and other related equipment to improve safety, availability and efficiency.

### **Added value of using helicopters in emergency operations:**

One common denominator of all emergency responses is the pivotal role played by logistics in the timely delivery of what is needed, where it is needed, to save lives. To that effect, the helicopter proves instrumental. in many ways, not only allowing operators to serve “last mile” destinations, but also to carry out vital CASEVAC or SECUEVAC missions. in benefit of humanitarian personnel.

A helicopter can go pretty much anywhere with a level of accessibility, maneuverability, and versatility unmatched by other means of transport.

Portable helipad (PORTAPAD) combined with MIL-Star® air to ground controlled helipad lighting system provides a strong and consistent landing surface with 24/7 accessibility that can go into an area at a known cost for and set period of time and when the mission is complete relocated without the loss of the initial investment time and time again.

### **Main challenges, current and future, for heliborne operations in the Humanitarian, Civil Protection and Peacekeeping sector**

Finding the right helicopter operator with the right asset at the right time, and who is willing to engage in complex emergencies can prove quite difficult.

The global trend is here to stay. More complex crises and natural disasters in the future.

There is an overall need for a smarter consolidated logistics approach, notably in air operations which include the helicopter, to ensure modular heliborne solutions are readily available whenever and wherever needed.

In partnership with FEC Heliports, we can provide the Humanitarian, HEMS, Border Control and Commercial operations infrastructure that you require to improve and enhance helicopter landing site safety and to enable 24/7 operational capability.

**Portable Helipad Systems can assist your organisation to become the operator with the right assets at the right time.**