



---

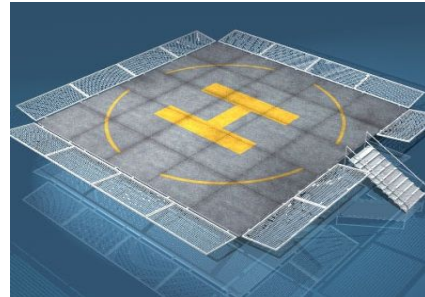
## Heliports General Information

### **DEFINITION OF HELIPORTS**

The heliports are designated helicopter landing and take-off areas, which can range from simple unprepared open fields & parking lots to locations that support scheduled air services (with terminal, hangars, fuel and aircraft maintenance facilities and capabilities).

### **SIZE OF HELIPORTS**

All international standards have space requirements (both on land and in the air) for an obstacle-free area in order for the aircraft to land and takeoff. These airspace standards are generally based on the size of the largest aircraft using the facility.



### **DIFFERENT TYPES OF HELIPORTS**

#### *Private heliports*

- privately owned and operated;
- permission to land on a private heliport is needed;
- privately funded, located on private/corporate property and not open to the general public.

#### *General Aviation facilities*

- open to the general aviation public, and the majority charge landing or other fees;
- a combination of privately and publicly owned properties;
- many locations form part of a hub and spoke system of heliports that serve as feeders from major cities to airports, suburban to urban areas, and city-center to city-center locations.

#### *Transport facilities*

- publicly owned or controlled;
- designed for accommodating larger helicopters and increased numbers of passengers;
- in general, include intermodal considerations, passenger waiting and ticketing areas & provisions for the high security associated with direct linking of helicopters to major air carriers at airports.

#### *Hospital facilities*

- generally located on or near the hospital campus;
- can be ground level, elevated or on rooftops;
- handling and care considerations are very important in the facility design;
- the proximity to the emergency areas or ambulance drop-off and pick-up points are considered.

#### *Official-Use facilities*

- are for police, fire departments, as well as various governmental agencies;
- special permission is generally required for aircraft other than their own.



### *Medical Emergency Sites*

- designed for lifesaving emergency use;
- any suitable clear and open areas that are close to or at the scene of an accident, medical emergency or disaster meeting the criteria set by the MedEvac company and the pilot-in-command of the aircraft;
- may be a pre-planned system of sites along highways, as in rest areas or recreational areas.



### *Emergency Evacuation Facilities*

- are intended for use in the event of an emergency, to facilitate bringing emergency personnel to a roof and removing building occupants;
- there are private heliports on rooftops that both service the travel needs of the building occupants and meet evacuation requirements.

### **LOCATION OF HELIPORTS**

- anywhere there is sufficient space, depending on the available air space, real estate priorities and exact departure points/destinations of the passengers or where the services are required;
- could be located on ground-level, elevated on buildings, bridges, or over highways; on ships, offshore oil/gas rigs, etc.;
- the facilities can be in cities, suburbs, rural areas or forests and are limited only by the availability of a small open area and a way of supporting the weight of the aircraft.



### **MATERIALS USED TO CONSTRUCT HELIPORTS**

- for **ground level sites**: turf or supplemented turf (grass pavers, mixed gravel, shells) are the most common heliport material;
- for **elevated structures**: asphalt and concrete, concrete and steel, aluminum, wood & composites (fiberglass, carbon and numerous other fibers) may be used.

### **REGULATORY AUTHORITY**

- **Romanian Civil Aviation Authority (RO-CAA)** assures that the landing area meets the general requirements for the safe and efficient use of airspace.

### **BENEFITS OF HELIPORTS**

#### *Economic*

- a Heliport can help attract and keep businesses that use helicopters;
- a great majority of the largest Romanian and international corporations own, lease or charter helicopters for the safe, secure, reliable and dependable transportation of their top executives and clients.



### *Emergency/Disaster Relief*

- a system of strategically placed facilities can provide, in addition to the daily business and private sector benefits, an emergency system of landing/staging areas;
- in the event of a local or regional disaster (i.e., fire, earthquakes, floods and industrial accidents), helicopters can be immediately available for saving lives and property.

### *Medical Use*

- Hospitals around the world consider a heliport an essential part of the total patient-care system, which has resulted in thousands of lives saved.



### *Public Service-Disaster Relief*

- many public safety agencies (fire, law enforcement and government wildlife and resource management authorities) use helicopters and associated heliports.

### News Gathering/Reporting, Traffic and Safety

- many network and local TV and radio stations use helicopters and local heliports to provide up - to - the second news, traffic reports and, in some cases, lifesaving information to the public.

### Utility, Forest and Resource Management

- many heliports support helicopters that patrol and repair critical power transmission lines, fight forest fires, manage national forests, and survey vast areas without the need for disturbing the environment.



### **EQUIPMENT NEEDED FOR A HELIPORT**

- equipment requirements are based upon the mission of the facility;
- a simple daylight-only VFR ground location will need only a wind indicator and some markings;
- attended ground-level facilities require portable fire extinguishers;
- most elevated locations over occupied structures will require fire extinguishing equipment, depending on the building code;
- if the location is to be used at night, simple perimeter and obstruction lighting is generally all that is needed;
- fueling, servicing and automatic weather reporting would all require equipment as appropriate to the needs of the operator.

### **Are there lights specifically designed for Heliports?**

- the great majority of today's facilities use lights that were designed for airports and adapted to the needs of heliports;
- lighting systems using conventional incandescent, electro-luminescent, fiber optic, light bar, LED, laser and cold cathode tube technologies;
- battery - powered lighting systems for temporary sites or sites isolated from a normal electrical power source.





---

### **Are Heliports expensive?**

- the greatest majority of domestic heliports are simple, inexpensive facilities;
- a daylight heli-stop can be established for less than a few hundred euro for minimum markings and a windsock;
- nighttime operations will require lighting and can range from a few hundred euro to several thousand depending upon the source of electricity;
- costs of larger facilities are in direct proportion to the real estate costs, and outlays for enhancements;
- a full-service heliport with hangars, fuel, services and offices would cost no more than the same facilities being used for cars, trucks or other vehicles.