

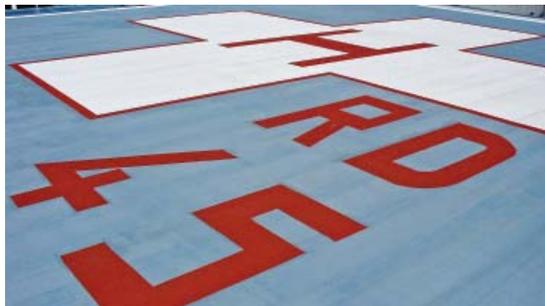
Is your helipad up to snuff?

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It's time for a quick refresher on your helipad. The main reference on helipads, FAA Advisory Circular 150/5390-2B entitled *Helipad Design*, should be consulted for all of the details. In fact, I refer to this reference as *The Book*, because it is the only source of aviation regulation information that should be at your fingertips.

Markings

Markings are the painted stripes and letters on the helipad surface, and they are used to identify the facility as a heliport. Sunlight fades these markings over time. If you don't see any markings at all, it is probably time to repaint them. There are really only a couple of ways to mark a helipad (see *The Book*), and neither includes a big heart or a big happy face. This is a great project for scout groups or other volunteers if your helipad is on the ground. Leave painting a rooftop helipad to the professionals, however.



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Ingress/Egress Route

Helicopters typically approach and depart the helipad from the same directions, depending on wind conditions. The routes can be marked on the ground, but the most important thing is that they are clear of obstacles such as fences, signs, fire hydrants, buildings, power lines, cars, trees or any other fixed object not smart enough to get out of the way. This path is a simple 8:1 slope—that is, eight feet out horizontally for each one foot rise in altitude

from the edge of the pad. Trees, buildings and power lines are usually the biggest obstacles to a clear route. Each helipad owner is responsible for maintaining a clear approach and departure path. See *The Book* for more information.

Lighting

If you have helicopter operations at night, the helipad needs lighting. There are several types of lighting, but the most important is perimeter lighting. Perimeter lights are the colored lights around the edge of the helipad. The one and only color for these lights is GREEN. In the past, the standard for perimeter lights was yellow or amber, but that changed several years ago to green (see *The Book*). The green color is less blinding to pilots wearing night vision goggles. If you have amber lights, the glass lenses in them can usually be changed out to the correct color: green.



Perimeter lights are the green lights around the edge of the helipad.

Wind Indicator

Commonly known as windsocks, some aviation people call them windcones (see *The Book*), but they all do the same thing: tell you which way the wind is blowing. This is important for aircraft, as they need to take off and land into the wind. Putting a



Known as windsocks or windcones, devices like this tell pilots which way the wind is blowing.



If your helipad looks like this (orange lights, faded markings and permanent fence) then your helipad is due for a makeover.

windsock on a nearby building is a great idea. Helipads may be blocked from the wind by buildings, so when a helicopter gets aloft the winds may be different from what they are on the ground-level helipad. Higher placement can also eliminate a lot of the potential for vandalism. Always replace a missing or faded windsock.



Iron and concrete bollards do not make good heliport fences and can damage any helicopter part that comes in contact with it. Instead, opt for a row of shrubs or a simple fence that will give way if necessary. Above left, a helicopter was damaged when it came in contact with a concrete bollard (inset).



Simple fence



Fences

Fences around helipads are both good and bad. The idea behind fencing is to keep people off helipads. With the exception of a handful of particularly busy hospitals, this isn't often a problem. People are generally smart enough to get out of the way, and ground personnel will shoo them away if all else fails. Because of the potential for damage, we discourage the use of hard, heavy, permanent fencing around helipads. When a helicopter or a piece of a helicopter makes contact with a fixed object like a fence, it is a real problem. *The Book* says that the top of the fence should not penetrate the approach slope. Doing the math, a fence 20 feet from the edge of a pad can only be 2.5 feet tall. Most fences are too high and too close, and they present an obstruction hazard. A great solution is a nicely maintained row of shrubs. The shrubbery won't stop a helicopter that might brush into them (causing damage), but they present a visual and sometimes physical barrier to people.

The Book

The main reference on helipads is FAA Advisory Circular 150/5390-2B, entitled *Heliport Design*. Although you think you may simply have a helipad, you actually have a heliport. Heliport is the term for the whole landing site, because the area where the helicopter lands encompasses more than just the concrete square where the helicopter sits. You won't find the word helipad anywhere in *The Book*. Although the entire circular is important to review, Chapter 4 gives information specific to hospital heliports and may be of particular interest to health care providers. It is free at www.faa.gov; type in "heliport design" in the search box.

Registration

Federal regulation requires you to notify FAA when you establish a helipad (14 CFR 77). We are still working to bring all helipads into compliance with this regulation. We are much more focused on compliance than enforcement, so don't be worried if you have not yet registered. And, we study lots of helipads after they've been built, so if your site is older, you can still register. To confirm your helipad is registered with FAA, ask your air ambulance pilot what the "location identifier" is for the pad. This is similar to the code on your luggage tag that says AUS, DFW, SAT and so on. Location identifiers are issued for every approved landing site. Helipads are typically four characters of mixed letters and numbers such as 51TA. You can also go to www.gcr1.com/5010web or www.airnav.com to search for your location identifier.

The Form

As with everything, there is a form to fill out to register your helipad. It is FAA Form 7480-1, Notice of Landing Area Proposal. You can get it on our website. Read the instructions.

Questions

FAA is always here to help with your questions. You can contact Glenn Boles, Safety and Standards Branch, Airports Division, 2601 Meacham Blvd, in Fort Worth at (817) 222-55627 or by email at glenn.boles@faa.gov.