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Governing Regulations, Code Criteria and Accreditation Standards for Heliports in the United States

FAA, NFPA, IBC, IFC, CAMTS & NAAMTA

A HeliExperts Discussion Brief

FEDERAL AVIATION ADMINISTRATION (FAA)

While the FAA heliport advisory circular AC 150/5390 is the FAA's design guide for heliports, the regulation governing the construction, alteration, activation and deactivation of heliports is found in the Code of Federal Regulations (CFR).

Code of Federal Regulations

Title 14 – Aeronautical and Space

Chapter 1 – Federal Aviation Administration, Department of Transportation

Subchapter I – Airports

Part 157 – Notice of Construction, Alteration, Activation, and Deactivation of Airports

§157.3 Projects requiring notice.

Each person who intends to do any of the following shall notify the Administrator in the manner prescribed in §157.5:

- a) Construct or otherwise establish a new airport or activate an airport.
- b) Construct, realign, alter, or activate any runway or other aircraft landing or takeoff area of an airport.
- c) Deactivate, discontinue using, or abandon an airport or any landing or takeoff area of an airport for a period of one year or more.

- d) Construct, realign, alter, activate, deactivate, abandon, or discontinue using a taxiway associated with a landing or takeoff area on a public-use airport.
- e) Change the status of an airport from private use to public use or from public use to another status.
- f) Change any traffic pattern or traffic pattern altitude or direction.
- g) Change status from IFR to VFR or VFR to IFR.

The FAA Advisory Circular AC 150/5390 does provide guidance on the cover page under section 3 “Application” as to what extent that the advisory circular’s guidance may be applied in many cases.

FAA Advisory Circular 150/5390-2C Heliport Guide

“Other federal agencies, states, or other authorities having jurisdiction over the construction of other heliports decide the extent to which these standards apply.”

Further guidance for heliport oversight and inspection criteria to be utilized by the FAA’s inspectors and representatives can be found in the Flight Standards Information Management System (FSIMS) Order 8900.1.

FAA Order 8900.1
CHG 140 (3/3/11)
Volume 8 General Technical Functions
Chapter 3 Miscellaneous Technical Functions
Section 3 Evaluation and Surveillance of Heliports

8-213 Heliports

- A. **Types of Heliports.** Heliports are one of two types: public use or prior permission required (PPR), also known as a private heliport. Both types can be used for either General Aviation (GA), which is the most common, or transport helicopters. Heliport specifics on both can be found in AC 150/5390-2. The evaluator must determine if the heliport will be limited to PPR use or for public use, and if it is for GA or transport helicopters.
- 1) Public use heliports can be publicly or privately owned and can be used by any qualified pilot without requirements for prior approval from the owner or operator. The evaluator should consider the heliport facility requirements with regards to AC 150/5390-2 if they are to be used in the public interest; e.g., air carrier usage.
 - 2) A PPR heliport is developed for exclusive use of the owner and persons authorized by the owner. The heliport owner and operator should ensure that all pilots are thoroughly knowledgeable about the heliport (including such features as approach/departure path characteristics, preferred

heading, facility limitations, lighting, obstacles in the area, size of the facility, etc.).

Additionally the FAA does stipulate requirements for adherence to the FAA heliport advisory circular AC 150/5390 for Instrument Flight Rule (IFR) operations at Visual Flight Rule (VFR) heliports. This guidance can be found in U.S. DOT/FAA National Policy Order 8260.42B.

FAA/DOT Order 8260.42B

Appendix A. Conditions and Assumptions for IFR to VFR Heliport (IVH) (Proceed Visually) Approach Procedures

Before designing a special RNAV (GPS) IFR to VFR heliport (IVH) approach procedure ensure the heliport meets the following criteria:

1. **FAA Form 7480-1, Notice of Landing Area Proposal**, has been filed under Part 157.
3. **An acceptable onsite evaluation of the heliport for VFR use is required.** Order 8900.1, General Aviation Inspector's Guide, chapter 61 is to be used for evaluation of the heliport. Based on the FAA determination, a procedure can be developed under the following conditions:

The following information outlines who several of the other federal agencies, states, or other authorities having jurisdiction mentioned in the FAA heliport advisory circular are and to what extent they enforce the FAA's heliport design advisory circular.

ADDITIONAL CODE STANDARDS

In evaluating the code criteria outlined and governed by the National Fire Protection Association regarding heliports, helipads and helistops it is important to consider other governing criteria on the subject that municipalities subscribe to. The primary agency in this case is the International Code Council (ICC) and the two documents; International Building Code (IBC) and International Fire Code (IFC), which they publish. These two publications contain required guidance on heliports, helipads and helistops that numerous municipalities subscribe to and are required to therefore follow.

The following is an excerpt from ICC/IBC 2012, NOTICE OF INCORPORATION / United States Legal Document: *"All citizens and residents are hereby advised that this is a legally binding document duly incorporated by reference and that failure to comply with such requirements as hereby detailed within may subject you to criminal or civil penalties under the law. Ignorance of the law shall not excuse noncompliance and it is*

the responsibility of the citizens to inform themselves as to the laws that are enacted in the United States of America and in the states and cities contained therein.”

STATE REGULATIONS

Additional regulations and standards can also be found in individual state laws as well as individual State’s Department of Transportation (D.O.T.) regulations. Every state in the U.S. has different laws and regulations on the books that provide guidance on heliports, helipads and helistops. This guidance is rather voluminous and ranges from literally no criteria at all to very stringent standards and licensing procedures. Those State D.O.T. agencies and territories which do have oversight and legal authority and recourse have been authorized such oversight by legislation adopted by that states governing legislative body. In these cases the FAA heliport advisory circular AC 150/5390 is predominantly the standard criterion that has been adopted along with NFPA-418, IBC and IFC codes.

CITY AND MUNICIPALITY REGULATIONS

Much like individual states, many large cities, e.g. Chicago, Seattle, New York, Newark, Los Angeles..., have regulations and codes for their municipal area of control which govern heliports, helipads and helistops. These municipalities, just like states criteria, range a broad spectrum from the very minimal to the very stringent. The oversight and legal recourse which these municipalities have been granted, just like states, has been authorized and granted by legislation adopted by that municipalities governing legislative body which has been passed into law.

INDEPENDENT ACCREDITATION STANDARDS

Specific to the helicopter air ambulance industry there are two accreditation groups that provide additional criteria on heliports, helipads and helistops as they apply to this particular industry. Those two agencies are the Commission on Accreditation of Medical Transport Systems (CAMTS) and the National Accreditation Alliance of Medical Transport Applications (NAAMTA). This is important due to the fact that some states, e.g. Colorado, Utah, Washington, Road Island, New Hampshire, Maryland, Massachusetts, and some counties in California require accreditation for operations in their states by law. This in turn places a certain legal obligation on those states and subsequent providers to meet certain standards for heliports as dictated by those agencies.



CODE REVIEW:

The Federal Aviation Regulations, not the FAA advisory circulars, requires notice to be provided to the FAA of any planned or upgraded heliports. The failure to file notice to the FAA accounts for the primary reason that the majority of the more hazardous heliports in the United States fail to meet standard safety criteria as outlined by the FAA, NFPA, IBC, and IFC.

Given that individual state's and city's represent such an enormous volume of material and ranges such a large spectrum of differing criteria for the purposes of this report we will focus primarily on the IBC and IFC standards as well as the air ambulance accreditation standards. To suffice to say there are many states that do require adherence to FAA criteria found in the heliport advisory circular AC 150/5390 as well as NFPA-418, IBC and IFC.

Excerpts of IBC, IFC, CAMTS and NAAMTA standards pertaining to heliports, helipads and helistops have been included in this document and can be found in the appendix.

- The IBC and IFC code documents can be reviewed online at the International Code Councils (ICC) website at: <http://publicecodes.cyberregs.com/icod/>
- CAMTS standards can be reviewed at: <http://www.camts.org/>
- NAAMTA standards can be reviewed at: <http://www.naamta.com/>

PERTINENT CODE EXCERPTS

As illustrated here there is a cascade effect between the different agencies and their subsequent code criteria for heliports. Just because a municipality has adopted one criterion over another, the other criteria will more than likely still apply for their area of jurisdiction due to the interrelationship of the language as illustrated below.

INTERNATIONAL FIRE CODE

[A] 105.6.40 Rooftop heliports.

An operational permit is required for the operation of a rooftop heliport.

2007.1 General.

Helistops and heliports **shall** be maintained in accordance with [Sections 2007.2](#) through [2007.8](#). Helistops and heliports on buildings **shall** be constructed in accordance with the [International Building Code](#).

2007.8 Federal Approval.

Before operating helicopters from helistops and heliports, approval **shall** be **obtained from the Federal Aviation Administration**.



INTERNATIONAL BUILDING CODE

[F] 412.7.4 Rooftop Heliports and Helistops.

Rooftop *heliports* and *helistops* **shall** comply with **NFPA 418.**

NATIONAL FIRE PROTECTION ASSOCIATION, NFPA – 418

Chapter 4 General Requirements – Land Based Facilities

Section 4.2.2

The design of the heliport, including all of the aeronautical components, **shall** be in accordance with **FAA AC 150/5390-2B, Heliport Design Advisory Circular.**

Commission on Accreditation of Medical Transport System (CAMTS)

05.00.00 – Rotor-Wing Standards

05.10.00 Helipad

5. Have at least one clear final approach and takeoff area (FATO) according to the **FAA Advisory Circular entitled Heliport Design Advisory Circular includes: using A.C 150/5390-2C as a guide.**
 - a. Takeoff and landing area length and width, or diameter, must be 1.5 times the overall length of the helicopters that utilize the helipad.
 - b. Surface of the helipad must be clear of objects, including parked helicopters.
 - c. A parking area must be provided if more than one helicopter at a time is to be accommodated.

18. Evidence of a system to communicate changes (construction, additions, obstructions, etc.) to the helipad for users of the primary helipad(s) must be available and may include a pilot's memo book or a database in the communications center. A system to record acknowledgment must be in place.
 - a. There is a system of photos used to familiarize pilots with helipad locations and conditions as a baseline for noting changes in conditions as well as providing a training aid for new pilots.
 - b. There is an FAA form 5010-5 on hand (for programs that own or operate their own helipad) for the helipad.**



National Accreditation Alliance of Medical Transport Applications (NAAMTA)

4.5.0 Listing Helipad Requirements

This content is in regards to the primary and receiving hospitals helipads/heliports. Helipad and Heliport criteria are found in accordance to the FAA Advisory Circular "Heliport Design Advisory Circular, AC 150/5390/-2B."