# ALABAMA DEPARTMENT OF TRANSPORTATION AERONAUTICS BUREAU





### REGISTRATION PROCEDURES FOR LANDING AREAS IN ALABAMA

#### **HELIPORTS**

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**LICENSING AUTHORITY**: The Code of Alabama Title 23, Part 1, Section 372 as amended, requires that the site approval and licensing of heliports, restricted landing areas, and other air navigational facilities be vested with the Alabama Department of Transportation Aeronautics Bureau (Department).

<u>GENERAL</u>: This booklet contains information on landing area license categories and the minimum requirements for each. Its design is to provide sponsors of proposed landing areas guidance on the steps necessary in the State of Alabama to register and construct these facilities in accordance with state law.

#### **CATEGORIES**:

- **Public Use**: This type of license is issued to facilities that are open to the public with no restrictions. This license category also applies to landing areas used to conduct air tours by an air tour operator that is providing helicopter flights under 14 CFR Parts 91, 121, and 135. To be licensed in a Public Use category, a helicopter landing area shall meet the requirements of the most recent publication of the FAA AC150/5390-2 "Heliport Design".
- ₹ Private Use: This type of license requires users of the facility to obtain permission from the owner before operating from the site. This permission must be obtained directly from the owner and no advertising for use of the facility by the public is allowed.
- **Hospital:** This type of license is issued for heliports that are used exclusively for the transportation of medical patients and/or medical purposes.
- Special Event: This type of license is issued for specific events that require a license to meet local zoning ordinances.

**Change of License Category -** A change of the category of an issued license is permissible if the heliport meets the requirements for that license category to which the change is requested. The request for a change of category will be made on a completed FAA Form 7480-1 forwarded to the Department.

**Exceptions to Licensing Requirements -** The Federal government (including military) and persons whose facility is used exclusively by the owner and immediate family (personal use) are exempted from the requirement of maintaining an operating license.

#### **MINIMUM REQUIREMENTS FOR HELIPORTS**

The requirement to receive permission from the Department prior to construction of any landing area includes heliports. The construction of a heliport is based upon the size of the largest helicopter expected to use the facility. ALDOT strongly recommends all heliports be constructed to the standards found in FAA Advisory Circular (AC) 150/5390 "Heliport Design", as amended. The exact size and type construction planned must be coordinated with the Department.

**PROPERTY REQUIREMENTS**: The amount of land needed for a heliport must also include the areas surrounding the actual landing area which must meet requirements for the removal of obstructions. These requirements include land to the sides of the landing area as well as the areas used as approach and departure paths. These requirements must be added to the amount of land that is necessary to construct the actual helipad. For example, a medical facility considering installing a heliport may choose to consider a rooftop design to minimize the risk of obstructions. An inspector from the Department will assess the land requirements and determine if the type of facility planned can be constructed at the proposed location. You must receive permission from the Department prior to construction of any landing area to be used by persons other than the property owner and immediate family.

All heliports must provide and maintain an obstruction free approach and departure path for rotorcraft. These paths to and from the landing area are trapezoidal in shape and slope up at a ratio of 8:1. The dimensions are as follows:

#### Requirements for Heliport Approach and Departure Paths

- **Public Use:** Must follow standards found in FAA Advisory Circular (AC) 150/5390-2C, as amended. Generally, this would be an approach/departure path with a minimum width dependent upon the design helicopter and a maximum width of 500 feet at a distance of 4,000 feet.
- ₩ Private Use (Including Hospital): A minimum width of 48 feet at the beginning of the approach/departure path and 125 feet in width at a distance of 400 feet (See Appendix I).

#### Heliport Surfaces and Their Minimum Dimensions:

- **Touchdown and Liftoff Area (TLOF)** A load bearing area on which the helicopter lands or takes off .
  - o <u>Public Use</u> Minimum of 1.0 times the rotor diameter of the design helicopter.
  - <u>Private Use</u> Minimum of 20 feet in regard to its least dimension, i.e., length, width, or diameter (See Appendix I).
  - <u>Hospital</u> Minimum of 20 feet in regard to its least dimension, i.e., length, width, or diameter (See Appendix I).
  - Special Event Dimensions shall be as approved by the Department
- ₩ Final Approach and Takeoff Area (FATO) A defined area over which the final phase of the approach to a hover, or landing, is completed and from which the takeoff is initiated.
  - <u>Public Use</u> Minimum of 1.5 times the overall length of the design helicopter.
  - <u>Private Use</u> Not lets than a 14-foot width shall surround the TLOF (See Appendix I).
  - <u>Hospital</u> Not less than a 14-foot width shall surround the TLOF (See Appendix I).
  - O Special Event The FATO shall be as approved by the Department.
- ₩ Heliport Safety Area (SA) A defined area on a heliport surrounding the FATO which is free of objects, other than those required for air navigation purposes.
  - <u>Public Use</u> Equal to 1/3 the rotor diameter of the design helicopter, but not less than 20 feet in width, surrounds the FATO.
  - Private Use Not less than 10 feet shall surround the FATO (See Appendix I).
  - o <u>Hospital</u> Not less than 10 feet shall surround the FATO (See Appendix I).

o **Special Event** – The safety area size shall be as required by the Department.

#### Minimum Requirements for Heliport Markings:

- The TLOF of all hard surface heliports shall be identified by a 12-inch-wide solid white line along the perimeter.
  - <u>Public Use</u> A white H centered in the TLOF and aligned with the preferred direction of approach.
  - Hospital A red H centered on a white cross, centered in the TLOF and aligned with the preferred direction of approach.
  - <u>Private Use</u> A distinctive marking, such as a company logo, identifies the facility as a private use heliport.
- ₩ The FATO of all hard surface heliports shall be identified by 12-inch-wide, 5-foot-long segments.
- ₩ Turf Heliports:
  - o TLOF A continuous 12 inch in-ground marking.
  - o FATO Marked by 12-inch-wide, 5-foot-long in-ground markings.

#### Minimum Requirements for Heliport Wind Direction Indicators:

- ₹ All heliports must have an operational wind direction indicator, which is to be installed in a highly visible area.
- ₹ To be licensed for night operations, the wind indicator must be lighted.

#### Minimum Requirements for Heliport Lighting:

 $\aleph$  Heliports that install TLOF lighting shall meet the dimensions, intensity, placement and lens color requirements of FAA AC 150/5390-2, as amended.

#### Minimum Requirements for Heliport Beacons:

- ₩ A beacon shall have green/white/yellow lens and not obstructed by objects of natural growth or manmade structures.
- $\Re$  A beacon is suggested but not required for heliports.

#### Minimum Requirements for Heliport Conditions:

- ₩ The TLOF, FATO, and taxilane surfaces must be kept free of any defect or obstruction.
- ₹ The TLOF, FATO, and taxi lane surfaces of turf heliports shall be graded. Grass surfaces shall not exceed a height of more than twelve (12) inches above the graded surface.
- ₩ Helicopter Parking Area Requirements:
  - o Parking of helicopters only.
  - o The apron surface shall be graded and free of any defect or obstruction.

#### Minimum Requirements for Heliport Fueling Areas:

- Ⅺ Sign(s) posted to prohibit open flames or smoking in fueling area.
- ₩ Grounding cables.
- Accessible fire extinguisher approved for the purpose of extinguishing petroleum product(s).
- ₩ Hoses for the dispensing of fuel shall not be frayed, cracked, or subjected to any condition that could cause a rupture or leaking of fuel.
- ₩ Fuel tanks must be clearly labeled for contents.

#### Minimum Requirements for Heliport Transitional Surfaces:

₩ A transitional plane shall surround the FATO for the purpose of identifying obstructions as defined in Rule 450-9-2.05 (See Appendix II).

The Department recommends all new heliports be constructed to the design standards found in FAA Advisory Circular (AC) 150/5390-2 "Heliport Design", as amended. Furthermore, the FAA requires that AC 150/5390-2 be followed as a condition of their airspace determination. In addition, if a heliport is constructed to the specifications found in AC 150/5390-2, it will meet State Licensing Standards. It should be noted that all Public use heliports *must* be constructed to AC 150/5390 as amended.

#### <u>APPLICATION PROCEDURE FOR LANDING AREAS</u>

- (I) Any person desiring to construct a proposed new landing area must first be granted permission to do so from the Alabama Department of Transportation Aeronautics Bureau. Before the Department will consider an application for a proposed new landing area, the applicant must receive a "Determination of No Objection" (DONO) from the FAA. To obtain such a determination, the applicant must complete and submit FAA Form 7480-1 ("Notice of Landing Area Proposal") on the Obstruction Evaluation / Airport Airspace Analysis (OE/AAA) public portal at <a href="https://oeaaa.faa.gov/oeaaa/external/portal.jsp">https://oeaaa.faa.gov/oeaaa/external/portal.jsp</a>. If the applicant needs help filing this form online, they should notify the Department for assistance.
- (II) Attached with this booklet is the "State of Alabama Landing Area Registration Form" (Form AB 1000) that must be completed and returned to the Department before any construction of the proposed landing area begins. The Form AB 1000 will constitute a formal application for the proposed new landing area. The application will not be considered without a DONO issued by the FAA.
- (III) A drawing depicting the proposed development, property boundaries, and a location map must be submitted to the Department with the completed State Registration form. The drawing must show the proposed heliport location and orientation on the property.

  Documentation evidencing that local zoning requirements have been met and approval received from the appropriate government agency must be included with the submittal. If no zoning ordinances exist for the proposed location, a written statement of fact from the appropriate government agency must be submitted.
- (IV) The Department will assign an Airport Inspector of the Aeronautics Bureau to visit the proposed site to determine if a heliport can be constructed at the location and, that if constructed, will conform to standards set forth in the ALDOT Administrative Code. The site inspection will take into consideration the amount of land available for construction of

the heliport and the present use of the land contained in the approach and departure paths. Other considerations are the type of activities to be conducted at the airport and what obstructions must be removed.

(V) The Inspector will file a report with the Chief of the Aeronautics Bureau after the site visit and recommend that a site approval be issued or denied. The applicant will be notified by registered mail and/or official email of the approval or denial of the request in the form of an Initial Site Inspection Report. A recommendation of denial will be accompanied by an explanation of the circumstances that justify this decision. If there are items that can be corrected to meet the requirements for issuance, these will be included in the explanatory statement of denial. If the Bureau Chief issues the certificate for approval of the site, construction may begin.

#### **Notes:**

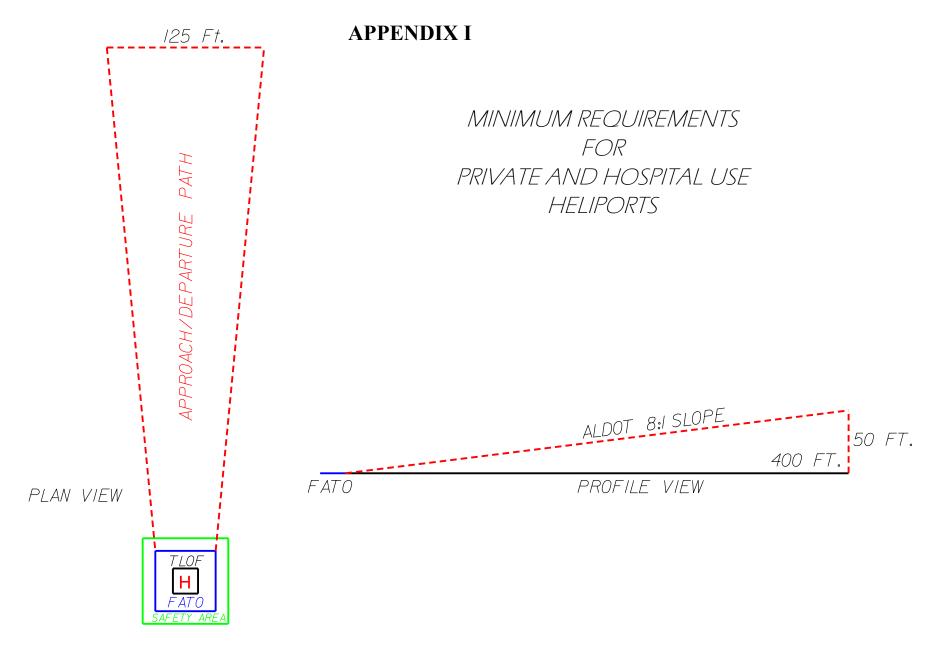
- © Copies of the ALDOT Administrative Code (*Chapter 450-9-1 and Chapter 450-9-2 authorized by Title 23, Chapter 1, §371-417 Highway Laws of Alabama*) can be obtained by request to the Alabama Department of Transportation Aeronautics Bureau or may be access online at <a href="https://www.dot.state.al.us/programs/Aeronautics.html">https://www.dot.state.al.us/programs/Aeronautics.html</a>.
- ₹ All mail correspondence should be sent to the Aeronautics Bureau's address at:

Alabama Department of Transportation
Aeronautics Bureau
1409 Coliseum Blvd.
Montgomery, AL 36110

- ₹ To contact the Aeronautics Bureau by phone, please call 334-242-6820 and your call will be directed appropriately.
- ₹ To connect with the Aeronautics Bureau through email, please send all inquiries to aeronautics@dot.state.al.us.

# APPENDIX SECTION

Contains Sketches of Required ALDOT Surfaces and Their Dimensions



TLOF - MINIMUM OF 20 FEET BY 20 FEET

FATO - MINIMUM OF 14 FOOT WIDTH SURROUNDING THE TLOF

SAFETY AREA - MINIMUM OF 10 FOOT WIDTH SURROUNDING THE FATO

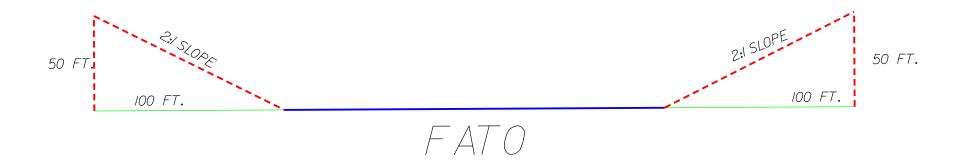
APPROACH SURACE - BEGINNING AT THE EDGE OF THE FATO

AND EXPANDING TO A WIDTH OF 125 FEET

AT A DISTANCE OF 400 FEET BEYOND.

#### **APPENDIX II**

### ALDOT HELIPORT TRANSITIONAL SURFACE



TRANSITIONAL SURFACES - EXTEND UPWARD AND OUTWARD FROM THE FATO AT A SLOPE OF 2 TO 1 FOR 100 FEET.