U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of the Chief Counsel

**800 Independence Ave., S.W.
Washington, D.C. 20591**

JAN 11 2011

Bill Young
HHC, 110th Aviation Brigade
302 Honeysuckle Drive
Enterprise, AL 36330

Dear Mr. Young:

This is in response to your letter of June 11, 2010, requesting our interpretation of certain Federal Aviation Administration (FAA) regulations and air traffic control (ATC) topics. Your email presents five issues for our consideration. Issues one and three involve the regulations. Issues two, four, and five involve questions addressing ATC procedures and design criteria. Those responses are provided by the Air Traffic Organization and the Flight Standards Service.

Issues one and three request interpretation of the following sections in Title 14 of the Code of Federal Regulations (14 CFR):

Section 91.126 provides, in pertinent part, that "unless otherwise authorized or required, each person operating an aircraft on or in the vicinity of an airport in a Class G airspace must" establish two-way radio communications with an operational control tower prior to four nautical miles from the airport where the operational control tower is located, and up to and including 2,500 feet AGL.

Section 91.127 provides, in pertinent part, that "unless otherwise authorized or required, each person operating an aircraft on or in the vicinity of an airport in a Class E airspace must" establish two-way radio communications with an operational control tower prior to four nautical miles from the airport where the operational control tower is located, and up to and including 2,500 feet AGL.

Section 91.129(a) provides, in pertinent part, that "unless otherwise authorized or required by the ATC facility having jurisdiction over the Class D airspace area, each person operating an aircraft in Class D airspace must" comply with sections 91.126 and 91.127.

In your letter, you describe a scenario in which control towers at LOR, HEY, and FHK heliports exist outside the Class D surface area boundary. You question whether a person operating outside Class D airspace, with no intent to land, would be required to comply with the communications requirements in sections 91.126 and 91.127, which are incorporated by reference in section 91.129. The answer is yes. A person operating outside of Class D airspace with no intent to land, and who does not enter the Class D airspace at any time, is required to establish communications with an operating control tower whenever the aircraft

is within 4 NM and 2,500 feet AGL of the control tower. 14 C.F.R. 91.126(d). Additionally, we understand you have been in contact with Aviation Safety, Flight Standards Service division (AFS) regarding this issue. We understand that AFS is considering sending a representative to assist you in this matter.

In your second question you ask what the maximum holding pattern airspeed for Copter procedures is, once established in the holding pattern. FAA Order 7130.3A provides design criteria to the procedure developer. The 100 indicated airspeed (KIAS) specified in FAAO 7130.3A is intended to be a maximum, not an absolute requirement. If a procedure designer determines a slower speed is necessary in a particular situation, that speed may be specified. Similarly, the maximum holding speeds specified in Section 2, paragraph 2-8a, Table 1 may be restricted operationally to avoid potential airspace conflicts. In the example you cited, the GPS procedure designer determined that the maximum speed in a holding pattern when using GPS for navigation is 90 KIAS. Since this is less than 100 KIAS, it is not in conflict with the guidance contained in FAAO 7130.3A, paragraph 5-2b.

In your third question you ask when an aircraft must descend to a lower published altitude if cleared for an instrument approach and operating above a lower published route or instrument approach procedure segment absent an altitude assignment issued in conjunction with an approach clearance. Once an approach clearance has been issued, the controller has determined that all vertical conflicts have been resolved between the point of the clearance and the runway as long as the pilot adheres to any published altitude restrictions. If the term "at pilot's discretion" was included in the altitude information of an ATC clearance, the pilot has the option to descend whenever he wants, at any rate, and to temporarily level off at any intermediate altitude as desired. AIM, paragraphs 4-4-10 (c). "At pilot's discretion," when used in conjunction with altitude assignments, means that ATC has offered the pilot the option of starting climb or descent whenever he or she wishes. The pilot may temporarily level off at any intermediate altitude, however, once he or she has vacated an altitude, he or she may not return to that altitude. Id.

In your fourth question you ask when an aircraft must descend to a lower published altitude when cleared for an RNAV instrument approach and operating within the boundaries of TAA, but above the TAA altitude and without an altitude assignment. Once ATC issues an approach clearance, the pilot is authorized to maneuver as necessary to complete the landing. In this case, if the aircraft is already at the altitude for the area depicted for an area of a TAA, ATC would expect the aircraft to remain at that altitude. If the aircraft is above the depicted altitude, ATC would expect the aircraft to descend to that altitude. The point at which the descent begins and the rate of descent are not specified. It should be noted, however, that in most cases, the 180 degree arc that makes up the initial portion of the approach is designated a "No Procedure Turn" (NoPT) area, and ATC definitely expects the aircraft to proceed straight into the final portion of the approach, and not require a turn in the holding pattern to loose altitude. For that reason, it would be appropriate for the pilot to be at the minimum altitude depicted so as to be in position for a turn into final without necessitating a turn in holding.

In response to your fifth question, it is permissible, without specific ATC clearance, to shorten published outbound DME legs in a holding pattern as long as the issued holding pattern leg length is not exceeded. If ATC verbalizes leg lengths for either a charted or uncharted holding pattern, the pilot does have to obtain ATC clearance to shorten outbound legs to less than that which has been cleared. "When an ATC clearance has been obtained, no pilot in command may deviate from that clearance unless an amended clearance is obtained, an emergency exists, or the deviation is in response to a traffic alert and collision avoidance system resolution advisory." See 14 C.F.R. 91.123(a).

I hope this information has been helpful. This interpretation has been coordinated with Flight Standards Service Flight Technologies and Procedures Division and NextGen Procedures Implementation Group Terminal Services, Air Traffic Organization. If you have further questions concerning the legal issues discussed in this interpretation, please contact Sabrina Jawed on my staff at 202-267-3073. If you have further questions concerning the technical issues, please contact Bruce McGray, Program Manager Field Operations at 202-385-4937.

Sincerely,

Rebecca MacPherson
Assistant Chief Counsel for Regulations, AGC-200