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

Office of the Chief Counsel

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

NOV 23 2010

Mr. David Tuuri
3530 Perch Drive
Mansfield, OH 44903

Dear Mr. Turri,

This is in response to your follow-up email message of July 22, 2010, forwarding three questions you submitted previously to the Federal Aviation Administration's (FAA), Air Traffic Organization's Customer Help. Your questions are in reference to the operating requirements associated with the loss of two-way radio communications that are codified in section 91.185(c) of Title 14, Code of Federal Regulations. As your questions involve interpretations of the above-referenced regulation, they were referred to our office for response.

Specifically, your questions reference section 91.185(c)(3), which provides:

> (i) When the clearance limit is a fix from which an approach begins, commence descent or descent and approach as close as possible to the expect-further-clearance time if one has been received, or if one has not been received, as close as possible to the estimated time of arrival as calculated from the filed or amended (with ATC) estimated time en route.
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> (ii) If the clearance limit is not a fix from which an approach begins, leave the clearance limit at the expect-further-clearance time if one has been received, or if none has been received, upon arrival over the clearance limit, and proceed to a fix from which an approach begins and commence descent or descent and approach as close as possible to the estimated time of arrival as calculated from the filed or amended (with ATC) estimated time en route.

First, you question whether the holding fix and the clearance limit are the same place. The answer is, not necessarily. The Airman's Information Manual (AIM) defines a "clearance limit" as "[t]he fix, point, or location to which an aircraft is cleared when issued an air traffic clearance." AIM, Pilot/Controller Glossary (8/26/10). For example, if ATC clears a pilot to the airport, the airport becomes the clearance limit. Therefore, a clearance limit, by definition, can be any fix, including a holding fix, but is not necessarily one.

Second, you question whether section 91.185(c) applies if no holding instructions have been issued and, if so, how non-GPS aircraft comply. The answer to the first part of your second question is yes. There is nothing to indicate that section 91.185(c) would not apply if no

holding instructions have been issued. Section 91.185(c)(3)(i) applies when the clearance limit is a fix from which an approach begins, and section 91.185(c)(3)(ii) applies when the clearance limit is not a fix from which an approach begins.

The second part of your question is how do non-GPS aircraft comply? A pilot plans and files his/her route of flight based on the navigation equipment onboard the aircraft and used during the flight. If an aircraft is not equipped for GPS navigation, the pilot should plan the flight using ground-based navaids. ATC will clear the pilot based on the filed route and if ATC needs to amend this route, ATC will not place the pilot on a route of flight using navaids that are unavailable to the aircraft.

Third, you question whether ATC wants pilots to postpone their descents when NORDO, despite the deletion of the "descent" paragraph from section 91.185(c). The requirements of 91.185(c) were updated by rulemaking in 1985. See 49 FR 46749, November 28, 1984. ATC expects pilots to comply with 91.185(c)(3)(i) and (ii) and commence descent in accordance with either one of the two paragraphs as appropriate.

I hope this information has been helpful. This interpretation has been coordinated with the Airspace and Rules Group, Air Traffic Organization & Flight Standards Service, General Aviation and Commercial Division. If you have further questions concerning this interpretation, please contact Sabrina Jawed on my staff at 202-267-8863.

Sincerely,

Rebecca MacPherson
Assistant Chief Counsel for Regulations, AGC-200