Dear Ms. Simmons:

This is in response to your letter of December 4, 2009, requesting an interpretation of the term “congested area” as used in 14 C.F.R §91.119 and clarification of §91.119(a). You also asked whether definitions for the terms, “densely populated, unpopulated and sparsely populated” discussed in the preamble of a recent NPRM, Experimental Permits for Reusable Suborbital Rockets, 71 FR 16251, March 31, 2006 provide appropriate guidance for interpreting §91.119.

On January 6, your representative, Mark Simmons, verbally advised the FAA he wished to withdraw the request for clarification of §119(a). In a subsequent email message and telephone conversation, Mr. Simmons confirmed that his primary interest is in obtaining clarification of the use of the National Aeronautical Charting Office (NACO) Aeronautical Chart User’s Guide for flight planning purposes in an effort to develop an appropriate training curriculum for pilots operating banner tow operations under part 91. In particular, Mr. Simmons seeks to clarify that pilots may use the yellow areas depicted in the NACO Aeronautical Chart User’s Guide to designate a congested area under §91.119(b), and any other area not so identified would be “other than a congested area” as that term is used in §91.119(c).

Discussion

The FAA has not defined the term “congested area” by regulation and does not use a mathematical formula to determine the boundaries of a congested area. Instead, the FAA applies a case-by-case analysis to determine compliance with § 91.119\(^1\) to balance the

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\(^1\) Sections 191.119(a) (b) and (c) state-

Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes:
(a) Anywhere. An altitude allowing, if a power unit fails, an emergency landing without undue hazard to persons or property on the surface.
(b) Over congested areas. Over any congested area of a city, town, or settlement, or over any open air assembly of persons, an altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft.
(c) Over other than congested areas. An altitude of 500 feet above the surface, except over open water or sparsely populated areas. In those cases, the aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.
interests of the pilot’s operation and the need to protect persons and property on the ground, which has been the purpose of the minimum safe altitudes rule in §91.119 since its inception.

This approach is well documented and supported by many legal opinions issued by the FAA, the National Transportation Safety Board (NTSB) and federal courts. See, F. Dennis Halsey, Legal Interpretation, January 5, 1978 and Richard D. Henderson, Legal Interpretation, September 13, 1976, interpreting §91.79, which was recodified as §91.119 without substantive change. In Richard D. Henderson, the FAA summarized the NTSB’s guidelines for sustaining violations of the rule in cases where pilots operated aircraft over a small area consisting of approximately ten houses and a school, over the campus of a university, a beach area along a highway, and over a boy’s camp where there were numerous people on the docks and children playing on the shore. The opinion also noted that no precise density of population, ground traffic or congestion, or description of the proximity of buildings, or number of residences has been devised.

Consistent with these earlier opinions, in 2009, the NTSB found that a pilot had violated §91.119(c) by operating over the open water near the beach but closer than 500 feet to persons on the beach. The pilot also violated §119(b) by operating over an open air assembly of persons (several hundred people). See Administrator v. Riggs, NTSB Order No. EA-5436 (March 17, 2009) noting that “[u]nder Board precedent, a picnic area, if it is sufficiently populated can be an open air assembly of persons. So can a beach.” See also, Mickalich v. United States, 2007 WL 1041202 (E.D. Mich.) for a general discussion of the terms “congested area,” “other than congested area,” and “sparsely populated” as used in §91.119. In that case, the court found that twenty people on a ten acre site would be a sparsely populated area under §91.119(c) and not an open air assembly of persons constituting a congested area under §91.119 (b); therefore, the appropriate minimum altitude was above 500 feet to any person, vessel, vehicle, or structure.

In recent opinions, Gary S. Wilson, Legal Interpretation, December 11, 2006 and Anderson, Legal Interpretation, July 2, 2009 (enclosed), the FAA again emphasized that the agency would adopt a case-by-case analysis in determining when a pilot violates §91.119.

While there is no precise definition of a “congested area,” official U.S. government aeronautical charts and NOTAMs provide general guidance for developing a proposed route that complies with §91.119. However, aeronautical charts would not be expected to reflect all required local information. Pilots may obtain such information in a briefing from the local Flight Standards District Office. This information along with the pilot’s prior knowledge of the area and information the pilot obtains from other sources may require an adjustment to the planned flight path before or during flight. Ultimately, it is the pilot’s responsibility to maintain the minimum safe altitudes required by §91.119.

You also ask whether it is reasonable to rely on the definitions for experimental permits for reusable suborbital rockets discussed in the NPRM at 71 FR 16251, March 31, 2006. The definitions in 71 FR 16251 were discussed pursuant to the commercial space rules under 49
U.S.C. 70101-70121, which are inapplicable to the general operating and flight rules of part 91.

This response was prepared by Lorna John, Senior Attorney in the Regulations Division of the Office of the Chief Counsel and coordinated with the General Aviation and Commercial Division of the Flight Standards Service and within the Office of the Chief Counsel. If we can be of further assistance, please contact us at (202) 267-3921.

Sincerely,

Rebecca B. MacPherson
Assistant Chief Counsel for Regulations, AGC-200

Enclosure