

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Parts 71, 91, 95, 121, 125, 129, 135****[Docket No. FAA-2003-14305; Special Federal Aviation Regulation No. 97]****RIN 2120-AH93****Special Operating Rules for the Conduct of Instrument Flight Rules (IFR) Area Navigation (RNAV) Operations Using Global Positioning Systems (GPS) in Alaska****AGENCY:** Federal Aviation Administration (FAA), DOT.**ACTION:** Final rule.

SUMMARY: Under Special Federal Aviation Regulation (SFAR) No. 97, the FAA allows the use of Global Positioning System/Wide Area Augmentation Systems for the en route portion of flights on routes in Alaska outside the operational service volume of ground based navigation aids. The use of aircraft navigation equipment other than area navigation systems, that only permit navigation to or from ground-based navigation stations, often results in less than optimal routes or instrument procedures and an inefficient use of airspace. SFAR 97 optimizes routes and instrument procedures and provides for a more efficient use of airspace. Further, the FAA anticipates that it will result in an associated increase in flight safety.

DATES: This final rule is effective March 13, 2003.

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SUPPLEMENTARY INFORMATION:**Availability of Final Rules**

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- (1) Searching the Department of Transportation's electronic Docket Management System (DMS) Web page (<http://dms.dot.gov/search>);
- (2) Visiting the Office of Rulemaking's Web page at <http://www.faa.gov/avr/armhome.htm>; or
- (3) Accessing the **Federal Register's** Web page at http://www.access.gpo.gov/su_docs/aces/aces140.html.

You also can get a copy by submitting a request to the Federal Aviation Administration, Office of Rulemaking,

ARM-1, 800 Independence Avenue SW., Washington, DC 20591, or by calling (202) 267-9680. Make sure to identify the docket number or amendment number of this rulemaking.

Background

Aviation is critical to Alaska for routine travel and commerce, and for nearly any kind of emergency. Only 10% of Alaska is accessible by road, and waterways are impassable most of each year. Alaska also is very large and crisscrossed by mountains that block radio and radar transmissions so that aviation services and infrastructure that are available in the 48 contiguous states are not available in many areas of Alaska. Aviation is essential to Alaska, but there also is a safety consequence of operating in this environment. The aviation accident rate for rural Alaska is 2.5 times the average for the rest of the United States. The Capstone Program is one initiative by the FAA to reduce this accident rate.

The Capstone Program is a joint initiative by the FAA Alaskan Region and the aviation industry to improve safety and efficiency in Alaska by using new technologies. Derived from the National Transportation Safety Board (NTSB) and industry recommendations, Capstone Phase I focuses on southwest Alaska (the Yukon and Kuskokwim River Delta—YK Delta), which is isolated, has limited infrastructure, and has the same high rate of aviation accidents experienced in the rest of the state. Under Capstone, installation of advanced avionics in the YK Delta aircraft began in November 1999 and expansion of ground infrastructure and data collection will continue through December 2004. Relying on lessons learned during Phase I, Capstone Phase II is beginning in southeast Alaska. A more robust set of avionics, that include Global Positioning Systems/Wide Area Augmentation Systems (GPS/WAAS), is being deployed that aims at further reduction of controlled flight into terrain and mid-air collision accidents. In addition, instrument flight rules (IFR) area navigation (RNAV) procedures are being introduced that enable participants to conduct IFR operations on published routes, improving overall safety and capacity.

The current operating rules under the Federal Aviation Regulations in title 14 of the Code of Federal Regulations (14 CFR) do not accommodate the use of GPS/WAAS technology for IFR RNAV outside the operational service volume of ground-based navigation aids. SFAR 97 allows the timely approval of approximately 200 aircraft that are being equipped under Capstone Phase II to

conduct IFR RNAV operations using GPS/WAAS navigation systems. Additionally, SFAR 97 provides the opportunity for air carrier and general aviation operators, other than those participating in the Capstone Program, to voluntarily equip aircraft with advanced GPS/WAAS avionics that are manufactured, certified, and approved for IFR RNAV operations. This SFAR serves two purposes: (1) It allows persons to conduct IFR en route RNAV operations in the State of Alaska and its airspace on published air traffic routes using TSO C145a/C146a navigation systems as the only means of IFR navigation; and (2) it allows persons to conduct IFR en route RNAV operations in the State of Alaska and its airspace at Special MEA that are outside the operational service volume of ground-based navigation aids.

The FAA proposed SFAR 97 on January 24, 2003 (68 FR 3778). The comment period closed on February 24, 2003. The FAA received four comments on the proposed SFAR.

Discussion of Comments

Three comments received on the proposed SFAR supported the proposal. A pilot commented that this is a positive move toward improved safety and efficiency of operations in Alaska. The Alaska Airmen's Association commented that the SFAR provides more reliable navigation. The Association noted that by allowing safer minimum altitudes, the rule allows aircraft to fly below freezing/icing levels. It also noted greater operational capability. The Aircraft Owners and Pilots Association (AOPA) stated that SFAR 97 would also facilitate further development of the AOPA-supported Capstone Program, which uses current-day technology to increase capacity while improving safety. Allowing the use of Global Positioning System/Wide Area Augmentation Systems (GPS/WAAS) for the en route portion of flights on routes in Alaska will further reduce the chances for controlled flight into terrain and midair collisions while at the same time improving capacity.

The Boeing Commercial Airplane Group agreed with the intent and goal of proposed SFAR 97 but noted the following:

"1. The NPRMs provisions are inconsistent with movement towards a Performance based International Airspace System (INAS), and are inconsistent with applications of RNP (e.g., it addresses only specific limited technologies; does not credit other more capable technologies, and has underlying angular criteria implications that are inappropriate in an inherently