

# **U.S. DEPARTMENT OF TRANSPORTATION**

# FEDERAL AVIATION ADMINISTRATION Air Traffic Organization Policy

N JO 7110.491

Effective Date: October 1, 2008

Cancellation Date: August 27, 2009

**SUBJ:** Random Point-to-Point GPS RNAV Routes within the Anchorage Air Route Traffic Control Center (ZAN) Controlled Airspace, Excluding Oceanic Airspace

- 1. Purpose of This Notice. This notice transmits changes to FAA Order 7110.65, Air Traffic Control, concerning ATC surveillance requirements for properly equipped aircraft operating on point-to-point RNAV routes within the Anchorage Air Route Traffic Control Center (ARTCC) controlled airspace, excluding oceanic airspace.
- **2. Audience**. This notice applies to the following ATO organizations: the En Route and Oceanic Safety and Operations Support Office (ATO-E SOS), En Route and Oceanic Service Areas, and all En Route and Oceanic air traffic facilities.
- **3.** Where Can I Find This Notice? The notice is available on the MYFAA employee Web site at https://employees.faa.gov/tools\_resources/orders\_notices/ and on the air traffic publications Web site at http://www.faa.gov/airports\_airtraffic/air\_traffic/publications.
- **4. Procedures**. Change FAA Order 7110.65, Air Traffic Control, Paragraph 4-1-2, Exceptions; Paragraph 4-4-2, Route Structure Transitions; Paragraph 5-5-1, Application; Paragraph 6-5-4, Minima Along Other than Established Routes or Airways, to read as follows:

#### 4-1-2. EXCEPTIONS

Altitude and distance limitations need not be applied when any of the following conditions are met:

- a. Routing is initiated by ATC or requested by the pilot and the following is provided:
  - 1. Radar monitoring.
  - 2. As necessary, course guidance unless the aircraft is /E, /F, /G, or /R equipped.

## NOTE-

1. Para 5-5-1, Application, requires that radar separation be provided to RNAV aircraft on random (impromptu) routes at FL 450 and below.

EN ROUTE. Radar monitoring is not required for aircraft equipped with IFR-certified GPS systems operating on point-to-point RNAV routes within the Anchorage Air Route Traffic Control Center (ARTCC) controlled airspace (excluding oceanic airspace), where ATC surveillance coverage is not available. Additionally, in accordance with para 5-5-1, Application; such aircraft described herein may be provided nonradar separation, in lieu of radar separation, when an operational advantage will be gained.

2. When a clearance is issued beyond the altitude and/or distance limitations of a NAVAID, in addition to being responsible for maintaining separation from other aircraft and airspace, the controller is responsible for providing aircraft with information and advice related to significant deviations from the expected flight path.

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Reference-FAAO JO 7110.65, Para 2-1-3, Procedural Preference. FAAO JO 7110.65, Para 4-4-2, Route Structure Transitions. FAAO JO 7110.65, Para 6-5-4, Minima Along Other Than Established Airways or Routes. P/CG Term- Radar Monitoring

No further changes to paragraph.

## 4-4-2. ROUTE STRUCTURE TRANSITIONS

# Title thru f, No change

g. Provide radar monitor when transition to or from a designated or established RNAV route is made along random RNAV routes.

## **EN ROUTE**

*EXCEPTION*. Radar monitoring is not required for aircraft equipped with IFR-certified GPS systems operating on point-to-point RNAV routes within Anchorage Air Route Traffic Control Center controlled airspace (excluding oceanic airspace) where ATC surveillance coverage is not available.

#### Reference-

FAAO JO 7110.65, Para 6-5-4, Minima along other than Established Airways or Routes FAAO JO 7110.65, Para 4-1-2, Exceptions

No further changes to paragraph.

#### 5-5-1. APPLICATION

a. Radar separation shall be applied to all RNAV aircraft operating on a random (impromptu) route at or below FL 450 and to all published Q routes in the conterminous United States.

#### **EN ROUTE**

*EXCEPTION*. Aircraft equipped with IFR-certified GPS systems operating on point-to-point RNAV routes within the Anchorage Air Route Traffic Control Center (ARTCC) controlled airspace (excluding oceanic airspace), where ATC surveillance coverage is not available, may be provided nonradar separation, in lieu of radar separation, when an operational advantage will be gained.

#### Reference-

FAAO JO 7110.65, Para 2-1-3, Procedural Preference FAAO JO 7110.65, Para 4-1-2, Exceptions FAAO JO 7110.65, Para 6-5-4, Minima Along Other Than Established Airways or Routes

No further changes to paragraph.

## 6-5-4. MINIMA ALONG OTHER THAN ESTABLISHED AIRWAYS OR ROUTES

## Title thru a2, No change

3. Via degree distance fixes for RNAV flights above FL 450- 10 miles on each side of the route.

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#### NOTE-

1. Degree distance RNAV flights (random routes) at FL 450 and below are provided radar separation.

2. EN ROUTE. Aircraft equipped with IFR-certified GPS systems operating on point-to-point RNAV routes within the Anchorage Air Route Traffic Control Center (ARTCC) controlled airspace (excluding oceanic airspace), where ATC surveillance coverage is not available, may be provided nonradar separation, in lieu of radar separation, when an operational advantage will be gained.

#### Reference-

FAAO JO 7110.65, Para 2-1-3, Procedural Preference FAAO JO 7110.65, Para 4-4-2, Route Structure Transitions FAAO JO 7110.65, Para 5-5-1, Application

# b thru d, No change

#### **EN ROUTE**

- e. For aircraft equipped with IFR-certified GPS systems operating within Anchorage Air Route Traffic Control Center controlled airspace (excluding oceanic airspace) where ATC surveillance coverage is not available:
- 1. Aircraft shall be cleared via point-to-point route segments. Points are defined as: NAVAIDS, intersections, airports, and waypoints.
- 2. Lateral protected airspace shall be 4 NM either side of the projected centerline between the points.
- 3. Points used for navigation shall be named and depicted on the controller video map, and/or on the controller chart(s) located at the position.
  - 4. The maximum distance between successive fixes/waypoints must not exceed 512 miles.
- 5. Assigned altitudes must be at or above the highest minimum IFR altitude (MIA) along the projected route, including the protected airspace of that route, for the route segment being flown.
- **5. Training.** Training shall be provided to all Anchorage ARTCC operational personnel involved with providing GPS point-to-point separation services.
- **6. Distribution**. This notice is distributed to select offices in Washington Headquarters, En Route and Oceanic Service Areas, William J. Hughes Technical Center, Mike Monroney Aeronautical Center, and all En Route and Oceanic Air Route Traffic Control Center.
- **8. Background**. Due to the limited availability of air traffic control (ATC) surveillance service within the Anchorage ARTCC domestic controlled airspace, the FAA promulgated special flight regulations in support of the implementation of a statewide RNAV/GPS route structure as reflected in the FAA Flight Plan. Those special flight regulations include aircraft equipage and pilot training requirements to provide additional safety mitigations for the expanded use of RNAV/GPS procedures in areas with limited or no ATC surveillance coverage. Initially, a waiver was authorized for Anchorage ARTCC to support GPS equipped aircraft transitioning from the en route structure to airports with GPS instrument approaches. Based on the experience gained through the application of the subject waiver, this change supports the use of RNAV/GPS routes for properly-equipped aircraft operating on point-to-point RNAV routes within Anchorage ARTCC controlled airspace, excluding oceanic airspace, regardless of ATC surveillance coverage.

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**9. Safety Risk Management**. This notice supports an exception to the radar monitoring and radar separation requirements for properly-equipped aircraft on point-to-point RNAV routes in Anchorage ARTCC controlled airspace, excluding oceanic airspace. An associated Safety Risk Management Decision Memorandum has been prepared to document this determination.

**10. Implementation**. This notice shall be implemented on the effective date and the context of this notice will be incorporated into FAAO 7110.65S, change 3, effective August 27, 2009.

Luis A. Ramirez

Director, En Route and Oceanic Safety and

**Operations Support** 

Air Traffic Organization

Date Signed