

## **Twentieth Meeting of the Cross Polar Trans East Air Traffic Management Providers' Work Group (CPWG/20)**

(Anchorage, Alaska 26-29 October 2015)

### **Agenda Item 3:**

#### **Changes in the Anchorage Arctic Flight Information Region**

(Presented by the Federal Aviation Administration)

##### **SUMMARY**

This paper presents information regarding changes to the Anchorage Arctic Flight Information Region (FIR) in terms of airspace designation and airspace use.

### **1 Introduction**

1.1. Prior to 2015, use of the Anchorage Arctic FIR (Fig. 1) was generally limited to overflights by air carrier and air cargo flights, operating above FL280, on Cross Polar and Trans Polar routes. Flight operations in the airspace below FL280, and especially below FL230, (generally scientific research flights) were infrequent and, because of the airspace designation, operated with limited ATC service. Two divergent issues are changing this historic use pattern: concern about climate change and resource exploration and extraction. Consistent with these changing user demands, the Federal Aviation Administration has instituted two significant modifications in the Arctic FIR. The first of these concerns the re-designation of the Arctic FIR airspace and the second concerns the development of an offshore special use airspace "Warning Area".

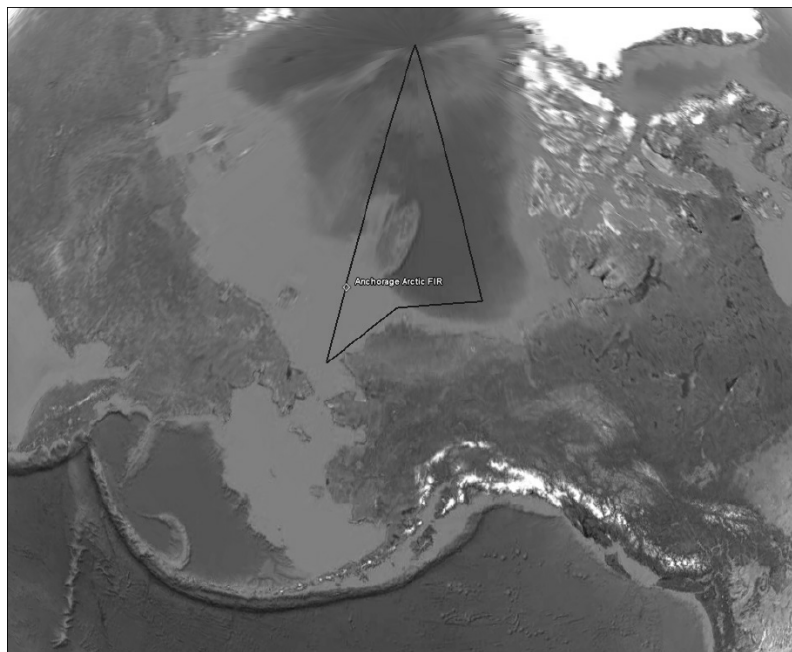


Fig. 1 Anchorage Arctic FIR

## 2 Discussion – Airspace Designation

2.1. In 2003, at the suggestion of the International Civil Aviation Organization (ICAO), the Federal Aviation Administration (FAA) notified airspace users of the types of Air Traffic Services FAA provides in international (Oceanic) airspace controlled by the United States. This notification was accomplished by relating the various ICAO airspace classes (i.e. Class A, B, C, etc.) to the individual international areas (Oceanic FIRs) where FAA provided Air Traffic Control (ATC). The designation of the airspace class itself (e.g. Class A) identifies, by definition, what types of air traffic service are provided therein.

2.2. FAA's 2003 designation stated that, in the Anchorage Arctic FIR, ATC services consistent with ICAO Class A airspace would be provided between Flight Levels (FLs) 230 and 600 inclusive, those with Class E airspace above FL600, and those with Class G airspace below FL230. As noted earlier, changes in the way the airspace is being used has driven FAA to amend this designation.

2.3. On July 1, 2015, FAA notified airspace users that the airspace of the Anchorage Arctic FIR was re-designated such that ATC services consistent with ICAO Class A airspace are now provided between FL180 and FL600 inclusive, those with Class E are provided both above FL600 and from FL12 up to, but not including FL180. Services consistent with Class G airspace are provided below FL12.

## 3 Discussion – Special Use Airspace

3.1 The concern about global climate change is generating increasing scientific research in the Arctic. While the research is primarily concerned with surface conditions, i.e. polar ice coverage, etc., researchers are using airborne tools such as Unmanned Aerial Systems (UAS), aerial dropsondes, free and tethered balloons, et.al, to gather the surface data.

3.2 In order to provide airspace where these research tools can be used and still maintain a safe operating environment for aircraft, FAA has established a "Warning Area" (as described in Appendix A, Part II of ICAO Circular 330-AN/189) within the Anchorage Arctic Airspace. The Warning Area, identified as "W-220", consists of that airspace below 10,000 feet Mean Sea Level (MSL) and is described in Figures 2 and 3 (Fig. 2 & 3).

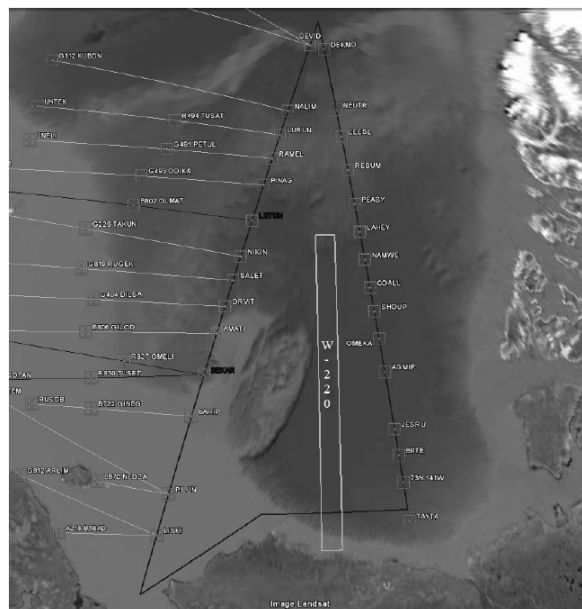


Fig. 2 Warning Area 220

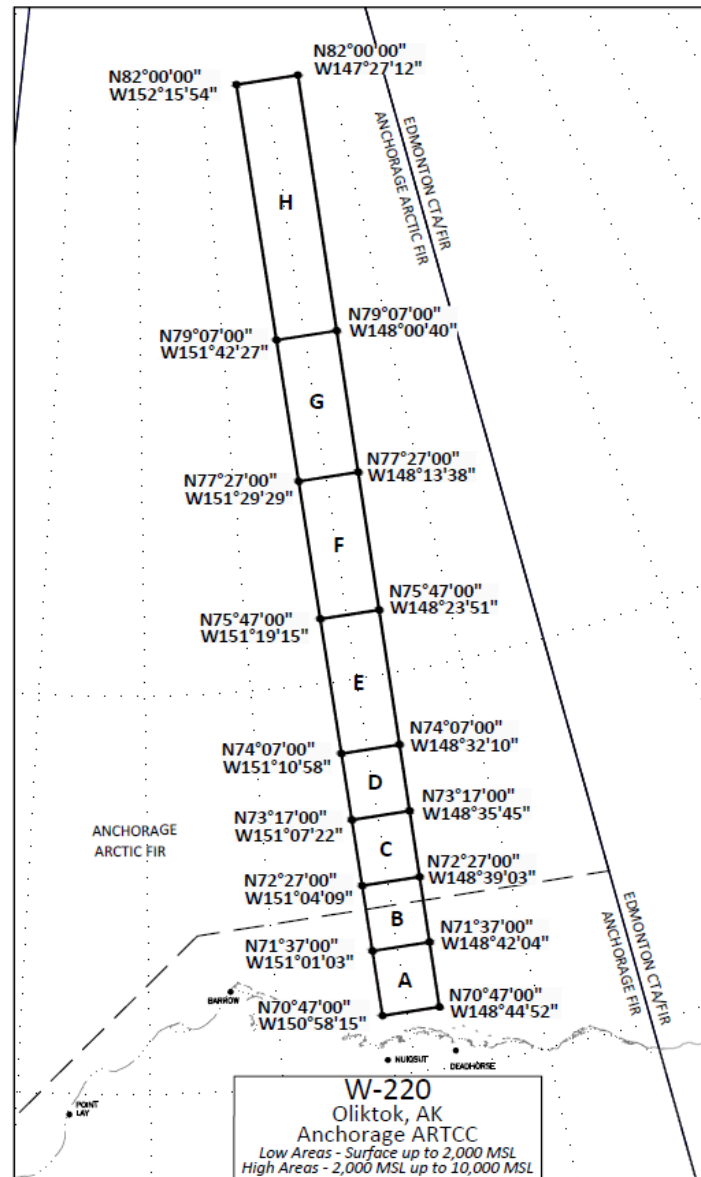


Fig. 3

3.3 Warning Area "W-220" is subdivided both vertically and horizontally providing a method to maximize the flexible use of the airspace in accordance with ICAO recommendations. Notices to Airmen are published, in real time, to notify airspace users when any portion of W-220 becomes active.

#### 4 Conclusion

4.1 The Meeting is invited to note the information provided in this paper.