



Federal Aviation Administration

CHARTING NOTICE

Date: March 6, 2020
To: Users of FAA Chart Supplement Publications
From: Aeronautical Information Services
Subject: Notices in Chart Supplement Alaska – High Frequency Active Auroral
Research Program (HAARP)

Starting with the July 16th, 2020 effective date, the Chart Supplement Alaska publication will remove the High Frequency Active Auroral Research Program (HAARP) entry listed below within the Notices section.

These changes are in compliance with the Air Traffic Organization (ATO) AI/NOTAM Modernization Initiative. This initiative objective is to eliminate duplicative, redundant, and conflicting information used in flight planning and operations.

Information regarding the High Frequency Active Auroral Research Program (HAARP) can be found at https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/fs/alaskan/advisories/haarp/.

For questions or comments, please contact 9-AWA-AJV-A2-Apt-MapTeam@faa.gov

(See next page for the HAARP notice scheduled for removal)

The following entry is being removed from the Notices section:

ALASKA

High Frequency Active Auroral Research Program (HAARP)

The High Frequency Active Auroral Research Program (HAARP) is managed and operated by the University of Alaska Fairbanks Geophysical Institute.

HAARP is the world's most capable high-power, high frequency (HF) transmitter for study of the ionosphere. The principal instrument is the Ionospheric Research Instrument (IRI), a phased array of 180 HF antennas spread across 33-acres and capable of radiating 3.6 MW into the upper atmosphere and ionosphere.

The location of the HAARP Research Station was chosen to take advantage of specific ionospheric features found in limited geographic regions of the world. The occurrence of these features (like the auroral electrojet) cannot be predicted on a daily or even hourly basis. Experiments of opportunity address the study of these features by standing by to conduct the experiment should conditions become favorable. Preparations may occur on consecutive days for two weeks at a time even though experiments may be conducted on only one of two occasions, or not at all. Notification that such experiments may be conducted will be by telephone to the FAA operations point of contact in sufficient time (minimum 24 hours) to permit the issuance of a NOTAM (if required).

The goal of the research performed at the HAARP facility is to conduct fundamental research on the physical processes at work in the ionosphere and upper atmosphere. The type of research falls into two categories: (1) active or interactive research requiring the use of the IRI and (2) passive research involving monitoring instruments only. The latter activity does not require use of high power emitters.

Although the HF transmitter has been designed and constructed to suppress out-of-band electromagnetic (EM) radiation, at sufficiently close ranges to the HF antennas used for this research, radio interference to aircraft systems may be possible within 5 nautical mile radius and up to an altitude of 50,000 feet. The IRI is a fixed system and the field strengths associated with its antenna system decrease in a known, methodical manner with absolute distance from the antenna. The rate of decrease is inverse to distance and the strength drops rapidly to levels typical of those encountered in the vicinity of AM/FM/TV broadcast stations.

An aircraft alert radar will be used to monitor the airspace within a 5-nautical mile radius of the HAARP site, located at milepost 11.3 Tok Highway, during all research operations involving the high power HF transmitter system. The video display for this radar is located immediately adjacent to the control operator position for the HF transmitter in the operations control center. During active operations, a dedicated operator will be assigned to monitor the radar display. All aircraft transitioning near the HAARP site will be allowed to do so without risk from the research operations. No operation of the IRI will occur while aircraft are detected within 5-nautical miles.

Aircraft can contact the HAARP Test Director on VHF frequency 122.25 to ensure their safe transition around the site or to get current project status. The HAARP Test Director can also be reached at (907) 822-5904.

Other Links: HAARP Website at: <http://www.gi.alaska.edu/facilities/haarp>
Updated: July 2016

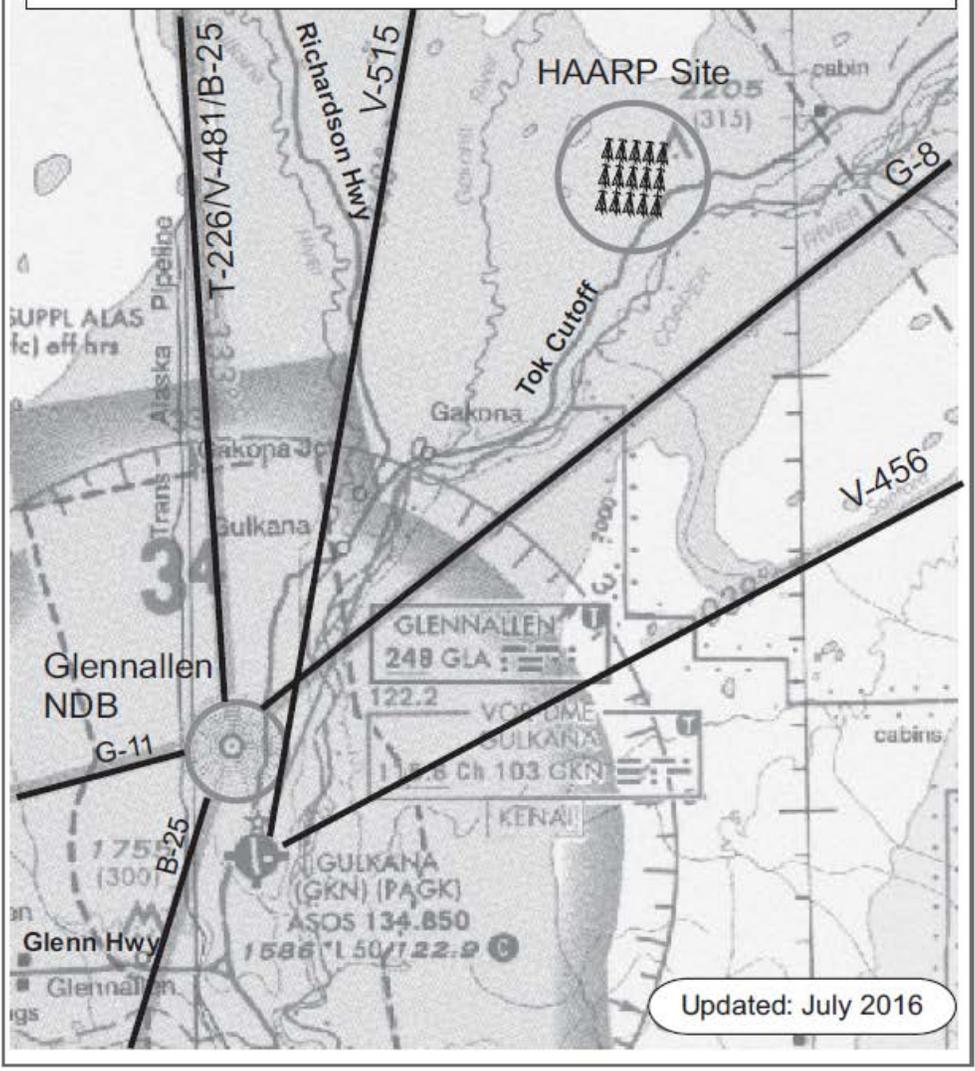
HAARP

High Frequency Active
Aurora Research Program

Milepost 11.3 Tok Cutoff
62°23'36"N., 145°08'03"W.



HAARP Test Director: VHF 122.25 or (907) 822-5904
<http://www.gi.alaska.edu/facilities/haarp>



The map displays the HAARP Site (a grid of antennas) and the Tok Cutoff. Key roads include Richardson Hwy (V-515), Glenn Hwy (B-25), and G-8. Landmarks include Glennallen NDB (G-11), Gulkana (GKN) (PAGK) ASOS 134.850, and the Alaska Pipeline. A scale of 1:50,000 is indicated. A note in the bottom right corner states 'Updated: July 2016'.