Aeronautical Study No. 2022-AAL-301-OE



Mail Processing Center Federal Aviation Administration Southwest Regional Office Obstruction Evaluation Group 10101 Hillwood Parkway Fort Worth, TX 76177

Issued Date: 12/20/2022

Michael Kasper Arctic Slope Telephone Association Cooperative 4300 B Street # 501 Anchorage, AK 99503

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Antenna Tower Cape Lisburne Tower
Location:	Point Hope, AK
Latitude:	68-52-07.55N NAD 83
Longitude:	166-08-42.67W
Heights:	1519 feet site elevation (SE)
	100 feet above ground level (AGL)
	1619 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, a med-dual system-Chapters 4,8(M-Dual),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (800) 478-3576 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

At least 10 days prior to start of construction (7460-2, Part 1)

___X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

To coordinate frequency activation and verify that no interference is caused to FAA facilities, prior to beginning any transmission from the site you must contact WSA Frequency Management Officer Byron Ipock at the following phone number: 907-271-5962.

This determination expires on 06/20/2024 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before January 19, 2023. In the event an interested party files a petition for review, it must contain a full statement of the basis upon which the petition is made. Petitions can be submitted to the Manager of the Rules and Regulations Group via e-mail at OEPetitions@faa.gov, via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, Room 425, 800 Independence Ave, SW, Washington, DC 20591, or via facsimile (202) 267-9328. FAA encourages the use of email to ensure timely processing.

This determination becomes final on January 29, 2023 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone - 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact Justin Hetland, at (847) 294-8084, or justin.hetland@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-AAL-301-OE.

Signature Control No: 560000066-565523991 Mike Helvey

Manager, Obstruction Evaluation Group

(DNH)

Attachment(s) Additional Information Frequency Data Map(s)

cc: FCC

Additional information for ASN 2022-AAL-301-OE

AERONAUTICAL STUDY NO. 2022-AAL-301-OE

AbbreviationsVFR - Visual Flight RulesAGL - Above Ground LevelRWY - runwayIFR - Instrument Flight RulesAMSL - above mean sea levelnm - nautical mileARP - Airport Reference PointPart 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the
Navigable Airspace

1. LOCATION OF PROPOSED CONSTRUCTION

Arctic Slope Telephone Association Cooperative's proposed Antenna Tower at 100 feet AGL/1619 feet AMSL has been identified as an obstruction under Part 77 standards. The structure is located 0.83 nautical miles southwest of the Cape Lisburne LRRS (LUR) Airport Reference Point (ARP) in Cape Lisburne, AK. LUR elevation is 14 feet AMSL.

2. OBSTRUCTION STANDARDS EXCEEDED

Section 77.21(a)(3): Inner horizontal surface. A plane that is oval in shape at a height of 150 feet above the established airfield elevation. The plane is constructed by scribing an arc with a radius of 7,500 feet about the centerline at the end of each runway and interconnecting these arcs with tangents. This proposed structure exceeds the outer horizontal surface by 1455 feet.

3. EFFECT ON AERONAUTICAL OPERATIONS

a. The impact on arrival, departure, and en route procedures for aircraft operating under VFR follows: The VFR Traffic Pattern Airspace (TPA) is penetrated by 1455 feet. However, the site elevation at the site of the proposal already exceeds the TPA by 1355 feet. Due to the already high terrain south of the airport, the VFR traffic pattern is flown north of the airport away from the mountain the proposed tower is to be built on, eliminating the impact.

FAA Findings

There are no effects on any existing or proposed arrival, departure, or en route IFR/VFR minimum flight altitudes.

There are no physical or electromagnetic effects on the operation of air navigation and communications facilities.

There are no effects on any airspace and routes used by the military.

b. The impact on arrival, departure, and en route procedures for aircraft operating under IFR follows: There is no impact on IFR procedures.

c. The impact on all planned public-use airports and aeronautical facilities follows: The study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposed structure affect the capacity of any known existing or planned public-use or military airport.

d. The cumulative impact resulting from the proposed construction or alteration of a structure when combined with the impact of other existing or proposed structures is not considered to be significant.

4. CIRCULATION AND COMMENTS RECEIVED

The proposal was not circularized for public comment because current FAA Order 7400.2, Procedures for Handling Airspace Matters, identifies that circularization is not required for any structure that would be outside the traffic pattern airspace. This does not affect the public's right to petition for review determinations regarding structures, which exceed the subject obstruction standards.

5. DETERMINATION - NO HAZARD TO AIR NAVIGATION

It is determined that the proposed structure does not have a substantial adverse effect on the safe and efficient use of navigable airspace by aircraft.

6. BASIS FOR DECISION

Study for possible VFR effect disclosed that the proposed structure would be located within the VFR inner horizontal surface and VFR traffic pattern airspace and would exceed by 1455 feet; however, LUR has right traffic to RWY 27, therefore, all operations are conducted to the north of the airport and the structure would be located to the south of the RWY 27 threshold. The proposed structure would not conflict with airspace required to conduct normal VFR traffic patterns operations. There are no IFR impacts and no objections were received by the U.S. Air Force. The incorporation of lighting would provide additional pilot conspicuity for IFR and VFR operations conducted in the vicinity of LUR airport.

7. CONDITIONS

The structure shall be lighted as outlined in Chapters 4, 8(M-Dual) & 15 of the Advisory Circular AC 70/7460-1M. The advisory circular is available online at https://www.faa.gov/regulations_policies/ advisory_circulars/index.cfm/go/document.information/documentID/1038519

Within five days after the structure reaches its greatest height, the proponent is required to e-file the Supplemental Notice, FAA form 7460-2, with actual construction details, at the OE/AAA website (https://oeaaaa.faa.gov/oeaaa). Detailed instructions are available under the 'Instructions' link. This Supplemental Notice notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national database.

FAA facilities (LUR RCAG,RCO) critical to aviation safety are located less then 1nm from your proposed transmitter site. Frequency Management is not anticipating any adverse effects; however, if some issues do occur, it would be the proponent's responsibility to mitigate. During mitigation process, depending on its impact to FAA services, the offending equipment will be required to be shut down until verification has been made that any adverse effects has been resolved.

Frequency Data for ASN 2022-AAL-301-OE

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
6	7	GHz	55	dBW
10	11.7	GHz	55	dBW



