



SOUTHEAST ALASKA POWER AGENCY (SEAPA)

Tyee Lake Hydroelectric Project

**SOP**  
**Version 2**

Rev. Date: 01.31.2020  
Author: SEAPA Ops. Mgr.

## Tyee Aircraft and Runway Standard Operating Procedure (SOP)



### 1.0 Introduction:

The Southeast Alaska Power Agency ('SEAPA' or 'Agency'), owner of the Tyee Lake Hydroelectric Project, maintains an airstrip known as the 'Tyee Runway'. The Tyee Runway is a private, non-commercial, unmanned gravel runway owned and maintained by SEAPA primarily for the purpose of logistical support for SEAPA's Tyee Lake Hydroelectric Facility.

These Standard Operating Procedures shall serve as a guide to ensure safe and consistent protocols are in place for runway maintenance and ground-to-air-carrier communications, but do not, in any manner, relieve air carriers of responsibility in determining the overall safety of the runway or flight conditions. It is the intent of SEAPA to provide the safest possible atmosphere for its employees, contractors, and other guests visiting the Tyee Facility. Failure to abide by these Standard Operating Procedures could result in Agency review and action.

### 2.0 Federal Aviation Regulations

All air carriers utilizing the Tyee Runway must operate in accordance with applicable Federal Aviation Regulations. These Standard Operating Procedures are not intended to replace Federal Regulations or common sense.

### 3.0 Tyee Runway Description

The Tyee Runway is an airstrip 35 air miles from Wrangell, 42 air miles from Swan Lake, and 77 air miles from Ketchikan. It is a 50'-wide x 2,480'-long airstrip located at Latitude 56° 13'16.61" N and Longitude 131° 29' 10.17"W at an approximate elevation of 10' MSL. There are two windsocks on opposing ends of the strip placed as wind directional aids.

#### 4.0 Local Hazards

All air carriers or flight contractors must be aware of local hazards at or near the navigable airspace in the vicinity of the Tyee Runway which include, but are not limited to, power transmission lines, frequent migratory water fowl traffic, bears, beavers, runway maintenance equipment, ice, snow, sudden wind and weather changes, and mountainous terrain.

#### 5.0 General Communications

The Tyee Facility typically utilizes an air carrier for its crew changes which are generally two flights per day one day each week on an annual basis. The flights are typically between Wrangell and Tyee but may also be between Ketchikan and Tyee, Petersburg and Tyee, or other locations. The SEAPA Tyee Lake Foreman or his designee must update the crew flight schedule(s) and the manifest with the air carrier at least one (1) day prior to departure. Information to be provided to the air carrier includes:

- Names of all incoming and outgoing passengers
- Freight items incoming or outgoing and approximate weight
- If there are no passengers or freight, the flight shall be canceled

Prior to each inbound flight, the Air Carrier must call Tyee Control at 907.874.3712 to announce its departure to Tyee. The information to be exchanged includes:

- Confirmation of flight manifest (passengers and freight)
- Current weather conditions
- Current runway conditions
- Expected ETA

While the aircraft is inbound, the pilot and the Tyee crew should monitor the Tyee Camp Radio Frequency RX/TX 158.175 VHF and the pilot shall announce when the aircraft is approximately five (5) miles from its final approach. It is important for the pilot to announce his or her intentions and the Tyee crew on the ground to relay any additional or last-minute updates on runway conditions. Radio communications shall be clear, concise, and professional with minimal 'small talk'.

#### 6.0 Weather Conditions

One (1) hour prior to the expected arrival of each flight, local weather conditions must be observed so that information can be relayed to the air carrier prior to its departure for Tyee. On-site staff at the Tyee Lake Hydroelectric Project are not certified weather observers and only provide generalized weather and runway information. Weather Information shall include the following:

- Current temperature
- Estimated ceiling and visibility
- Estimated Runway conditions
- Estimated wind direction and severity

For consistency in information, a photograph of known landmarks is attached as **Appendix A** and made a part hereof that the Tyee Foreman or his designee shall reference when relaying ceiling and visibility information to the air carrier.

## 7.0 Tyee Runway Conditions

At least one (1) hour prior to expected aircraft departure from Wrangell, a welfare check of current runway conditions must be made. The Tyee crew shall drive the length of the runway and observe the following:

- Runway surface conditions
- Obstacles or hazards to aircraft

If icing conditions exist, the crew person driving the observation vehicle must attempt rapid stops at approximately 20 MPH at (4) different locations along the air strip. If the test vehicle shows indication of slipping, then the runway will be considered closed until the condition is corrected. That closure information must be relayed to the air carrier prior to their departure.

If for any reason communication is not possible with the air carrier, a truck will be parked at the end of the runway facing outward with headlights and Emergency Hazard lights on to warn the expected approaching aircraft of the hazard.

## 8.0 Runway Maintenance Guidelines

The Tyee Foreman or his designee must make every effort to assure that the Tyee Runway is available daily and in the best possible condition by using the following maintenance guidelines:

- Grading and compaction of the landing surface should be done as often as required
- Pot Holes should be filled as soon as they develop
- Shoulders of the airport plus the eastern end of the airstrip will have underbrush mowed or trimmed as often as need to limit growth to 1' to 2' in height
- Beaver dams, slough drainage, and ditches should be kept clear to avoid runway flooding
- The Runway sign-in shack should be kept orderly and a sign-in guest book maintained
- Runway sanding, when required, should be done with clean select sanding material, free of dirt, sticks, or any stones larger than 3/8" in diameter

## 9.0 Aircraft Operations

- ✦ The pilot in command is solely responsible for assessing conditions and ensuring safe aircraft operation.
- ✦ Air Carriers are expected to utilize sound, conservative judgment in their approach to their duties
- ✦ The aircraft pilot's word is final in assessing all safety considerations related to each flight; however, users of this SOP shall become familiar with the FAA's consumer education program titled "Circle of Safety Program for Alaska" (COS) which is focused on arming aircraft passengers with the knowledge to be proactive about their own safety. A COS flyer on Passenger Rights and Responsibilities is attached as **Appendix B**. Additional information may be accessed online at:

[https://www.faa.gov/about/office\\_org/headquarters\\_offices/arc/programs/fly\\_alaska/?template=CircleOfSafety](https://www.faa.gov/about/office_org/headquarters_offices/arc/programs/fly_alaska/?template=CircleOfSafety)

- ✈ When traveling to Tyee Lake, SEAPA personnel and contractors must arrive at the aircraft departure point in time to load themselves and their gear on the aircraft to meet the scheduled departure time
- ✈ SEAPA personnel and contractors must wear Personal Flotation Devices (PFDs) (e.g., manually deployed SOSpenders or similar) on all aircraft
- ✈ Passengers and Tyee Lake personnel shall not operate any aircraft equipment unless directed by the pilot to do so
- ✈ Passengers and Tyee personnel must follow the pilot's directions while onboard the aircraft
- ✈ The Tyee Lake Foreman or his designee, shall assure that at least one Tyee crewmember is at the airstrip to meet arriving aircraft and respond to landing emergencies, if necessary
- ✈ Tyee personnel meeting the inbound flight should have direct access to a functioning radio tuned to the Tyee Camp Radio Frequency RX/TX 158.175 VHF
- ✈ All pets and small children shall be secured prior to the arrival of the aircraft
- ✈ Airplane contractors providing flight services to the Agency's Tyee Lake Facility shall:
  - while the aircraft is inbound the airplane contractor's pilot shall monitor the Tyee Lake Camp Radio Frequency RX/TX 158.175 VHF and announce when the aircraft is approximately five (5) miles from its final approach
  - represent and warrant that they are a certificated air carrier pursuant to all local, State, and Federal regulations, and shall provide the following:
    - qualified pilot(s): (i) with at least two thousand (2,000) hours year-round flight time in Southeast Alaska who are familiar with local operating conditions, and in all other ways qualified to perform services for SEAPA, consistent with all local, State and Federal regulations, (ii) that possess exemplary safety records, and have current FAR Part 135 approval for the make and model of aircraft used for services to Tyee Lake;
    - if requested by SEAPA, the airplane contractor shall provide a list of its qualified pilot(s) name(s) and address(es), and shall:
    - obtain the best available weather data and carefully evaluate it prior to filing flight plans
    - be familiar with any weather conditions that may, in any manner, affect cost and/or delivery of the flight services.
    - operate and maintain all aircraft in flight-worthy condition, and in full compliance with all local, State and Federal regulations
    - certify that its owners and operators have knowledge of all local, State and Federal regulations and that they are now and will continue to comply with all local, State and Federal regulations
    - be responsible for implementation of all health and safety measures taken to complete the required services
    - carry survival equipment in accordance with Alaska Statute (AS) 02.35.110 and in a readily accessible location made known to all passengers by the pilot.
    - provide aircraft with a good appearance, including, but not limited to a neat and clean interior with no visible corrosion or damage, and no fuel or oil leaks
    - be responsible for the safety of the aircraft, occupants and cargo/freight
    - refuse any flight or situation which he/she considers hazardous or unsafe

- not allow smoking, consumption of alcohol, or the use of any judgment impairing substance by any occupant during flights to and from Tyee Lake
- refuse passage to anyone that, in his/her opinion, is under the influence of any judgment impairing substance
- be in possession of an air carrier certificate under the provisions of Federal Aviation Regulations (FAR) 14 CFR Part 135 "Air Taxi/Commercial Operations" and shall comply with all provisions of approved FAA Operating Specifications and FAR Parts 43, 91 and 135

## 10.0 Tyee Runway Availability

While the Tyee Runway may be available for emergencies, non-business-related access requires prior approval of SEAPA management.

## 11.0 Standard Operation Procedure Deviations

Any deviation from this SOP that may be dictated by conditions, or other circumstances, must be reported by the Tyee Foreman or his designee to SEAPA's Operations Manager, who must be thoroughly briefed in writing, if necessary, and understood by all Tyee crewmembers.

## 12.0 Prohibited Activities

- Domestic pets are not permitted on the Tyee Runway unless destined for air transport or are restrained by leash or container
- Smoking is prohibited within fifty feet (50') of any aircraft
- Use or possession of non-prescription drugs and alcohol is not permitted on the Tyee Runway or any SEAPA facilities at any time

## 13.0 Amendments and Corrections

- 13.1 Amendments, additions, deletions, or corrections to this SOP may be initiated by SEAPA's Operations Manager as conditions warrant.
- 13.2 This SOP supersedes and cancels all previous SOPs that may have been published for SEAPA.
- 13.3 The SOP Change Table attached as **Appendix C** and made a part hereof shall be maintained and updated with each amendment, addition, deletion, or correction to this SOP and attached to each new version of the SOP issued by SEAPA.

Z/Operations and Maintenance/Tyee Lake /Standards Operating Procedures/Aircraft & Runway SOPs/Tyee\_Aircraft\_&\_Runway\_SOP\_Version\_2\_Revised\_2020\_0131



## Passenger Rights and Responsibilities

You have the **right** to...

- Know location and use of survival equipment, emergency locator transmitter (ELT), fire extinguisher, flotation devices and oxygen
- Understand the operation and know the location of the emergency exits
- Know how to work the seatbelt
- Ask whether the aircraft is equipped with instruments for flying at night and in clouds. Be assured the pilot is trained to fly using those instrument
- Know if the aircraft weight and balance has been calculated
- Be apprised of and understand the weather forecast
- View the pilot's license, rating and training currency
- Know if a flight plan has been filed

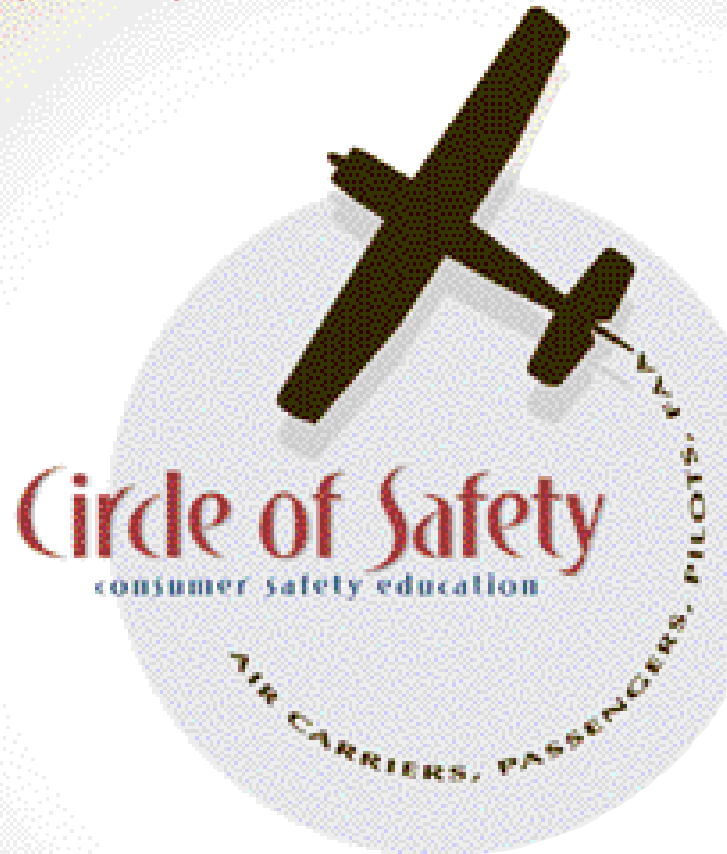
Take **responsibility** for your safety...

- Pay attention during the safety briefing
- Tell the pilot that you can fly at another time if the weather is questionable
- Accept any decision to delay or cancel a flight.
- Heed established load limits for the airplane
- Be alert to pilot fatigue and that pilots have flight and duty time limitations
- Wear clothing that's appropriate for the season
- Do not ask the pilot to fly below 500 feet
- Remember that pilots can make mistakes; if you have a question, ask it

Closing the **Circle of Safety**  
is all of our responsibility

For more information, contact:

FAA Flight Standards Office – 907.271.5514



Flying is a necessity for Alaskans and we put our safety in the hands of others every time we fly. It's time to take control by understanding your responsibilities as a passenger for your safety. With the Federal Aviation Administration's **Circle of Safety** program you can do just that.



## One Accident is One Too Many

As aircraft passengers we place tremendous trust in the people we've hired to fly the airplane to take us where we want to go. Rules, regulations and systems are in place to ensure our safety. At the same time, we can unknowingly place pressure on airline personnel that puts us in danger. Asking the pilot to fly in questionable weather, get a better look at wildlife or load extra gear increases everyone's exposure to risk.

[ we can unknowingly place  
pressure on airline personnel  
that puts us in danger ]

Alaska's accident rate has been steadily decreasing since 1998. The FAA continues its work to provide ongoing pilot training, improve airfields and strengthen communication programs. To further ensure the safety of passengers, the Alaska Air Carriers Association is instituting a Medallion Program to recognize carriers who choose to exceed FAA, standards.

## Share the Responsibility for your Safety

Today, the FAA wants passengers to close the circle around safety. By taking part in the [Circle Of Safety](#), passengers and companies share the responsibility for, and take an active part, in their own flight safety.

## Designating an Aviation Coordinator is an Organization's First Step to Safety

An aviation coordinator is the person who ensures air carriers doing business with your organization meet your standards. The coordinator also trains travelers regarding their rights and responsibilities as a passenger.

Using a combination of the FAA's criteria and your organization's policies, the coordinator will develop a list of approved air carriers, eliminating some of the pressure that comes with choosing an air carrier.

Traveler training addresses rules, weather requirements, how to discuss concerns with pilots and what constitutes basic service.

To help with the program, a [Circle of Safety](#) kit is available from the FAA's Flight Standards offices. It includes sample policies, a coordinator's handbook and training materials. Flight Standards Safety Program managers are also available to help implement this program.

To complete the circle, coordinators are responsible for reporting aviation safety issues to a Flight Standards district office. This helps the FAA identify and correct problem areas that could result in accidents.

By having these systems in place, aviation customers can make a difference in aviation safety.



**APPENDIX C  
TO  
TYEE RUNWAY STANDARD OPERATING PROCEDURE**

**SOP CHANGE TABLE**

Date of Change	SOP Version	Page Changed	Reason for Change
01/31/2020	2	4	Update paragraph 9.0 Aircraft Operations