Alaska Flight Services Information Area Group (AFSIAG)

Flight Service Station Satellite Tracking Device Briefing:

Enhanced Special Reporting Service (eSRS)

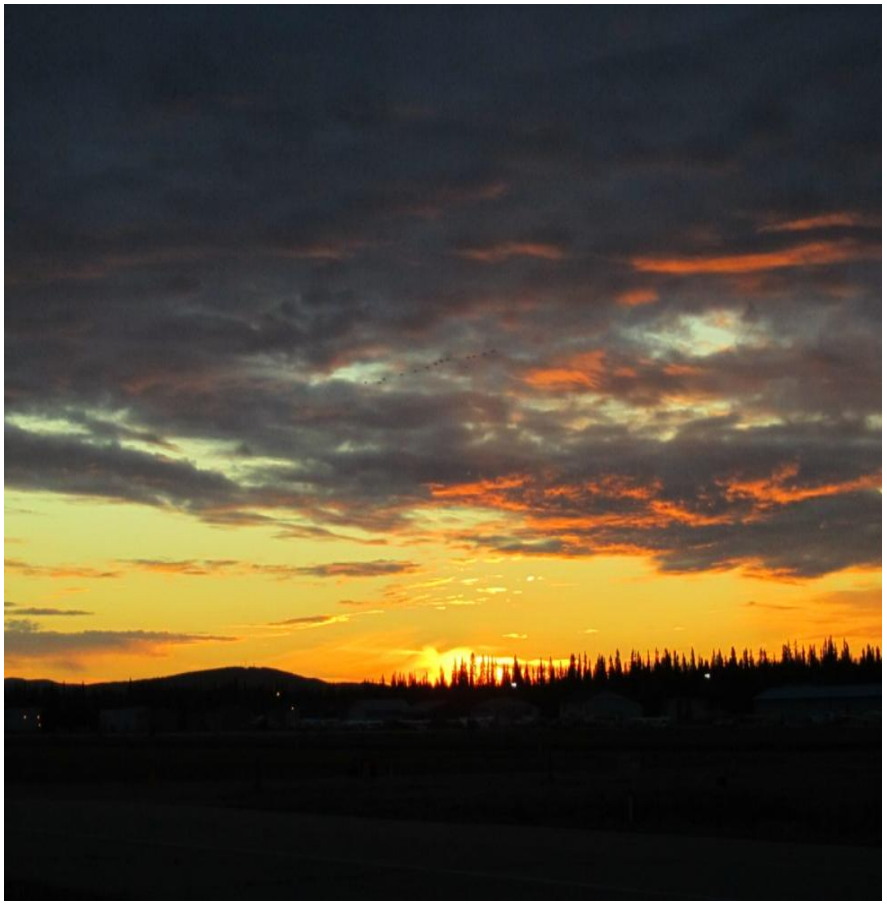
Date: May 2021

At Customer Request

- Alaskan Flight Service customers have, over the past several years, been asking for increased Flight Service support of satellite/GPS Tracking Devices such as SPOT™, Spidertracks™, DeLorme/Garmin inReach™ and RockAIR™/TracPlus™ devices.
- These requests are for service in addition to the Automated Flight Following system used by the Department of Interior and other government agencies.

Workgroup Formed in 2011

- Associations
  - Alaska Airmen
  - AOPA
- National Air Traffic Controllers Association.
- Alaska Flight Services Information Area Group
- Alaska Flight Service Stations



Workgroup Goals

- Develop operational knowledge about satellite/GPS tracking devices.
- Demonstrate how FSS might enhance search and rescue response supplemented by satellite/GPS tracking devices.
- Develop, test, train for, and make procedures available to pilots who wished to participate in an enhanced search and rescue responses.

Workgroup Activities to Support Goals

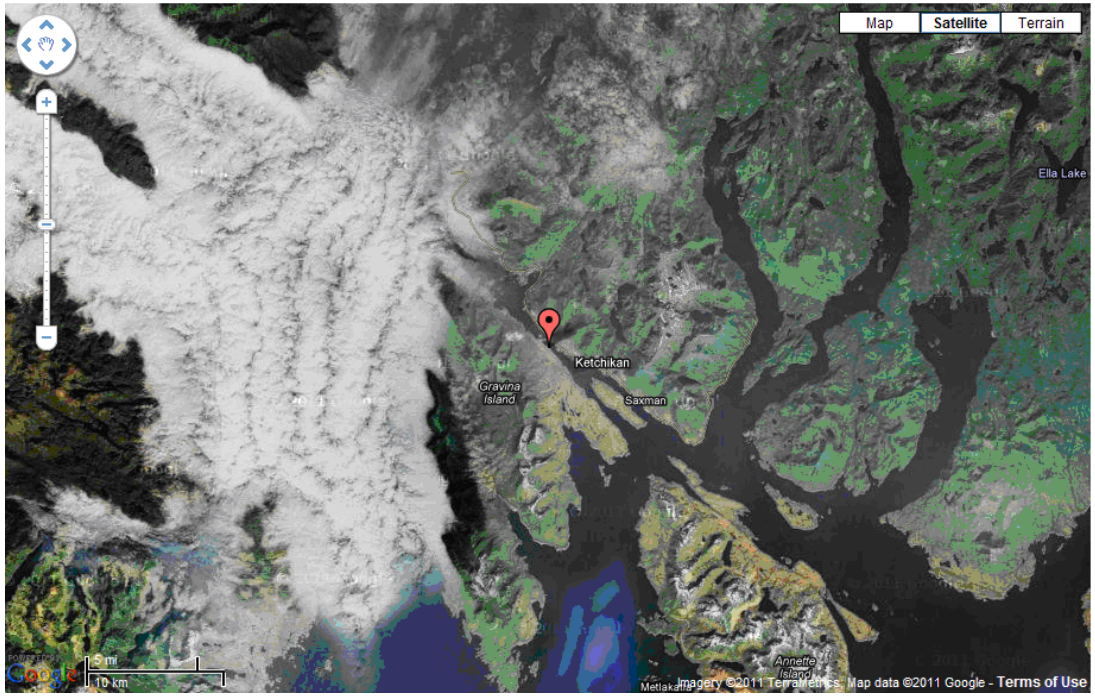
- Developed “Enhanced Special Reporting Service” (eSRS) concept.

  ➢ Similar to the current Special Reporting Service. eSRS provides that Flight Service will initiate search and rescue action upon receipt of electronic distress alerting messages.

  ➢ eSRS is value-added search and rescue. It is intended to enhance and expedite search and rescue for aircraft on a flight plan. eSRS does not replace a flight plan.

Workgroup Activities to Support Goals

- Tested SPOT™, Spidertracks™, DeLorme/Garmin inReach™ and RockAIR™/TracPlus™ over wide area of the state.
  - ➢ Anchorage
  - ➢ Fairbanks
  - ➢ Deadhorse
  - ➢ Ketchikan
  - ➢ Valdez



eSRS Program Implementation

- In January 2013, the eSRS Program was opened to all Alaska Pilots who were equipped with either a SPOT™ or Spidertracks™ device.
- In March 2014, the DeLorme/Garmin inReach™ was added to the program.
- In March of 2019, the SPOTX™ was added to the program.
- In January of 2021 the RockAIR™/TracPlus™ was included in the program.
- Future systems may be added at a later date.

General Concept of Tracking Devices

- The Pilot and/or the Aircraft is equipped with a satellite/GPS tracking device (four manufacturers devices are now included in this program).
- Satellite/GPS tracking device transmits location to a private vendor either routinely inflight or in an pilot-initiated distress message.
- A distress message, either automatically generated by the vendor, or initiated by the pilot, is transmitted directly to Flight Service via text and email message, or on some devices, the distress message is relayed through the International Emergency Response Coordination Center (IERCC) to FSS.

General Concepts (continued)

- Messages include location, and may provide a link to an online map with additional information.
- Once received by Flight Service, messages can be correlated with Flight Plans or other information to reduce response time to an emergency. eSRS messaging/notification is totally dependent on message receipt at FSS. FAA makes no guarantee of vendor messaging reliability.
- The location information is expected to significantly reduce search and rescue response time when an emergency occurs.

General Concepts (continued)

- As with ELT's, FSS will have to investigate specifics of a report to distinguish real emergencies from false alarms.
- These procedures are intended for use with VFR or IFR flight plans originating and terminating within Alaska.

Summary of anticipated benefits

- Reduced response time to distress call in comparison to flight plan alone.
- Added protection in the event of ELT failure.
- Reduced total search time due to known track and/or location from alert message.

Summary of anticipated benefits

- Better protection when it becomes necessary to deviate from a given route and pilot is unable to update flight plan.
- Better protection when operating in remote areas, where there is a lack of Remote Communications Outlets (RCOs) or other communications, and it is necessary to file a "round robin" and/or extended period flight plan.

Portable “SPOT™” GPS Tracking Devices

Portable or Hard Wired Spidertracks™ GPS Tracking Device

Portable DeLorme/Garmin “inReach™” GPS Tracking Devices

RockAIR™/TrackPlus™ GPS Tracking Devices

What if my device is not a SPOT™, Spidertracks™, DeLorme/Garmin inReach™ or RockAIR™/TrackPlus™ ?

- Only SPOT™ Spidertracks™, DeLorme/Garmin inReach™ and RockAIR™/TrackPlus™ devices are approved for the eSRS program at this time.
- Additional satellite tracking devices will be evaluated for inclusion in the eSRS program based on pilot demand.

How Does eSRS Work?

- FSS monitors cell phone, 24 hours a day.
- "Alert" messages (Spidertracks™) are sent to FSS by text and email.
- The International Emergency Response Coordination Center (IERCC) (SPOT™ and inReach™) will call FSS to initiate search and rescue when the SOS button is activated. IERCC will provide FSS with an email and link to map.
- Email messages provide a link to map depicting the last transmitted position of the tracking device.
- If FSS cannot determine that the aircraft is on an active flight, the information will be passed on to the Rescue Coordination Center (RCC) and State Troopers for search and rescue coordination.

Messages With no Lat/Long

- During testing of some GPS Tracking devices, it was noted that occasionally messages were received without any coordinates. Search and rescue will be initiated based on the information from the flight plan when FSS receives "Alert/SOS" messages without any corresponding coordinates.

Search and Rescue Still Initiated

Does FSS Track me?

- FSS does not track routine traffic. No other agencies are given the pilot's link.
- Once a "Alert/SOS" message has been activated some devices may continue to update the position every few minutes until the alert is cancelled.
- FSS is only interested in providing faster more efficient search and rescue service.

FSS Search and Rescue Procedures

- When the responsible FSS receives notification of a "Alert/SOS" message, the facility would begin search and rescue. This may be a communications search but could be accelerated up to and including a full search and rescue response.

- If a Call is received from the International Emergency Response Coordination Center, (IERCC) the responsible FSS would immediately begin search and rescue procedures. The IERCC will call FSS directly when the 911/SOS button is pushed on a SPOT™ or DeLorme/Garmin inReach™ tracking device.

"Alert" Messages Not Tied to a Flight Plan

- When a "Alert/SOS" message is received by FSS, they will verify that the aircraft is on a flight. If they are unable to verify that the alert is from an aircraft they will pass on the information to the Rescue Coordination Center (RCC) and State Troopers for search and rescue coordination.

- *NOTE: Some of the GPS tracking devices are portable and may be used for many activities not related to aviation.*

"Alert" Messages Not Tied to a Flight Plan

- When using a portable GPS tracking device between multiple vehicles, it is important to remember to change the Profile/Vehicle to the appropriate settings.

- This will ensure FSS is looking for the right aircraft when the same tracking device is used in multiple aircraft.

- FSS contact info should only be used for aircraft Profile/Vehicle information. FSS should not be on the contact list when the device is used for non-aviation purposes.

"Alert" Resolved" Message

• Search and rescue activities initiated by an "Alert/SOS" message will be cancelled by FSS when an "Alert Resolved" message is received from the tracking device or IERCC advises that the SOS has been resolved.

• Flight plans must be closed by conventional methods. An "Alert Resolved" or other text or email message asking to have the flight plan closed is not an accepted method to close a flight plan.

How Does a Pilot Enter the Program?

- A Pilot must have a Master Flight Plan (MFP) on File to participate in eSRS.

- Master Flight Plans may be submitted through your local FSS.

How Does a Pilot Enter the Program?

• Once you have a master flight plan on file, contact one of the below contacts:

Fairbanks FSS:
Support Staff:
(907) 455-1600

Juneau FSS:
Support Staff:
(907) 586-7382

Kenai FSS:
Support Staff:
(907) 283-3735

How Does a Pilot Enter the Program?

- In addition to answering any of your questions, these specialists will provide you with access to additional training material including FAQs, an eSRS brochure, this Power Point presentation and specific instructions on setting up your device.

- Once you have set up your device you are ready to take full advantage of the eSRS benefits.

More Information on eSRS

•To view additional information including a brochure, and frequently asked questions (FAQ), go to the following web site:

- https://www.faa.gov/go/alaskafss/