THE PERFORMANCE OF THE GLOBALSTAR CONSTELLATION IN ALASKA
AN INDEPENDENT EVALUATION THAT SETS THE RECORD STRAIGHT
THE PERFORMANCE OF THE GLOBALSTAR CONSTELLATION IN ALASKA
AN INDEPENDENT EVALUATION THAT SETS THE RECORD STRAIGHT

INTRODUCTION AND OVERVIEW

Over the past several years, our competition has taken many liberties with the truth regarding our overall satellite data and communications performance across Alaska...even though we spent hundreds of millions of dollars launching the newest MSS constellation in 2013. It has, in fact, been widely documented that our second generation satellite constellation provides the fastest data speeds, clearest voice quality and most solid infrastructure of anybody in our industry. Our so-called competition can’t match us now and can’t even start to catch up to us for several more years.

They say a lie can travel the world before the truth can put on its pants, and other satellite providers have been lying about us for years. Regardless, we realize that disputing their assertions directly (no matter how untruthful) would appear as somewhat disingenuous without outside verification. With that in mind, we actively sought an independent evaluation of the Globalstar family of products from a trusted and recognized figure in Alaska and were extremely pleased when Rob Stapleton agreed to take on this project.

Alaskans are likely very familiar with Rob due to his popular weekly TV segments on both FOX and ABC throughout the state. Rob has been a licensed pilot for decades and is on the board of and/or member of The Alaska Airmen Association, Alaska Aviation Museum, Chairman of the Alaska Moving Image Preservation Association, The Experimental Aircraft Association Chapter 42-Anchorage, AOPA, Alaskan Aviation Safety Foundation, EAA, National Association of Flight Instructors, Lake Hood Seaplane Pilots Association and the American Radio Relay League. He also has been an Information Specialist for FEMA and studied the Russian language and Russian/Alaskan history at the University of Alaska Fairbanks.

In addition, Mr. Stapleton is a respected and trusted photojournalist in Alaska, with his photographs and stories being published in magazines and newspapers worldwide. His reputation is above reproach.

The following are Rob’s findings about our constellation performance during his extensive travels this summer across the great state of Alaska. To Rob was not paid for his findings and the equipment he used was only loaned to him during his independent evaluation period.
As a precursor, my familiarity with Globalstar comes from working closely with Skip Nelson of ADS-B Technologies LLC. The ADS-B ALAS system works off of the Globalstar constellation for the uplink from aircraft to satellite and down to Ground Based Transceivers.

In an effort to learn about Globalstar’s services here in Alaska, I received the Sat-Fi satellite Wi-Fi hotspot, the GSP-1700 phone, the SPOT Gen3 and the SPOT Trace device from Globalstar in May of 2015. Initially I had heard that Globalstar’s phones did not work here in Alaska and that the SPOT devices would only work to Latitude 64 in normal terrain scenarios.

As a photojournalist, I am not accustomed to taking anyone’s word as definitive and set to find out for myself. Knowing human nature and how technology can be overwhelming to some, and impossible to others, I pursued learning the equipment received in May. In an effort to know how they work, I used and tested the devices almost daily up until early August. As such, here are my findings regarding performance of the Globalstar Satellite Constellation. Testing was mainly done in the South-Central, Interior, Prince William Sound and Cook Inlet regions of Alaska.

MAY/JUNE

• During this time, the Polish Buran Team was flying in Alaska and I watched their SPOT tracks north from the Yukon River Bridge and south from Latitude 68.8 to Seward, 112 highway miles south of Anchorage.

• During this period, I mainly studied the equipment and concentrated on the GSP-1700 sat phone. Initially, I received both a handset and an additional handset with the portable car kit. The car kit had the hockey puck style antenna and it initially did not work well outside of Anchorage.

On a trip to Talkeetna (Latitude 62) we were able to get the Sat-Fi to work using a Wi-Fi connection. My wife used both WhatsApp and normal texting to Cali, Colombia using the Globalstar Sat-Fi device. The GSP-1700 sat phone would quickly acquire the satellite signal, but in some cases would not hold a call for an extended period of time from our location at the Talkeetna Airport/PATK during the Hudson Memorial Fly-in.

After sharing this with Globalstar, I received the alternative white helix antenna, and I changed out the patch antenna on the car kit. After making this change and getting a bit of technical support, I had no problem connecting to the Globalstar satellite network from Birchwood Airport.

• Because of additional dispute among locals and other companies selling against Globalstar regarding the usability and reliability in Fairbanks, I decided to test this new setup right in Fairbanks to see for myself. Bottom line, the GSP-1700 performed well and I was able to receive satellite signals (the red “house” indicator on the phone’s screen) at most places in and around Fairbanks. A call was made to my local friends there, but they never responded. My wife, however, was able to make a call to Cali, Colombia while in Fairbanks over that Solstice weekend.

• I also tested the GSP-1700 in the Big Lake area just outside Wasilla in June. Without fail, I was able to dial up Buenos Aires, Argentina, Cali, Colombia, and Santiago, Chile. The calls to Cali and Santiago dropped after about five minutes, but the call to Buenos Aires was crystal clear with no interruptions. The dropped calls to Cali and Santiago, however, were successfully re-dialed and the conversations continued flawlessly.

JULY

• On a road trip from Anchorage to Valdez on July 3rd, I took and used the SPOT Gen3, SPOT TRACE and the GSP-1700 handset. This was a good test area because of the terrain that follows the Glenn Highway along the Matanuska River to the glacier and continues north to Glennallen to the Richardson Highway.

There were areas between Mile 80 and 100 on the Glenn Highway where the SPOT did not send our tracks mainly due to mountainous terrain to the west and south. Tracks from Mile 100 into Glennallen, however, were consistent.

Once I headed east and then southeast through Copper Center and as far as Pump Station 12 on the Trans Alaska/Alyeska Pipeline, the signal on all the devices was steady and reliable. I did, however, lose signal on my SPOT Gen3 once in the Tonsina drainage area when surrounded by mountains and regained signal when I reached the summit of Thompson Pass. In addition, both SPOT devices did not transmit tracking locations while I was in the Keystone Canyon simply because the walls of the surrounding mountains rise 1,000 or more vertical feet. Tracking resumed immediately, however, when I came out of the canyon on the Robe River heading into Valdez and worked well while I was there. I cycled the SPOT Trace on and off in Valdez and on my return trip to Anchorage to ensure the movement alert feature would send email messages to my phone. It worked perfectly.

• While in Valdez, I demonstrated the GSP-1700 by calling one of the fishermen at Allison Point on his cellphone. It was midday and the signal was clearer than his cellphone. He was impressed and promised to buy one before next year’s fishing season. On the return trip to Anchorage, similar tracking blackouts happened in the same locations.

• During flights from Anchorage to Kenai in mid and late July, I carried the SPOT Gen3 device and kept it covered in my camera bag which was onboard for all flights. The device was set to 2.5 minute tracking intervals for most tests and performed well leaving trail messages in the terminal, the air (short 25 min. flight) and on the ground in Kenai.

• An additional test was on a flight from Anchorage to Homer and the SPOT performed well in the air and on the ground leaving a trail of messages that I could follow on my iPhone Spot App. Both in the air, inside the aircraft and on the ground at the terminals, it continued to work well.

CONCLUSION

As a user of technology, I was amazed at how well the Globalstar equipment functioned throughout Alaska, as well as how long the GSP-1700, SPOT Gen3 and Trace devices hold a charge. This is especially true for the SPOT devices which are still working months later with their original batteries. While in heavy terrain areas mainly to the south, and as you reach higher latitudes, there may be a temporary loss of ability to make a connection with the GSP-1700 phone, but I would estimate that the SPOT Gen3 and Trace devices will have no trouble working if they can “see” to the south. Furthermore, Alaskans can request a 907 area code for their Globalstar phone when they sign up.

As such, I have no trouble recommending the purchase and use of Globalstar satellite voice and data communication equipment for business and personal use in Alaska.