

G150 Info Page

Peregrine has developed an approved solution to resolve issues with the G150 flap and slat actuation systems that may arise during approach and landing in certain situations.

When your G150 has been exposed to precipitation or high humidity, exposure to freezing temperature at altitude can cause the flap and slat actuation drives to freeze, preventing the high lift devices from deploying properly. This situation can lead to:

- Shallow approaches and high speed landings without flaps or slat deployment
- Costly diversions to alternate destination with a runway of suitable length that allow for higher than normal landing speeds

Peregrine is ready to schedule your STC installation or the delivery of the STC and installation package to your repair station. The STC and associated components are available directly from Peregrine.

Peregrine also offers a 'turnkey' solution including labor, STC and project management for complete installation and return to service of your G150 at our selected KAPA, Englewood, Colorado, authorized Part 145 repair station, Air Agency Certificate #OMKR399L.



Why did Peregrine develop this STC?



Gulfstream operates several 'Gulfstream Field and Airborne Support Teams (FAST)' G150 aircraft, Figure 4, to provide factory service for customers.

The FAST G150 aircraft encountered this flap/slat actuation issue and worked with Peregrine and their selected authorized repair facility to develop a retrofit solution.

Peregrine answered the challenge and developed a complete STC solution that has subsequently been installed on the FAST aircraft

Who can do this work?

The STC and associated components are available directly from Peregrine.

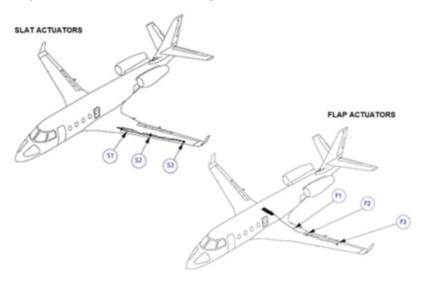
- Peregrine is ready to deliver of the STC and installation package to your repair station.
- Peregrine is ready to schedule the installation as a 'turnkey' solution including labor, STC and project management and return to service of your G150 at our selected KAPA, Englewood, Colorado, authorized Part 145 repair station, Air Agency Certificate #OMKR399L.

• Can't I just buy the parts on eBay and DIY the install?

The heaters and control system components are available exclusively through Peregrine as part of the STC

What is added to my aircraft?

The G150 flap and slat drive system is comprised of a Power Drive Unit (PDU), flexible drive shafts, and twelve linear ball screw actuators (3 per wing, 2 systems) as shown in Figure 1.



• Is there a Gulfstream Service Bulletin?

While not a Service Bulletin from Gulfstream, the STC has been recognized by Gulfstream FAST operation as solving the issue with high lift actuation system freeze-up.

How does this affect operation and maintenance of the aircraft and the flap/slat systems?

The STC does not modify the G150 Flap/Slat drive system including controls, indications, safety mechanisms or recommended lubrication maintenance procedures.

The existing Flap/Slat actuators are modified by the installation of external supplemental heaters only

What changes are made to the flight deck?

An On/Off switch/annunciator is added to the control pedestal.

Does the system provide freeze-up protection automatically?

Yes, the system will automatically heat the actuator when temperatures are below 40° F. Thermistors installed on each heater are used to both activate the heaters at the proper temperature and ensure the actuator never reaches the upper operating temperature limit of 130° F

What does the STC cost?

 The STC and installation kit including Peregrine-specific heaters and control modules and installation materials, brackets, switch and permission letter for installation by your repair station

\$99,950

 The STC and installation kit including Peregrine-specific heaters and control modules and installation materials, brackets, switch and permission letter for installation by our affiliated repair station at KAPA

\$149,950

 A nominal deposit is required to initiate the order and delivery of the STC and/or installation.

• Will my Gulfstream Service Center install this for me?

"Gee, Wally, that is a great question! We'll get back to you on that!"

Who is your affiliated repair station?

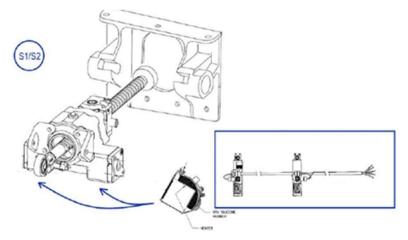
Straight Flight at KAPA is a Sierra Nevada company and they performed the installation of the STC on the Gulfstream FAST G150 aircraft

Should I install an ACA ionization system at the same time?

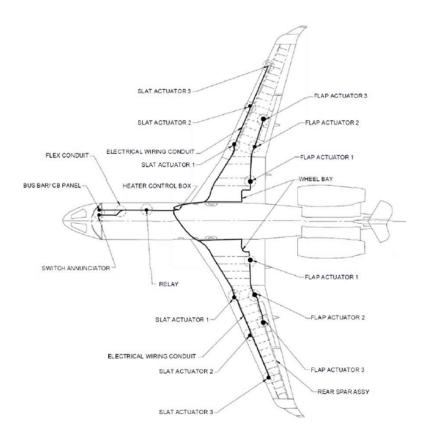
Of course! We can sell that STC at the same time!

What is involved in the installation of the system?

The flaps and slats are removed to access the drive system. Once the heaters, control modules and wiring is installed, the flaps and slats are replaced and if necessary, rigged, in accordance with Gulfstream service procedures detailed in G150 ATA 100 documentation. (ATA 27-82-01, 27-80-00-AT, 27-51-05-RI, 27-50-00-AT)



Wrap-around, cuff-style, design and are mounted on the exterior of the actuators



Wiring and component installation locations are described fully in the STC