IFR HeliSAS® Autopilot & Augmentation

Genesys Aerosystems IFR HeliSAS® Autopilot and Stability Augmentation System

Working all the time, so you don’t have to

The IFR HeliSAS system is based upon the popular VFR HeliSAS; however the new system adds more robust hardware and redundancy for the harsher environment and heavier controls of larger helicopters. IFR HeliSAS is designed for two-axis (pitch and roll) autopilot configuration for dual-pilot IFR operations and three-axis (pitch, roll and yaw) autopilot configuration for single-pilot IFR operations. IFR HeliSAS can work in conjunction with the exiting SAS system to add upper mode capability.

Designed to be on all the time, HeliSAS, helps return the helicopter back to straight and level in the event it is inadvertently flown into an unusual attitude or if a pilot becomes disoriented due to a loss of visual references. IFR HeliSAS also features Two-Axis (Three-Axis available) autopilot capabilities, such as lateral (GPS, VOR and LOC) and vertical modes (GPS VNAV, VS, ALT, SPD). Combining both stability and autopilot functions leads to increased pilot confidence to focus on other tasks. Additionally, beep trim allows the pilot to keep both hands on the controls while changing heading, altitude, vertical speed and indicated airspeed targets.

The IFR HeliSAS system is currently STC’d for the following:

- **Airbus Helicopters**
  - EC-145e

Pending:

- **Sikorsky Helicopters**
  - UH-60

Automatic recovery to near-level flight

If the helicopter is inadvertently flown to an unusual attitude, releasing the cyclic when the HeliSAS is engaged will automatically return the helicopter to a neutral attitude.

Further, the HeliSAS Autopilot system provides many of the functions found in very heavy, expensive helicopter autopilots, these functions include:

- **SAS** Engages system to provide attitude stabilization at all speeds
- **HDG** Selects the desired heading the pilot wants to fly. If a Horizontal Situation Indicator (HSI) is installed, HeliSAS will fly to and maintain the heading selected by the heading bug. If there is no HSI, the HDG function will maintain the existing GPS track
- **NAV** The active GPS, VOR, or Localizer course will be automatically intercepted and tracked when NAV is engaged. VOR and Localizer coupling require an HSI. GPS does not
- **ALT** Maintains the existing altitude for an indefinite period. Pilots can also preselect their altitude
- **VRT** Vertical navigation allows automatic flying of ILS glide slope or GPS VNAV if a WAAS-enabled GPS is installed
- **SPD** Indicated Airspeed Hold allows pilots to select a specific airspeed for climbs and descents

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