HeliSAS® Autopilot and Stability Augmentation System

Genesys Aerosystems HeliSAS® Autopilot and Stability Augmentation System

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

Genesys Aerosystems’ Helicopter Autopilot and Stability Augmentation System (HeliSAS) is the leading autopilot certified for light and medium rotorcraft. This affordable system greatly improves safety, dramatically reduces pilot workload, and provides unprecedented levels of control and confidence in the cockpit, especially in inadvertent IMC conditions. HeliSAS delivers life-saving technology, backed by responsive personalized service.

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. HeliSAS also features Two-Axis autopilot capabilities, such as lateral (GPS, VOR and LOC) and vertical modes (GPS VNAV, VS, ALT). Combining both stability and autopilot functions leads to increased pilot confidence to focus on other tasks.

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

- **Bell Flight**
  - 206B/L
  - 407
- **Robinson**
  - R44
  - R66
- **Airbus Helicopters**
  - EC120B
  - EC130B4
  - EC130T2 (H130)
  - AS350 (H125)

**Significant stability improvement.** Pilots with no helicopter experience have successfully hovered a HeliSAS-equipped helicopter with very little practice.

**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.
- **BC** Intercepts and flies a back course localizer approach (requires an HSI).
- **ALT** Maintains the existing altitude for an indefinite period.
- **VRT** Vertical navigation allows automatic flying of ILS glide slope or GPS VNAV if a WAAS-enabled GPS is installed. Both functions require an HSI.

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**Diagram:**

- ADAHRS or ADI
- GPS/VOR/LOC/GS*
- Flight Control Computer (FCC) *Remotely Mounted
- HSI*
- Audio Panel
- Pitch Servo
- Roll Servo

*Some functions depend on the avionics installation.