LIGHTWEIGHT

REDUCED PILOT WORKLOAD

SAFER, MORE CONFIDENT COMMAND

AUTO-RECOVER TO NEUTRAL ATTITUDE

HeliSAS® for R66 + R44

Autopilot and Stability Augmentation System for Robinson R66 + R44 helicopters

Lightweight: Weighing less than 12 pounds, the HeliSAS brings capabilities to the R66 and R44 that were not previously feasible.

Robinson R66   Robinson R44

Reduced Pilot Workload: With autopilot and stability augmentation, pilots are freed up to concentrate on other flight deck tasks.

Safer, More Confident Command: Precise control during all modes of flight, regardless of wind conditions or shifts in weight.

Auto-Recover to Neutral Attitude: In the event that a pilot loses visual reference due to limited visibility, releasing the cyclic causes the helicopter to automatically recover to a near-level attitude.
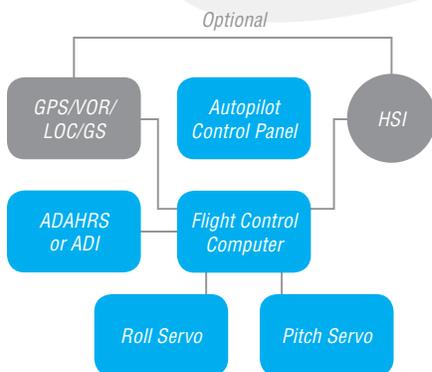
HeliSAS®

Autopilot and Stability Augmentation System for Robinson R66 + R44 helicopters

Lightweight, easy to install, affordable, expandable

The HeliSAS Autopilot and Stability Augmentation System from Genesys Aerosystems brings the tremendous safety and workload reduction advantages of stability augmentation—once reserved for military and transport category rotorcraft—to Robinson R66 and R44 helicopters.

Designed to be engaged at all times, HeliSAS provides unmatched stability and ease of handling. While the pilot may override the HeliSAS at any time with manual cyclic inputs, the attitude stabilization and force feel features enhance handling characteristics to allow the pilot to easily transition from HeliSAS to manual flight. HeliSAS is available in two configurations to address a variety of R66 and R44 mission requirements:

1. Stability Augmentation System Only

2. Stability Augmentation System and Autopilot

Optional

GPS/VOR/LOC/GS — Autopilot Control Panel — HSI

ADAHRS or ADI — Flight Control Computer

Roll Servo — Pitch Servo

The HeliSAS system provides many of the functions found in very heavy, expensive helicopter autopilots, but at a fraction of the cost and weight:

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. Allows automatic flying of ILS glide slope or GPS VNAV if a WAAS-enabled GPS is installed. Both functions require an HSI.

Genesys Aerosystems HeliSAS® Autopilot and Stability Augmentation System

1. Digital Flight Control Computer
- Functions as SAS computer
- Provides attitude hold function

2. HeliSAS Control Panel
- Installed with full autopilot, provides the functions of:
  - HDG: Heading Select and hold
  - ALT: Altitude hold
  - NAV:
    1. VOR intercept and tracking
    2. Localizer intercept and tracking
    3. GPS intercept and tracking
    4. BC: Localizer backcourse tracking
  - VRT:
    1. Glide slope intercept and tracking
    2. VNAV

3. Attitude Gyro or Air Data / Attitude and Heading Reference System (ADAHRS)
- State-of-the-art technology provides the most accurate attitude control
- ADAHRS must be purchased separately if installation does not include EFIS integration

4. Pitch Servo
- Controls aircraft rotation about its lateral axis
- Provides cyclic stick anchoring (position holding) with "SAS On"
- Provides artificial force gradient and re-centering when cyclic is displaced from anchor point

5. Roll Servo
- Controls aircraft rotation about its longitudinal axis
- Provides cyclic stick anchoring (position holding) with "SAS On"
- Provides artificial force gradient and re-centering when cyclic is displaced from anchor point

6. Cyclic Control Buttons
- Existing cyclic control can be used in most cases
- A trim button is required
- An autopilot / SAS release/engage button is required

GENESYS A E R O S Y S T E M S

**PRECISE PERFORMANCE.
PROVEN EXPERIENCE.
PERSONALIZED ATTENTION.**

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