

HeliOffshore Automation Guidance

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These guiding principles are offered to ensure effective use of automation. Standard Operating Procedures based on these principles will help to mitigate the risks of interacting with cockpit automation and improve safety performance in usage and monitoring.

Know how and when to use your automation

- Understand when and how your AP is designed to protect the flight envelope
- Understand the functional capabilities and authority of your AP
- Clarify use of automated modes during in-flight crew briefings

Follow your SOPs for autopilot mode selection and deselection

- Ensure the aircraft is properly trimmed and power applied with an appropriate attitude
- Consider and manage AP usage in 3 stages: (1) pilot intention (2) mode selection, (3) aircraft reaction
- Use clear and consistent language to announce, confirm and acknowledge AP mode changes and FMS programming updates
- Communicate misunderstandings or knowledge gaps around mode display symbology

Use the appropriate level of automation for the situation and be prepared to change as necessary

- Use the AP as an aid to flight; step up and down between levels of automation, as required
- Be prepared to fly manually if it reduces workload
- Avoid manual control inputs when AP is engaged
- Use 4-axis coupling where possible for all climbs, descents and approaches
- Select a target altitude when making significant level changes

Be aware of autopilot functional limitations during mixed-mode and degraded operations

- Be clear which channels are controlled through the AP or manually by the PF
- Speed will always be a function of the helicopter's attitude in pitch; be aware of undesired speed changes when IAS mode is not coupled or is degraded

Take appropriate and timely action when deviations from the desired aircraft state are observed

- Integrate the AP mode indications into your routine scan as PF and PM
- Clearly announce observed deviations from the intended flightpath and intervene as required.