Talking senses about cockpit alerts

The many issues raised in “Autoflight Audit” (ASW, 6/08, p. 30), related to the pilot-automation interface, reminded me of one thing I’ve lost transitioning from the old “mechanical” cockpit to the “glass” version, and that was the click.

Although not contemplated in the flight manuals, old cockpits actually signaled the flight mode annunciator changes with the audible click of a flipping flag, which caught a pilot’s attention. Glass cockpits, friendly though they are, have grown silent; audible cues are categorized as cautions and warnings; and awareness has come to rely entirely on visual monitoring. The sole remaining discrete aural cue is the triple-click warning for landing capability degradation.

I think that modern cockpit design is wasting some resources in human input ability — the aural and tactile inputs. In high-workload flight phases, the use of cues other than visual optimizes the human interface. The click announcing a flight mode change is an extra that can capture a pilot’s attention at the right moment, gaining seconds compared to the routine visual scan.

A moving throttle lever informs the pilot of the autothrottle system performance via his hand, while a static lever may require a visual confirmation of the commanded thrust indexes in the center panel at a critical heads-up moment. I believe modern cockpit design should try to use all available physiological capability as well as it uses all available technology.

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AeroSafety World encourages comments from readers, and will assume that letters and e-mails are meant for publication unless otherwise stated. Correspondence is subject to editing for length and clarity.

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