

**AOA** has been used as a primary performance parameter for years on some military aircraft, particularly on fighters. There are many good reasons for this.

In general, fighters operate more often at the extremes of the envelope, often flying at maximum lift for minimum radius turns. For other applications, AOA minimizes the pilot (usually single-place)

workload by giving a simple target to fly. AOA is accurate enough for these applications. In addition, the higher sweep and lower aspect ratio of the wing reduce the sensitivity to AOA errors.

AOA has proved particularly useful for approach to aircraft carriers, where it is important to maintain a consistent approach attitude for each landing. In this case, "backside" approach

techniques are used, where glide path is controlled primarily by changes in thrust while the aircraft is held at a fixed AOA. Use of this technique during approach on commercial jet

airplanes would be contrary to the pitch commands provided by the flight director bars, and to the speed hold mode of the autothrottle, which is often used during approach.

# MILITARY APPLICATIONS

