0.04
A: -38.54
P: -2.09
S: 1258

10
10

5189.37
ALT

ARTIFICIAL INTELLIGENCE IN THE COCKPIT
CREATING A COMPETITIVE ADVANTAGE
AT MACH 1.0

The rapid rise of artificial intelligence (AI) has spurred debate in aerospace and defense. When an unmanned aircraft bested an aviator in simulated combat in 2020, the industry asked, **"How should AI be used? Can AI be trusted?"** A fighter jet on an armed reconnaissance mission illustrates how powerful the technology can be.

-5
-5

AI in action: Anticipating danger to give aviators an edge

00:01:02 01:09

: OBSERVE :
HIGH-SPEED SENSORY OVERLOAD

Flying at more than 400 knots inside enemy "threat rings," the aviator must monitor multiple detection systems. Data comes fast, and stress is high.

AI provides focus. It strips away irrelevant data and presents vital, real-time and easy-to-digest information.

[AI provides focus]
vital, real-time easy-to-digest information

00:01:02

00:01:16 01:23

: ANALYZE :
MAGIC ON BOARD

For aviators, **AI is "the magic in the box."** High-performance edge processing occurs on the aircraft, instantly turning sensor data into actionable insights.

AI informs the aviator's critical decisions— operating in the background, assessing the situation.

[AI is the magic in the box]
turning sensor data into actionable insights

00:01:16

00:01:30 01:37

: DISRUPT :
GREATER PROTECTION

As the aviator navigates the mission, **AI enables the aircraft to remain undetected.**

It identifies, characterizes and locates enemy radar systems. Next, working with electronic warfare systems, **AI selects the appropriate capabilities** to confuse the enemy radar and mitigate the threat.

00:01:30

[AI enables undetectability]
identifies, characterizes, locates enemy radar systems

00:01:44

00:01:44 01:51

: ACT :
FASTER AND BETTER DECISIONS

Without AI, armed air-reconnaissance missions typically have a 50/50 chance of identifying the target.

AI provides the precision and speed for safe and effective reconnaissance. Sorting through a deluge of data to visualize a distant target, **AI provides insights to the aviator,** who then can confidently determine the appropriate mitigating measures to use.

[AI provides precision and speed]
safe and effective reconnaissance

[AI EVERYWHERE]

When aviators need a competitive advantage, **AI makes predictions that were previously impossible.**

One day, **AI will be found everywhere.** Until then, its acuity will only continue to improve. And Mercury's advanced processing systems will keep improving alongside, enabling AI to enhance mission success.

PROTECT YOUR MISSION TODAY

Learn more about how Mercury powers AI with high-performance edge processing

Visit:
mrcy.com/AI