Lexington Institute

Issue Brief
January 9, 2001

THE MARINE CORPS' COMMON-SENSE APPROACH TO HELICOPTERS

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Today's video games offer a stunningly realistic simulation of modern aerial combat. Many of these games place a player in a virtual cockpit of some of the most advanced warplanes in the world, with nearly identical controls, weapons systems and communications networks at the player's fingertips. CD-ROM technology enables players to "fly" over video footage of various terrain or over a computerized landscape to engage enemy vehicles, troops and aircraft. These programs essentially reduce years of military training to a "see the target, hit the target" computer game.

Unfortunately, in the case of the Marine Corps' AH-1W Super-Cobra, life does not imitate art. That's because the Cobra is not a "see the target, hit the target" aircraft like those found in computer games. Its two-blade main rotor system is unable to sustain anything more than minimal negative G-forces, and this prevents a pilot from dipping the nose of the aircraft down to get a better view of the ground. Instead, he must execute a series of turns while decreasing altitude before engaging a target. This maneuver may force the pilot to take his eyes off his target – or threats to his own aircraft.

The Marine Corps has a common-sense solution for this dilemma – add more rotor blades. It's just one of the myriad upgrades the entire fleet of Cobras will receive under a program to remanufacture the aircraft, along with all the Corps' UH-1N Hueys. The new "Z" model Cobras will be refitted with new transmissions and a four-bladed rotor system that will give it much more stability in negative-G attitudes. Along with the new transmissions will come new cockpits, engines and communications gear, among others. Even the skids will be built anew.

Better yet, the Cobra will have an 85 percent commonality ratio with the UH-1 "Y" model helicopters. That means that most parts in each aircraft will be interchangeable. Not only will this streamline maintenance – a Huey's rotor system will be completely interchangeable with a Cobra's, for example – but the Corps' helicopter mechanics will have a lighter workload. Rather than have one mechanic work on two different helicopters, the same mechanic will be able to work on two similar helicopters in about half the time.

Sometimes, common parts are just common sense.

AH-I W SuperCobra versus AH-17