

# AN/ALE-50 Towed Decoy System



The combat-proven **AN/ALE-50 Towed Decoy System** successfully countered numerous missile attacks during Operation Allied Force.

## Benefits

- ▶ Unparalleled protection for aircraft and aircrews
- ▶ Combat-proven performance against monopulse radar threats
- ▶ Adaptable for use on multiple platforms
- ▶ Requires no threat-specific software
- ▶ Low procurement and life-cycle costs

## Pilot Comments

- ▶ "Thanks for the little buddy."
- ▶ "It's definitely a life-saver."
- ▶ "Without you we all wouldn't still be fighting."
- ▶ "Keep 'em coming."

The AN/ALE-50 towed decoy acts as a preferential target that lures enemy missiles away from the intended destination by providing a more attractive radar target. The protection it provides to aircraft and aircrews makes the AN/ALE-50 one of the most important electronic countermeasures (ECM) tools available.

The ALE-50 system consists of a launch controller, launcher and towed decoy. The decoy control/monitor electronics and power supply are contained in the launch controller. The launcher, which holds the decoy magazine, can be customized to fit any candidate aircraft. The decoy has a ten-year shelf life and is packaged in a sealed canister, which also contains the payout reel.

This stand-alone system requires

no threat specific software and communicates health and status to its host aircraft over a standard data bus.

## Program Success

The AN/ALE-50 is a successful joint development venture — by a U.S. AirForce/Navy/Raytheon integrated product team — that demonstrates multi-service ECM system commonality is achievable.

## System Adaptability

The AN/ALE-50 was first deployed on U.S. Air Force F-16 aircraft. The F-16 uses the standard AN/ALE-50 decoy and a platform-specific integrated launcher/launch controller mounted in a wing pylon. This system can be adapted to other pylon installations.

The Multi Platform Launch Controller (MPLC) is the

## AN/ALE-50 Towed Decoy System



F-16 Launcher/Launch Controller



F/A-18 E/F T-3 Launcher



B-1B 1 x 4 Launcher



Multi-Platform Launch Controller

The highly adaptable AN/ALE-50 towed decoy system is available in several different configurations — it can be used on virtually any tactical or combat support aircraft.

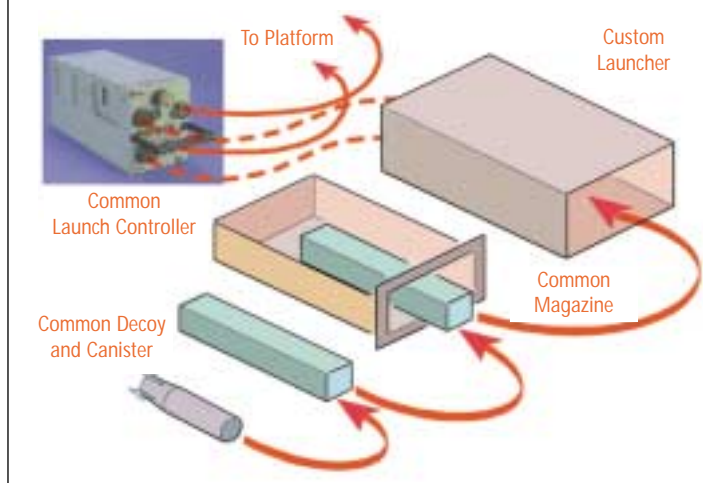
standard launch controller for all future installations. The U.S. Navy F/A-18E/F, U.S. Air Force B-1B, and Raytheon's AN/ALQ-184(V)9 pod will use the MPLC with platform-specific launchers. This flexibility makes the AN/ALE-50 adaptable to any tactical or combat support aircraft.

### Technology Enhancement

To provide continuing effectiveness against increasingly sophisticated threats, Raytheon is exploring expanded applications for the AN/ALE-50. We are currently developing a higher power, fiber-optic towed decoy

for protection of larger aircraft. And, we are working closely with the U.S. Air Force and U.S. Navy to provide seamless growth to an infrared towed decoy. This would enable the AN/ALE-50 to provide equally effective protection against radio frequency and infrared threats. An existing expanded application is the AN/ALQ-184(V)9 ECM Pod. Currently used by the U.S. Air Force, the AN/ALQ-184(V)9 combines the AN/ALE-50 with the AN/ALQ-184 Self-Protect ECM Pod to provide advanced threat protection.

### ALE-50 Towed Decoy System Configuration



### EW Operations

Ron Colman  
Business Development  
6380 Hollister Avenue  
Building H01, M/S D-090C  
Goleta, California  
93117-3114 USA  
805.879.2041  
805.879.2877 fax  
rmcolman@west.raytheon.com

[www.raytheon.com/ew](http://www.raytheon.com/ew)