A vertical advertisement for the AN/ALQ-214 missile. The background is a dramatic sunset sky with large, dark, textured clouds. A thin white line representing a cable or wire extends from the top left corner down to a missile in the bottom right. The missile is dark and has a cylindrical body with a conical nose and a tail section with four fins. The text is centered in the middle of the image.

AN/ALQ-214
IDECM RFCM

BAE SYSTEMS / ITT Avionics

Survivability for Mission Success

The ALQ-214 IDECM RFCM (Integrated Defensive Electronic Countermeasures RF Countermeasures System) allows aircrews to respond with confidence against the world's most advanced threats. IDECM RFCM breaks the paradigm by removing the distinction between traditional onboard coherent jammers and end-game only towed repeaters. IDECM RFCM integrates the best characteristics of both into one affordable advanced system, applicable to multiple aircraft, for maximum commonality.

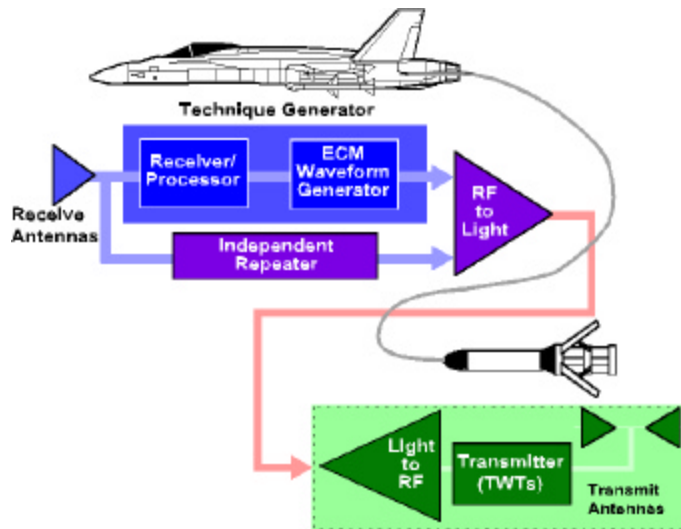
IDECM RFCM goes further to fill survivability gaps created by home-on-jam and man-in-loop command guided threats to provide robust self protection capability. In doing so, three layers of defense are provided. These include: 1) Suppression to deny, delay and degrade adversary acquisition and tracking; 2) Deception to mislead guided weapons away from aircraft if a track solution is obtained and a launch occurs; and 3) End-game capabilities that make the Fiber Optic Towed Decoy (FOTD) the preferred target, seducing adversary missiles that manage to leak through the first and second layers of defense.

Multiple Configurations Available

The AN/ALQ-214 can be tailored to customer applications.

- Onboard techniques generator + FOTD
- Onboard techniques generator + onboard transmitters
- Onboard techniques generator and transmitters + FOTD

Robust Self-Protection



The ALQ-214 IDECM RFCM leverages previous government investments in ALQ-165 and ALE-50 development and the Group A standards to reduce program cost and risk. Features of the system include:

- Independent Repeater Mode
- Coherent Digital RF Memory
- C++ EW Integration Software
- “Plug-In” Onboard Transmitters
- Technology Insertion to Reduce Cost

ALQ-214 Specifications

Reliability (predicted)	600 hour MTBF
CASS Compatible	Yes
Human Factors	All Receiver/Modulator/Processor (RMP) group WRAs are single-person lift less than 35 pounds
BIT	RMP fault isolation and FOTD end-to-end BIT

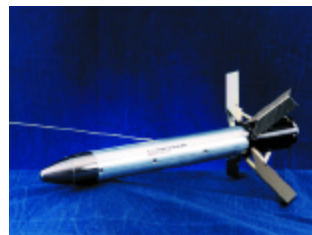
	Predicted	
	Weight (lbs)	Power (AC-VA/DC-W)
Receiver	32.4	403/5
Modulator	31.0	251/5
Processor	34.5	493/5
Rack	57.0	N/A
SCA	13.0	150/1
Total with Rack	167.9	1297/16
ALE-50 IMPLC and Launcher	GFE	GFE
Canister/Decoy (3)	11.0 (each)	N/A
Pre-Amp (3)	7.0 (each)	84/0



Receiver/Processor/Techniques Generator



Onboard Transmitters (Optional)



Techniques are Transmitted From the FOTD



Signal Conditioning Assembly

Application to a Wide Range of Platforms

Baselined for application on the U.S. Navy F/A-18E/F, and the US Air Force B-1B and F-15C/E, IDECM RFCM components can be used as a commodity across multiple platforms, including F/A-18C/D, F-16, AC/MC-130 and U-2 aircraft. The AN/ALQ-214 is currently under consideration for export to multiple international countries.

Life cycle cost benefits provided by standardization and common use include: elimination of duplicative development programs, reductions in shipset costs via economy-of-scale manufacturing, and reduced logistics support infrastructure.



BAE SYSTEMS / ITT Avionics

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