

Identification Friend or Foe (IFF) Product Family

More than 75 years of innovation
and IFF leadership

BAE Systems offers a complete family of IFF systems for the **entire battlespace.**

BAE Systems' Identification Friend or Foe (IFF) systems enable friendly forces to identify friendly platforms among potential targets. This provides critical time to counter an attack or prevent fratricide between friendly forces. U.S. and NATO forces utilize Mode 5, Mode S and legacy Mark XII modes to positively identify coalition forces and determine targets, both in the immediate battlespace and well beyond a pilot's visual range.

BAE Systems is the **leading supplier of interrogators** to the U.S. Navy with over 1,000 units in service.

INTERROGATOR	SIF	MODE 4 EVALUATOR	MODE 5	MODE S	TARGET DATA EXTRACTOR	COMMENTS
AN/UPX-37	✓	Option*	Option	Growth	Option	U.S. Navy replacement for AN/UPX-27
AN/UPX-41(C)	✓	Option	✓	Option	Option	–
AN/UPX-42(C)	✓	✓	✓	Option	✓	–
AN/APX-122	✓	✓	–	–	✓	–
AN/APX-122A	✓	✓	✓	✓	✓	–

*Requires external crypto computer

BAE Systems is a proud provider of transponders on U.S. Navy, Army, USAF, and Allied forces platforms with **over 13,000 units in service.**

TRANSPONDER	MODE S	MODE 4	MODE 5	ADS-B	M5L2 IN, M5L2-B IN, AND UAT IN GROWTH
AN/APX-117	✓	External Computer Required	Growth	Growth	–
AN/APX-118	✓	✓	Growth	Growth	–
AN/APX-123	✓	✓	✓	Out	–
AN/APX-124	✓	✓	✓	Out	–
AN/DPX-7	✓	✓	✓	In & Out	✓

BAE Systems is a **leading supplier of combined interrogator/transponders** for fighter aircraft worldwide with over 4,500 units in service.

COMBINED INTERROGATOR-TRANSPONDER SYSTEM	CRYPTOGRAPHIC COMPUTER	INTERROGATOR SIF MODES AND MODE 4	INTERROGATOR MODE 5	TRANSPONDER SIF MODES AND MODE 4	TRANSPONDER MODE 5	TRANSPONDER MODE S
AN/APX-111 (RT-1763B)	KIV-6	✓	Upgradeable	✓	Upgradeable	✓
AN/APX-111 (RT-1763C)	KIV-78	✓	✓	✓	✓	✓
AN/APX-113	KIV-6	✓	Upgradeable	✓	Upgradeable	✓
AN/APX-125	KIV-78	✓	✓	✓	✓	✓



AN/DPX-7 RST



AN/APX-117(V)/118(V)
AN/APX-123/124



AN/APX-113(V) CIT
AN/APX-125 CIT



Crypto KIV-6 Mark XII



AN/UPX-37/41/42
Digital Interrogator



OE-120/UPX Antenna Group



AN/APX-122



AN/APX-111(V) CIT and
Conformal Antenna System

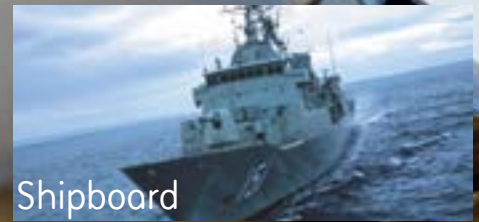
Whether in the air, on the ground, or at sea Identification Friend or Foe systems are **key components to mission success.**



Airborne



Ground



Shipboard

For fast-jet aircraft

AN/APX-111, AN/APX-113, AN/APX-125 Combined Interrogator/Transponder

For transport aircraft, trainers, helicopters, and fighters (air-ground)

AN/APX-117/118 (V), AN/APX-123, AN/APX-124, AN/DPX-7 (Reduced Size Transponder)

Stationary

AN/UPX-37 Digital Interrogator, AN/UPX-41, AN/UPX-42

Long-range ground and coastal radar short-range

Man Portable Digital Interrogator

Ships that require interrogators such as destroyers, frigates, and aircraft carriers

AN/UPX-37, AN/APX-117/118(V), AN/UPX-41, AN/UPX-42, AN/APX-123, OE-120/UPX antenna group

For ships that only require transponders such as submarines, cargo ships, and patrol boats

AN/APX-117/118 (V), AN/APX 123, AN/DPX-7 (Reduced Size Transponder)

Seven decades of IFF experience

A dynamically evolving technology

						AN/APX-124 F-16 Transponder	
					AN/APX-111(V) F/A-18, F/A-18E/F	AN/UPX-42 Digital Interrogator	
			AN/UPM-150 Test Set	Mark XII Upgrades Korea, Turkey, Denmark, Norway		KIV-78 Mode 5 Crypto	
		AN/APX-77	E-2C Dual IFF System	KIV-6 Crypto Computer	AN/APX-122 E2-D IFF Interrogator		
		AN/APX-72	AN/MPX-12A	AN/APX-113(V) F-16 USAF/NATO, Japan F-2 Taiwan IDF, F-15C	AN/APX-113(V) Mode 5 F-16 ANG, MIDS/IFF Compatibility		
		AN/APX-46	AN/TPX-50	ESCAN IFF Antenna	UK Sea King CIT	AN/UPX-41 Mode 5 Digital Interrogator	
	AN/APX-19	AN/APX-76	AN/TPX-46	SEEK IGLOO Interrogator	F/A-18 Transponder	AN/APX-123 Mode 5 Common Transponder	AN/DPX-7 transponder with integrated GPS
ABK Transponder	AN/APX-35	AN/APX-64	Special IFF Systems	B-2 Special Transponders	AN/UPX-37 Digital Interrogator	Mid-Air Collision Avoidance System	AN/APX-123 ADS-B Upgrade
LANAC Height Reporting IFF	AN/APX-34	Invisible Dipole Antenna Invention	IFF Test Sets	AN/TPX-54	E-2C IFF Production	F-15K CIT	AN/APX-122 Mode 5/S Upgrade
MK III IFF System	MK X IFF System	Air-by-Air IFF Systems	NCTR IFF Systems	MK XII TIP	F/A-18E/F CAS	UAV Transponder	AN/APX-111(V) Mode 5 CIT Upgrade
MK V IFF System	MK X (SIF) System	MK X IFF System	E-2C Display Processor	MK XV Concept Definition	Mode 5 Brassboard Flight Demonstration	AN/APX-117/118 U.S. Navy/Army Common Transponder (CXP)	AN/DPX-7 Triton (BAMS) UAS Transponder
1940s	1950s	1960s	1970s	1980s	1990s	2000s	2010s

BAE Systems' AN/DPX-7 Reduced Size Transponder is our latest IFF transponder product.

The future of IFF is a system that is **affordable, effective, easy to upgrade, and features reduced SWaP.**

BAE Systems' AN/DPX-7 Reduced Size Transponder is a reduced size, Mark XIIA/ Mode S/ADS-B transponder with an embedded ADS-B IN capability that can reduce procurement, upgrade, and life cycle costs.

- Specifically developed for UAVs, RPAs, and helicopters but available for integration on all platforms
- Lower cost and easy to upgrade
- Meets all current Mark XIIA, Mode S and ADS-B requirements



BAE Systems' reduced size transponder can support ADS-B In applications or be used as a cooperative sensor in an UAS Sense-and-Avoid system.

Feature	Currently Fielded Military Transponders	Reduced Size Transponder
Lower cost		✓
Reduced size, weight, and power		✓
Higher reliability		✓
LRU scalable to support multiple functions		✓
Selectable platform interface module to reduce integration cost	✓	✓
Modes 1, 2, 3/A, C, 4 and 5 Level 1 and 2	✓	✓
Mode S Level 3 and interface to TCAS II systems	✓	✓
Elementary and enhanced surveillance	✓	✓
ADS-B Out	✓	✓
AIMS 03-1000A certified	✓	✓
FAA TSO-C 112 certified	✓	✓
MIDS Compatible	✓	✓
1090MHz receive for ADS-B, ADS-R, TIS-B		✓
Growth to 1090MHz receive for M5L2 or M5L2-B		✓
Growth to UAT ADS-B In		✓
Integrated GPS		✓

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