The Mark XII IFF System is a cooperative question and answer friend identification system that has been operational since the 1960s. The Mark XII System is comprised of 4 main component sections: An interrogator subsystem [e.g. AN/UPX-25(V)], transponder subsystem [e.g. AN/UPX-28(V)], associated decoders and antennas.

The Mark XIIA Mode 5 is an improvement to the aging Mark XII Identification, Friend, or Foe (IFF) System that uses modern modulation, coding, and cryptographic techniques to overcome performance and security problems in the current Mark XII waveform. Additionally, Mark XIIA Mode 5 offers expanded data handling capable of passing GPS position and other extended data.

Implementation of this improved combat identification system in Navy

platforms will be via a cost-effective evolutionary upgrade to modern digital IFF hardware.

The Mark XIIA Mode 5 Program stems from the DoD Mark XII Improvement Initiative begun in 1995. The Navy, responding to USD (A&T)/VCJCS tasking, led the Joint Service/NATO development of the Mode 5 waveform as documented in STANAG 4193. POM funding supports a formal FY02 Navy program start, with the potential for eventual establishment of a Joint Service Program with Army and Air Force. The Mark XIIA Mode 5 Program is responsive to the Combat Identification Mission Needs Statement (MNS) dated 13 April 1992 and reviewed/revalidated in 1998. The Improved Combat Identification Capabilities Operational Requirements Document (ORD) is in the second round of Service staffing (Flag-level chop) following the successful 0-6 level review conducted April June 2000. Other program documentation is in initial staffing, and subject to formal program approval and funding.

Mark XIIA Mode 5 platform-tailored ECP kits will be developed, tested, and procured, with full production beginning in FY05. State-of-the-art Open Systems Hardware (OSA) interrogator and transponder sets will accommodate easy installation and integration of Mark XIIA Mode 5 VME cards that also provide for new-technology cryptography.