

LEONARDO ELECTRONICS

ECRS MK2

EUROPEAN COMMON RADAR
SYSTEM MK2 – MULTI
FUNCTION ARRAY



ECRS Mk2 is a multi-function Active Electronically Scanned Array (AESA) designed and built by Leonardo to provide Eurofighter Typhoons with a world-leading Electronic Warfare (EW) and Electronic Attack (EA) capability alongside optimised traditional radar functions.

The system offers enhanced traditional radar modes providing Eurofighter Typhoon with increased situational awareness and lethality in the most complex and hostile future electromagnetic environments. The EW and EA functions increase threat awareness and provide operators with the ability to locate, identify and jam enemy radio frequency emitting surface-to-air systems, providing enhanced ownership and third-party protection whilst conducting a SEAD (Suppression of Enemy Air Defences) mission.

The system has been developed using experience gained from the development and production of ECRS Mk0, Raven and Captor M fire control radar systems, and has been specifically designed to meet the UK MOD's requirements for its Eurofighter Typhoon fleet.

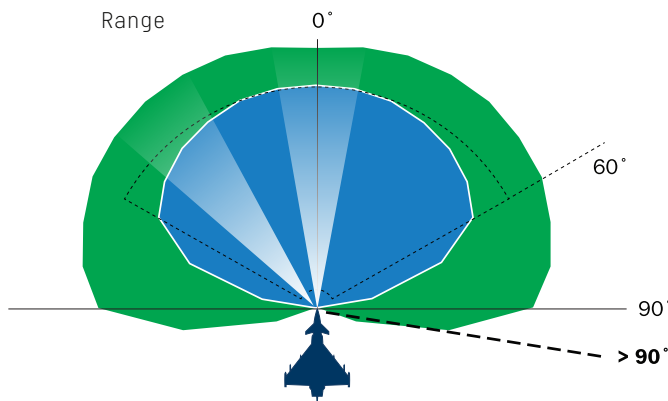
The UK will replace Captor M systems in their Tranche 3 aircraft initially to provide the platform with a world leading Radar and EW capability for the future battlespace.

KEY BENEFITS

- Enhanced traditional radar modes and functions
- SEAD capability - ability to locate, identify and suppress enemy air defences
- Greater freedom of manoeuvre whilst conducting missions
- Simultaneous operation of air-to-air, air-to-ground and EW functions
- Extended range missile guidance
- High availability due to graceful degradation and increased redundancy

KEY FEATURES

- Large and high power AESA aperture – high comparative TRM
- Rotating re-positioner for maximum power positioning across Field-of-Regard (FoR)
- Wide FoR – 50% greater than traditional fixed AESA
- Electronic warfare
- Wide band electronic attack
- Enhanced multi-channel receiver and processor
- Combat identification capability
- Mission data loadable for Radar and EW tasks
- Mission data programmable processor with increased capacity



- Wide Field of Regard ECRS AESA Radar
Enables optimised Max-Power on target across the WFOR
- Typical Size Fixed Plate AESA Radar

INTEGRATION

ECRS Mk2 is due to be in service with UK RAF Typhoons towards the end of the decade. ECRS Mk2 can be retro fitted to Tranche 2 & 3 and new EF aircraft.

TECHNICAL SPECIFICATION

System Name	European Common Radar System Mark 2
Platform	Eurofighter Typhoon
Previous Names	Radar 2
Related Systems	CAPTOR M, ECRS Mk0, ECRS Mk1
System Type	Multifunction Array
In-service date	Currently in development
Customers	UK
Compatibility	Tranche 2,3, Future Tranche
EF Software Standard	P4 and future software standards

CAPABILITIES

- Air-to-air search, track, target
- Weapon support
- Electronic warfare
- Electronic attack
- Target identification
- Air-to-surface mapping
- Air-to-surface targeting



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