

OVERVIEW

The Gun and Guided Missile Director MK82 and the Director Controller MK200, components of the MK99 Fire Control System are currently produced for the Aegis Weapon System MK7 by General Dynamics Ordnance and Tactical Systems.

The Antenna Assembly SPG-62 (developed and designed by Raytheon, an RTX business) is mounted on the MK82 by an elevation-over-train pedestal, providing space stabilization for the radar's line of site.

The assembly is capable of moving on two axes, train and elevation (parallel and normal to the base plane of the director), and is unmanned with START, STOP and RESET controls located apart from the device. The director, which is not limited in train or traverse positioning, supplies train and elevation position data and radar line of site rates in both traverse and elevation for use by the fire control system computer.

The power drive includes a highspeed, direct-current permanent magnet motor driving through a gear train that is spring preloaded to minimize backlash. Precision data assemblies in elevation and train provide plus or minus oneminute accuracy.

SPECIFICATIONS

Mount Weight	2,700lbs (1,225kg)
Antenna Aperture	7.5ft (2.3m)
Control Weight	1,500lbs (680kg)
Peak Power	34 kVA pf 0.85, 440 Vac, 30, 60Hz
Average Power	10 kVA pf 0.9
Operation Readiness Test System	Yes
Gyros	Two Axis
Brakes	Electric
Horizon Search Rate	72° per second
Reliability (Calculated)	2,000 hours MTBF, 2 hours MTTR
Reliability (Demonstrated)	9,000 hours MTBF
Data Readouts	±1 minute
Slip Ring	98 contact rings
Acceleration	2.5 rad/s² in maximum wind and ice
Rate Accuracy	0.5 mrad/s or 1% of local rate value
Field Adjustments	None