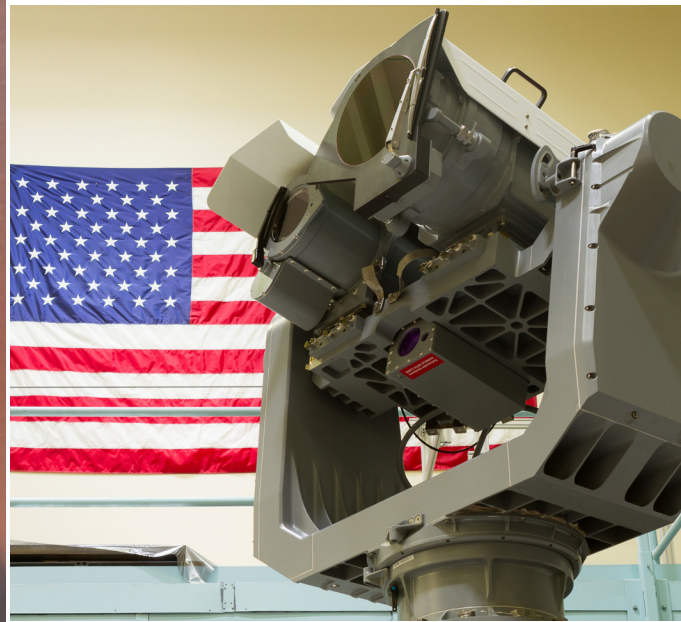


STALKER



GO BEYOND WITH BALL.®

Ball Aerospace has developed a modular long-range electro-optical surveillance system, known as Stalker by the Navy. Stalker significantly enhances the Navy's ability to detect, classify and identify potential threats to ships and determine hostile intent. Stalker is currently deployed on carrier (CVN) and large deck amphibious (LHD and LHA) platforms.

SPECIFICATIONS

VISIBLE

Image Detector and Format	Color CMOS, 1920 x 1080, 60 Hz
Video Format	3G SDI
Interscene Dynamic Range	0.001 fL (1/4 moon) to 10,000 fL (bright sunlight)
Spectral Band	425 to 1,070 nm with spectral filters
Lens Type	40x zoom lens (34 to 1,360 mm focal length)
Field of View (FOV)	20.8 H x 11.8 V to 0.53 H x 0.3 V

MWIR

Image Detector and Format	InSb 1280 x 1024
Video Format	HD-SDI
NEΔT	≤30 mK
Spectral Band	3 to 5 μm
Lens Type	Continuous zoom (146-1200 mm focal length)
FOV	7.3 H x 5.8 V (wide), 0.9 H x 0.7 V (narrow)

LRF

Wavelength	1.54 μm (eye safe)
Range	Up to 30 Km
Range Accuracy	±5 meters

ENVIRONMENTAL

Temperature (operating)	-30 to 58 °C
Wind Loading	90 Kts sustained
Rain Loading	Peak: 7 in/hr; average: 1 in/hr
Wave Loading	500 lb/ft ²
Vibration and Shock	MIL-STD-167
Humidity	100%
Electromagnetic Interference (EMI)	MIL-STD-461, MIL-STD-464C

FEATURES

- Low-light high definition EO and MWIR sensors with Laser Range Finder
- Electronic stabilization
- Automatic video tracker (with closed loop gimbal control on IM)
- Lens, wiper and defroster for EO and MWIR
- All-weather sealed and pressurized environmental housing
- Modular construction for easy repair and upgrade
- Built-in test equipment for quick fault isolation
- Qualified for shipboard environments including vibration, thermal, EMI, humidity, and salt fog
- No increase in ship manning

With up to four radar directors on CVN class ships and two on LHD class ships, the Mk 6 Mod 3 Stalker can provide continuous 360 degree coverage and separate tracking functions during multi-target engagements. Stalker has already proven itself by saving lives during operational deployments.

Stalker Independent Mount

The Stalker Independent Mount (SIM) is a Mk6 Mod4 Stalker EO system on a stabilized mount for ships that do not have the SeaSparrow radar director. SIM provides the same EO sensor package as the director mounted Stalker system and can be installed on most maritime platforms.

OVERVIEW

After operational evaluation of three experimental and eight developmental Stalker systems, Ball is delivering production systems that provide enhanced capability to characterize and determine intent of small boats and other surface contacts at long range.

The improved Stalker employs a low-light, high definition, color sensor with user-selectable spectral filters, and a high definition Midwave Infrared sensor. The solid state laser diode-based range finder has also been improved for reliability and shot life.

Stalker was designed to conform to the existing sensor wiring and power source, allowing rapid installation of the modular electro-optical (EO) system.