

Rotary Wing Helmet Mounted Display



ROTARY WING HELMET MOUNTED DISPLAY

A lightweight, visor projected helmet system for helicopters - one of the "Striker" range of Helmet Mounted Displays.

- Selected for US Marine Corps AH-1Z Programme
- Full day/night capability
- High accuracy head tracking system
- Removable Night Vision Cameras
- Fully overlapped 40° binocular display
- High resolution display with embedded symbology

This 40 degree field of view system employs a 2-part helmet concept in which a display module is fitted to a "one size fits all" inner helmet providing day and night mission capability. At night, or in low light level conditions, the helmet displays the real world scene by projecting intensified images from the detachable night vision cameras onto the clear visor together with flight and weapon aiming symbology. The ability to electronically mix the intensified real world picture with flight critical symbology is essential to ensure safe night operation of rotary wing aircraft flying nap of the earth missions.

BAE SYSTEMS

Rotary Wing Helmet Mounted Display

FEATURES

NIGHT VISION Miniature intensified high definition night vision cameras, ensure state-of-the-art night imaging performance to compliment "Strikers" high definition display. Night Vision Cameras, such as those produced by Ball Aerospace, overcome the limitations of conventional image intensifier devices, (as seen in photo 1). Ball Aerospace's Anti Blooming Technology combined with Enhanced Automatic Gain Control ensures maximum detail with minimum blooming (photo 2).

In daytime operation, the night vision cameras may be simply removed giving an ultra lightweight symbology display system.

Sensors and weapons are slaved by head movement using the BAE SYSTEMS advanced head tracking system (pulsed dc) to derive the line of sight of the helmet. The system enables accurate delivery of weapons using only the helmet mounted display for targeting and designation.

The unique helmet fitting system provides a comfortable, custom fit for each pilot using a single size inner helmet. The fit, combined with the optimised centre of gravity, results in an extremely comfortable flying helmet with a highly stable display.



PHOTO 1 - CONVENTIONAL IMAGE
INTENSIFIER



PHOTO 2 - ANTI BLOOMING
TECHNOLOGY

SPECIFICATIONS

MAIN FEATURES

- 24 hour capability
- Visor Projected Display
- Two part helmet assembly
- One size fits all, custom fit inner liner
- High resolution display
- Miniature night vision cameras
- High accuracy head tracker
- Optimum centre of gravity

PERFORMANCE

- Field of view 40 degrees
- Exit pupil >15mm
- Eye relief 70mm
- Head supported weight <3.7lbs
- Twin visors Dark and clear
- Tracker coverage Azimuth $\pm 180^\circ$
- Roll $\pm 180^\circ$
- Pitch $\pm 90^\circ$



HELMET WITH CAMERAS REMOVED

FOR MORE INFORMATION CONTACT

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