



PILOT NIGHT VISION GOGGLES

BM 8043

NEW:
**With XR - 5 autogated
ii - tubes**



Ultimate Night Vision Technology

TCA Technik
Consulting
Alvade S.L.

PILOT NIGHT VISION GOGGLES BM 8043

The solution for flying helicopters at night

Helicopter night operations will acquire increasing importance for transport and liaison purposes.

Search and rescue missions require night vision flights at low levels. This means the pilot must have unlimited view and be able to estimate critical distances.

Until now helicopter missions under low-level flight conditions and "in touch" with natural barriers have only been possible during daylight hours. The Night Vision Helmet Mounted Goggles enable the pilot to control and navigate the helicopter at night, also facilitating nighttime observation.

The concept of these Night Vision Helmet Mounted Goggles BM 8043 has been thoroughly tested by pilots of nearly all Armies

Features:

- large field of view with stereoscopic sight
- reliable estimation of distances
- crew read instruments and routing maps by looking peripherally below the goggles and by illuminating the panel with a spotlight activated by a lip switch
- no need for focus adjustment
- insensitive to interfering light sources
- fast mounting to all standard pilot helmets
- comfortable to wear
- adaptable to suit pilot
- two spare batteries in power pack



Description

The Night Vision Helmet Mounted Goggles BM 8043 are binocular night vision equipment. High-transmission lenses display the scenario on the photocathodes of the image intensifier tubes.

The tubes incorporated are of the 2nd plus or 3rd generation with exceptionally high

- cathode sensitivity and
- contrast reproduction.

The intensified image can be observed true to scale through the eyepieces. The optical impression corresponds to daylight flying conditions. Defective eyesight can be compensated by means of diopter adjustment.



To read instruments and routing maps, the operator has to switch on a narrow-beam spotlight with a lip switch mounted beside the microphone arm of the pilot's headset. The illuminated instruments can be read peripherally below the goggles with the naked eyes.



The goggles can be swiveled round and adjusted with one hand very easily.

Goggles and power supply pack are well balanced so it is possible to wear the equipment relatively long periods without tiring.

Advantages

- The Night Vision Helmet Mounted Goggles BM 8043 enable helicopter pilots
- to perform the same flight maneuvers as during daylight hours
 - to fly at low altitudes above ground in difficult areas
 - to take off and land in non-illuminated areas.

With the Night Vision Helmet Mounted Goggles BM 8043 it is now possible to conduct night-flight operations with helicopters even under difficult conditions.

Specifications:

Optical Data

Tube	Image Intensifier: microchannel of 3rd generation (gen. 2nd +)
Magnification	1 x (unity)
Field of view	42 °
Focus range	fixed
Depth of field	12 m to ∞
Range of recognizability	2 m to ∞
Diopter range	– 5 to + 5 dptr
Interpupillary distance adjustment	58 to 72 mm

Electrical Data

Power supply	2.8 V
Batteries	Lithium e.g. Type G 06, size AA Space for 3 batteries (2 batteries for spare)
Battery life	11 h min. (without spotlight) (additional 2 x 11 h by spare batteries)

Dimensions and Weights

Length	95 mm
Width	115 mm
Weights:	
Goggles incl. cable and narrow-beam spotlight	543 g
Mount incl. clamp, power supply, batteries, cable	587 g
Canvas bag incl. accessories and spare parts	1.100 g
Case, empty	2.250 g

Ambient Conditions

Temperature:	
operation	– 45 °C to + 45 °C
storage	– 55 °C to + 65 °C
Waterproof	to 1.5 m depth



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