

Elbit Hermes 450

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The Elbit Systems **Hermes 450** is an Israeli medium size multi-payload unmanned aerial vehicle (UAV) designed for tactical long endurance missions. It has an endurance of over 20 hours, with a primary mission of reconnaissance, surveillance and communications relay.

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Operators

 Azerbaijan ^[2]

- 10 Hermes 450 UAVs were purchased in 2008. On September 12, 2011, a UAV was reportedly shot down by the NKDA over the airspace of the unrecognized Nagorno-Karabakh Republic.^[3] Preliminary investigations carried out by the NKDA have determined the model to be a Hermes 450 type.^[4]

 Botswana ^[5]

 Brazil

- The Brazilian Air Force has, since December 2009 a unit under lease for 1 year of testing and evaluations in conjunction with the Brazilian Army and Brazilian Navy;^[6] there are plans to buy two more.^[7]

 Colombia

- In August 2012 Elbit has won a multi-million-dollar contract to supply a mixed fleet of Hermes 900 and 450 unmanned air systems to Colombia.^[8]

 Croatia^[9]

- Two Hermes 450 were ordered by the Croatian military along with two smaller Skylark UAVs in late 2006, delivered in late 2007.

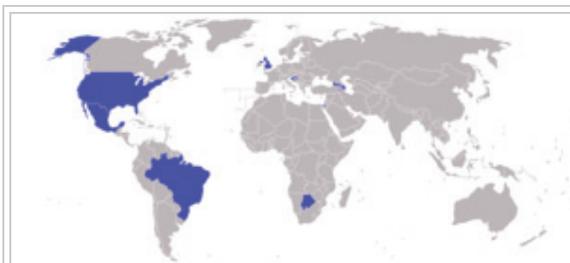
 Cyprus

Hermes 450



Hermes 450 of the U.S. Customs and Border Protection

Role	Unmanned aerial vehicle
National origin	 Israel
Manufacturer	Elbit Systems
Designer	Silver Arrow (Elbit Systems)
Introduction	1998
Status	Active
Primary user	Israeli Air Force
Unit cost	\$2M ^[1]
Variants	Watchkeeper WK450 Elbit Hermes 900



Map of Hermes 450 operators

- The Cyprus Air Forces operating one UAV Squadron (2 groups of UAVs). Reported to be procured no later than 2009.^[*citation needed*]

Georgia

- Hermes 450 have also been used by Georgia for reconnaissance over its disputed Abkhazia territory, where some were shot down.

Mexico

- The Mexican Air Force acquired the Hermes 450 system in 2009.^{[10][11]}

Singapore

- The Singapore Ministry of Defence announced that the Republic of Singapore Air Force is adding the Hermes 450 to its Unmanned Aerial Vehicle fleet, as part of the Air Force's new UAV command.^[12]

Israel

- The Israeli Air Force, which operates a Hermes 450 squadron out of Palmachim Airbase south of Tel Aviv, has adapted the Hermes 450 for use as an assault UAV, reportedly equipping it with two Hellfire missiles or, according to various sources, two Rafael-made missiles. According to Israeli, Palestinian, Lebanese and independent reports, the Israeli assault UAV has seen extensive service in the Gaza Strip and was used intensively in the Second Lebanon War as well as in the 2009 Sudan air raids. Israel has not denied this capability, but to date, its policy has been not to officially confirm it either.

United Kingdom

- The H450 is operated by the 32nd Regiment Royal Artillery of the British Army on military operations in Afghanistan and Iraq. The British version is the only Hermes to use laser gyroscopes in its inertial navigation system. It does not have the option for wing mounted armament. The Hermes 450 is the basis of the British Army's Watchkeeper WK450, development of which started in July 2005 in conjunction with Thales. Watchkeeper is scheduled to replace Hermes in 2010.

United States

- Hermes 450s are operated by the U.S. Department of Defense Joint Unmanned Aerial Vehicles Test and Evaluation Program at the Naval Air Station Fallon,^[13] and two Hermes 450s were tested by the U.S. Border Patrol in 2004.



Hermes 450 of the Brazilian Air Force.



A Hermes 450 taking off



Hermes 450 of the U.S. Customs and Border Protection

Specifications

General characteristics

- **Crew:** 0
- **Capacity:** 150 kg
- **Length:** 6.1 m (20 ft 0 in)
- **Wingspan:** 10.5 m (34 ft 5 in)
- **Gross weight:** 450 kg (992 lb)
- **Powerplant:** 1 × UAV Engines Limited R802/902(W) Wankel engine, 39 kW (52 hp)

Performance

- **Maximum speed:** 176 km/h (109 mph; 95 kn)
- **Cruising speed:** 130 km/h (81 mph; 70 kn)
- **Range:** 300 km (186 mi; 162 nmi)
- **Endurance:** 20 hours (450LE - 30 hours)
- **Service ceiling:** 5,486 m (18,000 ft)
- **Rate of climb:** 4.6 m/s (900 ft/min)

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External links

Media related to Elbit Hermes 450 at Wikimedia Commons

- Hermes 450 Brochure (http://elbitsystems.com/Elbitmain/files/HERMES_450.pdf) , Elbit Systems

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