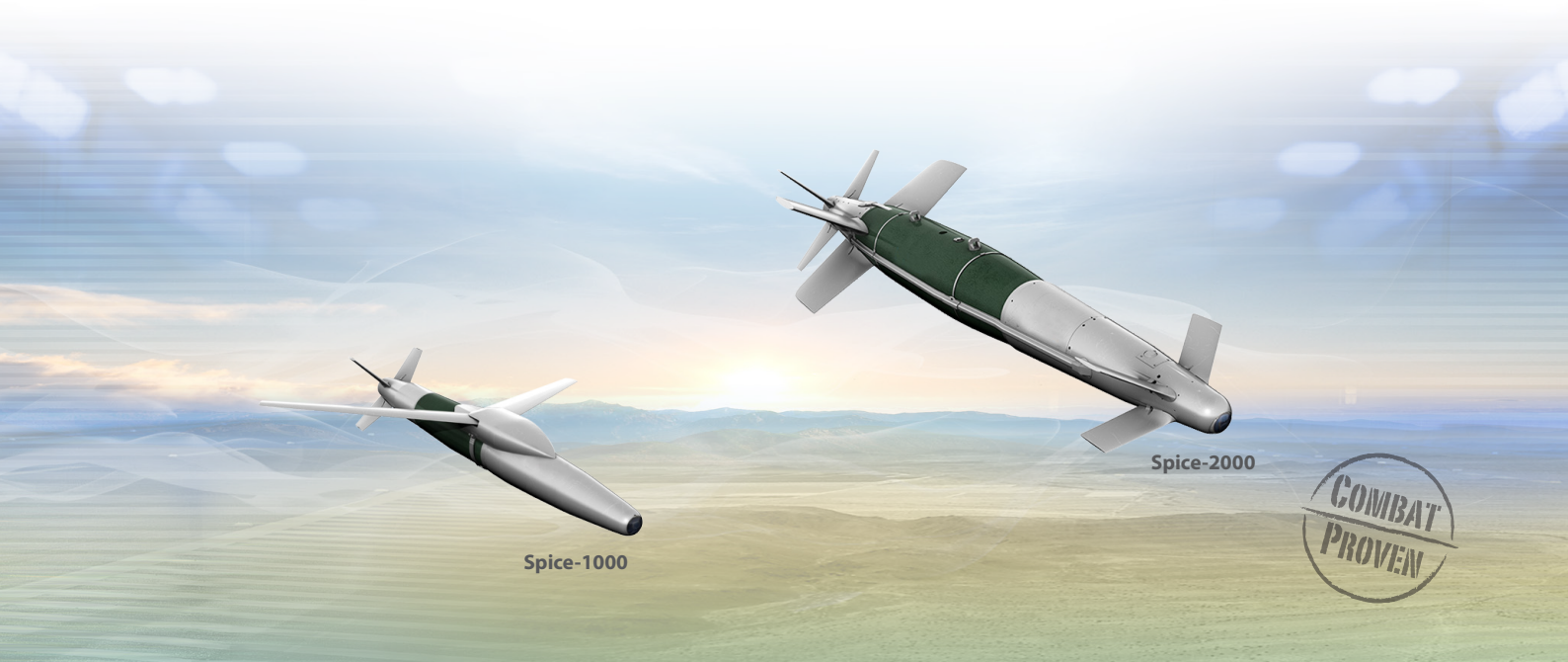


SPICE™

Smart, Precise-Impact and Cost-Effective Guidance Kits



Achieve absolute precision

Benefits

- Autonomous stand-off capability
- Pinpoint accuracy and effective target destruction
- Insensitive to communication jamming
- Overcomes GPS jamming and Target Location Error
- Range of targets including land, maritime and targets of opportunity
- Multiple missions per sortie

Spice guidance kits convert 1000 lb and 2000 lb general-purpose and penetration warheads into precision stand-off strike weapons (Spice-1000 and Spice-2000).

Never-Miss Operational Scenario

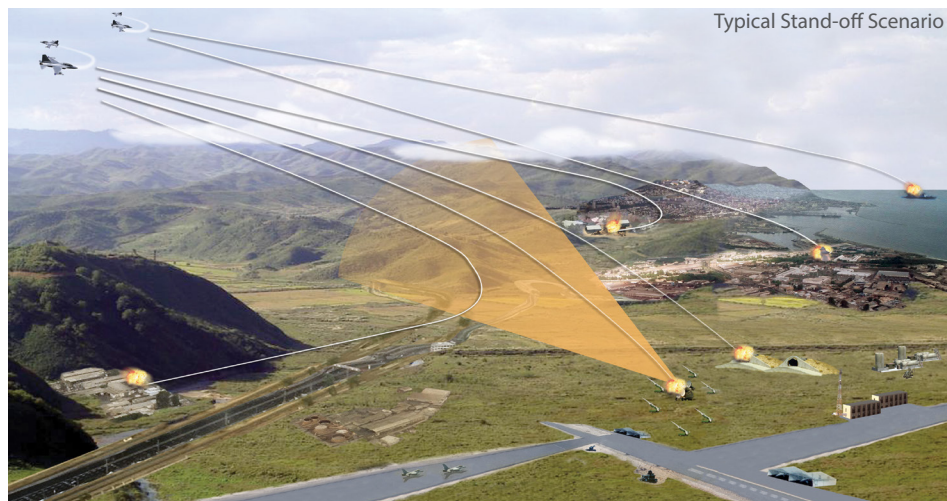
Mission planning (in the air or on the ground) uses target data (target coordinates, impact angle and azimuth, imagery and topographical data) in order to create a mission for each target. The pilot allocates a mission to each weapon before release. The weapon is released outside the threatened area and heads autonomously towards the target zone. As the weapon approaches the target, Spice's unique scene-matching algorithm compares the electro-optical image received in real-time via the weapon seeker with mission reference data stored in the weapon computer

memory and adjusts the flight path accordingly. In the homing phase, after successful completion of the scene-matching process, Spice acquires the target automatically. The weapon homes in accurately and autonomously to the exact target location in the pre-defined impact angle and azimuth.

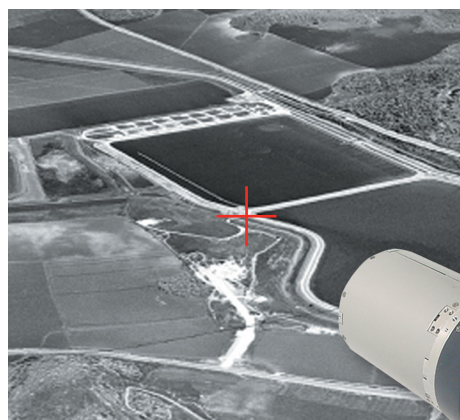
Operational Use - Weapon of Choice

Spice is combat-proven in the Israeli Air Force and is in service with leading air forces throughout the world. The system is also being considered by other international customers.

Spice is easily carried and operated from single and dual-seater fighter aircraft such as the F-15, F-16, F-18, Tornado, Mirage, Rafale Gripen and Eurofighter. Use of a common aircraft interface and sophisticated weapon software simplify the effort needed for aircraft integration.



Typical Stand-off Scenario



Mission reference image stored in weapon



Seeker real-time image

Guidance and Target Acquisition

Spice has day, night and adverse weather capabilities, based on its Advanced Electro-Optic seeker. The Automatic Target Acquisition capability is implemented by a unique scene-matching technology that is robust to scenery changes,

countermeasures, navigation errors and Target Location Errors. Spice navigates autonomously by means of INS/GPS and its seeker provides positive target identification.

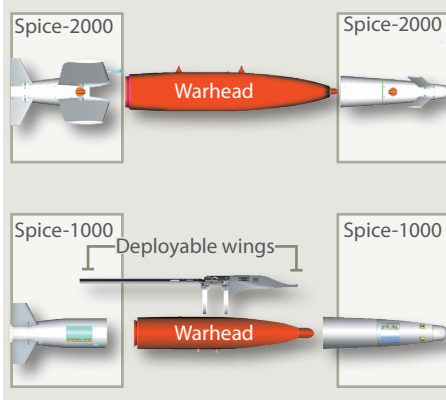
Spice Specifications

Stand-off range	Over 60 km
Warhead	1000 or 2000 lb
CEP	Less than 3 meters
Operation	Day/night and adverse weather
Target acquisition probability	95%
Number of selectable missions per weapon	100

Kit Concept

Spice-2000 consists of an add-on kit for warheads such as the MK-84, BLU-109, APW and RAP-2000.

Spice-1000 consists of an add-on kit for warheads such as the MK-83, BLU-110, I-1000 and RAP-1000. The weapon has unique deployable wings that substantially increase its range and facilitate the integration to light fighter aircraft.



Features

- Autonomous operation
- Tactical flexibility in trajectory
- Low collateral damage
- Simple mission planning
- Low life cycle cost
- Growth potential

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