Firing accuracy and speed of intervention are the main factors governing the success of an operational combat mission. Thales has developed a simple-axis aiming and firing system for Air-to-Ground weapons that is simple to install and user friendly, thereby meeting the requirements of armed helicopters equipped with axially mounted guns or rocket launchers.

**Easy to integrate**

The T100 aiming and firing head-up display is a fully analogue sighting system that is easy to install on any helicopter deploying any type of guns or rockets. The number of interfaces is kept to a minimum to speed up the integration process and reduce installation costs. The lightweight, low-volume system features a fold-away reflector to ensure pilot safety. T100 is compatible with almost every helicopter platform and is currently in operation on board many types such as Panther, Fennec, Cougar, Gazelle…

**Accurate and cost effective**

Firing with T100 aiming system dramatically increases the hit probability at any distance from the target, both on defensive and suppressive missions, improving mission success rates while reducing the cost of wasted ammunition.

**Versatile**

The T100 offers unrivalled versatility to provide the best accuracy and speed of intervention in all operational environments. The system is fully adjustable to pilot size and features automatic photosensitive and variable dimming in addition to compatibility with night vision goggles.

**Plug …**

…and Fire
**T100 HELICOPTER AIMING & FIRING HEAD-UP DISPLAY**

The T100 helicopter sighting system is built around a head-up display focused to infinity and including a sighting reticle, elevation indicator and warning indicators. The T100 comprises two LRUs:

- single-axis sight head with firing display
- control unit to determine line of sight presented by sight head

The sight head comprises:

- an optical unit to generate the aiming display and a semi-transparent mirror. The mirror can be adjusted to the height of the pilot and folded away to keep the pilot’s field of view clear when the sight head is not in use.
- an angular elevation servo enabling the pilot to set firing corrections on the control unit without losing visual contact with the target.

The sighting system is designed for optimum integration into the helicopter canopy by attachment under the windshield frame to give the pilot maximum visibility.

The control unit computes the line of sight based on:

- estimated distance to target (pilot input)
- weapon elevation input repeater (pilot control for mobile guns equipped with elevation actuators)
- two emergency warnings

**OPTICAL FEATURES**

- Simple lens vision
- Manually adjustable contrast with servo system to maintain contrast level whatever the brightness of the targeted zone
- Compatible with Night Vision Goggles
- Yellow chromatic light source

**PERFORMANCE**

- Operating elevation -10° to +7°
- Maximum slew rate 10°/s
- Aiming accuracy better than 2 mrad

**SYMBOLOGRAPHY**

- Sightig reticle
- Elevation indicators
  - x100 m for gun firing
  - x10 mrad for rocket firing
- Piloting warning indicators
  - C: torque overload
  - X: sighting system failure
  - -: radio-altimeter height warning

**PHYSICAL CHARACTERISTICS**

- Weight: 4.63 pounds (HUD) (2.1 kg)
- Weight: 2.42 pounds (control unit) (1.1 kg)
- Power supply: 28 VDC (HUD via control unit)
- Temperature:
  - 40 to 55°C continuous operation
  - 55 to 70°C for 30 min operation
  - 45 to 85°C storage
- MTBF: 5,000 hours
- Standards: AIR 7304 - AIR 2021 E MIL STD 461 B, 704 D
- I/O: - analogue (gun elevation/power)
  - discrete (distance/alarms)