



ADVANCED CENTRIC SYSTEMS B.V

Sea / Air/ Land

## ALDBK

# ADVANCED LASER DESIGNATION BOMB UPGRADE KIT



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### THE PROBLEM

Precise engagement of targets is a mandatory requirement of modern warfare in all modes of battle.

Today's armed conflicts often take place in urban environments where the targets position themselves behind the cover provided by uninvolved parties (noncombatants – civilians).

Consequently, targets must be engaged by high-precision weapons using pinpoint 'surgical' methods so as to avoid collateral damage to uninvolved parties and to property.

## THE SOLUTION

ACS presents ALDBUK – Advanced Laser Designation Bomb Upgrade Kit.

ALDBUK converts standard US General Purpose (GP) bombs and various other bomb types into Precision-Guided Munitions through the addition of a guidance section and a tail section.

ALDBUK offers an effective solution for the accurate engagement of such targets as fortified positions, entrenched vehicles, moving and maneuvering targets, urban targets and personnel where the use of so-called ‘statistical’ fire would prove impractical, ineffective, excessive or unethical.

ALDBUK provides the user with a stand-off launching capability, pinpoint accuracy, effective penetration of hardened targets, enhanced lethality and minimum collateral damage.

ALDBUK enables the user to employ fewer munitions (and fly fewer sorties) in order to effectively engage the intended targets, thereby enhancing aircrew survivability.

ALDBUK is the cost-effective alternative to the acquisition of costly, dedicated Laser-guided munitions.

According to the operational procedure, a ground, airborne or heliborne designator unit acquires the target and illuminates it using a Laser designator. The designator unit coordinates the actual launch with the pilot of the launching aircraft and the munition is delivered subject to said coordination. Finally, the munition seeker acquires the Laser spot on the target and homes onto it.

ALDBUK offers a precise, lethal, survivability-enhancing and cost-effective solution for the engagement of high-value targets on the modern battlefield.

## KEY FEATURES & MAJOR ADVANTAGES

### Features & Advantages

- Laser designation upgrade kit converts general purpose bombs into Precision-Guided Munitions (PGMs)
- The cost-effective alternative to dedicated Laser-guided weapons
- Kit consists of a guidance section and a tail section (fins)
- Compatible with standard US General Purpose bombs such as Mk-82, Mk-83, and Mk-84 as well as with other bomb types
- Extended launch envelope
- Stand-off range – enhances aircraft survivability
- Pinpoint accuracy
- Excellent penetration
- Enhanced lethality, high kill probability
- Minimum collateral damage
- Effective engagement of intended targets using fewer munitions and fewer sorties
- Selectable trajectory (steep, ballistic, shallow or extended range) to fit impact angle (e.g. horizontal or vertical surface) and operational circumstances
- Converted munitions may be carried by most fighter aircraft as well as by some advanced jet trainers
- Simple to operate & maintain – no aircraft modifications required
- Dual guidance capability (GPS guidance may be used in adverse weather)
- Typical targets:
  - Urban targets (specific doors & windows, ventilation shafts, etc.)
  - Moving & maneuvering targets (naval vessels, vehicles, etc.)
  - Entrenched armored vehicles
  - Airbase runways
  - Underground aircraft pens
  - Bridges
  - Power stations
  - Bunkers & fortifications
- Laser coding advantages:
  - Immunity to ECM
  - The option to engage more than one target in the same area at the same time
  - Programmable to user's specifications
- Seeker characteristics
  - Angular coverage: 86° cone
  - Gimbal angles: 60° cone
  - IFOV: 26° cone
  - Typical acquisition range: 4-8km