ENHANCED LETHALITY & COMPACT DESIGN
40 CTAS
CASED
TELESCOPED
ARMAMENT
SYSTEM
COMPANY
CTA International (CTAI) is a 50/50 Joint Venture Company founded in 1994 between BAE Systems and NEXTER Systems. The company comprises more than 80 British and French Engineers and Support staff and is dedicated to Research & Development, Manufacture, Support and Sale of 40 CT weapon Systems.

EXPERTISE AND UNIQUE EXPERIENCE
CTAI has developed a revolutionary medium-calibre weapon system. The 40 mm Cased Telescoped Armament System (40 CTAS) providing a paradigm shift in terms of use, logistics and ease of integration into armoured vehicles for either new build or systems upgrades. CTAI continues to develop the CTAS, including the integration of complex firing functions and the design of new and unrivaled ammunition that will defeat current and emerging threats.

SYSTEM MATURITY
The CT Cannon and Ammunition suite has been jointly qualified by both the British and French governments. This qualification programme is aligned with the schedule and performance requirements of the French JAGUAR Armoured Reconnaissance Vehicle programme, the British AJAX and WARRIOR Capability Sustainment Programmes. CTAI is in full-scale series production for these contracts, to deliver over 800 systems. CTAI continues to expand its CT Product portfolio and is currently developing Anti-Aerial and naval variants.
The 40 CTAS is primary aim is to equip armoured and reconnaissance vehicles in order to provide them with enhanced lethality and superior fire power over any other Medium-Calibre system.

KEYS COMPONENTS OF THE CTAS

- **40 CT Cannon (40 CTC)**
  40 mm Cannon equipped with optional thermal sleeve.

- **Ammunition Handling System (AHS)**
  Automatically manages the nature of ammunition to be fed into the Cannon to achieve the desired effect. The external shape of the AHS can be adapted to the space available in the turret and can be loaded under armour.

- **Gun Controller (CTAS-C)**
  The CTAS-C is modular in design and construction. It controls the cannon and the AHS. It also incorporates the control of the weapon azimuth and elevation along with the ballistic calculation, coincidence control and the programming of the Airburst rounds (GPR-AB-T and KE-AB).

- **Gun Control Equipment (GCE)**
  Provides full azimuth and elevation stabilisation when firing on the move. The GCE includes the elevation and azimuth drive motors, encoders, gyroscopes, accelerometers and electronic control unit.

- **Gun Mount**
  Designed specifically to support the CTC integration into each turret application.

- **Suite of Ammunition**
  - APFSDS-T
  - TP-T
  - GPR-KE-T
  - GPR-PD-T
  - GPR-AB-T
  - KE-AB
• Ease of integration
Along with increased fire power the 40 CTC and its associated small footprint ensures easy turret integration (both manned and unmanned), increasing crew protection and workspace, whilst reducing the turret size and weight.

• Multi-role “rapid effect” performance
The 40 CTC uses multiple natures of ammunition within the same ammunition handling system at the same time, giving the End User the capability of first round response and to quickly engage threats across the modern battlefield spectrum including those within urban environments and UAS.

• High Elevation
The CT-cannon design reduces intrusion into the turret allowing for increased swept-angle which in turn offers greater elevation of the gun. This provides advantages in urban or mountainous environments or for counter UAS effect.

40 CTAS allows for lower-profile turret designs, offering reduced vehicle silhouette and increased survivability

40 CT AS up to 4x more effective than a 30mm weapon

CHARACTERISTICS

WEIGHT
Total : 340 kg / 750 lb
Recoiling mass : 230 kg / 507 lb

OVERALL DIMENSIONS
L3428 mm x W311 mm x H264 mm
L3 ft x W12 in x H11 in

RIFLED BARREL LENGTH
2.80 (70 Calibres)

RATE OF FIRE
Nominal up to 200 rds / min

RECOIL FORCE
Nominal 110 kN

RECOIL STROKE
Nominal 42 mm / 1.6 in

FI RING MODES
Single shot mode, Burst mode and Coincidence mode

ELEVATION
From -10° to +45°
(can be extended to +75°)
The Armour Piercing Fin Stabilised Discarding Sabot - Tracer (APFSDS-T) is able to penetrate more than 140 mm of RHA (Rolled Homogeneous Armour) at 1500 m.

This sub-calibre dart can defeat all light armoured vehicles and infantry fighting vehicles, including those heavily protected with advanced add-on armour.

**APFSDS-T**

**ARMOUR PIERCING FIN STABILISED DISCARDING SABOT - TRACER**

**CHARACTERISTICS**

- **DIMENSIONS**: 65 x 255 mm / 2.5 x 10 in
- **AMMUNITION MASS**: 1900 g / 4.19 lb
- **PROJECTILE MASS**: 550 g / 1.21 lb
- **INITIAL VELOCITY**: >1500 m/s / > 4900+ ft/s
- **ACCURACY**: 0.3 mil
- **PENETRATION**: 140 mm RHA at 1500 m
  - 5.5+ in RHA at 4900+ ft
- **EFFECTIVE RANGE**: >2500 m / > 8200+ ft
With a low cost, inert projectile with high initial velocity and weight, the Full Calibre KE round is specifically designed to economically engage light armoured vehicles and non-coherent structures such as bunkers, mud walls and thick concrete.

The Target Practice - Tracer (TP-T) is a training munition, lightweight projectile with a reduced quantity of propellant to provide a low cost training solution with reduced range capacity.

The TP-T has a ballistic trajectory similar to that of the GPR-PD-T and GPR-AB-T rounds up to 1500 m.

The projectile is designed to limit the range to less than 6500 m allowing training in areas with a reduced safety trace.
### GPR-PD-T

**GENERAL PURPOSE ROUND - POINT DETONATING - TRACER**

The General Purpose Round Point Detonating - Tracer (GPR-PD-T) is a high explosive munition capable of penetrating more than 210 mm of double reinforced concrete. The unique projectile is optimised for fragmentation effects.

The high “behind protection” effects of this munition deliver effective suppression of threats in urban structures and lightly armoured vehicles.

<table>
<thead>
<tr>
<th>CHARACTERISTICS</th>
<th>DIMENSIONS</th>
<th>65 x 255 mm / 2.5 x 10 in</th>
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<tbody>
<tr>
<td>AMMUNITION MASS</td>
<td>2400 g / 5.29 lb</td>
<td></td>
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<tr>
<td>PROJECTILE MASS</td>
<td>980 g / 2.16 lb</td>
<td></td>
</tr>
<tr>
<td>INITIAL VELOCITY</td>
<td>1000 m/s / 3280+ ft/s</td>
<td></td>
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<tr>
<td>ACCURACY</td>
<td>0.5 mil</td>
<td></td>
</tr>
<tr>
<td>PERFORATION</td>
<td>&gt; 210 mm concrete at 1000 m</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt; 8.3 in concrete at 3280+ ft</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt; 15 mm RHA at 1000 m</td>
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</tr>
<tr>
<td></td>
<td>&gt; 0.5 in RHA at 3280+ ft</td>
<td></td>
</tr>
<tr>
<td>EFFECTIVE RANGE</td>
<td>2500 m</td>
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<td></td>
<td>8200+ ft</td>
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### GPR-AB-T

**GENERAL PURPOSE ROUND - AIRBURST - TRACER**

The GPR-AB-T is a programmable high explosive munition delivering an “Airburst” detonation of the HE shell above the target at 2500 m.

The specific projectile is optimised for fragmentation effects, resulting in a large area coverage of 125 m² on the ground or behind protective barriers and offers the ability to neutralise vehicle optical systems.

The GPR-AB-T can also operate in Point Detonating mode and has the same capability as the GPR-PD against reinforce concrete targets and light structures.

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<tr>
<td>ACCURACY</td>
<td>0.5 mil</td>
<td></td>
</tr>
<tr>
<td>PERFORATION</td>
<td>&gt; 210 mm concrete at 1000 m</td>
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<tr>
<td></td>
<td>8200+ ft</td>
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</tr>
<tr>
<td>LETHALITY AREA</td>
<td>&gt; 125 m² / 1345+ sq ft</td>
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</table>
With an increased operational range, very high accuracy and significant payload of tungsten pellets, the KE-AB round provides the 40 CTAS Weapon System with a highly effective anti-aerial capability reducing the number of rounds for an effective target kill.

KE-AB delivers a greater airburst mean-area-of-effect which increases the probability of first round effect and mitigates the impact of others system targeting inaccuracies.

The KE-AB ammunition is particularly effective against Unmanned Aerial Vehicles (UAV), swarming drones, UAS helicopters and low speed aircraft as well as other land domain applications.

**CHARACTERISTICS**

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<tr>
<td>AMMUNITION MASS</td>
<td>2820 g / 6.22 lb</td>
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<tr>
<td>PROJECTILE MASS</td>
<td>1400 g / 3.09 lb</td>
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<tr>
<td>INITIAL VELOCITY</td>
<td>900 m/s / 2900+ ft/s</td>
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<tr>
<td>ACCURACY</td>
<td>0.5 mil</td>
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<tr>
<td>MAXIMUM EFFECTIVE RANGE</td>
<td>4000 m / 2.50 mi</td>
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A JOINT VENTURE COMPANY

Bae Systems

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A Company of

KnDS

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