



AL EFAH'S EOD/IEDD SOLUTIONS



Tools and equipment developed by EOD & IEDD trained Engineers.

Safety, Quality and reliability delivered at affordable pricing.

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DISPOSAL & RSP KITS



EAD-20 Recoilless De-Armer Disruptor



EAD-20S is a recoilless Disruptor designed for disrupting the IEDs with a high probability of avoiding detonation. It answers for requirement of a medium powered and accurate disruptor. The disruptor can be employed with a multitude of support arrangements like its stand or on a EOD robot mount. The disruptor design pays special attention to simplicity safety and speed. Recoilless operation is achieved by ejecting water load rearward at the same time as the forward load.



EAD-20S breech has a safety pin to keep the terminals short and cartridge gets connected just when it has been deployed. This enables minimum time at IED ensuring speedy yet safe deployment. The disrupter can be provided with standard 0.5 inch or 20mm cartridge.

Item	Specifications	Item	Specifications
Length assembled	525 mm	Width (with Recoil Body)	150 mm
Filled Water qty	210 cc	Bore diameter	20 mm
Danger area forward	140 m	Danger area rear	30 m
Minimum height with stand	0.5 meters	Weight with stand	8.5 kg
Cartridge type	0.5 inch / 20 mm	Weight	4.9 kg
Maximum attack height	1.3 mtr (stand height 1.1 mtr)	Recoil system	98% recoilless
Movement on stand (azimuth)	360°	Movement on stand (elevation)	180°
Standard accessories	Packing & carrying box, Tripod stand, Removable Cleaning Brush, Push rod, Spanner Tube, Dual pin wrench, Water bottle, Allen key, Recoil sleeve head, Recoil sleeve.		
Optional Accessories	Tough polypropylene case, Laser aiming head, Laser camera, Robot Mount, Accessories to make De-armour- Thread protector, Steel Slug (A)/Steel chisel, Steel Slug (B)/ Steel blunt, Steel Slug (C) or Cutting Fork, Loading sleeve, Special slugs can be made on customer's requirement.		
Ignition voltage	Works with commercial exploders/ blasting machines.		
Composition	Specially treated Stainless Steel alloy and Aluminum alloy recoil body.		

EAD-20S is ideally suited for installation on Robots due its superb recoilless feature. If the mounting details of the robot are provided. An installation adapter can be provided.





EAD-50 Recoilless Disruptor De-armor



EAD-50 is a multi-barrel recoilless system to disable the IED as well as to render safe the UXO. It can attack from a close distance of up to 30 meters. The system is modular with multiple configurations. Options are offered for an integrated wireless initiation system as well as with different aids to aim the targeted area.

Key Features

- *Water, Solid Slugs or Frangible Slugs can be discharged.*
- *Multi Barrel system with spin stabilised rifled Projectiles.*
- *Integrated Wireless initiation system option.*
- *One power cartridge for all situations due adjustable recoil compensation.*
- *Day/ Night sight and laser pointers on standard Picatinny rail.*
- *Multiple safeties of handling when cartridge is installed.*
- *Stable Tripod and Multiple multi-position stand options.*
- *Stainless Steel / Aluminium/ Carbon fiber design options.*

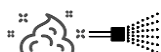


Multi Barrel – Diverse Projectile System



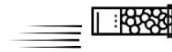
Choke barrel

Fires Fluids & Very close
Taper Bore



40 mm Muzzled Barrel

Fires Frangible & Standoff
Smooth Bore or rifled



25.4 mm Barrel

Fires Solids & Targeted
Smooth Bore



Powered by electrical 0.5-inch cartridge; EAD-50's is a modular system with multi Barrel/ Multiple projectiles provide solutions in diverse situations. In its disruptor's mode it can be configured to fire frangible or fluid projectiles and in De armer mode; it can fire different solid projectiles to attack the area of interest of the UXO or pipe bomb. The disruptor cancels its recoil by also ejecting water rearward. The rearward ejection design has very insignificant effect on the surroundings.

Item	Specifications
Disruptor with 40 mm barrel	4 Kg
Disruptor with Choke barrel	3.6 Kg
Multi-position stand with mounting block	4.6 kg
Tripod stand with Floating head	Less than 1 Kg
Length with muzzle	550 mm
Length with choke	485 mm
Overall diameter across recoil body	76 mm
Breech Assembly	Separate Breech for Leaded and Non-leaded cartridges



Accessories Recoilless Disruptors

End Caps

Penetrator Cap not only seals the water but with its metallic tip achieves a entry hole in metallic walled IEDs



Closure Cap seals water inside the barrel when attaching soft targets.



Annular Closure Cap seal the water from capture gate



Pistons

HDPE Piston Annular is designed to hold water just at the gas side in the Compensator.



Elastomer Projectile have higher density with and without Penetrator are designed for close attack



Polyethylene 40 mm Piston holds the water or fluid



Solid Slugs

One inch barrel is provided to fire solid and fork slugs to perform as De-armor function



Blunt Slug

Blunt ended steel projectile, fitted with an 'O' Ring, used in conjunction with 1 inch barrel to attack UXB fuse



Chisel Slug

Chisel end shaped projectile is used with 1 inch barrel for cutting action.



Blade Slug

Blade slug is designed to cut in two half like the pipe bomb.



Fork Slug

Fork



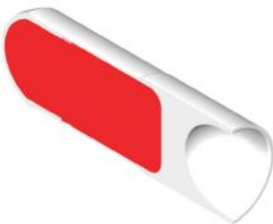
Rifled barrel slugs



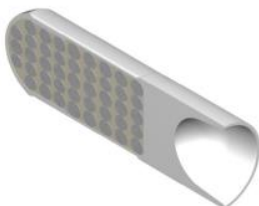
Plain Slug. The plain slug is to be a 200g projectile comprising a one-inch steel Plain Slug mounted upon a HDPE piston/carrier. It is fired through the rifled barrel. Typical target will be UXB fuses. Typical stand-off – 0.20 to 30m and beyond is intended.



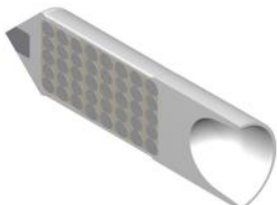
Frangible Clay Slug This is to be one-piece piston-carrier projectile. filled with refined china clay fired through the rifled barrel for long stand-off shots out to 30 meters and beyond. It could also be used for punching through car doors and windows to hit an IED on the inside of the vehicle. A Stand-off – 0.20 to 30m and beyond is intended.



Frangible Ceramic Slug. This is to be a projectile comprising an HDPE one-piece piston-carrier filled with alumina balls and powder. The projectile is to be designed to be used against IEDs with heavier metal enclosures. It could also be used to punch through vehicle doors and other panels to take out an IED inside the vehicle. A Stand-off of – 0.20 to 30m and beyond is intended.



Frangible Ceramic Slug with Penetrator. This is to be 200g projectile and has a feature of penetrator cone. This version of the Projectile is to be designed for punching into heavy metal enclosures such as LP gas containers, pressurised drinks and heavy fire extinguishers etc. Also, for punching through vehicle doors to take out, for example an IED in a metal container inside the vehicle.

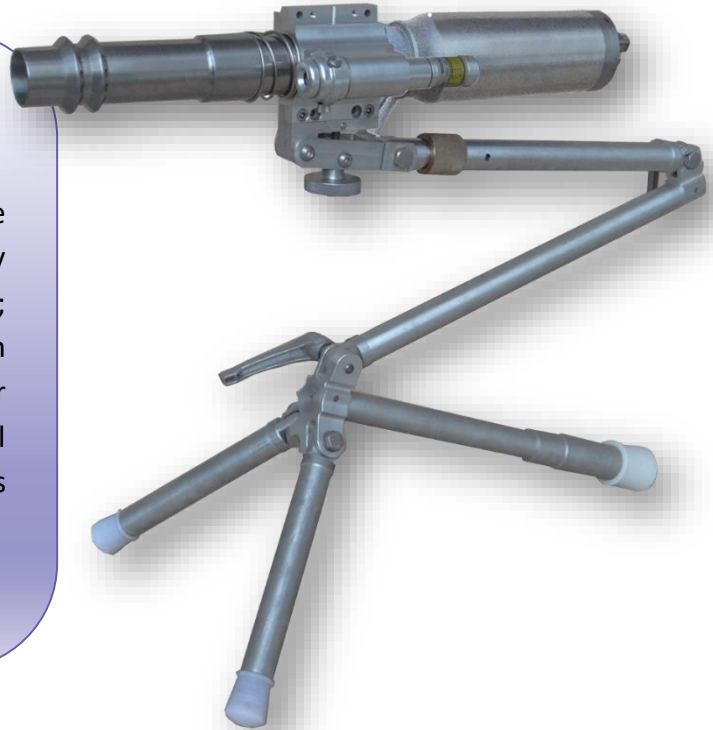




Upgrade Options

EAD-50SS A Stainless Steel Disruptor

Conventional multiple barrel disruptors are of ferrous steel. As water is filled in, they may have potential rusting issues. Whereas; we have developed expertise on High strength Stainless Steel metallurgy for different disruptors and offer to provide all **Stainless Steel metallurgy** for EAD-50 in its upgraded version as EAD-50SS.



Tripod Kit With Floating head & Picatinny Rail Clamping



Picatinny

For a rapid deployment OF disruptor at IED, it is mounted on a smooth pan / tilt floating head. Setting up the disruptor on Tripod is very easy as the system uses Picatinny Rail Clamps. Anodized aluminum or Carbon fiber construction has weight of less than 1 kg and height to 4 feet. Legs are one push clamps to fit uneven surfaces. When initiation is with our RF device, operator takes less than 30 seconds at the IED

30 Sec



RF Initiation System

Integration of RF initiation system with the disruptor provides flexibility and speed of IEDD operation. The EOD operator gets relieved to carry the demolition wire to the IED. Our Wireless Initiation system RDS-6722 is provided with mounting & fittings to be installed on Disruptor's standard mount or the system can be installed with International Picatinny rail mount standard.



Quick clip-on

The RF system is offered with single as well as with dual output firing port for single or dual disruptor attack.



SL-6722A – With single firing port

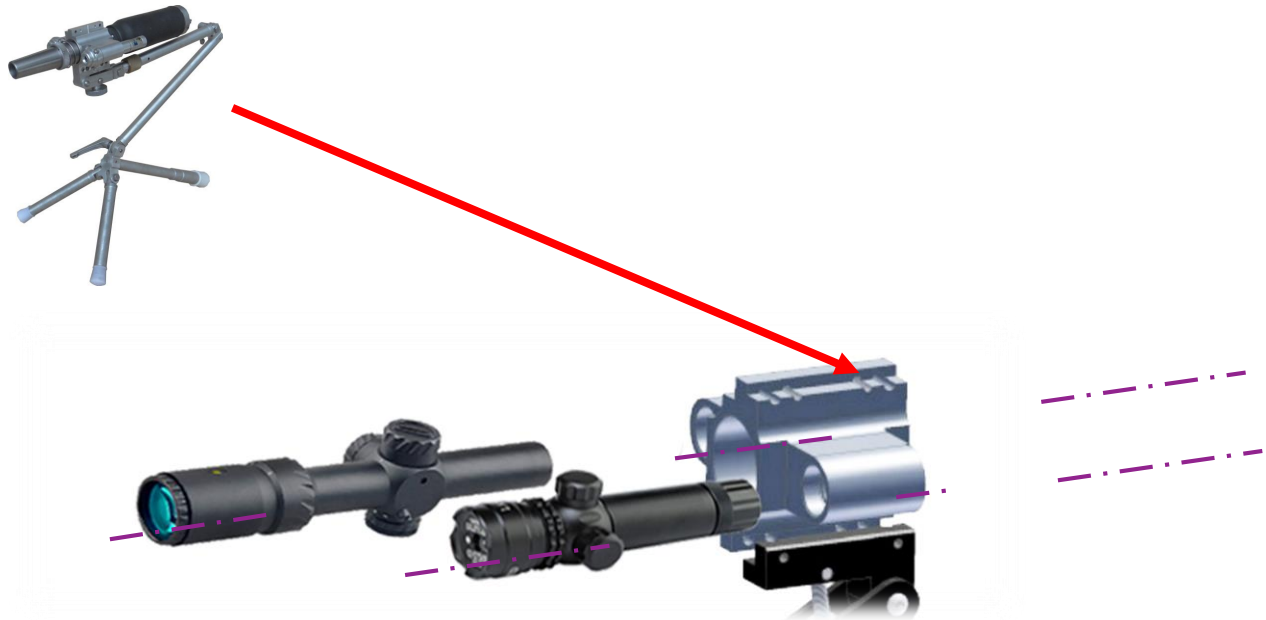


SL-6722B – With Dual firing port



Aiming Aids options

Laser & Sight



One mounting with the multi-position stand has provision of 2 x laser OR 1 x laser + 1 x telescopic sight. Additional mounting can also be installed. The Laser sight has a strong shock resistance body and Superior optical glass and has provision for sideway and elevation adjustments.

Specifications

Maximum Power	5mw	Weight	5 oz (146g)
Laser Color	Green laser sight	Body Color	Black
Wavelength	532 nm	Power	1 x CR123A battery
Tube Diameter	26 mm	Laser Class	3R
Length	121 mm	Range	300~500m
Material	Aluminium alloy		

Additional mounting Options





Picatinny rail mounting



Range Finder

With 225 grams of weight, it is a handy tool for decision making at the incident control point as well at the IED. Can be installed on the rails of the disruptor. Can measure upto 700 meters and displays on illuminant OLED screen.

Laser sight

Two laser sights are installed on either sides of the disruptor mount on Picatinny rail for a quick identification of the targeted area of the disruptor.



LED Flashlight with Laser sight

Quick release mounting of a laser sight and flashlight. Flashlight / laser sight can be operated together as well as independently. Black solid ABS body. Operate with 2 x CR123 battery.

Multi-function 3-10x42 Rifle scope

In this all in one solution we have a laser sight, Optical scope and a red dot sight. It can easily be installed and removed from the Picatinny rail. You can add in more accessories on this unit to add in more features.



Day & Night LCD sight

Aiming the target on disruptor mounted riflescope can be aided with a vision kit and LCD. During the night a waterproof 850nm Infrared LED illumination gives good vision for 350 Meters. Camera provides a sharp and clear image both during day also. Easily switch between day (Color) and night mode (IR monochrome).



Laser Range Finder J-3000



The J-300 Laser range finder is a tough product made with high-density pumped PC+ABS materials. It is a sturdy and sealed design to IP54 protection level. It has 800mAH rechargeable lithium battery for long working time. The lens is coated with multi-layer high-definition transparent film for a clear vision.

Key features

- **Maximum Measuring Number: 10000 times**
- **Dust and Splash Protection: IP54**
- **Power Supply: USB lithium battery direct charge**
- **Measuring Range: 6-3000 meters**
- **Laser Class: I class of human eye safety laser**
- **Measurement Accuracy: 0.5 meters**
- **Working Environment: Outdoor**



Specifications

Measuring Range	Up to 3000 (m)
Ranging Error	$\pm 0.3\text{m}$ (<100M); $\pm 1\text{m}$ (>400M)
Magnification	6X
Field of View	7.5°
Diopter	$\pm 3^\circ$
Exit Pupil Diameter	3.7 mm
Objective Lens Size	22 mm
Eyepiece Size	16 mm
Measuring Range of Speed	20-300 km/h
Diopter Adjustment	Eyepiece adjustment
Side Angle Range	-60°~60°
Automatic Shut-down	No operation for 8 seconds
Power Supply	Built-in lithium battery 3.7v/800mAH
Display	LCD
Operating Temperature	-10° - 50° C
Weight	168 g (without battery and the accessories)
Size	118mm x 75mm x40mm



Recoiling Water Disruptors EAD-26 and EAD-40



EAD-26 and EAD-40 are disruptors with recoil and are designed as a means of disrupting IEDs. There is a high probability of avoiding a detonation or explosion of an IED on its deployment. These are light weight and medium caliber disruptors capable of being fired remotely. The complete disruptor is constructed with high strength stainless steel. The complete disruptor with its stand and accessories are supplied in a strong Cardura outer pack with carrying straps.



Breech with safety pin. Disruptor breech is upgraded from the older Pigstick version that it has a safety pin to keep the terminals short and cartridge is connected just when it has been deployed. This enables a bomb technician to set up the disruptor at the incident control point and spending minimum time at IED.



Injector Barrel

Injector barrels with fluid capacity of 0.1/0.2 liters (260- 485 mm length) can be supplied. Barrels are specially treated to have a long life. Barrel length can be changed on customer requirement.

Stand

The stand is multi position with counter weight. The hinges contain friction washers and spring loaded nylon insert to receive the barrel. The disruptor can be deployed to heights of more than 1050 mm.

Kit complete



	EAD-26	EAD-40
Nominal Bore Diameter	26.5 mm	40 mm
Disruptor Overall Length	485 mm	465 mm
Complete Kit Weight	4 Kg	5.5 kg
Disruptor Complete Weight	2.9Kg	3.5 kg
Pigstick Adjustable Stand	7 Kg	7 Kg
Water filling capacity	100 ml	200 ml
Kit components	1 x Barrel 1 x Breech module, 1 x Water Bottle, 2 x safety pins, 1 x Small Arms cleaning Brush, 1 x Screw Driver, 1 x Tool Loading Injector, 2 x Ln Key, 1 x Adapter, , 2 x Cleaning Brush Wool, 2 x Safety pin, 1 x Cleaning brush steel, 1 x Transit case fabric, 1 x Cleaning Brush Nylon, 1 x Multi position Stand, 1 x Rod for cleaning brush	



EAD-10 Bottle Jet Disruptor



EAD-10 is a low cost invention for safe and quick disablment of IEDs. It is a plastic container for fitting a sheet explosive shaped to form a slug when detonated. The sheet explosive is adjustable to control the shape and velocity of the fluid projectile. The projectile is aimed towards the IED using a general chevron-shape configuration. This system can disable specific portions of the IED from a safe distance with a focused projectile that has enough energy to penetrate rigid enclosures.

Size options

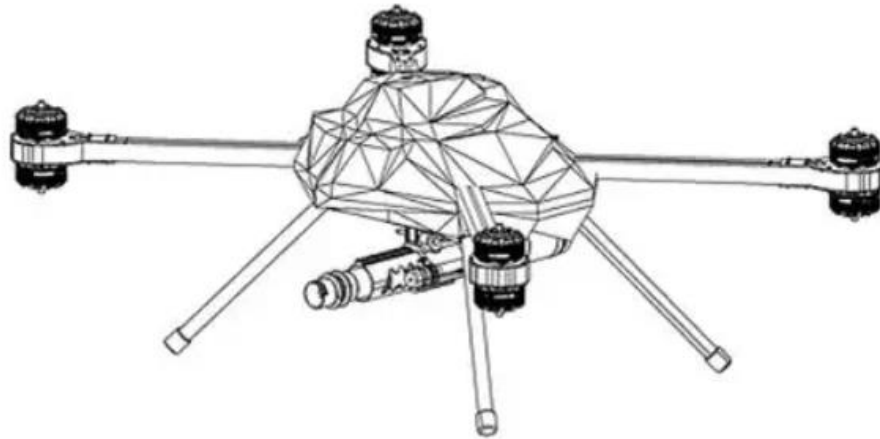
- 1 Ltr
- 1.5 liters
- 2 Liters

Items

Wide mouth Plastic container	Container lid with alignment handle
Sheet explosives V-backing	Detonator guide / holder
Wire / shock tube security knob	Grommet

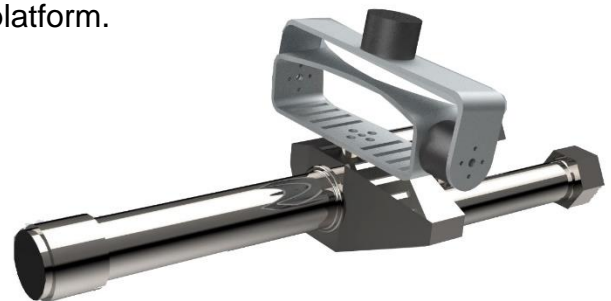


Multi mount Drone for small payload EAD-30



We offer handling improvised explosive devices (IEDs) with the aim of minimizing the hazards faced by bomb disposal professionals. The Drone Disruptor EAD-30 integrates EAD-50 and EAD-20 recoilless disruptors. The EAD-20 eliminates the Center of gravity issues which occur in other disruptors after firing. The platform also has potential for use in humanitarian situations, such as post-conflict zones and disaster areas.

The drone's control systems respond very fast to changes in attitude and the aiming is aided by a laser pointer and stabilization of the platform.



Weight Carry capability	20 Kg total with filled Disruptor, Camera and control electronics, Range finder
Endurance time	30 minutes
Hand controller range	1.5 Km (5 KM LOS)
Features Electronic speed controller, Stabilized platform, Brushless motors, Capacity batteries, 4K cameras, Aiming aids.	

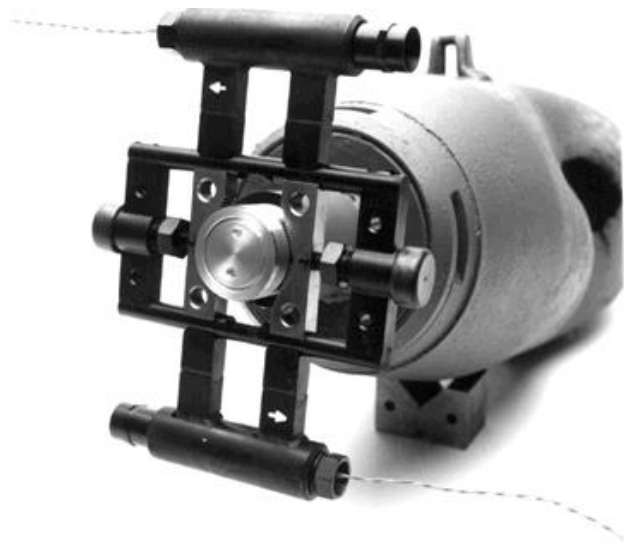


Fuse Render Safe Tools

In EOD avoiding detonation of unexploded bombs is the prime objective. Render Safe Procedures are adopted for which different tools are available for breaking the detonation train by attaching the bomb fuze.

Rocket Wrench EMD-01

Bomb Fuse extractor 'Rocket Wrench' AME-01 is a high torque, remotely operated dynamic wrench. It is designed to unscrew and remove bomb fuze mechanisms. Two rocket tubes with cartridges fired in opposite directions, when initiated, rotate the wrench. Different jaws are provided to hold the wrench firmly onto different fuze shapes.



Components

- *Wrench with pair of Rocket Tube and Venturies.*
- *Taper Jaws/ Roller Jaws.*
- *Electrical and Det-Cord Plugs.*
- *Bungee Cord Set.*
- *De-bulleting kit*
- *Packing box*

When fired, a bungee cord tied to a stump pulls the rotating wrench away from the bomb body. The Rocket Wrench kit can also be powered using 0.50 inch cartridges by removing its bullet. De-bulleting equipment is also supplied with the kit. It can generate torque in both clockwise and anti-clockwise directions.



Fuse Extractor EMD-03



The Fuse Extractor No 8 Mk3 is an EOD tool designed for manually removing a range of nose and tail fuses particularly in situations where a collateral hazard makes it unsafe to use a Rocket Wrench. With the optional Side Pocket Fuse Adapter Kit this specialist tool can be used to unscrew certain side pocket fuses. With nose and tail fuses the Fuse Extractor is clamped around the fuse. Then, from 100 meters a repetitive torque action can be applied to unscrew and remove the fuse. Certain side pocket fuses can be removed using the Side Pocket Fuse Adapter Kit.

Kit Includes:

- ***100m Braided Stainless Steel Cable or Dyneema high tech cord, on Aluminium Drum***
- ***Return Spring Assembly***
- ***Clamping Assembly with Rotating Hammer Plate all in aluminium and stainless steel***
- ***Spare Roller Jaws, Spares, Fairleads and Tools***
- ***Peli Transit Case with Hard Foam Inserts***
- ***Optional Side Pocket Fuze adapter Kit comprising Brass Adapter Assembly and 4 + 2 Spigot Plates***

Weights & Dimensions:

- ***Overall weight of kit in transit case: 17kg***
- ***Weight & Dimensions of Peli 1510 Transit Case: 559 x 351 x 229mm***



Fuze Projector (De-armor) EMD-02

Fuze projector or a De-armor deal with the fuzes of UXOs for breaking its detonation train. De-armor has specially designed barrel, with slugs to be fired by a cartridge. De-armors disrupt fuses with cocked strikers. Electric 0.5" cartridges or de-bulleted 0.5" rounds are used in it. A fork can be used for a lower velocity attack on some specific fuses. This tool can also be used against Improvised Explosive Devices (IED's) also with special shot load.





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