

FIRE COVER

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ATENTA TOYOTA HI-LUX 6 X 6 RIV

On the front cover, and here, we showcase an impressive Rapid Intervention Vehicle (RIV) built on the Toyota HI-LUX 6x6 platform by Atenta who are based in the Czech Republic.

Designed for extinguishing electric cars, its advantage is the ability of deployment on rough terrain or into areas with limited height down to 190cm (75 inches).

The key equipment carried on this RIV includes Cobra 'Coldcut' high-pressure firefighting system, enabling fast and efficient extinguishing of traction batteries, through Atenta's unique extinguishing method and added special extinguishing medium.

At the end of the 80-metre hosereel is a new type of the lightweight hand lance with the ability to regulate the flow from the jet to a wide cone. The hosereel is mounted on a pull-out tray at the rear of the vehicle body. Due to the high efficiency of the pump and extinguishing medium, it is possible to use the vehicle for a wide range of interventions by fire brigades. This project is the result of many years of our development in the field of modern fire fighting vehicles based on the partnership and cooperation with the General Directorate of the Fire and Rescue Service of the Czech Republic.

The vehicle is also equipped with a first aid kit and rescue set, as well as an integrated tablet with FireTruck Control software and hydraulic power-take-off for the pump. The additional equipment for the vehicle can include Holmatro cordless rescue tools, over-pressure ventilation, gas detection technology, front fixed FLIR infrared camera and portable radios.

It is also equipped with a combined conservation socket for recharging rechargeable batteries.

The bodies external LED lighting is recessed into the side drips and into the rear wall of the purpose-built body.

The equipment lockers are illuminated by LED lights located along the entire width of the shutters.

The LED warning lights include full width roof mounted flasher bar, front vehicle grill flashers, top mounted 'quarter flashers' on the rear of the equipment body and a flasher strip over the top of the rear locker.

The purpose-built equipment body is made of light metal alloy sheets and profiles assembled using the technologies of prismatic screwed joints and gluing. The interior of the equipment body is complemented by laminate sheeting. The aluminum roller shutters have continuous handles across the entire width of the shutters.

Extendable and adjustable brackets in the body are provided in the equipment body and the rear hosereel is mounted on a slide out tray to increase ease of access.

The polypropylene water tank has a capacity of 600 litres, but a 1,000 litre option is available.

The front mounted electric winch has a pulling force of 15 kilo newtons.

All the walking platforms are non-slip.

Liveries and conspicuity markings can be applied to the customer's requirements

The crew cabin is equipped with connection points for the vehicle's analogue radio, as well as an integrated two USB and two CL sockets for connecting tablet charging, mobile phones, etc.

Part of the storage space in the crew cabin is for storing PET plastic 1.5L bottles with drinking water, essential for rehydration of the crew at incidents.

The technical specification is as followed:

Height 1,857 mm, width 1,982 mm and length 6,309 mm.

Gross weight 5,610 kg with a payload of 3,000 kg.

Livery colour, RAL 3020 / 3024.

Tilt transition angle 29 degrees, front approach angle 31 degrees and rear approach angle 33 degrees.

Chassis description: Toyota HI-LUX 6X6, engine 2.8D or 4D 204 HP, with transmission automatic six speed gearbox, a manual gearbox option being available, pneumatic suspension, air automatic conditioning, central remote locking, electric windows and reversing camera.

FRSLINKS4U-'bitesize'

A video of this vehicle can be viewed at:

<https://www.youtube.com/watch?v=Sm6xa12Kpjl>

ATENTA s.r.o - The Company

Based in Lučany nad Nisou 568, 468 71 Lučany nad Nisou, Czech Republic, Atenta was established to provide specialized services in the field of innovative fire extinguishing systems.

The team has some 25 years of experience in the field of fire protection and security systems.

The company works closely with partners in the European and global markets to develop new technologies for extinguishing electric cars and large-scale fires. One of their main products on the market is the 'STAN TRAP' foaming agent for low, medium and high expansion foam, according to EN 1568-1-2-3: 2018, which is specially effective for extinguishing traction batteries fires. Behind this product are many years of research and development and many years of experience in firefighting. This product is also environmentally friendly.

Atenta's partners on this project are; Cold Cut Systems AB, Sweden; Kobrat s.r.o, Czech Republic (Cold Cut Systems agent); Kobit, spol.s.r.o, Czech Republic (a company formed in 1992 engaged in the development and production of vehicle based machines) and DAJBBYCH, s.r.o, Czech Republic (Toyota agents).

Innovative Equipment For Extinguishing Of Fires

The RIV featured was designed for extinguishing electric car fires, particularly in confined car parking, and as part of regime developed by Atenta using 'STAN TRAP' (Water C. David) expansion foam.

On arrival at an incident the regime for tackling fires involving electric cars is as follows; tackle any fire peripheral around the drive battery; cut into casing containing the drive battery; apply fire fighting agent; monitor reduction of battery temperature whilst applying fire fighting agent and following to prevent re-ignition; tow vehicle with front winch out of confined space and load into specially constructed 'roll-on, roll-off' pod for containment of electric cars involved in fire.

FRSLINKS4U-'bitesize'

An Atenta video on the process for tackling electric car fires, especially in confined areas, can be viewed at: <https://www.youtube.com/watch?v=3VS42LLegvc&t=9s>

Acknowledgements: The Editorial Team thanks Atenta s.r.o. for their full cooperation in the supply of information and all the images to allowing the compilation and publication of this feature by the Editorial Team.

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All photographs courtesy of Atenta s.r.o

ATENTA



GOLDEN OLDIES *A MIX FROM THE CAMERA OF BOB SMITH*



Photographed in Hojer fire station, Denmark, in 2016, this Land Rover Series IIA, 109 inch Light Four Wheeled Pump L4P, registration number HER T 1. The Land Rover IIA was introduced in 1961 and production ceased in mid – 1971



This 1970 Bedford TK / HCB – Angus Water Tender Escape, ALT 468 H, was on the run at The Fire Service College, Moreton in Marsh, Gloucestershire. The Bedford TK chassis was popular with many fire brigades. However, those equipped with wheeled escape ladders were relatively uncommon. The void left by the demise of Bedford Trucks in 1986 was largely filled by the Volvo FL6 chassis, the subject of the 'Golden Oldies' on the following page



GOLDEN OLDIES *VOLVOS FROM THE CAMERA THE LATE MIKE LAWMON*



4 X 4 versions of Volvo FL6-14 fire engines are fairly rare in the UK. This 1991 Volvo at Cranfield Airport, Bedfordshire, registered J13 AEV, was built by Carmichael, Worcester



Also built by Carmichael for Humberside Fire Brigade this 1988 Volvo FL6-14 Water Tender Rescue was based at D3 Snaith and Humberside Fire Brigade Training School



It now seem a long time since Volvo FL6-14 / Saxon Sanbec Dual Purpose Ladders (DPL) arrived on the streets of the capital, London. 1997 DPL 1029, P479 RHV, was based at G21 Harrow

MALTA'S BAI HAWK



BAI
BRESCIA ANTINCENDI
INTERNATIONAL



Front and rear images of one of the new Mitsubishi Fuso Canter 7C15 Fast Response Units built by BAI, Italy, for Maltese Civil Protection. Photo: Courtesy of BAI with acknowledgement to and Giulia Gandolfi at BAI



MALTA'S BAI HAWKS



Photo: BAI

As reported in FBS International News in Fire Cover 231, Maltese Civil Protection has invested in a fleet of five (not six as previously reported) Mitsubishi Fuso Canter 7C15 DUONIC HAWK Fast Response Units built by BAI, Italy. This represents an investment of 1.3million euro by the Maltese Government.

Based on Mitsubishi Fuso Canter 7C15, 4 X 2 chassis, with four cylinder, 2,998 cc, engine, these Fast Response Units carry an impressive array of fire and rescue equipment as itemised following.

BAI Fast Response Units VSAC 1,400 L CAFS - 'HAWK'

- Water capacity 1,300 litres
- Foam Class A 100 litres (Class B, suitable for ATP use) and 50 litres (Class A, suitable for CAFS use)
- Double mixing system: Electronic ATP (Around The Pump) + CAFS
- Fire Pump 1,000 litres / min @10 bar without CAFS performance
- HP performance is 230 litres / min @ 40 bar (BAI usually declares it at 40 bar)
- Vehicle weight total laden 7,300 kg
- Hosereel length 60 metres (3 x 20m sections)
- Electric winch 1,864 Kg

Front Offside Locker

- Box 1 Lukas Windscreen Hack Saw
- Box 2 Rabbit Door Opener
- Firemans tool box
- 1 x Lukas Spreader
- 1 x Lukas Shears
- 1 x Lukas Ram
- 1 x Lukas Pedal Cutter
- 1 x Lukas Door Opener
- 1 x Lukas Door Opener Hand Pump
- 1 x Lukas Ram Support
- 2 x Chain attachment for spreader tips
- 2 x Lukas hydraulic pipes
- 1 x Lukas Hydraulic Power Unit
- 1 x Airbags Safety System
- 2 x Patient Protection Shield (drop)

Front Nearside Locker

- 2 x Drager 300 Bar PSS 500 BA Sets
- 2 x 300 bar 6.8 litres BA Spare Cylinders
- 2 x Rechargeable handlamps
- 1 x Electric Cable cutter
- 1 x Haligan tool
- 1 x Bolt Cropper
- 1 x Pick Axe
- 2 x General purpose lines
- 3 x Traffic cones
- Box 1 Electric Gloves
- Box 2 - 2 x Drager BA masks
- Box 3 Empty
- 1 x 15 kg CO2 fire Extinguisher
- 1 x 6 kg Dry Powder Extinguisher
- 1 x 6 lts Foam Fire Extinguisher

Rear Offside Rear Locker

- 2 x Tripods
- 2 x Working lamps
- 1 x Extension Reel



Front and rear lockers open images of the HAWK showing the equipment stowage layout. Photographs courtesy of BAI with acknowledgement to Giulia Gandolfi at BAI

Nearside Rear Locker

1 x Spinal board
1 x Head immobilizer
1 x Cervical Collar Normal
1 x Cervical Collar Pediatric
1 x Spinal Board Spider Webbing
1 x Resuscitator Complete
1 x Spare O2 Cylinder 2lts
1 x First Aid Box
2 x POK pistol Grip Branches
1 x CAFS Pistol Grip Branch
6 x 38mm x 20 m Delivery Hoses

Roof of Appliance

1 x 8.5 metre Extension Ladder
1 x Crow bar
1 x Electric pole
1 x Shovel

Tool Box inventory

1 x Allen keys 9 pieces
1 x Screw drive set 7 pieces
1 x Plier
1 x 12 inch Stensol Wrench
1 x Thin Snips
1 x 12mm Allen Key
1 x Craft Knife
1 x Pipe Wrench
1 x Carpenter Plier
1 x Griper
1 x Mallet 1 kg
1 x Small Hammer 2 g
1 x Hack Saw Frame c/w Blade
1 x Open-ended Spanner Set 6-32mm

BAI – The Company

BAI, Brescia Antincendi International Srl is one of Italy's largest companies designing, manufacturing and marketing a broad range of custom-tailored fire fighting and rescue vehicles, providing service, specific training programmes, customized maintenance agreements and a wide-ranging stock of spare parts.

The company is strategically located in the northern part of Italy, in Brescia area. Employing a workforce of 180-200 the manufacturing site covers some 20,000 square metres and the production capacity averages 200-250 units per year.

BAI has supplied of fire fighting and rescue vehicles, to industrial brigades, local authorities brigades, ministries and other government departments all over the world including Europe, Africa, the Far East and Middle East. They pride themselves with having the capacity to deliver tender requirements that such departments require. They have a world-wide network of agents in order to enable customers to have a local point of contact.

Filming the Video

The arrival of the Hawks on the beautiful Island of Malta GC was celebrated with the filming of a video. With the backdrop of many of the historic vistas on the island and highlighting the narrow access in the capital Valletta and many of the picturesque villages, the reason for procurement of the Hawks, the production of the video also provided entertainment to the islands residents, seen masked, a sign of the times, against Covid 19.



Preparing for filming – the cameraman and fire service co-ordinator. All filming photographs courtesy Tony Pasini of Maltese Civil Protection



Drive-by filming of the Hawks



The convoy of Hawks driving through Malta's capital, Valletta, for filming and providing 'entertainment' for the on lookers



The five Hawks travelling past the beautiful hill top city of Mdina, also referred to as 'the silent city' and once the capital of Malta



Where's the fire! A resident watches the Hawks negotiating the narrow streets

FRSLINKS4U-'bitesize': The video featuring the Hawks, produced and issued by Malta's Home Affairs Ministry, can be seen at the following link courtesy of the Times of Malta news:

<https://timesofmalta.com/articles/view/civil-protection-department-gets-five-new-fire-trucks.870190>

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