

# POWER OF PRECISION

Modern acoustical scoring systems for quality live firing practice and performance

## AREA OF EXPERTISE

Air Target delivers modern, leading-edge acoustical scoring systems for quality practice and performance. Our products are continuously developed with the latest technology and components.



Air Target is the prime contractor to defence forces in more than 30 countries and has a complete product range, including MDIs, scoring stations, test equipment, sleeve targets and inboardtarget towing winches. Air Target has the capability to customize all products to the customer's requirements.

Air Target provides weapon system-operators with instant feedback, turning each fired shot into valuable experience.

# OUR PRODUCTS AND SOLUTIONS IN SHORT

The universal 12 sector miss distance indicator (MDI) detects fire being directed at the target coming from any direction. The target-towing or Drone/ UAV operator can change the target course during the mission. The systems are compatible with a full range of weaponry from 5.56 small arms to missiles. The battery operated MDI, uses pressure sensors to detect the shock wave generated by a passing supersonic projectile or missile. The MDI is installed on or close to the target. The amplitude and the time differences between the different sensors are used to calculate the shortest distance and the angular position between the target and the projectile.

Scoring data from the airborne system (MDI) are then sent to the scoring station, via radio. The scoring station can receive scoring data from up to six targets (MDIs) simultaneously.

# BENEFITS WITH AIR TARGET SCORING SYSTEM

- Cost effective solution
  Versatile can be used with all
- kind of targets
- Accurate
- Real time scoring
- Low life cycle cost

## REDUCE LIVE FIRE TRAINING COST

- Save money by using inert and less ammunition
- Save time by being more effective
- Get live firing experience with real-time feed-back to operator
- Measuring is knowing

## PRODUCT SYSTEM HIGHLIGHT

# AIRCRAFT TOWED SLEEVE TARGET WITH MISS DISTANCE INDICATOR

The towed MDI/target sleeve system is a very cost effective solution for basic training against aerial targets. Both the AS-131 miss distance indicator and the sleeve can be re-used for years in operation. AS-131 is a 12 sector universal MDI, detecting fire coming from any direction and in any attitude relative the target and with virtually any ammunition type being used. Scoring data is being sent down to TOR scoring station in real-time, the scoring station may be put on the ground and/or in the towing air craft. Optionally, AS-131 can

#### OUR TRAINING SYSTEMS



**AIR-TO-AIR** Realistic training scenarios with universal angle sensors.



**GROUND-TO-AIR** Prepare to protect targets on the ground from airborne threats.



AIR-TO-GROUND Improving the pilot's precision skills with every exercise.



The AS-131 for sleeve targets

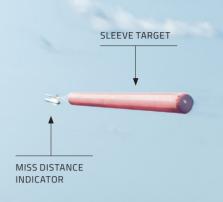
is a universal 12-sector miss

distance indicator (MDI).

AS-131



TARGET TOWING WINCH The MBV 45 electro/hydraulic operated winch is intended for medium duty target towing operations with inboard installation in the towing aircraft.



be equipped with GPS, flashing lights and onboard scoring data logging function. The sleeve target is available in different lengths, colors, with or without radar and/or laser reflecting function in order to simulate the right target signature. The target towing winch, which can be internally or externally fitted to the aircraft, deploys the target in the mission area and recovers the target after the mission. The deployed length of the wire is normally between 800-11 000 meters.



## SCORING STATION TOR

The TOR scoring station is a computerized scoring station for collection, calculation and presentation of real time firing results from the universal 12-sector miss distance indicators.



## SLEEVE TARGET

The sleeve target has a slight conical shape. It is manufactured of PVC coated fabric. It consists of a circular half spheric end, and two longitudinal orange colored gores.

# MISS DISTANCE INDICATORS FOR HARD **TARGETS AND TARGET DRONES/UAV:S**

The use of remotely piloted aircraft systems (RPAS) or unmanned aerial vehicles (UAV) as aerial target drones in parallel with hard towed target defines a training environment much closer to reality compared to the use of conventional towed targets. By adding miss distance indication (MDI) functionality and other target signature simulation payload to the target drones or hard targets, a complete aerial training system

becomes available within in a very short period of time. Air Target Sweden provides different MDI platforms for integration into any kind of towed or remotely piloted aerial target. All Air Target MDI is available as universal type, i.e. they handle all target courses relative the firing gun or missile, i.e. all types of attacking and passing courses with real-time presentation of the live-firing results to the user.



AS-113 is intended to be

installed on the wing-tip or on

the body of UAVs or hard aerial

AS-113

targets.



AS-133 AS-133 is intended to be installed in the nose of UAVs or hard targets.



AS-134 AS-134 is designed to be installed in target drones, UAVs or hard targets.



AS-135 The AS-135 is designed to be installed in the hull of target drones or hard targets.









"Outstanding support, many thanks" Johann Kaminski Austrian Armed Forces

"This product works perfect for us. It's really easy to integrate." Avdhesh Khaitan CEO, Kadet Defence Systems



"Our customers will never find themselves in a first line-filter. They simply bring the issue to the attention of their ordinary point of contact who will then escalate the case to the right level"

Anna Pettersson Sales and support, Air Target

## ABOUT US **TECHNICAL EXPERTISE**

Our goal is to deliver scoring system solutions that truly meet the customer's requirements. We combine technical expertise with perceptiveness and never assume that we understand before we have a clear view of the whole picture.

For us a delivery is not complete until the customer has the solution up and running and should there be any issues we will do everything in our power to resolve them as guickly and with as little inconvenience to the customer as possible. We believe that an excellent experience is the best way to cultivate good customer relationships that stand the test of time.

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## ABOUT US **OPERATIONAL AND TECHNICAL SUPPORT**

We listen attentively to any issues or requirement that our customers bring to our attention and do everything in our power to solve the problems or add the extra feature. Our goal is always for the customer to have the system up and running as quickly as possible, as we are fully aware of the fact that systems that do not meet the requirements cause operational inconveniences. We don't believe in pointing fingers – it's much more constructive to focus on finding a way forward

#### Our goals:

- To provide outstanding operational and technical support
- Develop a long-term business relationship with our customers
- Provide the most cost-effective integrated solutions to meet our customers requirements and training policy

Air Target works in very close partnership with the user and provides support for the life time of the products:

- Regular maintenance of the product
- Repair and immediate exchange of damaged material
- Product installation and setting to work (initial contracts)
- On site user training
- Technical assistance during firing training



We do offer off the shelf-solutions, but we have learned that customer satisfaction increases immensely by working closely with the customer and adjusting the solution according to each unique application. Delivering a custom fit that is ready to be used out of the box. Our long experience from military applications, our dedication to quality, and our proven technology for turning physical stimuli into an electrical signal and converting it into digital data that can be visualized, guarantees optimal target precision training.



"We work hard and passionate to design the perfect fit for each and every application, carefully tending to every technical detail"

Henk Martijn Head of RnD, Air Target OUR HISTORY

# A PART OF A PROUD SWEDISH ENGINEERING TRADITION



Air Target Sweden has a history that dates back to the 1930s and we are a part of the proud swedish engineering tradition that transformed our coun-

try to a world leader in innovation. Our company originated as a part of the Swedish military but is now privately held with a complete range of scoring products including MDI's, scoring stations, test equipment, sleeve targets and inboard target towing winches Air Target is owned by swedish investment company Teqnion AB. The Teqnion group's companies offer advanced technology products with associated consultation, customized solutions, support and training to meet industry's needs to create competitive end products.

Teqnion's clients are found in most industrial sectors where the group raises clients competitiveness by providing specialist knowledge and world-leading components and systems.

## ABOUT US WORLD WIDE REPRESENTATION

Air Target is represented world wide and has its head office in Stockholm, Sweden.

