



# NORTHERN LIGHTS' TACTICAL ROBOT

*Do-it-all TRACS is a multi-mission sureshot superstar!*

By Paul Markel

It's the 21st century and yet we don't have flying cars, underwater cities, or jet packs. However, we do have robots and thanks to the folks at Northern Lights Tactical, we have robots that can fight.

A couple of years ago I went out to the Gunsite Academy for a few days of training. On the first day, we practiced on paper targets and steel. After the senior instructor was assured that all of our skills were up to par he announced, "Tomorrow we are going to bring out the robot." I must admit I was enthused. I have shot a lot of things over the years, but never a robot.

What the Gunsite instructors rolled out was the TRACS unit from Northern Lights Tactical. TRACS stands for "Tactical Robotic All-purpose Chassis System." No, the robot does not look like something from your favorite science fiction movie. It bears no resemblance to R2D2 or C-3PO.

## ROBOT DETAILS

The actual robot is low to the ground, being only 12 inches high, with four, 10-inch roll-flat rubber tires. All the industrial-grade internal components are encased in an NIJ Level IIIA armored steel housing. The MIL-DTL-46177 armor will withstand hits from all handguns, shotguns, and frangible rifle ammunition. As expected, all that steel has some weight to it. TRACS weighs under 200 pounds.

The robot is operated via remote control with a frequency choice of 75 MHz, 27 MHz, and 2.4 GHz available. A low profile "rubber duck" antenna receives the signal from the controller. TRACS isn't some toy car; the remote signal is powerful enough to operate the unit up to 300 yards with the 75/27 MHz version to over half a mile with the 2.4 GHz version. This allows trainers to use the robot for close-up and distance work such as sniper training.

As it is battery powered you can train almost anywhere. Unlike standard target

turners and pop-up targets, you don't need a hard-line power source. The unit runs on a single 24V rechargeable battery. Spares are available and batteries can be charged in a relatively short amount of time.

TRACS has an average top speed of 7 mph and is four-wheel drive, thanks to four industrial hi-torque motors. While it cannot cover every terrain, the robot can cover rough, rocky, and sandy ground and climb grades up to 25 degrees.

For dynamic firearm training you will need to mount some type of target to the robot chassis. The unit includes a mount for a standard adjustable steel target frame and it will accept other target mounts as well. TRACS can haul a load of up to 250 pounds, far more than any target set-up you will likely use.

Just how advanced or realistic the target is will be up to you. When I was at Gunsite, the target was 3D cardboard silhouette held up by a wooden frame. There are various plastic/polymer "bad guy" dummy targets available from numerous target makers that work well on the robot.

It should go without saying that hitting a moving target is challenging. Most of the standard moving targets we use in pistol and shotgun training bob or swing. After a few moments you can pick up on the movement pattern and then hitting them becomes easier. With the TRACS unit, movement is as consistent or random as the instructor wants it to be.

The robot starts and stops quickly

and can move in a complete 360-degree circle. For the shooter you never really know just what the robot is going to do. Kind of like real life, huh?

During my Gunsite experience the robot target was set up like a knife-wielding assailant. It even had a plastic training knife protruding from an "arm." One at a time, students were instructed to identify and challenge the armed threat.

The instructor varied the exercise. Sometimes he would stop the robot as soon as the student drew his sidearm and issued a verbal challenge. Other times the robot would ignore the commands and charge straight in. The robot would sometimes feign retreat and come back at them.

(Left) The Tactical Robotic All-purpose Chassis System (TRACS). (Below) SWAT officer engaged in live-fire training against the robot.



All of these scenarios forced the students to literally be on their toes. We had to draw and fire while moving laterally to the right or left. If you simply stood still the robot could run over you. Now a good instructor won't run over you for failing to move, but when the robot is bearing down on your feet, you quickly learn what to do to get out of the way.

Naturally such training can be conducted with handguns, shotguns, or rifles/carbines. As touched upon earlier, you can even train your sniper teams with

the robot. Install some kind of 3D target man on the chassis and the bad guy can be operated hundreds of yards away from the sniper team.

### VERSATILE SERVICE

Should your agency be hesitant about laying out the cash for the TRACS unit, it should also be noted that the robot is good for more than just firearms training. As it is armored, the robot can be used by SWAT for such chores as drop phone delivery or video surveillance. Northern Lights has a 5.8 GHz wireless video camera system to mount on it. They even have a remotely fired paintball marking gun option.

As this goes to print the folks at Northern Lights are developing a number of new products that will work in conjunction with the TRACS. SWAT guys will be interested to hear that they are developing a Flashbang/CS grenade system and a remote gas launcher. The Prescott Company has larger tires as an option to increase speed and they have a tread/track set-up in the works, too.

While the TRACS unit is a bit pricey for your local gun club, for a large agency the benefits of training against an unpredictably moving target are tremendous. Unfortunately, for many law enforcement officers the first moving target they ever have to engage is one that is trying to kill them.

The group that I was with at Gunsite was comprised primarily of law enforcement trainers. To a man they were all impressed with the robot and the new world of tactical training that it opened.

Just how creative you get in your training scenarios is really up to the instructors. You can use one robot versus one shooter, a single robot and partners or a small team such as you would have during a tactical entry. The robot can be used on the open range or you can put him in your shoot house and really add to the realism of room clearing drills.

If your academy or agency has the funds, you can add multiple robots to the training scenario. Can your people deal

with two attackers at the same time? It could very well happen out in the real world. Why not give them the edge and train them for just such an encounter?

Another large benefit of using the TRACS robot is that it adds a new, challenging element to your firearms training. Let's face it, if your training consists of shooting only static paper and cardboard targets your people will eventually burn out and start simply going through the motions just to get it done. TRACS adds an exciting new dimension to firearms training.

### FINAL NOTES

While we might not have jet packs or flying cars, we do have robots. Robots have been building cars, searching shipwrecks, and performing other jobs men would rather not do for years. Now they can help us sharpen our defensive skills and increase the likelihood of coming out on top of a deadly force situation. ■

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