

Experiences in International Competitions and Opportunities That Follow

by SFC Michael A. Deleon

As missions in theater-specific operations wind down, I believe leaders have identified that, as tank crewman, we need to rebuild the proficiency level that steadily began to decline due to lack of tank usage during nearly 14 years of combat action. With that in mind, development of an armor-crew proficiency competition was determined to be a great way to build camaraderie and *esprit de corps*, and to reinforce training of critical crew skills.

International competition

From 1963 to 1991, the Canadian Army hosted tank crews from the United States and various countries throughout Europe in a live-fire tank-gunnery competition known as the Canadian Army Trophy. Fast-forward to 2012: the U.S. Army Armor School at Fort Benning, GA, hosted its first tank-crew proficiency competition known as the Sullivan Cup. These type of competitions force units throughout our Army to increase their level of tank-gunnery training to identify highly proficient crews to represent their brigade at the Sullivan Cup.

Due to this international competition, a joint partnership began to open opportunities to noncommissioned officers (NCOs) across the U.S. Army, which has helped challenge crews and strengthen relations with our regionally aligned forces. Through these competitions and shared training methods, our NCOs can further develop themselves and their Soldiers while helping build a stronger relationship with our international partners.

The Armor School's first Sullivan Cup Competition in 2012 was only open to U.S. Army units. Two years later, the Armor School hosted another Sullivan Cup, this time extending the invitation to the Marine Corps and the Canadian Army. The Marine Corps brought its Tiger Competition winners, and the Canadian Army brought two tank crews from its armor units. As a result of their participation, the Royal Canadian Armoured Corps School (RCACS) invited two American tank crews and two Bradley crews to compete in its own armored-fighting-vehicle (AFV) skills competition known as Worthington Challenge, located in Gagetown, New Brunswick, Canada.

(Editor's note: The next Sullivan Cup competition is currently scheduled May 2-6, 2016.)

The invitation was forwarded to the 2014 Sullivan Cup crew winners, which were SFC James Grider and his tank crew from Cobra Company, 2nd Battalion, 69th Armor Regiment, 3rd Armored Brigade Combat Team (ABCT), 3rd Infantry Division. The competition also called for a tank section, and I was fortunate enough to have my crew selected as "wingman" for the Sullivan Cup crew. The Bradley crews were chosen throughout our brigade by a Gunnery Table Six shoot-off. At the end of the qualification table, one crew from 3-1 Cavalry and another from 1-15 Infantry were chosen.

Worthington Challenge

The Worthington Challenge competition spanned four days and was arranged in four "stands." Our U.S. tank team had the competition arranged in the following order: observation stand, drivers and maintenance challenge, march-and-shoot event and platform-specific gunnery.

Day 1 began with the observation stand, at which our crews were individually evaluated on a vehicle-identification test. This was followed by a mounted-crew vehicle-identification test from our tanks. Then a range estimation of random targets observed from a bunker was conducted.

Finally, the vehicle commanders were individually evaluated with an all-arms call for fire mission. During this event, I was given the 10-digit grid to my location, a map, a compass and binoculars. As soon as the target was raised and I had eyes on it, I had one minute to plot the target, give a 10-digit grid and bearing, and then provide all the elements of a call-for-fire mission. A perfect score for this portion of the event was 15 points. A point was deducted for every 50 meters a vehicle commander was off, in any direction, when the call-for-fire was placed.

Day 2 kicked off with the drivers and maintenance challenge. During this event, each crew lined up at a starting point with a lane walker equipped with a stop watch. On the command "go," our crew sprinted 200 meters to the

road-wheel challengestand. At this stand, event officials marked off a road wheel we had to change in the fastest time possible. Upon completion, we lined up and then ran a mile and a half to the next event, a casualty-evacuation stand, where we had to evacuate a casualty from an M113 vehicle, evaluate the casualty, perform first-aid and move the casualty to a landing zone, all while being timed.

Once we completed the casualty-evacuation stand, we lined up and ran almost a mile to our final event for the day, the driver's challenge. We mounted our tanks and negotiated a two-mile driver's course that had a variety of obstacles and crossings. This was also a timed event.

During Day 3 of the competition, the march-and-shoot event tested our marksmanship and physical abilities. This portion of the competition required our crews to complete a confidence course for time, execute correct drills on the Canadians' C16 Automatic Grenade Launcher System (the equivalent of our M240B), run four miles to the rifle range and conduct a stress shoot with our M4 rifles and M9 pistols from various positions and ranges. This entire event was conducted wearing a full modular lightweight load-carrying equipment vest load, Advanced Combat Helmet and a protective mask while carrying a "dummy" rifle (training aid).



Figure 1. Tank commander SFC Michael Deleon maneuvers his tank into the first firing position during the live-fire shoot-off during Worthington Challenge in September 2014. (Photo by CPL Nick Alonso, Canadian Army Public Affairs)

Next came the final day of the competition. Our crews conducted day and evening tank-section battle runs at Canada's gunnery range. Each battle run had three stationary and two offensive live-fire challenges. We engaged non-heated, scaled targets that were painted black for the main gun with a cluster of steel knock-down plates painted black for our machineguns. Each tank section completed the two battle runs while being evaluated for time and accuracy.

At the end of the event, our two Abrams tanks staged with two Leopard 2A4 tanks and loaded up the remaining main gun and machinegun ammo to conduct platoon live-fire gunnery. This was a showcase of firepower and the culminating event of the competition.

Following this showcase, the results were announced during an awards ceremony. Our tank section took 3rd place in the "top fire team" portion. In addition, one of our Bradley crews, commanded by SSG Matthew K. Doty from 3-1 Cavalry, 3rd ABCT, 3rd Infantry Division, took "top 25mm crew."

(See *ARMOR's* original article on Exercise Worthington Challenge, http://www.benning.army.mil/armor/eARMOR/content/issues/2015/JAN_MAR/Kennedy.html.)

Building partnership

The camaraderie and mutual respect shown by U.S. and Canadian crews enhanced the success of the entire challenge. It also opened a partnership between the Canadian Army and our brigade that resulted in another invite

from the Canadian Armor School to send a tank master gunner and a Bradley master gunner from our brigade to observe their Army Direct-Fire Specialist Course (ADFS). When asked by my brigade command sergeant major if I would like to participate, I immediately jumped on the opportunity to participate in the once-in-a-lifetime experience.

Three months after Worthington Challenge, I returned to Canada along with Doty, a Bradley master gunner, to observe the Canadian ADFS course. The six-week advanced course reinforces the quality of instructors Canada has who teach gunnery in their units. It also certifies these instructors to perform duties equivalent to that of U.S. master gunners on the range.

This opportunity allowed me to observe the training methods used to train gunnery in the Canadian Army. The size of their armor force in comparison to ours affects the development of their training program. For example, in our brigade alone, we have 58 tanks, whereas their entire army has about 80 tanks. This size difference has an advantage, though, because it allows our Canadian counterparts more control of their armor units' training plans by their actual armor school.

A good example of this is when a unit prepares a gunnery-training plan. The plan they develop must be sent to their armor school for review and approval. This added control allows them to certify all their tank-crew positions at the schoolhouse. In addition, I noticed the Canadian training aids (such as simulators) are high quality.

The result is that their tank crewmen are certified on each individual position by the schoolhouse before conducting gunnery as a crew. The theory behind this is that each individual crewman is proficient and ready to switch from their present crew to that of any other tank; they are interchangeable. Thus, there's no need for a set gunner and tank-commander combination like U.S. crews observe. Once a Canadian crewman is certified in a specific position, he is certified until he gets promoted to a higher position.

Tank crewman in the Leopard 2 tank begin at the driver position. After about a year (or two) in that position, they attend a gunner course to be certified to operate the gunner station. The loader is the second in command of the tank in their army. Canadian soldiers can attend a turret-operator course to be certified for the loader station when they attain the rank of corporal. Following that course, they can go to a crew-commander course to certify as a tank commander.

At the unit level, gunnery training is planned and conducted by their instructor of gunnery (IG), a position equivalent to U.S. unit master gunners.

The Canadian unit's IG conducts classes that cover basic crew tasks very similar to ours, but they teach their classes very in-depth, starting with basic engagement techniques and progressing all the way to advanced engagement scenarios. Experienced crew commanders teach classes using the following seven-step training principle:

- Review the theory;
- Review the fire order (fire commands);
- Conduct blackboard (chair drills);
- Conduct dry practice (dry practice on the tank);
- Conduct demonstrations (simulator demo);
- Practice on the simulator; and
- Debrief.



Figure 2. CPL Taylor Smith (Canadian army direct-fire specialist candidate, RCACS) and CPL Riley Cook (ADFS candidate, RCACS) conduct blackboard shoots (chair drills) during the instructor portion of the Army Direct-Fire Specialist Course in Gagetown, New Brunswick, Canada. (Photo by SFC Michael Deleon)

These classes are designed to teach gunners the basics in engagement techniques. When all classes pertaining to gunnery fundamentals are complete, the Canadian soldiers go to the range and apply what they learned. There is no qualification criteria during live-fire, but their IGs evaluate the crews to ensure they apply the fundamentals properly while engaging targets. This certifies the crews to move to the next level of gunnery, and it allows them to shoot live-fire with their troop (platoon) and eventually to conduct a squadron (company) live-fire exercise.

The first part of ADFS focused on the instructor portion, with a strict performance evaluation from the instructors on the students' ability to teach, instruct, coach and conduct a valuable debriefing session. They were then taught zeroing procedures, templating of ranges, elements of ballistics, AFV designs and how to conduct a gunnery-training program, range operations and range safety.

Just as in the U.S. Army, the individual unit is responsible for the quality control of the soldiers they send to this course.

During the instructor portion, students were separated by 120mm and 25mm classes. Then they were divided into small groups. The students came back together later in the course to conduct common-core training. I observed one of the small tank groups as they were taught how to instruct and then assigned classes to teach for evaluation. Each student received two classes to prepare and teach (using the seven-step training principle) before their evaluation.

Upon completion of the instructor evaluations, electrical and optical (EO) technicians taught the students classes on boresighting, pullbacks (recoil exercise) and sight calibration. The Leopard 2 tank requires an advanced support package for its intricate fire-control system, so the crews did not boresight their own tanks. Instead, that was done by the EO techs. Then the boresight was confirmed by the students under the IGs' supervision. Following this training, the class travelled to the University of New Brunswick, where a professor taught them the principles of ballistics.

The next module of the class pertained to surface danger zones. During this training, the students had to template areas as safe-to-fire zones based on the weapons of specific vehicles, including a single fire point, multiple fire points and maneuver-box fire points. This instruction lasted a week and included multiple practical exercises prior to the test.

The ballistics module was next; it focused in-depth on the variety of ammunition the Canadian Army uses. Students were taught the origin of each type of ammunition, including development, purpose and effects on armor in relation to its terminal ballistics (what the projectile does when it strikes a target). Students were given a review and tested the following week on all the information covered.

In the final week of the course, small groups were assigned vehicles, for which they had to conduct a 10-minute briefing on its survivability, firepower, mobility and protection in relation to their own vehicle platform. Just like U.S. courses, the Canadian students finished with a series of closeout tasks and an end-of-course review to help improve future courses.

Lasting benefits

The opportunity to observe another country's course first-hand while integrating with their students provided insight for me to restructure my training program, in preparation for future live-fire exercises, upon return to my unit. In addition, I learned that the Canadian Army's armored force conducts a very standardized style of instruction, with emphasis on drilling the basics. This provides a very structured and strong basic foundation for their armor crews, which is something I think we need to improve in our Army.

From my observations, a company's success at gunnery is mainly determined by the proficiency and competence of that unit's platoon sergeants. Our master gunners and commanders develop and resource the gunnery-training plan for their unit. Therefore, it's up to the platoon sergeant and subordinate NCOs to fill in gaps of time with meaningful training while ensuring the platoon is prepared before and during gunnery. This is best accomplished by exposing our NCOs to multiple types of training methods. I believe integration of some of the techniques observed in Canada will help increase proficiency levels throughout our force. In the end, the interaction with another country's army allows our NCOs to share training methods while strengthening the bonds between our Army and that of the other nation.

As we move forward, our Armor NCOs have become smarter, more resilient and even more resourceful, thanks to technology. This increase in their knowledge pool results in more creative training methods that improve our NCO corps while helping develop and groom more lethal Soldiers.

In summary, the success of the U.S. Sullivan Cup and Canadian Worthington Challenge opened doors to further improve U.S.-Canadian military-to-military relations. Now 3rd ABCT, 3rd Infantry Division, offers slots to the Canadian Army to participate in the brigade's best-squad competition. Our brigade also sent NCOs and officers to serve as observer-controllers, and we plan to send an infantry company from one of the battalions to conduct joint training with a unit from their army in Canada. Through such joint training and exchange opportunities, we can better understand each other's tactics, techniques and procedures. This in turn enables us to operate more efficiently when conducting multinational operations in various regions of the world.

SFC Michael Deleon is currently the U.S. Army Europe Schools NCO in charge at Joint Multinational Training Command, 7th Army Training Center, Germany. His previous assignments include platoon sergeant with 1st Platoon, Cobra Company, 2nd Battalion, 69th Armor Regiment, 3rd ABCT, 3rd Infantry Division, Fort Benning, GA; battalion master gunner, 2-69 Armor Regiment, Fort Benning; company master gunner, Dealer Company, 2-69 Armor Regiment, Fort Benning; company master gunner, 2nd Battalion, 9th Infantry Regiment, Camp Casey, Republic of Korea; and tank commander, 2-9 Infantry, Camp Casey. Deleon's professional military education includes the Master Fitness Trainer Course, Maneuver Senior Leader's Course, Combatives Levels 1 and 2, Unit Movement Officer's Course, Advanced Gunnery Training System Senior Instructor Operator's Course, Joint Firepower/Controller Course, M1/M1A1 Abrams Master Gunner Course, Advanced Leader's Course, Warrior Leader's Course and the Army Recruiter Course. He is pursuing a bachelor's of science degree in computer science at Troy University. Among his awards and decorations are the Order of St. George (black and bronze awards), Draper Armor Leadership Award and member of the Excellence in Armor Program.

Acronym Quick-Scan

ABCT – armored brigade combat team

ADFS – (Canadian) Army Direct-Fire Specialist Course

AFV – armored fighting vehicle

EO – electrical and optical

IG – instructor of gunnery

NCO – noncommissioned officer

RCACS – Royal Canadian Armoured Corps School