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Exceptionally detailed analysis of a training competition system, sponsored by the Canadian Army for tank crews within NATO. Well organized, thoroughly researched, and logically developed. Program is explained and persuasive and convincing arguments for continued US participation are presented, despite the recognized monetary costs and decrements to mission readiness. Alternatives to the competition, i.e., seminars, demonstrations, or combinations of these with actual competition are described and assessed. Evidence is advanced which overshadows rationale for their adoption in lieu of

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current concept. LTC Heldstab devotes considerable effort in defining the program, facilitating understanding by those unfamiliar with the Canadian Army Trophy Competition. Recommendations and conclusions are supported by extensive documentation and objective and practical rationale.

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

US ARMY WAR COLLEGE

INDIVIDUAL RESEARCH BASED ESSAY

INTERNATIONAL MILITARY COMPETITIONS

AN EXAMINATION OF

THE CANADIAN ARMY TROPHY COMPETITION

BY

JOHN C. HELDSTAB

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WHAT IS THE CANADIAN ARMY TROPHY COMPETITION?

The Canadian Army Trophy Competition (CAT) is a tank gunnery competition held biannually for the armored forces of the NATO Central Region. The competing element, the platoon, is limited to three tanks. The platoon may have only the personnel and equipment authorized by the respective national tables of organization and equipment.[1]

The national teams consist of five platoons. Immediately prior to the competition one of the five is randomly selected by the Chief Judge as a reserve platoon. This platoon provides the replacement tanks and equipment for the competing platoons should a certified need arise prior to the start of the competition. While all five platoons negotiate the competition course, the score of the reserve platoon does not count in the team score. The team score consists of the best three individual platoon scores from the remaining four competition platoons.[2]

Each platoon negotiates a moving tank course (battle run) with three lanes, one for each tank. During the battle run the platoon will be required to engage both main gun and machinegun targets as listed below:

Main Gun Targets

1) Eighteen targets presented:

   a) At least 2 must be moving targets: range about 1200 meters.

   b) At least 2 must be engaged with the tanks moving: range about 1200 meters.

c) Remaining targets are stationary: range 900-2500 meters.

d) All targets, except those engaged when tank is moving, are presented in groups of 2 to 5.

e) All targets are exposed for 40 seconds and do not fall when hit.

2) Platoon has 30 rounds for 18 targets (1.6 rounds per target)

3) Targets are physically scored after each battle run.

Machinegun Targets

1) Six groups of ten individual targets presented: range 800-1000 meters.

2) Platoon may engage only when tanks are moving.

3) Targets fall when hit.

4) Platoon has 750 rounds for 60 targets (12.5 rounds per target).

5) Targets which do not fall are physically scored.[3]

Each battle run is scored by a multinational judging staff. Each scoring team consists of three officers from a different competing nation.[4]

WHY THE CANADIAN ARMY TROPHY COMPETITION?

The Canadian Army Trophy Competition was initiated in 1963 by the Canadian Government to improve the overall standard of tank gunnery within the participating forces. In addition, Canada saw the competition as a means of increasing interoperability within NATO by enabling the various competing national teams to meet in a spirit of true comradeship and fraternity.[5]

Headquarters, Allied Forces Central Europe (AFCENT) acts as the executive agent for Canada in conducting the competition. The competi-

tion is supervised by a Committee of Control, chaired by a General Officer from AFCENT with representation from each competing nation, Northern Army Group, Central Army Group and the Canadian Ministry of Defense, Ottawa. This committee establishes and issues the Rules and Conditions for the competition, subject to approval of the Canadian Ministry of Defense.[6]

Historically, national participation varies from competition to competition. In the past only those nations with forces subordinate to the Commander in Chief, AFCENT have participated. In 1980 all NATO nations were invited to either participate or send observers to the 1981 competition. While some sent observers, none outside AFCENT elected to participate. In the 18-year history of the competition, participants have included Belgium, Canada, Germany, The Netherlands, the United Kingdom, and the United States.[7]

COMPETITION HISTORY - PRE 1981

Since 1963 there have been twelve competitions. They began as rather simple affairs. National teams competed with groups of single tanks positioned on a firing line shooting at stationary targets. Initially, competitions were held annually. As time progressed, the competition became more complex, with single tanks moving along a course road. Due to increasing complexity it was decided that an annual competition was too frequent. Therefore, in 1968 the competition was changed to a bi-annual event, conducted in odd years.[8]

All pre-1981 competitions were held at Bergen-Hohne, a NATO training center in the Northern Army Group area. This training area is habitually used by a number of the competitors for tank gunnery train-

ing. Normally, the United States trains in the Central Army Group area at Grafenwoehr.[9] Range familiarity for nations normally training at Bergen-Hohne may have favored them in past competitions.

Over the past 18 years the competition has included all six nations of the central region. Only two nations, Germany and the United Kingdom, have participated in each competition. Canada and Belgium have taken part in all but two while the Netherlands has missed three. The United States is a relative late comer to the Canadian Army Trophy. The first US team was organized and fielded for the 1977 competition. A US team has been in each subsequent competition.

The record of past competition winners proves interesting:

Past Competition Winners

Nation	Wins	Year
Germany	4	'73, '75, '79, '81
UK	3	'65, '66, '70
Belgium	2	'63, '68
Canada	2	'67, '77

(1964 was a tie between Belgium & Germany)

Neither the Netherlands nor the United States have ever won. During the early years of the competition, 1963 through 1970, the dominant teams were from Belgium and the United Kingdom. These two teams won five of the seven competitions. In more recent years, the dominant team has been from Germany. They have won more times than any other nation, having taken four of the last five competitions, including 1981.

The effect of the same unit participating in sequential competitions is interesting. Only three nations have submitted the same unit as the national team in consecutive competitions. The 4th Regiment Lanciers was the Belgian team from 1963 through 1967. They won only in

1963 and tied in 1964. The 83rd Panzer Battalion was the German team from 1963 through 1967, but only tied with Belgium in 1964. Canada has a unique problem. It has only a single tank battalion in Europe and this unit is always the Canadian Team. Apparently, continuous participation by the same unit is no assurance of victory.[10]

While the selection and training of the competing team presents challenges for each nation involved in the competition, one nation must also act as the host for the event. This task entails a number of administrative arrangements plus the actual conduct of the competition under the supervision of the AFCENT Committee of Control. To insure impartiality key personnel are subordinated to AFCENT during the competition. One such person is the Chief Judge. He is provided by the host nation, is responsible to AFCENT for the conduct of the competition, and is the final authority on the conduct of the platoon battle runs. He is assisted by a panel of National Judges, usually two field grade armor officers from each competing nation.[12] They score the battle runs and serve as an appellate body for the national teams. In addition, the host nation provides a Host Nation Project Officer. He is, in effect, the administrative officer for the competition responsible for team accommodations and support.

The hosting function normally rotates among the various nations who compete. Each of the six nations has acted as host at least once. The United States hosted the 1981 competition. Germany has served as host three times, including 1979 when they volunteered out of the normal cycle. Belgium and the United Kingdom have been hosts twice, with Canada hosting for the second time in 1983. Only the Netherlands and the United States have hosted once. This is due to the limited past

participation in the competition by both nations.[13]

THE 1981 COMPETITION

Preliminary Controversy

Preparation for 1981 began as the 1979 competition concluded. The Committee of Control met to discuss and resolve rules and conditions. This should have been an easy task. However, with the results of the 1979 competition still fresh, it proved extremely difficult.

The major issue dividing nations was the number of battalions which each nation was to nominate as potential participants. Some nations wanted to nominate only a single battalion which would then become the national team. Others wanted all nations to nominate all national armor units in the central region with the national team selected at random by HQ AFCENT.

Some saw the nomination of all armor units as the solution to a deeper problem. This problem centered on large versus small and have versus have-nots. They saw the problem in terms of resources. They believed the larger, more wealthy nations could invest greater resources in the training of the team if they were limited to a single battalion. Greater investment in a team by larger nations meant better trained teams and an increased probability of winning. Forcing the larger nations to focus on a vast number of units would remove the resource advantage.

For the other camp the issue was readiness of the armor force. The requirement to nominate all as participants meant all must reorganize into platoons of three tanks, train to the special rules of the competition, and achieve a gunnery standard considerably more difficult than the national gunnery standard. Clearly, the readiness of the total

armor force would suffer if a nation was to prepare its whole force for the competition. From their standpoint the number of potential competitors must be limited to as few as possible to minimize readiness problems.[14]

The subsequent meetings were heated. Various nations considered withdrawing from the competition. Ultimately each side gave and the result was compromise. This compromise was reflected in the Rules and Conditions for 1981. The rules address the concerns of both sides:

1) The nomination process: Only the United States and Germany were required to nominate two battalions as potential participants. These nations had the largest armored force and, it was felt, the most resources to invest in preliminary training. All others would nominate only a single battalion. All battalions selected as potential participants were nominated to HQ AFCENT by 1 February 1981. The selection of the battalion to compete for the United States and Germany was made by random selection at HQ AFCENT on 8 May 1981.[15]

2) Ammunition: The concern of the smaller nations for vast expenditures by larger nations was most apparent in the area of ammunition. The smaller nations feared that an unconstrained investment in main gun ammunition with a correspondingly significant amount of main gun range time would enable the larger nations to "buy" the competition. Therefore, the amount of main gun ammunition which could be expended in preliminary training for any battalion was limited. This limitation was set at 210 main gun rounds per tank crew.[16] While main gun ammunition was restricted, small arms ammunition was not. The rationale was that unlimited small arms would encourage nations to learn how to train tank crews and platoons more efficiently using less costly ammunition.

3) Main gun range time: The restriction placed on main gun range time is a correlary to the main gun ammunition restriction. Since all nations do not have unlimited access to ranges, all were limited to their own annual allocation of main gun range time. In conjunction with the ammunition restriction, this limitation on range time constrained the resources a given nation could invest in preliminary training.

4) Personnel stability: All nations were required to fix the personnel to participate as members of national teams two months prior to the actual competition. Thereafter, new soldiers recently joining these units could not participate as members of the competition team. This rule attempted to discourage the use of "professional competitors", those who had previously participated in the competition perhaps with another unit.[17]

The rules further contained a provision which assured compliance by each nation. The senior national commander stationed in Germany was to provide written certification of rule compliance by his national team to the Commander in Chief, AFCENT by 8 May. Accordingly, General Kroesen certified United States compliance as did other senior national commanders.[18]

The controversy had been solved for 1981 by sincere men seeking the greater good for all participants.

Preparing For The 1981 Competition

Concurrently with the resolution of rules for the 1981 competition, the United States volunteered to act as host for the 1981 competition. In the rotational scheme of the competition, the United States had participated in two prior events and it was now appropriate that the US Army host. Accordingly, Grafenwoehr was chosen as the site of the 1981

competition, and planning began by the seventh Army Training Command to insure a smooth and efficient competition.[19]

The command began two actions simultaneously. The actual competition range was selected and previously programmed improvements accelerated. In addition, the command requested personnel augmentation to conduct the competition. The request for temporary overstrength was honored by HQ USAREUR and the Chief Judge was assigned in December 1980. Initially, he performed duties as both Chief Judge and command project officer.

Internal command organization for support began with the publication of the Seventh Army Training Command Canadian Army Trophy Letter of Instruction in February 1981. This document defined the organization for support, listed tasks to be accomplished by the organization, and established a milestone schedule for accomplishment of these tasks.[29]

Personnel to support the Seventh Army Training Command in the execution of the hosting function were phased into the Canadian Army Trophy support organization over time from March through June 1981. they came from the training command; other USAREUR units; a specifically designated support unit, a tank battalion from the 1st Armored Division; and the various nations participating in the competition.

Multinational personnel from the competing nations, in conjunction with personnel from the support battalion, were responsible for the operation of the ranges, both zero and competition. They were under the control of the Chief Judge and a panel of National Judges. These personnel performed such tasks as Safety NCO; Range Officers; Ammunition and Personnel Verification; and, finally, the actual scoring of the competition battle runs.

Preliminary training of such a diverse group was a real concern.

Members of the 1st Armored Division tank battalion supporting the competition had to work in close cooperation with representatives from the various nations to insure the smooth functioning of the competition. Dry run training prior to the competition was critical. Therefore, all personnel reported to Grafenwoehr a week prior to the competition for a preliminary training phase. During this phase the supporting tank battalion, the 1st Battalion, 13th Armor, formed platoons of three tanks, the CAT competition configuration. These platoons conducted the zeroing exercise and negotiated the competition course under conditions similiar to those of the actual competition. They acted as training aids for the various US and multinational personnel conducting and controlling the competition. The result was a trained and functioning team from some very diverse elements.

In addition to the training value, the use of these platoons enabled the Chief Judge to validate the general range organization as well as procedures designed to minimize the impact of range operation on the competing platoons. So that the whole rehearsal process was as open as possible, the competing teams were invited to send representatives to observe, which all did.[22]

This preliminary rehearsal training proved invaluable, especially in familiarizing multinational personnel with scenarios (target arrays) which were similar to those which would be used in the competition. In addition, it enabled them to become totally familiar with the US range equipment they were to operate during the competition.

The number of scenarios to be used by the Chief Judge in the competition was a source of some disagreement among the competing nations. While the competition scenarios were known only to the Chief

Judge, the course requirements for the competition, such as numbers of targets required, ranges, etc. were specified in the rules and were well known. During the 1979 competition a total of five scenarios had been used for the 25 competing platoons. Each scenario was used each day of the five day competition. Since platoons could watch the competition before they negotiated the competition course, they could gain a degree of "intelligence" on the course, target layout and ranges to targets. In fact, if they watched long enough, they could very well see the scenario they would subsequently face. Therefore, the 1979 system allowed one to "G-2" the competition.

For the 1981 competition the system changed: a total of nine scenarios were used. Platoons were grouped into nine time windows. Those firing the competition course in the same time window would face the same scenario. Prior to the first platoon negotiating the competition course all platoons in that time window were placed in a quarantine area. They could not leave, others could not enter, and communications were strictly controlled, so that platoons were confronted with scenarios which were new and different from anything they, or anyone else had, previously seen.

In the beginning there was a move to continue the five scenario system used in 1979 for the 1981 competition. Some felt more comfortable with it and it surely would have been easier on the Chief Judge and range crews. However, the consensus was that the nine scenario system with its associated platoon quarantine was a better test of the platoon's combat ability. Its ability to acquire targets, to determine range and to kill targets as fast as possible without the artificial crutch of competition course "G-2". Ultimately, all nations agreed that the nine scenario system afforded the fairest opportunity for all, and

it was approved.

Team Training For The 1981 Competition

Training for the competition was extensive and intense by all competitors. It begain late in 1980 and continued with increasing intensity up to the time of the competition. The training calendar for these teams was compressed so that from about October until May they accomplished more gunnery training than they would normally accomplish in a full calendar year. In the case of Germany and the United States, they had to train not one but two units because the random selection of the actual competition team would not occur until 8 May. Upon completion of this training the teams were easily the most proficient units in their respective national armored forces in the area of tank gunnery.

While team training programs varied from nation to nation, they achieved this level of proficiency as a result of dry firing exercises, subcaliber small arms simulation for the main gun and actual main gun firing at various major training areas. In addition, the competition rules allowed each team to have two days practice on the actual competition range prior to the conduct of the competition.[23] The purpose of these two days was merely range familiarity as the competition range was not in its final configuration for the competition.[24]

For most nations the training plan was developed, executed and monitored by the chain of command. However, two nations, Germany and the United Kingdom, used a uniquely different method of preparing the competing teams. In addition to the normal chain of command in the units, these nations added special team training cells. The leaders of these cells had a long association with the competition and both were also associated with their respective national armor school.

In the case of the German training cell, Lieutenant Colonel Meineke, the chief trainer, had previously served as the Chief Judge of the 1979 competition and as a National Judge prior to that. He was also the Chief of the Gunnery Branch of the German Armor School. From this position he trained the German team. Major Charles Roger, chief trainer for the United Kingdom team, had previously participated in a number of competitions in various capacities.

While the relationship between the chief team trainer and the unit commander is unknown, these two men brought significant knowledge of the competition and its nuances to their teams, as well as an indepth knowledge of gunnery and gunnery training techniques. They also freed the unit commander to monitor more than just the training of the team. This was especially important as the competition neared and the myriad of administrative and support details demanded the commander's time. The only conclusion one can reach is that, judging from past results, the system has worked extremely well for the German teams over the past few years.

The Environment, Press, Stress, & Understanding

Stress was a key factor throughout the competition for the teams. Not only did the team and crew members feel pressure, but battalion commanders associated with the teams felt the self-imposed pressure which resulted from the desire to win. It was not just to prove that your team was the best of the six, but to prove it was the very best in the NATO Central Region. Some nations wanted to prove even more. A number of articles had appeared in the US press critical of past US performance in international military competitions. US past standing in the Canadian Army Trophy competition was always mentioned. The authors

of these articles linked past poor performance with a number of issues facing the Army and drew erroneous conclusions ranging from the failure of the all volunteer Army, to the low level of trainability of the current soldier, to the inability of the Army leadership to properly train the Army. Unfortunately, these articles not only increased pressure on the respective teams, but also reflected poor understanding of the competition by the media.[25]

The press did not take the time to truly understand this competition before drawing conclusions. They failed to understand that this competition is the Olympics of tank gunnery. The comparision is apropos since each team is the very best from that nation, and the standards against which they compete are considerably higher than their respective national standards.

A comparison of the CAT Competition standard with a close relative, the US platoon battle run course (tank table IX), reveals the differences in standards:

1) CAT targets are smaller by 1/3 to 1/2.

2) CAT targets are about 20% further from the tank than for tank table IX with some beyond 2 kilometers.

3) CAT crews have 17% less main gun ammunition with which to engage targets.

4) CAT targets do not fall and, therefore, provide no feedback to the crew when hit.

5) CAT machinegun targets must be physically hit as they are physically scored.

6) CAT targets must be hit considerably faster, in 17 seconds on the average, if the platoon is to be at all competitive. US platoons

have 40 seconds on table IX. So, CAT targets are smaller, further away and must be hit faster and with less ammunition than on the US platoon battle run.[26]

The failure to truly understand the difficulty of the CAT standard leads to the wrong conclusions for those teams which finish in other than first place.

CAT 81 Results

With the stress factor and a standard more difficult than the individual national standard, how did the teams measure when compared to the intent of the competition?

Did the teams meet in a spirit of true comradeship? Despite the intense competition, the interchange between soldiers was, according to old CAT hands, the best of any competition. Some teams had to expand troop canteens due to the large influx of members of other national teams who came to socialize. Teams also spontaneously invited other teams to equipment demonstrations and displays, which fostered interoperablity and understanding among the various national contingents.

Was the overall standard of tank gunnery improved among the competing forces? Competition results show that the teams training for and participating in the competition greatly improved their gunnery standards and capabilities. The degree to which their expertise is spread in the national armored force is a function of the extent to which lessons learned are incorporated into that armored force. The potential for improvement is great. If nations use the competition as a laboratory for innovative ideas which, if successful, are subsequently used, the objective of the competition is achieved.

How did the teams come out? The German team was solidly in first place with a 5,000 point lead over the second place Belgian team. Point spreads among the remaining teams were narrow, with only 200 points, less than one target hit, separating some of the teams. The final platoon of the competition, a German platoon, clinched the competition for the German team by hitting all main gun targets, a feat never before accomplished in the history of the Canadian Army Trophy.

Team Standings

Nation	Standing	%Main gun[27] hits	Score[28]
Germany	1	83%	41,770
Belgium	2	80%	36,577
USA	3	71%	35,187
Canada	4	72%	34,990
United Kingdom	5	69%	34,840
Netherlands	6	69%	30,077

LESSONS LEARNED

Lessons From The Battle Run

Lessons learned from the competition have real potential value as we train units for combat. Since the course was designed to simulate a platoon combat engagement, it required crews of the platoon to accomplish all tasks associated with a combat engagement, including:

1) Target acquisition and identification.
2) Target - tank assignments.
3) Rapid target engagement.
4) Sensing for hit assurance.

Tagret acquisition was task one. Competition targets were

presented at varied locations and differing ranges. They were presented in groups of varying number, not known to the platoon. Many blended with the terrain and vegetation. Smoke discharges did not identify individual target locations as is frequently done on many national gunnery courses.

These conditions dictated special training in target acquisition for the competing teams. This special training reduced the difficulty of identifying targets. Some targets, however, were never seen by any member of the platoon and, therefore, never engaged. More work needs to be done in this area. For the US, the first step might be to drop the smoke charge designator from normal gunnery training. By the time an enemy has fired (the discharge of the smoke charge) you have lost the initiative and may have already been hit. The goal must be to hit the enemy before he can hit you.

The target acquisition task facing the platoon is complicated by the requirement to communicate targets internally, specifying location and number. Then tank and target assignments must be made to insure all threats are covered. Generally, internal pre-established procedures solve this problem except when more targets appear in a tank's sector than it can service in a timely manner. Then another member of the platoon must engage the excess targets either at the direction of the platoon leader or in accordance with pre-established procedure. Since competition course design allowed any tank to fire on any main gun target, the target tank assignment process was combat realistic. Unfortunately, safety constraints on many national courses limit tanks to established targets in assigned lanes, thereby removing the requirement that the platoon commander/leader insure total coverage of the platoon front. Where these safety constraints preclude cross fire,

redesign of existing courses may enable the platoon to function as a unit rather than functioning only as a group of individual tanks negotiating the same course at the same time.

The rules of the competition rewarded speed and accuracy, and penalized lethargy and sloppiness. To be truly competitive a platoon must hit its targets in 17 seconds on the average. The press for speed and accuracy helped meld man and machine in the crews. This melding was achieved primarily through repetitive training and drill. In addition, established procedures were re-examined and modified as necessary to shorten the engagement sequence. For example: the US team, commanded by LTC Ross Johnson, discovered that the normal fire command sequence was unnecessarily time consuming. Therefore, the whole sequence of six commands and responses was shortened to the command "action". This saved valuable time for the crews, and contributed to the success of the unit. Based on their achievements with this innovative approach, and the limited types of ammunition in the current basic load of tank units, a re-examination of the current fire command sequence may be in order. The seconds saved may be the difference in who fires and hits whom first.

Sensing target hits was the final problem facing the platoon. As mentioned earlier, targets did not fall when hit. Therefore, like enemy tanks engaged with non-pyrophoric ammunition, the target does not provide the crew hit or miss feedback. Given the speed of the SABOT round and the heat and dust cloud which envelops the firing tank, it becomes very difficult for the firing tank to sense its own rounds. Yet, knowing when one has hit or missed a target is crucially important both in the competition and combat. Accordingly, procedures were developed

by national teams for cross sensing. One tank would fire while a member of the crew from another tank would sense. In this way, with training and repetition, platoons could engage multiple targets simultaneously and be assured of target hits without relying on the target to provide feedback.[29]

The lesson is that cross platoon sensing must be used to insure target/enemy destruction in the absence of pyrophoric ammunition. Reliance on target hit feedback (target falls when hit) trains crews to conditions they will not experience in combat. We must insure our training conditions and tasks are in harmony with our equipment and battlefield conditions.

Lessons From Other Nations

While each national team had strengths from which others learned, this section will focus on only two which seemed to contribute most to success.

The first observation was derived from the German team and its techniques. As mentioned earlier, the concept of a team trainer was used by this team. For them it has merit. They have used it for the past several competitions and have been highly successful with this system. The "trainer" not only contributes personal competition expertise, but also has a detailed knowledge of tank gunnery training techniques. In addition, he appeared to have non-routine access to various organizational elements of the German Army which could be used to provide support which contributed to the success of the team. Therefore, he was able to cut bureaucratic red tape to obtain timely support in addition to training the team to CAT standards.[30] The merits of this system are: competition knowledge, gunnery expertise, and rapid access

to other support resources. The drawback might conflict with the existing chain of command but this was not noted. This is a system which has potential for the US Army in future competitions.

The second observation is derived from the experience of the Belgian team. They, like the Germans, have been highly successful in recent competitions, placing second behind Germany in the last two competitions. They have a unique method of tracking the performance of tank gunners. According to their Senior National Judge, each gunner is specially screened for entry into the gunner program. This gunner screening and subsequent performance testing continues as long as the man is a member of the armor force. Whether in simulation or on actual ranges, the results of these performance tests are recorded for each gunner. If, at any time, he fails to measure up to the standard set for achieving first round hits, his continuation as a tank gunner is re-examined.[31] Perhaps the key to the performance of the Belgian team might be the more rigorous selection process for tank gunners coupled with the continuing evaluation of their performance. This system warrants examination by the US Army.

THE FUTURE - SOME THOUGHTS

The Competition

What of the future of the competition? There are at least three possiblities for the future:

1) Continue the competition relatively unchanged.
2) Continue in modified form.
3) Cancel the competition completely.

Continuation of the competition requires that national participants, HQ AFCENT, and the Committee of Control are capable of resolving

conflicts which arise among the various nations. The number of units to be selected as potential participants continues to be a thorny question. Although discussed and resolved for the 1981 competition, the issue of resource investment in preparation versus negative readiness impact remains. In preparing for 1983, the Seventh Army Training Command examined the issue of numbers of units from another point of view. They ask if units other than battalions should be the basic unit nominated. Would this system minimize resource concentration and negative readiness impact? After considerable study it was concluded that there is no better system than selecting battalions. The battalion is the lowest level with the command and staff structure necessary to handle the complexity of participation in the competition. Therefore, continuation of the competition will require continued compromise by the participants on difficult issues.

Could the competition be modified and retained? There are at least three options:

1) Conduct a gunnery seminar only.
2) Conduct a series of national demonstrations only.
3) Continue the competition but add a seminar.

The seminar alternative assumes no team competition. Nations would merely meet to exchange ideas concerning gunnery and training techniques. This alternative would avoid issues such as unit selection, training, resources and readiness. It would not enable national contingents of soldiers to meet in a spirit of comradeship as now happens, as it would likely become an officer and senior NCO only affair. It could contribute to improved gunnery among the nations of the Central Region. It would allow nations to exchange ideas which could, at national

option, be incorporated into national training programs. It might become a great social event, but its usefulness in meeting the objectives of the competition would be relatively low.

The demonstration alternative, like the seminar alternative, sidesteps key issues, such as unit nomination. However, since this concept envisions units demonstrating national expertise, a team would not be competing against a common standard, and therefore, the team would not get feedback concerning the soundness of its training approach or crew skill. This alternative more closely realizes the intent of the competition than does the seminar, but runs the risk of becoming a show for show's sake.

The competition and seminar option have merit. The intent of the competition would be reinforced. Currently, nations are able to observe one another and gleen ideas, but there is no formal means of exchanging training and gunnery techniques learned as a result of preparing national teams. A seminar following the competition, conducted by HQ AFCENT with presentations by each competing nation, would be of considerable value in improving the gunnery standards of each participating nation. Informal exchanges occurred on an informal basis during the 1981 competition, but information does not get wide-spread dissemination when limited to informal contacts. A more formalized requirement for sharing ideas would foster understanding, standardization and interoperability. A good idea shared might benefit all.

If the alternatives listed above cannot be agreed to, should the competition be cancelled? Cancellation would mean an inability of AFCENT nations to agree to the conditions of the competition. It would mean they could not agree on the numbers of units to nominate for random selection or on the rules limiting resource expenditure. In addition,

it would seem to mean that they are not interested in using the competition as a forum for improving their own national gunnery programs. With this in mind, it seems unlikely that the competition will be cancelled. If it is cancelled the alliance may be in serious difficulty: agreement on the conditions of a competition is much less significant than agreement on the execution of a war.

Continued United States Participation?

The question of United States' continued participation has been asked frequently. There are costs and benefits associated with continued participation. Let us first examine the costs.

The argument to terminate U.S. participation has been fueled by the relatively poor US team performance in both 1977 and 1979. The competition is of long standing and provides the press and remainder of the world a view of our armored forces in direct competition with the armor forces of other friendly nations. It is as close as the press and public can come to getting a feel for how "our guys" might stack up against "their guys" without actual combat. Unfortunately, as discussed earlier, neither the press nor the public recognize the competition for what it really is: the Olympics of Tank Gunnery. This has led to misinterpretations of results, and, therefore, pressure on the Army. The fact that one must win does not mean that others are weak, that their training was poor, that their armored force is inferior, that their soldiers are poor, nor that the leadership is weak. It means that all of the Olympic athletes cannot win the gold medal. The others, although not gold medal winners, are still outstanding competitors. This is what the press fails to see. The desire to avoid press criticism seems to have translated itself into a desire by some to

withdraw from the competition. They believe participation is not worth the criticism of the Army.

If the cost to the Army is the potential for criticism, what is the cost to the unit involved?

The question must be answered with reference to a number of units. The cost of participation to USAREUR as a whole is primarily range time. Although the competition unit is limited to the normal national allocation of main gun range time, it will probably spend a great deal of time on subcaliber ranges at major training areas. In addition, it will use the main gun range time in smaller "bites" than is normal for a unit, thus necessitating adjustments in the range schedules of other USAREUR units. Tight range scheduling in major training areas in USAREUR presents problems. However, they can be overcome just as they were for the 1981 competition.

The cost to the Division is more direct. First, training costs money. Additional funds must be provided the division for the intensive training of the competition battalions. This is perhaps the most minor problem facing the division commander, for if he is not provided the training funds he cannot train the competitor effectively. His major problem is really the remainder of the division. Since special attention is focused on the competitors, those, such as ADC's, devote a large share of time to the competitors and may not be able to devote the time that may be required to other units. In addition, support units may be strained. They are normally geared to support the division as a whole in Brigade slices. Competition involvement causes them to devote a disproportionate amount of effort and assets to support the competition battalions. In short, the division must focus on the competition units

and this may be at the expense of other units in the division. An alternative might be to use the German system of a team trainer, but augment the division with selected support elements to handle such challenges as the unique and intense maintenance requirements which result from participation in the competition.

The primary burden on the Brigade is the requirement for substantially increased coordination and follow through as it applies to all aspects of the preparation for and conduct of the competition. This strains the command and staff elements of the Brigade. The Brigade in USAREUR is not staffed to coordinate with the USAREUR staff, DARCOM elements, HQ AFCENT representatives, and a host of others. However, this is exactly what must be done. Again, a team trainer with a support cell could, if properly staffed, relieve the Brigade of much of this burden.

The cost of participation to the battalion is the greatest of all. During the period of preparation and intense training, the whole unit focuses on the competition. Gunnery training is paramount, with little attention devoted to other aspects of training, such as maneuver. While the unit focus is on the competition, the whole unit does not participate since only 5 platoons (15 tanks and crews) will ultimately compete. However, all initially train since the ultimate goal is to have the 15 best crews as the competition team. Therefore, while all benefit from the initial training, only a few benefit from actual participation. This does not mean that the non-competition crews are doing nothing. The requirement for internal support in the battalion is considerable, and these men provide the expertise and manpower to run ranges, assist in training, and accomplish a host of other functions where manpower requirements are greater than normal for a gunnery exercise with only 15

tanks. Thus the real cost to the battalion is the exclusive focus on gunnery for what ultimately becomes only about one third of that battalion's combat force.

With the costs just discussed, why do we continue to participate? First, it affords the United States a tremendous opportunity to learn. The units involved dramatically improve crew gunnery skills. We learn a great deal about how to efficiently and effectively train crews. Support personnel gain a better knowledge of what is required to support armor in an intense gunnery environment. The units involved learn to do their jobs more efficiently and expertly. The knowledge gained has the potential for being exported to the armored force at large, with gains for the Army at large.

The second reason for continued participation is more basic. Our prestige is on the line. Once involved, it is difficult to take our marbles and go home, especially since we're not number one. Terminating participation now would communicate a reluctance on the part of the Army to stay the course when we do not win. Unless we do even better than we did in 1981, and that was a tremendous achievement, we will be forced to remain in the competition. So, the answer appears to be to do better.

Just how does the US do a better job of preparing in order to improve our standing?

The first step is to recognize at the outset that the competition is not just another gunnery shoot, but an Olympic level test of competitors who have trained long and hard.

Next, the potential competitors must have a comprehensive plan for preparation and execution of the actual competition. The basis for the plan must be the standard to be achieved. This is derived only by a

erect for 40 seconds, they must be hit in far less than that to have any hope of winning. So the standard might read: each platoon must hit 17 of 18 main gun targets in less than 15 seconds on the average. Having determined the standard for winning the competition we must do some backward planning. Intermediate objectives must be established based on the ultimate goal to build the crews to this level of expertise in a series of steps. However, the plan must be more than a training plan. It must include all aspects of preparation. When combining men, machines and ammunition the results will only be as good as the weakest link. Accordingly, the plan must address detailed tank inspections, periodic maintenance and the timely provision of repair parts. In addition, ammunition selection is key. A lot of main gun ammunition must be selected (or specially purchased) for training and the competition which has the least dispersion and greatest accuracy at the probable engagement ranges. It was interesting to note that following the 1981 competition the Belgian team began a study of their own ammunition and its dispersion as they believed that it did not measure up to their expectations.[32] All aspects of preparation must be included in the plan: it must be comprehensive, with intermediate objectives against which the unit can measure its performance, to determine if adjustments are necessary.

Third, success will require that all training be closely monitored by knowledgable trainers to insure that the crews are not merely going through the motions. This will frequently require the presence of field grade leadership, the staff and perhaps outside experts. They must evaluate performance objectively against the "win" standard to insure training remains on course for the unit. In addition, their knowledge

and background will assist junior leaders in overcoming problems in preparing the team. They are key players in preparing the team.

The "team trainer" concept employed by the German team over the past few years has merit. This cell could do much to assist the unit in achieving the actions laid out above. If properly organized, he could handle both training and support functions, providing the unit a far greater capability to achieve success.

What is the future for the United States in the competition?

The United States will continue to participate. We have no other option. However, we should take the steps outlined above to relieve the burden on the units to the extent possible and assure improved US performance.

CONCLUSION

In all probability the competition will remain relatively unchanged. The United States will not withdraw as a participant. The only alternative is to train to win. The 3rd Armored Division did a magnificant job in 1981. Providing future competitors with easier access to resources would enable them to spend less time on periferal aspects of preparation and more time devoted to intensive training. At the same time, augmenting the division with additional manpower in the form of a "team training and support cell" would assure a more equitable share of resources and attention to the other units in the division.

ENDNOTES

1. Canadian Army Trophy 1981 Competition, Rules and Conditions: HQ Allied Forces Central Europe, 11 August 1980, p. 9, 15.

2. Loc Cit.

3. Ibid, p. 11, 12, 13.

4. Ibid, p. 18, 19. Also, Canadian Army Trophy Competition 1981, Vol. V, Chief Judge After Action Report: HQ Seventh Army Training Center June 1981 Annex I.

5. Op Cit, Rules and Conditions: p. 4.

6. Ibid, p. 4, 5.

7. Ibid, p. 4, 8.

8. Ibid, p. 1. Also, Chief Judge conversations with National Judges.

9. Loc Cit.

10. Ibid, p. A-1.

11. Ibid, p. 8.

12. Ibid, p. 18.

13. Ibid, p. A-1.

14. Based on Chief Judge discussions with staff Seventh Army Training Command.

15. Op Cit, Rules and Conditions: p. 11.

16. Ibid, p. 12.

17. Loc Cit.

18. Ibid, p. 9.

19. Ibid, p. 6.

20. Canadian Army Trophy Competition 1981, Vol. 1, Letter of Instruction for Canadian Army Trophy Competition 1981: Seventh Army Training Command, 2 February 1981.

21. Loc Cit.

22. Op Cit, Chief Judge After Action Report: Annex J.

23. Op Cit, Rules and Conditions: p. 9.

24. Specific US Team training plans formulated by 3rd Brigade 3rd Armored Division.

25. Articles by Jack Anderson and John Fialka appeared in The Washington Post and Saint Louis Post Dispatch.

26. Computations of differences based on standards reflected in Rules and Conditions 1981. 1979 competition time results and Tank Table IX requirements/authorizations as of Spring 1981.

27. Based on Chief Judges notes for four competing platoons.

28. Based on Chief Judge notes, may differ slightly from official scores as a result of hasty math calculations.

29. Based on discussions with Team Captains, team trainers, competing battalion commanders and National Judges.

30. Based on discussions with LTC Meineke, German Team Trainer.

31. Based on discussions with LTC Bunkens, Senior National Judge from Belgium.

32. Loc Cit.