

the
TANK
CANADA

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**IN
THIS
ISSUE**

| | |
|--|----|
| EDITORIAL | 2 |
| WORTHY'S BABY GROWS UP —IS FIVE NOW | 3 |
| CONSTANCY NO VIRTUE | 5 |
| FROM BEHIND THE EIGHT- BALL AT A-8 | 9 |
| NEW TEST FOR REINFORCE- MENT OFFICERS | 10 |
| REVEILLE TO RETREAT AND LATER | 11 |
| C.A.C. HOLDING UNIT NO. 3 | 14 |
| TANK WORK IS TEAM WORK | 15 |
| C.A.C. WOMEN'S AUXILIARY | 16 |
| TANK FIGHTER TEAM | 17 |

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What We Have For You

The year-end holiday leaves left everyone in good shape for winter training, judging by the news from the centres in this edition. Read it for yourself and find out what has been going on.

Inside you will find an article on the changing use of armored formations as exemplified in Europe, and some valuable data on tanks and organization of enemy forces. Some of the information on the Japanese organization may be of real interest at this time in view of the Japanese show of armored strength in the Orient.

"Tank Fighter Team" continues the breath-taking adventures in France from the pen of a combatant. You can't afford to miss this instalment of the story.

A tribute to the tremendous growth of the Canadian armored formations is found in the article covering the fifth birthday of the C.A.C.

Our slant on some of the passing events can be found in the editorials.

All in all it should keep the pot boiling for the next few weeks.

This publication is the official organ of the Canadian Armored Corps, and will be devoted to advancing the interests of that Corps. However, the Canadian Armored Corps does not necessarily assume responsibility for opinions expressed in articles appearing herein, these being those of the authors only. Any officially authorized statements of the Corps on any subject will be so designated.

Editorial . . .

JAPAN AS A MECHANIZED POWER In the rapid turn of events around the globe it is hard to get any clear picture of a single portion of this world war in which we are engaging the destiny of our children's children.

It has been a matter of considerable surprise to many to read that the Japanese armies have been using tanks and armored vehicles to a large extent in gaining victories in the Luzon struggle and on the Malay land appendix.

Many overlook the fact that Japan has been on a war basis for a decade, since the Manchurian seizure of 1931, and very completely so since just before the China "incident" that may yet overwhelm her in concert with the United Nations' effort.

On top of that, Japan's spy mania, and the extreme difference in customs and language, has made it a hard country in which to pick up informative military tid-bits.

This much is known. The Japs has been actively building tanks for six or seven years. They have used various designs, German and British, being as ever unable to originate for themselves. Their tank building program has been under the guidance of German technical experts, and judging from quite wide use of the armored fighting machines in Malaya and the Philippines, their production has been extensively increased in the last couple of years without much knowledge of its escaping.

They are even using a small amphibian modelled on the U.S. Alligator boats, which is not a tank in the true sense. Their love of miniatures also extends to tanks. They have a lightly armored two-man tank, as well as a two-man submarine.

It appears that the Japanese tanks are generally inferior to better British and U.S. models. However, the defending forces have had few, if any, of their superior models to use against the Japanese, so that the little men from the islands have had it pretty much their own way.

As far as production goes, the Japanese can probably maintain their present rate of tank building for two or three years. They have immense reserves of scrap iron, mostly purchased from this continent, and it is not vulnerable to air attack either. The chief bottleneck, and one that will be felt if new and improved models are attempted, is that of machine tools.

Only preliminary reports of Japanese tank operations have come through to date, but they indicate that the Japs are brave almost to the point of recklessness. They are not likely to rule the armored roost once British and U.S. tanks begin to arrive and oppose them, but until that day, which may be some months hence, the Japs are definitely armored masters of the Orient. Even an inferior tank becomes superior against an army that has none at all.

MORE AND BETTER

The theory has been advanced by several non-military writers who have viewed the battle scene, that in some respects, the Allied side (and it sounds good to say that again) is on the wrong track in the production of tanks.

These men feel that Britain and the U.S. are stressing quality too much and that they should be stressing quantity. The truth probably lies in between, and if you examine the argument closely you will find that these experts cannot provide too much proof for their case.

An example of high production and lower quality might be found in Russia. The Russians standardized their tank designs earlier than other nations, and the war found them with many tanks of inferior quality. The result was that Russian tanks were defeated in many armored battles by superior German machines. On the other hand, reports have it that the newer type of Russian tanks performed very well and were able to hold their own.

It is certain that we must have tanks in the mass. Men who have to fight the tanks, however, do feel that their machines should be of high quality too if they are to have a sporting chance.

Britain's sea policy has always been to provide quality ships for its sailors, and that same policy is evident in tank production. The United States, too, will not be satisfied with inferior products.

If the experts are referring to elimination of gadgets they might have some cause for debate. But the suggestion that a big production of inferior tanks will solve our problem is definitely not the answer.

German tanks have proven to be well-built machines. The Huns, with much less industrial potential than our side, have turned them out by thousands. We shall do the same when our industry hits its stride. What we want is more and better tanks. Only then can the victory be assured in armored combat.

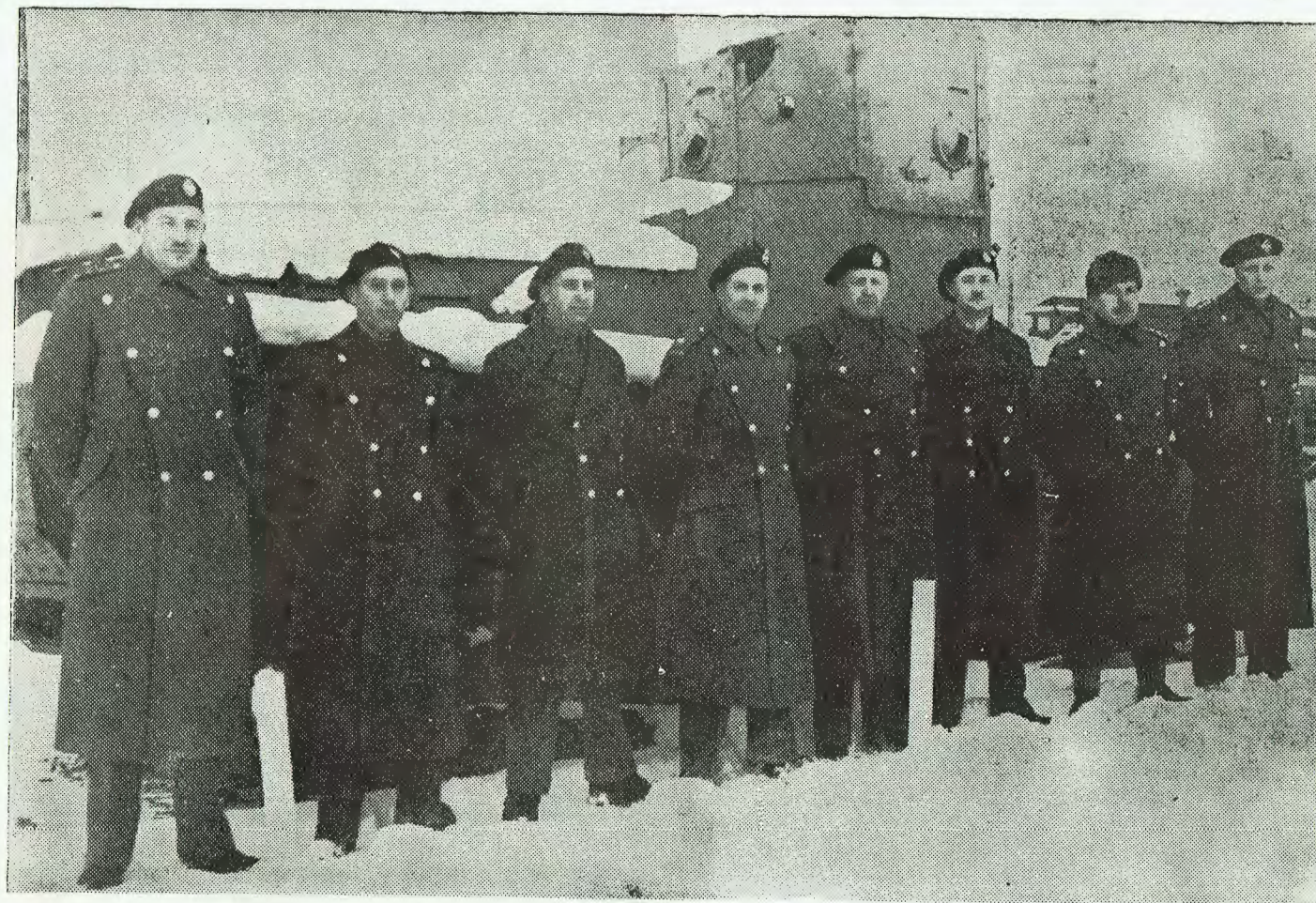
UNIFORMS WILL PLEASE

Announcement of new walking out dress for other ranks of the Canadian Army will be welcomed by all concerned. The army has been at a disadvantage in this regard for a long time, and at last the boys in khaki are to get a deserved break.

There have been a few voices raised in protest. More than likely they are cries from the same quarters that condemned the unkempt appearance of army battle dress.

The battle dress issue is a particularly comfortable training and fighting outfit. That is a matter of general agreement. But it leaves much to be desired as walking out dress.

This new issue will please the troops we feel sure. The camp tailors will certainly notice increased business in the task of keeping creases in the proper places.



ORIGINALS OF C.A.C. GATHER ON FIFTH BIRTHDAY OF CORPS

Of the handful of "originals" in the formation of Canada's armored corps five years ago, the eight shown here are still on active duty around Camp Borden. Left to right, they are: Capt. R. S. Edwards, who was a P.P.C.L.I. corporal when the corps started; Lieut. R. Harris, formerly a S.M.I.

with the R.C.D.; C.S.M. Viel, who started as a lance-corporal with the Royal 22nd; Major J. C. Cave, who was a sergeant-instructor with the P.P.L.C.I.; R.S.M. Hider, sergeant with R.C.D.; Q.M.S.I. LeBlanc, a corporal with the Royal 22nd; Capt. R. Hughes, was a Q.S.M.I. with the R.C.R.; Capt. G. Farmer, former lance bombardier with the R.C.H.A.

Worthy's Baby Grows Up— Is Five Now

Towards the close of December, 1941, they had a birthday celebration for Worthington's "baby." The infant, five years old, is growing bigger and better every day.

Five years ago in December the Canadian Armored Corps came into being so it was only fitting that the originals should celebrate.

The thousands of men now wearing those distinctive black berets are the offspring of the eighteen men who reported to the then—Capt. F. F. Worthington, M.C., and bar, M.M. and bar, at London, Ontario on December 15, 1936.

It is some distance from 1936 to 1942, and much further from eighteen men and an idea to the current C.A.C. establishment of thousands of men with a mission.

The originals began tank training with tiny two-seater carriers. Now 30-ton Rams and 20-ton Valentines roar all around the Camp Borden training area.

Some of the birthday thoughts were reserved for "the old man," for Canada's De Gaulle, who believed in and preached with unceasing fervor the gospel of armored troops.

Capt. Worthington and Lieut. J. LaRoque were picked to go to England for instruction early in 1937. They returned full of enthusiasm and ideas, and went to work.

Worthington, LaRoque and Capt., now Col. G. C. Smith were the only three who had ever driven a tank when the first two arrived in 1938. They were 6-ton lights, but they were the proudest possessions of the still struggling hopefuls of those days.

As an illustration of the lack of mechanization in

1938, when summer manoeuvres were held at Borden it was necessary to call in R.C.A.S.C. trucks from as far east as Halifax to get sufficient transport to handle the situation for Canada's very small peace-time army.

Capt. Worthington got his majority then, and events moved rapidly to the war climax, which found him a colonel almost at once.

An army tank brigade was in the making but the training centre was inadequately equipped with training machines. Col. Worthington went to the United States and put over his famous tank deal, purchasing several hundred 1918 Renauds in very dilapidated condition from the U.S. arsenals.

Their wheezy, balky motors were a hideous nightmare at times, but they were good training vehicles, and they made the personnel mechanically minded as nothing else could have.

By this time the tank idea has flowered into the C.A.C. training centre. From it Col. Worthington was placed in charge of the 1st Canadian Army Tank Brigade. His brigade major was a man who less than five years before had been Lt. John Andrews. Others of the originals filled important posts. Nine of the first eighteen are at Borden keeping up the tradition and the good work.

The present rank of the originals may be of interest and in order of their seniority as of December 15, 1936, it is as follows:

Capt. (Temp. Major) F. F. Worthington, P.P.-C.L.I., now brigadier; Capt. G. C. Smith, RCA, now colonel; Lieut. J. H. LaRoque, R.C.D., lieutenant-colonel (commanding a regiment with the Fifth Canadian Armored Division); Lieut. J. A. G. Roberge, R.22R., now major; Lieut. J. G. Andrews, P.P.C.L.I., now lieutenant-colonel; Lieut. T. G. Gibson, R.C.R., major; Lieut. F. E. White, L.S.H., major; Q.M.S.I. F. Richmond, L.S.H., lieutenant; Q.M.S.I. R. Hughes, R.C.R., major; Q.M.S.I. M. M. Philpott, L.S.H., captain; S.S.-M.I. R. Harris, R.C.D., lieutenant; Sgt. R. J. Hider, R.C.D., R.S.M.; Sgt.-Instr. J. C. Cave, P.P.C.L.I. major; Corp. Pengelley, R.C.R., Q.M.S.I. (Oshawa); Bombardier D. H. E. Reid, R.C.H.A., lieutenant; Cpl. R. S. Edwards, P.P.C.L.I., captain; Corporal W. Leblanc, R.22R., Q.M.S.I.; L. Bombardier F. Farmer, R.C.H.A., captain and L.-Cpl. A. Viel, R.22R., C.S.M.


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Constancy No Virtue

(By TACTICUS)

One interesting thing about the restoration of offensive action to the science of war by the use of armored fighting vehicles is that the actual makeup of this new restorative is not, and may never be, permanently settled.

It is evident, even to the uninitiated, that the actual composition of armored units in the German army is still in a state of change. When you consider the head start enjoyed by the Nazis in experimenting with the proper balance of forces for armored corps work, it is not hard to foretell further changes in our own presently constituted arrangements when the day of major testing against the Huns is experienced. The present campaign in Libya, as armored personnel realizes, is almost certain to bring us a wealth of useful information in that regard.

Up to the present one of the differences between German and British employment of armored units has been the lack of Teutonic preference for what we are inclined to view the functions of an army tank brigade as necessitating.

When the Germans began to rearm they rejected the theory that tanks must be closely tied to foot infantry. They decided, and results have shown them to be very correct under some circumstances, that the tank must be used in huge numbers, and must be completely self-contained in the process by the addition of highly mobile infantry, artillery, engineer and aviation groups.

The tank brigade idea was rejected by General Guderian, brilliant Nazi armored expert, in the following words:

"There are important strategic and tactical objections to the organization of separate low-speed tank units for the infantry. The tank units that are designed for strategic purposes may be used tactically either as entire units or divided. On the other hand, it would be impracticable to combine the division tank battalions for strategic employment. Aside from the fact that their equipment is not suitable for missions of this kind, the combined force would lack the requisite headquarters and could not produce them at will. The greater the speed of an arm on the march and in combat, the more important that it and its commanders be trained in units that are organized in peace the same as they would be in war."

German authorities, even on the limited experience of the Spanish Civil War, felt that their decision to make armored units self-contained had more than been confirmed.

Russia Changes It

Having laid down this fairly definite principle, it now appears that the German is once more demonstrating his much increased ability to flexible thinking and acting in this war, by changing his ideas in Russia.

Pending more definite information it is unwise to make any clean-cut statements as to present policy, but it does appear that the Hun, for the present at least, is using his tanks much more in co-operation with the infantry than was the case in previous campaigns.

This may have been necessitated by the depth of battle provided by the resolute Russians and the painfully long lines of communication that is affecting the Nazi attack and retreat, with the invaders open to interference almost along its whole length.



NAZI NOTABLES REVIEW GERMAN TANK FORMATIONS

This "march" past of German armored units occurred in the late days of peace. It features entirely the light PzKw. Mk. I tanks, which have not been able to stand up to the improved anti-tank weapons of later war

months. This type of tank has been converted to the task of flame-throwing and has been used in that role to some extent. It is unlikely that any more of this type are being made.

However, in this return to some of the basic thinking of the old British tank idea, the Nazis evidently are not creating a separate infantry tank brigade unit, but breaking down their speedy armored divisions for use in smaller formations.

This willingness to adapt oneself to changed circumstances marks a resourceful foe, and has been one department in which the Nazis have excelled us to date. As the heading to this piece says, constancy is no virtue, in tank warfare particularly, and the ability to improvise will play a large part in final victory.

Basic Formation

Having arrived at this point, it is only fair to make clear that the Germans have a definite basis of armored organization. Changes in the detail of its structure and equipment appears to have been frequent, but the general pattern can be roughly laid down as something like this:

Divisional Headquarters.

Armoured Brigade: 1 or more tank regiments plus staff, recce, communicational and administrative elements (200 to 450 tanks approximately).

Motorized Infantry Bde.: 1 or more motorized infantry regiments, plus staff, assault artillery, recce and line of communication troops.

Artillery Regiments: Several units of motorized artillery including 75 mm., 105mm., 150 mm. calibre groups. They may use armored, self-propelled mountings.

Motorized Anti-Tank Battalion: Uses 47 mm., 50 mm. and 75 mm. A-T weapons, some mounted on motorized chassis.

Reconnaissance Regiment: Constituted of light tanks, armored cars and motorcycles, the latter a favorite arm.

A-A, A-T Combination Regiments: Dual purpose motorized groups using 15 mm., 20 mm., 37 mm., 88 mm. guns.

Engineer Battalions: Carrying bridging and ferry equipment.

Intercommunication Group: Telephonic and radio equipment groups.

Attached Aviation: Recce and bomber flights, and A-9 units.

Finally there are supply, maintenance and medical service groups.

Recent tendencies appear to place emphasis on A-A and A-T defences, to utilize more close-support artillery on armored mounts, and to introduce more medium and heavy tanks. As appears to be the case with all major armies, the light tank is definitely limited in scope, and on the way out.

Not Jerry-built

Examination of captured German tanks reveals that the land battleships have the same common virtue of their Luftwaffe flying craft — they are well made and built for fighting service. None of the German equipment appears shoddy or Jerry-built, although punsters may argue on this latter phrasing.

It is possible that their armor is inferior to that of British tanks. Indeed, tests have proven this point, but the German tank is nonetheless, a potent weapon. They make up for inferior armor by clever angling to make penetration difficult, so that projectiles will glance off.

An earlier tendency to rely on speed rather than armor is adjusted in later models, it appears. In new tanks the self-seal fuel tank is used, as well as fire-proofing in walls. By rivetting extra plates on their base, the Nazis have made more lightly armored tanks useable in quantity. Once again their ability to improvise is demonstrated.

Characteristics of main German tanks now in use are of interest and are as follows:

1.—PzKw 1. (light) weight 5.7 tons; crew, two; armor basis 18mm.; armament, 2 m.g.; speed (maximum) 32 m.p.h.; radius of action, 95 miles.

2.—PzKw 2, (light) 9 tons, three men, 20 mm. basis; 1 heavy m.g., 1 light m.g.; 24 m.p.h.; radius of 125 miles.

3.—PzKw 3. (medium) 18 tons; crew of five; 30-40 mm. basis; 1 37 mm. or 50 mm. gun; 2 l.m.g.; speed, 28 m.p.h.; radius of operation uncertain.

4.—PzKw 4. (heavy-medium) 22 tons; crew of five; 40-60 mm. basis; 1 75 mm. gun; 2 l.m.g.; 23 m.p.h.; radius of action not known.

5.—PzKw 5 (heavy) 32 tons; 7-8 men; 60 mm. basis; 1-75 mm. and 4 m.g. or 1-75 mm., 1-37mm. and 3 m.g.; 31 m.p.h.; radius of action, 12 hours.

6.—PzKw 6 (heavy) 35 tons likely; crew unknown; 75 mm. basis; 1-75 mm. or one 105 mm., 2-30 mm. m.g.; 4 l.m.g.; 25 m.p.h.; radius of action, 16 hours.

7.—PzKw 7 (super-heavy) 90 tons (?); crew 18 (?); 90 mm. basis; 1-105 mm., 2-47 mm., 4 m.g.

In addition to these the Germans have used flame-throwing tanks of the 9-ton variety. Their characteristics are roughly as follows: 9 tons; 28 m.p.h.; 15 mm. basis; 1-20 mm. and 1-l.m.g.; crew of three; flame thrower.

Two Czech tanks in common use with the Germans include the following models:

6.2 tons (light) 28 m.p.h.; 14 mm. basis; 1 or 2 l.m.g.; 90 miles radius; amphibian 3-4 m.p.h. in water; crew of 3.

8.5 tons; 26 m.p.h.; 50 mm. basis; 1-37 mm., 2-l.m.g.; 3 or 4 men; 125 miles radius.

It is interesting to note that Rommel's Afrika Korps depended very largely on the PzKw 4. Eyewitness despatches from Libya have told of the fine service these large tanks have given the stubbornly resisting Germans there. This tank is one of the better German efforts in the production line.

In addition to the types mentioned it is possible that others of which no data is available are coming into use, although hardly likely in quantity. The Germans also use a number of captured tanks of French make. The most formidable of these is the French Char B, a 31-ton heavy with 60 mm. basis which mounts a 75-mm. gun, a 47-mm. gun and two maggies. It was considered the finest tank in action in the battle of France, but there were not nearly enough of them, unfortunately. One drawback was its maximum speed, only 17 miles an hour. Most Polish tanks, it is reported, have been converted into gun mounts.

Japanese Tanks

Since this article went into preparation, the Japanese have come into the picture as an armored power, perhaps of doubtful quantity, but for the time being supreme in the current Eastern fighting.



ONE OF THE MORE SUCCESSFUL GERMAN MODELS—PzKw 4

In this photo is shown one of the better German all-purpose tanks, the PzKw. Mk. 4. Weight is 22 tons and it carries a crew of five. Armor basis of 40-60 mm. (1.6-2.4 inches). Armament includes 1 75-mm. gun and two

machine guns. Radius of action appears to be better than 100 miles. Drive sprocket is at rear. A heavy medium tank, there are several versions of it extant. It has been relied on to a large degree by Rommel's Libyan army.

Data on Japanese tanks is far from complete, but some information is available. First of all, the Japs have decentralized their armored command to a large extent, following more the Russian practice of army tank brigades. Separate from any tank formation are 20 light tanks which are part of each infantry division, used mostly in contact reconnaissance roles. In addition, most infantry divisions have allocated to them for co-operative offensive a tank battalion of light and medium tanks.

A Japanese tank regiment consist of three battalions. Each battalion is made up of two companies. The company has a headquarters with one medium and two light tanks. Each company embodies four platoons, one of three light tanks and the other three of medium tanks, also three to the platoon. This means 15 tanks per company. There are three tanks in battalion headquarters, making a total of 33 tanks per battalion.

With three battalions to the regiment, and three tanks in regimental headquarters, it can be seen that the total strength in tanks of a Jap regiment (equivalent of our brigade) is 102 tanks. This, it is evident, is well below the strength of the British army tank brigade establishment, and the contrast is even more

marked when it is recalled that 20 per cent of the Japanese tanks are light.

There are five standard Japanese tanks in production:

1. Small 3-ton recce tank (the two-man tankette.)
2. Light, 5-7 tons.
3. Cruiser, 15-18 tons.
4. Heavies, 25-30 tons.
5. Light amphibians, modelled on the U.S. "alligators," of 6-7 tons; road speed of 25 m.p.h.

There appears to be no organization among the Japs of armored divisions as such. At least, none appear to have shown up in Malaya or the Indies, and none have ever been reported from the Chinese theatre.

Japanese tanks are reported to be rather obsolete in design and they have nothing that is not generally the product of Western producers, even their tankette being from an original British idea in that line.

What the future may hold in the question of tank types and their use is open to wide speculation. The basic ideas of tank warfare will remain, but there is little doubt that not much else can be safely counted on to be constant.

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FROM BEHIND THE 8-BALL AT A-8

BROUGHT GOOD CHEER

With Christmas and New Year's Eve but glowing memories, we will only touch on the high-lights of the festive season.

Without a doubt the most enjoyable memory to all ranks was the gala dinner served to the men the Monday before Christmas Day. Good food, a modest amount to drink and fine spirits prevailing among all ranks, made it a stand-out affair.

In "B" Officers' Mess Christmas trees with all the tinsel, made the ante-room a pleasant spot to while away the holiday hours. However, the "oldsters" (28 and over, you know) wondered if the age regulations hadn't been carried a spot too far, when three of the "young" officers were nabbed trying to hang stockings by the fire-place. They probably still believe in Santa Claus.

Incidentally Santa Claus and the stork raced neck and neck to the homes of several chaps among us, who believe in exerting their war efforts at home and abroad. Among the seven so visited only two were able to boast sons—and we need fighting men.

Genial S/Sgt. Hockley of the Gunnery Wing scored a Magpie. He was presented with a lovely daughter.

Lt. F. J. Cornish, attached to Corps Headquarters didn't do any better. Rank means nothing in this democratic army.

Sgt. G. W. Hobbs and Tpr. W. H. Homewood are congratulated on the arrival of lusty male offspring.

Tpr. I. I. Stoffregan, Tpr. F. Leggett, and Tpr. E. T. McCully, did themselves proud with a daughter apiece.

LOVE BUG CASUALTIES

A dozen or so of our personnel decided to sit the old year out at home, quietly holding hands of newly acquired brides. Among those so misbehaving, were: Tprs. D. F. Campbell, R. H. Ellis, W. C. Bucholtz; L. T. Johnston, A. E. Rose, E. Farrington, C. Moon and Tpr. Quibbell; Cpl. H. G. Pearson; Sgt. R. W. McKeown and 2/Lts. R. Matte and W. A. Marlow.

BACK FROM B.M.A.

Lt. Ernie Linsdell, who has been on the instructional staff of the Armored Corps Wing at Brockville is back in Borden. He returns after a longish tour of duty down east.

SPORTS AND SUCH

Sports, winter and otherwise, took a beating from the weatherman prior to the New Year. The weather

was too mild for the water to jell into ice, resulting in NO HOCKEY. The Sports Officer went on furlough and got tangled up at Christmas, resulting in NO SPORTS. AW, WELL

Squadron basketball teams have been formed and a competitive series has been arranged for the current month. Charles the Cockroach has whispered that "B" Squadron has consistently overlooked a real twine-ball artist, both as coach and player in the person of 2/Lt. A. Harrison.

Fortunately for the physical well-being of this centre the Sergeants are diligently keeping themselves fit with a weekly bowling tournament and a Chinese Checkers tourney.

And that, gentlemen, is the sports news from this centre.

NEW BADGES DEPT.

From the Wireless Wing comes news of several important promotions. First of all, Gus (Gimmeyacigarette) Keeler became Wing sergeant-major in fact, as well as in theory, and substituted the well-earned insignia of Q.M.S. in place of the "crown and three."

Sergeants Hill, Cowdy, Myers and Wilson were found in conference as to the exact official location of a crown in relation to three chevrons.

Corporal Thompson J.S., seemed to be considerably enjoying the task of removing "sets of two" and preparing to "post" some "sets of three."

Among the attached personnel, L/Cpl. Chamberlain, and troopers Clausen, Rollo and Day didn't seem the least bit annoyed at being burdened with the chore of sewing corporals' stripes on the sleeves of thrilled battle-dress blouses.

Congratulations are sincerely voiced by all members of the Wireless Wing staff.

THE Q.M. RISES TO REMARK

"Don't give it all to me although I do save it. Thank you for the paper that filled my pockets and gloves on recent date. Believe me, it is really necessary to save paper. Before the war we imported 20,000,000 tons a year of paper-making material. Wood pulp came from Germany, the Baltic States, Norway and Finland. It makes artificial silk. Silk makes parachutes. We have to save to make up for those millions of tons—but you can't put it all in my pockets. It takes 25 books to make a ton of scrap paper. I thank you one and all."

New Test for Reinforcement Officers

Following through an idea conceived by Col. E. L. M. Burns, O.B.E., M.C., officer administrating the C.A.C., a group of reinforcement officers from A-8 Training Centre recently carried out an unusual motorized move.

The scheme, first to be tried in such circumstances, combined various aspects of their training, including D. and M., tactics and wireless.

Eleven 8-cwt. wireless trucks, each with a No. 11 set, were pushed off from camp on a series of moves that lasted for more than 50 hours. In that time the convoy travelled almost ceaselessly, stopping not more than 4 hours at any one time, and that on only one occasion, the first night out.

Crews of these vehicles thus had less than six hours sleep in two nights, were constantly driving and maintaining vehicles, and handling wireless equipment in winter conditions. It was a fair approximation of what they might be up against in winter campaigning. One of the tests included non-arrival of rations, the troops getting one solid meal and two sandwiches in 24 hours.

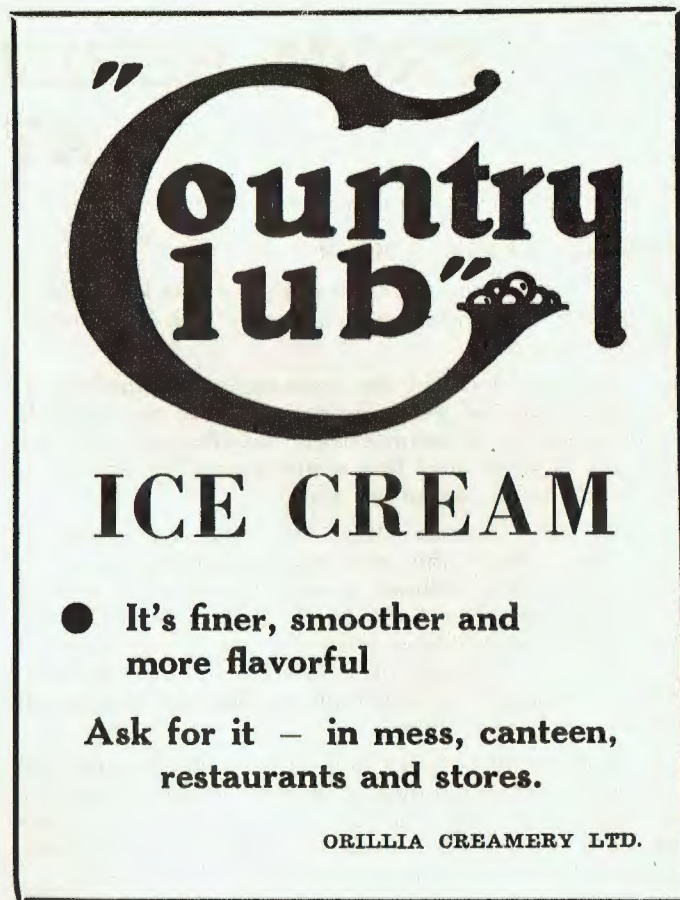
After two almost sleepless nights their mental abilities were tested by having to consider and answer a two-hour examination in tactics.

Upon returning the entire group was subjected to medical tests, and was found to be in surprisingly good physical condition.

Complete returns from the scheme, which was covered by official observers in all its phases, have not been announced. It was found, however, that men over the 28-year age limit stood up just as well as their younger brethren. The whole group, from the standpoint of mental alertness as demonstrated by the written examination, did not exhibit nearly as much brain fatigue as might have been expected. In fact, officials in charge of the scheme expressed pleasure at the high standard of marks obtained.

As a practical demonstration of mechanized movement, and as a real illustration of all the advantages and unexpected disadvantages therein, it was voted a tremendous success.

The scheme is to be elaborated and a written narrative is likely to be added, and it now appears to become a likely final test for all future reinforcement officer classes to hurdle.



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REVELLE TO RETREAT and Later

AT A-9 C.A.C.-A.T.C. (A.F.)

RAMBLING WITH 'MAC.

By Sgt. McAllister

Here's hoping that every Officer, W.O., N.C.O. and Trooper of A-9 had an enjoyable Christmas and New Year's leave. May they and theirs have a very prosperous New Year.

* * *

All ranks should look back to D.O. dated 23-12-41 para. 9 and see what a swell fellow our Commanding Officer is.

* * *

Orchids should be given to the committee who were responsible for the wonderful dance held at Barrie Armouries.

* * *

Our Cooks and their staff deserve a big hand for the wonderful dinner they put up at Christmas and New Year.

* * *

Thanks to Miss Ann Paterson of Toronto who very graciously served tea to the troops in "A" Mess Hall on New Year's Day.

* * *

Congratulations to S/Sgt. Davies on taking the big jump. May all his troubles be little ones. This also goes for L/Cpl. Warren and Armourer S/Sgt. Maguire.

* * *

To all the N.C.O.'s who were recently promoted, may they continue to climb the ladder to the top rung.

* * *

Our Reception Wing Storeroom looks like a first class Sports Store, with all the skis standing in racks, and an efficient staff fitting and waxing skis.

* * *

Here's hoping that Mrs. Edgar and little Miss Edgar, the new addition to the family, both enjoy the best of health.

* * *

The Norwegian National Anthem was sung with lots of volume, in the Sgts.' Mess on New Year's Day by three Officers of the Norwegian Army. Here it is with a translation by Lt. H. F. Heine Gundersen:

Norsk:

Ja, vi elsker dette landet
som det stiger frem,
furet, vaerbidt over vannet,
med de tusen hjem.
Elsker, elsker det og tenker
pa var far og mor,
og den saganatt som senker,
senker dromme pa var jord.

Engelsk:

Yes, we love this country
as it appears,
hard, weatherbeaten up from
the ocean,
with the thousands of homes.
Love it, love it and think
of our father and mother,
and the night of history,
which
gives us the dreams on this
our earth.

* * *

Anyone wishing to learn Highland Dancing get in touch with a certain Sgt. who will teach them the light fantastic.

Congratulations to our N.C.O.'s who left us to go to that haven of rest at Brockville. May the cure do them a lot of good.

THINGS WE WANT TO KNOW

Who was the S/Sgt. who said to the young lady at our dance in Barrie, "Don't look at the floor, look into my eyes?"

* * *

What did the trooper say to the Officer on New Year's Day, when the said Officer had his thumb in the said trooper's soup while serving dinner?

* * *

What happened to Sgt. Rennie's Christmas pudding that he left under the chesterfield?

* * *

Why does a certain C.S.M. go to Baxter on a Wednesday night. Is it to practice in the local choir?

* * *

Did Sgt. Arnold make a mistake when he sent himself a Christmas card and hung it on the Mess Notice Board?

DO YOU BELIEVE THIS?

1. James Lanvier of Edinburgh, sneezed 690 times in succession in 1927.
2. Rev. W. B. Hogg of El Paso, Texas, memorized the Bible.
3. A Hindu, Urdhabahu, held his arms above his head for 20 years.
4. A humming bird hums with its wings.
5. Table salt is not salt.
6. The longest word in the world has 184 letters.

GETTING SETTLED

After a series of shiftings that had all the intricacies of a Chinese puzzle, things are returning to normal at A-9. The D. and M. department appears permanently placed, and "A" mess has finally come to ground after a series of exciting rushes from one group of buildings to another.

Latest feature is the addition of a full-blown wireless wing, which has just graduated its first class of C.A.C. signally-minded. Capt. L. Brodie is in command, assisted by Lt. George Bell, back from overseas for a time. Capt. Brodie has been busy battling 'flu and pneumonia bugs, but appears to have the situation in hand.

ANENT DECEMBER BATHING

There is no percentage in December dips. This is advice straight from the source. In a recent night scheme, Lt. Art Peake placed too much faith in the lifting power of a sapling as he attempted to cross the

ford on the creek at "C" area. The night air was shattered into infinitesimal portions when the sapling broke off at the roots. Brother Peake's diving form was very bad, and the resultant splash was a caution. The water is not very deep, but there is nothing wrong with its damping effect on a full length immersion.

GUINEA PIG DEPT.

The foregoing incident was recorded in the course of a 50-hour combination tactics, wireless and D. and M. scheme for reinforcement officers. The mechanized movement paralleled as closely as possible similar training moves in England under conditions that might apply in actual warfare on the move.

Generally speaking the affair was a howling success, although the g.p.'s only averaged 3 hours' sleep in two nights. The scheme is likely to be enlarged for future classes. As a lesson in practical wireless use, maintenance and operation of vehicles it was of tremendous value. And the meals were swell—when you got them.

LEAVES WERE APPRECIATED

In a muster parade shortly before Christmas, Lt.-Col. McCamus pointed out that the troops were being given special privileges in having this leave with the external situation in its present shape. He cautioned the assembled troops to behave themselves and congratulated them on their fine disciplinary record. Details of how to obtain extra leave were announced, but returns to date do not indicate that much extra holidaying was enjoyed from that source.

CARE OF VEHICLES

Major issue with most of the "one-pip" wonders in driving vehicles is to avoid being charged with "Druckman driving." And small wonder, either.

FIRE DEPT.

The aforementioned went into action on December 19, when an overheated stove set fire to the signals wing orderly room. It was quite an extensive blaze, and some records and materials were lost, but valiant work by the bucket brigade and others with more elaborate equipment prevented the burning down of the whole hut. Only the orderly room interior was gutted.

It all added to the confusion however, what with the head sahib sick, Christmas leaves coming up, and all that.

SASSIETY DOINGS

The December social season found A-9 leading the parade. Other ranks enjoyed a fine dance in Barrie, with dancing partners provided, early in the month. It was a good show. One week later the officers of A-9 entertained officers from the entire camp at a gala dance. Another outstanding success. Orchids for both, to Lieutenant Wickham, who toiled hard and long to put the events across.

BROCKVILLE BOUND

Banished to Brockville are three popular members of the officers' mess. Lts. Sid Druckman, Len McIver and George Dowdell are doing C.A.C. instructional work at B.M.A.

—Continued on page 14

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Reveille to Retreat (Con'd.)

SPORTS PARADE

Sports are now well under way in A-9 Training Centre, and after many handicaps especially the preparation of the Drill Hall, A-9 played their first Volley Ball game January 19th, 1942.

The Armoured Corps Training Centres work under extremely difficult conditions, with so many night-lectures, work, tanks, trucks and guns to take care of and study; the boys, although willing, find the going pretty hard, and unlike our friends in the Infantry Centres, they have to work very late at night.

In spite of this sad, sad story, A-9 have entered all sports, including boxing and have plenty of punches behind them. If the weather man gives us a break we can safely say that this Centre will be in the hockey finals at Barrie.

Volley Ball comes as second nature, and Basketball we learned in our cradles, and in boxing all comers are welcome.

It's nice to blow your own trumpet, but it is grand to have confidence in those you are working with, so with these few words, Camp Bordenites, in all sports, A-9 will be there.

C.A.C. Holding Unit No. 3

By Sgt. W. G. Murray

Greetings from another new unit of Canada's Armoured Corp.

This is the holding unit of the Armoured Corps, now established at Camp Borden.

We are still in the process of formation and how much work that entails only our hard working Colonel can say—and he won't. Our staff is being drawn from all over Canada, not only Cavalry Regiments being represented, but many are officers who have grown C.A.C.-minded and transferred from well-known infantry regiments.

All these are being drawn together and welded into one body of men all equally determined to do all in their power to bring victory to our arms in the shortest possible time and in the completest manner.

Have you read Matthew Halton's description of the Tank battles in Libya? To our mind they are tops in eye-witness reporting. His tribute to the men of the Tank regiments should make us all proud of our berets, and steel ourselves that we will ever strive to maintain and uphold the reputation our comrades have made for us.

Shades of the old cavalry lines, not a horse to be seen anywhere. However in our wanderings we did observe a pile of something that at one time must have had something to do with a horse, whereupon we took a deep breath and heaved a great sigh for the dear dead days beyond recall.

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Tank Work is Team Work

By MAJOR J. M. McAVITY, Chief Instructor, Gunnery Wing, A-8 C.A.C.(A)T.C.

(A message to Armored Corps reinforcement personnel entering classes for advanced training).

You men now belong to the Canadian Armored Corps; you look like the type of men that the C.A.C. needs. Three months from today, the best of you will be fully trained in the highly specialized jobs which from then on will be your daily work—as members of tank crews.

In no army of the past, that of our fathers or our grandfathers, has the need for thorough training been as important as it is in "this man's army"; and in no branch of this army is thorough training of more urgent importance than in the Armored Corps.

Today, 200 odd men in 50 odd tanks take into battle more fire-power than did many times that number in the last war. Look at your future from this angle—you will be one of either three or four men, entrusted with between \$50,000 and \$100,000 of first class fighting equipment. Your vehicle will be equipped with sufficient ammunition to destroy about 100 German tanks, to kill over 4,000 Germans! Now whether or not you bring your expensive equipment out of one battle and into another—whether or not you will destroy your share of Germans, depends to a considerable extent on your work here in the next few weeks. Every day of training missed will lessen your chance of "getting your share" of Germans.

Successful tank action will be the result, mainly, of good team-work, similar to that seen in championship football and hockey teams; every man is trained to play his position, and to work with the others. On any team however, there is usually one man who stands out as the scoring threat—and it is he around whom the others build up plays—it is he who is on the "business" end of every play.

In the tank battle, the commander, wireless operator and driver constantly strive to bring their vehicle into a position from which the gunner can score a hit. The gunner is the man with the hitting-power. Many years ago, a little man named Napoleon stated that battles are won by fire-power. Today, the tank represents the most powerful, as well as the most mobile unit of land fire-power that the world has ever known. The tank gunner is behind that unit.

Let us look briefly into the training of the man who handles all this firepower; first he must become fully familiar with his weapons, their mountings, and other fittings and equipment which the gunner uses, in the turret or fighting chamber. He must learn how each functions, as well as to maintain them in action and generally preserve their life.

Then he must become practised in the control and manipulation of his weapons, to this end, a miniature range course fired from rotating and oscillating platforms, which simulate the movements of a tank, is a major part of the gunner's training program. On the 30 Yard Range and finally on the A.F.V. Range, the

gunner is progressively introduced to firing under conditions as close as possible to battle.

Obviously the process of finding and engagement of the enemy is an important one. This is covered under the headings—"Eye Training" and "Crew Control." The crew commander is responsible for the finding and selection of targets as well as for full control of the gunner's fire; but the gunner must receive considerable Eye Training in order that he may find and recognize targets as indicated by the crew commander. The actual control of the gunner's fire is by a system of crew control—a system by which the commander develops the maximum fighting efficiency out of his vehicle and crew. The gunner requires much training here so as to become familiar with the fire orders which he will receive. (Further, both Eye Training and Crew Control are important to every member of the crew, since if the commander becomes a casualty, one of them must automatically take over).

I suggested earlier that our armament is the best in the world; when you come to handle the Z-pounder gun and Besa and Browning machine guns, and later fire them on the ranges, you will be of the same opinion.



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C.A.C. WOMEN'S AUXILIARY

BARRIE AUXILIARY

Here we are into a new year! Our Christmas party is over and we really had a grand time. Four hundred and fifty children of twelve and under, representing all branches of the Active Forces were present, not forgetting mothers and a number of fathers. The Old Time Band from Camp Borden entertained with musical selections and a real Indian dance, and led a sing-song. The Clowns got a great hand, and there was a "Yank in the R.C.A.F." who came from Miami and grew a palm tree from a sheet of paper, and then with due consideration to the season and the climate, changed it to a Christmas tree! When little tummies were filled with sandwiches, cakes, milk or pop, and ice-cream, and grown-ups had had tea, Santa arrived down the big chimney and stepped out of the fireplace, well laden with gifts, candy, balloons and oranges.

Little soldiers, sailors and airmen, and their little sisters eagerly greeted Santa, some overjoyed with a handshake or a kiss, but a few clung to mother at the edge of the crowd.

Among the large number of Canadian Armoured Corps children we noted Joan and Larry McHale, Ronnie Simpkins, Susan Andrews, Garry Labbie, Peter Masson, Phyllis Reid, Jimmie Dinning, Judy Gianelli, Vici Marsh, Penny Gillespie, the Van Straubenzie boys, the Loudon boys and girls and lots of others. Joyce and Jimmy McMillen, whose father is with the Royal Regiment in Hong-Kong were there too. Yes, it was a good party—but thank goodness it only happens once a year!

L.S.H. AUXILIARY WINNIPEG, MAN.

December 22, 1941, was a wonderful day for the children of the men of the Lord Strathcona's Horse, (Royal Canadians) when approximately 250 mothers and children were entertained at a Christmas party given by the Ladies' Auxiliary at the Army and Navy Hall, Winnipeg. Jack the Clown was responsible for much of the fun and happiness of the evening, while

Felix the Cat, in his many adventures on the screen provided much excitement for the children. Supper was served to all at 5.30 p.m.—with all the trimmings, pop, ice cream, paper hats and balloons.

Much merriment was caused when Captain Clarke commandeered the services of the men of the party for the purpose of blowing up balloons, many a loud pop delighted the children. The climax of the evening was the arrival of Santa Claus who distributed a gift and bag of fruits and candy to each child from the gaily decorated tree. Guests of honor were Captain G. H. Nettleton of the depot and his staff, Captain G. H. Clarke of the Infantry Training Centre, and Lieut. W. G. Reade of Calgary, Alta.

The Ladies' Auxiliary at Winnipeg have been closely connected with the regiment since the ladies received their first charter in December, 1939. Up to the present they have raised all their own funds by successful teas, dances, and card parties. During November, 1941, 700 individual parcels containing good things for Christmas along with knitted comforts were sent overseas to the regiment and also a large shipment of cigarettes, with the hope that they will arrive at their destination during the festive season. It is the intention of the Winnipeg ladies to assure a monthly supply of cigarettes to be shipped overseas.

During January a very extensive membership drive is proposed, and a welcome is assured to all wives, mothers and friends of the men of this regiment.



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Tank Fighter Team

By LIEUTENANT ROBERT M. GERARD*

Reprinted from "Infantry Journal"

PART III: DEFENSE BEHIND THE SEINE

After all the movements the Nth Groupe Franc had made, which I have told about in the earlier parts of this account, its gasoline was running dangerously low. My captain accordingly decided to send me with two gasoline trucks to get some more, wherever I could find it. We could no longer count on supplies coming up from the rear. We could only count on ourselves.

I left on June 10 at 3.00 in the morning, with two drivers and two other men to help. At one gas station after another we found the pumps empty. We tried all the gas stations from Bourtheroulde to Pont Audemer and all those in Pont Audemer itself—but no gas. I then gave up as far as that particular area was concerned, and decided to drive straight south for thirty miles, without stopping, to reach Lisieux, a good-sized town with a big Standard Oil tank depot near it.

There was nobody at the depot except two or three workers and an old French janitor. I told him I wanted a thousand gallons of gasoline for our Groupe Franc, whereupon he asked me to give him a blue requisition slip, Form No. 3. I had none, of course, and told him so, but "No slip, no gas," was all I could get out of him. I tried argument and pleaded with him, telling him that if I didn't get the gas he alone would be responsible for the death and capture of the men of the Nth Groupe Franc, who were, after all, defending him. But he could not rise from his long life of routine and Forms No. 3 to conceive a different world.

I finally cut things short, pulled my revolver out and said I would shoot him if he didn't give us the gas. He just about collapsed, but had strength enough left to call me a gangster. But we got the gas. And not just a thousand gallons, but 1,500 gallons more in big barrels, more even than my two trucks could quite carry. I had also learned one fast way to cut red tape.

We then headed back toward the north and the front. On the running board of each truck I kept a man standing and constantly watching the sky for planes. It seemed a good idea not to be caught without warning while we were still in the gasoline trucks.

In a short time we were driving against the flow of refugees, and as we passed through Brionne there were houses still burning from a bombardment a short while before. As we came to Bourtheroulde, however, the refugees and fleeing troops grew fewer and fewer. "The Germans are already in Bourtheroulde," some of them cried. But they all seemed in a state of semi-hysteria, and in such a state false rumors spread at terrific speed. We did advance very slowly toward Bourtheroulde, but found no enemy. Our Groupe Franc were still there. And the men acclaimed the

arrival of more gas as if it had been gold. In short order it was distributed to the vehicles.

The captain then decided to move his headquarters platoon to a small hamlet off the main road, two miles to the southwest of Bourtheroulde, where the vehicles would be more secure. That morning he had sent two patrols, each consisting of an armored car and a few motorcycles, to La Bouille and to Elbeuf. But not a single German had they seen. The enemy was still not attempting to cross the Seine.

In the afternoon of that day (June 10) my captain received information from division headquarters that supposedly sixty German parachutists had just landed to the south of the Seine, in the loop below Rouen, and had sought cover in the woods of the Foret de Rouvray. The captain decided to send me there to find out what the situation actually was. There were only a few sidecar motorcycles left. So I got only one for the job. But my driver and I were equipped. Each of us had a light machine gun and two revolvers, and several hand grenades besides. And as my captain put it, before we left, if I didn't get back within three hours he would know that there were parachutists in the Foret de Rouvray.

We followed a small dirt road, winding through the woods. Our motorcycle noisily advertised our approach, and if there were any parachutists posted along the road it was not going to be hard for them to kill us. I rode with both feet hanging outside the "bathtub," ready to hit the ditch along the road. As we approached every curve, we stopped to observe and listen intently. But not a sound. And not a German. We kept on toward Rouen, and reached the suburbs. And then we took a small street leading to the Seine. The whole city was deserted. At the river we dismounted and watched the far bank where the two bridges, now demolished, had led. As we did this we held our light machine guns in our arms like two movie gangsters. But still we saw no German soldier. After a little we jumped in our sidecar and headed back full speed on the straight main road. What headquarters had told us was just another false rumor.

Not far out of St. Ouen and Bourtheroulde, we were suddenly stopped by a group of French infantrymen hidden along the road. They sprang out at us with light machine guns and rifles at the ready. The sergeant in charge announced that I was under arrest and they all surrounded us, looking as if they meant serious business. I told them that I was a French officer from the Groupe Franc, coming back from a reconnaissance, but they did not believe me. I showed my officer's card with my fingerprints and photograph, but they were still suspicious. They took us to the young infantry lieutenant in command of their platoon. He too was fully as suspicious. In the end we were dragged to the lieutenant colonel commanding the infantry battalion, who recognized me, as I had met him

* Formerly French Armored Force.

Tank Fighter Team (Contd.)

the day before. Apparently these troops, misled by our special equipment and particularly by the new armored-force helmets we were wearing, padded in front with leather, had mistaken us for German parachutists. Back in Bourtheroulde I reported the negative results of my patrol.

To my great astonishment I found there the commander of the tank platoon whom I thought had been killed in Rouen. He was the one who had gone out with his tank to hit the rear of the German column, north of Rouen. His attack had been a successful surprise. He had destroyed three German tanks, then retreated full speed. A little later he had attacked the flank of the tank column that was in the city itself and got two more enemy tanks, about the time we had been fighting those same tanks hardest with our anti-tank guns. His tank was hit once in the left of the cupola but this did not disable it. He could still fire the gun, however, and managed to get hits on two more German tanks.

Then he had heard the two explosions of the bridges and decided he might be able to get back across the Seine with his tank on one of the ferries. The ferry at La Bouille had been destroyed, so he went as far as Caudebec and was amazed not to encounter a single enemy column all the way. At Caudebec he found the ferry still operating but had a hard time putting his tank on it, though he finally got it aboard. In the middle of the Seine the ferry was machine-gunned by a lone bomber but three RAF pursuit planes which suddenly appeared opened on the German plane and drove it away.

Landed safely on the south side of the Seine, the tank-platoon commander had to spend all the next day (June 9) hunting for some gasoline. He kept asking all fleeing troops and refugees whether they had seen a French motorized unit with big white N's painted on the sides of their vehicles, and was finally directed to Bourtheroulde. He had some trouble, he reported, dodging colonels who wanted to commandeer his tank to ride in as they retreated to the south.

I had just about time to hear this story when some German bombers came in sight. Not far away from where I was there was an old 75-mm. gun in position, guarding one of the roads to the town. The officer in charge of it had lost his unit in the general retreat and had offered his services to my captain, who had gladly accepted. The German planes had first dropped a few bombs on the central square of the town near the church. Suddenly, as they came directly overhead, a man left a small group of refugees not far away and ran toward the 75-mm. gun, waving a white cloth. One of the planes saw, it diving straight on the gun which was well-camouflaged, and had apparently not been seen from the air before. The plane released three bombs, one after the other, and got the small crew of the 75 and the officer. But it also killed the fifth col-

umnist, too, in the middle of his dirty work. The gun was no longer usable.

That same night we heard a sudden shot in the street of the village. On investigation we found one of our men lying dead, with his papers gone and the identification plate on his wrist likewise stolen. By now this continual fifth column activity had gotten thoroughly on our nerves. We began to hate such activities more than anything else, except attacks from the air.

The next morning, June 11, came one of the best surprises of the whole campaign. On a stolen bicycle, dirty, unshaved, and exhausted, came riding into Bourtheroulde, the first lieutenant who commanded our 25-mm. antitank-gun platoon, and whom we had also thought had been killed in the battle of Rouen two days before. He told us, moreover, that ten miles from Bourtheroulde there were thirty infantrymen whom he had brought back from the north side of Rouen, and also the remnants of our antitank-gun crews—a few like himself who had survived the blowing of the bridges and the German artillery fire. At once we gave him two trucks to bring these men back to us.

When he returned, two hours later, the lieutenant explained that the blowing of the bridge had put his antitank-guns out of commission and killed nearly everyone in their crews. Those still alive had luckily found the men of the infantry platoon. Together they all marched toward the west along the banks of the Seine. A few miles out from Rouen they found a barge that would float. On this they got across to the south side, fifteen miles from Rouen, between Duclair and Caudebec. They marched from there toward Pont Audemer, inquiring as they went about the Groupe Franc. But soon they were so exhausted that the lieutenant ordered them to rest, and continued the search himself with a commandeered bicycle, in the end finding us in Bourtheroulde.

Almost unbelievably our Groupe Franc was now regaining some of its past strength. We were now five officers and about 120 men. The infantrymen had brought back four of their six heavy machine guns and this boosted our fire power a little. On the other hand, we had a new and serious problem because these thirty additional men had lost all their trucks—all transportation of every kind—and we could only cram them in the few vehicles we had left. But this, compared to the joy of getting them back, was a small thing.

What we were concerned about more deeply was our ammunition. It was low, after our battles at Boos and Rouen. But I got word from some retreating British that there was an abandoned munitions train on one of the railroad tracks near La Bouille in the middle of the forest. Immediately I took one of our trucks and four men to the spot, where we found the train. Near its front part and its rear part were enormous bomb craters, but by some miracle the attacking Nazi planes had missed the part that carried the ammunition. I posted a man in front of the train and another in its rear to give the rest of us warning with their whistles if any plane approached.

The bomb craters, the half-demolished train, the dead silence of the place, the lack of human activity, gave us the feeling that we were far from substantial military protection, and exposed to any sudden attack. Nervously we opened door after door of the freight cars. This took time, for the doors were all sealed. We looked rapidly inside each car to see whether it had the boxes of ammunition in it. All the first cars we opened contained artillery shells for 155-mm. and 75-mm. guns.

Suddenly one of the men whistled three times. We dashed across the tracks and under the train into the woods on the other side, as three planes came over. They let go a few bombs in level flight, but missed the ammunition train. We let our breaths out, crawled back again to the train, and in a few minutes more found what we wanted. We jammed one truck full as fast as we could, took the load back to the Groupe Franc, and then made a second trip to load the second ammunition truck. During the time we had three alerts, and had to hit cover three times, but no bombs were dropped on us.

When we came back from the wrecked ammunition train the second time the Groupe Franc was about ready to leave Bourtheroulde for a small village some fifteen miles to the west called Bourneville. During the movement I performed the job of "serrefile," that of the officer who is last in the column and sees to it that no vehicle is lost and that those with motor troubles get repaired and catch up. But no vehicle had such trouble this time. The mechanics had spent all night overhauling their motors and checking all possible weaknesses. Several Nazi planes machine-gunned us on the way to Bourneville, but their aim was bad and we had no casualties.

According to the reports of our patrols, there were still no signs that the enemy had tried a crossing anywhere in our sector. We had sent patrol after patrol along the Seine all day, in rotation, of course, to enable our men to get some rest. We now had to rely on continuous reconnaissance of this type because we had lost our radio truck in the bombardment of Bourtheroulde, which had been a major blow for the Groupe Franc. Without a radio truck, we were continually losing contact with our armored cars and tanks during their march, and we were cut off from information from higher headquarters except for the news brought by the few motorcycle scouts that we could spare and keep stationed all the time with corps headquarters to bring us orders and new information on the latest developments.

Late in the evening of June 11 we arrived at Bourneville, a charming little village still full of refugees. It had not been bombed. We immediately felt better because of this peaceful atmosphere, even though the degree of danger here was exactly the same as it had been at Bourtheroulde. We were lucky to find there also a few lambs and sheep, which we killed and ate with much delight. No food, of course, was reaching us from the rear, and we were getting sick of eating our "pain de guerre," a very dry hardtack, and the cans of "singe" ("monkey meat" or canned beef)

which we had in our supply truck. It was even luckier to find 400 pounds of flour in the town bakery, and we immediately detailed two men to make some bread. For the next two days these men made bread without taking a single minute of rest. It tasted better than any bread I ever ate in my life.

We camouflaged our trucks in two orchards as soon as we arrived in the village. Beginning at once, also, and all during the night, the men constructed road-blocks on all roads at the outskirts of the village. We took over the central switchboard at the post office simply by telling the girl in charge that the Germans were approaching full speed—another way of cutting red tape. She left at once, scared to death. Once an hour during the night we sent a patrol, on foot, around the village, mainly to listen. In the village the patrol saw to it that there were no lights, not even a match or a cigarette.

The next morning, June 12, my captain and I went around the village to determine the best emplacements for the heavy machine guns of the motorized infantry platoon. We were walking along a little dirt road just outside of the village when suddenly, not fifty yards away, a man appeared and aimed a sub-machine gun directly at us. We threw ourselves into the ditch along the road as bullets whistled past our ears, automatically pulling our revolvers as we did so. My captain killed the German with his second shot. When we examined the fifth columnist and his little gun we found that he had fired some sixty bullets at us. This Mauser sub-machine gun of the Germans is a very inaccurate weapon though its use had a marked psychological effect on the population. We found no identification papers on the German, only a map of the region. It was more detailed than the official French military maps we were using.

Since German fifth columnists were apparently mingled in with French refugees, my captain decided to take stern measures. We prepared a lot of small notices and pasted these on the walls of the village. The notice declared that to avoid any possibility of fifth columnist activity and enable us to prepare our defense without being hampered by refugees, the commander of the Groupe felt compelled to order every civilian to leave the village within an hour. After two hours had passed any civilian found in the village without good reason would be locked up and, if there seemed grounds for it, shot. During the rest of the campaign we executed several. We may have made a mistake or two but most of them were in all probability fifth columnists and all others had been warned. Until we took this stern action, no matter how well our vehicles had been camouflaged, German bomber pilots always seemed to know where they were hidden. But from then on, we suffered very few bombings in any village we defended. I feel therefore that the drastic measures taken by my captain were justified.

Bourneville was to be the headquarters of the Groupe Franc. We were not only assigned this village to defend, but also were assigned a line to protect behind the Seine that had a front of about twenty-five miles—from La Bouille near Rouen to the sea. To hold

Tank Fighter Team (Contd.)

any such front with 120 men was practically an impossible task. If the enemy tried to cross by force it was evident we could not prevent them from doing so. We could, however, hinder their preparations on the far bank and could probably repulse any crossing attempted by a weak reconnaissance force. Our main mission, however, was that of warning the division headquarters of any crossing attempt. Thus we were, in effect, the rear guard of the French division. What puzzled me during that time was the fact that none of us had ever seen this division. Was it a myth, a ghost, or just a bunch of men too afraid to fight in the front lines? Or was it just retreating slowly on foot to new positions? I found out on June 18, a few days later, when I actually saw the men in the division surrounded.

A company of customs officers on bicycles retreating from the coast came into our area. They wore vivid blue uniforms with a red strip down their pants. Their commander had very little push and my captain persuaded him to stay with us, telling him he would have nothing to do, that my captain would take care of everything. We naturally welcomed any reinforcements as long as they would stay with us.

We set up our defense in the following manner. All along the banks of the river we posted these 300 customs officers with their rifles. (They had no machine guns.) Thus they were used as a line of sentries or scouts about 150 yards apart. Every two or three miles a sidecar or a solo motorcycle from the Groupe Franc was posted. If one of the customs officers saw the enemy trying to cross the Seine, or preparing to make such a crossing, he was to fire several shots with his rifle to attract the attention of the motorcyclist, who would at once go to the place where the shots came from and then report to the headquarters of the Groupe Franc on the situation. At certain places the motorcyclist could use a telephone nearby instead of racing to headquarters.

We installed the headquarters of our Groupe Franc in the post office of Bourneville. The town lay several miles south of the Seine behind a deep forest and we made it the strong point of our defense, preparing its immediate defenses with mechanized attack mainly in mind. For the fixed defenses of the village the captain used the motorized infantry platoon, the several roadblocks, and a 47-mm. antitank-gun platoon under the energetic young artillery officer who had lost his unit and offered his services and those of his platoon to my captain instead of fleeing to the south like most of the rest of the army. His two antitank-guns with their prime-movers and the one cargo truck with them were a great help to us and made up for our losses in the fight at Rouen.

The most essential part of our defense was the mobile reserve formed of two armored cars, the motorcycle platoon, and our three remaining tanks. The armored cars and motorcyclists were used also to effect numerous reconnaissances to the east, in order to cover our right flank if the Germans crossed the Seine east of Rouen. Our three tanks were ordered to go back and forth along the south bank of the Seine. Once

an hour one of the tanks left La Bouille in the direction of Quillebeuf, moving along the Seine, stopping often to observe the other bank, and firing at any Germans who were sighted. The tank would come back to La Bouille again after a few hours. Thus our three tanks were constantly scouting along the Seine at different points, toward different directions. We hoped by using them that way to give the enemy the impression that there was a sizeable mechanized force on the south side of the Seine, and thus make them hesitate to attempt a crossing. I doubt very much whether we actually fooled the Germans, but at least if they attempted a crossing, our fire would certainly harass them and slow them up. If the enemy tried to cross anywhere our three tanks were to assemble full speed and concentrate their fire on the point the customs officer sentries indicated.

I did a good deal of that back-and-forth business in a tank myself because the tank platoon commander was worn out and needed a rest. On the first day I saw nothing of the enemy, driving all the time with my turret open. Nor did our patrols to the east report any Germans either. When night came we drove our three tanks back to Bourneville, and that first night I stayed near the telephone with my captain.

About 2.00 o'clock in the morning (June 13) the telephone rang and one of the motorcyclists told us that between Duclair and Caudebec a German motorized infantry column was moving along the north bank of the Seine on the road that followed the river. Some of the customs officers had fired across at them to give the alarm, and at once the enemy had returned the fire, using tracer bullets of all possible colors—red, white, blue, yellow. The effect on the customs officers of seeing that kind of a show was terrific; they had never seen such a thing. Half an hour later another motorcyclist phoned. The German column, he said, was still advancing to the west along the river bank and was now keeping up a terrific noise for the purpose, he thought, of scaring our defending troops. The enemy would send a red rocket into the sky, and the whole column would stop dead. Then a green rocket would go up and the column would resume its march. They also used white and yellow rockets for some purpose, and the whole performance was more than puzzling. From our own side of the Seine our motorcyclists and customs officers could hear officers shouting orders in German, and even the enemy troops singing Nazi songs. The few customs officers who took up fire with their rifles didn't seem to bother the column, which was returning their fire with tracer bullets, now from machine guns. But daylight approached without any attempt by the enemy to cross the river.

At 5.00 o'clock that morning I again left Bourneville with my tank and resumed scouting along the Seine, but with much more care than before because we knew for sure now that enemy troops were on the other side. Beyond Duclair I saw a few Germans but no vehicles. I systematically shelled their general area with the high-explosive shells of my 47-mm. gun and must have killed a few. I opened fire from a defiladed position with good protection against anti-

tank-gun fire. But apparently the German force had no antitank guns with it and only returned the fire with small automatic arms. That kind of fighting continued at intermittent periods all during the day.

I learned later why the Germans had not appeared on the north side of the Seine right after our battle in Rouen. Contrary to our belief the panzer division whose reconnaissance units we had met in Boos and Rouen, did not stay along the Seine but headed northwest toward the sea and reached the sea at St. Valery-en-Caux, a little southwest of Dieppe, thus completely encircling the French and British troops retreating from the Somme River. Only when they had partly cleared up this pocket did the German motorized infantry turn south to take position along the lower part of the Seine between Rouen and the sea.

During the afternoon of June 13, as I arrived opposite Caudebec, I saw that the whole town was in flames. The Germans had just bombed the place. And all along the road leading to the ferry were hundreds of abandoned automobiles, all on fire with flames leaping into the sky. On my way back to Bourneville, early that evening, I met a few British who had built a beautiful roadblock on the road my tank was following in the middle of the forest. They had two antitank rifles to defend it, but were preparing to leave which they soon did. They left a lot of equipment behind, which we salvaged early the next day—excellent motorcyclists' goggles, some good light raincoats, and especially the two antitank rifles which they had evidently decided were too heavy for them to carry in their hasty retreat. We liked that particular antitank weapon, of which our army had none. It was called the Boys rifle from its inventor and was of calibre .55, weighing around thirty-six pounds with its bipod rest. It was effective against lightly armored vehicles at short distance.

I spent the night again at the telephone with my captain. One rumor after another to the effect that the Germans had crossed the Seine east of Rouen came to us over the phone. Louviers, a bridgehead on our side of the Seine, south of Pont de l'Arche, was reported in German hands. The German column was advancing at night, toward the east, toward us, we were also told. To determine the part of reality and the part of fantasy in those rumors was impossible, except by sending out our own patrols. At 2.00 in the morning a colonel telephoned us from division headquarters. He said a German column was already a few miles from Bourneville, in Bourtheroulde, our last previous position. If this was true our position with our right flank exposed was now untenable. The colonel wanted a patrol sent at once to confirm this information. My captain told him that to send out a tank at night on such a mission was hardly desirable. The tank couldn't see anything anyway and could be taken in ambush. It was finally decided to send a tank and a few motorcycles with machine guns at dawn. My captain told me that I had been inside a tank enough during the past two days, and that I should therefore wake up the tank-platoon commander

and direct him to take charge of the patrol. In view of the importance of this patrol my captain decided to send an entire motorcycle platoon with its commander.

This patrol left Bourneville at 4.30 on the morning of June 14. We waited and waited, until an hour later one of the men of the motorcycle platoon reported by telephone. The patrol had been mistaken for a German column by the French artillery still in Bourtheroulde which had opened fire. Several men were wounded, and the tank-platoon commander was dying. The motorcycle-platoon commander asked us to send a truck at once to transport the wounded to the nearest hospital or ambulance. My captain sent me with a truck and telephoned division headquarters to send two ambulances at once to Bourneville. Arriving in front of Bourtheroulde, I saw the disabled tank near the road. In Bourtheroulde itself, I found the motorcycle-platoon commander who told me the story very briefly.

The tank commander with his tank was out in front of the motorcycle platoon. He was fired at without warning from the outskirts of Bourtheroulde. Thinking it was enemy fire, he quickly returned it. The motorcycle platoon dismounted and sought cover in the ditches along the road, opening on the supposed enemy with their machine guns. The "Germans" were firing with a 47-mm. or 75-mm. gun, well camouflaged. Its high-explosive shells burst near the motorcycle platoon. The tank kept on firing shells at the gun, using fire and movement, stopping only to fire. After a couple of minutes the tank received a direct hit on its front and the shell penetrated the tank as if through butter. Fragments of armor cut the left arm off the driver and tore the gunner's right shoulder apart. Another piece went through the tank-platoon commander's helmet into his head.

The motorcycle platoon advanced along the road in the ditches, approaching the village, to determine the strength of the enemy forces, but they finally discovered that the enemy was French. Our tank had killed two men of the artillery gun crew. The tank commander was in bad shape when I arrived with the truck and was plainly dying. I carried the wounded back to Bourneville as fast as I could, and from there they were taken to the rear in two ambulances.

The mistake had occurred partly because of the morning fog. The artillerymen couldn't determine whether the tank was French or German. Our tanks had the blue-white-and-red circle of the Republic, and German tanks had the Iron Cross painted on the front of the tank. But the Germans had used French colors so many times that this means of identification was of little practical value. Since the French had so little mechanized equipment left in the area, the artillerymen could hardly be wrong in assuming that any mechanized equipment they would see would be German. The real reason for the mistake was because the crews of the artillery antitank guns had never had any thorough training in identifying the silhouettes of the different types of French, British, and German vehicles.

Tank Fighter Team (Contd.)

And, of course, the lack of liaison between division headquarters and this particular artillery unit gave rise to the rumors that the Germans were there in Bourtheroulde, and prevented the artillery unit from being warned in time that a French mechanized patrol was approaching.

The tank commander was also somewhat at fault. He would probably not have been killed if he had stayed with his tank along the edge of the woods west of Bourtheroulde, and sent a few motorcycles to reconnoiter the village before he exposed his tank in the perfectly flat, open area between the woods and the village. With hindsight, however, it is always easy to criticize an action that has proved disastrous. Anyway, the result was a serious blow to the Groupe Franc. We now had only two armored cars and two tanks left as armored equipment. We had also lost a few sidecar motorcycles, destroyed by the 75-mm. fire in the same fight.

Shortly after I had come back to Bourneville, we received an order from headquarters to retreat again. Other rumors that the Germans had crossed the River Seine east of Rouen had been confirmed by other units. Our movement had to be effected quickly, otherwise a German column advancing generally toward the southwest would cut our retreat. Our Groupe Franc was ordered to go to Campigny and establish its headquarters in this little village a few miles southeast from Pont Audemer, and prepare a defense behind a small river, the Risle. The French Army as a whole was abandoning the Seine as a defensive position.

What made us smile a bit at this news was that as far as we had been able to see, the Seine had never been defended by French forces at all, except for a few rearguard units like our own. All during the time we had been making reconnaissance after reconnaissance from one position after another behind the Seine, our division had been stationed back there behind the Risle, building a few roadblocks. And now that the Seine line had been dented, our division was leaving the Risle and we were to take their place there. Things went this way, in fact, up to June 18, when the division was surrounded. During the whole time it did not fire a single shot to the best of our knowledge. For its own retreat, the division was lucky enough to have great numbers of Paris buses which the Army had requisitioned. Without those buses it would probably have been captured a few days sooner.

My captain used our two tanks to protect the rear of our column as we dropped back from Bourneville to Campigny. The two armored cars, with what was left of the motorcycle platoon, protected our flanks by making small reconnaissances out on side roads, coming back to the main road after the column had passed. Thus the column had a mobile antitank defense on its flanks and rear. No hasty roadblocks were built on the side roads because this would take too much time and work. Instead, my captain relied on the armored cars to repulse any small German mechanized column during the time it would take to re-establish the Groupe Franc quickly in a new defensive position. Preceding

the column within sight were the solo motorcyclists, acting as scouts.

My captain decided to give me one of the two tanks to command. I was ordered to stay till the last in Bourneville—until 10.00 o'clock in the morning, with the Groupe Franc leaving at 9.30. I waited near the east entrance of the village—the Germans were expected to come from the east—near the crossroad of the main east-west and north-south roads, so that I could move my tank quickly in any direction.

On the road leading to the east, we had built a stout roadblock by digging holes in the asphalt road, and then sticking thick logs vertically in the holes. We had found this work half completed by some previous unit, with logs all cut and ready to be placed, and we had had time to finish it. The roadblock was of the staggered barricade type, to permit the traffic to flow through it. But at night, or if the enemy came in sight, the barricade could be closed by movable obstacles, such as abandoned vehicles and sliding beams. Just beyond this barricade the road turned to the right in a curve. An antitank gun had been defending this barricade but was now retreating with the main column. There were similar barricades on the roads leading south and north. We left them all open so that I could pass through them with my tank and attack the enemy if he came in sight.

At 10.00 o'clock sharp, just as I was preparing to leave Bourneville with the tank, a German armored car drove suddenly into sight on the road from the east, stopped dead in front of the barricade, apparently saw my tank, and began to move back, in reverse. It was not more than 150 yards away, and I fired and got a hit on it before it could get back around the curve in the road. This was probably the point, I thought, of a whole armored-car platoon. And so I also said to myself, "Let's go!" I then took my tank slowly out through the barricade, firing once more at the armored car without stopping, but hitting it again. It hadn't fired a single shot at my tank. It didn't have time to.

We now went out on the road beyond the disabled armored car and moved on around the curve of the road. And there a second car was heading toward the village to help the other. This was too good. I had nothing to fear, anyway, as I knew the 20-mm. antitank gun on the enemy armored car could not pierce my armor. It was much like a battleship fighting a light cruiser. The moment this new German saw me he headed toward a side road to escape my fire. He opened fire himself, and a direct hit clanked on our armor but didn't come through. I had been right in feeling safe. After firing twice myself this second armored car was out of business. Several enemy motorcyclists following it had pulled off to the left of the road and were firing at me with their machine guns—probably with armor-piercing bullets. Several of them hit the tank but didn't penetrate either. I continued on toward these motorcyclists leaving the road to do so, and now firing high-explosive shells. I know I got several of them.

I headed back on to the road but couldn't see any other enemy cars or troops. The rest of the armored-

car platoon had probably decided to pull back—the proper tactics for lightly armored vehicles in the face of a medium tank. I decided not to follow for fear of an ambush. It was well past 10.00 o'clock now, and I had orders to stay only till 10.00. And so I headed back to the village, passing the two disabled armored cars and firing one good shot at each of them. It was probably pure waste and child's play, but it made me feel good. All things considered, I had nothing to brag about. Anyone in a medium tank could have destroyed those two armored cars. But I don't think I would have been able to destroy them at all if the enemy platoon commander had sent his motorcyclists out ahead to reconnoiter the village. I would probably have got one or two of his motorcycle scouts but nobody else. His armored cars would have had time to take cover.

Before leaving Bourneville I had my gunner and my driver close the barricades. I stayed in the tank covering them, ready to shoot, for by now the Germans were probably preparing an attack on the village. I had had a chance to fulfill my mission by slowing down the German reconnaissance elements and thus give the Groupe Franc more time to prepare its defense behind the Risle River. This made me feel a little better than I had for several days. I had made up a little for my poor marksmanship in our Battle of Rouen.

When I arrived in Campigny, I found our two antitank guns already in position in the village, and roadblocks half completed. My captain decided to turn the tank to its noncommissioned officer who was in good shape again. But I must have been bad luck for any tank I touched. The tank commander had been killed in my tank the very morning he took charge of it again. This time the noncommissioned officer of the tank was killed the next day, by a bomb from a Stuka which penetrated his turret.

In Campigny my captain had installed the headquarters of the Groupe Franc in a small castle, situated in the middle of a big park in which all the vehicles had been well concealed and camouflaged under the trees. For the first time in several days I now found the time to shave and wash my hands and face. In the afternoon I went around the village, supervising the work done on roadblocks, and on the antitank-gun and machine-gun emplacements. We had ordered all refugees out of the village.

At 3.00 o'clock I was sent in my sidecar to division headquarters, which had not given any orders since we had arrived in Campigny. I found the headquarters at Carsix, thirty miles to the south in a castle. The staff was standing around big maps, planning the withdrawal of the division to a new position. The Groupe Franc was again to be the last to move.

Shortly after I got back to Campigny, several enemy bombers came over. I was in the middle of the town and there was no time to seek cover in the woods that lay around the village. So I decided to go into the cellar of the nearest house. I found there one of my noncommissioned officers, a placid fellow who

never seemed to be bothered by anything. He hadn't shaved for a week, and now having some time to think about it, he went upstairs in the house, hunted around, and came back down in a few minutes with an old square mirror, an old blade and razor, and some soap. He hung the mirror on a nail and began shaving. By then the bombs were coming down, with attack apparently centred on the park and our vehicles. Some more good fifth columnist information, I thought. But now the bombs were coming much nearer. It was funny to watch my noncom trying to shave. He had kept his helmet on as a precautionary measure. Every time a bomb fell a little nearer, his mirror swung on its nail, and plaster fell from the ceiling. But he kept on shaving unperturbed until a terrific crash came and I thought for one moment it was the end of things for us both. Plaster came pouring down covering us. A part of the ceiling above us broke. But the hit was not quite direct and we were still safe even though the house above had been partly destroyed. My noncom, with razor still in his right hand, was now white with plaster. He slowly turned toward me and said very calmly, "The only trouble with this damn war is you can't even shave in peace!"

The planes dropped a few more bombs and left. They had destroyed many houses in the village. I now headed toward the park and saw that two of our trucks were demolished. One was a gasoline truck and the men were busy keeping the flames from spreading. On the outskirts of the village one of our antitank guns had also been destroyed and some of its crew killed. Decidedly our Groupe Franc was getting smaller and smaller with each day.

Next morning, June 15, we got the order to withdraw once more, this time about sixty miles to the south, to Argentan. But before our Groupe Franc left, it must blow up the two bridges on the Risle: one at St.-Paul-sur-Risle, the other at Pont Audemer. Our tanks, armored cars, and sidecar motorcycles had been patrolling along the south bank of the river all the preceding afternoon, but had seen no Germans. The enemy was, however, expected any minute. Our movement to the south had been ordered because the French Army was expected to make its next stand along the Loire River.

The order to blow up the two bridges was a perfect example of an impossible task. If even one staff officer from headquarters had visited the Groupe Franc since it left Rouen, the division commander would have known that we had no explosives. And so my captain sent a motorcycle scout back to tell them that we would have to be given some explosives if we were to do the job. We did have several tank mines and a few "petards de cavalerie", but it would take a good deal more to blow two bridges. The messenger came back an hour later to report that headquarters had already gone.

We had to do something. For the protection of our Groupe Franc itself, we couldn't leave the bridges merely with a barricade on each side, especially since our tanks and armored cars would have to leave with our column in order to protect it on the march.

Tank Fighter Team (Contd.)

The captain decided to leave me behind with a sergeant and four men, and three sidecar motorcycles to blow one bridge, and gave the lieutenant commanding the antitank guns the job of blowing the other; he had one truck and a few men. But first we had to find something to do it with. Together we hunted all along the Risle for some TNT left behind by some French unit in its hasty retreat. And we finally did find a few blocks in an abandoned British depot, but not as many as we needed. To our surprise, the supply depot seemed mainly full of British cigarettes in big wooden boxes, hundreds of them. We decided that a few thousand cigarettes were practically as important as TNT, in view of the boost they would give to the morale of our whole Groupe Franc. And so we left our truck there with two men to pack it full.

I then went to Pont Audemer with my three side-cars and half of the explosives, and the other lieutenant took his half to the bridge at St.-Paul-sur-Risle, only a few hundred yards from the British depot. I found Pont Audemer completely deserted. It had been bombed and many buildings destroyed. All stores had been looted, all shop windows broken. Arriving at the river where it passes through the northern part of the town, I found that "the bridge" of Pont Audemer was for all practical purposes three bridges!

True, one of them was nothing more than a small wooden lock to regulate the flow of the river, too small for vehicles though troops could easily walk across it. And the middle bridge was no real bridge either, but simply a big building built across the river, which was very narrow at this point. The building served as the marketplace for the town. At both ends of this "bridge," French troops had piled sandbags and anchored them with cement. The floor of the building wasn't strong enough, it seemed to me, to bear the weight of a tank. A light armored car might cross without going through the flooring into the river, but I had my doubts. But enemy motorcycles and passenger cars could use it easily enough provided the sandbags were cleared away first, which would be quite a job to do by hand, but could easily be done with one or two blocks of TNT.

I simply didn't have enough explosive to blow this so-called bridge and the regular stone bridge where the main road crossed the river. I therefore decided to concentrate on the main bridge. At both ends of this bridge the French had also built sandbag barricades. My men began to dig a big hole in the middle of the bridge into the heavy pavements, working as fast as they could.

Meanwhile, with my driver, I reconnoitered what to do if we were surprised by a German column. I decided to put the three sidecars in the first side street to the right of the bridge, where they were protected by the buildings from machine-gun fire. We could get in them, and then take another street to the left out of town and be out of German fire because of the cover given by a big building on the other side of the river. In this way we could hit the main road again a few

hundred yards to the south. There a stretch of some fifty yards would be dangerous because it would be under direct machine-gun fire from the bridge, but this was a distance so short I thought we could cover it without casualties. I went back to the bridge. The hole was getting bigger and deeper.

Just at that moment we could hear an explosion off a few miles to the east. The antitank lieutenant had blown the other bridge. I then told my men they had dug deep enough and had them put the dynamite in the hole and cover it over. It seemed to me time to act fast and everybody helped. We put some big paving blocks on top, and covered the hole over with tightly compressed soil. Then I had my men leave the bridge and wait behind the sandbags. I started off the bridge myself, unrolling the wire that connected the detonator to the TNT. Just as I was climbing over the sandbags at the French end of the bridge, I heard the noise of a motor. A German armored car was coming around the curve of the road just north of the bridge, and it at once began firing at us. I had just the time to jump over the sandbags and throw myself flat. We had no machine guns or any weapon to do much good. The men behind the sandbags opened fire at the armored car with their rifles, using armor-piercing ammunition. We had to blow the bridge fast, now, if at all. As I connected the cord with the detonator, the sandbags gave excellent protection from the fire of the German car. Finally I was able to light the wick leading to the detonator. We then had exactly ninety seconds to get out before the bridge would go up. I lined the men behind the sandbags and at a signal from my hand we leaped toward the little side street to the right all together at highest speed. We made the side street fifty yards away in about five seconds—I'm sure it was a record. The German gunner, surprised by this unexpected action, didn't hit any of us, we were so fast. In the side street we kept close to the walls of the houses on the north side of the street. A few seconds later up went the bridge but none of its pieces hit us as they fell because we were protected by the houses. Arriving at the dangerous spot on our route, I lined the three sidecars up and we dashed over it all together, instead of one after the other. The German fire missed us again. We heard some bullets whistle, though.

When we finally reached Campigny our rallying point, I found the other lieutenant there waiting for me. He told me he had just blown his own bridge and was heading back to the British depot across the fields, when German motorcyclists appeared on the north bank and fired at him and his men, but by leaps and bounds they reached the depot. His men had kept their truck on the safe side of the building and were still loading cigarettes, even though the door was on the north side and they had to carry the boxes around under fire. The truck left the depot under long-range German fire but nobody was hit. I looked in the truck. The lieutenant told me there were approximately 350,000 cigarettes. That made at least 3,000 cigarettes per man for our Groupe Franc. What a capture!

To be concluded.