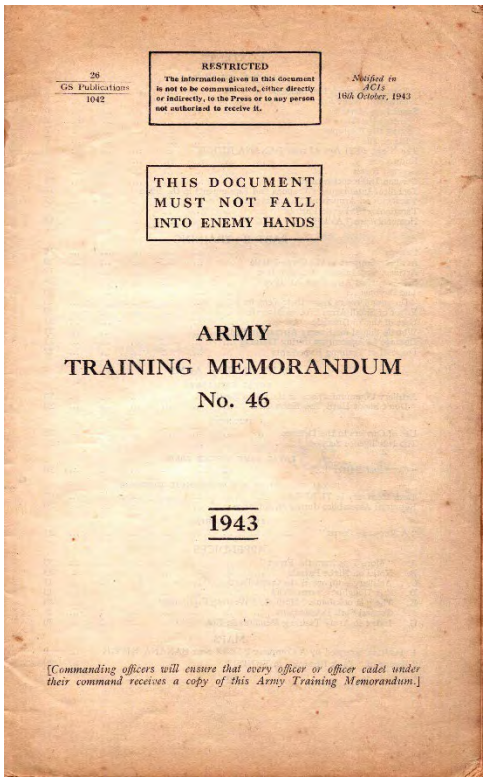
Technical Intelligence in WWII – Weapons and Equipment in the Field



The information below comes from Army Training Memorandum No. 46. (*left*). The document was published by the War Office in 1943. The section we are looking at is entitled **'Technical Intelligence (Weapons and Equipment) in the Field.'**

The article states the following notes are written to bring out the basic principles and certain points. Many lessons have been learnt from the valuable work done in the Middle East and North Africa.

Object

(a) technical intelligence section in the field has two tasks:

To provide the C-in-C and his subordinate commanders with accurate intelligence on enemy equipment already in use, and on that likely to be brought into operational use in that theatre of operations.

(b) To provide the War Office with accurate information on enemy equipment, for the benefit of the General Staff, the higher command and Cs-in-C in other theatres of operations, and the research and design branches of the Ministry of Supply. The prompt provision by forces in the field of this information is essential for the guidance both of our own General Staff in its equipment policy, and of those responsible for design in the constant improvement of equipment essential to success. Experience has shown that military intelligence as a whole has a great responsibility in this respect.

Sources of Information

The main sources that can be tapped by technical intelligence in the field are:

(a) Equipment that falls into our hands.

(b) Documents that fall into our hands.

(c) Prisoners of war.

These sources each have their own particular value.

(a) Equipment that falls into our hands is invaluable in that it provides the only 100 percent accurate data on design, methods and materials of production, and – most important – performance. For instance, however carefully an estimate of an anti-tank gun's performance is made, only examination of the projectile and its propellant charge will give a sound basis for calculation, and only trials with a gun and ammunition will give true figures. On the results of such a trial the protection given to British tanks in production, now and in the future, may depend. Careful examination of a tank may disclose features of design that may directly help not only in the design of our own vehicles, but also in our

anti-tank weapon policy. As a further example, examination of a series of German fuzes may lead to useful changes in the design of our own.

(b) Documents that fall into or hands are of the utmost value for the advance information they give of new enemy equipment not yet in the field, of the performance of existing equipment and of modifications. The importance of technical information obtain by this means cannot be overstressed.

(c) Prisoners of war are always a mixed blessing from this point of view. They will rarely produce 100 percent accurate information, but if carefully handled they will often provide useful evidence to support or destroy other intelligence. Time and concentration are, however, required to obtain the desired results, and while technical intelligence officers should not normally conduct interrogation, they must guide the interrogating staff; otherwise much obsolete or unimportant information will be obtained.

Methods of obtaining the information

Technical intelligence in the field can only be operated with any success by an active staff. A small staff at GHQ is necessary, because this is the clearing house for information and the administrative centre. The work of detailed study, collation, digestion, and long-term appreciation, is necessarily centralised at the War Office.

The main work with a field force is well forward both in the offensive and in defence, and freedom of movement is essential. The possession of a piece of enemy equipment may be only transient, and it is the "I" staff's first task to know where best to place themselves in order to be on the spot to make a quick examination, and – better still – to organise and execute a quick recovery.



Not infrequently most valuable work can be done on equipment left by the enemy in No Man's Land; there is a classic instance in the report on, and the recovery of, the first of a new series of German tank guns. The examination was carried out under fire between the opposing [sides], and recovery was planned to take advantage of our first counter-attack. The complete gun with a supply of ammunition was in England ten days after the tank was knocked out, thanks to the prompt and determined action taken by a technical intelligence officer.

The occupation of a former enemy strongpoint is another type of occasion when a technical intelligence officer can profitably go in on the heels of the first wave, to attempt to rescue both documents and equipment before destruction by the enemy can be completed, and to prevent destruction, and even looting, of valuable material by our own troops.

Importance of active liaison

The first essential to success is the cooperation of the intelligence officers of lower formations and of units. Technical IOs cannot be everywhere at once, and it's essential that the IOs of formations and units, however burdened they may be with operational matters, should have the interest, the knowledge, and the initiative to take responsible action on technical intelligence whenever occasion arises, enlisting on the spot any technical help needed.

The second essential is the cooperation of the officers of the RAC, RA, and RE staffs, and all those who have any control over transportation and salvage facilities. Technical intelligence officers must not be in the way when operations are in progress, or a nuisance between operations, so they must know their own way around, and know where they can count on a helping hand for any specific emergency when it arises. Liaison with those directly concerned with British equipment is also important. The existence in a theatre of operations of British weapon and AFV [Armoured Fighting Vehicle] technical personnel in no way relieves intelligence of any of its responsibilities. The former's qualifications, however, enable them to give effective help to intelligence, and their cooperation must be arranged.

Conclusion

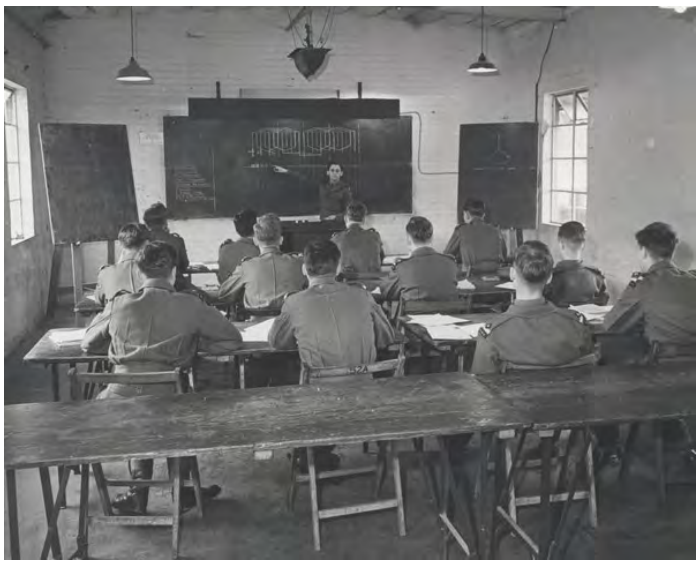
Such, briefly, is the purpose and manner of working of technical intelligence. At the root of it all is the paramount importance of going into battle better equipped than the enemy, and confident that he cannot spring a "secret weapon" on us.

It should be clear therefore to all officers of all arms that the need for accurate intelligence is one of immediate urgency, however faint the immediate effect on the individual.

Vacancies on Armament Technical Staffs

It may not be generally known that qualified officers are urgently needed for service on the armament's technical staffs of the Army and Ministry of Supply. These staffs are responsible for the initiation, design, development, and production of armaments.

The type of officer required is one with a sound background of scientific and engineering knowledge and "user" experience of all or any type of weapons – guns, small arms, or armoured fighting vehicles in the field.



To prepare officers for these technical staff appointments various advance classes are run at the Military College of Science, at which the study of artillery equipments, ammunition and explosives, fire control instruments, small arms, or tanks, is combined with such pure physics, chemistry, metallurgy, mechanical engineering, electricity, and ballistics as may be necessary to enable officers thoroughly to understand the general principles of design and methods of production of armaments.

Full details of courses run, the type of appointment, and the qualifications required, are given in ACI 1103 of 1943, together with instructions regarding applications, recommendations, and selection.

On the work of the armament technical staff officers the success or failure of armament design largely depends. Without the guidance and advice of officers with sound technical knowledge allied to experience in handling equipment in action, designers will inevitably make mistakes that will cost lives, time, and money when they can least be spared.

Officers with high technical qualifications should therefore realise that their services may be of greater value to the war effort in a factory than they are in the field, and commanders should be prepared to release them, even though their value as regimental officers may appear to be equally high.