614 FLIGHT

Tank Stalker PERSONAL IMPRESSION!

The author of this article gets ready to fly the Potez 75. The undercarriage is fitted
with large low-pressure tyres for operation from unprepared fields. (Right) Layout of the
pilot's spacious cockpit, forward of which can be seen the missile aimer's access door.

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EW Englishmen would be able to appreciate the full implications of the problem which first suggested to
M. Henri Potez the development of a specialized "defence vehicle"; yet this particular problem has always existed for the Continental nations, whose land frontiers are so much more easily invaded than England's moated shores. Whereas our first line of defence lies in the skies over and beyond the Channel and North Sea, French soil must always be considered vulnerable to direct ground attack by fast-moving armoured columns. This was poignantly demon-strated, as M. Potez emphasizes, during the initial German break-through in the Ardennes in 1940: the Germans thrust rapidly straight to the Channel coast, and the defenders on the ground found themselves unable to bring effective weight to bear on the enemy's relatively dispersed armoured spear-heads. The situation was confusingly fluid, and the roads were hopelessly cluttered with fleeing refugees.
It was this state of affairs that led the eminent French aircraft designer to study the possibilities of an effective weapon which, operating away from roads yet using natural cover, could be employed to attack the armoured spearheads while they were still on relatively unconsolidated territory. The eventual result of the study was the Potez 75. It is a machine which must be considered as an army missile-launcher that flies.

When it first appeared in public, at the Paris Aero Show last year, the Potez 75 was regarded by some visitors with misgivings. It looked a little ungainly, for it had a pusher engine, twin-boom tail, fixed spatted undercarriage, and an open cockpit above and behind an armoured compartment for the missile-aimer. It had an all-up weight of 5,280 lb for a take-off power of 480 h.p., and, as far as could be seen, it carried a single 0.5in machine gun in the nose. The makers stated that its main armament was to consist of guided weapons. To those who regarded it as a conventional ground-attack aircraft, there appeared to be little to recommend it. But the Potez 75 is, in fact, a remarkable machine—the term aircraft is advisedly avoided—and we shall attempt to explain its peculiar merits.
It has been designed specifically to operate at extremely low levels from completely unprepared ground—even from tilled land or convenient stretches of road. Taking advan-tage of trees and buildings as cover, the 75 will stalk a target at "zero feet," thus avoiding possible radar detection and delaying visual sighting until it is too late to bring concen-trated anti-aircraft defences to bear.

Trials recently carried out with Vampires have shown that it can also comfortably avoid interception by conventional

fighters; not only is it difficult to find but, as can be imagined, it is virtually impossible to attack. It can also operate in weather too bad for jet fighters. Its operational bases will be natural features of the landscape and will for this reason be equally difficult to detect from the air. It is designed to be serviced by army technicians lacking extensive specialized training.
The makers claim that the Potez 75 is purely an army weapon, to be flown by army personnel holding little more than the equivalent of a private pilot's licence. As I dis-covered for myself, this is no idle claim. Despite its size it handles like a light aircraft. The 450 h.p. Potez 8-D32 inverted vee-eight engine is smooth and reliable and the constant-speed propeller is automatically controlled. Engine cooling is by geared fan drawing air through a filter in the ventral scoop so that the engine may be run continuously on dusty ground without overheating. The undercarriage, to say the least, is spectacularly effective.
Potez 75s could be formed into anti-tank squadrons, but another use was suggested to us by M. Potez: one machine could be attached to a troop of tanks as a spotter-destroyer operating as a pan of the troop, reconnoitring the ground ahead and using its missiles to clear any hidden resistance with which the tanks could not themselves deal effectively. It is intended that a standard army tank radio set shall be fitted. Thus the Potez 75 pilot could be instructed to locate and destroy an enemy tank which was denying open ground to the troop from some hidden position.
As I saw it, the whole Potez 75 theory hinges on the missile which the machine is designed to launch. Not unnaturally, it is impermissible to give any details of the engin teleguide. Suffice it to say that, in conformity with Potez thinking, it is a French-developed ground-to-ground weapon adapted for 75-to-ground use. It is very simple, extremely accurate and armour-piercing. In fact, the missile can be fired, guided and the strike observed, and the Potez 75 then flown away behind neighbouring cover without' passing over the target. Head-on attacks are not necessary, and the pilot can make use of ground cover throughout the approach, attack and get-away.
Earlier photographs show the Potez 75 with four missile attachments, two just outboard of each main undercarriage. When, recently, I went to see the machine at Les Mureaux, on the Seine, it was carrying one missile under each wing-tip. Although it still bore French civil markings it was excellently camouflaged and French Air Force roundels were painted on fins and wings.
I first watched its peculiar capabilities demonstrated by