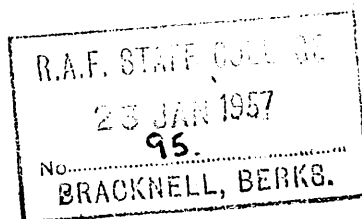


**RESTRICTED**AIR HISTORICAL BRANCHTRANSLATION NO.VII/18.

THE FUTURE OF GERMAN PARATROOP  
AND AIRBORNE OPERATIONS

A report addressed to GOERING  
by  
General Student, (A.O.C. Fliegerkorps XI,  
and later, (1945), in Command of all German  
Paratroops), dated 10th November, 1942.

TRANSLATED BY: -

Air Ministry, A.H.B. 6.  
14th January, 1947.

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"IN THE FIELD"

10.11.1942

TO: The Reichsmarshall and  
C.-in-C. of the G.A.F.

Since the operations in Crete, I have been concentrating on the further development of the Paratroops, and on improving the methods of their operational employment. The following report attempts to Summarise the results of past operations and of my recent activities.

I.

Our first paratroop operations, in Holland, Eben Emael, and Corinth were successfully concluded at the cost of relatively small losses.

Over Crete, losses were more severe, the majority being incurred during the first landing under heavy defensive fire. These did not occur in the air during the descent, as might have been expected, but during the period in which the men were extricating themselves from the parachute harness, the fire-power of the individual soldier being very inadequate.

Paratroops floating down to earth present an extremely difficult target, due to the erratic and swinging nature of their descent. Special tests carried out with dummies have confirmed this, and have also given the following results:

(Tests carried out by a training unit under undisturbed conditions)

At a range of 150m.	180 shots	- 1 hit
" " " " 250m.	784 "	- 2 hits
" " " " 350m.	1708 "	- 1 hit

As has been said, the most severe losses during the Crete operations were incurred on the ground, after landing. With the parachute then in use, a paratrooper could only release himself from the harness by standing upright, and thus presented an easy target for enemy fire.

With the new type of harness developed since Crete, release can be effected in a prone position, and very rapidly. The advantages of this new parachute are shown by the following figures.

Release from the old harness	- 80 seconds (and longer if windy)
" " " new "	- 10 seconds (even when windy)

Furthermore, in Crete, our paratroops could only jump with pistols, hand grenades, and very short range machine carbines. They were therefore at the mercy of the enemy's superior fire-power until they could reach the weapon containers that had been dropped with them.

To-day, the paratroops carry all necessary weapons on them, and can therefore engage the enemy immediately and on an equal footing. Their striking power has thereby been substantially increased.

When the problem of the fire power of the individual paratrooper had been solved, I proceeded to the question of whether it was possible for the paratroops to fire at the enemy from the air during the descent.

It was clearly proved that in addition to the great moral effect achieved, it was possible to score hits from the air, and that up to a range of 200 metres, more hits could be made from the air than in the reverse operation. (Ground troops shooting at falling paratroops).

/ Exercises

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2.

Exercises were carried out from the air with rifles, machine carbines and rifled Very pistols, and the best results were obtained with the latter weapon, at a range of up to 300 metres. The throwing of hand grenades with percussion fuses was also experimented with. Firing from the air now forms an integral part of all paratroop training.

## II.

Great progress has been made since Crete, despite the lack of a suitable aircraft for training and operational flying.

The Ju.52 has been the only transport aircraft available for operations hitherto. This has been a considerable disadvantage, - for the presence of Ju.52's on airfields has been an indication to the enemy that paratroop operations were impending. Enemy reconnaissance could not fail to report the approach of several hundred aircraft of the same type, and surprise attacks were therefore impossible.

The Ju.52 is a slow, unwieldy aircraft with unprotected fuel tanks, and makes an easier target for enemy fighters and Flak than would a bomber.

From this fact arose the urgent necessity of experimenting with parachute jumps from bombers, and since the operations over Crete, this problem has been successfully tackled. Several thousand practise jumps have been made from the He.III during this period, and paratroops can now be dropped from any type of bomber.

Jumps have also been tried from gliders and towing aircraft, (He.III carrying 12 paratroops, Go.242 glider with 16 paratroops.

This use of gliders represents a further step forward towards the solution of the urgent problem of air transport space, and indicates the great possibilities of giant aircraft such as the Me.321 and Me.323 in the future conduct of the war.

## III.

The arms used by our paratroops have also been improved. The new "paratroop" gun, now in the process of development, has the pistol grip and is in fact a combination of the machine-carbine, rifle and machine gun, although weighing less than the Mark 98 rifle. 2000 of these weapons will have been produced by Christmas, 1942.

In all operations to date, all artillery employed has had to be landed separately. Even in Crete, the new light parachute guns, (7.5 cm and 10.5 cm), could only be carried by the most experienced battery near RETHIMNON.

Airborne landings carried out in the enemy's rear depend above all on the confusion caused by the surprise effect of this means of attack. Heavy mortars (Schwere Wurfkoerper-Batterien), which can be dropped by parachute, are very effective in this type of attack.

At the present time it is possible to drop all artillery in time for it to be used by the paratroops on reaching ground..

## IV.

The extremely important question of night jumps has also been dealt with. During the course of the past year, approximately 3000 night jumps have been made, the He.III being used to an increasing extent for this purpose.

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On clear moonlight nights, jumping conditions are similar to those obtaining in daytime. On dark nights, artificial illumination of the dropping area is necessary. Flares can be dropped from the aircraft, or the paratroopers can themselves fire off Very pistols. It cannot yet however be said that dropping on dark nights is operationally feasible.

Mention should also be made of the special equipment that has been introduced to reduce personal injuries on landing. Special clothes protect the face, shoulders, elbows, knees, ankles and pelvis and make landings on the most difficult terrain possible.

V.

Considerable progress must also be reported with regard to gliders. The light DFS.230 glider was used operationally for the first time at Eben Emael, and proved an outstanding success.

Severe mistakes, resulting in a number of Court-Martial cases, were made during the operations in Crete, but in spite of this, and the fact that only about 30% of our gliders landed in the correct area, enemy anti-aircraft batteries at Canea and Maleme were completely destroyed within a few minutes.

In view of this success, further intensive development has been continued, and the dive approach with gliders has now been introduced. This method of approach has the advantage of permitting the gliders to dive rapidly through the defensive fire of the enemy; if necessary, the use of screamers can make it appear that a dive-bombing attack is in progress.

Two machine guns have been installed in some gliders, and during preliminary tests, on a target 20m. x 20m. from a height of 1000 metres, 10% hits were scored on a glide approach and 25% on a dive approach.

Ropes approximately 50 metres in length are used for towing and instrument flying is not possible. To enable towed gliders to do instrument flying, the question of the 'rigid tow' (Starrschlepp), has been studied since the beginning of the war. This method facilitates glider training and simplifies tactical control.

In addition to the light glider, medium and heavy types are now also available. The Go.242 can carry a load of 2 tons (metric), has as armament 4 machine guns, and is suitable for dive approaches. In view of the fact that it can transport a number of large guns (e.g. 7.5mm. anti-tank guns) together with troops, it is exceptionally suitable for operational employment.

The giant Me.321 glider has reached the stage of development at which the heaviest guns can be carried. Equipped with the new Servo-controls, this aircraft is almost as manoeuvrable as a light glider, but has the disadvantage that it requires large ground crews for operational servicing.

The increasing size of gliders enables us to consider the planning of large-scale airborne operations directed at open country in the rear of the enemy. It is now possible for large gliders to carry heavy and cumbersome ground levelling equipment, which can be used to prepare landing strips for powered aircraft on almost any open space.

VI.

The German Paratroop Corps has demonstrated its value in all theatres of war. Trained for its special tasks and accustomed to fighting engagements in which there can be no surrender, its offensive spirit is probably greater than that of the Army, - which can usually afford to be more cautious.

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4.

Our paratroops have long been better armed and equipped than the Infantry. Larger gliders now enable them to carry the heaviest weapons into battle with them. Tactics have been improved, and these have appreciably increased our chances of success and reduced the risk of heavy losses. Our paratroops are to-day equal to any type of airborne operation.

The High Command has not undertaken any airborne operation since Crete. Now, when the stiffening of enemy resistance on all fronts reveals the possibility of long drawn out and bloody fighting, and when the striking power of our paratroops is immense, is the time to surprise the enemy by airborne operations at key points in his rear. Only thus can a contribution be made towards rapid and decisive victory.

(Signed) STUDENT.

General der Flieger.

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