

Operation Sidecar — Gliders at Dial Post

By Colin Rudling

At 1140AM on the 18th of April 1944 forty-eight gliders landed in the fields between Dial Post and Hooklands Lane (see fold-out map).

This was probably the most significant military event in our area, yet very few local people seem to have been aware of it, both at the time and to this day.

The main objects of the exercise were:-

- (1) To test the ability of pilots to land in a selected area.
- (2) To ascertain the minimum size of fields required for satisfactory glider landings.
- (3) To test the glider capacity of individual fields.
- (4) To evaluate the effectiveness of the glider force, in equipment and troops, for battle after landing.
- (5) To find the length of time for the airborne force to form up, with equipment, at a selected rendezvous point.

The exercise, code named "SIDECAR", was an American operation involving the 101st Airborne Division and 437 Group, part of the 53rd Carrier Wing which was based at Ramsbury Airfield near Marlborough in Wiltshire. The landing site was chosen because the countryside was very similar to that in Normandy, where the D-Day invasion was being prepared for. The glider pilots had to be able to land in small fields no longer than 350 yards that were surrounded by high hedges and large trees. The gliders used in this exercise were the British built "Horsa", and the smaller American built CG-4A "Waco".

The Royal Air Force was kept informed of the operation, but seem to have played no active part in it. The British Meteorological Office supplied weather information.

On the 15th April, three days before the landings, a team of fifty men went to the site to rehearse their ground duties. Flares were to be put on the lanes surrounding the landing area, white stripes were laid in fields, a "Eureka" homing device was to be installed and four movie cameras to be put in place. Aerial still and movie pictures were also to be taken. (see page 140)

Initially the landings were planned to take place at dawn, which is the time that the D Day landings would be, but this was later considered too hazardous and the time was changed to 1140am. The local Lands Officer was ordered to make sure all that all land owners and farmers in the landing zone were made aware of the landings, and to clear their fields of livestock.

The force consisted of eight Horsas and forty Waco gliders. They took off in four flights, fifteen minutes apart. The Horsas were each loaded with a Jeep combined with a 57mm gun, or a Howitzer gun, or with a similar weight of ammunition. Twelve of the Wacos were loaded with either a Jeep, a Howitzer, a 57mm gun or ammunition. The other twenty Wacos were loaded with sandbags to simulate a normal operational cargo.

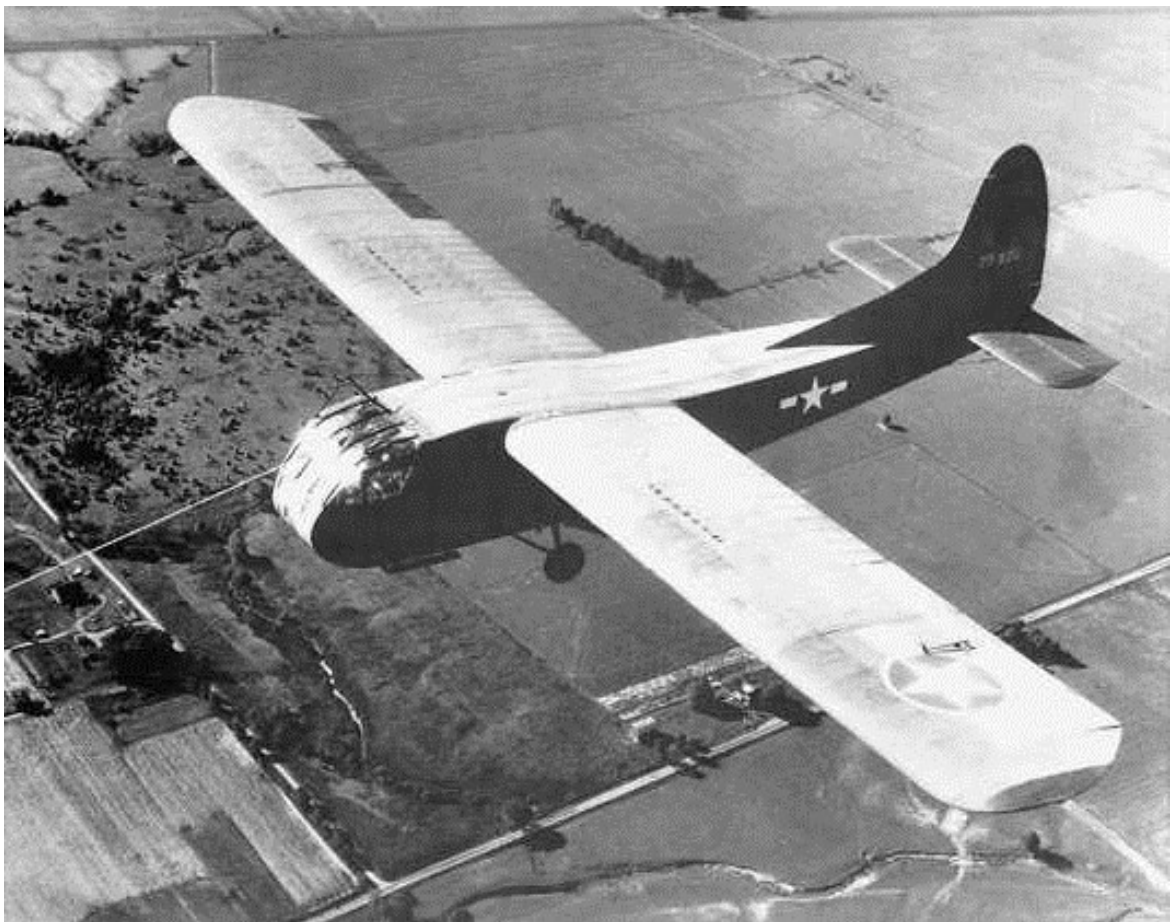
Each glider had a pilot and co-pilot, but no troops were on board. The crews who would normally be on board to unload the cargo were waiting at the landing zone; this was a precautionary measure to minimise casualties.

The forty Waco gliders were fitted with tail parachute brakes, which were a new development to most of the pilots.

The gliders used in Operation Sidecar



The British built Airspeed Horsa glider was made completely of wood, had a wingspan of 88 feet and was 67 feet long. The load capacity was 7,750lbs.



The American built CG-4A Waco was made of fabric covered wood and had a metal frame. Smaller than the Horsa, it had a wingspan of 84 feet and was 49 feet long. Its load capacity was around 3,700 lbs.



Aerial photograph taken prior to Operation Sidecar with target area marked

The force arrived over the landing zone at 1140am and at about 1000ft. It was completely landed within 5-10 minutes. Only one glider landed outside an area of 1 square mile; another five landed just outside the designated zone. Officers on the ground watching the landings reported that the pilots did a "superior job" landing their gliders in the fields, which were, if anything, smaller than the fields they would be using in France. The pilots had not seen the landing area before except on maps and photos.

Less than one hour after the last glider had landed, one glider had been retrieved by the automatic pick-up device. This was to continue with all gliders that were flyable.

Glider recoveries or "snatches" as the crews called them, were carried out as follows. One end of a nylon towrope was attached to the glider's nose. Two 12 foot poles, placed twenty feet apart, supported the other end of the 350 foot long towrope, which was formed into a loop in the centre of the two poles. The tug aircraft, usually a C47 Dakota, with a twenty foot long arresting hook hanging down from the tail flew over at about 40 feet above the ground. The hook was attached to a cable that was wound around a steel drum within the tow plane. With the Dakota flying over the glider and elevated towrope sling, the hook "snatched" the glider's towline at 110mph. The glider was airborne in about three seconds.

The location of the landed gliders is shown on page 142.

Glider numbered 5 (Horsa), 6 (Horsa) and 19 (Waco) made crash landings. Casualties would have occurred had personnel been riding in those gliders. All the other gliders made safe landings.

The gliders were fairly well concentrated in the landing area. However no attempt was made to land the Waco gliders that contained a howitzer or gun section close to a glider carrying a jeep that would be towing it after the landing. The larger Horsa gliders had the advantage that they could carry both Jeep and howitzer. This exercise showed that the Wacos needed to land in pairs, in order to speed up the unloading process.

Landing reports for all gliders that carried military equipment

(Glider numbered 1 to 8 were all Horsas; gliders 9 to 20 were all CG-4A Wacos)

No. 1

Nose wheel was broken and forced up through the floor of glider. Right wheel lost on landing. Glider was cocked forward and to the right. The upper left bolt bound and required ten minutes to get loose. Too much time was spent trying to pry off the split nut, rather than removing the bolt with a wrench. Load: Jeep and Howitzer.

No. 2

Left wheel lost in landing. Studs to hold troughs for unloading broke. Twisting strain caused steel plate to break off. Personnel steadied troughs for actual unloading. Load: Jeep and Howitzer.

No. 3

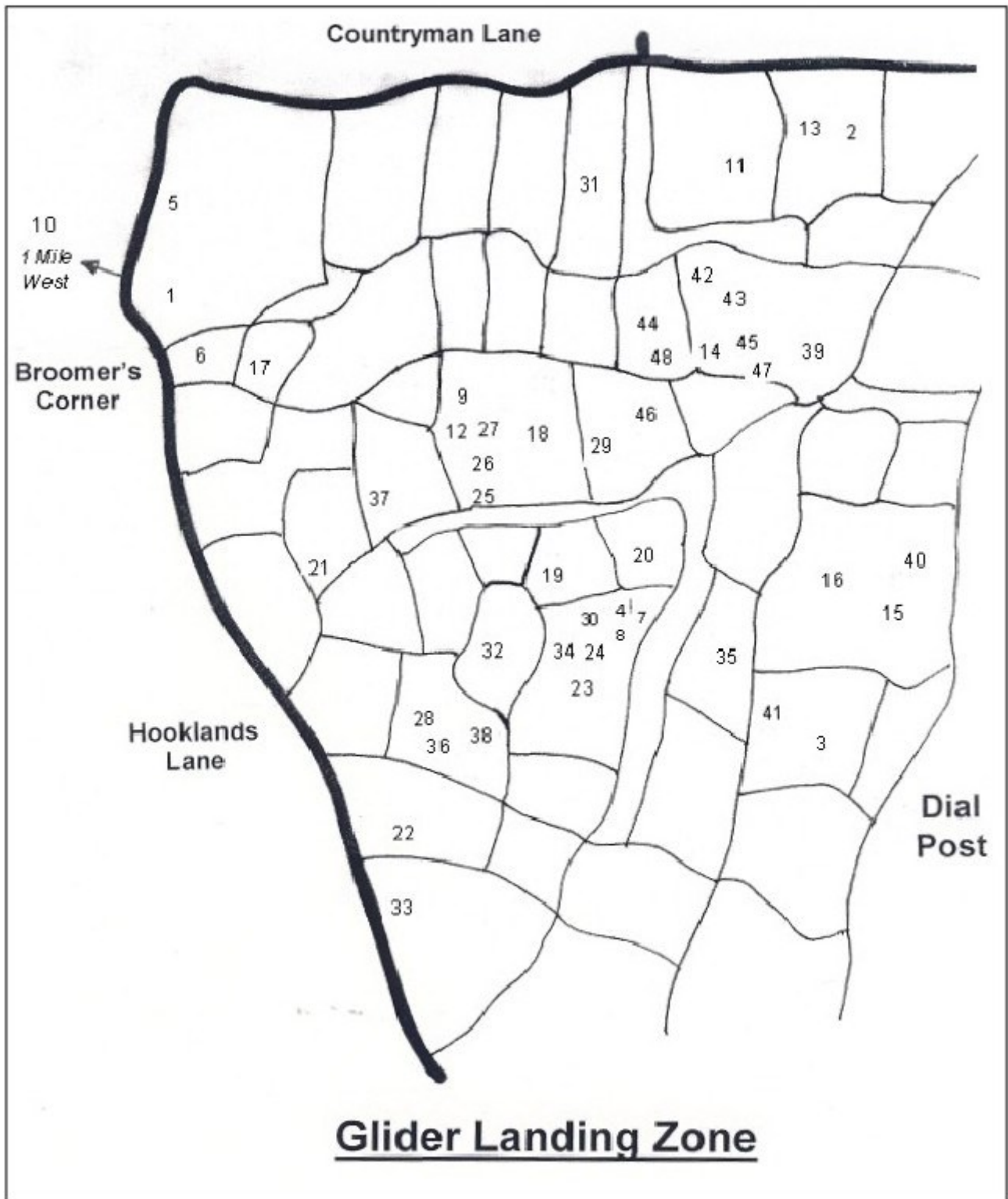
No difficulties encountered during unloading. Blocked road caused delay reaching the assembly area. Load: Jeep and Howitzer.

No. 4

Studs to hold unloading troughs broke while Jeep was being unloaded. Blocked road delayed reaching the assembly area. Load: Jeep and ammunition.

No. 5

Glider crash landed across road. Nose wheel broke and came up through the floor. Right wheel lost on landing. Front unloading door broken. Tail section sticking up in the air. Load removed by chopping out right side of glider. Load: Jeep and ammunition.



Plan showing location of landing of each Glider

No. 6

Glider crash landed. Left wing hit a tree and landing gear caught in a ditch, stopping the glider suddenly. The Jeep and trailer broke loose and went through the front of the glider, ending up about ten feet away.

The Jeep had been lashed with six lashings, four to prevent forward motion, two to prevent rearward motion. Standard lashings require only four lashings on a Jeep.

The trailer had been lashed with four lashings, two forward and two rear, as prescribed.

The landing washed out the floor of the glider back to bulkhead No. 3, and the forward lashings of the trailer. Four broken chains and two broken strainers remained at the glider at the inspection. This accounts for six of the remaining eight lashings on the equipment. The sergeant in charge of the load reported that air corps officers had taken a couple of broken chains with them. One tiedown ring at frame No 15 to which the Jeep had been lashed was torn loose from the glider.

Conclusions

- (1) The equipment had been properly lashed with two extra lashings on the Jeep.
- (2) The excessive landing shock caused the lashings to break. Due to the number of broken lashings, it is concluded that the lashing equipment was not defective.
- (3) It is recommended that no additional lashings be required on Jeeps and trailers.

No. 7

No difficulties encountered in unloading. Load: Jeep and trailer.

No. 8

Nose wheel of glider was broken and forced up through the floor behind pilot compartment. Nose section split loose from cargo compartment most of the way round. Tail of glider was up in the air. Nose wheel coming through floor prevented unloading by the front loading door. As the nose section was loose it was deemed easier to remove it completely to unload by the front unloading door.

Steps necessary to get the nose off.

- (1) Cut top frame of door with a saw.
- (2) Cut three metal air lines at upper right side of bulkhead.
- (3) Cut all wiring.
- (4) Cut control cables. All control cables are located under the floor, three on each side and two in the centre.
- (5) Cut metal longerons (longerons are long spars, running fore and aft in the fuselage of the glider) at top of glider with an axe, and two cables inside each longeron.
- (6) Push nose off. With the nose off and the equipment in place the glider is tail heavy. When the nose was pushed off, the front of the cargo compartment raised up and the front wheel fell off. With the nose off, the Horsa glider is about balanced at the wheels. Moving equipment forward brought the nose down to the ground. The floor level was close enough to the ground to unload the Jeep and trailer without using troughs or other aids.

This method of unloading was only practical as the nose section of the glider had been split loose in landing. It would not be practical to cut the nose section completely off.

Unloading Times for Horsa Gliders:

Glider No.	Bolts Removed	Troughs in Place	Unloading Completed	Arrival at Assembly Area	Remarks
1	17 mins	19.5 mins	20.25 mins	26.5 mins	
2	2.5 mins	13 mins	14 mins	15 mins	
3	6.75 mins	8 mins	9.25 mins	30 mins	
4	6 mins	7 mins	12.12 mins	23 mins	
5			20 mins	23 mins	Unloaded through side
6					Crash landed
7	5 mins	9 mins	11 mins	22 mins	
8			25 mins	30 mins	Unloaded through nose

Unloading Times for CG-4A Gliders:

Glider No.	Type of Load	Unloading Completed	Jeep to Weapon	Arrival at Assembly	Remarks
10	Jeep				Landed 1 mile from area. Pilot and co-pilot unloaded prior to arrival of troops.
9	Jeep	1 min	2 min	8 min	
11	Howitzer	0.5 min			Jeep from no. 9
12	Howitzer	1 min	24 min	29 min	Jeep from no. 9 (second trip)
13	Jeep	25 min	29 min	33 min	* see note below
14	Howitzer	3 min			Jeep from no. 13
15	Jeep	8 min		22 min	
16	57mm Gun	3 min			Jeep from no. 15
17	Jeep	3 min	7 min	26 min	
18	57mm Gun	5 min			
19	57mm Gun	5 min			Gun got bogged down. Never reached the area.
20	Jeep	10 min	22 min		

* Glider no. 13

Glider crash landed with nose section against a building so that it was impossible to unload through the nose. The metal frame on the right side was cut with an axe at the rear personnel door. A Jeep was used to bend the tail section out of the way so the Jeep in the glider could be removed.



This aerial photograph was taken soon after the landings, and covers about two thirds of the landing area

Initial General Conclusions

Captain James M Robinett, Field Artillery Liaison Officer, made the following assessment immediately after the landings:

(a) Equipment can be removed from crashed gliders of either type within half an hour provided the equipment itself is not damaged.

(b) Gliders can be landed in a limited area composed of small fields without an undue number of casualties and loss of equipment.

(c) Gun sections, or Jeep and trailer can be assembled from two CG4A Waco gliders without loss of time provided they are landed close to each other or the Jeep driver knows the location of the weapon or trailer. Identifying markings on the gliders to indicate a prime mover or towed load would aid assembling after landing.

(d) Glider leaders will use ingenuity in unloading gliders that have crash landed.

Two days after the exercise the following evaluation was made:

1. The value of the glider rehearsal carried out by 437 Group of IX.T.C.C. on the 18th April, was to a large extent discounted by the fact that it was not carried out until 1145AM when weather and light conditions were good.

2. The test was carried out more as a demonstration than a rehearsal, and the postponement of the landing from the dawn hour for which it was fixed was unfortunate as the weather conditions at dawn appeared satisfactory, though undoubtedly more difficult.

3. The following factors made the exercise easier than under operational conditions:-

(a) The flight to the target was carried out in good weather conditions and wholly by daylight. It lasted for forty minutes instead of about two hours. There was no enemy opposition. Navigation was easy.

(b) Considerably more reconnaissance of the landing area had taken place than could occur over enemy territory.

(c) The marking of the area was exceptionally clear and lavish. Large white strips and coloured smoke were laid out all around the area, which must have been very easy to see from the air.

(d) The landing took place in full daylight without ground opposition.

4. The results of the landings as far as the gliders are concerned were as follows:-

Gliders

Landed outside area, or in fields not assigned to them	12.5%
Bad damage	15%
Less badly damaged	43%
Undamaged	27.5%
Special glider for demonstration (?)	2%
	100%

50% of the gliders landed outside what was understood to be the fields selected for landings. 3% of the glider pilots taking part were injured, none seriously; it appeared that about 2% of the equipment in the gliders would have been badly damaged; it appeared that perhaps 5% of the troops, if carried in the gliders, might have been injured.

In short, the exercise confirmed that it is a perfectly practicable proposition to land gliders by daylight in fields of this size in peaceful conditions.

5. The following points of interest emerged from this exercise:-

(a) More than 50% of the gliders landed in fields in which they were not briefed to land.

(b) It appeared to be mainly the later gliders that landed outside the area or in the wrong field, and some of the pilots reported that this was due to their fields being already full. It appears that arable fields will not hold as many gliders as anticipated, the earth causes them to lose their undercarriages which prevents them running to the end of the field, leaving room for following gliders to land.

In my opinion the glider pilots showed great skill in landing their gliders as well as they did. The task of landing in small fields with practically no wind proved more difficult than I expected, and even the glider pilots who appeared to judge their approach accurately got into trouble. In my opinion the casualties at first light would have been far greater.

(c) Horsas. Although the approach and glide of the Horsa appeared to be much safer than that of the Waco, every Horsa over-shot rather badly or crashed. Some expert pilots said they were being flown too fast, but it was also clear that the loaded Horsa runs a long way on the ground as compared to the Waco.

Wacos. The float and glide of the Waco was so flat as to appear dangerous, but once the Waco touched down it pulled up in a very short distance. Time and time again Wacos that I thought were going to crash badly, pulled up in about twenty five yards with no serious damage.

(d) Gliders were released from between 800 and 1200 feet. Most of the pilots seemed to consider this too high, as there was congestion and risk of a collision during the glide down. I think personally this was due to the concentrated release, bad flight plan after release, and the fact that U.S. glider pilots are used to being released at a low height.

6. Ground Equipment

The collection of the ground equipment was somewhat unrealistic as insufficient gliders were carrying equipment. The point that struck me was that immediately after landing had taken place, it was impossible to tell where any particular glider had landed. I think they will have to carry a much more conspicuous means of identification.

7. Conclusion

From the point of view of "OVERLORD" the exercise does not answer the really difficult air questions to which answers were required, but it does confirm that gliders can be landed without undue casualties in daylight in areas of this nature, provided they can be towed there free from serious enemy opposition and provided there is plenty of time to collect equipment after landing.

Air Vice-Marshal H.E.P. Wigglesworth, Royal Air Force Senior Staff Officer, having read a report of the exercise, commented "All very well, but oh the losses or damage".

On the 14th May 1944, almost a month after the landings, the local Lands Officer wrote to Allied

Headquarters complaining that difficulties were being experienced in connection with the settlement of outstanding claims for damage caused by the exercise.

Various damaged gliders had not been removed, and apart from the question of further damage which may arise if and when the gliders were removed, some of them were in growing crops and therefore the longer their removal was postponed the more damage ultimately would be caused. In addition broken gates and damaged fences could not be repaired until all the damaged gliders had been removed, with the result that certain fields could not be used for cattle.

The Lands Officer requested that if the remaining wrecked gliders were not going to be removed in the near future, that permission be given to burn or otherwise dispose of them on site.

Footnote

Over 200 gliders took to the skies on the night of June 5th 1944, at the start of operation Overlord. The first wave carried Allied Paratroops whose mission it was to secure key objectives and prepare a secure landing ground for the next wave of gliders carrying Jeeps, Howitzers, anti-tank guns and ammunition.

Fighting was intense and casualties were heavy, but the main objective, to prevent the Germans reinforcing their troops resisting the D Day landings on June 6th was largely achieved, saving many lives.