

This document published on : <http://www.6juin1944.com>

The following document is an extract from a microfilm I bought at Maxwell Air Force Base. The cost for each microfilm is \$ 30. Help me to buy more microfilms about the Troop Carrier and put more documents and information on the website.

MAKE A DONATION – USE THE PAYPAL BUTTON – THANKS!



Le document suivant est extrait d'un microfilm que j'ai acheté à la base aérienne de Maxwell aux Etats-Unis. Le coût par microfilm est de \$ 30. En m'aidant à acheter d'autres microfilms vous permettrez au site de diffuser encore plus d'informations sur le rôle des différents 'Troop Carrier Groups' lors de l'opération «Neptune».

FAITES UN DON – UTILISEZ LE BOUTON PAYPAL - MERCI



SECRET

HEADQUARTERS
434TH TROOP CARRIER GROUP
APO 133 U S Army

E/SRP/2

31 May 1944

S O.P. GLIDER OPERATIONS

1. All gliders will be chalk marked before leaving dispersal area for loading zone. Chalk numbers will be at least 18 inches high with 1 inch band. One number on nose, close to eye level and one each side of fuselage half way between trailing edge of wing and leading edge of horizontal stabilizer.
2. Complete glider crews will be assigned to specific gliders prior to loading time. It will be the responsibility of the first pilot and the squadron glider engineering officer to inspect and determine the airworthiness of each glider prior to loading time. All available spares will stand by to replace gliders not judged airworthy.
3. Each first pilot will accompany his glider to loading area to supervise and assist in loading of equipment. He will be held responsible that the maximum allowable useful load is not exceeded. Useful load includes crew and equipment. ie. Gross weight maximum minus weight empty equals useful load. He will check the placing of equipment, personnel and emergency equipment in order to maintain proper weight and balance. He will inspect lashing, safety belts, and placing of emergency equipment, Mac Wests air sea rescue, etc.
 - a. Maximum useful load Horsa - 6900 lbs
 - " " CG-4A - 3750 lbs
4. Final check on CG & weight and balance will be determined by load adjuster. Final check on Horsa by pilot and copilot leaving cockpit with entire load in place and pulling down their combined weight on horizontal stabilizer lift struts. If the nose wheel can be raised off the ground the load is flyable. Nose wheel should remain on ground with only one mans weight on tail.
5. The 1st pilot will approve and sign manifest form "B" after entering CG index on same.
6. Windshield covers, pitot covers, control and flap locks will remain in place until ten minutes before engine starting time.
7. After loading is completed gliders will remain in area facing perimeter until decision has been made as to runway to be used. Gliders will be towed to marshalling area as per chalk mark in sequence, in a clockwise direction. A competent crew member will remain in pilot seat while glider is being towed in order to operate brakes if necessary. If marshalling at night, running lights will be left on until glider is marshalled and the glider to its rear is also in place.
8. The officer in charge of marshalling will be stationed at the radio jeep at the head of the marshalling column. He will direct the placing of the first two tugs and gliders.

-1-
RESTRICTED

9. One hour prior to marshalling he and the group weather officer will make the decision as to which end of the long runway the a/c and gliders will be marshalled. This decision will be forwarded immediately to all squadron S-3 who will be in their respective offices at this time.

10. Each squadron will be given a specific time to start marshalling, tugs will remain in dispersals and gliders in loading zones until such time as called for by marshalling officer. (All tugs will be chalk numbered on nose and one foot aft of main loading door) Tugs will stand by on interplane frequency at scheduled time for instructions from radio jeep. All tugs will taxi counter clockwise on perimeter.

11. Assistant marshalling officers will be stationed at tail of tug and glider already marshalled to signal tug or glider to enter runway from perimeter and proceed to place as directed by him. This will be accomplished by means of ~~green~~ ~~white~~ lamp flashed at tug pilot or vehicle driver in turn. If at night aldis lamp will be directed on person or persons directing tug in position.

12. In marshalling of Horsa or CG4 gliders the odd numbers will align with center of runway, even numbers to the right of and in a position to assure safe lateral clearance in the event of cross wind take offs.

13. Nose to tail clearance on Horsa will be three feet on CG 4 fifteen feet. All gliders and tugs should be aligned in trail and in position that would make it impossible for tugs to hit gliders when signal is given to enter runway to take off for power on position.

14. When full service is required in tugs it will be accomplished before leaving dispersals. Starting and taxiing will then be done on:

- a. Odd chalk numbers on left main, both engines.
- b. Even numbers right main, both engines.

This will allow gas truck to top off main tanks from outside of marshalling line and assure full service at take off.

15. Engines will be run up and mag tested before entering marshalling area. Final warm up will be at a maximum of 1000rpm.

16. All vehicles used as tows or required to be in marshalling area will have tops or canopies down and windshields lowered. All possible precautions will be exercised against damage to a/c or gliders.

17. There will be no smoking in or near the marshalling area at any time.

18. Five minutes prior to engine time all crews and personnel will be at stations and marshalling area will be cleared of all but necessary and experienced crews needed to assist during take off.

In the event of an air raid alert while marshalling is in progress the tower will warn radio jeep. Officer in charge will signal with series of short blasts on whistle which will be passed on by other officers in area. All clear will be one long blast. All lights will be extinguished during alert.

SECRET**S.O.P. FOR STATIC HOOK UP TAKE OFF**

1. The Group engineering officer will be responsible that the sled, used for measuring tow rope length, is in position, that the rope is measured to the required length and that all equipment used in conjunction with same are in place and functioning satisfactorily.
2. The Group Communications officer will be responsible that the radio jeep is functioning properly and placed in position with signal sled ten minutes prior to marshalling time.
3. The Group Glider engineering officer will operate signals from sled to tug pilot.
4. The Group Engineering officer will select two squadron engineering officers to act as runway police. They will check runway and overshoot areas at intervals prior to take off and report condition to the marshalling officer. At take off time they will take stations to the left of take off runway. One station at point where tugs and gliders leave runway, another half way between that point and signal sled. They will be equipped with signal gun and a minimum of six red and six green flares each. Flares will be fired only in an emergency such as accidental release on runway, loss of undercarriage from glider or in the event of any other obstruction to take off run. A weapons carrier will stand by well clear of runway between both stations to assist in moving any obstructions. A green flare will be fired as signal to sled that runway has been cleared.
5. The lead a/c will start take off at designated time on signal from sled. Each succeeding tug will be on the alert with crew at take off stations. Crew chief observing tow rope and glider through astral dome. Tug pilot will follow as closely as possible to the glider in motion ahead of him at the same time observing signals from sled. Quick dashes on green aldis directed on sled panel means take up slack quickly. Longer slower dashes slack almost out slow down. At this point tug should be almost abreast of sled panel. Steady green light, apply take off hp slowly but deliberately.
6. Tug pilot will stand by on interplane frequency for emergency instructions from radio jeep.
7. Red flare ahead on take off lane will indicate obstruction on runway. Tug pilot instructions will be taken from sled and radio jeep.
8. (a) Assembly heading at station 467 will be 220° mag. and 040° . Tugs will not make turns after take off until a minimum safe altitude and air speed have been reached. In any event turns will not be made until tugs and glider are well clear of outer boundaries of airframe.
(b) Assembly altitudes will be 1000' MSL until completion of one complete 360° circuit of assembly pattern, 1500' MSL for final assembly of entire formation unless otherwise directed at briefing. Tugs will assemble in elements of two in right echelon until on course time and signal from lead a/c to form four ship elements is given. See paragraph 10. a. for SOP on all r/t and light signals.

RESTRICTED

9. Emergency procedures.

- a. On take off tug pilots losing gliders will remain on runway if possible, turn both landing lights on long enough to turn right and clear runway.
- b. If tug has gained too much momentum to remain on runway take off will be completed and radio jeep contacted immediately for further instructions. Tug will remain at 300' above field elevation and clear of assembly pattern. Having lost glider tug will leave gear down and be prepared to land and proceed to rear of column on instructions from radio jeep.
- c. During flight the crew chief or another crew member will maintain a continuous watch, through astral dome particularly when under enemy fire and report to 1st pilot any trouble encountered by glider.
- d. When heavy equipment such as vehicles, guns etc., are hauled in CG 4 gliders they will be hooked to the nose opening cable prior to take off, unhook nose just prior to landing in order for the lead to lift nose if crash landing is made and avoid injury to crew.
- e. Procedure to be followed by tug in event glider is hit by enemy, or in event tug is hit by enemy fire, must to a great extent be left to the exercise of good judgment on the part of individuals concerned; however, it must definitely be established as SOP that if necessary to cut a glider loose rather than to sacrifice a tug and a glider, this must be done. This further indicates the necessity for making sure that interphone communication is working properly, enabling the tug pilot to know whether or not the glider should be cut loose. It is obvious that the thing to do is to drop the glider at the LZ if this is at all possible, but if this is clearly impossible and the glider is already a loss, save the tug if possible. SHAEF SOP signals must be used in the event of interphone failure for the tug pilot to notify the glider pilot that it is necessary to cut. If glider pilot fails to recognize LZ, tug pilot should give the release signal, then release the glider at LZ if necessary.
- f. Suggest that glider pilots go prepared to land in any direction and not on one fixed pattern, as approach may be from wrong direction. Glider pilots should be prepared to land from preferred pattern if approach can be made as planned; otherwise, from any pattern.
- g. Be sure to maintain the double interval between number 2 and number 3 tugs and gliders when in the presence of enemy fire; this is to enable a tug or glider which is seriously hit to get down and out of formation without collision.

10. Glider S.O.P. R/T and light signals.

- a. All tug pilots will monitor Group inter plane frequency during take-off, assembly, enroute and return. Complete radio silence will be maintained except in the case of extreme emergency.
 - b. Group and squadron R/T code names only will be used.
 - c. R/T call sign for gliders is Boxcar. For tow ropes Football.
 - d. The following aldis lamp signals through tug astral dome will remain S.O.P. this Group.
 1. Red aldis lamp:
 - Steady:- Ten minutes prior to LZ.
 - Dashed:- Emergency release immediately.
- The Red aldis will not be used while in flight for any other purpose than the above.

SECRET

2. When the ten minute out Red steady aldís lamp is followed by one of the following colors it will designate:

- a. Green:- Glider will make 180° approach.
- b. Amber:- Glider will make 270° approach.
- c. White:- Glider will make 360° approach.
- d. No light following steady Red:- Wind direction unknown or calm that is less than 10 mph.
- e. When tug has spotted LZ and is on heading on which glider is to be released the color designating the type of approach to be followed will be shown steady long enough to indicate to GP that the LZ is visible to his left. Tug pilot will order light to be dashed at point of release.
- f. Each element leader will pass signals back to all A/C and gliders in flight. Release signals at LZ will follow in sequence when glider flights are in release position as briefed. Repeating:-
 - Steady Green:- 180° downwind leg area to left.
 - Dashed Green:- Release and turn left immediately to base leg.
 - Steady Amber:- 270° approach. Area to left.
 - Dashed Amber:- Release and turn left immediately to downwind leg.
 - Steady White:- 360° approach. Area dead ahead.
 - Dashed White:- Release and turn left immediately for 360° approach.
- g. To assist squadron and element leaders during the take-off and assembly the formation leader will use a dashed green aldís at intervals in assembly pattern. The second wave lead A/C will use a dashed amber aldís. The third wave lead a white aldís. All afore mentioned aldís lamp signals are for use in flight and are not to be confused with S.O.P. Green and Red stop and go signals on the ground.
- h. Lead A/C will key dashes on white astral dome light as a signal to go from elements in trail to four ship elements or vice versa.

11. After release of glider and rope the following will apply when practicable.

- a. If gliders were released from four ship elements, 2000' separation, numbers 3 and 4 will fall in trail and follow leader in standard two ship elements.
- b. If A and B flights split 2000' laterally for release the leader of "B" flight (see attached diagram) will maneuver "B" flight so as to trail "A" flight if practicable. If turns are necessary after LZ both "A" and "B" flight leaders will plan and execute procedure to be followed as the situation permits.

12. On arrival at home airdrome with two ship elements in trail leaders will peel off on upwind leg 1000' above field elevation. Lead A/C and first wave land first. On each succeeding 360° circuit of airdrome lead A/C of each succeeding wave will peel off and land. Minimum interval between landing A/C will be 15 seconds.

RESTRICTED



Upon peeling from initial approach altitude no A/C will descend lower than 500' above field until entering funnel on final approach.
A/C in distress or short on fuel will inform leader and leave formation to land individually, upon instructions from lead A/C.

13. Operations Memorandum number 55-2 S.O.P. mission reports will govern there after.



Route Formation

Release Formation

After Release From 4 Ship Elements

