SIGNED NEW

January 21, 1943.

Assistant Chief of Staff, G-3, U.S. Army
Assistant Chief of Staff, G-3, 1943.

SUBJECT: Lessons from Operation "Torch".

1. Attention is invited to the inclosed copy of report from the Commanding General, Eastern Assault Force, December 26, 1942, regarding lessons learned from Operation "Torch".

2. This report covers only the landing in the vicinity of Algiers and not the entire "Torch" operation.

HB Lewis

H. B. Lewis,
Brigadier General,
Acting Adjutant General.
Lessons from Operation Torch.

Lessons learned from the amphibious landings in the vicinity of Algiers. Includes staff reports on the preparations for the assault and the coordination with Air and Navy personnel.
MEMORANDUM FOR Assistant Chief of Staff, G-2, WDGS;  
Assistant Chief of Staff, G-3, WDGS;  
Assistant Chief of Staff, G-4, WDGS.

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1 Incl.
EASTERN ASSAULT FORCE
UNITED STATES ARMY

26 December 1942

LESSONS FROM OPERATION "TORCH"

I - G-1:

1. In the planning stage of the "Torch" operation, there were no exceptional difficulties. During operations the chief difficulty was to obtain battle casualty reports from lower units. It is believed that this can be remedied by having the Adjutants General of Division and higher units conduct schools for Regimental and Battalion Adjutants prior to the beginning of the operation.

II - G-2:

2. Preparation for operation:

a. An abundance of accurate information was furnished and disseminated by this Headquarters covering our zone of operations. Excellent aerial photographs were provided covering our theater of operations. However, an expert interpreter of aerial photographs would have been a valuable asset to this command. A larger supply of aerial photographs of critical points was needed (only one set of photographs per Combat Team was available).

b. Terminal force, which was an infantry unit under control and operation of the Royal Navy, report that intelligence furnished it was both meager and inadequate, also that after the plans were revealed to the personnel, there was not sufficient time (about two days) or facilities given for a complete study of the information furnished.

c. It is suggested that since these operations were on shore, they should have had the benefit of the intelligence information passed on to the other land forces in the operations, and in sufficient time to have thoroughly studied that information.

3. Operation "Torch":

a. Very little information came back to Headquarters EAP from our combat units for the following reasons:

1. All units were widely scattered and intermingled, due to failure to land troops at place and at time scheduled.

2. Lack of means of communications, either radio or vehicle. Runners could not function as there was no axis of communications because troops were widely scattered in landing.
3. Intelligence officers and men were under stress of circumstances other than their normal functions.

b. Suggestions:

1. The lensatic compass proved to be too fragile and susceptible to salt water. A more sturdy water proof compass should be provided for amphibious operations.

2. When regimental Combat Teams operate alone, there should be more provisions for the organization of a prisoner of war collecting section.

3. After the location of this operation was known, it was impossible for security reasons to pick linguists from troops not coming with us. It is recommended that a general pool of linguists be maintained by higher headquarters, and that qualified linguists suitable for the operation be furnished to the force for assignment to units.

III - (5-19)

I. Training:

a. Our great weakness is the lack of adequate doctrine and technique for amphibious operations. This is especially true of the means and methods to be employed by Combat Teams and small units. The remedy appears to be to organize a training center employing officers from our Divisions which have had combat amphibious experience, and there develop a technique which is suitable for our organization, for our equipment and for the amphibious missions which our Army may be called upon to perform.

b. Uniformity must be secured as to the method by which rifles, gas masks, and other equipment is carried; in the method of lowering equipment from ship to landing craft; in the method personnel should use in descending nets; in the method in getting out of landing craft; and finally and most important in the methods in reorganizing ashore.

c. Ship to shore training must include training in rough water as well as quiet water. It must also include training on different types of beaches, that is, on open beaches from which an exit can be made on a broad front, on beaches where there are only one or two exits, and finally on beaches where "scrambled" landings must be made.

d. Another defect in training was that the Battalion landing teams of the U.S. trained Combat Teams were trained to land personnel and vehicles in a certain sequence on a single beach. In the "Torch" operation that Combat Team found it necessary to land personnel on two beaches and vehicles on a third beach. This caused considerable confusion.

5. Equipment:

a. The individual equipment of our soldiers is excellent. The only
fault to be found is that there is too much of it. This is especially true of the equipment of the Infantry officer, who is so loaded down with heavy cumbersome equipment so that his mobility is impaired. A careful study should be made of the individual equipment to be carried. This study should be based on the principle that the equipment of both officers and men should be as light as practicable.

b. Weapons and ammunition function satisfactorily. Salt water and salt water spray cause malfunctions in automatic weapons. This can be obviated by giving such weapons a thorough coating of S.A.K.-30 motor oil.

c. The question of the types of vehicles to be carried is a difficult one. It is recommended, in any future operation, that at least 50% of the T.H.A. 2½ ton trucks be taken. All vehicles should be waterproofed before landing. A minimum of twelve very lightweight solo motorcycles and twenty four bicycles should be included in the equipment of each battalion landing team.

6. Communication:

a. Communication troops were generally adequately trained in their individual jobs. There was, however, a number of communication officers who have never had this type of training. Due to the controlled exercises in which our troops had been training, a marked reluctance on the part of communication sections to depart from orthodox book "doctrine" was discovered. It is recommended that our service schools introduce a sub-course in amphibious communications.

b. As this operation involved the use of radio only in the assault phase, the following comments are pertinent to radio:

The present Infantry Division radio equipment from Division Headquarters to Battalion Headquarters is designed to be used primarily as vehicular sets, consequently little thought is given as to whether portable combination ground and vehicle sets function properly when used as ground stations. The Infantry regiment relies principally on the SCH-284. The weight of this set when dismounted from its vehicle is 110 pounds. This weight added to the individual equipment and arms of the operating personnel is almost prohibitive on long marches. Again while this set is being carried as a pack it cannot be operated and it is necessary to halt before the set can be placed in operation.

SCH-195 has proven to be unsatisfactory due to the ease with which it can be masked. It operates satisfactorily from small craft to shore as there are no obstacles to mask the set.

SCH-536 does not have the necessary range for amphibious operations. A set is needed for use between battalions and companies with a range of approximately five miles. The battery supply of this set is extremely critical since battery drain is high as compared to battery capacity.

It is recommended that a portable set similar to the British No. 46 be developed for this type of operation; that a hand cart in which SCH-284 sets may be mounted with storage batteries as a source of power be issued;
that waterproof bags be furnished with all radios.

7. Planning:

a. The biggest defect in planning was that Battalion commanders were not taken into the confidence of the commanders of higher echelons early enough so that they could intelligently make their own plans under the supervision of Division and Combat Team commanders. It is strongly recommended that in future operations Battalion commanders and their staffs be included in the planning of amphibious operations.

b. It is fundamental that Combat Team commanders should be given the task of loading their ships to accomplish the mission which has been prescribed for them. In operation "Torch", the British insisted that the loading plans be made by the Division. It is recommended that in any combined operation, in the future, Combat Team commanders be given the task of loading their ships in order to fulfill their prescribed missions.

8. Operation:

a. The actual operations of this force consisted of infantry skirmishes. Field artillery was not employed due to the fact that high seas prevented its landing in sufficient time to be effectively employed. The infantry 37mm and 60mm mortars were especially efficient in dislodging enemy troops from buildings and prepared defensive works.

IV - G-4:

9. General:

The following observation is fundamental. The intermingling of the British and U.S. Army supply systems should be studiously avoided wherever possible. In an operation where the troops participating are partly British and partly American, duplicate parallel channels of supply must be established and maintained. This situation, the constant and never-ending necessity for compromise as to principles and technique of supply make a very difficult task unnecessarily more difficult. In future amphibious operations, the Army element should be exclusively American or British, but not a mixture of the two. Observance of this principle will eliminate many faults in technique which existed in operation "Torch".

10. Embarkation:

To facilitate the embarkation of troops in an amphibious operation, a "staging area" should be established. This staging area should have a "camp complement" including transportation, cooks, medical officers, and other necessary camp overhead. In an amphibious operation, it is normal that the organic transportation of the unit concerned is loaded a considerable period ahead of actual embarkation of the troops themselves. During the intervening period the troops are without transportation, and without
kitchens, (kitchens having been stowed inside the trucks when the trucks were loaded) unless the staging area system is used. In operation "Torch", this staging area arrangement was improvised with fairly satisfactory results; it is recommended that it be SOP for all future operations.

11. Separation of Vehicles and Drivers:

In this operation, in many instances, drivers of vehicles were transported on one ship while their vehicles were transported on another. The bringing together of the driver and his vehicle from different ships, in the dark, and under adverse circumstances presents a very difficult problem of coordination. If landing in the face of active hostile resistance, it is believed extremely doubtful whether this could be done effectively. It is recommended, therefore, that in all future operations drivers travel on the same boat with their vehicles.

12. Rations:

In principle, the British type 48 hour ration is sound. The American "C" and "K" rations are excellent so far as nutrition is concerned, but the soldier has no place to carry them. The British 48 hour ration is designed to fit into the British type mess tin, but there again that ration will not fit into the American mess kit old or new type. Consequently, it is recommended that a ration be developed, following the lines of the British 48 hour mess tin ration in principle and containing the essential items of the U. S. "K" ration, with the containers designed in size and shape to fit inside the U. S. mess kit, new type. The problem of bulk as well as weight is important in landing operations, and such a ration would utilize what is now dead space inside the U. S. mess kit.

13. Grenades:

At present, the U. S. soldier has no method of carrying hand grenades or M9 AT grenades other than pure improvisation. He now is forced to stick grenades into his trouser pockets or wherever he can. It is therefore recommended that a suitable size haversack, knapsack, or field bag be devised and issued to U. S. troops for this purpose. Among other qualities it should have a wide, firm shoulder strap to avoid a cutting-type pressure over the shoulder or on the neck which is likely to occur when carrying heavy loads.

14. Life Preservers:

Reports indicate that both the British type "Blue West" and the American self-inflating type life preservers are not completely satisfactory for landing operations. It is recommended, therefore, a type of life preserver capable of sustaining a man with his equipment be developed and issued in all landing operations.

15. Medical:

It is recommended that a lightweight binder be developed and issued to securely immobilize wounded men being carried in litters. This would
facilitate the handling of wounded personnel being carried over rough terrain, by air, or when the litter is being taken on or off ships.

b. Individual Venereal Prophylactic Kits: Between the start of our amphibious operation and the ability of units to establish venereal prophylactic stations, a considerable length of time elapses. Experience has shown that immediately after hostilities cease or our mission is accomplished, personnel are prone to expose themselves to venereal disease. It is recommended, therefore, that individual prophylactic kits be issued to each man coming ashore in landing operations to enable him to bridge the gap, if necessary between the start of the operation and the establishment of a prophylactic station.

c. Ambulances: The landing of ambulances in the early stage of an amphibious operation is difficult. The use of 2-ton, OR Cars, equipped with a frame superstructure to carry litters was found to be practicable in operation "Torch". It is recommended, therefore, that such or similar means be used in the early stages of all landing operations.

d. Morphine Syrettes: The use of morphine "syrettes" containing compound of morphine tartrate was found in operation "Torch" to be necessary and practicable. It is recommended that in all future landing operations that company aid men and other medical personnel be issued morphine syrettes on the basis of one syrette for every four (4) individuals. In this type of operation against determined opposition, casualties, of course are likely to be quite high. It is believed that one syrette per four (4) individuals is a practical minimum.

e. It is recommended that a hospital ship accompany an assault task force so that seriously wounded men may be evacuated until adequate hospitals can be established ashore.

f. Battalion and regimental surgeons report that in many cases medical personnel knew nothing of the tactical situation. The medical service, especially in the early stages of the operation, was extremely sketchy. This fact again emphasizes the necessity of having Battalion commanders and their staffs taken into the problem early in the planning stage.

16. Beach Organization:

The beach personnel must be familiar with the troops and type of equipment to be landed. In operation "Torch" the beach organization was British on two of the three beaches and was composed of personnel who were not familiar with U. S equipment and organizations. In many instances they disregarded U. S priorities and substituted British priorities. Example: British staff cars were landed in place of U. S. artillery pieces which were urgently needed. The priority of landing supplies on the beach must be planned by the supply officer of the landing team. The handling of supplies on the beach must be carried out according to that plan. The handling of the supplies on the beach must be carefully rehearsed just as the other parts of the operation are rehearsed.
17. Army and Navy Cooperation:

a. Cooperation between individuals of the Army and Navy, both British and American, was entirely satisfactory. However, it is recommended that the line of demarcation wherein the Navy has full control of the operation until the troops reach the shore, should be changed so that the Army takes control when the troops get into the landing craft. Landing craft personnel should be Army personnel and trained by the Army. The reasons for this recommendation are:

1. The crews of landing craft must be highly trained in landing operations. Able-bodied seamen, no matter how well or how effectively trained in their duties aboard ship, are not competent or trained to man landing craft.

2. The Combat Team and Battalion commanders prescribe the plan by which the troops are to go ashore. Having planned it, they should be given the job of getting their commands ashore.

3. During the preparation for an amphibious operation the crews of landing craft and the assault troops should be carefully trained together until they are letter perfect in their respective duties; then crews, assault troops and landing craft should all three be loaded on the ships together. This will require that during the final training stages, complete information as to the ships to be used including their capacities must be in the hands of the various commanders.

b. Ships of all types and classes were furnished for this operation. From an Army standpoint assault ships should have the following specifications: Tonneage - 10,000 to 15,000; speed - not less than 18 m.p.hr. cruising speed in order to avoid submarines; sufficient berthing space for seventy five officers and 1,500 men; adequate troop kitchens and dining rooms; adequate berthing facilities; exits from berthing compartments arranged to facilitate the movement of troops to debarkation points; a minimum of five debarkation points on each side of the ship; a minimum of four holds; two forward and two aft; adequate booms so rigged that they can simultaneously handle Army loads; adequate deck space at debarkation points so that troops have sufficient room to disembark; sufficient deck space so that troops can get proper physical exercise.

g. The present landing craft are inadequate in every respect. They are too small to carry tactical units; they broach easily; they break up in moderately heavy seas; their compasses are worthless. It is strongly recommended that a suitable landing craft large enough to carry a platoon of infantry with two units of fire and all platoon weapons be developed.

d. During operations two calls were made on the British naval forces for naval gunfire. In the first case it took one hour to get the gunfire; in the second it took two hours.
g. The only air support of this force during the assault phase, except adequate reconnaissance aviation, was carrier based naval aviation. One call was made on it — to bomb Fort Lazaret on Cap Matifou. It took two hours to get this support.

f. The time lag for both naval gunfire and air support appears to be excessive. It is suggested that the problem of such support be given careful consideration and study.

/s/ C.M.S. Y. HYDEL
Major General, USA
Commanding.