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United States Forces, European Theater

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THE CONTROL OF THE BUILD-UP OF TROOPS IN THE
CROSS-CHANNEL AMPHIBIOUS OPERATION 'OVERLORD'

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MISSION: Analyze and Report on the Organization and Operation of the
Build-Up Control in Operation 'OVERLORD'.

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UNITED STATES FORCES, EUROPEAN THEATER
APO 408

CONTROL OF THE BUILD-UP OF TROOPS IN THE
CROSS-CHANNEL AMPHIBIOUS OPERATION 'OVERLORD'

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CONTROL OF THE BUILD-UP OF TROOPS
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INTRODUCTION

1. The General Problem. The objective of Operation 'OVERLORD' was to secure a lodgment on the Continent from which further offensive operations could be launched. Viewed from a logistical standpoint, the problem was to funnel a large force of combined arms in the United Kingdom through a limited amount of transportation into a narrow battle area in France, and to maintain and expand that force. It is understatement to say that this was a most difficult problem. Peculiar aspects of it derived from the nature of the ports of embarkation, the waters to be crossed, the tides and weather, the beaches on the far shore, the anticipated lack of an adequate Continental port for some time after the initial assault, and the character of the enemy's resistance at sea, on land, and in the air. The joint efforts of numerous individuals and organizations, British and American, over a period of many months before and during the operation, resulted in complete success.

2. The Build-Up of 'OVERLORD'. An essential part of the broad problem just outlined - the part with which this study is concerned - was the preparation and execution of a plan for reinforcing, or building up, the initial assaulting force. This plan not only specified the order in which the reinforcing troop units were to be moved to the battle area, but also provided for an organization to control and modify the cross-Channel flow of troops, once started, so as best to meet unforeseen tactical and administrative requirements. The build-up control organization was found to be of great value throughout the operation. Because this is a subject not treated in current War Department publications, it is believed desirable to present the following report on the purpose, structure, and methods of build-up control, and lessons learned therefrom. It should be noted that, although the build-up control organization was a combined British and American undertaking, the discussion hereunder is concerned solely with its American aspect.

SECTION I

MOUNTING OF THE OPERATION

3. Introduction. Before considering the problem of planning and controlling the build-up, it is desirable to review briefly the manner in which the troops taking part in the operation were assembled and prepared for their movement across the Channel, that is, the scheme for mounting the operation.

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4. Responsibility for Mounting. The mounting of operation

1 For details see:

1. Q (M) 6/101 - SHAEF, 24 Apr 44; Subj: 'NEPTUNE' - Outline, Movement Plan.
2. SOSTC memo 461 - Hq. SOS, ETOUSA, Office of the Chief of Transportation, 1 Apr 44; Subj: Instructions for the Control of Movement - 'OVERLORD'.
3. File 370.5 - Hq. ETOUSA, 10 Jan 44; Subj: Preparation for Overseas Movement: Short Sea Voyage.

'OVERLORD', insofar as the American forces were concerned, was primarily a responsibility of the Commanding General, Services of Supply (later, Communications Zone), European Theater of Operations. In accordance with requirements established by commanders of troops, his headquarters prepared and executed the detailed plans for the movement of troops to concentration areas and marshalling areas, and for their embarkation for movement to the Continent. In addition, it prescribed the administrative measures necessary to prepare the troops for movement overseas.

5. Concentration and Marshalling Areas. The necessity for dispersal in order to take full advantage of facilities, to minimize loss from enemy air action, and to obtain deception, required that our forces in the United Kingdom assemble over broad areas behind the points of embarkation. Also in order to load large numbers of troops simultaneously in many craft, each of relatively small capacity, it was necessary to employ numerous embarkation facilities. The localities in which the American troops concentrated and marshalled for their movement to France were selected in accordance with surveys made as early as November 1943. Facilities in southern and southwestern England were examined, and recommendations made for a layout of concentration and marshalling areas, means of mounting, and other physical facilities necessary for the embarkation of troops. Specific areas for the concentration and marshalling of troops were selected so as to fit closely the tactical assault plan and the priorities assigned to various units for movement to the Continent. The processes of assembling, loading, and debarking troops were rehearsed in a number of large-scale exercises in the spring of 1944.

6. Concentration. During a period of several weeks prior to the assault, units in the expeditionary force began to assemble in their concentration areas. The priority in which units concentrated was prescribed by the Field Force commanders, in accordance with requirements as envisaged in the operational plan. Assault units were placed close to their points of embarkation. Units moving later in the program were concentrated farther back. Some units did not move into their concentration areas until after the operation had begun, when room was made available by the movement overseas of preceding units. Most units moved into concentration areas 21 days before sailing. Placement of all assault and early build-up troops in concentration areas was completed on 15 May. Once the operation began, troops of the build-up were progressively moved into their areas, as space became available. The considerable congestion of combat troops in southern England required close coordination with the activities of the Air Force in order to protect these troops from enemy air action. If the enemy "Crossbows", or flying-bomb sites, known to exist across the Channel, had been permitted to go into operation, the damage to our concentration might have been serious. Therefore, in addition to continuous air cover, a considerable amount of bombing against the "Crossbow" sites took place through the Spring months. A plan to give the enemy the impression that a major troop concentration was being effected on the southeast and east coasts of England rather than on the southern coast gave additional protection to the concentration.

7. Marshalling was the process of dividing units into unit parties and then forming these parties into craft or ship loads. This was carried out in the marshalling areas, which were located within short marching distance of the hard and piers for embarkation. Each such area contained accommodation for four times the number of personnel and vehicles which could be embarked during a period of 12 hours from the embarkation area serving it. Spare accommodation was held in readiness to take care of any unforeseen clogging of the channels of movement, such as might result from delays in the embarkation of troops because of enemy action against a port, or from an urgent demand that a specific unit in a concentration area proceed to the Continent, which would cause it to move through the marshalling areas ahead of schedule. Most units moved directly from their concentration area to their assigned camp in a marshalling area, and, having marshalled themselves into craft or ship loads, remained there until called forward for embarkation. Units

generally were in the marshalling areas for 18 to 36 hours. The final waterproofing, check and replacement of equipment, and briefing of troops in the operation, took place in the marshalling areas.

8. Embarkation Points. The American forces taking part in the initial assault were embarked from points in southern England, west of Poole (Dorset). Early reinforcements for this force were loaded at ports in the Bristol Channel in advance of the operation (pre-loaded build-up). The later American reinforcements, or build-up proper, were moved through Channel ports, from Southampton westward to Falmouth. A large number of embarkation points suitable for the various types of shipping to be used were prepared, including special ramps (called "hards") to facilitate the loading of troops and vehicles on assault ships, landing ships, and small craft.

9. Assignment of Troops to Shipping. Troops were loaded on the available craft and ships in accordance with their intended employment and the character of their organization and equipment. Some, to be used in the assault wave, were loaded on beach landing craft; some were placed on ships suitable only for handling personnel; others were loaded on ships designed to handle vehicles on an open beach. The assignment of specific troops to specific vessels involved meticulous and laborious planning. Before the operation began, it was possible to assign only troops in assault units and in the pre-loaded build-up to definite craft and ships. The rest of the force was dependent on shipping to be returned from the Continent. Inasmuch as the quantity and time of availability of this shipping could not be exactly determined in advance, specific loading plans for these troops had to wait until the operation was under way. However, it was possible to make certain preparations for embarkation on the basis of the anticipated priority in which units would move and the forecast of availability of shipping. Because of the limitations of shipping, it was necessary to move most units in the assault and early build-up at reduced strength (or "assault scale"). Personnel and vehicles not immediately needed in combat were set aside as "residues", to be moved overseas at a later date. There was also considerable splitting of units throughout the build-up, because ships were loaded at different points before being assembled for convoy to the far shore. However, every effort was made to avoid splitting below tactical sub-units and separating troops from their essential equipment. Some loss of stowage had to be accepted in order to preserve the desired tactical unity.

Section II

PREPARATION OF THE TROOP BUILD-UP LIST

10. Introduction. The operational plan for 'OVERLORD' prescribed that in the American zone the United States First Army would make its assault with three infantry divisions and two airborne divisions, together with necessary supporting troops. On D / 1 and D / 2 build-up forces, already loaded on vessels before D-Day, were to be discharged. The remainder of the build-up, dependent on shipping returned from the far shore, was to begin landing on the beaches on D / 2, and thereafter a shuttle service of vessels was to continue carrying troops daily from the United Kingdom to France.² In all, during the first three months

² For details of the basic directive on the build-up, see:

1. C.O.S. (43)416(0)-War Cabinet, Chiefs of Staff Committee, Operation 'OVERLORD', dtd 30 Jul 1943, pars. 77-85; Appendices L & M
2. NJC 1004- Initial Joint Plan of the Commanders-in-Chief, 21 Army Group, ANXF, and ABAF, dtd 1 Feb 1944, pars 72-86, 109-111; and Appendices L1, L2, N, O, P, R, U.
3. 3810- Operation 'NEPTUNE', Hq First U.S. Army, dtd 25 Feb 1944, Annexes Nos. 2a and 23.

of the operation, an American force of two armies, comprising 14 infantry divisions and 7 armored divisions, the seaborne elements of two tactical air commands, including 18 fighter groups and two reconnaissance groups, together with supporting combat troops, aviation engineers, and service troops - a total of some 1,350,000 individuals and 250,000 vehicles - were to be moved by craft and ships across the Channel.³

11. Responsibility for Build-Up Priority Lists. An integral element of the operational plan was a list of the build-up forces, arranged in order of their landing on the far shore. The necessity was to arrange the planned flow of troops, within the expected limits of shipping lift available daily, so as best to meet both tactical and logistical requirements. This was essentially a responsibility of tactical command. The Commanding General, First Army, the senior U.S. commander operating initially under the British 21 Army Group, was directed to prepare the build-up list for forces under his command which were to land in France during the first 15 days of the operation (that is, through D + 14). The list for the remainder of the U.S. forces assigned to First and Third Armies, Ninth Air Force, and the Communications Zone, expected to land in France from D + 15 to approximately D + 90, was prepared by Headquarters First U.S. Army Group (later redesignated 12th Army Group).⁴

12. Preparation of the List. The actual composition of the list, comprising more than 8,000 units, so as to satisfy the requirements of Army, Air Force, and Communications Zone planners, was extremely laborious. However, the basic considerations involved in the listing of troop units in order of priority for movement overseas may be stated quite simply. The anticipated daily shipping lift - that is, the personnel and vehicle capacity of available craft and ships - indicated the rate and strengths with which the U.S. forces in France could be augmented. An estimate of the course of the battle, especially the rate of our advance, indicated the types and numbers of combat and supporting troops needed by the Field Force commander. Similarly, an estimate of areas progressively held by our forces in France was a prime factor in determining the number of advanced airfields to be established by the Air Force. These estimates, in turn, by indicating the numbers of troops requiring logistical support, furnished a basis for calculating the required build-up of service units. Other considerations bearing on the requirements for supporting and service troops were the initial lack of substantial port and rail facilities, which called for heavy reinforcement in engineer and transportation troops; the virtually separate operations of the two corps in the assault, which necessitated the assignment of sizeable service elements to the corps in the first stage; the threat of enemy air attack against a large force concentrated in a small area, which required a large number of antiaircraft units and provision for early establishment of airfields on the ground captured. The rates of build-up of Field Forces, the Air Force, and Communications Zone were of course mutually interdependent. Because of the limitations of shipping, numerous compromises had to be made between demands for combat troops and demands for service troops. In practice, the Field Force, Air Force, and Communications Zone planners were allotted a presumably reasonable proportion of the expected daily lift, and were directed to list the specific troop units that should be included in each day's build-up. Finally, it was necessary to arrange these estimates of the build-up

3 See Appendix No. 1 for a graphic summary of the build-up as finally planned by First US Army Group. This summary is based on the lists referred to in the next footnote.

4 For the First Army's list for the period D-Day to D + 14 (known as List "A") see 381-C-Operation 'NEPTUNE', Hq First Army, dated 25 Feb 1944, Annex No. 2a.

For the First U.S. Army Group's list for the period D + 15 to D + 90 (known as List "B") see: Joint Operations Plan, US Forces, for Operation 'OVERLORD', FUSAG, Ninth Air Force, Western Naval Task Force, dated 8 May 1944, Annex No. 6.

in a single continuous order of priority. This task of final integration and consolidation was performed by the planning staffs of First Army and First U.S. Army Group.⁵ The completed lists showed in their anticipated order of priority all units or portions of units which were to move separately, their personnel and vehicle strength, their assignment, and other relevant data.

13. Modifications in the Planned Build-Up. The projected build-up thus was based upon certain assumptions as to the course of the projected operations. From the first it was clearly realized that, however carefully these estimates might have been made, the actual flow of troops into the zone of battle would in all probability have to differ from that which had been planned. The build-up was to be a race against time, affected by enemy action, casualties in shipping, the caprices of weather, and other variables. A further source of uncertainty lay in the fact that many of the units for which build-up plans were made had not yet arrived in the United Kingdom before the operation began. Some of these units might be delayed, in which case they would have to be phased back in favor of others already available. At any rate, it was evident that provisions must be made for permitting the actual troop build-up to depart from plan without causing undue confusion. The staff of First U. S. Army Group went so far as to prepare an alternative build-up list, for use in the contingency that the advance of our forces in Normandy would not be so rapid as was premised in the operational plan. This alternative list provided for a speeding-up of the flow of combat troops to France, at the expense of supporting and service troops. It was so arranged that 21 divisions would arrive on the far shore by D + 65, instead of by D + 88, as envisaged in the accepted list. That is, it provided for a maximum of combat strength with only sufficient service elements to support these combat troops over a short line of communications. But the major assurance for building our fighting strength along the lines required by operations, and for eliminating unforeseen errors in planning, was the establishment of a flexible, centralized build-up control organization.

Section 3

STRUCTURE AND OPERATION OF THE BUILD-UP CONTROL ORGANIZATION

14. Necessity for Build-Up Control. As stated above, plans for the trans-Channel movement of the build-up could not specify in advance of the operation details other than the priority in which units were expected to land and the forecast of shipping expected to be available to lift these units. In order to insure flexibility and economy in the use of shipping, a centralized Naval control of the ships and craft shuttling between the United Kingdom and the Continent was an obvious necessity. Furthermore, it was imperative that the Field Force commanders, in conjunction with their associated Air Forces, should exercise detailed control over the progress of their own build-up. That is, once the operation began, they should be able to modify in accordance with tactical requirements the priorities for trans-Channel troop movements insofar as the shipping available to them would permit. To these ends, a Build-Up Control Organization was established under the joint direction of the Allied Army, Naval, and Air Commanders-in-Chief, in order to effect changes in troop priorities and to supervise the flow of units across the Channel.

5 See Appendix No. 1

This organization, known in short as BUCO (West)⁶, consisted of British and American military, naval, and air representation. Located at Fort Southwick, Portsmouth, it functioned, so far as the U.S. forces were concerned, during the critical first four months of the operation. Machinery for implementing the decisions of BUCO was provided by a combined British and U.S. Movement Control, acting in close cooperation with the Naval authorities controlling the movement of craft and shipping.

15. Mission.⁷ The mission of BUCO was, in accordance with orders of the Joint Commander's-in-Chief, to:

a. Exercise detailed control over the build-up of personnel and vehicles by regulating priorities within the limits of the craft and shipping available;

b. Provide machinery for making any necessary late changes in the initial loading plans for the various assault forces.⁸

16. Functions. In order to accomplish its mission, BUCO performed the following functions:

a. Through representation of the Allied Naval Commander Expeditionary Force, the British Ministry of War Transport, and the U.S. War Shipping Administration, it controlled the movements of ships and craft. Furthermore, through representation of the War Office, the Air Ministry, and Headquarters ETOUSA (jointly called MOVCO), it controlled the movements of personnel and vehicles to the embarkation points.

b. It coordinated the priorities in which troops were to move with the latest estimate of craft and shipping lift for each sector in the form of forecasts of troop loadings.

c. It informed all concerned of the progress of the build-up and return shipping movement, and was prepared to advise the Commanders-in-Chief of practical possibilities and limitations as regards cross-Channel movements.

17. MOVCO and TURCO.⁹ The operations of BUCO were closely connected with those of two other agencies, MOVCO and TURCO, which in effect operated under the control of BUCO. MOVCO (Movement Control) exercised a central control over the movement of troop units from their home stations to embarkation points by issuing appropriate instructions to the transportation agencies (see par 22, below). TURCO (Turn-Round Control) was

6 The term "West" was adopted in order to suggest that there was more than one BUCO and therefore, in accordance with plans for cover and deception, a projected build-up of troops apart from that directed to Normandy.

7 For the basic directive on the organization of BUCO see:

NJC/00/302 - Hq 21 Army Group, dated 10 April 1944, Subj: Build-Up Control Organization.

For details on the organization and operations of the US element of BUCO, see: Hq US Zone, BUCO (West), Report of Operations, 30 Sept 1944.

The British aspect of BUCO operations is described in:

21 Army Group/1939/2/BUCO (G), Report on Build-Up Control Organization (British Zone), 14 June 1945.

8 BUCO was not concerned with the loading and sailing of the assault force. However, inasmuch as it represented all the commanders concerned with the assault, it did provide a useful means for dealing with final alterations and for coordinating arrangements necessitated by the 24-hours' postponement of the assault.

9 NJC/00/302 - Hq 21 Army Group, 23 March 1944, Build-Up Control Organization.

an organization formed to assist the naval commanders in controlling the movement of ships and craft so as to achieve the optimum rate of turn-round of these vessels between the far shore and their loading points. A central TURCO functioned under the Naval representation with BUCO. Under its direction subsidiary TURCOs operated in each Naval command or subcommand responsible for shipping employed in the operation. Assembly areas in which returned shipping was reorganized, minor repair work done, and crews relieved, were established as near as possible to the principal yards. From these naval assembly areas the TURCO organization obtained the information which enabled it to minimize the turn-round of shipping.

18. Organization.¹⁰ The organization of BUCO was as follows:

a. BUCO Control, consisting of:

- (1) Representatives appointed by the Joint Commanders-in-Chief, together with appropriate staff. The Brigadier representing the Commander-in-Chief, British 21 Army Group, acted as chairman of BUCO.
- (2) Representatives of the U.S. and British Zone Staffs.
- (3) Representatives of U.S. MOVCO and British MOVCO.
- (4) Representatives of the Ministry of War Transport and the War Shipping Administration, who acted in an advisory capacity.

b. A U.S. Zone Staff, also known as U.S. BUCO (West), consisting of:

- (1) A chairman (who also represented U.S. interests in BUCO Control), and his staff;
- (2) Representatives of the major U.S. headquarters whose interests in the build-up were served by BUCO, namely, First U.S. Army Group, First Army, Third Army, Ninth Air Force, and Forward Echelon, Communications Zone;
- (3) An advisory representative of the War Shipping Administration.

c. A comparable British Zone Staff.

d. A Naval Staff, controlling the TURCOs.

e. Liaison Officers from SHAEF.

Lines of authority might have been clearer and certain confusion as to responsibilities avoided had BUCO been an agency of the Supreme Commander. However, it was believed desirable that it operate directly under the tactical commands most immediately concerned with the build-up of troops. So far as American interests were concerned, the supervision effected by the representatives of the Joint Commanders-in-Chief was largely limited to decisions affecting the allocation of shipping as between the U.S. and British forces. The U.S. Zone Staff in practice functioned directly under the senior American tactical commander on the far shore, that is, the Commanding General of First Army (after D + 55, the Commanding General of 12th Army Group).

10 See Appendix No. 2 for a graphic description of BUCO's organization.

19. U.S. BUCO (West). The U.S. contingent of BUCO was organized as follows:

a. Chairman, Deputy Chairman, and Executive Assistant (three officers and two enlisted men). In addition to supervising the operation of the U.S. contingent, the Chairman was the chief representative of the U.S. tactical commander and advised the British Chairman of BUCO Control on all matters affecting American interests.

b. An Operations Section, consisting of five officers and six enlisted men. Its function was to execute all operational matters of the U.S. Zone.

c. A Movements Section, consisting of three officers and three enlisted men. Its primary function was to check and record the movement of units to the far shore.

d. An Administrative Section, consisting of three officers and fifteen enlisted men. This section acted as a housekeeping detachment for the U.S. Contingent.

e. In addition, American personnel - two officers and six enlisted men - were on duty with the Central Secretariat of BUCO.

The initial personnel strength of the U.S. contingent was found to be inadequate. During the course of the operation it was increased to the strength shown above, a total of 16 officers and 32 enlisted men. The attached representatives of the "using" commands - the Army Group, First and Third Armies, Ninth Air Force, and Communications Zone - totaled 16 officers and 22 enlisted men.

20. Basic Information. BUCO functioned on the basis of the following information:

a. The Build-Up Priority Table (List "A"), prepared by First Army, which listed in order of priority of landing on the Continent during the period D + 14, inclusive, First Army troop units and attached Air Force, Navy, and Communications Zone units;

b. A similar table (List "B"), prepared by First U.S. Army Group, showing the priority in which all U.S. troops would land on the Continent during the period D + 15 to approximately D + 90. This list included the remaining First Army troops, all troops assigned to Third Army, associated Air Force, Navy, and Communications Zone troops, as well as the Army Group headquarters;

c. Details as to the number of ships and craft available by type, the number of troops and vehicles which each vessel could carry, the time required to load, sea transit time, etc;

d. Information on the time by which decisions must be made, movement limitations, and progress of the build-up;

e. Status of readiness for movement of the troops in concentration and marshalling areas.

21. BUCO Operations. So far as concerns the U.S. forces, the operations of BUCO were as follows:

a. At a daily meeting of the Control Staff, such adjustments as necessary were made in the planned allocation of shipping and craft lift available in order to meet the current requirements of the Force Commanders, whose demands for troop units were subject to vary according to changes in the tactical situation. When it was necessary to alter the allotment of lift as between the British and Americans, BUCO so advised 21 Army Group,

which took the necessary action. Such changes were effected by altering the allocation of shipping moving out of Southampton, which was shared by both nations' forces. Alterations of priority within the American allotment were made only by direction of the senior U.S. tactical commander, through his representatives at BUCO (see par. 23).

b. As a result of the decisions made at such meetings, TURCO was instructed to bring the prescribed number of ships and craft into designated embarkation points at the proper time in order that units might be loaded as planned by the Base Section Commander.

c. The overall priority lists, as prepared and amended from time to time by First Army and First U.S. Army Group, were divided by the BUCO Operations Section into appropriate lists for each embarkation sector. These lists, showing the order in which units were to be embarked in each embarkation sector, were maintained continuously to show the next three weeks' movement. The U.S. element of MOVCO was informed daily by BUCO of the current priority in which U.S. units were to move to marshalling areas. On the basis of this information, MOVCO produced force movement tables, which showed the allocation of units to ports, their priority of loading, and the dates on which the units were to move to marshalling areas. In effect, these tables served as instructions to the transportation agencies to move units forward into the marshalling areas (see par. 22b).

d. On the basis of the currently amended priority lists, BUCO also released periodically a forecast of loadings from which MOVCO was enabled to produce a force loading forecast. This forecast was issued every third day, covering the movement expected during the next ten days (see par 22a).

e. The Movements Section, U.S. BUCO, received through MOVCO current sailing signals from the embarkation sectors. These signals showed the specific units that had loaded and the Navy numbers of the vessels on which they had embarked. This information was checked and then cabled to the headquarters of First Army (later to Twelfth Army Group) and to other headquarters on the far shore so that all concerned with the arrival of units in France would be prepared to receive them. Because of the short cross-Channel voyage, it was found that cable messages could not always be delivered in sufficient time before the arrival of vessels off the far shore. Therefore, a system was devised of telephoning pertinent information in code form from BUCO to First Army (later to 12th Army Group), and confirming it by cable. This information enabled the commander on the far shore to know what units were actually sailing and to exercise a degree of control over the priority in which such units were to disembark. The Movements Section also prepared a daily report on ship and craft loadings, showing in consolidated form the information previously sent to the far shore. In addition, it published a daily report which showed the cumulative build-up status of major U.S. combat units in France and in transit.¹¹ These reports were of value to tactical and administrative staffs of various headquarters concerned with the build-up.

f. As originally planned, BUCO was to control the movement of supplies of all classes as well as the movement of personnel and vehicles. For this reason, a rather large Administrative Section was organized. Before the operation began, however, BUCO was relieved of this mission, so that in actual operation the Administrative Section was used principally to care for the housekeeping needs of officers and men of the detachment.

g. The Central Secretariat, a combined British and U.S. activity, acted as a center for the reception, registration, and distribution of

11 For specimens of these reports, see Appendices Nos 3 and 4.

messages and documents. It also kept a register of visitors and issued passes to authorized personnel.

h. As noted above, First U.S. Army Group, the First and Third Armies, Ninth Air Force, and Communications Zone maintained representatives with U.S. BUCO. These representatives assisted the Control Staff by keeping in close touch with their commanders on all matters relative to the build-up, by transmitting to BUCO requests for changes in the planned build-up of the forces they represented, by contacting units of their commands as they passed through the marshalling areas, by transmitting to their respective headquarters information on loadings, and by assisting in the processing of amendments to priority lists. Inasmuch as the First Army Commander controlled the U.S. build-up during the period 6 June to 31 July, the First Army representative with BUCO was the most active of the representatives in the processing of changes in build-up plans.

22. Operations of U.S. MOVCO. MOVCO, like BUCO, consisted of a U.S. element and a British element, both of which functioned adjacent to BUCO at Fort Southwick. The U.S. MOVCO was an agency of the Theater Chief of Transportation. The mission of MOVCO, as already stated, was to exercise a general supervision over the movement of units from their home stations through embarkation points to the far shore. This it did by issuing, on the basis of information received daily from BUCO, force loading forecasts and force movement tables. MOVCO also kept records of the location and state of readiness of all units once they had entered the concentration areas, the progress of their movement in the United Kingdom, and sailings.

a. Force loading forecast.¹² A force loading forecast was maintained by U.S. MOVCO for each embarkation sector, indicating the overall allocation of craft and shipping to units, the approximate times of arrival of units in marshalling areas and their loading times at embarkation points. Copies of this forecast were issued by MOVCO to the Commanders of Base Sections, marshalling areas, and sectors every third day, covering the movements expected during the next ten days. The priorities shown in the forecast were subject to change, by reason of operational requirements of the Field Forces and alterations in the expected availability of craft and shipping. However, it gave the headquarters of Base Sections and sectors an indication of the movement that might be expected. It also enabled some preliminary work to be done in the preparation of movement tables to be issued later by Base Sections, and in the stowage of craft and shipping by Sectors.

b. Force Movement Table.¹³ A force movement table for each Sector was issued by U. S. MOVCO daily to headquarters of Base Sections, marshalling areas, and sectors, covering a 24 hours' flow of movement through the marshalling areas serving the embarkation points controlled by each sector headquarters. The force movement table, which was an extract from the force loading forecast brought up to date with the latest military and naval amendments, showed the allotment of shipping and the priority of units to be embarked, and was the basis for the detailed allocation by Sector headquarters of personnel and vehicles to individual craft and ships. On the basis of this table, too, the Base Sections issued road and rail movement tables for the move of units from concentration areas to marshalling areas.

23. Alteration of Priorities by Field Force Commanders. It was foreseen that at any time after the submission to BUCO of the completed First Army and First U.S. Army Group troop priority lists it might be

¹² See Appendix No. 5

¹³ See Appendices Nos. 6 and 7.

necessary, for tactical and other reasons, to amend such lists. The several headquarters concerned agreed that, once the invasion started, the decision as to what units should be moved to the Continent in priority different from that initially established would rest with the Commanding General of the First Army, as the senior U.S. tactical commander on the far shore. This control of the build-up of American troops and vehicles was to be retained by First Army until such time as First U.S. Army Group superseded First Army in command of the U.S. zone in France.

Several methods were provided for accomplishing a change in the priority of a unit:

a. By requesting a change in the unit's priority in the build-up priority table, or

b. By stating a definite date on which the unit was desired on the far shore.

The minimum time required to change priorities without dislocating the build-up program depended on a variety of factors, such as the type of units involved, their state of readiness for movement, and their location in the United Kingdom. As a general guide, BUCO requested that it receive orders changing the priority of a regiment or larger unit at least five days before it was to land, and of a battalion or smaller unit at least four days before its landing. An extra day was to be added if the unit concerned had to be embarked on merchant transport ships. If the unit was not already in, or moving into, a concentration area, and if its vehicles could not be landed dryshod, additional time had to be allowed for movement into a concentration area and for waterproofing of vehicles.

In especially urgent cases, when the time limits indicated above could not be met, two other methods for changing a unit's priority were available:

a. By stating that the unit was "Priority". In this case, BUCO decided how soon the unit could be moved forward without undue dislocation of the remainder of the build-up.

b. By stating that the unit was "Top Priority". In this case, the unit was moved as quickly as possible, regardless of effects upon the rest of the build-up.

In the actual event, many changes had to be made in the planned build-up. For example, tactical requirements at an early stage caused the First Army Commander to call for additional combat troops. Thus, the 79th and 83d Infantry Divisions, which were originally planned to land in Normandy on D + 19 and D + 22, respectively, were phased forward so as to arrive on D + 8 and D + 13. Other departures from plan were occasioned by tactical circumstances, as for example the delay in the capture of Cherbourg, as well as by administrative difficulties, such as slowness in equipping certain units in the United Kingdom. The machinery of BUCO served effectively to control these recurrent modifications of the build-up without undue dislocation of the remainder of the build-up.

24. Little BUCO. In order to assist the staff of the Army Commander on the far shore in keeping abreast of the current status of the build-up and in making necessary changes in the priority of troop movements, an organization known informally as "Little BUCO" was attached on D + 3 to Headquarters First Army. Initially, Little BUCO operated within the Army G-3 Section, but later was established as a separate entity within Army headquarters. In addition to personnel of the Army headquarters, Little BUCO comprised representatives of the G-3 and G-4 Sections of Army Group headquarters, of Ninth Air Force, and of the Communications Zone. These representatives were empowered to make decisions affecting the build-up for the commanders whom they represented. All requests for changes in the

priority of a troop unit appearing in a published priority table were submitted to Little BUCO. Requests originating within Third Army, Ninth Air Force, and Communications Zone were consolidated by these headquarters and routed through the appropriate representatives at Little BUCO. The requests were studied by Little BUCO with respect to their implications for the build-up, and, if approved by the Commanding General, First Army, they were transmitted to BUCO in the form of instructions to effect the required changes in the build-up. When desired changes had been effected, BUCO so informed Little BUCO. This information was also transmitted by BUCO to the other headquarters concerned, through their representatives at BUCO. As noted above, by reason of urgent tactical requirements, the Field Force Commander at times called for acceleration of the move of a specific unit through its marshalling area, or for the immediate movement forward of a unit which had not yet left its concentration area. Requests for such acceleration (or "red-balling") of a unit were transmitted as rapidly as possible by Little BUCO to BUCO, which in turn gave necessary instructions to MOVCO. In addition to effecting operational changes in build-up priorities, Little BUCO maintained a currently corrected copy of the build-up priority list for all U.S. forces moving across the Channel, and also verified and kept account of the arrival of all such units on the Continent. When, on 1 August 1944, Twelfth Army Group became operational, the functions of Little BUCO were transferred to the Army Group G-3 Section. By this time, however, the necessity for changing the planned flow of the build-up had greatly diminished, and Little BUCO activities were largely confined to maintaining records. Early in September, with the exhaustion of the Build-Up Priority List "B", its activities ceased.

25. Administrative Changes in the Build-Up Priority List. In addition to changes in the priority of overseas movement of troop units, many changes of a minor administrative nature - such as redesignation of units and alterations in unit personnel and vehicle strength - were required to be made in the build-up list. These did not materially affect the planned allocation of units to shipping. Requests for such changes were transmitted direct to BUCO by the representatives of the various headquarters concerned.

26. Closing of U.S. BUCO. The BUCO organization had been established in order that the priority of movement of units to the Continent should be adjusted closely to the operational requirements of the tactical commanders on the far shore, and so that the necessary control of shipping and landing craft could be exercised to meet those requirements. By the end of September, it was believed that the great bulk of U.S. troop movements from the United Kingdom to the Continent had been completed, and it was felt that the necessity for BUCO control had passed. Accordingly, on 30 September 1944, the U.S. contingent of BUCO was dissolved, and its functions were turned over to the United Kingdom Base Section, Communications Zone.¹⁴ At the same time, the U.S. element of MOVCO was absorbed by the Office of the Chief of Transportation, Communications Zone. These Communications Zone agencies then became responsible for maintaining the priority list for movement of such troops as still remained in the United Kingdom, as well as for controlling their movement to France. As it turned out, considerably more troops than had been anticipated when U.S. BUCO was dissolved were shipped from the United States to the United Kingdom before proceeding to the Continent. In view of this, it may well be that U.S. BUCO was closed down prematurely. Its dissolution at a time when a substantial number of units still remained to be moved meant a loss of flexibility in control afforded by a special organization manned by experienced personnel.

14 The British element of BUCO continued to operate until 15 June 1945 (D 7 374).

SECTION 4

LESSONS LEARNED

27. Necessity for a Build-Up Control Organization. Conviction that a special agency, representing the several interested commands, was essential to the effective control of the build-up was reflected in the establishment of BUCO. Actual experience in the operation reinforces the conclusion that for an amphibious undertaking of this nature a build-up control organization, as such, is a necessity. Even apart from difficulties raised by the international character of Operation 'OVERLORD', it is believed that many other problems peculiar to the build-up, involving logistical and naval as well as tactical considerations, could not have been efficiently solved by the normal staff of a commander. The flow of troop units in a build-up must necessarily be subject to alteration by the highest tactical commander. To effect such alteration, however, required coordination with, and action by, non-tactical headquarters. Normal means of communication do not suffice for this purpose. The requisite coordination is far more efficient when managed by a group of specially selected and trained personnel, representing the various agencies concerned, who are located centrally with respect to the troop movement. That a normal staff is not even adequate to carry out build-up control functions on the far shore is demonstrated by the attachment of 'Little BUCO' to First Army. This organization, in effect a forward echelon of BUCO, was a most useful supplement to the Army staff in the handling of the specialized and time-consuming tasks of altering priorities and recording the progress of the build-up.

28. Need for Centralization of Responsibility. The major problems of planning and controlling the build-up of American forces in Operation 'OVERLORD' were successfully solved. Within the limitations imposed by the means of transportation available, tactical commanders on the far shore received the troop units needed by them at the times and places desired. Nevertheless, the experience of those most intimately concerned with the operations of BUCO indicates that, given the advantages of hindsight, both the planning and the control of the build-up could have been improved. A source of difficulty lay in the decentralization and diffusion of responsibilities. The First Army was charged with planning the build-up troop priority list through D + 14; the First U.S. Army Group was responsible for preparing the list for the period beginning D + 15. First Army controlled changes in troop priorities from D Day to D + 55, when the Army Group assumed control. Plans for the preparation of troops to move across the Channel, and for their movement through concentration and marshalling areas to embarkation points, as well as the execution of such plans, were the responsibility of Headquarters SOS ETOUSA and subordinate agencies. The U.S. element of BUCO in effect controlled the American build-up, yet it was not formally an agency of First Army, nor of the Army Group, nor of Supreme Headquarters. On the one hand, the anomalous position of BUCO with respect to command, and, on the other, its necessity of dealing with numerous authorities concerned with problems of planning, mounting, and movement, gave rise to considerable confusion as to the responsibilities and functions of BUCO. This entailed a vast amount of coordination and many meetings, and made it difficult for BUCO to take timely action to correct mistakes in the mounting of the operation. In this instance, the violation of a basic principle - that authority should be welded to responsibility - may have been necessitated by considerations beyond the scope of the build-up control. But so far as that control was concerned, the diffusion of responsibilities resulted in needless loss of time and energy. The conclusion is that a central build-up control organization should be supervised by the highest tactical commander of the operation, and that it should be fully empowered to speak for him on all matters affecting the build-up.

29. Organization of Staff and Preparations for Operation. Experience suggests a number of other respects in which the build-up control might have been more efficiently exercised. Though seemingly trivial in themselves, they nevertheless are cumulatively important.

a. Although the several commands concerned with the build-up were represented at BUCO, it was found at times that BUCO was handicapped by not having ready access to personnel acquainted with details of the operation. In general, all key personnel should be well informed of the plans and functioning of the various agencies concerned in the build-up. By reason of the physical distance between BUCO and the ETOUSA agencies responsible for equipping and moving units to concentration areas, BUCO frequently had difficulty in determining whether specific units were in fact concentrated and ready to move to marshalling areas in time. Personnel thoroughly familiar with the mounting plan, and empowered to speak with authority for the mounting agencies and their activities, should have been more immediately accessible to the BUCO staff so that information and advice on various problems of mounting could have been promptly available. Also, in order to keep BUCO in close touch with the status of readiness of units insofar as equipment was concerned, representation of the supply service responsible for equipping units would have been desirable.

b. The initial BUCO staff assembled at Fort Southwick six weeks before the start of the operation, and rehearsed its functions in one exercise before D Day. However, when the actual test came, it was found that considerably more time could profitably have been spent in training key personnel. The entire staff together with necessary equipment should have been organized and established at least two months earlier, so that all personnel would have been thoroughly familiar with their duties and properly shaken down well before the beginning of the operation. Several exercises or rehearsals should have been conducted with MOVCO and TURCO participation, in order to bring out operational difficulties in time sufficient for their correction before D Day.

c. The initial estimate of the staff required by BUCO proved insufficient and additions had to be made after the operation had begun. In consequence, a large proportion of the staff had to be trained during the operation. Even when augmented, the staff proved hardly sufficient to permit continuous operation for 24 hours a day during critical periods. However, this is a common complaint in war-time.

d. A plan of communication must be made long enough in advance of an operation to insure its distribution to all personnel concerned. The plan for communication between BUCO and the far shore was not made until seven days before D Day, and actually was not distributed to those concerned until D + 4. This delay was reflected in serious tardiness, during the critical early stage of the operation, in the receipt by the far shore commander of information as to the specific units that had embarked and were soon to land. It handicapped him in planning for the tactical employment of such units. Details of cross-Channel communication, as well as the organization and functioning of a far-shore BUCO agency (LITTLE BUCO), should have been settled at a much earlier point in the planning.

e. Many agencies concerned with the movement of build-up troops were not sufficiently informed of procedures. For example, the force loading forecasts published by MOVCO were not properly used by many organizations to which they were distributed. This was apparent in numerous requests that the movement of specific units be deferred, on the ground that the units were not yet ready, even after their movement had been directed in a force movement table. Had proper use been made of the force loading forecast, which was in effect an advance notice that the movement was shortly to be expected, timely action could have been taken to inform BUCO that the units were in fact unprepared to move. Similarly, LITTLE BUCO had difficulty in verifying the arrival of units on the Continent.

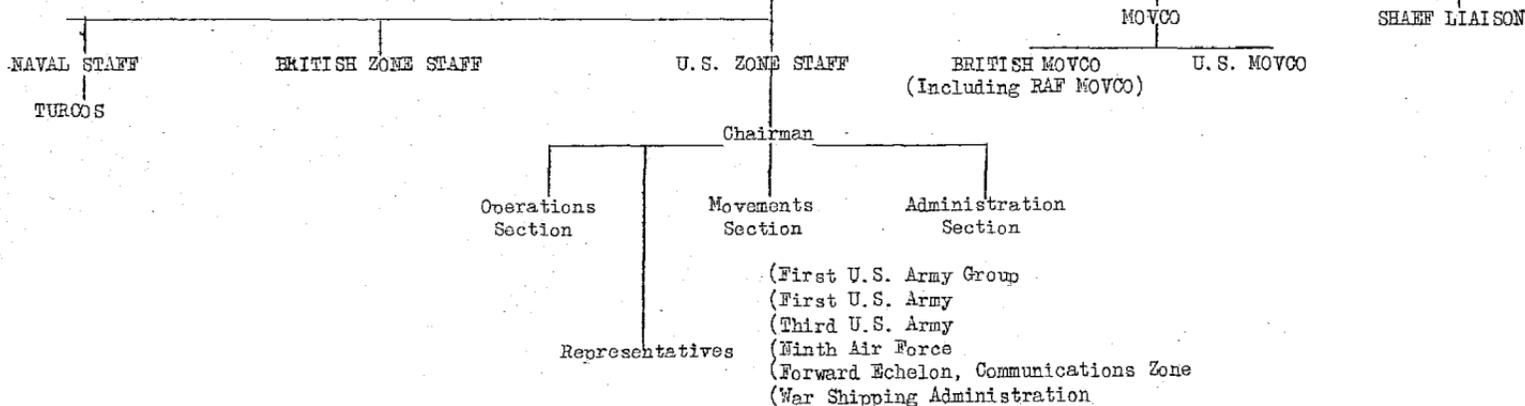
This reflected a failure on the part of responsible agencies to prepare and dispatch the required reports. Undoubtedly, much of the unfamiliarity with build-up procedures can be attributed to the considerable turnover of informed personnel in the various agencies throughout the period of planning and operation. More stable tenure would have made for more efficient functioning. Possibly an educational program to familiarize all concerned with objectives and procedures would have been of great value. A corollary is that routine procedures, instructions, and forms must be kept simple. To attain simplicity, however, it is often necessary to plan and experiment repeatedly - and this cannot always be afforded in war.

ORGANIZATION OF BUCCO (WEST)

Representative, 21 Army Group: Chairman
 Representative, Allied Naval Expeditionary Force
 Representative, Allied Expeditionary Air Force

Central Control

Chairman, U.S. Zone Staff
 (British Zone Staff
 Representatives U.S. MOVCO
 (British MOVCO

Central Secretariat

SPECIMEN

AMERICAN BUILD-UP PROGRESS REPORT

HEADQUARTERS U. S. BUCO WEST
APO 555
UNITED STATES ARMY

PROFORMA B

18 2400 August 44

AMERICAN BUILD-UP PROGRESS REPORT

Period Ending 2359 hours, 18 August 44, D Plus 73

1. Summary of Build-Up to Date.

	<u>Total Previously Reported Loaded</u>	<u>Loaded 17 August</u>	<u>Estimated Loading Today</u>	<u>Present Daily Target</u>
LST	1345	17	6	17
LCT	1949	20	10	30
MT	740	7	7	12

Total Vehicles sailed up to 2359 hours 17 August ----- 199950
(Excluding assault, follow-up and pre-loaded build-up.)

Total Vehicles sailing today (estimated) ----- 1310

2. Major (only) Units Reported Loading During the 24 hours Covered by This Report, or Previously Loaded and Waiting to sail.a. OMAHA

None.

b. UTAH

(1) 3037th Ord MVD Co (COM Z)

(For complete list of large and small units sailed 17 August
see Proforma "C" attached.)

3. Comparison between Planned and Actual Formation Build-Up.

	<u>Corps Eq.</u>	<u>Armd Divs</u>	<u>AB Divs</u>	<u>Inf Divs</u>	<u>Total Divs</u>
As originally planned	7	5	0	14	19
As currently revised	7	7	0	14	21
Actual	7	7	0	14	21

BUCO WEST
1293 (S)

4. Major Changes in Priorities Ordered During Period.

None.

5. Forecast of Major Units Due to Load Next.a. OMAHA

None.

b. UTAH

- (1) 3413th QM Trk Co (TC) (10 T) (COM Z)
- (2) 1314th Engr GS Regt (COM Z)
- (3) 1918th Ord MAM Co (9th AF)
- (4) 689th FA Bn (155mm How) (XII Corps)
- (5) 1767th Ord S&M Co (COM Z)
- (6) 242d FA Bn (105mm How) (XII Corps)
- (7) 1957 QM Trk Co (Avn) (9 AF)
- (8) 3537 Ord MAM Co (TUSA)
- (9) 131st AAA (Gun) Bn (M) (COM Z)
- (10) 132d AAA (Gun) Bn (M) (COM Z)
- (11) 133d AAA (Gun) Bn (M) (COM Z)
- (12) 771st FA Bn (4.5" Gun) (XX Corps)
- (13) 775th FA Bn (4.5" Gun) (XII Corps)

6. Casualties Reported within Past 24 hours.
(To ships and Craft used in Build-Up only.)

None.

for /s/ C.A. Madden
/t/ E. STEVENS
Colonel, GSC
Chairman, US BUCC

SPECIMEN

ACCUMULATIVE BUILDUP TABLE

"OVER ALL PICTURE" - MAJOR U.S. COMBAT AND SERVICE UNITS ONLY

As of 2359 hours, D + 73, 18 August 44

TWELFTH ARMY GROUP SECTOR

Formations Ashore (Div only) (a)	Formations reported arriving off Far Shore (b)	Formations reported in sea transit (c)	Formations reported loading (d)	Formations planned to load next (e)	Remarks (f)
INF DIVS - 14	<u>OMAHA</u>	<u>OMAHA</u>	<u>OMAHA</u>	<u>OMAHA</u>	
1st Inf Div	None	1. 791st AAA (AW) Bn (SM) (COM Z)			
2d Inf Div					
4th Inf Div					
5th Inf Div					
8th Inf Div					
9th Inf Div					
28th Inf Div	<u>UTAH</u>	<u>UTAH</u>	<u>UTAH</u>	<u>UTAH</u>	
29th Inf Div					
30th Inf Div	1. 176th FA Bn (4.5" Gun) (XX Corps)	2. 241st FA Bn (105mm How) (XII Corps)	1. 3077th Ord MVD Co (COM Z)	1. 3413th AM Trk Co (TC) (10 F) (COM Z)	
35th Inf Div	2. 447th Ord HAM Co (XII Corps)	3. 253d Armd FA Bn (105mm How) (XX Corps)		2. 1314th Engr GS Regt (COM Z)	
79th Inf Div	3. 293d Ord MA Co (FUSAG)	4. 274th Armd FA Bn (105mm How) (XX Corps)		3. 1918th Ord AM Co (St AF)	
80th Inf Div	4. 734th FA Bn (155mm How) (XX Corps)	5. 249th Engr (C) Bn (XII Corps)		4. 689th FA Bn (155mm How) (XII Corps)	
83d Inf Div	5. 752d FA Bn (155mm How) (XII Corps)	6. 3458th AM Trk Co (COM Z)		5. 1767th Ord MA Co (COM Z)	
90th Inf Div	6. 512th FA Bn (105mm How) (XII Corps)	7. 3439th AM Trk Co (COM Z)		6. 242d FA Bn (105mm How) (XII Corps)	
ARMED DIVS - 7	7. 381st AM Trk Co Std (COM Z)	8. 3457th AM Trk Co (COM Z)		7. 1957th AM Trk Co (Avn) (9th AF)	
2d Armd Div	8. 397th AM Trk Co Std (COM Z)			8. 3537th Ord MA Co (TUSA)	
3d Armd Div	9. 448th AM Trk Co (XII Corps)			9. 131st AM (Gun) Bn (M) (COM Z)	
4th Armd Div	10. 646th AM Trk Co Std (COM Z)			10. 132d AM (Gun) Bn (M) (COM Z)	
5th Armd Div	11. 669th AM Trk Co Std (COM Z)			11. 133d AAA (Gun) Bn (M) (COM Z)	
6th Armd Div	12. 670th AM Trk Co Std (COM Z)			12. 771st FA Bn (4.5" Gun) (AA Corps)	
7th Armd Div				13. 775th FA Bn (4.5" Gun) (XII Corps)	
2d Fr Armd Div					
TOTAL DIVS - 21					

for /s/ C. M. Madden
/t/ W. STEVENS
Colonel, GSC
Chairman, US BUCO

- 19 -

APPENDIX NO. 4

APPENDIX NO. 5

SPECIMEN
FORCE LOADING FORECAST

SOUTHAMPTON.....SECTOR/MARSHALLING AREA....."C".....FLF.9...22 June 44

Sheet No...S/13.

Loading		Craft or Ships	Estimated Lift		To reach Marshalling Area	List Index No.	Mob/Unit Serial No.	Unit	Vehicle Party			Marching Party	To land on beach	Remarks
Date	Time		Pers	Vehs					Pers	Vehs	M/Cs			
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(k)	(l)	(m)	(n)	(o)	(p)
27 June		12 MT	5760	1440	25 June	347B	32430	Hq/Hq Det 76 Ord Bn						
							32231	w/Med Det	35	11	-	-	OMAHA	
						352B	33960	661 QM Trk Co (Std) TC	156	55	-	-	"	
						353B	33314	3682 QM Trk Co (2 1/2 T COE) TC	112	58	-	44	"	
						354B	32367	Hq/Hq Det 103 QM Bn (M)(TC)	28	7	-	-	"	
						356B	31460	Hq/Hq Det 467 QM Gp (TC)	19	9	-	14	"	
						368B	30547	Det 729 Ry Orn Bn	34	8	-	18	"	
						387B	33619	Det 17 Base Post Office	8	4	-	92	"	
						423B	32070	3520 Ord MAM Co	120	51	-	-	"	
						451B	32053	3870 QM Trk Co (10 T Semi- Trl) TC	156	55	-	-	"	
						453B	32054	3871 QM Trk Co (2 1/2 T COE) TC	156	55	-	-	"	
						454B	32178	Hq/Hq Det 180 QM Bn (M)(TC)	28	7	-	-	"	
						463B	49523	Det A Hq/Hq Det FECZ 1st	-	-	-	69	"	
						464B(1)	49523	Det Hq Co FECZ	-	-	-	186	"	
						464B(2)	30758	Det A9 Gen Hosp	13	1	-	-	"	
						464B(3)	31466	Det A 3626 QM Trk Co	40	40	-	-	"	
						464B(4)		Det Hq 3rd U S Army	12	6	-	-	"	
						465B(1)	30758	Det A 6809 QM Car Co (FECZ) (Prov)	-	14	-	-	"	
						465B(3)	30970	Hq/Hq Co 12 Major Port (w/Fire & Util Det)	597	18	-	-	"	

LAND 29 JUN 44

APPENDIX NO. 6

SPECIMAN
FORCE MOVEMENT TABLE (U.S. FORCES)

SOUTHAMPTON.....SECTOR/MARSHALLING AREA....."C"....FMT...80....16 Aug 1944

SHEET NO....S/4..

Loading		Craft or Ships	Estimated Lift		To reach Marshalling Area	List Index No.	Mob/Unit Serial No.	Unit	Vehicle Party			Marching Party	To land on beach	Remarks
Date	Time		Pers	Vehs					Pers	Vehs	M/Cs			
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(k)	(l)	(m)	(n)	(o)	(p)
19 Aug		9 MT	4320	1080	18 Aug									
						3517B	50322	70 Serv Gp Hq/Hq Sq (I/Det)	164	26	-	-	OMAHA	
						3518B	50750	1087 Sig Co Serv Gp Hq & Opn Plat		53	6	-	"	
						3534B	51496	39 Mob R&R Sq Hq & 1 Unit	67	21	-	-	"	
						3598B		Hq WEAF Det	5	5	-	-	"	
						*4431B	50734	1054 QM Co Sev Gp Less Det A	41	2	-	-	"	
						*4435B	50324	380 Serv Sq	245	59	-	-	"	
						*4436B	50751	1087 Sig Co Serv Gp Less Det A	23	4	-	-	"	
						*4437B	50496	39 Mob R&R Sq (4 Units)	64	24	-	-	"	
						*4438B	50662	803 Cml Co AD (Less Det A)	67	21	-	-	"	
						*4443B	50888	1767 Ord S&M Co	80	26	-	-	"	
						*4444B	51887	2196 QM Trk Co (Avn) Less Det A	53	54	-	-	"	
						4503B	50494	Hq 323 Bomb Gp (M) Adv Ech	39	3	-	-	"	
						4504B	50495	453 Bomb Sqn Adv Ech	128	135	-	-	"	
						4505B	50496	454 Bomb Sqn Adv Ech	128	135	-	-	"	
						4506B	50497	455 Bomb Sqn Adv Ech	128	135	-	-	"	
						4507B	50498	456 Bomb Sqn Adv Ech	128	135	-	-	"	
						4508B	50143	19 Sta Comp Sqn (Det "B")	35	3	-	-	"	
						4509B	50739	1060 MP Co (Avn) (Less Det A)	52	4	-	-	"	
						4510B	51800	2037 Engr F&F Plat	17	4	-	-	"	
						4511B	50159	21 Wea Sqn (Mob) (Det "Z")	11	-	-	-	"	
						4512B	50224	40 Mob Comm Sqn (Det "Z")	9	6	-	-	"	
						4513B	52428	200 Med Disp (Avn)	16	6	-	-	"	
								TOTAL OMAHA	1553	814	-	-		

move, marshal, and arrive far shore together.

APPENDIX NO. 7

SPECIMEN

FORCE MOVEMENT TABLE (U.S. FORCES)

APPENDIX SERIES NO 73 (18 August 1944)

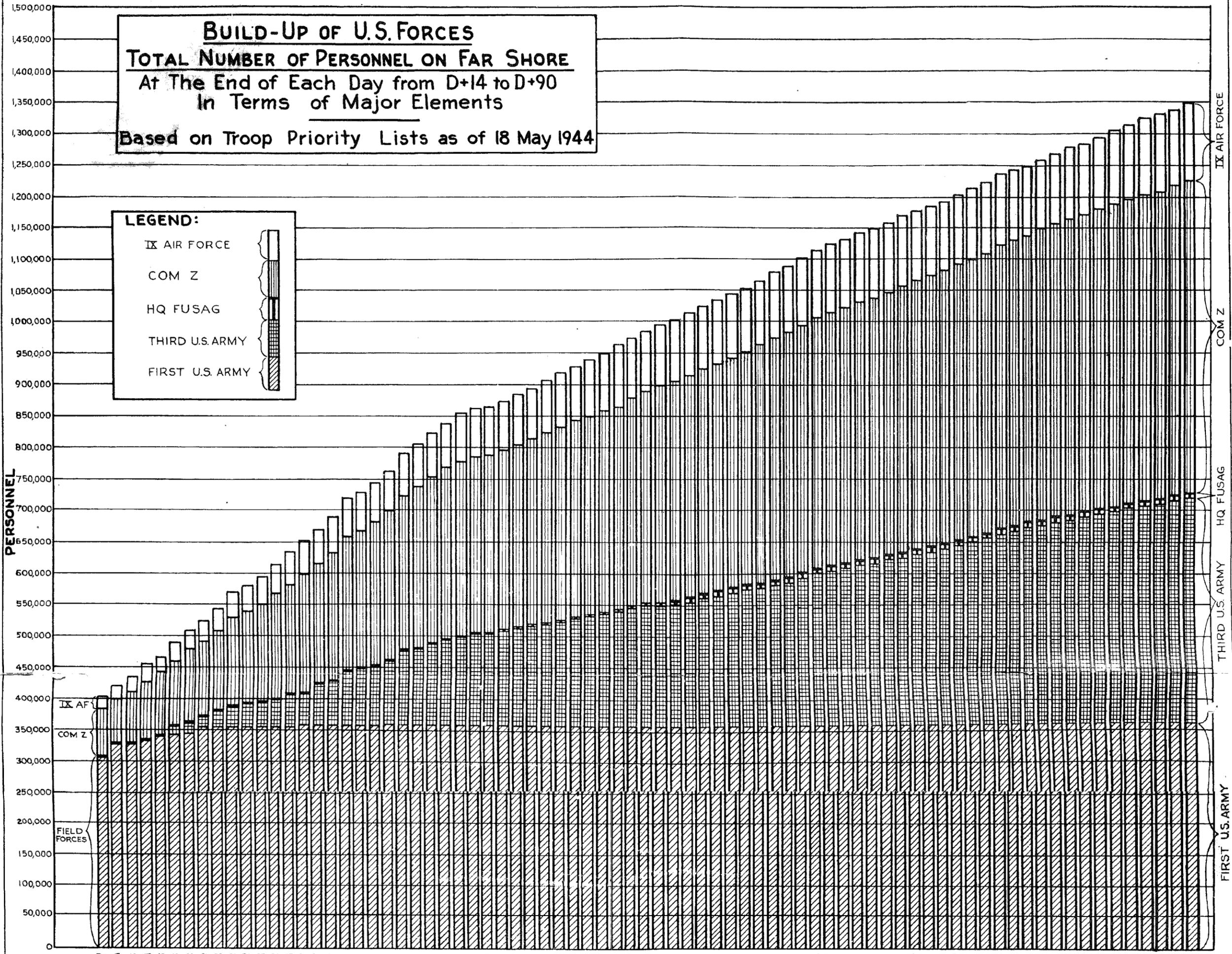
SHEET 4/1

FWT	SHEET	LIST INDEX	REMARKS
79	X/1-X/2		Change Col "o" to read: UTAH (BUCC_OPS)
80	S/6	3642B	Unit reinstated (SEALF)
81	S/1 S/5		Change Col "o" to read: UTAH (BUCC_OPS) All Units to marshal in area "D" (BUCC_OPS)

BUILD-UP OF U.S. FORCES
TOTAL NUMBER OF PERSONNEL ON FAR SHORE
 At The End of Each Day from D+14 to D+90
 In Terms of Major Elements
 Based on Troop Priority Lists as of 18 May 1944

LEGEND:

- IX AIR FORCE
- COM Z
- HQ FUSAG
- THIRD U.S. ARMY
- FIRST U.S. ARMY



Category	Day	Personnel Count
Arrival of Major Headquarters and Divisions on Far Shore	D to D+14 (incl)	0
	15	~100,000
	16	~150,000
	17	~200,000
	18	~250,000
	19	~300,000
	20	~350,000
	21	~400,000
	22	~450,000
	23	~500,000
FUSAG Hq:	24	~550,000
	25	~600,000
	26	~650,000
	27	~700,000
	28	~750,000
	29	~800,000
	30	~850,000
	31	~900,000
	32	~950,000
	33	~1,000,000
FUSAG (Adm.):	34	~1,050,000
	35	~1,100,000
	36	~1,150,000
	37	~1,200,000
	38	~1,250,000
	39	~1,300,000
	40	~1,350,000
	41	~1,400,000
	42	~1,450,000
	43	~1,500,000
FUSAG (1st Incr):	44	~1,550,000
	45	~1,600,000
	46	~1,650,000
	47	~1,700,000
	48	~1,750,000
	49	~1,800,000
	50	~1,850,000
	51	~1,900,000
	52	~1,950,000
	53	~2,000,000
FUSAG (2nd Incr):	54	~2,050,000
	55	~2,100,000
	56	~2,150,000
	57	~2,200,000
	58	~2,250,000
	59	~2,300,000
	60	~2,350,000
	61	~2,400,000
	62	~2,450,000
	63	~2,500,000
38th (Fwd):	64	~2,550,000
	65	~2,600,000
	66	~2,650,000
	67	~2,700,000
	68	~2,750,000
	69	~2,800,000
	70	~2,850,000
	71	~2,900,000
	72	~2,950,000
	73	~3,000,000
38th (C):	74	~3,050,000
	75	~3,100,000
	76	~3,150,000
	77	~3,200,000
	78	~3,250,000
	79	~3,300,000
	80	~3,350,000
	81	~3,400,000
	82	~3,450,000
	83	~3,500,000
IX Air Force:	84	~3,550,000
	85	~3,600,000
	86	~3,650,000
	87	~3,700,000
	88	~3,750,000
	89	~3,800,000
	90	~3,850,000

Arrival of Major Headquarters and Divisions on Far Shore

FUSAG Hq: [Timeline]

Army Hq: [Timeline]

Corps Hq: [Timeline]

Inf Divs: [Timeline]

Arm'd Divs: [Timeline]

2nd (French) [Timeline]