

3440.—Minor Landing Craft, Special Combined Operational Units, and Landing Craft Base Mobile Units—Summary of Complements

(N. 15772.—28 Jun. 1945.)

As landing craft and their supporting units are very mobile and dependent upon base and other extraneous facilities, it is considered desirable for an approximation of their complements to be readily available to all authorities concerned. The accompanying summary of schemes of complement is issued accordingly.

2. This Order relates to all *non-commissioned landing craft and supporting units*. A similar summary of the schemes of complement for *commissioned landing craft* will be promulgated in a separate order.

3. It is to be clearly understood that this order is *not* (and must not be quoted as) the authority for a particular scheme of complement, and does not supersede schemes of complement, which, with authorized amendments, will continue to be issued by Admiralty Letter in the ordinary way to Commanders-in-Chief, Force Commanders, H.M.S. "Copra", and other principal authorities.

4. This order will be re-issued periodically.

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SECTION A—MINOR LANDING CRAFT AND L.S.T. P/B UNITS.

Naval Manned

Squadron Staffs of L.C.A., L.C.A. (H.R.), L.C.E., L.C.M. (1), (3) and (7), L.C.P. (L), L.C.P. (M), L.C.P. (R), L.C.P. (S), L.C.S. (M), L.C.V., L.C.V.(P).

<i>No.</i>	<i>Rank or Rating</i>	<i>Duty</i>
1	Lieutenant Commander	Squadron Officer
1	Lieutenant, Sub-Lieutenant or Midshipman.	Squadron C.O.C.O.
(a) 1	Electrical Lieutenant or Electrical Sub-Lieutenant, R.N.V.R.	Squadron Electrical Officer
(b) 1	Writer	
<hr/>		
Total	3 officers	
	1 rating	

Notes.—(a) One Electrical Officer to be allowed for every 100 craft.
(b) Proposed but not yet approved.

Flotilla and Maintenance Staffs of L.C.A., L.C.M. (1), (3) and (7), L.C.P. (L) L.C.P. (M), L.C.P. (R), L.C.V., L.C.V. (P).

<i>No.</i>	<i>Rank or Rating</i>	<i>Duty</i>
1	Lieutenant	Flotilla Officer
1	Lieutenant (E) or Sub-Lieutenant (E).	Flotilla Engineer Officer
1	Petty Officer	Administrative
1	Leading Seaman (Sig. L.C.)	—
(a) 1	Leading Wireman (L.C.) or Wireman (L.C.).	—
1	E.R.A.	—
3	Motor Mechanics (C)	—
1	Leading Stoker	—
2	Shipwrights or Joiners (L.C.)	—
1	Ship Mechanic (L.C.)	—
<hr/>		
Total	2 officers	
	11 ratings	

Note.—(a) 1 P.O. Wireman (L.C.) allowed in lieu when operational flotilla consists of more than 12 craft.

SECTION A—MINOR LANDING CRAFT AND L.S.T. P/B UNITS—*contd.**Naval Manned—contd.***Flotilla and Maintenance Staffs of L.C.A. (H.R.)**

No.	Rank or Rating	Duty
1	Lieutenant	Flotilla Officer
1	Lieutenant (E) or Sub-Lieutenant (E).	Flotilla Engineer Officer
1	Petty Officer	Administrative
1	Leading Seaman (Sig. L.C.) ...	—
1	A.B. or O.S.—Q.O. (C.X.) ...	—
1	Leading Wireman (L.C.) ...	—
(a) 1	Leading Wireman (L.C.) or Wireman (L.C.).	—
1	E.R.A.	—
3	Motor Mechanics (C)	—
1	Leading Stoker	—
2	Shipwrights or Joiners (L.C.) ..	—
1	Ship-Mechanic (L.C.)	—
Total 2 officers		
13 ratings		

Note.—(a) 1 P.O. Wireman (L.C.) allowed in lieu when operational flotilla consists of more than 12 craft.

Flotilla and Maintenance Staffs of L.C.N. (flotilla of 6 craft)

No.	Rank or Rating	Duty
1	Lieutenant-Commander	Flotilla Officer
1	Lieutenant (E) or Sub-Lieut. (E)	Flotilla Engineer Officer
1	Petty Officer	Administrative
1	Leading Seaman (Sig. L.C.) ...	—
1	E.A....	—
(a) 1	Leading Wireman (L.C.) or Wireman (L.C.).	—
1	E.R.A.	—
(b) 1	Motor Mechanic (C)	—
1	Leading Stoker	—
(c) 1	Shipwright (L.C.) or Joiner (L.C.)	—
1	Ship-Mechanic (L.C.)	—
1	P.O. or Leading Radio Mechanic (W/R).	—
Total 2 officers		
10 ratings		

Notes.—(a) 1 additional Leading Wireman (L.C.) to be drafted if flotilla consists of over 8 and under 13 craft.

(b) 1 additional Motor Mechanic to be allowed for every 3 craft over 6 in each flotilla.

(c) 1 additional Shipwright (L.C.) or Joiner (L.C.) to be allowed if flotilla consists of over 8 and under 13 craft.

SECTION A—MINOR LANDING CRAFT AND L.S.T. P/B UNITS—*contd.**Naval Manned—contd.***Flotilla and Maintenance Staffs of L.C.P.(S).**

No.	Rank or Rating.	Duty.
(a) —	Lieutenant	Flotilla Officers
1	Lieutenant (E) or Sub-Lieutenant (E).	Flotilla Engineer Officer
1	Petty Officer	Administrative
1	E.R.A.	—
3	Motor Mechanics (C)	—
1	Leading Stoker	—
2	Shipwrights or Joiners (L.C.) ...	—
1	Ship-Mechanic (L.C.)	—
(b) 1	Leading Wireman (L.C.) or Wireman (L.C.).	—
Total 2 officers		
10 ratings		

Notes.—(a) 1 Flotilla Officer to be allowed for every 24 craft.

(b) 1 P.O. Wireman (L.C.) allowed in lieu when operational Flotilla consists of more than 12 craft.

Flotilla Staff of L.C.P.(S.Y.) (Flotilla of 6 craft).

No.	Rank or Rating.	Duty.
1	Lieutenant	Flotilla Officer
1	Lieutenant (E) or Sub-Lieutenant (E).	Flotilla Engineer Officer
1	E.A....	—
1	Leading Wireman or Wireman (L.C.).	—
1	Motor Mechanic (C) or E.R.A. ...	—
1	Stoker	—
1	Shipwright or Joiner (L.C.) ...	—
Total 2 officers		
5 ratings		

Flotilla and Maintenance Staffs of L.C.S.(M).

No.	Rank or Rating.	Duty.
1	Lieutenant	Flotilla Officer
1	Lieutenant (E), Sub-Lieutenant (E), Cd. or Wt. Engineer.	Flotilla Engineer Officers
1	Petty Officer	Administrative
3	O.A. or O.M.	—
(a) 6	A.B. or O.S.—Q.O.(C.X.) ...	—
(b) 1	Leading Wireman (L.C.) or Wireman (L.C.).	—
1	E.R.A.	—
3	Motor Mechanics (C)	—
1	Leading Stoker or Stoker ...	—
2	Shipwrights or Joiners (L.C.) ...	—
1	Ship-Mechanic (L.C.)	—
Total 2 officers		
19 ratings		

Notes.—(a) When craft are shore-based W.R.N.S. Q.O. may be borne in lieu.

(b) 1 P.O. Wireman (L.C.) allowed in lieu when operational Flotilla consists of more than 12 craft.

SECTION A—MINOR LANDING CRAFT AND L.S.T. P/B UNITS—*contd.**Naval Manned—contd.***Flotilla Maintenance Staff of Minor Landing Craft when embarked in L.S.I.(H).**

No.	Rank or Rating.	Duty.
1	Lieutenant (E) or Sub-Lieutenant (E).	Engineer Officer
1	E.R.A.	—
1	Motor Mechanic (D.L.P.) ...	—
1	Stoker	—
1	Wireman (L.C.)	—
1	Shipwright (L.C.) or Joiner (L.C.)	—
1	Ship-Mechanic (L.C.)	—
1	O.A., or A.B. or Ord. Q.O. (C.X.)	—
Total	1 officer	7 ratings

Flotilla Maintenance Staff of Minor Landing Craft organized in Flotillas of 5 Craft and Embarked in Transport Ferries

No.	Rank or Rating	Duty
(a) —	Lieutenant (E) or Sub-Lieutenant (E).	Engineer Officer
1	E.R.A.	—
2	Motor Mechanics or E.R.M. (I.C.E.)	—
1	Wireman (L.C.)	—
1	Shipwright (L.C.) or Joiner (L.C.)	—
Total	1 officer	5 ratings

Note.—(a) One Lieutenant (E) or Sub-Lieutenant (E) is allowed for every two flotillas.

Craft Crews of L.C.A.

No.	Rank or Rating	Duty
(a) —	Lieutenant or Sub-Lieutenant, R.N.V.R., or Commissioned Bos'n or Bos'n, or Skipper, R.N.R., or Midshipman.	Boat Officer
1	Petty Officer or Leading Seaman	Coxswain
(b) 2	A.B. or Ordinary Seamen ...	—
1	Stoker	—
Total	$\frac{1}{3}$ officer	4 ratings

Notes.—(a) One Boat Officer to be allowed for every three craft.

(b) To include one Sig. (L.C.) for Divisional and Sub-Divisional Leaders only.

Craft Crews of L.C.A. (H.R.)

No.	Rank or Rating	Duty
1	Lieutenant or Sub-Lieutenant, R.N.V.R., or Commissioned Bos'n or Bos'n, or Skipper, R.N.R., or Midshipman.	Boat Officer
1	Petty Officer or Leading Seaman	Coxswain
(a) 2	A.B. or Ordinary Seamen ...	—
1	Stoker	—
Total	1 officer	4 ratings

Note.—(a) To include one Sig. (L.C.) for Divisional and Sub-Divisional Leaders only.

SECTION A—MINOR LANDING CRAFT AND L.S.T. P/B UNITS—*contd.**Naval Manned—contd.***Craft Crews of L.C.E.**

No.	Rank or Rating	Duty
1	Lieutenant or Sub-Lieutenant ...	Boat Officer
1	Petty Officer or Leading Seaman	Coxswain
1	A.B. or Ordinary Seaman ...	—
2	Shipwrights (L.C.) or Joiners (L.C.)	—
1	Stoker	—
Total	1 officer	5 ratings

Maintenance Staff for 3 Flotillas of Minor Landing Craft, plus—

No.	Rank or Rating	Duty
1	Leading Wireman (L.C.) or Wireman (L.C.)	—
2	Motor Mechanics (C)	—
1	Leading Stoker	—
Total	4 ratings	

Craft Crews of L.C.M. (1), (3) and (7).

No.	Rank or Rating	Duty
(a) —	Lieutenant or Sub-Lieutenant, R.N.V.R., or Commissioned Bos'n or Bos'n, or Skipper, R.N.R., or Midshipman.	Boat Officer
1	Petty Officer or Leading Seaman	Coxswain
(b) 4	A.B. or Ordinary Seamen ...	—
1	Stoker	—
Total	$\frac{1}{3}$ officer	6 ratings

Notes.—(a) One Boat Officer to be allowed for every three craft.

(b) To include one Sig. (L.C.) for Divisional and Sub-Divisional Leaders only.

Craft Crew of L.C.N.

No.	Rank or Rating	Duty
1	Lieutenant (N)	Commanding Officer
1	Sub-Lieutenant or Midshipman ...	Boat Officer
1	Petty Officer or Leading Seaman	Coxswain
(a) 1	A.B. or Ordinary Seaman ...	—
1	A.B.—Sig. (L.C.)	—
1	Telegraphist or Ordinary Telegraphist.	—
1	Telegraphist	—
1	A.B.—R.P.2	—
1	Motor Mechanic (D.L.P.) or (C) ...	—
Total	2 officers	7 ratings

Note.—(a) One A/S rating to be allowed as required to operate the A.S. set in either the L.C.N. or L.C.A.(O.C.) which is used by the L.C.O.C.U.

SECTION A—MINOR LANDING CRAFT AND L.S.T. P/B UNITS—*contd.**Naval Manned—contd.*

Craft Crews of L.C.P.(L), L.C.V.(P), L.C.P.(R), L.C.V., L.C.P.(M).

No.	Rank or Rating	Duty
(a) —	Lieutenant or Sub-Lieutenant, R.N.V.R., or Commissioned Bos'n or Bos'n, or Skipper, R.N.R., or Midshipman.	Boat Officer
1	Petty Officer or Leading Seaman	Coxswain
(b) 1	A.B. or Ordinary Seaman	—
1	Stoker	—
Total	$\frac{1}{2}$ officer 3 ratings	

Notes.—(a) One Boat Officer to be allowed for every three craft.
(b) To be a Sig. (L.C.) for Divisional and Sub-Divisional Leaders only.

Craft Crews of L.C.P.(S).

No.	Rank or Rating	Duty
(a) —	Lieutenant or Sub-Lieutenant, R.N.V.R., or Commissioned Bos'n or Bos'n, or Skipper, R.N.R., or Midshipman.	Boat Officer
1	Petty Officer or Leading Seaman	Coxswain
1	A.B. or Ordinary Seaman	—
1	Stoker	—
Total	$\frac{1}{2}$ officer 3 ratings	

Note.—(a) One Boat Officer to be allowed for every six craft.

Craft Crews of L.C.P. (S.Y.)

No.	Rank or Rating	Duty
1	Lieutenant or Sub-Lieutenant	Boat Officer
1	Petty Officer or Leading Seaman	Coxswain
3	A.B. or Ordinary Seamen	—
1	A.B. (Sig. L.C.)	—
1	Motor Mechanic (C)	—
Total	1 officer 6 ratings	

Craft Crews of L.C.S. (M)

No.	Rank or Rating	Duty
1	Lieutenant or Sub-Lieutenant, R.N.V.R. or Commissioned Boatswain or Boatswain, or Skipper R.N.R. or Midshipman.	Boat Officer
1	Petty Officer or Leading Seaman	Coxswain
1	A.B. (Sig. L.C.)	—
1	Stoker	—
1	Corporal, R.M.	—
(a) 5	Marines	Gun's crew
Total	1 officer 3 ratings 6 R.M. other ranks	

Note.—(a) To include one A.A.3.

SECTION A—MINOR LANDING CRAFT AND L.S.T. P/B UNITS—*contd.**Naval Manned—contd.*

Landing Ship Tank Pontoon/Barge Unit (L.S.T.P./B.U.) consisting of 2 Landing Ship Tank Pontoon Crews A and B (L.S.T.P.C. (A) and (B).)

No.	Rank or Rating	Duty
<i>L.S.T.P.C. (A)</i>		
1	Lieutenant or Sub-Lieutenant	And in charge of Unit
1	Leading Seaman	—
10	A.B. or Ordinary Seamen	—
2	Stokers	—
<i>L.S.T.P.C. (B)</i>		
1	Petty Officer	—
1	Leading Seaman	—
10	A.B. or Ordinary Seamen	—
2	Stokers	—
Total	1 officer 27 ratings	

SECTION B—MINOR LANDING CRAFT.

R.M. Manned.

Squadron Staffs of L.C.A., L.C.A.(H.R.), L.C.M.(1), (3) and (7), L.C.P.(L), L.C.P.(M), L.C.P.(R), L.C.P.(S), L.C.S.(M), L.C.V. and L.C.V.(P).

No.	Rank or Rating	Duty
1	Major or Captain, R.M.	Squadron Officer
1	Captain, Lieutenant or 2nd Lieutenant, R.M.	Squadron C.O.C.O.
(a) 1	Electrical Lieutenant or Electrical Sub-Lieutenant, R.N.V.R.	Squadron Electrical Officer
1	Company Sergeant Major	—
1	Corporal (clerk)	—
1	Marine Clerk, Storeman or Orderly	—
Total	3 officers 3 ratings	

Note.—(a) Proposed that one Electrical Officer be allowed for every 100 craft (not yet approved).

Flotilla and Maintenance Staff of L.C.A., L.C.M.(1), (3) and (7), L.C.P.(L), L.C.P.(M), L.C.P.(R), L.C.V., L.C.V.(P).

No.	Rank or Rating	Duty
1	Captain or Lieutenant, R.M.	Flotilla Officer
1	Lieutenant (E) or Sub-Lieut. (E)	Flotilla Engineer Officer
1	Colour Sergeant, R.M.	Administrative
1	Corporal (R.M. Signaller)	—
1	Marine Clerk Storeman	Administrative
1	E.R.A.	—
1	Stoker	—
3	Motor Mechanics (C)	—
2	Shipwrights or Joiners (L.C.)	R.N.
1	Ship-Mechanic (L.C.)	
1	Leading Wireman (L.C.) or Wireman (L.C.)	
Total	2 officers 3 R.M. ranks 9 ratings	

SECTION B—MINOR LANDING CRAFT—*contd.**R.M. Manned—contd.*

Flotilla and Maintenance Staff of L.C.A. (H.R.).

No.	Rank or Rating	Duty
1	Captain or Lieutenant, R.M.	Flotilla Officer
1	Lieutenant (E) or Sub-Lieutenant (E).	Flotilla Engineer Officer
1	Colour Sergeant	Administrative
1	Corporal (R.M. Signaller)	—
1	Marine Clerk-Storeman	Administrative
1	A.B. or O.S.—Q.O. (C.X.)	} R.N.
1	E.R.A.	
1	Stoker	
3	Motor Mechanics (C)	
2	Shipwrights or Joiners (L.C.)	
1	Ship-Mechanic (L.C.)	
1	Leading Wireman (L.C.)	
1	Leading Wireman (L.C.) or Wireman (L.C.)	—
Total		
1	R.M. officer	
1	Naval officer	
3	R.M. ranks	
11	Naval ratings	

Flotilla and Maintenance Staff of L.C.P. (S).

No.	Rank or Rating	Duty
(a) —	Captain or Lieutenant, R.M.	Flotilla Officer
1	Lieutenant (E) or Sub-Lieutenant (E).	Flotilla Engineer Officer
1	Colour Sergeant, R.M.	Administrative
1	Marine Clerk Storeman	Administrative
1	E.R.A.	} R.N.
3	Motor Mechanics (C)	
1	Stoker	
2	Shipwrights or Joiners (L.C.)	
1	Ship-Mechanic (L.C.)	
1	Leading Wireman (L.C.) or Wireman (L.C.)	
1	Leading Wireman (L.C.) or Wireman (L.C.)	
Total		
1	R.M. officer	
1	Naval officer	
2	R.M. ranks	
9	ratings	

Note.—(a) One Flotilla Officer to be allowed for every 24 craft.

Flotilla and Maintenance Staff of L.C.S. (M)

No.	Rank or Rating	Duty
1	Captain or Lieutenant, R.M.	Flotilla Officer
1	Lieutenant (E) or Sub-Lieutenant (E).	Flotilla Engineer Officer
1	Colour Sergeant, R.M.	Administrative
1	Marine Clerk-Storeman	Administrative
1	E.R.A.	} R.N.
2	Shipwrights or Joiners (L.C.)	
3	Motor Mechanics (C)	
1	P.O. or Leading Stoker	
1	Leading Wireman (L.C.) or Wireman (L.C.)	
3	O.A....	
(a) 6	A.B.—Q.O. (C.X.)	
1	Ship-Mechanic (L.C.)	—
Total		
1	R.M. officer	
1	Naval officer	
2	R.M. ranks	
18	ratings	

Note.—(a) When craft are shore-based, W.R.N.S. Q.O. may be borne in lieu.

SECTION B—MINOR LANDING CRAFT—*contd.**R.M. Manned—contd.*

Craft Crews of L.C.A.

No.	Rank or Rating	Duty
(a) —	Lieutenant or 2nd Lieutenant R.M.	Boat Officer
1	Sergeant or Corporal R.M.	Coxswain
(b) 2	Marine Deckhands	—
(c) 1	R.M. Driver (L.C.)	—
Total		
$\frac{1}{3}$	officer	
4	ranks	

Notes.—(a) One Boat Officer to be allowed for every three craft.
(b) One Marine R.M.S. to be allowed in lieu of one Marine for Divisional and Sub-Divisional leaders only.

(c) 20 per cent. of Drivers (L.C.) per flotilla may hold the rank of Corporal.

Craft Crews of L.C.A. (H.R.)

No.	Rank or Rating	Duty
1	Lieutenant or 2nd Lieutenant R.M.	Boat Officer
1	Sergeant or Corporal R.M.	Coxswain
(a) 2	Marine Deckhands...	—
(b) 1	R.M. Driver (L.C.)	—
Total		
1	officer	
4	ratings	

Notes.—(a) One Marine R.M.S. to be allowed in lieu of one Marine for Divisional and Sub-Divisional leaders only.

(b) 20 per cent. of Drivers (L.C.) per flotilla may hold the rank of Corporal.

Craft Crews of L.C.M. (1), (3) and (7).

No.	Rank or Rating	Duty
(a) —	Lieutenant or 2nd Lieutenant R.M.	Boat Officer
(a) —	N.C.O.	In lieu of Boat Officer
1	Sergeant or Corporal R.M.	Coxswain
(b) 4	Marine Deckhands	—
(c) 1	R.M. Driver (L.C.)	—
Total		
$\frac{1}{3}$	officer	
6 $\frac{1}{2}$	ranks	

Notes.—(a) One Lieutenant or 2nd Lieutenant R.M. to be allowed for every six craft, also one N.C.O. in lieu of officer for every alternate six craft. Every third craft has an officer or N.C.O. alternatively.

(b) One Marine R.M.S. to be allowed in lieu of one Marine for Divisional and Sub-Divisional leaders only.

(c) 20 per cent. of Drivers (L.C.) per flotilla may hold the rank of Corporal.

Craft Crews of L.C.P. (L), L.C.V. (P), L.C.P. (R)

No.	Rank or Rating	Duty
(a) —	Lieutenant or 2nd Lieutenant,	Boat Officer
1	Sergeant or Corporal, R.M.	Coxswain
(b) 1	Marine Deckhand	—
(c) 1	R.M. Driver (L.C.)	—
Total		
$\frac{1}{3}$	officer	
3	ranks	

Notes.—(a) One Boat Officer to be allowed for every three craft.

(b) One Marine, R.M.S., to be allowed in lieu of one Marine for Divisional and Sub-Divisional Leaders only.

(c) 20 per cent. of Drivers (L.C.) per flotilla may hold the rank of Corporal.

SECTION B—MINOR LANDING CRAFT—*contd.**R.M. Manned—contd.***Craft Crews of L.C.P.(M) and L.C.V.**

No.	Rank or Rating	Duty
(a) —	Lieutenant or 2nd Lieutenant, R.M.	Boat Officer
(a) —	N.C.O.	In lieu of Boat Officer
1	Sergeant or Corporal, R.M. ...	Coxswain
(b) 1	Marine Deckhand	—
(c) 1	R.M. Driver (L.C.)	—
Total	$\frac{1}{2}$ officer $3\frac{1}{2}$ ranks	

Notes.—(a) One Lieutenant or 2nd Lieutenant, R.M., to be allowed for every six craft, also one N.C.O. in lieu of officer for every alternate six craft. Every third craft has an officer or N.C.O. alternately.

(b) One Marine, R.M.S., to be allowed in lieu of one Marine for Divisional and Sub-Divisional Leaders only.

(c) 20 per cent. of Drivers (L.C.) per flotilla may hold the rank of Corporal.

Craft Crews of L.C.P.(S)

No.	Rank or Rating	Duty
(a) —	Lieutenant or 2nd Lieutenant, R.M.	Boat Officer
1	Sergeant or Corporal, R.M. ...	Coxswain
1	Marine Deckhand	—
(b) 1	R.M. Driver (L.C.)	—
Total	$\frac{1}{2}$ officer 3 ranks	

Notes.—(a) One Lieutenant or 2nd Lieutenant, R.M., to be allowed for every six craft.

(b) One Corporal may be allowed in lieu of one Driver (L.C.) for every six craft.

Craft Crews of L.C.S. (M)

No.	Rank or Rating	Duty
1	Lieutenant or 2nd Lieutenant, R.M.	Boat Officer
1	Sergeant or Corporal, R.M. ...	Coxswain
(a) 1	Corporal, R.M.	Guns' crew
(b) 1	Marine, R.M.S.	—
(c) 1	R.M. Driver (L.C.)	—
(d) 5	Marines	Guns' crew
Total	1 officer 9 ranks	

Notes.—(a) One Sergeant may be allowed in lieu of one Corporal in each flotilla.

(b) One Corporal may be allowed in lieu of one R.M.S. for every six craft.

(c) One Corporal may be allowed in lieu of one Driver (L.C.) for every six craft.

(d) To include one A.A.3

SECTION C—SPECIAL C.O. UNITS.

Naval Beach Commando.

No.	Rank or Rating	Duty
1	Lieutenant-Commander	Commanding Officer
1	Lieutenant, Sub-Lieutenant or Midshipman.	Administration Officer
3	Lieutenants	Beachmaster
6	Lieutenants, Sub-Lieutenants or Midshipman.	Assistant Beachmaster
6	Petty Officers	—
6	Leading Seamen	—
61	A.B. or Ordinary Seamen ...	Includes one Messenger
Total	11 officers 73 ratings	

Naval Beach Signal Section.

No.	Rank or Rating	Duty
2	Lieutenants or Sub-Lieutenants, R.N.V.R.	Beach Signal Officers
1	C.P.O. Telegraphist or P.O. Telegraphist.	—
2	Leading Telegraphists	—
9	Telegraphists or Ordinary Telegraphists.	—
2	Chief Yeoman or Yeoman of Signals.	—
2	Leading Signalmen	—
9	Signalmen or Ordinary Signalmen	—
5	Coders	—
Total	2 officers 30 ratings	

Naval Section Bombardment Troop.

No.	Rank or Rating	Duty
1	Lieutenant or Sub-Lieutenant ...	Commanding Officer
1	C.P.O. Telegraphist or P.O. Telegraphist.	—
2	Leading Telegraphists	—
20	Telegraphists or Ordinary Telegraphists.	—
Total	1 officer 23 ratings	

C.O.P.P. Unit and Maintenance Staff.

No.	Rank or Rating	Duty
1	Lieutenant-Commander (N) or Lieutenant (N) or Lieutenant-Commander (H) or Lieutenant (H).	Commanding Officer
1	Lieutenant-Commander, Lieutenant or Sub-Lieutenant.	Maintenance and Intelligence Officer
1	Lieutenant or Sub-Lieutenant ...	Assistant to Commanding Officer
1	Lieutenant or Sub-Lieutenant or Midshipman.	Maintenance Officer
2	P.O. or Leading Seamen	—
1	Leading Seaman or A.B.	—
1	Leading Wireman (L.C.)	—
Total	4 officers 4 ratings	

SECTION C—SPECIAL C.O. UNITS—*contd.***Maintenance Staff.**

(The following ratings to be allowed for every 10 C.O.P.P. Units.)

No.	Rank or Rating	Duty
1	P.O.	—
2	Sailmakers	—
2	Shipwrights	—
1	P.O. Writer	—
1	Writer	—
2	Leading Stores Assistants	—
1	Stores Assistant	—
Total	— officers	—
	10 ratings	—

Landing Craft Recovery Unit.

No.	Rank or Rating	Duty
1	Lieutenant (E) or Sub-Lieutenant (E).	Engineer Officer in command.
1	Shipwright Lieutenant or Cd. or Wt. Shipwright.	Shipwright Officer
1	P.O.	—
6	A.B. or Ordinary Seamen	—
1	Chief Motor Mechanic (D.H.P.)	—
3	Motor Mechanics (D.H.P.)	—
6	Stokers	—
6	Shipwrights (L.C.)	—
1	Joiner (L.C.)	—
1	Blacksmith	—
1	Wireman (L.C.)	—
Total	2 officers	—
	26 ratings	—

Landing Craft Obstruction Clearance Unit.

No.	Rank or Rating	Duty
1	Lieutenant or Sub-Lieutenant ...	Commanding Officer
1	P.O.	—
2	Leading Seamen	—
13	A.B. or Ordinary Seamen (includes 1 S.D.).	—
1	Signalman or Ordinary Signalman	—
Total	1 officer	—
	17 ratings	—

Combined Operations Material Liaison Staff (Large) (Home Complement).

No.	Rank or Rating	Duty
1	Lieut.-Commander, R.N.V.R. ...	C.O.M.L. Officer
1	Chief E.R.A.	—
2	E.R.A. (F)	—
1	Chief Motor Mechanic (D.L.P. or C.)	—
2	E.A.(L.C.) or E.M.(L.C.)	—
1	Stoker	—
Total	1 officer	—
	7 ratings	—

Note.—Proposed but not yet approved.SECTION C—SPECIAL C.O. UNITS—*contd.***Combined Operations Material Liaison Staff (Small) (Home Complement).**

No.	Rank or Rating	Duty
1	Lieutenant-Commander, R.N.V.R.	C.O.M.L. Officer
1	Chief E.R.A.	—
1	Chief Motor Mechanic (D.L.P. or C.).	—
1	E.A.(L.C.) or E.M.(L.C.)	—
1	Stoker	—
Total	1 officer	—
	4 ratings	—

Note.—Proposed but not yet approved.

SECTION D—LANDING CRAFT BASE MOBILE UNITS.

Minor Landing Craft Receipt and Despatch Staff for dealing with 25 craft a month, when part staff of local Naval Authority at port at which there is no L.C. Maintenance Base (A).

No.	Rank or Rating	Duty
1	Lieutenant	—
(a) 1	Lieutenant or Sub-Lieutenant ...	—
(a) 1	Lieutenant (E) or Sub-Lieutenant (E) or Commissioned or Warrant Engineer.	—
1	Electrical Lieutenant or Electrical Sub-Lieutenant, R.N.V.R.	—
1	Lieutenant (S) or Sub-Lieutenant (S).	—
1	P.O.	—
(a) 1	Leading Seaman	—
(a) 9	A.B. or Ordinary Seamen	—
1	E.R.A.	—
(a) 4	Motor Mechanics (D.L.P.)	—
(a) 1	Stoker P.O. or Leading Stoker ...	—
(a) 9	Stokers	—
(a) 3	Shipwrights or Joiners (L.C.) ...	—
1	O.A....	—
1	P.O. Wireman (L.C.)	—
1	Leading Wireman (L.C.)	—
(a) 2	Wiremen (L.C.)	—
1	Writer	—
1	L.S.A. or S.A.	—

Total (a) 5 officers

(a) 36 ratings

Note.—(a) The following *additional* personnel to be provided for each additional 25 craft which require to be dealt with per month :—

- 1 Lieutenant or Sub-Lieutenant.
- 1 Lieutenant (E) or Sub-Lieutenant (E) or Commissioned or Warrant Engineer.
- 2 Leading Seamen.
- 9 A.B. or Ordinary Seamen.
- 3 Motor Mechanics (D.L.P.).
- 1 Stoker P.O. or Leading Stoker.
- 9 Stokers.
- 2 Shipwrights or Joiners (L.C.).
- 3 Wiremen (L.C.).

SECTION D—LANDING CRAFT BASE MOBILE UNITS—*contd.***Minor Landing Craft Receipt and Despatch Staff for dealing with 25 craft a month, when part Staff of a L.C. Maintenance Base (B).**

No.	Rank or Rating	Duty
1	Lieutenant	—
(a) 1	Lieutenant or Sub-Lieutenant ...	—
1	Lieutenant (E) or Sub-Lieutenant (E) or Commissioned or Warrant Engineer.	—
1	Lieutenant (S) or Sub-Lieutenant (S).	—
1	P.O.	—
(a) 1	Leading Seaman	—
(a) 6	A.B. or Ordinary Seamen ...	—
1	E.R.A.	—
(a) 2	Motor Mechanics (D.L.P.) ...	—
1	Stoker P.O. or Leading Stoker ...	—
(a) 6	Stokers	—
(a) 2	Shipwrights or Joiners (L.C.) ...	—
1	O.A....	—
1	P.O. Wireman (L.C.)	—
(a) 1	Leading Wireman (L.C.)	—
(a) 2	Wiremen (L.C.)	—
1	Writer	—
1	L.S.A. or S.A.	—
<hr/>		
Total(a)	4 officers	
(a)	25 ratings	

Note.—(a) The following *additional* personnel to be provided for each additional 25 craft which require to be dealt with per month:—

- 1 Lieutenant or Sub-Lieutenant.
- 1 Leading Seaman.
- 6 A.B. or Ordinary Seamen.
- 2 Motor Mechanics (D.L.P.).
- 6 Stokers.
- 1 Shipwright or Joiner (L.C.).
- 1 Leading Wireman (L.C.).
- 3 Wiremen (L.C.).

Minor Landing Craft Storage Section

No.	Rank or Rating	Duty
1	Lieutenant	Officer-in-Charge
1	Lieutenant (E) or Sub-Lieutenant (E).	Engineer Officer
1	P.O. or Leading Seaman	—
1	Stoker P.O. or Leading Stoker ...	—
1	Stoker	—
1	P.O. Wireman (L.C.) or Leading Wireman (L.C.).	—
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Total(a)	2 officers	
(a)	4 ratings	

Note.—(a) The balance will consist of a variable component dependent on the number of craft in storage (*vide* C.A.F.O. 89/45, Scale "D").

SECTION D—LANDING CRAFT BASE MOBILE UNITS—*contd.***Major Landing Craft Commissioning and Reception Staff**

No.	Rank or Rating	Duty
1	Lieutenant-Commander	Commissioning and Reception Staff Officer.
(a) 1	Lieutenant or Sub-Lieutenant ...	Assistant to C.A.R.S.O.
1	Lieutenant (E) or Sub-Lieutenant (E).	Engineer Officer
2	E.R.A.(F)	—
(b) 1	Stoker P.O.	—
1	O.A....	—
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Total	3 officers	
	4 ratings	

Notes.—(a) An assistant to C.A.R.S.O. to be allowed only where warranted by the number of craft being handled.

(b) For regulating duties.

Mobile Base Maintenance Unit (Major)—(Home)

No.	Rank or Rating	Duty
1	Lieutenant (E) or Sub-Lieutenant (E).	Engineer Officer-in-Charge
1	C.E.R.A.	—
2	E.R.A. (F)	—
1	E.R.A. (F. and T.)	—
2	E.R.A. (C.S.)	—
2	E.R.M. (F)	—
1	E.R.M. (T)	—
3	E.R.M. (M.W.W.), includes one trained in U.W. Cutting and Salvus gear.	—
2	E.R.M. (I.C.E.)	—
1	Chief Motor Mechanic (D.H.P. or B)*	—
1	Chief Motor Mechanic (D.L.P. or C)*	—
2	Motor Mechanics (D.H.P.)* ...	—
1	Motor Mechanic (D.L.P.)* ...	—
1	Chief Shipwright	—
3	Shipwrights (L.C.), includes one trained in U.W. Cutting and Salvus gear.	—
4	Ship Mechanics (L.C.)	—
4	Joiners (L.C.)	—
1	Joiner	—
2	Chief E.A. or E.A. or E.M. ...	—
1	P.O. Wireman (L.C.)	—
1	Leading Wireman (L.C.)	—
4	Wiremen (L.C.)	—
1	Blacksmith	—
1	Plumber	—
4	O.A. or O.M.	—
2	A.B. or Ord. Smn.—Q.O. (C.X.).	—
1	Stoker P.O.	—
2	Leading Stokers	—
18	Stokers	—
<hr/>		
Total	1 officer	
	69 ratings	

* Includes four trained in maintenance of refrigerator equipment.

SECTION D—LANDING CRAFT BASE MOBILE UNITS—*contd.*

Mobile Base Maintenance Unit (Major) (Foreign).

No.	Rank or Rating.	Duty.
1	Lieutenant-Commander (E) ...	Engineer Officer-in-Charge
3	Lieutenant or Sub-Lieutenant (E)	Asst. Engineer Officers
1	Electrical Lieutenant-Commander or Electrical Lieutenant, R.N.V.R.	Electrical Officer
1	Electrical Lieutenant or Electrical Sub-Lieutenant, R.N.V.R.	Assistant Electrical Officer
1	Shipwright Lieutenant-Commander	Shipwright Officer
1	Shipwright Lieutenant or Cd. Ship- wright.	Assistant Shipwright Officer
1	Chief E.R.A. (F. and T.) ...	—
2	E.R.A. (F. and T.) ...	—
4	E.R.A. (F) ...	—
3	E.R.A. (C.S.) ...	—
1	E.R.A. (E.S.) ...	—
3	E.R.M. (F) ...	—
2	E.R.M. (T) ...	—
4	E.R.M. (M.W.W.) includes 1 trained in U.W. Cutting and Salvus gear.	—
3	E.R.M. (I.C.E.) ...	—
3	Chief Motor Mechanics (D.H.P. or B.)	—
4	Motor Mechanics (D.H.P.) ... *	—
2	Motor Mechanics (D.L.P.) ...	—
2	Chief Shipwrights ...	—
9	Shipwrights (L.C.) includes 1 trained in U.W. Cutting and Salvus Gear.	—
8	Ship-Mechanics (L.C.) ...	—
10	Joiners (L.C.) ...	—
2	Joiners ...	—
4	Chief E.A. or E.A. or E.M. ...	—
2	P.O. Wiremen (L.C.) ...	—
2	Leading Wiremen (L.C.) ...	—
5	Wiremen (L.C.) ...	—
2	Blacksmiths ...	—
2	Plumbers ...	—
6	O.A. or O.M. ...	—
4	A.B. or Ord. Smn.-Q.O. (C.X.) ...	—
1	Stoker P.O. ...	—
3	Leading Stokers ...	—
(a) 26	Stokers ...	—
2	Painters ...	—
Total	8 officers 122 ratings	

* Includes four trained in maintenance of refrigerator equipment.

Note.—(a) The following are to be included when attached to L.S.E.(L.C.) :—

- 2 Stokers trained as Storekeepers.
- 3 Stokers trained as Lorry Drivers.
- 1 Stoker trained as Crawler Crane Driver.

SECTION D—LANDING CRAFT BASE MOBILE UNITS—*contd.*

Mobile Base Maintenance Unit (Minor) (Home).

No.	Rank or Rating.	Duty.
1	Lieutenant (E) or Sub-Lieutenant (E).	Engineer Officer-in-Charge
1	E.R.A.(F) ...	—
1	E.R.A. (F. and T.) ...	—
1	E.R.A. (C.S.) ...	—
2	E.R.M. (F) ...	—
1	E.R.M.(T) ...	—
3	E.R.M. (M.W.W.), includes 1 trained in U.W. Cutting and Salvus gear.	—
2	E.R.M. (I.C.E.) ...	—
1	Chief Motor Mechanic (D.L.P. or C.)	—
2	Motor-Mechanics (D.L.P.) ... *	—
2	Motor-Mechanics (C) ...	—
2	Shipwrights (L.C.), includes 1 trained in U.W. Cutting and Salvus gear.	—
3	Ship-Mechanics (L.C.) ...	—
6	Joiners (L.C.) ...	—
1	Joiner ...	—
3	Chief E.A. or E.A. or E.M. ...	—
2	P.O. Wiremen (L.C.) ...	—
2	Leading Wiremen (L.C.) ...	—
4	Wiremen (L.C.) ...	—
1	Blacksmith ...	—
2	O.A. or O.M. ...	—
1	A.B. or Ord.Smn.-Q.O. (C.X.) ...	—
1	Stoker P.O. ...	—
1	Leading Stoker ...	—
6	Stokers ...	—
Total	1 officer 51 ratings	

* Includes two trained in maintenance of refrigerator equipment.

SECTION D—LANDING CRAFT BASE MOBILE UNITS—contd.

Mobile Base Maintenance Unit (Minor) (Foreign).

No.	Rank or Rating	Duty
1	Lieutenant (E)	Engineer Officer-in-Charge
2	Lieutenant (E) or Sub-Lieutenant (E).	Assistant Engineer Officers
2	Electrical Lieutenant or Electrical Sub-Lieutenant, R.N.V.R.	Electrical Officers
1	Shipwright Lieutenant or Commissioned Shipwright.	Shipwright Officer
1	Chief E.R.A. (F. and T.)	—
2	E.R.A. (F. and T.)	—
2	E.R.A.(F)	—
1	E.R.A.(C.S.)	—
1	E.R.A.(E.S.)	—
3	E.R.M.(F)	—
2	E.R.M.(T)	—
4	E.R.M.(M.W.W.), includes 1 trained in U.W. Cutting and Salvus gear.	—
3	E.R.M.(I.C.E.)	—
1	Chief Motor Mechanic (D.L.P. or C.)	—
4	Motor Mechanics (D.L.P.)	—
3	Motor Mechanics (C)	—
1	Chief Shipwright	—
4	Shipwrights (L.C.), includes 1 trained in U.W. Cutting and Salvus gear.	—
6	Ship-Mechanics (L.C.)	—
9	Joiners (L.C.)	—
2	Joiners	—
5	Chief E.A. or E.A. or E.M.	—
2	P.O. Wiremen (L.C.)	—
3	Leading Wiremen (L.C.)	—
6	Wiremen (L.C.)	—
2	Blacksmiths	—
4	O.A. or O.M.	—
2	A.B. or Ord. Smn.—Q.O. (C.X.).	—
1	Stoker P.O.	—
2	Leading Stokers	—
(a)(b)(c)13	Stokers	—
1	Painter	—
Total	6 officers	
	90 ratings	

* Includes four trained in maintenance of refrigerator equipment.

Notes.—(a) These 13 Stokers to be trained lorry drivers when attached to M.O.L.C.A.Bs.

(b) Additional personnel to be provided when attached to M.O.L.C.A.Bs. to include:—

- 11 Stokers—2 trained in L.C. storekeeping duties.
- 3 trained as crawler crane drivers.
- 6 trained as lorry drivers.

- 4 E.R.M.(M.V.).
- 2 Plumbers.

- (c) When attached to A.R.L.(L.C.), Stoker complement to include:—
- 2 trained as storekeepers.
 - 3 trained as lorry drivers.
 - 1 trained as Crawler crane driver.

SECTION D—LANDING CRAFT BASE MOBILE UNITS—contd.

Faxman Overhaul Party (Foreign).

No.	Rank or Rating	Duty
1	Chief E.R.A. (F. and T.)	In charge
2	E.R.A.(F)	—
2	E.R.M.(I.C.E.)	—
3	Stokers	—
Total	8 ratings	

Basic Engines Overhaul Party (Foreign).

No.	Rank or Rating	Duty
1	Lieutenant-Commander (E) ...	Engineer Officer-in-Charge
5	Lieutenant (E) or Sub-Lieutenant (E).	Assistant Engineer Officers
1	Electrical Lieutenant or Electrical Sub-Lieutenant, R.N.V.R.	Electrical Officer
1	Chief E.R.A. (F. and T.)	—
(a) 4	E.R.A.(F)	—
(a) 4	E.R.A. (F. and T.)	—
3	E.R.A. (C.S.)	—
2	E.R.A. (E.S.)	—
(a) 4	E.R.M. (F)	—
2	E.R.M. (T)	—
4	E.R.M. (M.W.W.)	—
(a) 2	Chief Motor Mechanics (D.L.P. or C.).	—
(a) 2	Chief Motor Mechanics (D.H.P.) ...	—
(a) 12	Motor Mechanics (D.H.P.)	—
(a) 20	Motor Mechanics (D.L.P.)	—
(a) 12	Motor Mechanics (C)	—
5	Chief E.A. or E.A. or E.M.	—
2	P.O. Wiremen (L.C.)	—
2	Leading Wiremen (L.C.)	—
8	Wiremen (L.C.)	—
3	Joiners	—
2	Blacksmiths	—
2	Plumbers	—
2	Painters	—
1	Stoker P.O.	—
4	Leading Stoker	—
30	Stokers	—
Total	7 officers	
	133 ratings	

Note.—(a) Factory-trained in engine overhaul.

SECTION D—LANDING CRAFT BASE MOBILE UNITS—*contd.*

Mobile Engine Overhaul Party (Major)—(Foreign)

No.	Rank or Rating	Duty
1	Lieutenant (E) or Sub-Lieutenant (E).	Engineer Officer-in-Charge
(a) 1	E.R.A. (F)	—
(a) 1	E.R.M. (F)	—
(a) 1	Chief Motor Mechanic (D.L.P. or C.).	—
(a) 1	Chief Motor Mechanic (D.H.P.) ...	—
(a) 8	Motor Mechanics (D.H.P.) ...	—
(a) 8	Motor Mechanics (D.L.P.) ...	—
(a) 4	Motor Mechanics (C.)	—
1	E.M.	—
1	P.O. Wireman (L.C.)	—
1	Leading Wireman (L.C.)	—
3	Wiremen (L.C.)	—
1	Leading Stoker	—
5	Stokers	—
<hr/>		
Total	1 officer	
	36 ratings	

Note.—(a) Factory trained in engine overhaul.

Mobile Engine Overhaul Party (Minor)—(Foreign)

No.	Rank or Rating	Duty
(a) 1	Chief Motor Mechanic (D.L.P. or C.)	In Charge
(a) 4	Motor Mechanics (D.L.P.) ...	—
(a) 4	Motor Mechanics (C)	—
1	Leading Wireman (L.C.)	—
1	Wireman (L.C.)	—
2	Stokers	—
<hr/>		
Total	13 ratings	

Note.—(a) Factory trained engine overhaul.

SECTION D—LANDING CRAFT BASE MOBILE UNITS—*contd.*

Maintenance Staffs for L.C.T. (E)

No.	Rank or Rating	Duty
1	Lieutenant (E) or Sub-Lieutenant (E).	Engineer Officer-in-Charge
1	Electrical Lieutenant, R.N.V.R., or Electrical Sub-Lieutenant, R.N.V.R.	Electrical Officer
1	C.E.R.A.	—
1	E.R.A. (F)	—
1	E.R.A. (F. and T.)	—
1	E.R.M. (F.)	—
2	E.R.M. (M.W.W.)	—
1	Chief Motor Mechanic (D.H.P.) or (B.).	—
2	Motor Mechanics (D.H.P.) ...	—
1	Motor-Mechanic (D.L.P.) ...	—
1	Chief Shipwright	—
2	Shipwrights	—
2	Ship Mechanics (L.C.)	—
2	Joiners (L.C.)	—
1	E.A.	—
1	P.O. Wireman (L.C.)	—
1	Leading Wireman (L.C.)	—
2	Wiremen (L.C.)	—
1	P.O. Radio Mechanic (W/T) or Leading Radio Mechanic (W/T).	—
1	A.B. or Ord. Smn, Q.O. (C.X.).	—
1	O.A.	—
4	Stokers	—
1	Leading Stoker (Storekeeper) ...	—
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Total	2 officers	
	30 ratings	

(C.A.F.O. 89/45.)

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THE UNIVERSITY OF CHICAGO

DEPARTMENT OF CHEMISTRY

REPORT ON THE PROGRESS OF WORK

FOR THE YEAR 1921

BY

ROBERT M. HARRIS

AND

WILLIAM H. RAY

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1922

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