

C.R.1366/44.

Copy No.....

8th March, 1944.

LANDING SHIP PIER

1. The outstanding difficulty of amphibious warfare, "bridging the water-gap" assumes alarming proportions when the long sea passages for Pacific operations are contemplated.
2. The requirements for speed and ocean draught of ships and craft are such that landings on flat beaches are bound to leave a large water-gap. Generally speaking, the attempt to combine good seagoing qualities with good beaching qualities has resulted in a lack of both.
3. To carry the necessary equipment for bridging the gap is a problem which is already taxing the brains of the technical departments. The space bought up by this equipment will add further difficulties to the problem of providing sufficient lift, even supposing that the equipment proposed does prove satisfactory, which is at present open to doubt.
4. It is suggested that the most practical solution would be to produce a ship solely for beaching and bridging any watergap remaining - a Landing Ship Pier, in effect. There would be no attempt to carry vehicles in this vessel, which would be provided with very efficient ballasting arrangements (on the lines of the L.S.D.) in order to allow for a deep ocean going draught and a very light beaching draught.
5. The ship would have both bow and stern openings and a clear run for vehicles throughout its length. Special facilities for mooring L.S.T. and L.C.T. would be provided aft, with disembarkation points for L.C.I.(L) and other craft alongside.
6. The ship could also carry a large number of support weapons in the form of mortars, rockets or normal naval or military guns, and could be capable of producing large quantities of smoke.
7. A modified form of N.L. or some other pontoon gear could be incorporated in the design and arranged for easy and rapid launching to bridge the gap, if necessary, between the 3 ft. in which the bows should ground to dry land.
8. The vessel would then provide a mobile pier, capable of being operated at any point, however remote from its base, which would allow L.S.T. to be fully loaded and discharged without the attendant difficulties of carrying ferrying or pontoon gear themselves. It would provide some protection for vehicleless and personnel over a critical portion of the approach and would also give a lee to minor craft beaching alongside.
9. This proposal has been discussed with Mr. Baker, S.L.C., who says there are no fundamental difficulties in producing a design to comply with the majority of the requirements proposed, although a lower speed would probably have to be accepted. He also said the ship would probably be in the region of 10,000 tons, given a length of 600 ft. and a beam of 100 ft.

/PROPOSED REQUIREMENTS.....

PROPOSED REQUIREMENTS.

10. It is proposed that the possibility of producing a ship on the following lines should be investigated.

Length:	500 to 600 ft.	
Speed:	15 to 18 knots.	
Draught for ocean passage:	^F 10'0"	^A 15'0"
" " beaching:	3'0"	7'0"

(Keel slope 1 - 150).

11. Ballasting arrangements capable of changing from one draught to the other in, say, one hour.

12. Capable of carrying and lanching up to 500 ft. of N.L. or similar pontoon gear in not more than 20 minutes. (For bridging the gap between the bow - 3 ft. depth - to the beach, if required).

13. Specially designed to allow L.S.T., L.C.T. and minor landing craft to discharge over her to the beach.

14. It is not proposed that this vessel should be designed to carry any pay load except, possibly, troops.

C.R.1366/44.

Copy No.....

8th March, 1944.

LANDING SHIP PIER

(Docket X.R.359/44 also refers)

The attached proposed staff requirement by N.T.S.I. has been considered by the Sub-Committee and the minutes of the meeting are given below.

2. The Sub-Committee recommend that this proposal should not go forward to the Admiralty.
3. It was, however, recommended that the question of carrying NL pontoon equipment on the sides of M.T.ships and in L.S.D., with amphibians or craft stowed on top of the pontoons should be examined.
4. A.D.X.O.R. has undertaken to initiate action on this matter, unless the main Committee direct otherwise.

P.N. Elliott. (Signed.)
for Planning Seretary.

EXTRACT FROM MINUTES OF AMPHIBIOUS WARFARE SUB-COMMITTEE HELD ON
6th March, 1944 - A.W.S.C. (44) 8.

*II. LANDING SHIP PIER.

(P.S.N. 91/44 of 1 Mar 44 and docket X.R. 359/44 refer).

1. The Sub-Committee had before them N.T.S.I.'s paper on the Landing Ship Pier and the proposed staff requirements. N.T.S.I. point out that the Landing Ship Pier would solve the problem of bridging the watergap, which becomes more acute in Far Eastern operations; it would provide, in part, port facilities where normally these would not be available.

2. N.A.W.2. considered that the production of a Landing Ship Pier was undesirable for the following reasons:-

(i) It would be a very large target, and an obvious mark for enemy air attack or artillery fire.

(ii) It was unsound to lock up all facilities for bridging the watergap in one special type of ship.

(iii) For the reasons given in sub-paras (i) and (ii) above, the provision of the L.S.Pier would not absolve the Commanders from the responsibility for the provision of the normal pontoon equipment or other equipment for the bridging of the watergap.

(iv) The L.S.Pier would take probably two years before it was produced."

/"(v).....

"(v) It was undesirable to impose the design of such a ship on an already overburdened design staff unless it was absolutely necessary. He considered that the disadvantages of this ship would be such that it should not be proposed.

3. N.A.W.l. expressed disagreement with N.T.S.I.'s suggestion that this ship could carry a large number of support weapons, as it would not be used early in the assault.

4. The Sub-Committee:

(a) Agreed that, in principle, this was an excellent idea, but the disadvantages outweighed the advantages, and that this proposal should not go forward to the Admiralty.

(b) Agreed to examine the question of carrying NS pontoon, one length on each side of M.T. ships and in L.S.D with amphibians or craft on top of the NL pontoons."

DISTRIBUTION:

	<u>Copy No.</u>		<u>Copy No.</u>
D.C.O.(Air)	1	A.D.X.O.R.	10
D.D.C.O.(N)	2	G.I.(Trg)	11
D.D.C.O.(Mil)	3	A.Q.	12
D.D.C.O.(Air)	4	S.I.O.	13
D.X.O.R.	5	N.P.I.	14
C.E.C.O.	6	C.M.P.	15
		A.P.I.	16
<u>Copies to:</u>		N.T.S.I.	17
N.A.W.I.	7	W.D.	18-19
N.A.W.l.	8	Registry	20
A.A.W.	9	Copy retained for P.S.	21