

**Franklin D. Roosevelt Library
Map Room Papers, 1941-1945
Box 162**

**Folder:
Naval Aide's Files**

(A1-1) Habbakuks (Floating Airdromes for Asia Theatre) July 1942-January 1945

A1-3

*Capt. Nichols
to file*

COMINCH FILE

UNITED STATES FLEET

OFFICE OF THE COMMANDER IN CHIEF
NAVY DEPARTMENT, WASHINGTON, D. C.

SECRET

1 August 1942

MEMORANDUM FOR: THE PRESIDENT

Subject: Your memorandum of July 27th requesting additional information on the four CV new design proposed ships.

1. The characteristics for the new type of aircraft carrier grew out of lengthy discussions before the General Board with a view to the development of a previously non-existent type of carrier, namely, one which could stand immense punishment and still survive. All thought would seem to point to the need of a carrier of this type in the eventual phases of finally driving through an attack toward enemy shores.
2. British carriers, e.g. (ILLUSTRIOUS), with a partly armored flight deck, have shown how much bomb attack a vessel of this general type can stand and still survive.
3. Growing out of this need the 45,000-ton design was developed. The attached small plans show the outstanding differences between this contemplated ship and the ESSEX (CV9). The outstanding feature of the large new ship is a flight deck 3-1/2" thick extending over the entire hangar. This feature itself more than anything else determines the large displacement. The hangar deck is 2" thick, and the third deck about 2" thick, so that the total amount of protection to the vitals of the ship is 7-1/2" in thickness. The armor, moreover, is considerably higher at the sides than on the ESSEX.
4. The ESSEX, on the other hand, has no armor on the flight deck and has a total protection to the vitals of 4" as compared with 7-1/2" on the large ship.
5. The large ship will carry 120 aircraft as compared with 81 on the ESSEX. The ESSEX, moreover, is practically at her limit of capacity with the size of planes now in use. This results both from the length of flight deck and its strength which will not carry heavier planes. The 45,000-ton ship, on the other hand, can operate very much larger planes than are now contemplated, though the number would be reduced below 120.
6. Speeds of both ships are about the same, approximately 33 knots.
7. The above gives a general comparison of the two ships. The 45,000-ton ship should be able to withstand infinitely more attack

Memorandum for: The President

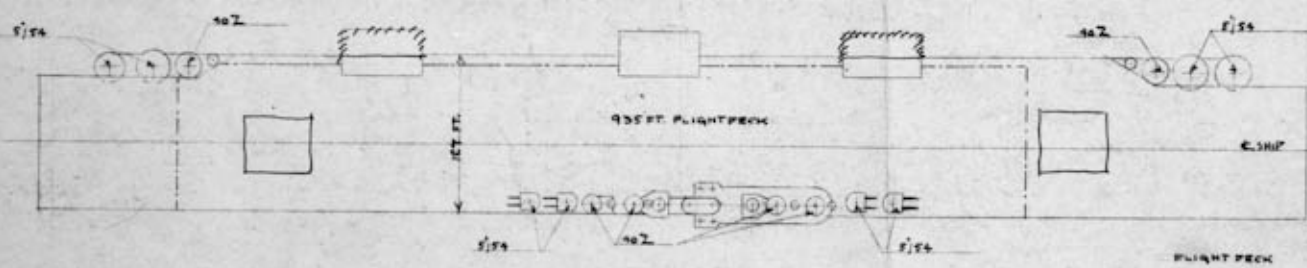
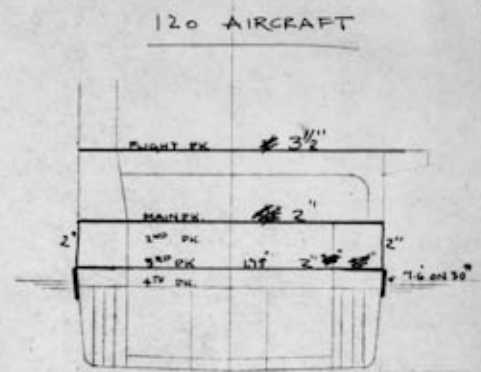
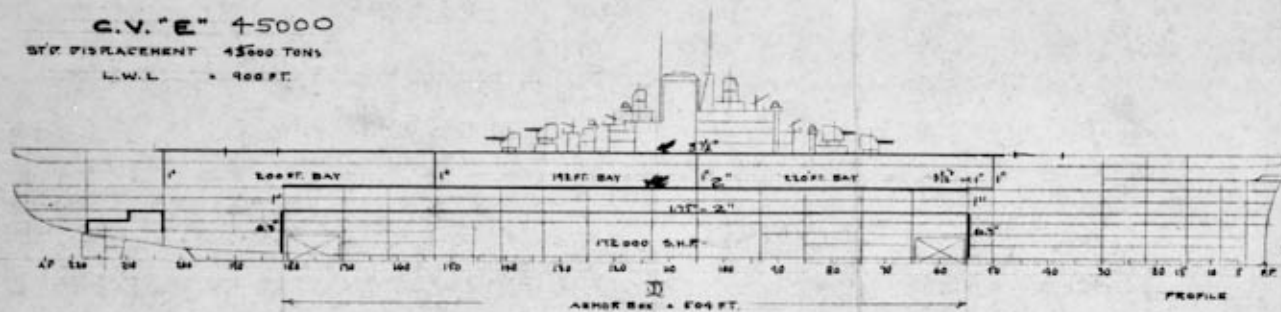
from the air than the ESSEX and still survive, and this is the whole reason for existence.

8. To summarize: The 45,000-ton ship is absolutely up-to-date and looks to the future; the CV9 is a development of the type we have now been building for several years.

E. King

27

C.V. "E" 45000
 STD DISPLACEMENT 45000 TONS
 L.W.L. = 900 FT.

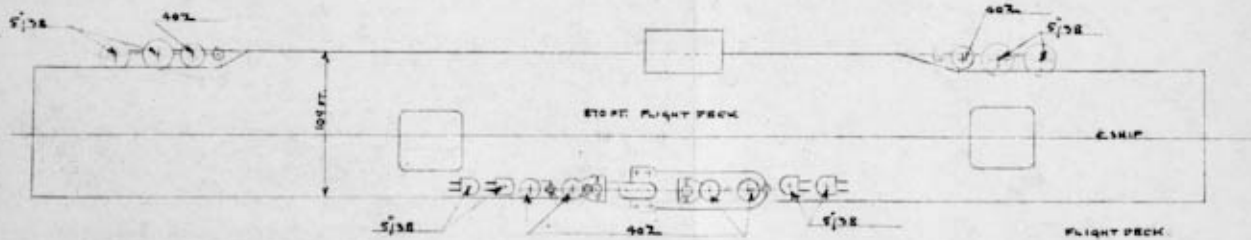
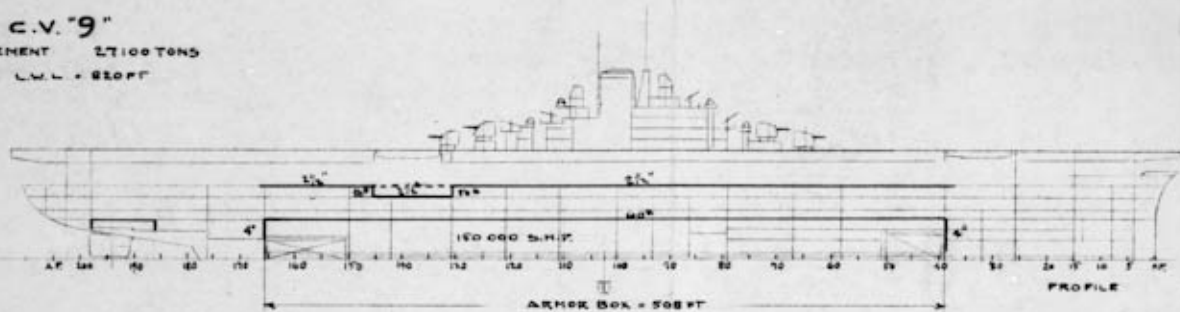


MIDSHIP SECTION
 LOOK AFT
 SCALE 1" = 40 FT.

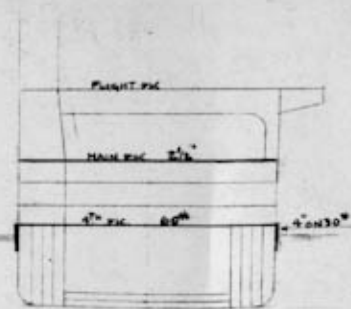
~~NOTE: IF THE DISPLACEMENT INCREASED TO 50000 TONS THE WEIGHT OF THE AIRCRAFT CARRIER WOULD INCREASE IN DISPLACEMENT APPROX 1000 TONS AND BEAN INCREASES 2 FT.~~

Regraded Unclassified

C.V. "9"
STP DISPLACEMENT 27100 TONS
L.W.L. = 820 FT



81 AIRCRAFT



MIDSHIP SECTION
LOOK AFT
SCALE 1" = 40 FT.