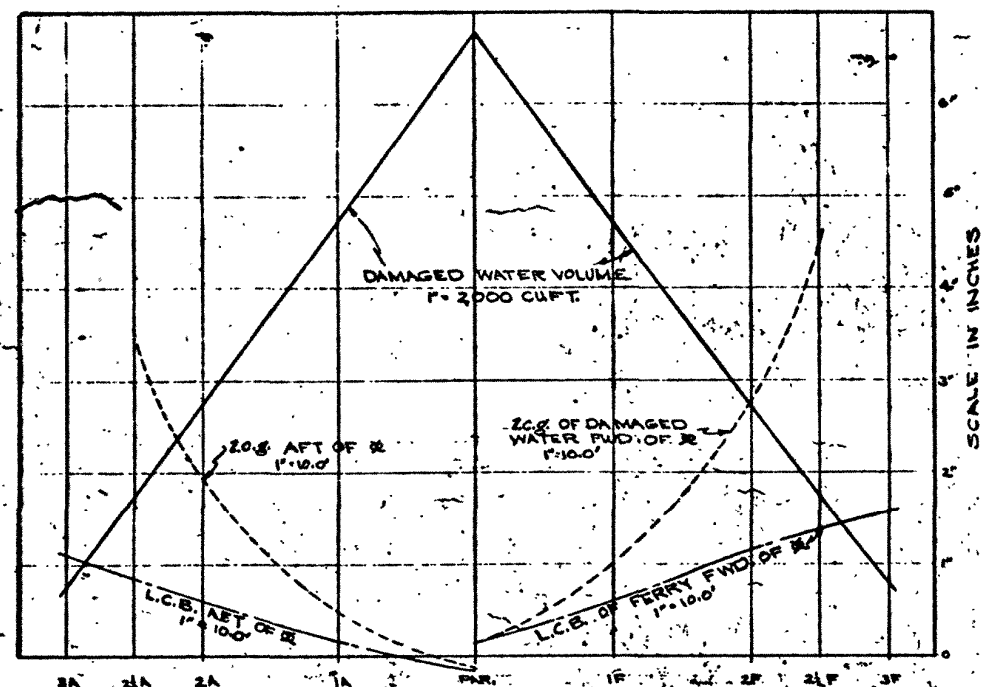




CURVES OF DAMAGED WATER VOLUME, L.C.B. OF DAMAGED WATER, & L.C.B. OF FERRY AT TRIM LINES

METHOD OF CALCULATION:

CALCULATIONS HAVE BEEN MADE BY THE SHIROKAUER METHOD AS DESCRIBED IN "PRINCIPLES OF NAVAL ARCHITECTURE", VOL. I, PAGES 169-176, PUBLISHED BY SOCIETY OF NAVAL ARCHT. MAR. ENGRS., 1942. FOLLOWING IS AN OUTLINE OF THE METHOD:

1. FROM BON JEAN CURVES OBTAIN SECTIONAL AREA CURVES AND L.C.B. FOR FOLLOWING CONDITIONS

ITEM	DRAFT AT RB	DRAFT AT AB
3F	8.25'	0.45'
2F	8.25'	2.72'
1F	8.25'	5.00'
PARALLEL	8.25'	7.25'
1A	5.96'	7.25'
2A	3.73'	7.25'
3A	1.44'	7.25'

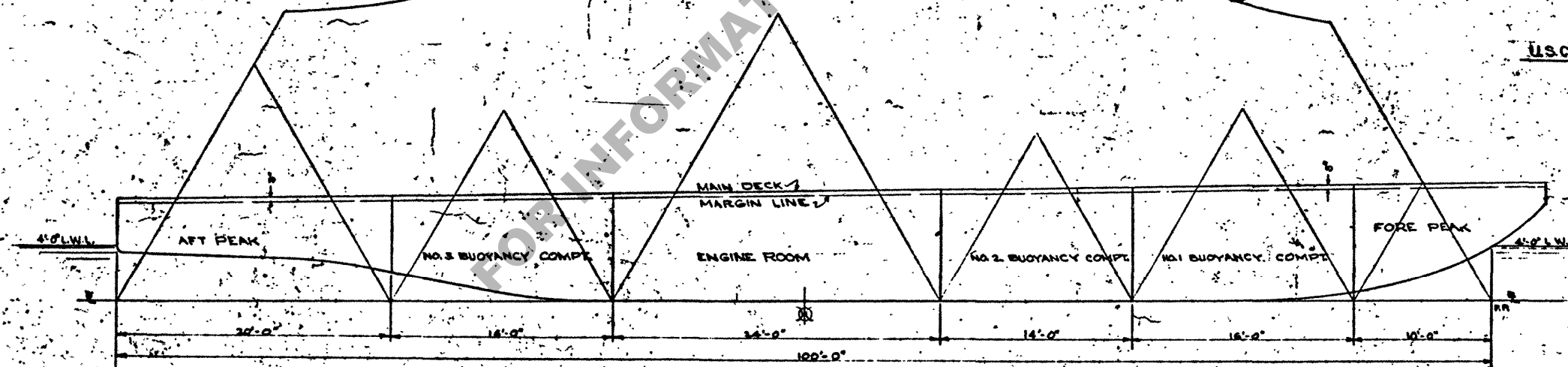
THE RESULTANT CURVES OF DAMAGED WATER VOLUMES THE RESPECTIVE L.C.B.'S AND L.C.B. OF THE VESSEL ARE PLOTTED AT THE LEFT OF THIS DNG.

2. FOR EACH ABOVE 4 CERTAIN INTERMEDIATE TANGENTS, A SERIES OF SUCCESSIVE APPROXIMATIONS, USING THE BON JEAN CURVES TO CONSTRUCT SECTIONAL AREA CURVES, RESULTED IN THE FOLLOWING COMPARTMENT LENGTHS AND LOCATIONS: (ALL AT 4-98%)

TANGENT	COMPT. L	CENTER OF L
2 1/2 A	24.25'	35.10' AFT OF R
2 A	29.80'	19.60' " " "
1 A	42.30'	5.02' " " "
PARALLEL	52.24'	2.17' FWD " " "
1 F	41.30'	9.65' " " "
2 F	26.20'	27.90' " " "
AFT END POINT	24.12'	
FWD. " "	23.38'	

3. THE MACHINERY SPACE HAS AN ESTIMATED 4-0.89, WHICH WOULD RAISE THE FLOODABLE LENGTHS CURVE IN THIS REGION. HOWEVER, THE USE OF 4-0.98 PROVIDES AN ADDED MARGIN OF SAFETY FOR A 1-COMPT. FERRY.

U.S.C.G. APPROVED: LTR. 4-25-55



FLOODABLE LENGTH CURVE
SCALE: 1" = 500'

REPRODUCED FROM
ORIGINAL DRAWING
N° 9040-7, DATED
FEBRUARY 11, 1955, BY
FRIEDE AND GOLDMAN, INC.
NAVAL ARCHITECTS AND
MARINE ENGINEERS.

FLOODABLE LENGTH CURVES

STANDARD PLAN
STEEL FERRY BOAT
AND LANDING PONTOONS

DATED: MAY 12, 1957

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS

DESIGNED	DETAILED	TRACED
CHECKED	CHECKED	CHECKED

BRIDGE DESIGN SECTION