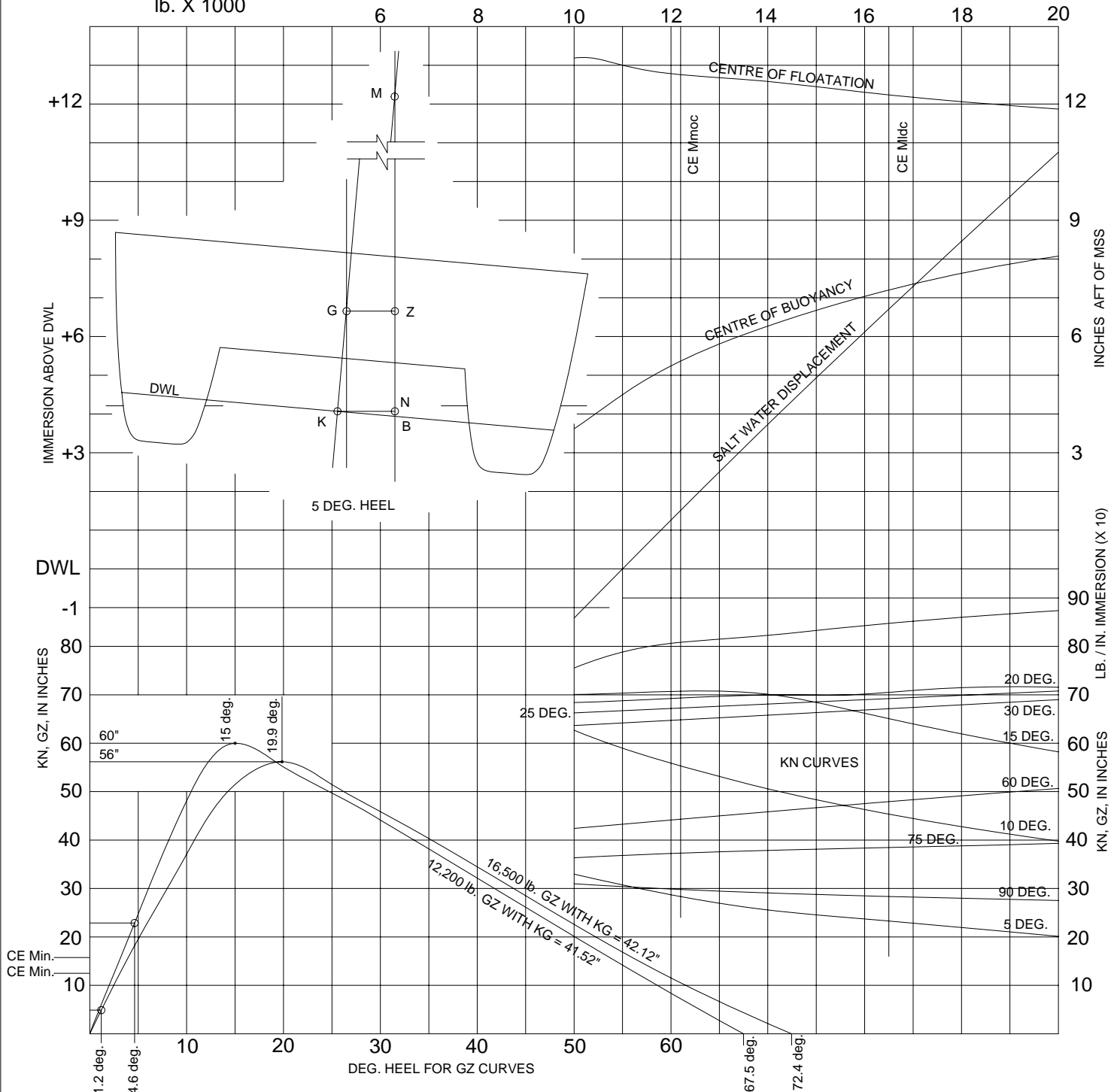


PDQ MV34 HYDROSTATICS AND STABILITY CURVES

SW DISPLACEMENT
lb. X 1000



Angle of heel with Mc applied

DWL - Design Water Line (datum)

Righting Moment = GZ x Displacement

MSS - Midships Station (X=0 for Model)

Mmoc - (CE) Mass at Minimum Operating Condition

Moment to trim 1" = Displ. x BM_L / LWL
= 3435 ft. lb.

M - Initial Transverse Metacentre

Mldc - (CE) Mass at Maximum Load Condition

$BM_L = I_L / V$

B - Centre of Buoyancy

I_L - Longitudinal Second Moment of Water Plane

V - Volume of Submerged Hull

G - Vertical Centre of Gravity

M_L - Longitudinal Metacentre

K - Datum for Vessel "Keel"

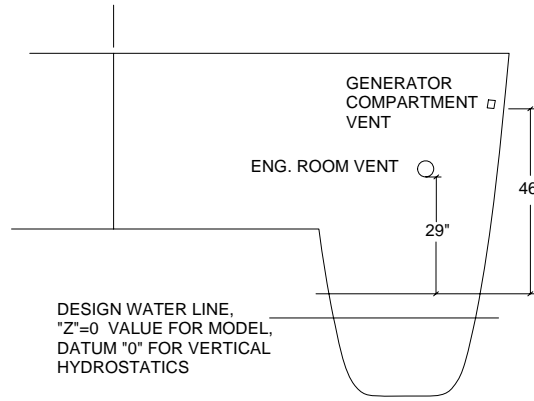
Note: "CE" Items are generated in accordance with ISO Standard 12217-1:2002 (E), Small Craft Stability and Buoyancy Assessment

GZ - Righting Arm

PDQ MV34 HYDROSTATICS AND STABILITY CURVES

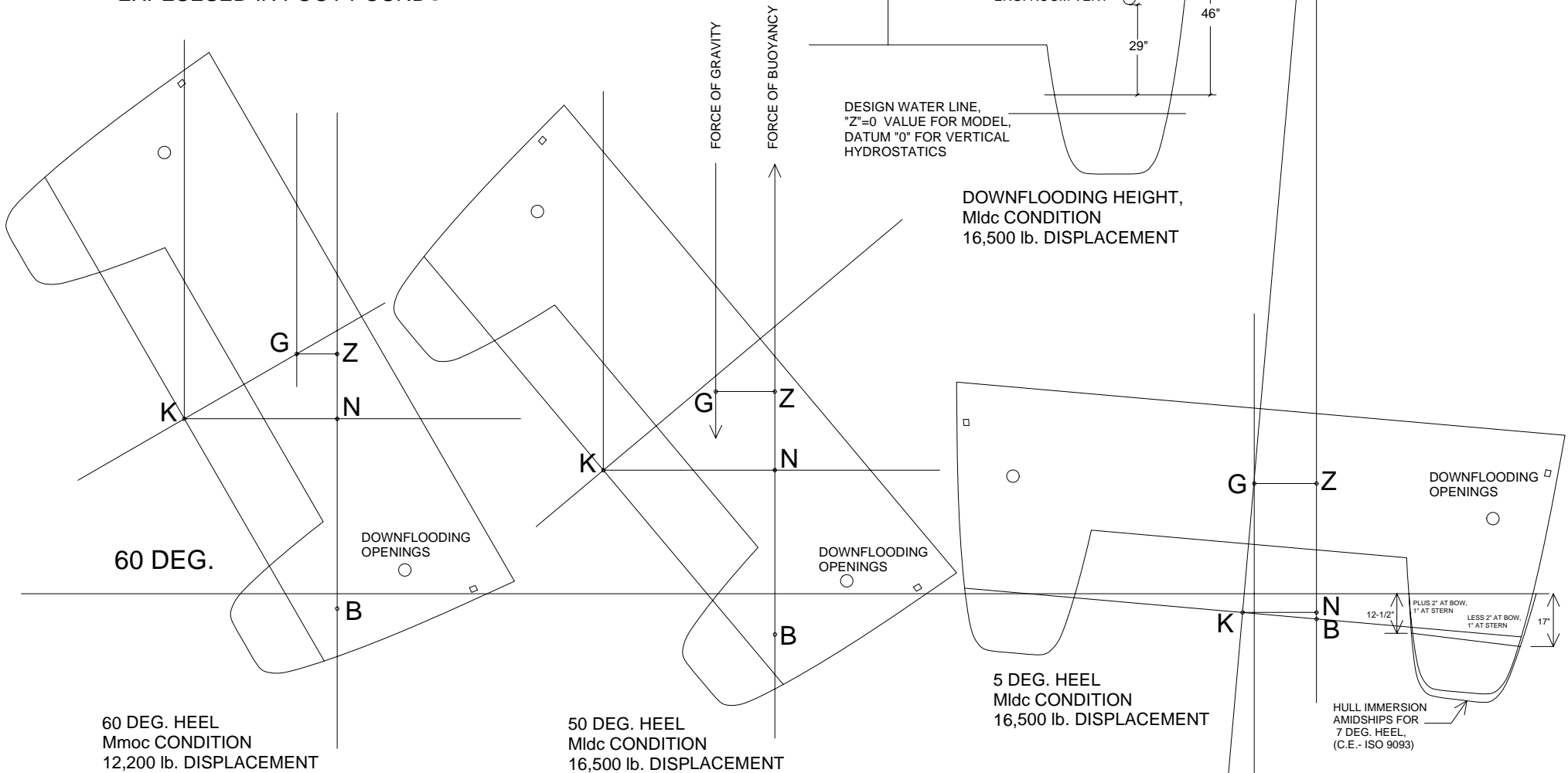
WHEN THE VESSEL IS AFLOAT, THE FORCES OF GRAVITY AND BUOYANCY HAVE THE SAME VALUE. IF THE VESSEL IS HEELED BY AN EXTERNAL INFLUENCE, THE FORCES MOVE OUT OF ALIGNMENT. "GZ" REPRESENTS A LEVER ARM FOR THE EFFORT ATTEMPTING TO ROTATE THE VESSEL BACK AND BRING THE FORCES BACK INTO ALIGNMENT. THE RECOVERY EFFORT IS THE ARM LENGTH (GZ) MULTIPLIED BY THE FORCE (BUOYANCY OR GRAVITY) EXPESSED IN FOOT POUNDS.

DESIGN CENTRE LINE,
"Y"=0 VALUE FOR MODEL,
DATUM "0" FOR TRANSVERSE
HYDROSTATICS

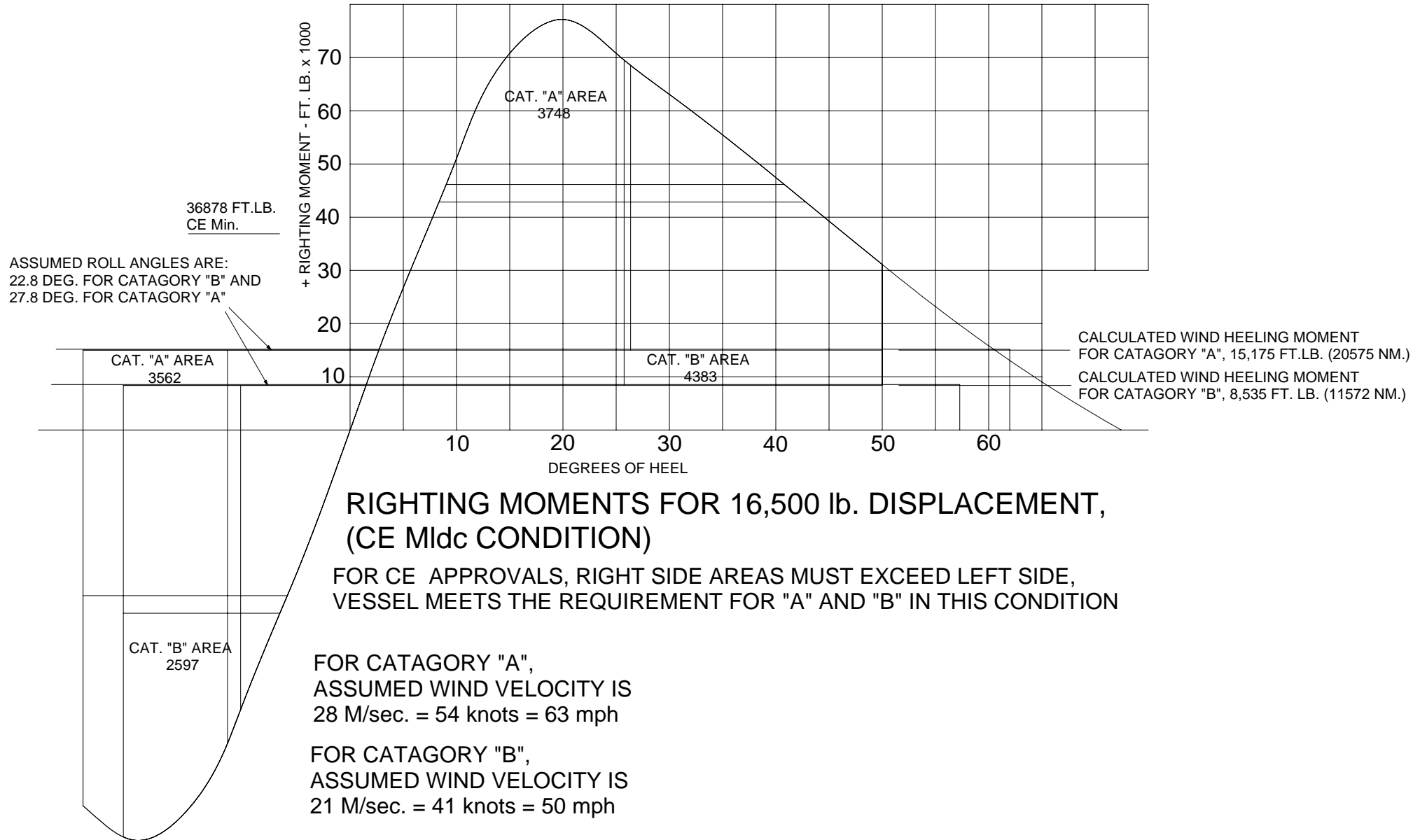


M
INITIAL METACENTRIC
HEIGHT (GM) = 230', 19' +/-

DOWNFLOODING HEIGHT,
Mldc CONDITION
16,500 lb. DISPLACEMENT



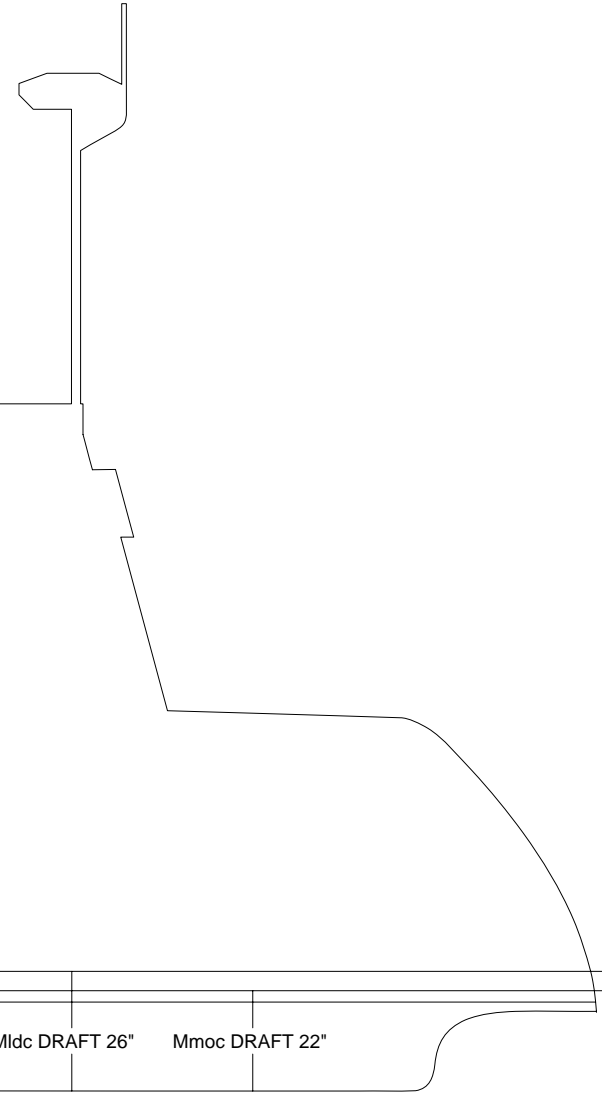
PDQ MV34 HYDROSTATICS AND STABILITY CURVES



PDQ MV34 HYDROSTATICS AND STABILITY CURVES

FOR CATAGORY "A",
 ASSUMED WIND VELOCITY IS
 28 M/sec. = 54 knots = 63 mph

FOR CATAGORY "B",
 ASSUMED WIND VELOCITY IS
 21 M/sec. = 41 knots = 50 mph



MIDSHIPS STATION,
 "X"= 0 VALUE FOR MODEL,
 DATUM "0" FOR LONGITUDINAL
 HYDROSTATICS



FOR Mldc CONDITION:
 238 SQ.FT. WINDAGE
 (22.13 M²)

FOR Mmoc CONDITION:
 243 SQ.FT. WINDAGE
 (22.57 M)



53 SQ.FT. SUBMERGED
 VERTICAL PLANE

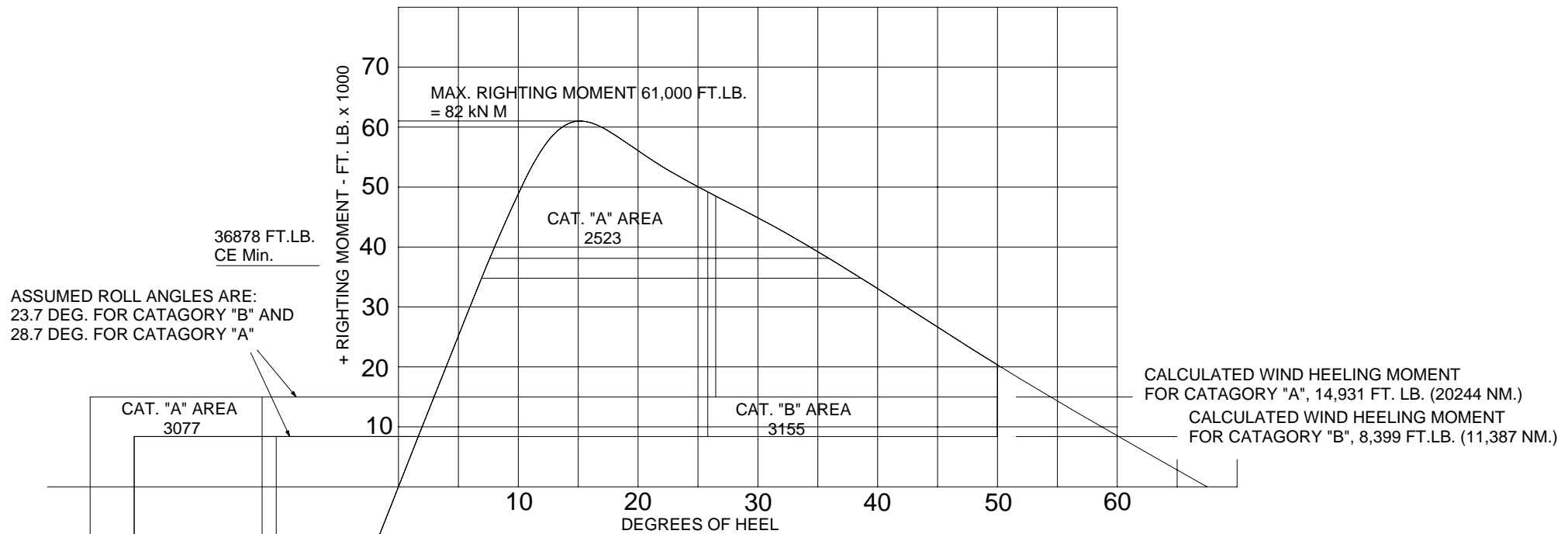
Mldc DRAFT 26"

Mmoc DRAFT 22"

Mldc 16,500 lb.
 Mmoc 12,200 lb.

DESIGN WATER
 LINE, "Z"=0 VALUE
 FOR MODEL,
 DATUM "0" FOR
 VERTICAL HYDROSTATICS

PDQ MV34 HYDROSTATICS AND STABILITY CURVES



RIGHTING MOMENTS FOR 12,200 lb. DISPLACEMENT, (CE Mmoc CONDITION)

FOR CE APPROVALS, RIGHT SIDE AREAS MUST EXCEED LEFT SIDE,
VESSEL MEETS THE REQUIREMENT FOR "B" IN THIS CONDITION

FOR CATAGORY "A",
ASSUMED WIND VELOCITY IS
28 M/sec. = 54 knots = 63 mph

FOR CATAGORY "B",
ASSUMED WIND VELOCITY IS
21 M/sec. = 41 knots = 50 mph