

# SMALL VESSEL CONFIRMATION OF LEVEL FLOTATION CERTIFICATE

<u>Vessel Name:</u> <b>MICHELLE</b>	<u>Vessel No.</u> <b>DTM 2458 B</b>
<u>Description:</u> <b>BUTT CAT 6.7 M SPORT FISHER</b>	
<u>Build Details</u>	<u>Principal Dimensions</u>
Builder: <b>BUTT CAT</b> Date of Build: <b>2005</b> Lightweight : <b>1 088 kg</b>	Length Overall : <b>6,7 m</b> Length of deck : <b>5.8 m</b> Breadth Overall : <b>2.5 m</b> Breadth of deck 1/6 from transom : <b>1,9 m</b> Depth of deck 1/6 from transom : <b>0,35 m</b> Engines : <b>2 X 70 Hp Suzuki 4 Stroke</b> <b>161 kg each = 322 kg</b> Crew capacity : <b>8 persons X 75 kg = 600kg</b> Buoyancy : <b>Closed cell polyurethane foam</b> <b>100%</b>



CONFIRMATION OF LEVEL FLOTATION IF THE VESSEL IS CAPSIZED

1. Total weight in aft 1/3 of boat

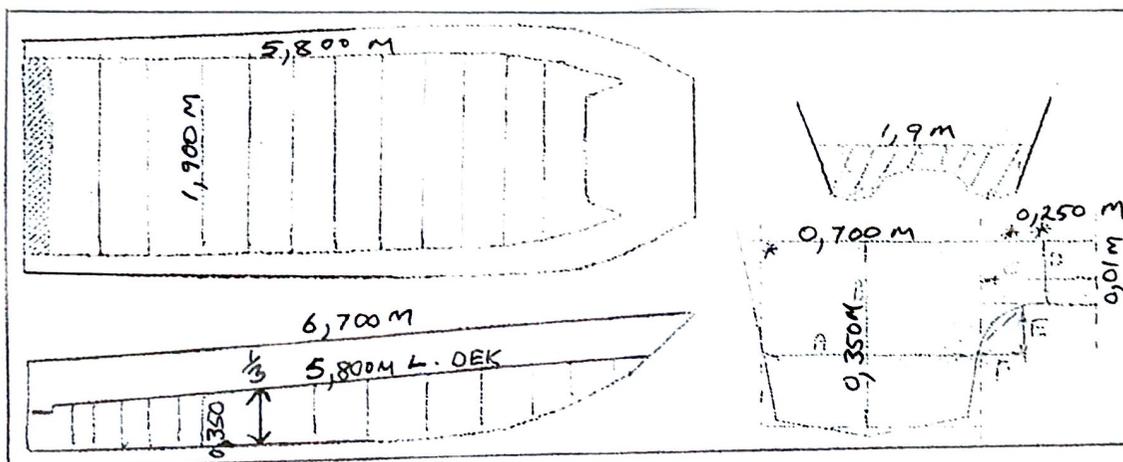
Boat lightweight 1 088 kg ÷ 3 = 327 kg  
 Engine weight 2 x 161 kg = 322 kg  
 Crew weight 8 x 75 kg = 600 kg ÷ 3 = 200 kg

2. Volume of built-in buoyancy required in the aft 1/3

DESCRIPTION	WEIGHT (KG)	K-FACTOR	WEIGHT (KG)
Lightweight of aft 1/3 of boat (GRP)	327	30%	99
Add : Engine weight (s)	322	85%	274
Add : Weight of 1/3 of crew	200	100%	200
<b>TOTAL WEIGHT OF REQUIRED IN AFT 1/3 OF BOAT; (KG)</b>			<b>573</b>

3. Calculation of buoyancy in aft 1/3 of boat

Length of boat deck = 5.8 meters  
 1/3 of length of deck = 1.93 meters  
 1/3 depth of deck (pontoons) = 0.35 meters  
 Depth of foam under tunnel = 0.01 meters



1/3 of pontoons

$0,6 \times 1,93 \times 0,700 \times 0,35 = 280 \text{ kg} \times 2 = 560 \text{ kg}$

1/3 Above tunnel

$1,33 \times 0,25 \times 0,01 = 30 \text{ kg} \times 2 = 60 \text{ kg}$

THERE ARE NO HATCHES IN AFT 1/3 OF VESSEL AND FOAM = 100%

TOTAL BUOYANCY IN AFT 1/3 OF VESSEL = 620 KG

REQUIRED = 573 KG THEREFORE : THE VOLUME OF BUILT-IN-BUOYANCY PROVIDED IS SUFFICIENT TO KEEP THE VESSEL AFLOAT WHEN FULLY FLOODED, SWAMPED OR CAPSIZED, AND WHEN CAPSIZED IN SUCH A MANNER AS TO PROVIDE A LEVEL PLATFORM ONTO WHICH THE FULL COMPLEMENT OF THE CREW CAN BE SECURED.

WM STEENKAMP  
 OWNER  
 DATE 2015-09-18

J GROBLER  
 SURVEYOR  
 DATE : 2015-09-18