

# 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> BUTT CAT 6.7 M SPORT FISHER			
<u>Build Details</u>		<u>Principal Dimensions</u>	
Builder:	BUTT CAT	Length Overall :	6,7 m
Date of Build:	2005	Length of deck :	5.8 m
Lightweight :	1 088 kg	Breadth Overall :	2.5 m
		Breadth of deck 1/6 from transom :	1.9 m
		Depth of deck 1/6 from transom :	0,35 m
		Engines :	2 X 70 Hp Suzuki 4 Stroke 161 kg each = 322 kg
		Crew capacity :	8 persons X 75 kg = 600kg
		Buoyancy :	Closed cell polyurethane foam 100%



## CONFIRMATION OF LEVEL FLOTATION IF THE VESSEL IS CAPSIZED

### 1. Total weight in aft 1/3 of boat

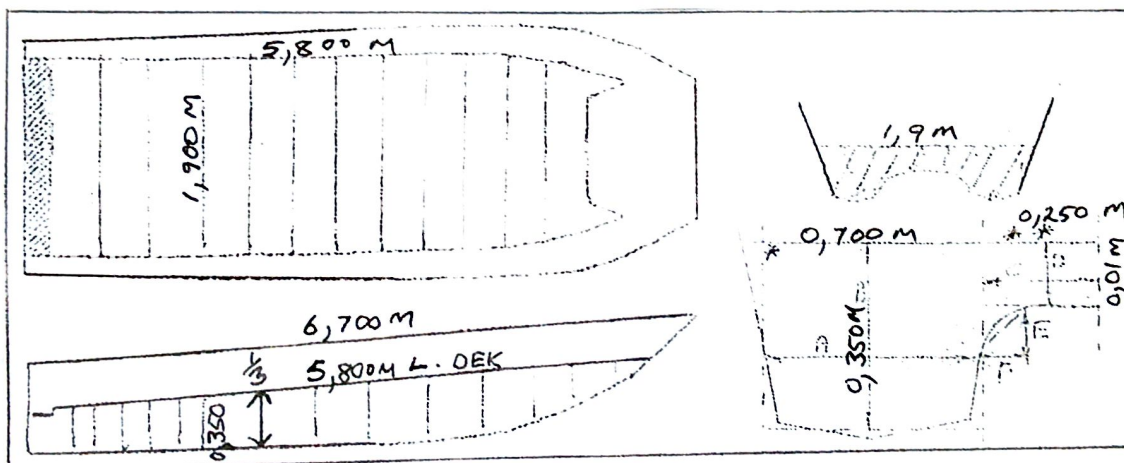
Boat lightweight 1 088 kg ÷ 3 = 327 kg  
 Engine weight 2 x 161 kg = 322 kg  
 Crew weight 8 x 75 kg = 600 kg ÷ 3 = 200 kg

### 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