Worksheet 1: Maritime Planning

INCIDENT

Search Target (description) :	asdfasdfa
LKP (lat/long) :	6'55'25 LS , 106'58'53 BT
@Time (UTC) :	201108240614G
Hours of Drift (a) :	10.0

SEA CURRENT

Sea / tidal current/knots	2.0 (T) 4.0 knots
Sea Current vector/distance:	2.0 (T) 4.0 knots 10.0 (a)hrs = 40.0 nm

SURFACE WIND and CALCULATION OF WIND CURRENT

Surface winds/knots	3.0 (T) 5.0 knots	Wind Current Divergence = Reciprocal Surface Wind - 30 for LKP greater than 10 South Latitude	
Reciprocal of Surface Winds/Knots (b)	3.0 (T) 5.0 knots	- 30 T =	3.0 (T) 5.0 knots
Wind current vector: (use reciprocal bearing and divergence (Figure I-1)	10.0 (a)hours x 0.178 knots (Figure I-1) = 3.0 (T) 1.78 nm		

TARGET LEEWAY

Leeway Angles (divergence) (Table I.1 or I.2):	Reciprocal Surface Wind (b) 3.0 (T)	± 31.0 (T)
Leeway vector: (LW)	L W (L) 332.0 (T)	L W (R) 34.0(T)
Leeway speed: (knots) = (Multiplier x Wind Speed) ± Modifier (Table I.1 or I.2)	[0.013 Multiplier x 5.0 Wind Speed = 0.065] ± 0.27 Modifier = 0.335	
Leeway distance:	Leeway speed 0.335 x(a) 10.0 hrs 3.35 nm	

DRIFT ERROR

Distance (L)	44.71685 nm	Distance (R)	44.66295 nm
de (L):(12.5 to 33% of Distance L)	5.58960625 nm	de (R):(12.5 to 33% of Distance R)	5.58286875 nm

Distance Left/Right =	3.4507551 nm	De = $\frac{[de (L) + de (R) + Distance L/R]}{2}$	De = 7.311615

FIX ERRORS

Distress craft error (x): (Table J.1, J.2 or J.3)	0.1 nm
Search craft error (y): (Table J.1, J.2 or J.3)	0.1 nm

TOTAL ERROR (E)

Total probable error (E): $E=\sqrt{(De^2 + x^2 + y^2)}$	E = 7.3129826

SEARCH AREA

Safety factor (circle) (fs)	1.1
Search radius (E x fs)	8.04428086 nm
Search radius rounded up to whole figure:	9.0 nm
Sea Current vector/distance:	324.0 nm^2