Table 1: Names and descriptions of Leeway Drift Taxonomy Levels

Taxonomy Level Number	Level Name	Level Descriptions
Level 1	Governmental Response Mechanism / Organizations	• Reflects governmental response mechanisms that are triggered • Reflects behavioral differences in response units • Identifies expected behavioral characteristics of the drift target • Reflects an expectation of the amount and types of datum information that may be available
Level 2	Primary Source of the Leeway Target	• Identifies the primary source of the drift object • SAR targets originate from marine or aviation sources • Non-SAR targets originate from non-SAR sources
Level 3	Major Target Categories	• First level using specific drift object characteristics • Identifies broad categories of intended object use • Highest level that could possibly have leeway information
Level 4	Target Sub-Categories	• Identifies major divisions within drift object categories • First level for which the size or shape of the drift object determines its placement in the taxonomy • First level that considers the ratio of drift object surface area above and below the waterline • The majority of current target leeway drift information will be found at this level
Level 5	Primary Target Leeway Descriptor	• Identifies the drift object feature that exerts the greatest influence on the drift object leeway ratio (typically above or below the waterline) • Swamping or capsizing are dominant leeway characteristics
Level 6	Secondary Target Leeway Descriptor	• Identifies the drift object feature that exerts the second strongest influence on the drift object leeway ratio (typically the above or below the waterline features opposite the primary feature)
Level 7	External Modifiers	• Identifies those items that can affect an object's leeway drift that have not been addressed in earlier levels • These items are usually controlled by the occupants onboard leeway targets • These items effectively modify the primary and secondary influences identified in Levels 5 and 6.

Figure 1: Outline of the first three Leeway Drift Taxonomy levels.

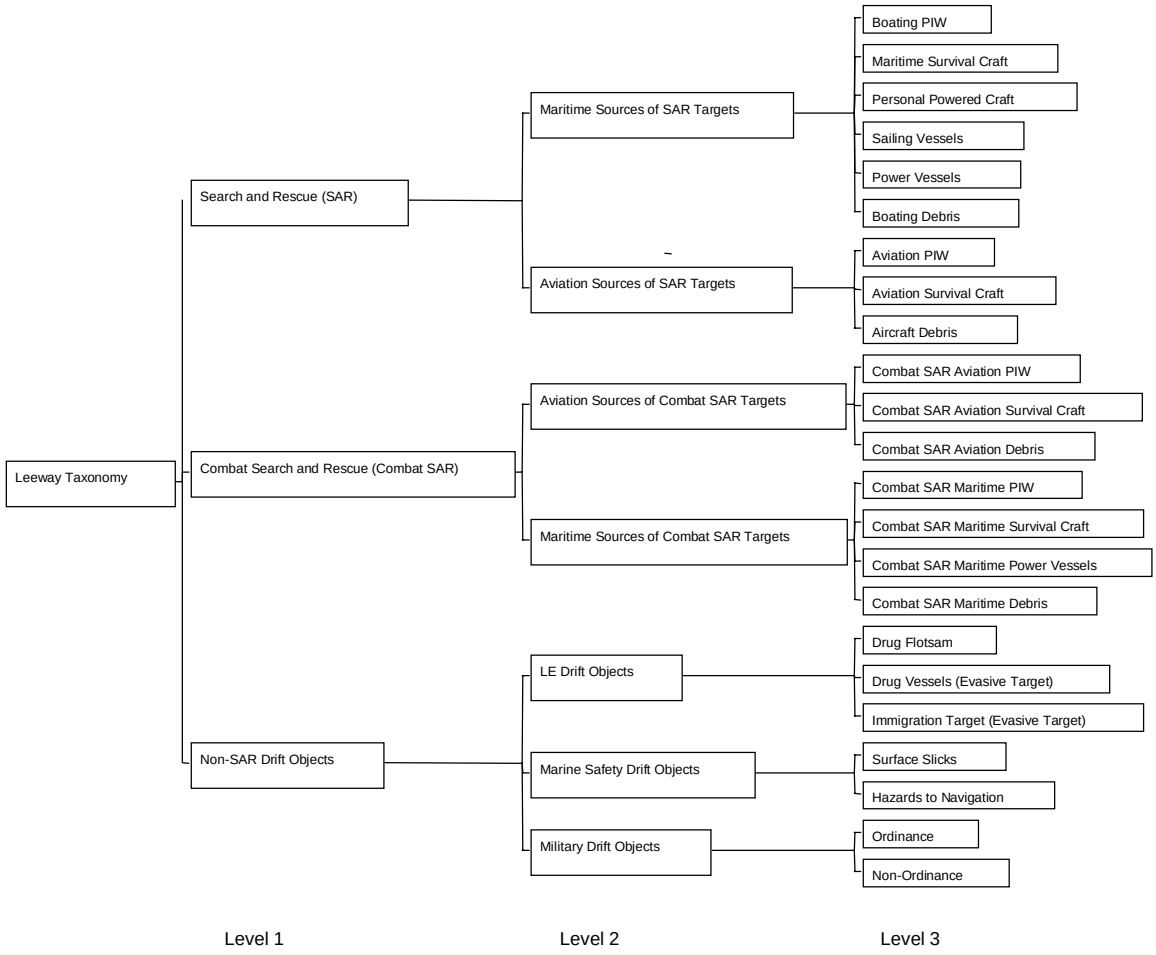

Table 2

Leeway Speed and Direction Values for Drift Objects (kts)

Leeway		Target	Class	Leeway Speed		Divergence
Category	Sub Categories	Primary Leeway Descriptors	Secondary Leeway Descriptors	Multiplier	Modifier (kts)	Angle (deg)
				0.011	0.07	30
PIW	Vertical			0.005	0.07	18
	Sitting			0.012	0.00	18
	Horizontal	Survival Suit		0.014	0.10	30
		Scuba Suit		0.007	0.08	30
		Deceased		0.015	0.08	30
Survival Craft	Maritime Life Rafts	No Ballast Systems		0.042	0.03	28
			no canopy, no drogue	0.057	0.21	24
			no canopy, w/ drogue	0.044	-0.20	28
			canopy, no drogue	0.037	0.11	24
			canopy, w/ drogue	0.030	0.00	28
		Shallow Ballast Systems and Canopy		0.029	0.00	22
			no drogue	0.032	-0.02	22
			with drogue	0.025	0.01	22
			Capsized	0.017	-0.10	8
		Deep Ballast Systems & Canopies	(See Table 2A for Levels 4-6)	0.030	0.02	13
	Other Maritime Survival Craft	life capsule		0.038	-0.08	22
		USCG Sea Rescue Kit		0.025	-0.04	7
	Aviation Life Rafts	no ballast, w/canopy	4-6 person, w/o drogue	0.037	0.11	24
		Evac/ Slide	46-person	0.028	-0.01	15
Person-Powered Craft	Sea Kayak	W/ Person on aft deck		0.011	0.24	15
	Surf board	w/ person		0.020	0.00	15
	Windsurfer	w/ person and mast	& sail in water	0.023	0.10	12
Sailing Vessels	Mono-hull	Full Keel	Deep Draft	0.030	0.00	48
		Fin Keel	Shoal Draft	0.040	0.00	48
Power Vessels	Skiffs	Flat Bottom	Boston whaler	0.034	0.04	22
		V-hull	Std. Config.	0.030	0.08	15
			Swamped	0.017	0.00	15
	Sport Boats	Cuddy Cabin	Modified V-hull	0.069	-0.08	19
	Sport Fisher	Center Console	Open cockpit	0.060	-0.09	22
Power Vessels	Commercial Fishing Vessels			0.037	0.02	48
		Sampans		0.040	0.00	48
		Side-stern Trawler		0.042	0.00	48
		Longliners		0.037	0.00	48
		Junk		0.027	0.10	48
		Gill-netter	w/rear reel	0.040	0.01	33
	Coastal Freighter			0.028	0.00	48
Boating Debris	F/V debris			0.020	0.00	10
	Bait/wharf box holds a cubic meter of ice			0.013	0.27	31
		lightly loaded		0.026	0.18	15
		full loaded		0.016	0.16	33
Misc. SAR Objects	Immigration Vessel	Cuban refugee raft	w/o sail	0.015	0.17	17
			w/ sail	0.079	-0.17	33
	Sewage Floatables	Tampon Applicators		0.018	0.00	5
	Medical Waste	Vials & Syringes		0.028	0.00	10

Sub -Table 2A
Sub-table for Maritime Life Rafts with Deep Ballast Systems and Canopies (kts)

Leeway		Target	Class	Leeway Speed		Divergence
Secondary Leeway Descriptors	Capacity Modifier	Drogue Modifier	Loading Modifier	Multiplier	Modifier (kts)	Angle (deg)
Maritime Life Rafts with Deep Ballast Systems and Canopies	4-6 person capacity			0.029	0.04	15
		without drogue		0.038	-0.04	15
			light loading	0.038	-0.04	15
			heavy loading	0.036	-0.03	15
		with drogue		0.018	0.03	12
			light loading	0.016	0.05	24
			heavy loading	0.021	0.00	20
	15-25 person capacity			0.036	-0.09	10
		w/o drogue	light loading	0.039	-0.06	9
		with drogue	heavy loading	0.031	-0.07	12 9
	Capsized			0.009	0.00	16 12
	Swamped			0.010	-0.04	11 8