

## APPENDIX : WEAPONS OF CONTROLLABLE SUBMARINES

Those tables show important informations about use of weapons of controllable submarines in S.C.S. - Dangerous Waters. It can help you to learn how to fire a weapon and at which speed and depth.

In the tables, range is in nautical miles (1852 m), speed in knots, depth and altitude are indicated in meters by default but sometimes presented in feet. The warhead of each weapon is in Kg.

For each weapon, you can see if it a missile, a torpedo or both, a missile dropping a torpedo in the water. The letter 'A' indicates a passive sonar, 'P' a passive sonar and 'Wire' a wire guidance for the torpedo.

The submarines columns show the submarine class carrying the weapon and at which speed and depth it can fire it.

The target column indicate the type of target :

- L : land target only,
- S : surface target only,
- SS : sub-surface target only.
- N : no target.

For example, 'SS (S)' indicates that the weapon is used to fire on submarines but it can alternatively be used against surface targets. 'SS + S' indicates that you can use the weapon against both surface and sub-surface targets.

When a word is in parentheses on the first column, it indicates that the weapon is based on this model. For example, 'Mine (53-65K)' indicates that this mine torpedo is based on the '53-65K' torpedo.

In the submarine name's column, if a country name is in parentheses, it indicates that only this country has submarines able to use the weapon.

When the '\*' character follows a words, it indicates that the source of this informations is external, not a Sonalyst. information.

**First, you can see the weapons for russian submarines.**

In the submarine name's column, 'export' indicates that the weapon is only available on exported versions of the submarine, not for russian submarine.

For the Kilo class submarine, only torpedos launched by the tube 5 or 6 can be wire guided. On the Akula class submarine, torpedos can be wire guided only using internal tubes. Note that only tubes 5 and 6 of the kilo class can allow the launching of the UUV which have a 30 minutes autonomy. If you start a turn of more than 90° you will cut the guidance of the UUV.

WEAPONS							SUBMARINES		
Name	Target	Range (nm)	Speed (knots)	Depth (m) or altitude	Warhead (Kg)	Type	Names	Speed (knots)	Depth (m)
<b>3M-14 E LAM</b>	L	162	467 *		400	Missile	Kilo (368 export)	<= 6	<= 100
<b>3M-54 E ASCM</b>	S	119	Subsonic *		200	Missile + torpedo	Kilo (368 export)	<= 6	<= 100
<b>53</b>	SS (S)	10	40	457 (1 500 ft)	205	A/P/Wire torpedo	Akula (Russia)		<= 250
<b>53-65 K</b>	S (SS)	10	55	300 (657 ft)	300	A Torpedo	Akula (Russia)		<= 250
<b>53-65 KE</b>	S (SS)	7,5	55	300 (657 ft)	300	Torpedo	Kilo		<= 250
<b>65</b>	S + SS	27	50	914 (3 000 ft)	900	A/P torpedo	Akula (Russia)		<= 250
<b>91 RE1 ASW</b>	SS	19 + 7	65		150	Missile + torpedo	Kilo (368 export)	<= 6	<= 100
<b>Mine (53-65 K)</b>	S + SS	10		4 < d <150	450	P Torpedo	Akula (Russia) Kilo		

WEAPONS						SUBMARINES			
<b>SA-N-5 Grail</b>	A	2,4	972	2 377 (7 800 ft)		Missile	Kilo (877 export)		Surface
<b>SA-N-8 Gremlin</b>	A	2,5		3 505	2	Missile	Akula (Russia)		Surface
<b>SET-53 ME</b>	S + SS	7,5	29	365 (1 200 ft)		A/P torpedo	Kilo (export)		
<b>SS-N-15 Starfish</b>	SS	19 + 4,3			100	Missile + torpedo	Kilo	<= 6	49 < d < 149
<b>SS-N-16 Stallion</b>	SS	54 + 4,3		500 (1 640 ft)	100	Missile + torpedo	Akula (Russia)	<= 6	49 < d < 349
<b>SS-N-27 ASM</b>	S	119			200	Missile	Akula (Russia)	<= 6	<= 100
<b>SS-N-27 ASW</b>	SS	19 + 7	65	600	150	Missile + torpedo	Akula (Russia)	<= 6	<= 100
<b>SS-N-27 LAM</b>	L	162			400	Missile	Akula (Russia)	<= 6	<= 100
<b>TEST-71 ME-NK</b>	S + SS	10,8	40		205	A/P/Wire torpedo	Kilo (636 export)		
<b>TEST-71 M</b> <b>TEST-71 ME</b>	SS	10,8	40	400 (1 312 ft)	205	A/P/Wire torpedo	Kilo		
<b>USET-80</b>	S + SS	10,7	50	500 (1 641 ft)		A/P torpedo	Kilo (Russia)		
<b>VA-111 Shkval</b>	S + SS	0,9 < r < 6	200		210	A Torpedo	Akula (Russia)		
<b>UUV</b>	N							<= 4	

**Here you can see the weapons for americans submarines.**

The UUV have an autonomy of 30 minutes. If you start a turn of more than 90° you will cut the guidance of the UUV.

WEAPONS							SUBMARINES		
Name	Target	Range (nm)	Speed (knots)	Depth (m) or altitude	Warhead (Kg)	Type	Names	Speed (knots)	Depth (m)
<b>Mk 48 ADCAP</b>	SS + S	27	55	730 (2 394 ft)		A/P/Wire torpedo	Seawolf (U.S.A.) 688(I) (U.S.A.)		
<b>TLAM</b>	L	1400					Seawolf (U.S.A.) 688(I) (U.S.A.)	<= 6	<= 46 (<= 150 ft)
<b>TASM</b>	S	250			500		Seawolf (U.S.A.) 688(I) (U.S.A.)	<= 6	<= 46 (<= 150 ft)
<b>Harpoon</b>	S	70					Seawolf (U.S.A.) 688(I) (U.S.A.)	<= 6	<= 46 (<= 150 ft)
<b>Mk 67 SLMM (Mk37)</b>	SS +S	11,5	26		235		Seawolf (U.S.A.) 688(I) (U.S.A.)		
<b>UUV</b>	N							<= 4	

More informations on :

- <http://www.wonderland.org.nz/rnss.htm>