

Office Memorandum • UNITED STATES GOVERNMENT

TO : Acting Chief, Industrial Division, ORR

DATE: 12 November 1959

FROM : Chief, Shipbuilding Branch, ORR

SUBJECT: OSI Comparison of USSR and US Nuclear Submarine Construction

25X1A9a

1. The attached table (Table 1) received from [REDACTED] in OSI indicates their thinking regarding the maximum capability of the USSR to construct nuclear submarines. Their estimates indicate that the Soviet completions per shipyard per year are only slightly higher than the actual and planned completions per shipyard per year in the US.

2. In this connection it is interesting to compare on the same basis the Soviet and US conventionally propelled submarine construction in recent years; Table 2. This shows that on a per shipyard per year basis the Soviet capability far exceeded the US.

3. Comparison of capability by completions per shipyard per year does not reflect a number of factors which influence the number of submarines built in each country, but it is believed that the general order of magnitude does indicate a capability and a priority assigned the submarine program. On the basis of Table 2, it can thus be estimated that the future completions of nuclear submarines by the USSR will far exceed the OSI estimate.

25X1A9a
[REDACTED]

Attachments:

Table 1 (1)

Table 2 (1)

~~SECRET~~

~~SECRET~~

October 1959

NUCLEAR SUBMARINES

COMPARISON OF MAXIMUM ESTIMATED SOVIET PRODUCTION CAPABILITY WITH ACTUAL AND PLANNED U. S. PROGRAM (1952-1964)

YEAR		52	53	54	55	56	57	58	59	60	61	62	63	64
USSR (estimated)	Submarines*	0	0	0	0	0	0	1	2	4	8	13	19	25
	Number of shipyards in program	0	0	0	0	1	2	2	3	3	3	3	3	3
	Submarines commissioned per year, divided by number of shipyards in program	0	0	0	0	0	0	1/2	1/3	2/3	4/3	5/3	6/3	6/3
U. S. (from official sources)	Submarines*	0	0	1	1	1	2	2	5	10	16	20	27	33
	Number of shipyards in program	1	1	1	1	3	5	5	6	6	6	6	6	6
	Submarines commissioned per year, divided by number of shipyards in program	0	0	1/1	0	0	1/5	0	3/6	5/6	6/6	4/6	7/6	6/6

*Cumulative totals for nuclear powered submarines of all types, in commission in the Fleet.

- NOTES: 1. The principal limiting factor is considered to be reactor ^{SYSTEM} construction capability, although capability to build the very large, deep diving submarine hulls which are required also enters.
2. This estimate reflects our belief that the USSR will concentrate nuclear submarine construction in fewer shipyards than the U.S. with a resulting higher production rate per shipyard.
3. We estimate that the USSR will build nuclear-powered submarines of the following types: torpedo-armed missile-armed, and a few "peaceful" types (cargo or oceanographic). While it is extremely difficult to estimate the numbers of each type which will be built, we tentatively estimate 14, 9, and 2 respectively by 1964. The "peaceful" types could appear during 1960-61.

~~SECRET~~

Conventional Submarines

Table 2.

	1950	51	52	53	54	55	56	57	58	59
USSR Submarines*	1	7	25	52	107	191	267	295	298	303
Number of Slipways in Program	1	2	3	4	5	5	4	4	1	1
Submarines completed per year divided by number of slipways in the program.	1/1	6/2	18/3	27/4	55/5	84/5	76/5	28/4	3/1	5/1
	<u>1</u>	<u>3</u>	<u>6</u>	<u>6³/4</u>	<u>11</u>	<u>17</u>	<u>15¹/5</u>	<u>7</u>	<u>3</u>	<u>5</u>
U.S. Submarines*	-	1	8	11	12	12	13	14	17	20
Number of Slipways in Program	-	1	3	2	1	-	1	1	3	3
Submarines completed per year divided by number of slipways in the program.	-	1/1	7/3	3/2	1/1	-	1/1	1/1	3/3	3/3
	-	<u>1</u>	<u>2¹/3</u>	<u>1¹/2</u>	<u>1</u>	-	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>

* Cumulative Total