INFO	RMATION REPORT	NFORMATION REPOR
2893	CENTRAL INTELLIGE	· · · · · · · · · · · · · · · · · · ·
COUNTRY	USSR	REPORT NO.
SUBJECT	Developments in the Soviet Missile and Nuclear Weapons Programs	DATE DISTR. 12 March 1963
		NO. PAGES 2
DATE OF	October - December 1961	Ret Rink
PLACE & DATE ACQ.	USSR	FIELD REPORT NO.
and the second division of the second divisio	HIS IS UNEVALUATED INFORMATION. SOURCE GRADINGS	
•	CHICKAD	E E
	APPROVED FOR	RELEASE
•	1/16/2006	
. ·	· ·	
. •	HR 70-14	
	Missile Developments	
	1. As of fall 1961, new antitank	guided missiles "Shmel" and
· .	"Falanga" were joining the armory of Artillery (PTRA - protivotankovaya ra firing tests these missiles have show	the Soviet Antitank Missile ketnaya artilleriya). At
	· · · · · · · · · · · · · · · · · · ·	

## SECRET



2. Soviet missile designer Vladimir Nikolayevich Chelomey has been moved from Moscow to Fili with his laboratories and his design bureau. Several blocks of buildings have been built for him next to the Voroshilov Sanatorium, not far from the Moscow River. He is still concerned with the "krylatka" missile.<sup>1</sup>

3. Next to the City Children<sup>#</sup>'s Hospital on Bolshaya Polyanka ulitsa (street) in Moscow there is a secret plant "belonging to" Marshal of the Soviet Union Kirill S. Moskalenko /i.e., Marshal Biryuzov/. The plant is concerned with optics and guidance equipment and has The director of the plant is designer Nudelman and HIS deputy is Kozlov. The consultantchief designer is Tokarev.

4. The R-ll missile with an HE warhead used to cost 800,000 old rubles, i.e., 80,000 new rubles. As of December 1961, following the implementation of mass production and the perfection of certain processes used in the production of this missile, the R-ll cost 60,000 rubles per missile. With an atomic warhead, this missile costs from five to ten times as much, depending on the yield.

## Nuclear Weapons Developments

No.

5. As of December 1961, the Soviets had mastered the process of producing atomic warheads with a yield of 1.5 - 2 kilotons. Such warheads can be used for either missiles or artillery shells (anaryad). It is considered that a warhead with a one-kiloton yield is not needed.<sup>2</sup>

6. In the testing of 50-megaton bombs, a completely unexpected result was an explosion equal to the force of an 80-megaton bomb.<sup>3</sup> The Soviets suppose that some sort of chemical changes took place in the charge after it was prepared. They also suppose that similar bombs of 100-megaton force may be higher than rated and may give explosions equivalent to 150-160 megatons.

## Comments:

- 1. Cf. paragraph 11 of for earlier for mation on Chelomey from this source.
- 2. Cf. paragraph 5 of for source's earlier information on warhead yields.
- 3. The U.S. estimate of the yield of the 27 October 1961 Soviet test is 58 megatons.

-2-

