## Nuclear Weapons Tests

1. As of September 1961, Eng. Col. Gen. Pyrskiy, one of two deputies to Chief Marshal of Artillery S. S. Varentsov and a specialist in nuclear weapons, was on Novaya Zemlya to direct the nuclear weapons tests going on there. He was not subordinate to Varentsov during this assignment. Pyrskiy was formerly commander of artillery of the North Caucasus Military District. There are both a huge
missile launching base and a missile testing rangehead on Novaya Zemlya equipped to launch R-12 and R-14 missiles, not R-11 missiles; both the launching base and the rangehead have nuclear warheads. In September 1961, nuclear testing was also going on in Central Asia, and Lt. Gen. Semenov, second deputy to Chief Marshal of Artillery Varentsov, was there in connection with the tests.

2. In early September 1961, a nuclear detonation with a yield of 16,000 kilograms (16 kt) was carried out at Kapustin Yar. Although yields of 10, 15 and more kilotons had been achieved previously, this was the first detonation yielding 16 kt. Chief Marshal of Artillery Varentsov was at Kapustin Yar for several days at the time of this test.

3. This warhead was carried on an R-12 missile launched from Kapustin Yar toward an impact area in Central Asia. Detonation was a high air burst, at the apogee of the missile's trajectory, which is generally one-tenth of the range in ballistic theory. An R-12 missile was first launched with a conventional warhead to determine lateral and range errors; lateral dispersion was 160 meters. Range error is not known. A nuclear-armed missile was then launched on the same trajectory.

4. Soviet testing practice is first to fire a missile against a selected target with a conventional warhead and then install a nuclear warhead on the same type of missile and fire at the same target.

5. The R-12 missile has been adopted as standard equipment and is in serial (seriynoye) production. It has a nuclear range of 2,500 km. The R-14 is being prepared for serial production but has not been produced in quantity (massovoye) as yet. Its nuclear range is 4,500 km. Conventional warhead ranges for R-12 and R-14 missiles are probably about twice their respective nuclear ranges, as that is the usual ratio with Soviet missiles.
Deployment of Missiles

6. In addition to Novaya Zemlya, there are also missile bases in the Norilsk area, the Vorkuta area, and in Franz Joseph Land; these bases have nuclear warheads. Extensive underground shelters and fortifications have been built around Vorkuta. In the south there are missile bases with nuclear warheads in the Krasnovodsk and Kirovabad areas, for use against Iran and Pakistan. The Soviet deployment concept is to disperse and avoid concentrations of bases.

7. A brigade of mixed battalions (divizion) of R-11 and R-12 missiles is located at Kremenchug for training purposes; there is a missile school there.

Anti-Missile Development

8. Anti-ballistic missile development is being carried out by a large, special scientific research institute in Moscow and one experimental battalion (divizion) at a testing site.

Miscellany

9. The Chief Artillery Directorate (GAU) has been renamed the Chief Missile and Artillery Directorate (GRAU).


11. A prominent and competent Soviet missile designer named Vladimir Nikolayevich Chelomey, who is 43 or 44 years old, has two laboratories in Moscow. Khrushchev's son Sergey Nikitovich, an engineer, works in one of these laboratories. Chelomey developed the P-5 (krylatka) for use by ground forces, and is improving its use on submarines. The velocity of this missile is 500 m/sec.

12. There is a shortage of vodka in Moscow and Leningrad because alcohol is being stored as a strategic reserve for missiles.
Headquarters Comments:

1. This is probably Col. Gen. of Artillery Ivan Mikhaylovich Pyrskiy.

2. The Directory of the Academy of Sciences of the USSR for 1961 lists Vladimir Nikolayevich Lavaymvy as having been born on 30 June 1914, and having joined the Academy of Sciences on 20 June 1958, where he is associated with the Department of Technical Sciences.

3. For earlier reports from this source on the P-5 and SP-5 cruise missiles.