

**The original documents are located in Box 24, folder “SALT” of the Michael Raoul-Duval Papers at the Gerald R. Ford Presidential Library.**


### **Copyright Notice**

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted material. Michael Raoul-Duval donated to the United States of America his copyrights in all of his unpublished writings in National Archives collections. Works prepared by U.S. Government employees as part of their official duties are in the public domain. The copyrights to materials written by other individuals or organizations are presumed to remain with them. If you think any of the information displayed in the PDF is subject to a valid copyright claim, please contact the Gerald R. Ford Presidential Library.

Some items in this folder were not digitized because it contains copyrighted materials. Please contact the Gerald R. Ford Presidential Library for access to these materials.

THE WHITE HOUSE  
WASHINGTON

As requested-

  
Coleman Andrews



# Another SALT Violation Spotted

Deployment of SS-20 nuclear missiles to Kamchatka held counter to agreement because of doubled range estimate

By Clarence A. Robinson, Jr.

**Washington**—Soviet deployment of SS-20 nuclear-armed ballistic missiles in silos on Kamchatka Peninsula and in other areas of the USSR appears to U. S. officials to be a further violation of the interim offensive strategic arms agreement, in the light of recent U. S. estimates more than doubling the range capability of the SS-20.

The SS-20 deployment brings the total number of ICBMs now deployed by the Soviets to more than the 1,618 launchers permitted under the accord, if the silo-based SS-20s are counted as operational ICBMs.

A debate is in progress among U. S. intelligence officials over whether the SS-20s in silos are operational or deployed for test purposes. The Kamchatka region in the past has been claimed by the Soviets as a test area, and they used that argument earlier when the U. S. complained of operation of a large phased-array anti-ballistic missile radar at that location (AW&ST Dec. 8, 1975, p. 14). "Coupled with other developments in the area, the pattern clearly indicates that the weapons are operational and not test vehicles," a senior U. S. official said.

Continued disclosure of Soviet missile deployments, some in violation of the SALT-1 agreement, and U. S. reaction to them, last week included:

- Limited deployment by the Soviets of a land-based mobile version of the SS-20 on the Kamchatka Peninsula. The action does not violate the SALT-1 agreement, although the U. S. unilaterally declared earlier that such deployment would not be consistent with the aims of the treaty as it understood them.

- Evidence that the SS-20 has a new lightweight warhead that extends its range significantly and that both the SS-20 and the SS-X-16, from which it is de-

rived, are equipped with a post-boost control system.

- Admission by the State Dept. that the Soviets did in fact violate the SALT-1 agreement by deploying an excess number of submarine-launched ballistic missiles, as first reported by AVIATION WEEK & SPACE TECHNOLOGY (May 24, p. 20).

- Decision by the Senate Armed Services arms control subcommittee to hold hearings by mid-June on the admitted Soviet SALT violations and other allegations.

- Disclosure of the details of one of the secret protocol agreements appended to the SALT-1 treaty which before last week had been disclosed only to certain key congressional committees. The protocol allowed the Soviets four months to dismantle their older, silo-based missiles.

The SS-20 missile uses the first two stages of the SS-X-16. Until recently, U. S. officials believed the SS-20's range was about 1,500 naut. mi. and the weapon was classified in the intermediate range ballistic missile category.

That range estimate now has been increased to about 3,100 naut. mi. by some U. S. intelligence officials, while others estimate the missile has a range in excess

of 4,000 naut. mi. when carrying a new, smaller nuclear warhead designed for it. The new warhead is believed in the yield range of the U. S. Poseidon missile warhead—about 50-75 kilotons with a weight of about 300 lb.

Earlier versions of the SS-20 are armed with a larger, 1.5-megaton warhead, which weighs about 1,000 lb., restricting the missile's range.

The range agreed to by the U. S. and USSR to determine whether a ballistic missile is intercontinental or intermediate range is 5,500 km., the shortest distance between the two countries. The 3,100-naut. mi. range is equal almost exactly to 5,000 km., while the 4,000-naut. mi. plus estimate is equal to about 6,400 km., clearly in the ICBM category.

The Soviets' limited deployment of the SS-20 in the land-based mobile mode is not a violation of the SALT-1 agreement signed in 1972, but does violate a U. S. unilateral declaration on mobile ICBM deployment.

When the five-year interim agreement was signed in 1972, the U. S. unilaterally stated that mobile land-based ICBMs should be banned because of the verification difficulties they presented.

The Soviet Union held that since neither side had such systems, a freeze should not apply to them. It also opposed banning them in a future comprehensive agreement.

In a formal statement, the U. S. delegation declared the U. S. would consider deployment of land-based mobile ICBMs during the period of the agreement as inconsistent with its objectives.

Evidence available indicates deployment of the land-based mobile SS-20s in the Kamchatka area is in limited numbers, using mobile equipment associated with a mobile development of the SS-X-16.

Both the silo-based SS-20 and the mobile version can reach the West Coast of the U. S. with both the large and new, smaller warhead from Kamchatka, according to U. S. officials.

"What we have here is the classic pattern that the U. S. has experienced in all of the Soviet ICBM development and deployment," a U. S. official said.

"We detect what we believe to be deployment of a few ICBMs and discuss the evidence and keep a close eye on other developments until the evidence mounts and it becomes a clear-cut deployment as the numbers increase. That is usually followed by scurrying around at State Dept. and a Talmudic reading of the agreement to see if it is a violation," he noted.

While the SS-20 has the same post-boost control mechanism as the SS-X-16,

## NATO Ministers Wary of Warsaw Buildup

**Oslo**—North Atlantic Treaty Organization ministers voiced considerable concern here at the sustained growth in Warsaw Pact countries of military power beyond levels justified for defense purposes.

They also warned that if the growth continues in both the Soviet Union and its satellites it could lead to an arms race of dangerous dimensions. The warning came at the end of a two-day meeting of the North Atlantic Council.

U. S. Secretary of State Henry Kissinger reported to the council on the present state of strategic arms limitation talks (SALT-2), but he declined to be specific in public. He repeated that the issues between the U. S. and the Soviet Union remain types of weapons and methods of control and limitations.

Kissinger also said the U. S. now has the Soviet position paper on SALT-2 and "will reply to it in a matter of weeks." He said the issues "are relatively few in number but they are important."

Kissinger said he was concerned over the failure of the finance package between Lockheed Aircraft Corp. and the Canadian government on the P-3 Orion long-range patrol aircraft (AW&ST May 24, p. 21), since the U. S. favored the deal in view of its importance to the NATO alliance anti-submarine warfare capability. "We believe that a useful deal can be worked out with the Canadian government," he added.



revised estimate is accounted for by the new understanding of Soviet prices and costs. "Many changes have been made to our estimates of Soviet force levels and procurement programs, but the net effect is small, about 5% of the increase in the estimate."

"The remainder of the increase resulted from the addition of several less visible expenditures"—the cost of the preinduction military training program and outlays for heat and electricity for barracks and other facilities.

Estimated Soviet defense expenditures in rubles grew each year from 1970 and "increases have been evident" in all major resource categories:

- **Investment.** About one-third of total defense spending is for new weapons. During 1970-75, about 45% of total weapon procurement outlays was for strategic weapons, with 70% of that figure devoted to purchases of aircraft and missiles. "This reflects both the emphasis the Soviets are putting on modernizing their forces with such systems and the fact that these items are extremely costly."

- **Operations.** Military manpower accounted for a little less than half of the total operating outlays and about 20% of total defense expenditures. Maintaining the stocks of weapons and equipment required about 35% of operating costs.

- **Research, development, test and evaluation.** This is the hardest figure to evaluate because of lack of substantive information. The study determined that the majority of these funds was "probably" directed toward the development of strategic systems.

The CIA analysis also determined that a new cycle of strategic missile development and procurement began about 1970. "By then the major missile programs of the 60s were nearing completion and during the next two years outlays for strategic missile systems fell sharply."

The reductions were partly offset by "substantial increases" in spending for equipment maintenance, aircraft procurement and research, development, testing and evaluation. "Nonetheless, in 1971 and 1972, growth in total spending averaged less than 3%."

A new generation of strategic missile systems began entering production in 1973, and by 1975 these programs were in "full swing." By 1975, investment in intercontinental ballistic missiles was three times as large as the 1972 level, and total spending during 1973-1975 grew by 5-6% annually.

The study said the analysis had determined that new ruble prices of military hardware indicate that high-technology programs, "the most rapidly growing component of Soviet military expenditure," are much more costly to the Soviet than previously believed.

Expenditures for Soviet military forces show the same rising pattern during the five-year period as the increase in total

defense spending. "Outlays for the forces rose relatively slowly in 1970-72, but began to increase more rapidly in 1973 as the USSR began procuring a new generation of ICBMs."

The CIA analysis also determined that the massive Soviet defense effort is having a major impact on the Soviet Union's industrial output. "At present, Soviet defense is absorbing almost 20% of the output of Soviet industry, including a substantial percentage of the output in high-technology areas."

However, the study could not truly determine how Soviet leaders evaluate the size and economic burden of defense. "Public statements are often made which reflect concern on the part of some leaders about the sacrifices in economic growth and consumer satisfaction that follow from their defense priorities."

## Newest Delta Sub Pivotal In Latest SALT Violation

Washington—Soviet Union is conducting sea trials with four enlarged Delta 2-class submarines armed with 16 SS-N-8 submarine-launched ballistic missiles before dismantling older SS-7 or SS-8 intercontinental ballistic missile launchers as required by the present Strategic Arms Limitation Agreement.

The move raises the number of SLBMs deployed to above the 744 maximum level established for the USSR in the interim SALT 1 accord under which both the U. S. and Soviet Union now operate in the absence of a SALT-2 agreement.

U. S. observers have detected the SALT violation but are now unable to continue surveillance because the last Lockheed Big Bird close-look photo-reconnaissance satellite covering that area of the USSR decayed Apr. 1 after 118 days in orbit.

There is normally a two-to-three-month delay between decay and launch of another Big Bird satellite.

The four new Soviet Delta 2-class boats now at sea are larger than the 450-ft., 8,000-ton surface displacement Delta boats that have been operating with 12 SS-N-8 SLBMs. The SS-N-8 has a range of more than 4,300 naut. mi. with its nuclear warhead. The 12-launcher Delta boat was the largest submarine ever built by any

This concern, however, has not prevented steady increases in military programs. "Major defense programs have been generously supported even in periods of economic setbacks."

But steadily rising defense costs could become a "painful issue" for Soviet leadership with lagging economic growth. Other factors that could color future outlays include the leaders' view of foreign military threats, powerful institutional forces that support defense programs, progress in arms limitations negotiations and technological advances.

"While the implications for future programs of our new perception of the Soviet defense effort are not yet clear," the study said, "we believe that long-term growth in military spending will continue, albeit perhaps at a more moderate pace."

navy until the new 16-launcher Delta put to sea.

An even larger version of the Delta boat designed to carry more than the 16 SLBMs is under development.

Under the terms of SALT-1, the Soviets are limited to deployment of 744 SLBMs unless they first phase out older ICBMs to compensate for adding new SLBMs to the fleet. They are permitted to deploy up to a total of 950 SLBMs on 62 operational submarines by mid-1977 as replacements of 200 ICBMs.

When U. S. officials approached the Russians about the deployment of the additional Delta submarines without dismantling the older ICBM launchers, Soviet officials said that older ICBM silos have not been closed out because of "construction problems," according to one U. S. official, "and the U. S. seems now willing to wait and see just what the next move will be."

The sea trials of the new Delta 2 boats come as no real surprise, according to one senior U. S. official, who cited "alleged violations" in concealing SS-N-8 missiles and component assembly of Delta boats.

Late last year, the Soviets built a second way for launching Delta submarines at the Severomorsk shipyard, near Murmansk, while the number of covers to conceal construction facilities at that location increased greatly to prevent U. S. satellite observation (AW&ST Dec. 8, 1975, p. 12).

The first Delta boats went to sea in 1973 after the Soviets completed a production run of 34 nuclear-propelled SLBM-armed Yankee-class boats. The Delta replaces the Yankee.

U. S. officials said that 18 or 19 Delta

### Submarine Detection

Washington—Soviet Union is in an advanced stage of developing satellite-borne sensor systems that will permit detection and near real-time tracking of U. S. and North Atlantic Treaty Organization ballistic missile submarines.