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WINTER MANEUVERS OF SOVIET MISSILE UNITS: INCREASED EMPLOYMENT DESPITE CONTINUING RE-EQUIPMENT PROGRAM

Army Foreign Science and Technology Center
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This translation was accomplished from a xerox manuscript. The graphics were not reproducible. An attempt to obtain the original graphics yielded negative results. Thus, this document was published as is, in order to make it available on a timely basis.

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As can be ascertained from professional publications from the USSR and other communist nations, as well as from many pictures and reports released by TASS in the West, the missile units of the Soviet ground forces have participates in almost all large and small winter maneuvers of 1970/1971, despite the fact that they are undergoing a re-equipment program. The units in question are missile battalions equipped with FROG-7 tactical surface-to-surface missiles. One such battalion is included in the TO&E of each motorized infantry and each armored division. Press reports have indicated that each FROG-7 battalion is equipped with four launchers. The ground forces of the satellite nations have also been equipped with this weapons system recently (see No. 11/1970, page 616). Missile units equipped with the strategic surface-to-surface weapons system SCUD-B mounted in the 8-wheel launcher MAZ-543 are assigned to army or military district commands. Evaluation of press reports from both the East and the West leads to the conclusion that the wartime TO&E of each Soviet army contains a SCUD missile brigade, each of which contains 3-4 battalions with 3-4 launchers each. This weapons system has also been introduced in the other Warsaw Pact armed forces.

Although the most recent pictures released by the military press in the East have shown only the new weapons systems for propaganda purposes, the fact remains that the older weapons systems - such as FROG-3, FROG-4, SCUD-A and SCUD-B, all mounted on tracked vehicles - are still operational in both Soviet and satellite forces. Considerable time will still be required until the new generation of weapons has completely replaced the old. One definite change, which can be recognized, is the replacement of tracked vehicles with wheeled vehicles having greater cross-country capabilities as launchers for tactical/strategic surface-to-surface missiles.

Naturally, all pictures and reports released for internal and foreign use by the communist censors must be evaluated with great care to determine the true purpose for their release. Accordingly, we have indicated in the text accompanying the pictures which of them has been staged.

Despite this fact, the West is forced to keep abreast of technical developments and innovations, even in those cases where, under certain circumstances, the weapons systems are only prototypes undergoing field tests.

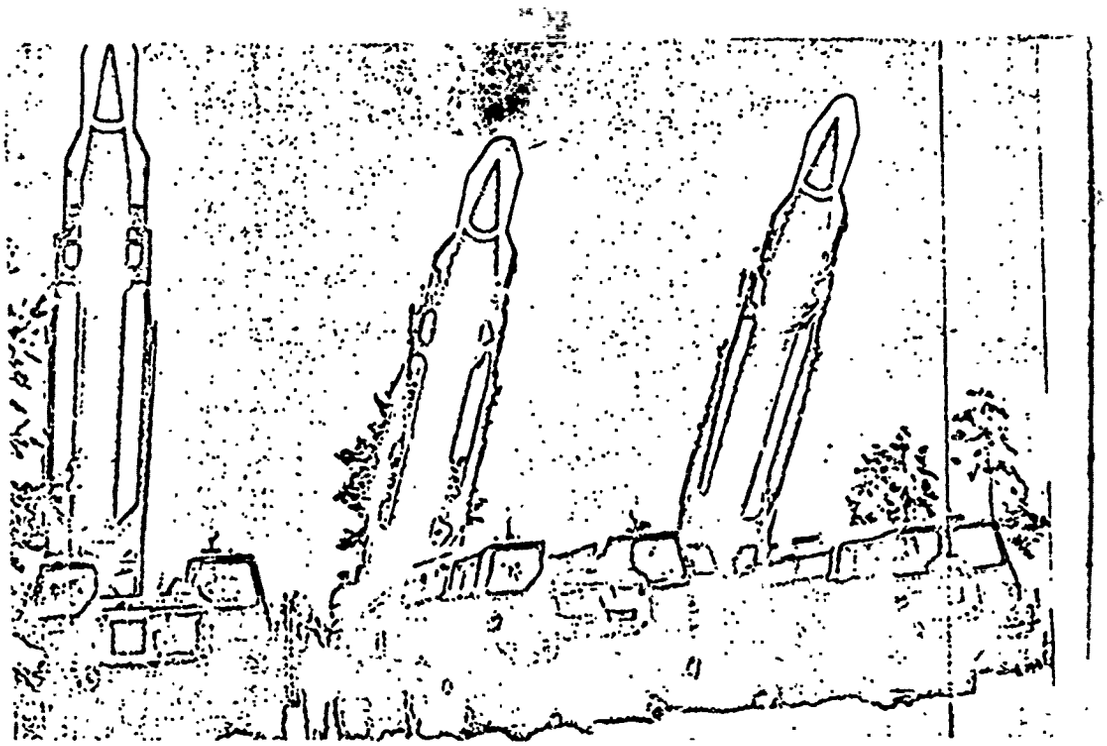

Figure 1. SCUD-B missile battalion during a systems test in a socalled "concentration area." Concentration areas are occupied after long marches in order to accomplish troop and equipment care and maintenance before proceeding to operational areas. The concentration areas must be close to the zone of operations, but outside the range of most enemy artillery. This picture represents a typical "staged photograph" for the press, since the fundamentals of active and passive camouflage must be observed even in concentration areas. This would naturally include the dispersal of the launchers and missiles. For the first time, this photo also shows a winter radiator cover on a Soviet truck. In addition, it is noteworthy that the launcher ramp is so designed that it can accomodate a much larger missile. It is possible that the launcher - a special model of the 15-ton MAZ-543 truck, will later be equipped with a larger missile.

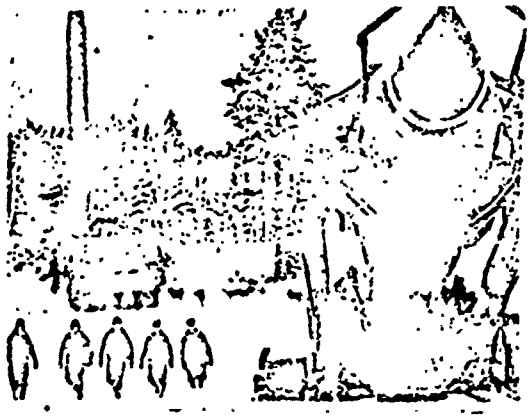

Figure 2. Two SCUD-B launchers with 8-wheeled MAZ-543 chassis at the launching point. Whereas the rear launcher has already lifted the missile into the vertical position atop the tiltable launching pad, the missile is being brought into this position on the launcher in the foreground. The heavy surface-to-surface missile has a single-stage, liquid-fuel motor. It can be seen clearly that the launcher in the foreground could accomodate a larger missile without modifications. This suspicion is intensified by the tubular strut in front of the warhead tip, which gives the impression that this is a provisional device. This must also be considered to be a "staged photograph," since the forest clearing shown is too large to provide adequate natural camouflaging. In addition, the Russians would not emplace 2 missile launchers so close together, since this would invite enemy counterfire.

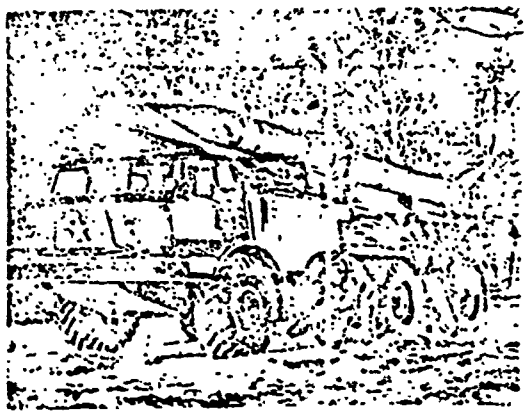

Figure 3. The tactical surface-to-surface weapon system FROG-7, which is assigned to divisions, employs the chassis of the 10-ton ZIL-135 truck as a launcher and a heavy ballistic missile with solid-fuel motor. This picture shows the FROG-7 just after arrival at a launching site during a winter maneuver. The crew is preparing the system for operation. A soldier can be seen clearly during removal of the safety clamp between the launcher and the lower end of the warhead. A second soldier is lowering the support pad between the first and second rear axles. The gunner is seen on the collapsible working platform at the rear of the launcher with the panoramic gunsight telescope. The launcher commander, seen to the right

of the launcher, coordinates the work of his crew. This is a typical forest launching site. Clearings and glades are chosen for this purpose, in take as much advantage as possible of available natural camouflage.

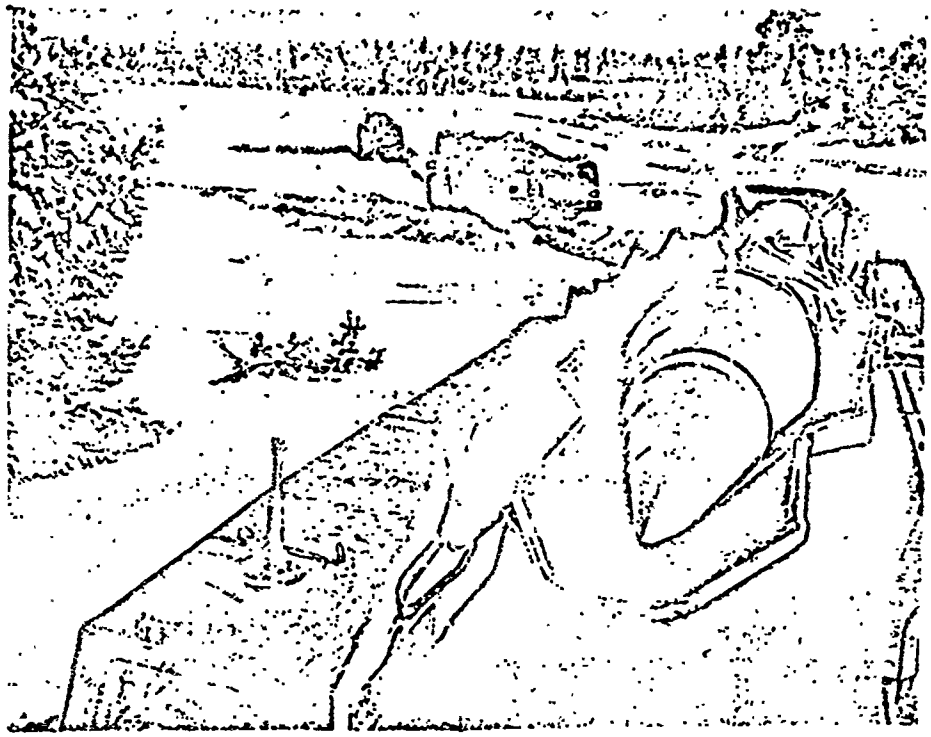

Figure 4. A missile battalion equipped with the tactical surface-to-surface weapons system SCUD-B - which is assigned to army-level units - on the march to a concentration area. It can be seen clearly that the route has been cleared previously with bulldozers. The strategic missile artillery units also prefer intermittently forested areas for the assembly, testing, and launching of their missiles. This is also true of tactical missile units. Based on the range of the SCUD-B weapons system - approximately 280 km - its launching sites are probably located about 80-150 km behind the front lines. The antenna base on the passenger side of the truck cab indicates that each launcher is equipped with a radio communications system. A tubular strut serves as a guard-bar to protect the warhead while the rocket is being raised on the launcher ramp in wooded areas.