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imagery analysis report

Organization of Soviet Army Aviation Helicopter Assets (S)

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Z-14014/84
IAR-0073/83
FEBRUARY 1984
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ORGANIZATION OF SOVIET ARMY AVIATION HELICOPTER ASSETS (S)

INTRODUCTION

1. In the late 1970s, the Soviet Air and Ground Forces were reorganized. A key element of that reorganization was the re-creation of army aviation, which had technically been abolished in May 1942 when these assets were incorporated into tactical air armies.[1] The reestablishment of army aviation provides combined-arms and tank army commanders and their subordinate division commands with organic air support to enhance their capabilities to conduct independent operations. (S/WN)

2. The Soviets reorganized their helicopter force by resubordinating many units from frontal aviation to army aviation. This report discusses the helicopter assets of Soviet army aviation, including their composition and probable function. The assessment of the major helicopter components of army aviation was based on an analysis of imagery and on collateral information on the composition, size, and deployment patterns of helicopter units. (S/WN)

DISCUSSION

3. Army aviation, elements of which are subordinate to the front, army, and division levels (Figure 1), provides commanders at all echelons in the front with air assets with sufficient flexibility to serve in a transport and resupply, a fire support, and a liaison function when necessary.[2] (S/WN)

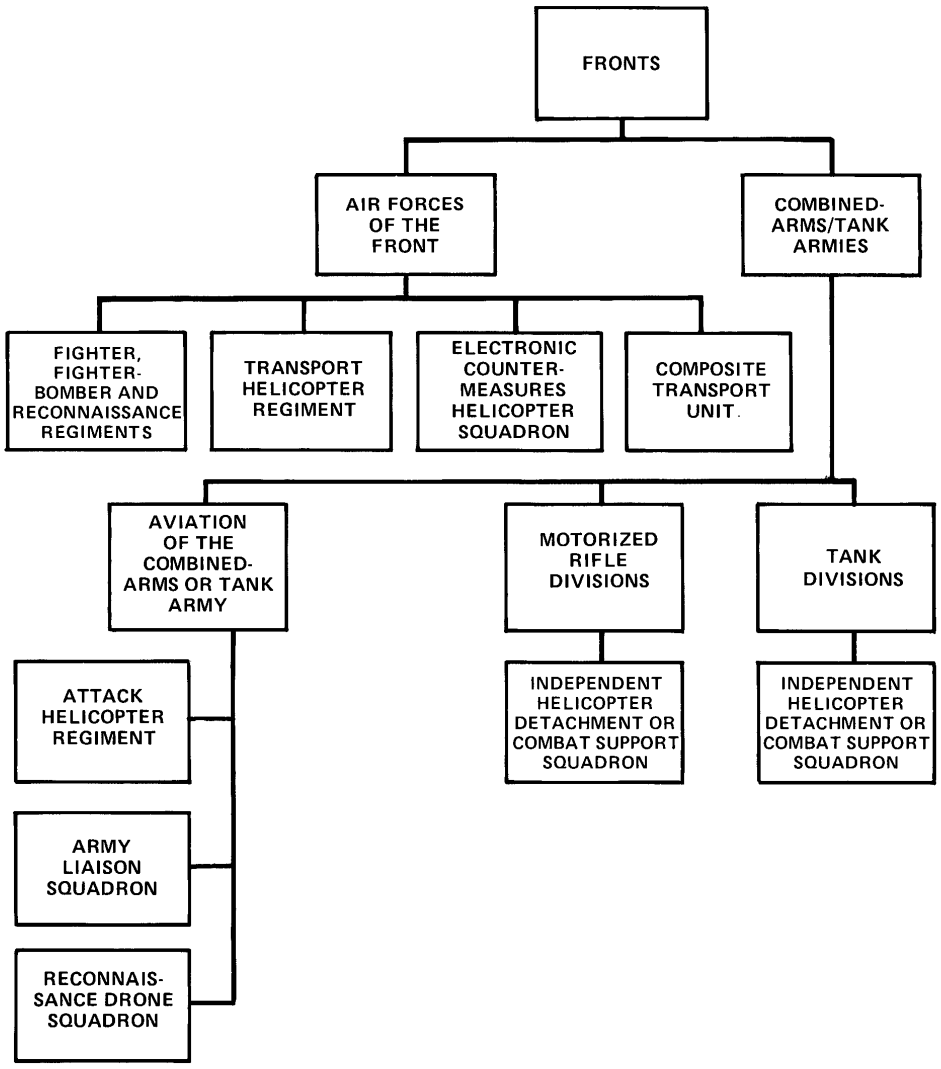

FIGURE 1. WARTIME COMMAND ORGANIZATION OF SOVIET FRONTAL FORCES

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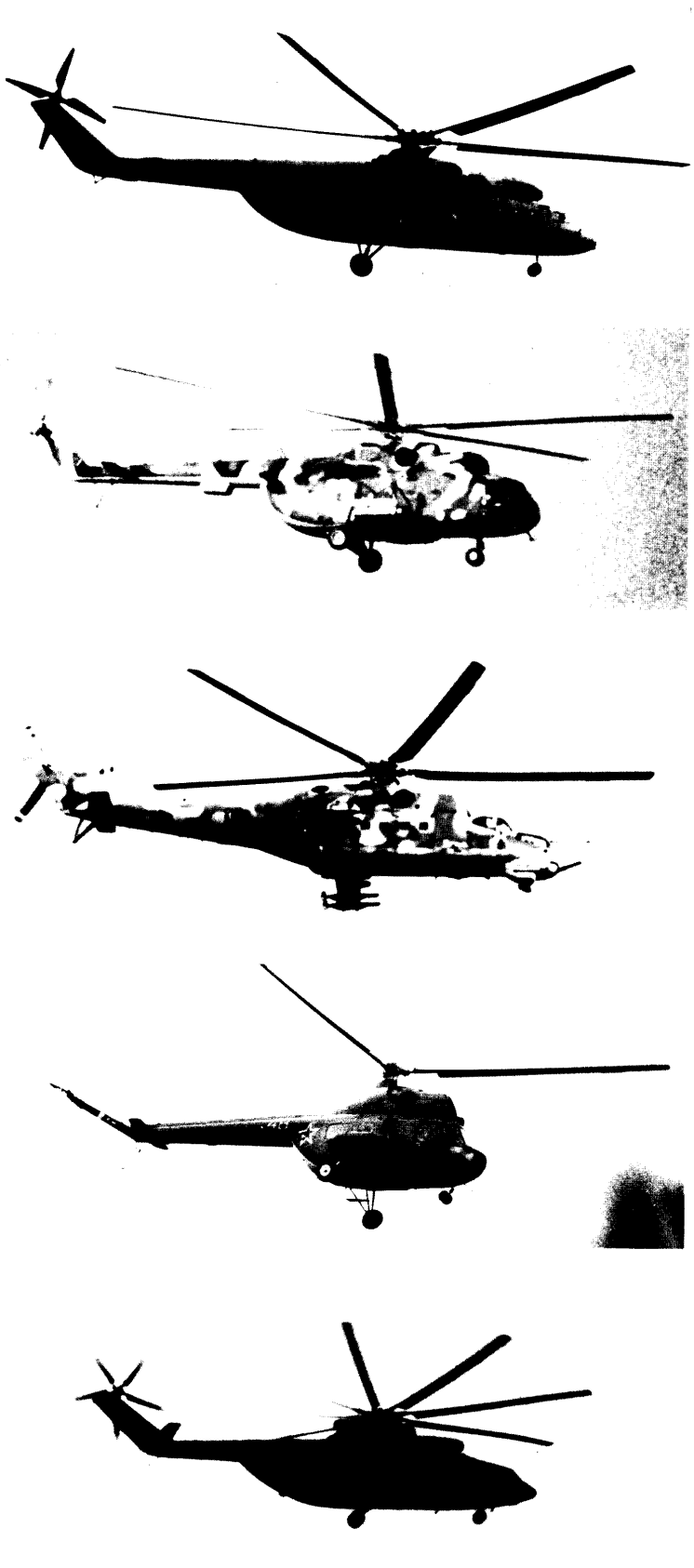

FIGURE 2. SOVIET ARMY AVIATION HELICOPTERS

4. The helicopter portion of army aviation is composed of HOOK, HIP, HIND D/E, HOPLITE, and the recently produced HALO A helicopters (Figure 2). In addition, DR-3 reconnaissance drone squadrons are associated with army aviation, and the FROGFOOT A (Figure 3), the new Soviet ground-attack aircraft now in service in Afghanistan and operationally deployed to Chervono-Glinskoye Airfield [redacted] USSR, may be introduced into the army aviation inventory.[3] The FROGFOOT A, a twin-jet, single-seat, subsonic aircraft which is similar to the US Fairchild A-10 Thunderbolt II, is apparently designed to provide direct aerial fire support for tank and motorized rifle maneuver forces. (S/WN/NOFORN)

5. Helicopters are deployed in detachment, squadron, and regimental strength. Although directly subordinate to the front, combined-arms/tank army, or division commanders, helicopter assets are manned, maintained, and supported by the Soviet Air Force.[4] (S/WN)

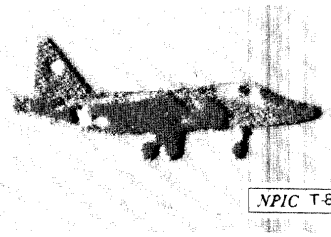

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FIGURE 3. FROGFOOT A GROUND-ATTACK AIRCRAFT

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	Installation
2	Legnica Airfield
3	Fokto Airfield
4	Klyuchevoye Airfield
5	Kobrin Airfield
6	Torzhok Airfield
7	Sambor Airfield
8	Malino Airfield
9	Aleksandriya Airfield East
10	Kherson Airfield
11	Tsulukidze Airfield
12	Telavi Heliport
13	Troitsk Airfield
14	Kagan Airfield South
15	Dzhambul Airfield
16	Nerchinsk Airfield
17	Mogocha Heliport
18	Magdagachi Airfield
19	Khabarovsk/Nekrasovka Airfield

FIGURE 5. LOCATIONS OF TRANSPORT HELICOPTER REGIMENTS IN THE USSR AND EASTERN EUROPE

Front-Level Units

6. In addition to ground forces assets and fixed-wing aircraft units, the commander of the front* may have a transport helicopter regiment, a HIP electronic countermeasures squadron, and possibly a composite transport unit under his control. A transport helicopter regiment (Figure 4) is usually composed of 20 to 25 HOOKs and 35 to 40 HIPs. These regiments allow the front commanders to move more than 2,200 troops (one motorized rifle regiment) or 240 metric tons of material, or any combination of both, over a 100-nautical mile radius in one regimental sortie.[4] The transport helicopter regiment serves in a variety of functions at the front level, including logistical support, resupply, and heavy transport for various frontal forces. In addition, like the Soviet Military Transport Aviation (VTA) forces, the transport helicopter regiment provides transport and resupply in support of air assault operations. Sixteen transport helicopter regiments are in the USSR and three are in Eastern Europe (Figure 5). The three in Eastern Europe are subordinate to the Northern Group of Forces, the Southern Group of Forces, Three of the 16 in the USSR (those at Mogocha Heliport, Tsulukidze Airfield, and Magdagachi Airfield) are directly subordinate to adjacent air-mobile assault brigades.[2] The others are probably subordinate to the military district (MD) in which they are located. In those MDs where a transport helicopter regiment is directly subordinate to an air-mobile assault brigade, a second transport helicopter regiment is present to support the MD. (S/WN) 25X1

7. The front commander may also have an electronic countermeasures squadron composed of as many as ten HIP J and ten HIP K helicopters (Figures 6 through 8) at his disposal. The HIP J is distinguishable by two boxes mounted along the window line on both sides of the aircraft. The HIP K has an antenna array on each side of the rear portion of the fuselage, immediately aft of the engine access panels. These helicopters probably operate in unison to disrupt enemy radar and communications frequencies.[5] These squadrons have followed the typical deployment pattern of new front assets—at least one per MD in the Western USSR, and one in Hungary (Figure 9). In addition, an export version of the HIP K has been identified in Syria. (S/WN) 25X1 25X1

*Fronts are higher-level, operational field forces which may be assigned operational or, in some cases, strategic missions. Fronts are supported by, and may have in their composition, elements from all branches of the armed forces. Fronts will be formed in wartime by military districts and will operate under the control of the Supreme High Command (VGK) or a high command of a theater of military operations. (S/NOFORN 25X1

FIGURE 6. HIP J HELICOPTER

FIGURE 7. HIP K HELICOPTER

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	Installation
2	Alakurtti Airfield
3	Arkhangelsk/Kholm Airfield
4	Jelgava Airfield
5	Kobrin Airfield
6	Debrecen Airfield
7	Lutsk Airfield North
8	Kiyev/Borispol Airfield
9	Tiraspol Airfield
10	Blagoyevo Airfield
11	Tskhinvali Airfield South

FIGURE 9. LOCATIONS OF ELECTRONIC COUNTERMEASURES HELICOPTER SQUADRONS IN THE USSR AND EASTERN EUROPE

8. The front commander may also have a composite transport unit (Figure 10) under his control. These units are unique in that they are composed of both fixed- and rotary-wing aircraft. The composite transport unit comprises a general-purpose and a special-purpose segment. The general-purpose segment consists of standard HIP, HOOK, and HOPLITE helicopters and CUB, COKE, and CURL aircraft. The primary function of this segment is liaison, which includes transportation of VIPs, logistical support, reconnaissance, medical evacuation, and administrative support. The primary function of the special-purpose segment is command and control. This segment may be equipped with either COOT As, special-purpose (SP) CATs, SP CURLs, HOOK Bs, HOOK Cs and/or HIP Ds. Ten composite transport units in the USSR, four in Eastern Europe (Figure 11), and one at Kabul Airfield in Afghanistan (Figure 11) have been identified. These units are usually collocated with, or in close proximity to, the MD/Group of Forces headquarters that they support. The aircraft composition varies greatly among MDs because civil as well as military aircraft are usually present. (S/WN)

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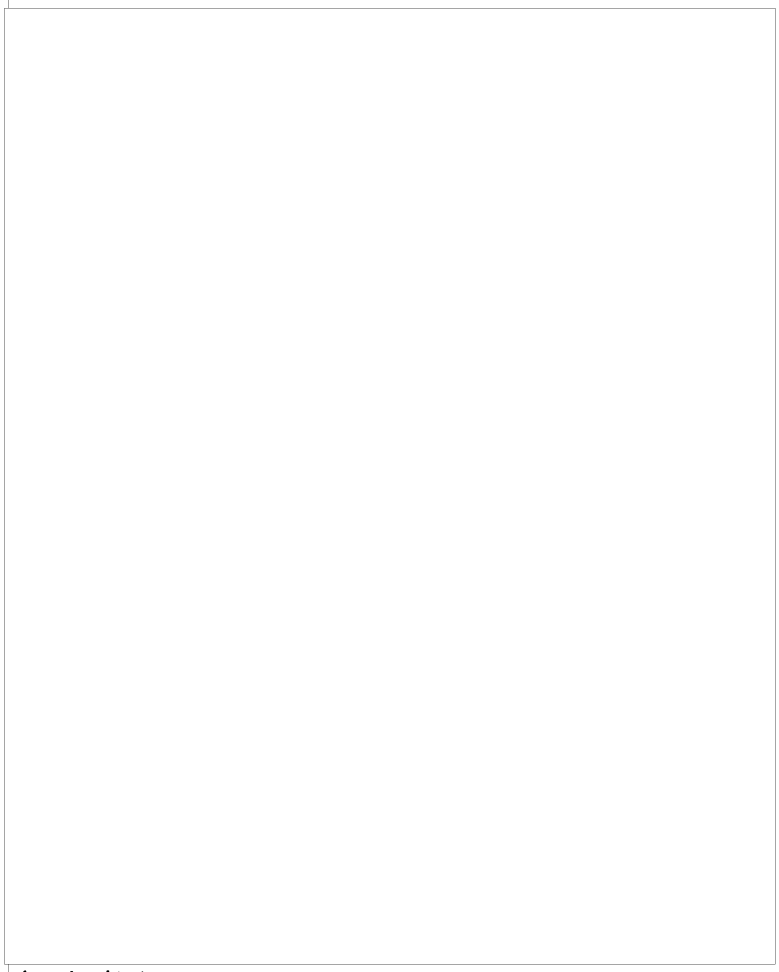

Army-Level Units

9. The commander of the army may have an attack helicopter regiment, a reconnaissance drone squadron, and an army liaison squadron under his control. The attack helicopter regiment (Figure 12), equipped with 20 to 25 HIPs and 35 to 40 HINDs, has a primary function of providing fire support to the army. In some instances, this regiment may be subordinate to the MD/Group of Forces or, in wartime, to a front-level or a lower-echelon commander. The HIPs can be equipped to carry as many as six 32-shot 57 mm rocket pods and either AT-2 SWATTER or AT-3 SAGGER antitank guided missiles. The HINDs can carry four rocket pods and either SWATTER or AT-6 SPIRAL antitank guided missiles and can also carry a small assortment of free-fall bombs.[2] Twelve attack helicopter regiments in the USSR, one in Mongolia (Figure 13), seven in Eastern Europe (Figure 14), and one at Kunduz Airfield [redacted] in Afghanistan have been identified. As of June 1982, another regiment may have been forming at Polotsk Airfield Northwest [redacted] in the Belorussian MD, where one squadron of HINDs and one squadron of HIPs were present and helicopter hardstand construction has been underway. However, the continued presence of HALO As at Polotsk is unusual in that heavy-lift helicopters are not usually deployed with attack helicopter regiments. (S/WN)

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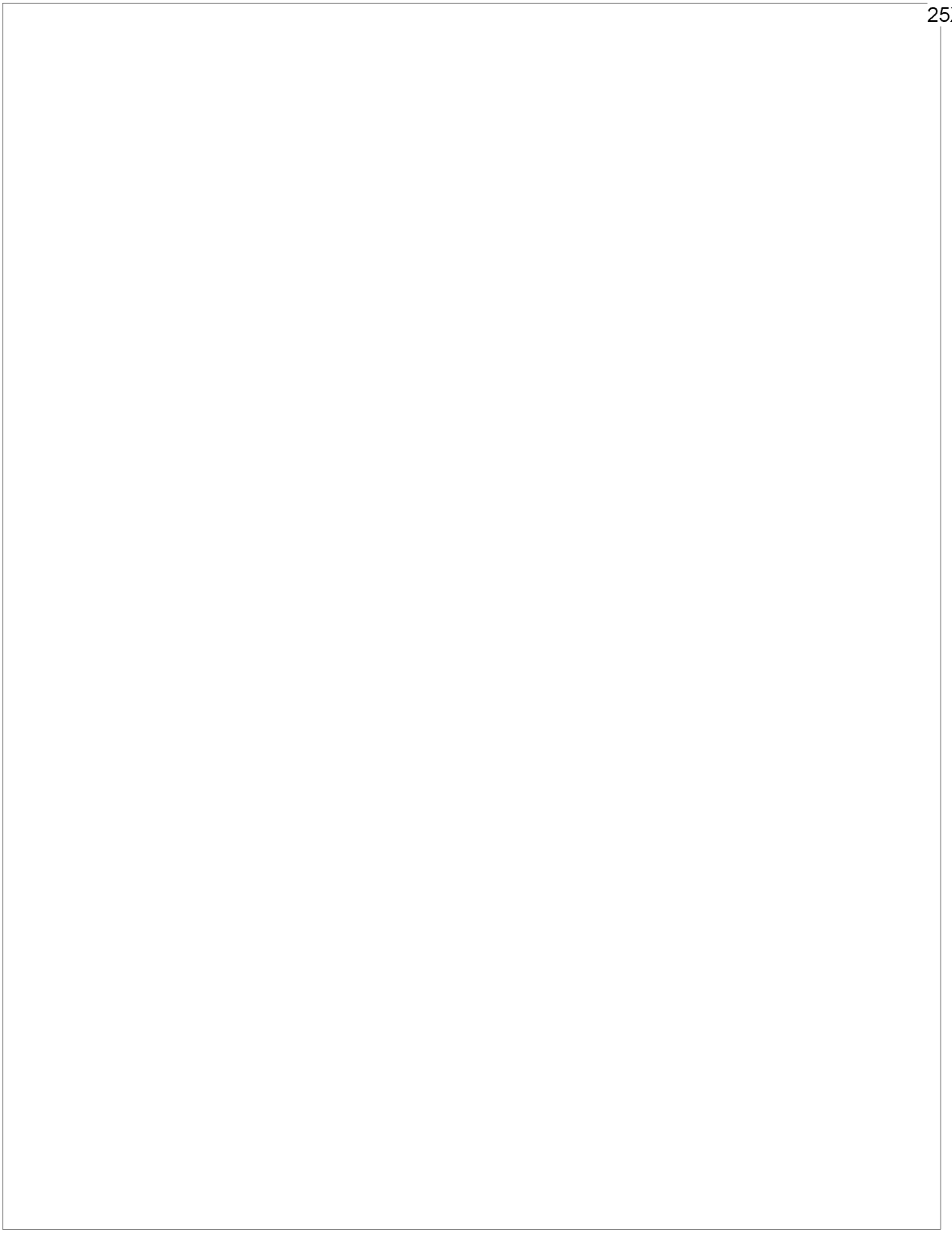

10. The DR-3 reconnaissance drone squadron (Figure 15) is composed of a mobile photographic processing laboratory, two to four DR-3 transporter-resupply vehicles, and two to four DR-3 transporter-erector-launchers. Fifteen to 20 DR-3 shipping containers are usually present. The primary function of the unit is to provide the army commander with a battlefield surveillance capability. The DR-3 is a low-altitude photoreconnaissance drone with a probable conventional load of cameras as well as a television surveillance system with a down link.[2] Although usually collocated with an attack helicopter regiment, the DR-3 reconnaissance drone squadron may be located elsewhere within the army area. Thirteen of these squadrons have been identified in the USSR, Mongolia, and Eastern Europe (Figure 16). (S/WN)

11. The general-purpose support function is satisfied at the army level by an army liaison squadron (Figure 17). These squadrons are usually composed of two to four HOOKs, five to ten HIPs, and ten to 15 HOPLITEs and are usually near the army headquarters, although they may be housed elsewhere in the army area. One or two HOOKs are usually modified with blade antennas either atop the fuselage or on the rear of the tail boom to provide command and control support (Figure 18). Twenty-nine of these squadrons have been identified—23 are in the USSR and Mongolia (Figure 19), and six are in Eastern Europe (Figure 20). (S/WN)

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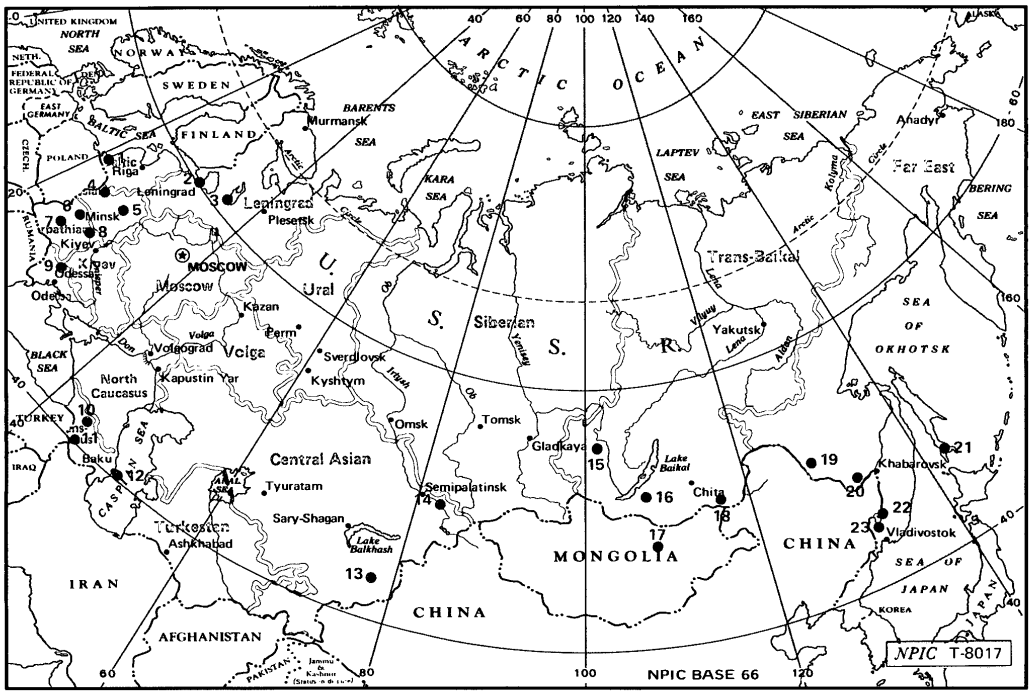

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	Installation
1	Kaliningrad/Lugovoye Heliport
2	Nurmalitsy Airfield
3	Leningrad/Kasimovo Airfield
4	Grodno Airfield
5	Lepel East Heliport
6	Dubno Airfield Northeast
7	Brody Airfield North
8	Zhitomir Airfield
9	Tiraspol Airfield
10	Kutaisi Heliport
11	Leninakan Airfield
12	Kyzylagadzh Airfield

	Installation
13	Alma-Ata Airfield North
14	Semipalatinsk Airfield
15	Nizhneudinsk Airfield
16	Ulan-Ude/Mukhino Airfield
17	Ulan Baatar Airfield Southwest
18	Borzya Airfield
19	Belogorsk Airfield
20	Birobidzhan Airfield South
21	Novo-Aleksandrovsk Airfield
22	Vedenka Airfield
23	Ussuriysk Airfield Southeast

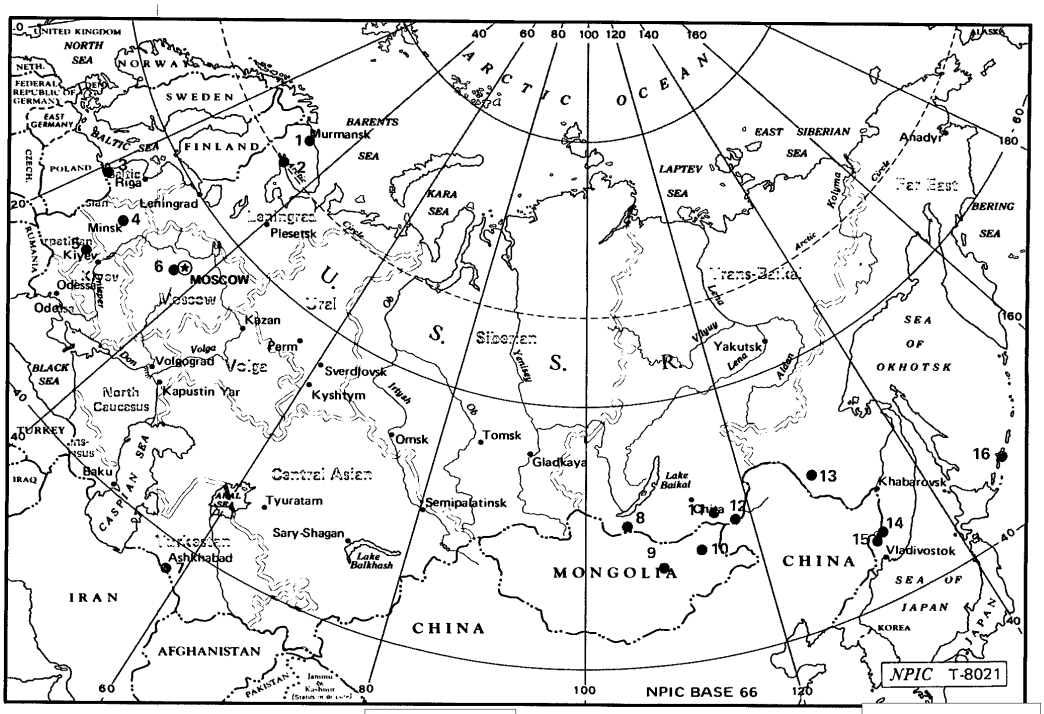
FIGURE 19. LOCATIONS OF ARMY LIAISON SQUADRONS IN THE USSR AND MONGOLIA

25X1

Division-Level Units

12. Ready/deployed tank and motorized rifle divisions are usually supported by an independent helicopter detachment or a combat support squadron. An independent helicopter detachment usually consists of two to four HIPs and six to eight HOPLITEs (Figure 21). The primary function of this unit is liaison, but one or two HIP Cs are usually modified to perform limited command and control functions. (S/WN)

13. A combat support squadron usually consists of four to six HIND D/E, four to six HIP, and four to six HOPLITE helicopters (Figure 22). This type of unit is new to the Soviet inventory and is formed by upgrading independent helicopter detachments to squadron strength by adding four to six HIND D/E and two to four HIP helicopters. Previously, HINDs were almost exclusively deployed in regimental strength. The primary function of the combat support squadron is to provide the division commander with a limited fire support and transport capability. In addition, the liaison capability, formerly a function of the independent helicopter detachment, is retained. (S/WN)



Installation		Installation	
1	Pechenga Airfield	8	Kyakhta Airfield
2	Kirovsk Airfield South	9	Choyr East Airfield
3	Kaliningrad/Lugovoye Heliport	10	Choybalsan Airfield Northeast
4	Minsk/Slepyanka Airfield	11	Khada Bulak Airfield North
5	Korosten Airfield	12	Dauriya Airfield
6	Alabino Headquarters Guards Motorized Rifle Division and Airbase AL-1	13	Belogorsk Airfield
7	Ashkhabad Airfield Northwest	14	Chernigovka Airfield
		15	Ussuriysk Airfield Southeast
		16	Burevestnik Airfield

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FIGURE 23. LOCATIONS OF COMBAT SUPPORT SQUADRONS IN THE USSR AND MONGOLIA

14. A combat support squadron was first observed at Belogorsk Airfield in 1977. At this same time, the adjacent tank regiments underwent combined-arms reorganizations. In retrospect, it appears that the squadron at Belogorsk and a squadron that was formed at Korosten Airfield in the Carpathian MD in 1978 were experimental units for the Soviets' two experimental divisions.[6] Between 1980 and late 1983, 35 additional combat support squadrons were identified (Figures 23 and 24). (S/WN)

IMAGERY ANALYST'S COMMENTS

15. Since the reorganization of the Soviet Air and Ground Forces in the late 1970s, significant helicopter-related activity has been observed, with helicopter units formed, upgraded, and extensively redeployed. In addition, Soviet combined-arms exercises apparently involve more extensive and intensive use of helicopters for airlift and fire support than ever before. This activity emphasizes the significance the Soviets place on helicopters in combined-arms warfare. If this trend continues, we can expect to see attack helicopter regiments formed to support armies which are currently without their services. Additional combat support squadron deployments (primarily in ready/deployed divisions) and continued DR-3 and electronic countermeasures helicopter squadron deployments are also likely. (S/WN)

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*Extracted information is classified CONFIDENTIAL/NOFORN.
**Extracted information is classified SECRET.
***Extracted information is classified SECRET/WNINTEL.

REQUIREMENT

This report is in response to current national interest in the reorganization of Soviet Air Forces and the reestablishment of Army Aviation.

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