EXECUTIVE SECRETARIAT

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1	DCI				
2	DDCI		✓		
3	EXDIR				
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6	DDA				
7	DDO				
8	DDS&T				
9	Chm/NIC				
10	GC				
11	IG				
12	Compt				
13	D/EEO				
14	D/Pers				
15	D/OEA				
16	C/PAD/OEA				
17	SA/IA				
18	AO/DCI				
19	C/IPD/OIS				
20	C/PS		✓		
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	SUSPENSE _____ Date				

Remarks:

Executive Secretary

11/12/82

Date

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HEADQUARTERS
DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT CHIEF OF STAFF FOR INTELLIGENCE
WASHINGTON, D.C. 20310

19 NOV 1982

Dear Mister McMahon:

During the IEWSPR, I responded to a question concerning Soviet RPV development with the statement that I did not believe they are developing them. I was wrong. I am enclosing a copy of the data we currently hold on their RPV program.

W. E. ODOM
Major General, USA
ACofS for Intelligence

1 Incl
as

Mr. John N. McMahon
Deputy Director
Central Intelligence Agency

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SUMMARY

(S) The DR-3 drone system significantly enhances Soviet capability to acquire timely intelligence data of enemy forces in a tactical battlefield environment. The vehicle uses a solid-propellant booster to launch from a highly mobile transporter-erector-launcher (TEL) and is powered for the remainder of the mission by a turbojet sustainer. Reconnaissance equipment aboard the vehicle is assessed to include several photographic cameras or alternatively several TV cameras with the data link. (Additionally, there is the possibility that separate from the primary reconnaissance payload alternatives the DR-3 avionics suite includes a forward looking TV with data link used for pilotage and navigation functions.) Flight duration is estimated to be up to 15 minutes. Vehicle recovery to a soft landing is effected by parachute. Overall, the DR-3 appears to be a highly reliable, highly flexible system that has added a new dimension to the battlefield.

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SECTION II

BACKGROUND AND STATUS (U)

(S-NOFORN-WNINTEL) The DR-3 was developed in the 1970's as a low-altitude, subsonic, mission-flexible reconnaissance drone for deployment into the tactical battlefield. Operational deployment of the system would be under the Soviet Army at the battalion level. The appearance of the DR-3 at the Pruzhany Army Barracks in the Soviet Union in May 1979 provided the first photographic evidence of operational deployment. (See Figure 2.) Also in 1979, the DR-3 TEL was deployed in East Germany. (See Figure 3.)

(S) With such a highly transportable system as the DR-3, it is possible that it can perform several roles. These might include ELINT collection, ECM, function as a target vehicle, or even dispersal of biological or chemical agents. However, there is no evidence supporting these possibilities. Instead, the DR-3 will most likely be used as a reconnaissance vehicle.

(S) Aside from deployment to East Germany, chances are good the DR-3 has been furnished to other Sino-Soviet bloc countries. The development and deployment of the DR-3 is a Soviet effort to upgrade their combat reconnaissance capabilities beyond that of manned aircraft systems such as BREWER D, FISHBED H, and FITTER H. With a relatively recent IOC of 1977-1978, the DR-3 is expected to operate as a viable tactical battlefield reconnaissance system throughout the 1980's.

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SECTION IV

SYSTEM CAPABILITIES AND LIMITATIONS (U)

1. Capabilities (U)

(S-NOFORN-WNINTEL) The fuel limited radius of the highly versatile DR-3 (based on a usable load of 110 kg) is calculated to be about 125 km when flying at Mach 0.7 and 1,000 m altitude. Equipped with several obliquely mounted framing cameras with a normal film load of 200 frames, the DR-3 can cover a 1,432 km^2 area from the 1,000 m altitude. Typical DR-3 drone reconnaissance scenario details are depicted in Figure 20.

(S-NOFORN-WNINTEL) Increasing the fuel load of the DR-3 to a maximum of 500 kg could permit a low-altitude radius in excess of 500 km or a high-altitude mission of even greater range. (It should be noted that the fuel tank shown in Figure 4 has capacity for 495 kg of fuel.) Potential high-altitude missions include broad area reconnaissance, ELINT collection, jamming, and chaff dispensing. Potential low-altitude missions include ELINT collection, chaff dispensing, and decoy operations. Additionally, the DR-3 could be used as a delivery and dispensing platform in a biological/chemical warfare mission. The DR-3 performance envelope is depicted in Figure 21. Figure 22 outlines assumed mission rules for low and high profile missions and Figure 23 presents the resulting fuel load and mission radius trade-offs for both profiles.

2. Limitations (U)

(S) Limitations of the DR-3 are few. Although each of the support vehicles is designed to complete its task, if one of these vehicles is out of action, the system effectiveness could be considerably degraded.

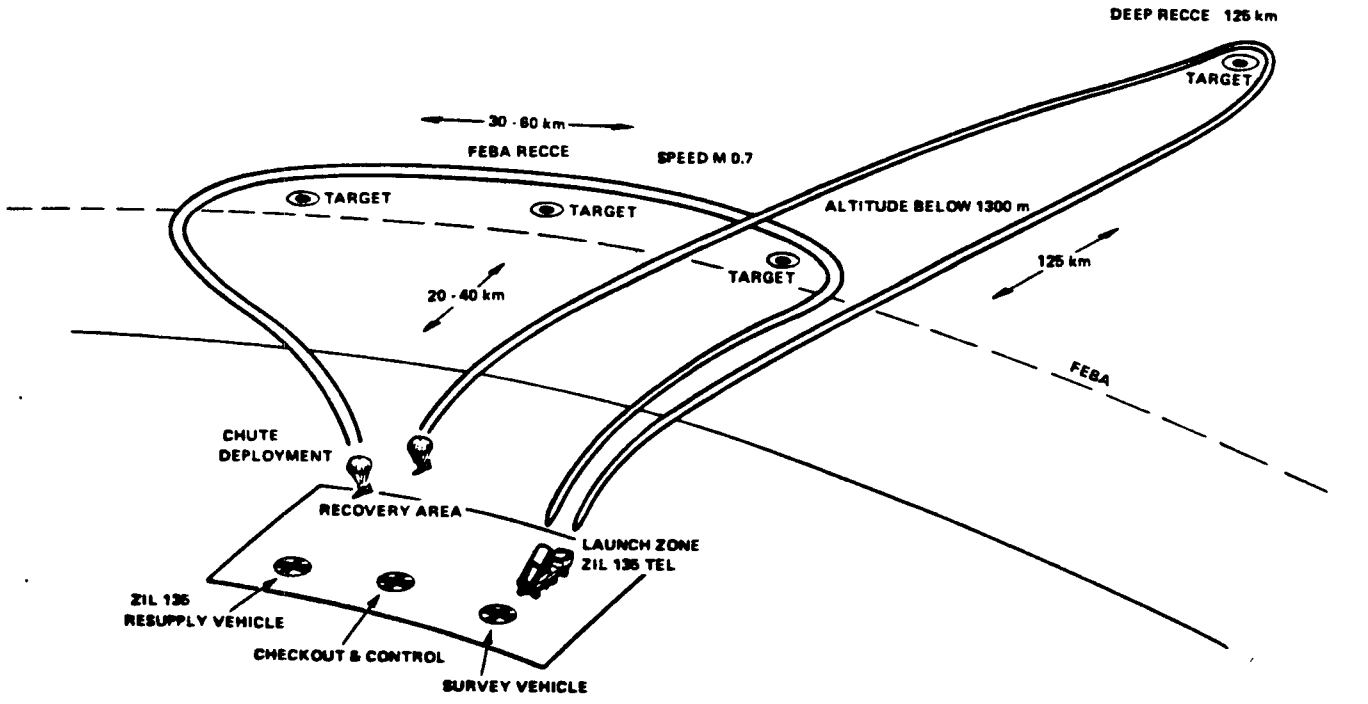

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Fig. 20 (S) DR-3 Reconnaissance Mission Scenario

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DEPLOYMENT OF THE REMOTELY PILOTED VEHICLE SYSTEM DR-3 AT SOVIET MILITARY INSTALLATIONS (S)

1. (S/D) Deployment of the remotely piloted vehicle (RPV) system at Soviet military installations has continued since January 1979. This report updates the initial NPIC summary report[1] on the ADV-1 reconnaissance drone system, which has been redesignated the Drone-3 (DR-3).

2. (S/D) Since the initial identification of the DR-3 system at Kapustin Yar Cruise Test Complex D Site 1 in October 1975, this system has been associated with seven airfields, four army barracks, one air depot, and one missile support facility (Figure 1 and Table 1). 25X1

DIA

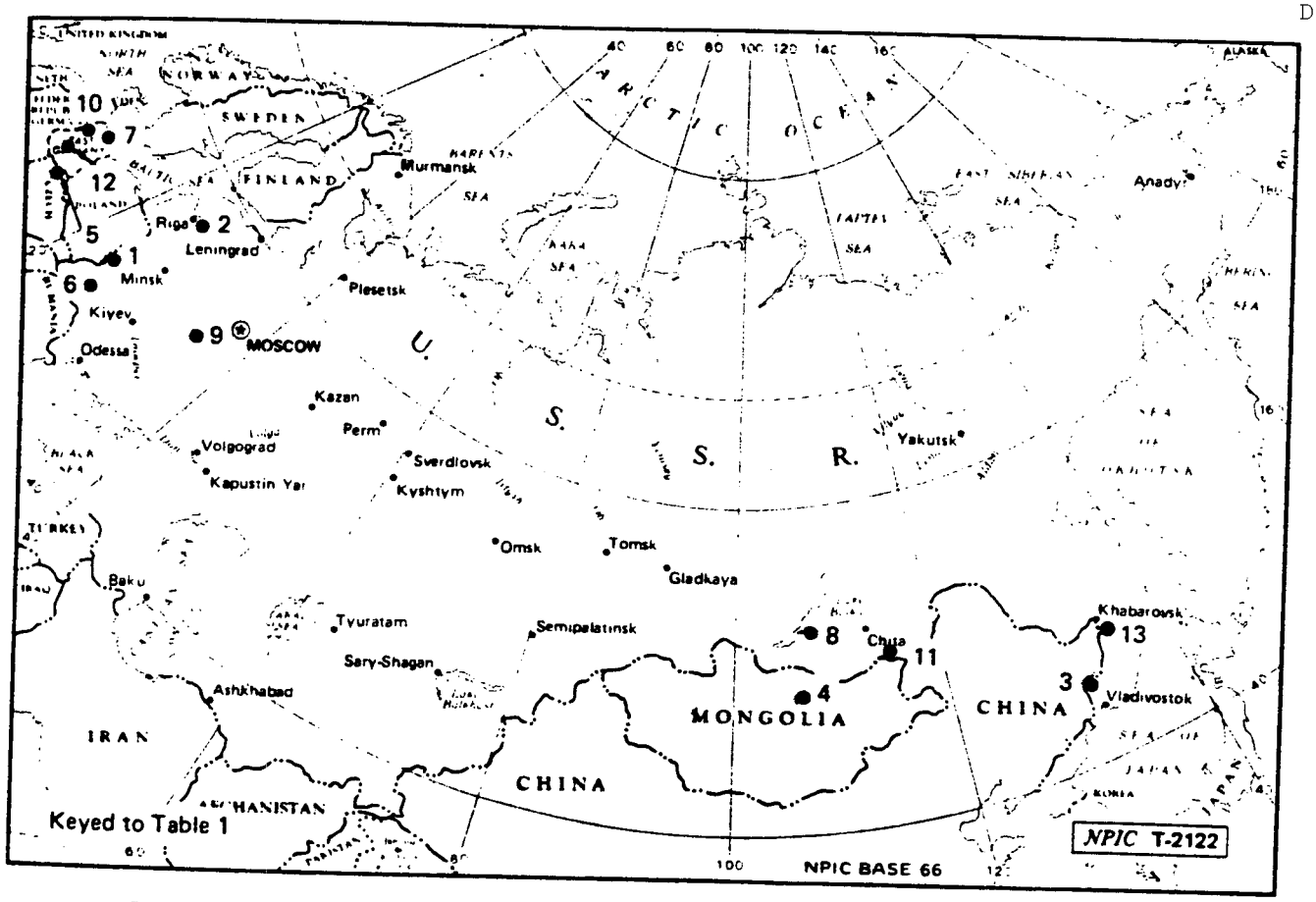

FIGURE 1. LOCATIONS OF SOVIET MILITARY INSTALLATIONS WITH DEPLOYED DR-3 SYSTEM

Table 1.
Soviet Military Installations with Components of DR-3 System (Keyed to Figure 1)
This table in its entirety is classified SECRET/ 25X1

Item	Airfield/ Installation; BE Number	Military District/ Country	First Observation	Latest Usable Imagery	Number of Components on Latest Usable Imagery: Transloader/ Launcher Vehicle	Transloader/ Resupply Vehicle	Checkout/ Control Vehicle	Shipping Crate	Mobile Photo Processing Lab	
1	Pruzhany Army Barracks	Belorussian MD	May 77	May 81	3		9	28	1*	25X1 DIA
2	Marciena Missile Support Facility	Baltic MD	May 77	Mar 81	2			1		25X1 DIA
3	Ussuriysk Airfield Southeast	Far East MD	Oct 78	Sep 80	8	4	15	19		25X1 DIA

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