NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

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basic imagery interpretation report

Activity and Developments at Soviet Defensive Missile Research, Development, and Production Facilities [redacted]

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STRATEGIC WEAPONS INDUSTRIAL FACILITIES
BE: Various
USSR

Top Secret

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RCA-09/0002/80
MARCH 1980
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INSTALLATION OR ACTIVITY NAME					COUNTRY
Activity and Developments at Soviet Defensive Missile Research, Development, and Production Facilities					UR
UTM COORDINATES	GEOGRAPHIC COORDINATES	CATEGORY	BE NO.	COMIREX NO.	NIETB NO.
NA	See below	See below	See below	See below	See below

MAP REFERENCE

ACIC. USATC, Series 200; Sheets 0153-4, 0154-24, 0155-8, 0156-18, 0167-5, and 02352; scale 1:200,000

LATEST IMAGERY USED	NEGATION DATE (If required)
See "Abstract"	NA

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Installation Name	Geographic Coordinates
Kirov Missile & Aircraft Components Plant 32	58-38-34N 049-37-09E
Kovrov Guided Missile, Machine, Tool, & Arms Plant Degtyarev 2	56-22-10N 041-19-33E
Leningrad Arms Plant Krasnoye Znamya Frunze 7	59-57-39N 030-21-51E
Leningrad Guided Missile Production Plant 272	59-58-56N 030-19-01E
Leningrad Guided Missile Production Plant 458	59-59-34N 030-17-21E
Leningrad Machine & Missile Plant Bolshevik 232	59-51-43N 030-28-43E
Moskva Guided Missile & Aircraft Plant Dolgoprudnyy 464	55-55-44N 037-30-27E
Moskva Guided Missile Production Plant 41	55-49-39N 037-30-24E
Moskva Guided Missile Research, Development, & Production Plant Khimki 293	55-54-44N 037-27-01E
Sverdlovsk Guided Missile Production Plant 8	56-52-13N 060-37-07E

ABSTRACT

1. [redacted] This report describes the recent developments at ten Soviet defensive missile research, development, and production facilities. It updates a previous NPIC report, [redacted] on the ten facilities and is based on all relevant KEYHOLE imagery acquired through the information cutoff date of 31 January 1980.

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2. [redacted] In addition to being a production facility for SA-4 missiles and SA-4 and SA-6 transporter-erector-launchers, Sverdlovsk Guided Missile Production Plant 8 is the production facility for the SS-N-15 and SS-NX-16 naval antisubmarine weapons. Equipment associated with a specific missile system (SA-3/SA-N-1 and SA-N-3 canisters) was identified for the first time at Moskva Guided Missile Research, Development, and Production Plant Khimki 293. A large number of SA-6 canisters was confirmed at Moskva Guided Missile and Aircraft Plant Dolgoprudnyy 464. No significant change occurred in the number of canisters observed at Moskva Guided Missile Production Plant 41 (SA-2), at Kirov Missile and Aircraft Components Plant 32 (SA-3/SA-N-1, SA-N-3, and SA-8/SA-N-4), or at Leningrad Guided Missile Production Plant 458 (SA-5). Observation of IIIX silo components continued at Leningrad Machine and Missile Plant Bolshevik 232. No significant new construction activity was observed at any of the ten facilities during this reporting period.

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3. [redacted] The current reporting period for each facility is as follows: 25X1

Installation	Current Reporting Period
Kirov Plant 32	28 June 1978—31 January 1980
Kovrov Plant 2	21 April 1978—14 August 1979
Leningrad Plant 7	26 June 1978—18 August 1979
Leningrad Plant 272	26 June 1978—1 September 1979
Leningrad Plant 458	26 June 1978—18 August 1979
Leningrad Plant 232	7 June 1978—30 December 1979
Moskva Plant 464	26 June 1978—7 January 1980
Moskva Plant 41	26 June 1978—9 October 1979
Moskva Plant 293	26 June 1978—7 January 1980
Sverdlovsk Plant 8	27 June 1978—12 January 1980

This report includes a location map, nine annotated photographs, and three tables.

INTRODUCTION

4. [redacted] The installations discussed in this report are associated with the following missile systems: SA-2, SA-3/SA-N-1, SA-4, SA-5, SA-6, SA-7, SA-8/SA-N-4, and SA-N-3 (defensive missiles) and SS-N-15 and SS-NX-16 (naval antisubmarine weapons—ASWs).[1] Developmental work was continuing on several new missile systems, including the SA-X-10, SA-X-11, and a new high-performance, probable advance tactical air defense system (ATADS). Figure 1 depicts the locations of the ten defensive missile installations. 25X1

5. [redacted] When possible, tables listing canister counts have been organized to reflect the number of canisters observed in various plant sections in addition to the total number. By considering how and where canisters are stored—within a fence-enclosed versus an open area, askew or neatly stacked—and changes in canister storage arrangement, the canister count in the individual areas could be a more useful indication than just total counts. 25X1

BASIC DESCRIPTION

6. [redacted] Construction activity was observed at each of the facilities; however, at most of the plants, the construction was not significant. The major projects were a continuation of previously reported construction activity.[1] 25X1

Kirov Missile and Aircraft Components Plant 32

7. [redacted] Kirov Missile and Aircraft Components Plant 32 (Figure 2) is the assembly facility 25X1

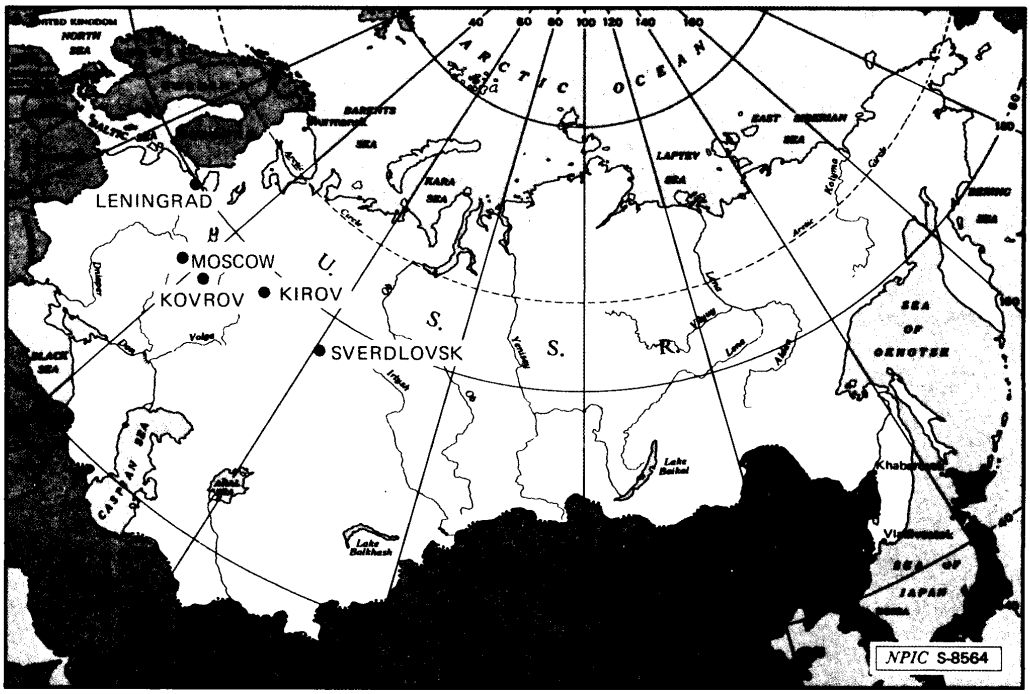

FIGURE 1. LOCATIONS OF SOVIET DEFENSIVE MISSILE RESEARCH, DEVELOPMENT, AND PRODUCTION FACILITIES

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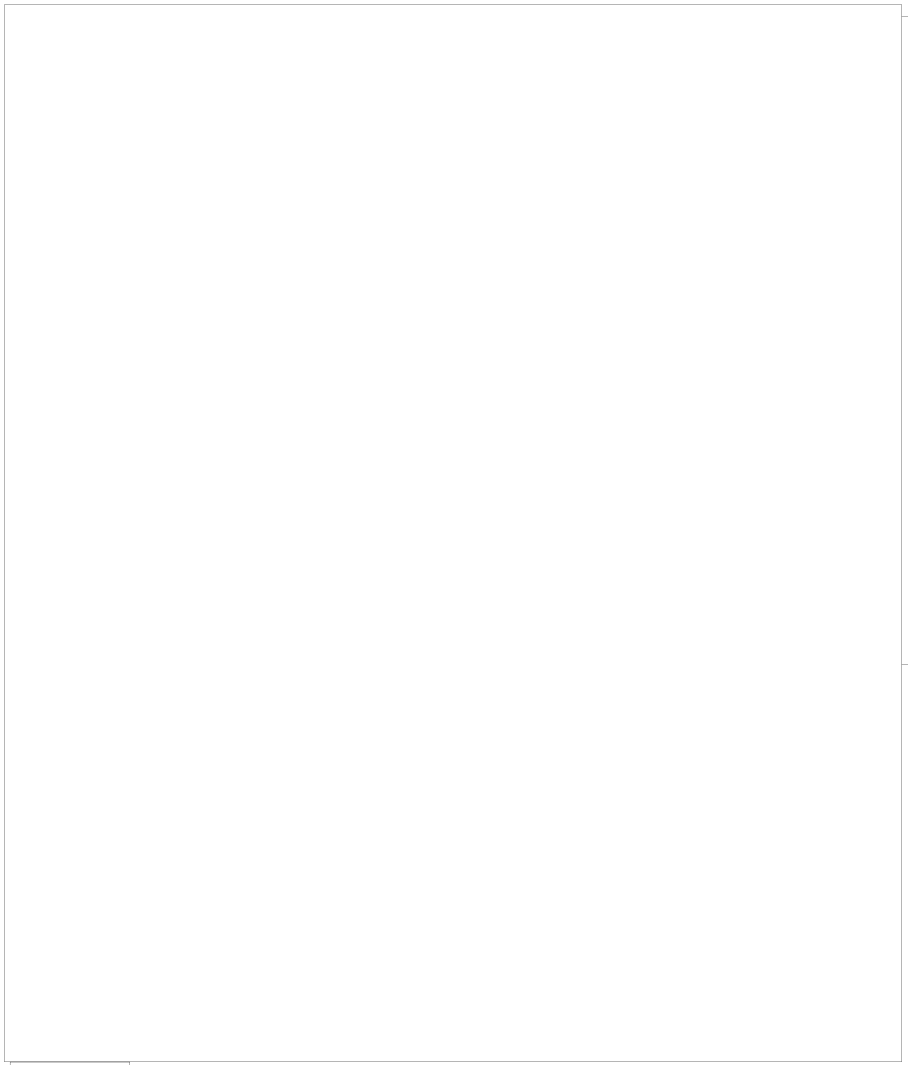
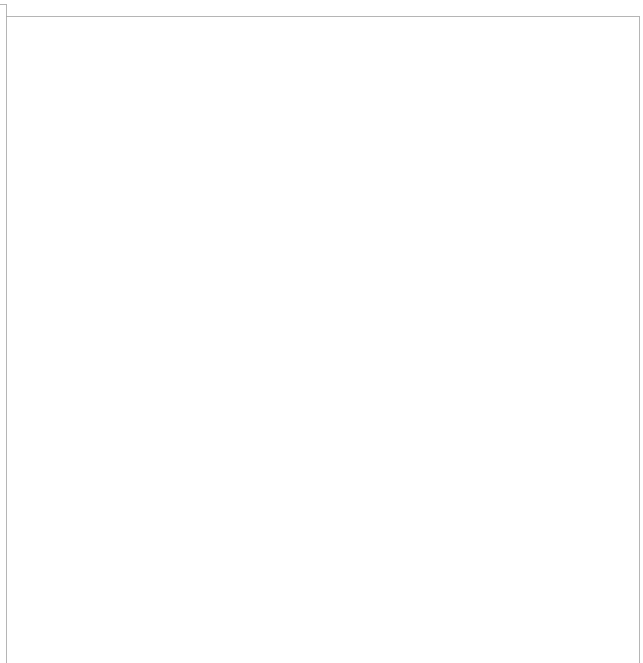
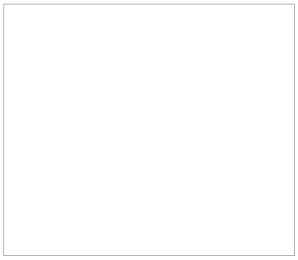




for the SA-3/SA-N-1, SA-N-3, SA-8/SA-N-4, and probably the SA-7 missiles. The plant areas where missile canisters were observed are annotated on Figure 2 and listed on Table 1.



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9. Additions to two support buildings and repairs to the heatplant roof were the extent of the construction activity at this plant during this reporting period.

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Kovrov Guided Missile, Machine Tool, and Arms Plant Degtyarev 2

10. SA-7 and antitank guided missiles and 122mm rockets are probably produced at Kovrov Guided Missile, Machine Tool, and Arms Plant Degtyarev 2.

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The SA-7 and SAGGER missiles are probably assembled in the separately secured area of the plant. No new construction activity was observed during the reporting period.

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Leningrad Arms Plant Krasnoye Znamya Frunze 7

11. Although historically, naval weapons have been produced at Leningrad Arms Plant Krasnoye Znamya Frunze 7 and missile component railcars have been observed there, no missile-associated products were identified during this reporting period. Evidence of the possible association of SA-3 and/or SA-5 missile systems with Leningrad Plant 7 is inconclusive.

12. Construction continued on the fabrication/assembly building previously reported to be in the midstage of construction.[1] Additional construction activity included two small excavations and a water basin.

Leningrad Guided Missile Production Plant 272*

13. Leningrad Guided Missile Production Plant 272 is probably involved in the production of the SA-5 missile. The plant is considered to be subordinate to or administratively a part of Leningrad Guided Missile Production Plant 458, the known production facility for the SA-5 missile. No missile-associated products or significant construction activity was observed at the plant during the reporting period.

Leningrad Guided Missile Production Plant 458

14. Leningrad Guided Missile Production Plant 458 (Figure 3) is the production facility for the SA-5 missile. SA-5 canisters, booster crates (both sizes), and fin crates were observed at the plant; however,

15. A number of canisters was partially obscured by netting and a 142- by 14-meter storage shed. The netting was in the same two previously reported areas, over the traveling crane in the transshipment area and extending from a shop building in the open storage area.[1] Although canisters were seen stacked in the 142-meter-long shed, they could not be accurately counted. There was no significant variation in the amount of SA-5-associated products observed in open storage during the reporting period. 90 SA-5 canisters were stacked in the open storage area and four SA-5 canisters, each carrying fin crates were seen under the netting in the transshipment area. Booster and fin crates were also stacked in the open storage area.

16. A probable support building adjacent to the heatplant was in an early stage of construction. Ground preparation for a small building and a small excavation were also observed in the plant area.

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Leningrad Machine and Missile Plant Bolshevik 232

17. Leningrad Machine and Missile Plant Bolshevik 232 is the final assembly facility for the type IIIX launch control capsule. The plant has probably been involved in the production of other missile-associated equipment, including components for the ABM-X-3 system.

18. Although no assembled IIIX capsules were identified, between three and 14 capsule sections were observed in the shipping and receiving area during the reporting period. No other missile-associated products were identified at Leningrad Plant 232.

19. A moderate amount of construction activity was underway at the facility. Two multistory support buildings were in late stages of construction and a third support building was in the midstage of construction. A large excavation was also seen and the roof of an administration/-engineering building was repaired.

Moskva Guided Missile and Aircraft Plant Dolgoprudnyy 464

20. Moskva Guided Missile and Aircraft Plant Dolgoprudnyy 464 (Figure 4) is the production facility for the SA-6 missile. Throughout the reporting period, SA-6 canisters were stacked adjacent to a railspur in an area of the plant which is not separately secured, suggesting that the canisters were empty. Approximately 600 SA-6 canisters were observed on imagery the number of canisters had decreased to approximately 130. Missile component railcars were also identified at the plant.

21. Two support buildings were built adjacent to the steamplant. No other construction activity was observed during the reporting period.

Moskva Guided Missile Production Plant 41

22. Moskva Guided Missile Production Plant 41 (Figure 5) is the only known production facility where SA-2 missiles are assembled. The areas of the plant where missile canisters have been observed are annotated on Figure 5 and listed on Table 2. The number, approximately 1,100, and position of the SA-2 canisters have remained relatively constant since 1976, indicating that a large number of these canisters was not moved during the reporting period.

23. An SA-X-10 canister transporter and missile component railcars were also identified at the facility. The SA-X-10 canister transporter was seen without the canister storage racks in the vehicle storage yard among general support vehicles. The transporter is probably utilized within the plant as a general-purpose, heavy-duty trailer. (Numerous installations use the SA-5 transporter in this capacity.)

*The figure for total floorspace given in paragraph 19 of the previous report, is incorrect. The correct floorspace is 41,438 square meters.

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Table 2.
SA-2 Canisters* at Moskva Guided Missile Production Plant 41

Date	Area	SA-2 Canisters	SA-X-10 Canister Transporter
		1,113	1
	A	475	
	B	184	
	C	259	
	D	—	
	E	195	
		1,190	1 (prob)
	A	360	
	B	368	
	C	279	
	D	—	
	E	183	

*Canister counts are approximate.

24. An extension to an assembly/shop building was in the midstage of construction. A portion of the roof of the SA-2 assembly building underwent repair. No other construction activity was identified at the plant.

Moskva Guided Missile Research, Development and Production Plant Khimki 293

25. SA-3/SA-N-1 and SA-N-3 canisters were observed in a fence-secured yard (Figure 6) at Moskva Guided Missile Research, Development, and Production Plant Khimki 293. This was the first identification at this plant of equipment associated with a specific missile system. Research and development of Soviet defensive missiles has probably occurred at the plant and the presence of these canisters may be an indication of SA-3/SA-N-1 and SA-N-3 modification. There is, however, no other available evidence which supports this explanation. Four possible test panels were also observed in the fence-secured yard with the canisters.

26. Construction was continuing on the assembly building at the southern end of the plant and on the installation of underground drainage conduits just inside the fenceline along the northern edge of the plant. A T-shaped building (previously reported as being Y-shaped[1]) was in a late stage of construction. No other construction activity was observed during the reporting period.

Sverdlovsk Guided Missile Production Plant 8

27. Sverdlovsk Guided Missile Production Plant 8 (Figure 8) is the final assembly facility for SA-4 missiles and SA-4 and SA-6 transporter-erector-launchers—TELs—(Figure 9 and Table 3). The plant has also been the production facility for the SS-N-15 and SS-NX-16 naval ASWs since at least 1968.[2]

Although a variety of canisters was seen, none could be associated with a new missile system. No new TELs were identified at the plant. Mensuration and identification of some canisters and TELs were not possible because of continued concealment efforts.

28. Table 3 lists the number of SA-4 canisters stacked in the SA-4 storage yard during the reporting period. These figures are total counts and reflect only the number of canisters observed; changes in canister placement within the yard, which may indicate additional activity, were not noted in the table. For example, the number of SA-4 canisters was 53 and the number was 52, showing a difference of just one. However, approximately 44 canisters were stacked in different positions on these dates.

29. Two SA-6 canisters were identified in the shipping/receiving yard where the SS-N-15, SS-NX-16, and various unidentified canisters have been stacked. After an almost two-year hiatus, confirmed SA-4 TELs were again identified at Sverdlovsk Plant 8; however, most of the TELs identified at the plant were SA-6.

30. SS-N-15, SS-NX-16, and SA-4 booster canisters have also been observed at Feodosiya Probable ASW Checkout Facility , Feodosiya Torpedo and ASW Weapons Storage Facility and Severodvinsk Naval Missile Support Facility . There is no known explanation for the presence of the canister at naval ASW facilities (Figure 10). This type of canister had previously been associated with only the SA-4 booster.

31. The four support buildings under construction during the previous reporting period[1] have been completed. During this reporting period, five additional support buildings were constructed and three other buildings, including a possible assembly/fabrication building were in an early stage of construction.

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Table 3. SA-4 Missile Canisters* and SA-4 and SA-6 TELs at Sverdlovsk Guided Missile Production Plant 8

Date	SA-4 Canister*	SA-4 TELs	SA-6 TELs	Comments
	68		6	
	47		15	
	72		17	
	93		15	
	83		10	TEL storage yard partially cloud covered
	88		10	
	86		12	
	102		11	
	135		10	2 TELs were on flatbed railcars
	95		16	
	96		13	
	94		13	
	118	10	14	SA-4 TELs were on flatbed railcars
	73		6	
	118		11 (2 prob)	
	94		16	
	82		13	
	87		21	
	61		18	
	79		19 (1 prob)	
	74		13	
	63		25	
	53		5	
	53		9 (2 prob)	
	52		4 (2 prob)	
	54		14	
	43		7	
	35		—	TEL storage yard obscured
	63		17	
	80		23	
	59		23 (2 prob)	
	58		6	

*Canister counts are approximate and only for the SA-4 canister storage yard.

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REFERENCES

[redacted] 25X1

MAPS OR CHARTS

ACIC. US Air Target Chart; Series 200; Sheets 0153-4, 0154-24, 0155-8, 0156-18, 0167-5, and 0235-2; scale 1:200,000 (UNCLASSIFIED)

DOCUMENTS

1. NPIC. [redacted] RCA-09/0001/79, *Developments at Soviet Defensive Missile Research, Development, and Production Facilities (S)*, Jan 79 (TOP SECRET [redacted] 25X1 25X1
2. NSA. [redacted] *Evidence that Sverdlovsk Plant 8 Produces Antisubmarine Missiles*, R101528Z Jan 77 (TOP SECRET Z-U) 25X1
3. DIA. [redacted] DDI-1923-4-76 SAO, *Foreign Missile Production (FOMP), Communist World (U)*, May 76, pp 23–24 (TOP SECRET [redacted] 25X1 25X1

REQUIREMENT

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