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PHOTOGRAPHIC INTERPRETATION REPORT

# ICBM LAUNCH COMPLEX

# YOSHKAR-OLA, USSR

NPIC/R-2/61 July 1961

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

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### PREFACE

This photographic interpretation report has been prepared by the Army, Navy, Air Force, and Central Intelligence Agency in answer to CIA requirement DDI/R-16/61 requesting a detailed analysis of an ICBM complex at Yoshkar-Ola imaged on photography of KEYHOLE

25X1

June 1961).

C02938774

Since final scale computations for were not available, mensural data given in this report is approximate and should not be considered precise. The accuracy of measurements and the interpretation were also affected by the large amount of halation around light-toned objects located in dark-toned wooded areas and by cloud cover and dense cloud shadow prevalent throughout the area. All mile distances given are nautical miles and all bearings are from grid north.

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### INTRODUCTION

An ICBM launch complex is under construction in a dense forest 7 miles southeast of Yoshkar-Ola, USSR (see Figure 1). The complex, identified from satellite photography, is the second deployed ICBM launch complex identified in the USSR. The first is located about 150 miles to the north near Yur'ya.

The launch area at the Yoshkar-Ola complex is nearly identical to previously reported Launch Area D at the Yur'ya ICBM launch complex. 1/The analysis of the Yoshkar-Ola complex strengthens the following conclusions derived from a study of the Yur'ya complex:

1. Missiles will be road mobile within a complex;

2. A complex will be SAM-defended;

The new complex is served by a rail spur which leaves the Yoshkar-Ola/Kazan rail line from the direction of Yoshkar-Ola (see Figure 2). Cloud cover partially obscures the area of the spur's junction with the main line and prevents determination of whether the complex can also be serviced directly from Kazan. The rail line from Kazan is not a through line, but terminates about 12 miles north of Yoshkar-Ola, in the vicinity of the Yoshkar-Ola Ammunition Depot 25X1

The nearest airfield which could support the complex is located near Yoshkar-Ola and has an 8,300-foot paved runway. Three airfields are also located about 60 miles to the southeast, around Kazan.

An SA-2 SAM site is under construction at 56-24N 48-11E, 12 miles south of the complex. Cloud cover precludes identification of additional SAM sites.

The complex proper, partially covered by clouds, consists of a roadserved launch area and probable support facilities both road and rail served (see Figure 2). An improved road serves the complex and appa-

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FIGURE 1. LOCATION OF YOSHKAR-OLA ICBM LAUNCH COMPLEX. The nearest airfield is located about 9 nm to the north.

rently terminates 4.5 miles east of the launch area. None of these facilities were observed in the photography of February 1960. No security measures can be identified other than its apparently isolated location.

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FIGURE 2. YOSHKAR-OLA ICBM LAUNCH COMPLEX. The complex, which is under construction, consists of a support area and a launch area. Cloud cover precludes complete interpretation.

A large, elaborate, rail-served storage and possible production facility, consisting of three secured areas, is located in the forest 9 miles south of the complex. 2/ The facility is not believed associated with the missile complex. The 1960 photography showed that the facility was operational.

### LAUNCH AREA

The launch area (56-35N 48-10E), which covers approximately 90 acres and consists of two elongated pads 1,000 feet apart, is located in a dense forest, approximately 4.5 miles east of the support facilities (see

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FIGURE 3. COMPARISON BETWEEN THE LAUNCH AREA AT YOSHKAR-OLA AND LAUNCH AREA D AT YUR'YA.

Figure 3). It is connected to these facilities by a straight, improved road. No security measures can be identified, although small clearings along the road could be checkpoints. The main road continues eastward for approximately 4.5 miles and appears to terminate in the forest. The distance of the apparent terminus from the launch area is commensurate with the distances between the launch areas at the Yur'ya complex and suggests that a possible second launch area is planned.

The road configuration and the arrangement and orientation (approximately 335°) of the pads at the launch area conform to those at Launch Area D of the Yur'ya ICBM Launch Complex (see Figure 3). Two clearings for the probable missile-ready buildings are located about 1,200 feet to

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the rear of the pads. Cloud shadow and haze preclude a definite determination of the stage of the launch area construction. However, the road pattern, the clearings for pads, and the clearings for the probable missileready buildings can be identified.

An unidentified area on the north side of the main road appears to contain buildings and may be the local support for the launch area. A group of clearings, south of the main road and opposite the entrance to the launch area road, may be associated with the launch area.

### PROBABLE SUPPORT FACILITIES

The probable support facilities (56-34N 48-03E) of the Yoshkar-Ola complex, consisting of three observed areas, are under construction (see Figure 4). The specific pattern of operations is not yet apparent.

The largest area, approximately 3,200 by 3,000 feet, is situated between the road and rail spur and is served by four rail sidings. The sidings are spaced about the same distance apart as the two sidings at Yur'ya, although those at Yur'ya are longer. The rail spur continues eastward, but its terminus could not be determined because of cloud cover. A few roads traverse the area, but no definite road pattern is yet in evidence.

A smaller area, approximately 2,000 by 1,200 feet, is located to the southwest of and connected by road to the largest area. The rail spur runs past this smaller area, but no siding can be identified. Although partially obscured by cloud shadow, it appears to have a street pattern characteristic of a family-type housing development. Building construction is in evidence.

A third area, located just east of the largest area, was cloud covered to the extent that only a rectangular clearing, approximately 1,500 by 1,200 feet, was visible.

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FIGURE 4. PROBABLE SUPPORT FACILITIES, YOSHKAR-OLA ICBM LAUNCH COMPLEX.

Positive identification of these facilities is not possible at this time. Their general appearance, location, and relationship to the launch area, however, make them highly suspect as support facilities for an ICBM complex.

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### REFERENCES

PHOTOGRAPHY

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Mission	Date	Pass/Camera	Frames	<u>Classification</u>
	Feb 60			TSC TSC
	Jun 61			TSR TSR

### MAPS or CHARTS

- ACIC. USAF Pilotage Chart, Sheet 155D, Sep 54, rev ed, scale 1:500,000 (U)
- SAC. US Air Target Chart, Series 200, Sheet 0155-22A, 1st ed, Oct 59, scale 1:200,000 (S)
- AMS. Series N501, Sheet 38-12, 2nd ed, May 58, scale 1:250,000 (U)
- AMS. Series N501, Sheet 39-10, 2nd ed, Sep 55, scale 1:250,000 (U)

DOCUMENTS

- 1. NPIC. R-1/61, <u>ICBM Launch Complex</u>, Yur'ya, USSR, July 61 (TSCR)
- 2. CIA. PIC/JMCS-5/60, Mission , Mar 60 (TSC) 25X1

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