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JOINT PHOTOGRAPHIC INTELLIGENCE MEMORANDUM

TYURA TAM MISSILE TEST FACILITY

KAZAKH REPUBLIC, USSR

[redacted]

ARMY CIA NAVY

HTA/JM-2/57

12 SEPTEMBER 1957

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TYURA TAM MISSILE TEST FACILITY

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I. Introduction

Joint Memorandum 2-57 presents a preliminary analysis of the TYURA TAM guided missile installation. It has been prepared at HTAUTOMAT by CIA, Army and Navy, under Army chairmanship, and is intended to supplement the general description presented in Ode Report 4058. Sufficient detail is provided to permit an interim evaluation of the installation by the various members of the intelligence community. A more detailed report is being prepared, also on a joint basis, and will be published at the earliest possible date.

II. Summary

A study of activity and structures in the TYURA TAM launch area shows that certain key support and operational facilities were either completed or in a stage of completion so advanced as to permit operational launchings from this installation as of late August 1957.

III. Description of Facilities

A. Launching Area A (See Figures 1 and 2)

Launch Area A is located at the terminus of the east rail spur. It is triple-fenced, and protected by guard towers. Four rail spurs lead directly up to the launching platform. A fifth spur leads into a long, concrete, flat-roofed building [redacted] situated adjacent to the launching platform.

25X1

Preliminary examination of Launching Area A reveals that a servicing and/or launch tower is located on the launching platform directly over the exhaust deflector. The tower structure appears to ride on rails and possibly is moved away from the erected missile prior to firing. The metal frame tower measures approximately 65' to 70' high, [redacted] across at the top, and 65' across at the base.

25X1

The exact configuration of the structure is difficult to determine because of an irregular or blackened base. It is probable, however, that three or four main struts support the tower-like structure in the center.

The flame deflector, located directly below the platform, lies at the base of the pit (150 feet down) and is flanked by two paralleling trenches or ramps.

B. Launching Area B (See Figure 1)

Located on a major multiple-rail spur directly west of the Missile Checkout Area is a probable second launch area. The area is triple-fenced and marked by considerable construction activity. Power lines and a large water conduit (under construction)enter the area. There is a railroad run-through building (230' x 155') within the fenced area, and several other fenced structures are evident. A separately-fenced area (530' x 500') is located just north of Area B and is marked by a U-shaped earthen revetment which encloses a large concrete pad (85' x 75').

Although a pit similar to the one found in Area A is not evident in Area B, the similarity of support facilities, security measures, and relative locations indicate the probability of like or similar missions. It is probable, however, that a different missile system or its components will be tested in this area.

C. Guidance

The probable main guidance facility, located approximately 4800' SW of Launch Area A, appears to be operational. It consists of probable radars laid out in a plus pattern, with each cross arm measuring approximately 395'. An earth-covered bunker is located in the center of the area where the connecting cables converge. The NNE/SSW cable has an azimuth of [redacted] Two probable radars are located on both the WNW and SSW cable ends and one each is on the ESE and NNE ends. 25X1

D. Control

A buried cable connects the guidance facility with a probable main missile instrumentation control center which is located approximately 650' ESE of the guidance facility and approximately 4700' SW of Launch Area A. The fenced control center appears operational and consists of several structures of varying configuration, including a main control building, a dome-roofed structure and at least two small probable control system elements.

E. Instrumentation

Numerous instrumentation facilities are located within the area of the launching platform. Other instrumentation facilities are located on an approximate line extending 66 nautical miles north of Launch Area A. An unusual cross-shaped facility is also located approximately 66 nautical miles ENE of the launch platform.

F. Communications

Two large communication facilities are located within the TYURA TAM complex. One of these, a probable transmitter station, is located approximately 19 nautical miles south of the launching area. The other, a probable receiver station, is located approximately five nautical miles south of the launching area. Construction of the transmitter station appears to be almost complete with a least eight rhombic antennas, four antennas of 16 masts each arranged in 5-3-3-5 array, and two antennas of at least three masts each. The installation of masts at the receiver station has not been completed. It presently consists of three rhombic antennas and two antennas of 4 to 6 masts each. In addition there are local communication facilities within the area.

G. Water Supply

A water supply line leading north from the water treatment facility under construction along the bank of the

Syr Darya River can be traced 17 nautical miles to the launching area. At a point about one-third of the way, the water line crosses the road and railroad and leads to the top of a small hill where two large tanks appear to be buried.

At the terminus of the line leading to the launching area from the river, four semi-buried tanks (two 100' dia., two 50' dia.) are visible in a separately-fence area. From these tanks, three separate buried lines lead to Launch Area A. Two additional 50-foot-diameter tanks (presently being covered) have been installed outside the fenced area and an open trench connects these new tanks with Launch Area B.

H. Power Facilities

A probable operational steam plant and possible power plant has been located in the TYURA TAM launching area. The multi-storied building (105' x 60') is located adjacent to the main rail line. Coal piles and conveyors are visible. Possible transmission lines lead along the rail line to Launch Area A and several other structures. Approximately 800' east of the plant is a probable sub-station which is the terminus of the main power line leading north from the large power plant under construction in the TYURA TAM railhead area, reported in ODE 4035. Several lines radiate from the sub-station.

I. Rail Activity

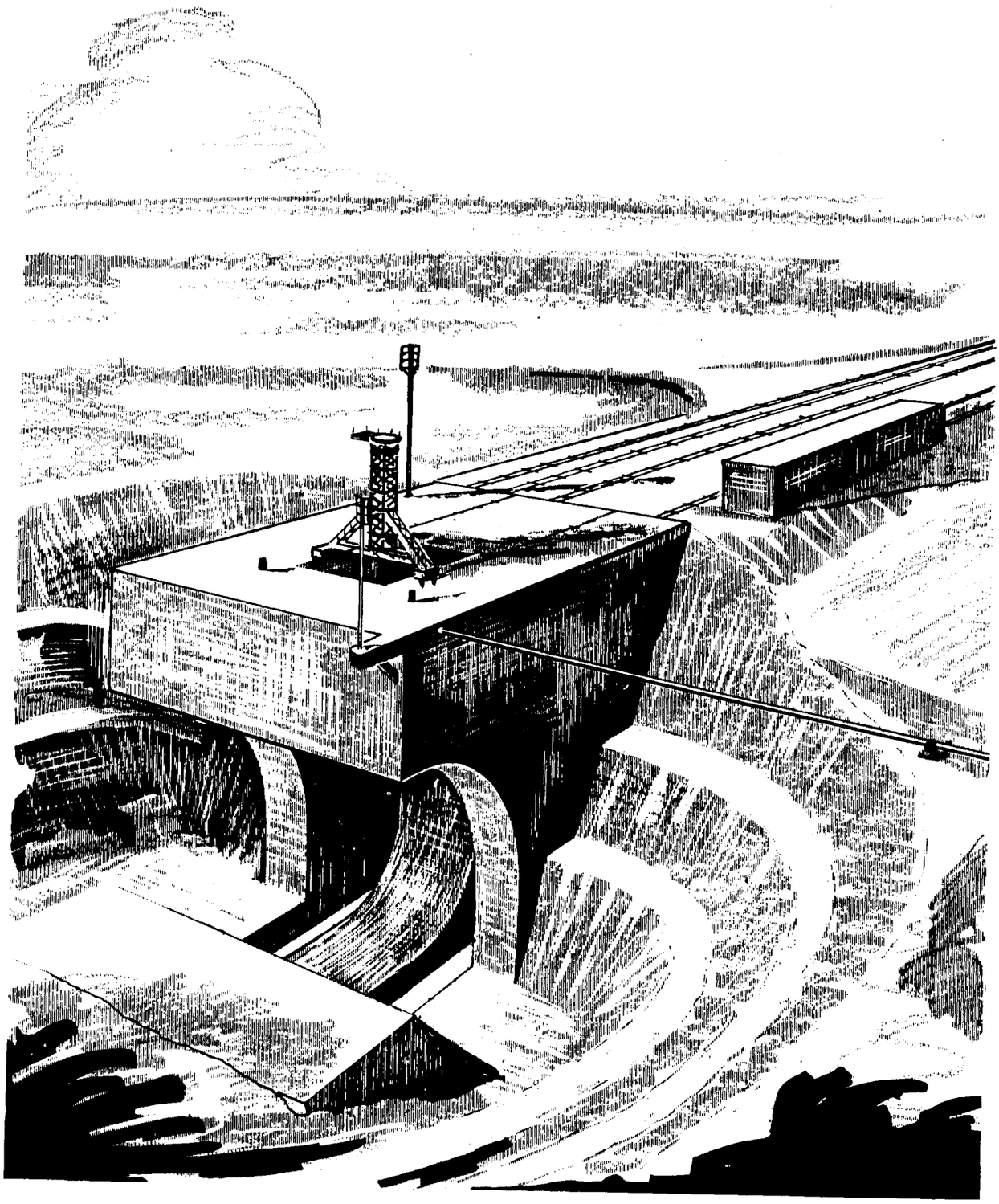
Study of rail nets and facilities in the area indicate that the TYURA TAM missile complex is primarily dependent upon rail transportation for support and operational activities. Several rail run-through buildings, together with numerous sidings and spurs, characterize the area. Approximately 44 long rail cars with lengths varying between 65 and 85 feet are visible throughout the installation. Numerous normal-length rail cars were also noted. Several of the larger cars,

some of which probably are passenger cars, have unusual configurations. Some appear cylindrical and metallic in nature. In addition, a single long flat car with an unusual lattice-type superstructure was visible in the Missile Checkout Area. It appears to have a wide frame base at one end and possibly has a mission related to the transportation and/or erection of missiles.

JM-2-57
Figure 2

PRELIMINARY SKETCH OF MISSILE LAUNCH PLATFORM

TYURA TAM



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JM 2-57 Figure 1

2 Time Enlargement
Approximate Scale 1:16,50

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