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PHOTOGRAPHIC INTERPRETATION REPORT

ICBM COMPLEX, PLESETSK, USSR

NPIC/R-272/64 May 1964

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

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Launch Points I and II (TDI Site I	•	40-27と(1) 40-28と(11)	
Launch Point III (TDI Site 2)		40-32E	
Launch Point IV (TDI Site 3)	62-57N	40-41E	
Launch Site A (TDI Site 4)	62-58N	40-47년	
Launch Site B (TDI Site 5)	63-03N	40-58E	
Launch Site C (TDI Site 6)	63-01N	40-52E	
Launch Site D (TDI Site 8)	62-53N	40-50E	
Launch Site E (TDI Site 7)	62-50N	40-35Ŀ	

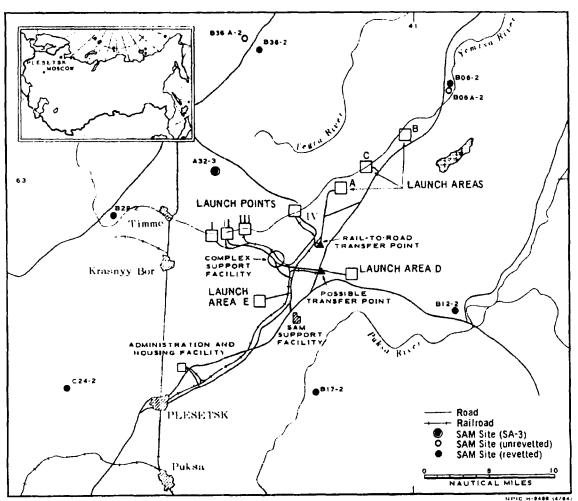


FIGURE 1. LOCATION OF COMPLEX.



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INTRODUCTION

The Plesetsk ICBM Complex is unique in having in one complex most of the known types of Soviet ICBM launch facilities. Indications that they were possibly constructed concurrently with the prototype sites at the Tyuratam Missile Test Center (TTMTC), together with the presence of large-scale support facilities, suggest that Plesetsk may be both a deployed operational complex and a training/orientation facility.

The complex is located northeast of Plesetsk on the Vologda-Arkhangelsk rail line and occupics an area of approximately 215 square miles (Figure 1). Launch facilities extend about 18 nm along the south bank of the Yemtsa River and consist of a complex support facility, an administration and housing area, one and possibly two rail-to-road transfer points, four Type I launch facilities, one Type IIA launch area, one Type IIB, two Type IIC, and one Type IIIA. The general topography of the area ranges from level to rolling forested plains with numerous marshes, lakes and streams. Surrounding forests have been extensively logged. Cold winters and cool summers with considerable precipitation prevail, although the permafrost zone does not extend this far south.

The complex is served by a rail spur from the double-tracked Vologda-Arkhangelsk rail

> Plesctsk ICBM Complex SAM Site Plesetsk ICBM Complex SAM Site

line and by an adequate local road network which links the launch complex to adjacent towns and villages. Obozerskiy Southeast Airfield is located approximately 25 nm to the north.

Launch Points I-IV and Launch Area A were present on (December 1960). However, poor-quality photography, cloud cover, and haze precluded positive identification of ICBM deployment until (February 1962), which confirmed Launch Areas A, B, and C, and (April 1962) which confirmed Launch Points I-IV as ICBM facilities. Bv comparison of the two later missions with it was determined that roads, railroads, built-up areas, and scarring observed at Launch Points I-IV and Launch Area A on were apparently the same for the most part as the features observed and identified at these areas on It is possible to conclude from this similarity that Launch Points I-IV were probably completed by December 1960 and that Launch Area A was under construction at that time.

The complex is defended by six revetted SA-2 SAM sites, and two unrevetted SA-2 SAM sites, collocated with the north and northeast revetted sites, and one SA-3 site.

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B06A-2			
B12-2	ļ		
B1 7-2			
B29-2			
B36-2			
B36A-2			
C24-2			
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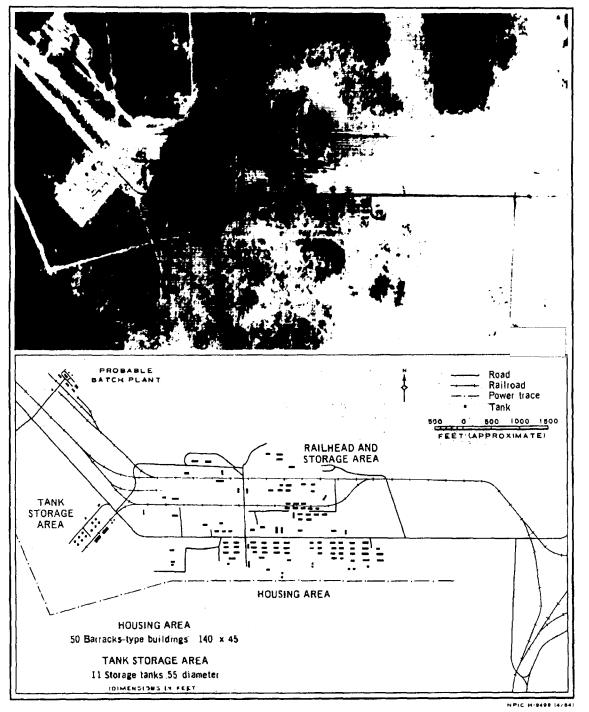


FIGURE 2. COMPLEX SUPPORT FACILITY.





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COMPLEX SUPPORT FACILITY

The complex support facility (Figure 2), located 15 nm northeast of Plesetsk at 62-54N 40-39E, consists of a railhead and storage area, a housing area, a tank storage area, and a probable batch plant.

The railhead and storage area is served by a main rail spur leading to Launch Points I-III, a 6,000-foot siding paralleling it, and a 1,000foot spur at the western end of the area. At least 30 buildings of various sizes, few of them large, are located within this area and among them can be observed open storage areas, construction equipment, and vehicle parking areas.

A housing area adjoins the railhead and

storage area on the south and consists of a group of at least 50 buildings, most of which are barracks-type and arranged in rows of three and four.

A probable batch plant, served by a 2,700foot rail spur and two short sidings, is situated at the northwest edge of the complex support facility and a tank storage facility, served by a 1,000-foot rail spur, is situated at the westend.

All elements of the launch complex are connected by road with the complex support facility, and Launch Points I-IV are connected with it by rail also.

ADMINISTRATION AND HOUSING FACILITY

An administration and housing facility (Figures 3 and 4) is situated near the southwest end of the launch complex at 62-46N 40-21E, 11 nm southwest of the complex support facility and 14.5 nm from the rail-to-road transfer point. It encompasses an area of approximately 2 square miles, contains about 428 buildings, and includes a railhead and storage area, an unidentified area, and a probable batch plant in addition to the administration and housing buildings.

The railhead and storage area consists of a railyard with four tracks 6,000 feet long and two short sidings, eight large warehouses which lie along the southwest side of the yard, and ten more situated at the extreme northeast end of the area. A probable power plant is located within the railyard. To the east is an unidentified group of eight dispersed, road-served buildings; 0.5 nm to the southeast is a railserved probable batch plant in a partly secured area that also contains at least 29 other buildings, 18 of which are barracks-type.

The administration and housing buildings consist of one very large and two smaller Tshaped buildings, one large C-shaped administration building, one E-shaped building, an Hshaped building, 226 barracks-type buildings of various sizes, 21 small family-type buildings, 69 very small structures (probably housing), and miscellaneous support buildings. No security measures are evident.

RAIL-TO-ROAD TRANSFER POINT

The rail-to-road transfer point (Figure 5) at 62-55N 40-45E is adjacent to the rail line to Plesetsk. It is 1,700 feet long, oriented north-east-southwest, and has three cross-over links, one at each end and one in the center. A possible board fence encloses an open storage area

in the northeast half of the facility. At least one possible small building and a possible substation are present, and four unidentified objects are situated just outside the northernmost crossover link. A single security fence encloses the facility on three sides. About 3,500 feet to the



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FIGURE 3. ADMINISTRATION AND HOUSING FACILITY.

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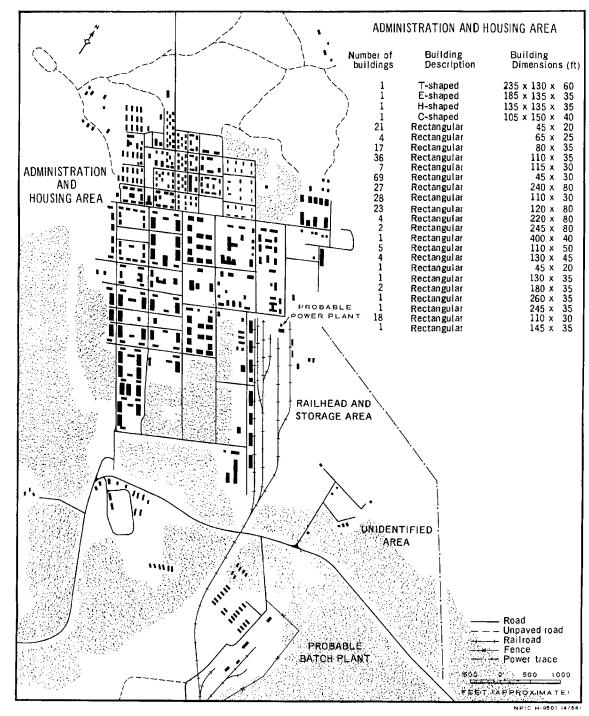


FIGURE 4. LAYOUT OF ADMINISTRATION AND HOUSING FACILITY.

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south, three rail sidings 1,000 feet long serve a small unidentified facility with five buildings. No security measures are apparent here.

A possible second rail-to-road transfer point (Figure 13), with two crossovers and serving Launch Areas D and E, is located at 62-53N

Launch Points I and II (Figure 6), each with one launch pad, are completed Type I facilities. They are located 5.5 nm west-northwest of the complex support facility. The launch pads and missile-ready building are situated in an inverted L-shaped area lying on a north-south axis. The maximum width of the area on the north side is 2,300 feet and the maximum length on the east side is 5,000 feet. The area is enclosed by a triple security fence.

The launch pads are concrete platforms built out from the escarpment along the Yemtsa River. One building lies slightly behind and midway between the pads with two possible small structures nearby. A missile-ready building lies 3,450 feet south of the launch pads. Two small buildings lie along its northeastern side and two other associated buildings are located 425 and 850 feet north of the missile-ready building. A rail spur enters the launch site at the south end and runs north through the missile-ready building to a point 1,050 feet south of the pads, where it forks. From this point a spur continues to each pad. A road providing access to other elements of the launch complex enters the area on the east side, then parallels the rail spur connecting the ready building and the launch pads.

40-46E, 2 nm south of the transfer point. It is about 3,400 feet long by 680 feet wide and is oriented generally east-west. Approximately 13 small- to medium-sized buildings are situated along the southern side of the tracks.

LAUNCH POINTS I AND II

Outside the secured area is a probable guidance facility and the launch support facility. The probable guidance facility, located 5,150 feet southeast of the pads, apparently consists of two like elements each containing at least three buildings. A similar, single installation is located behind each of the other two Type I facilities within the complex, Launch Points III and IV. A perpendicular to the axis of the probable guidance facility through the launch pads indicates a probable pad orientation of 330 degrees plus or minus 5 degrees.

The launch support facility appears to be primarily for housing, except for a possible small heating and/or power plant served by a rail spur parallel to and outside the east fence of the secured area. The administration/housing section contains about 52 buildings, 43 of which are barracks-type arranged in quadrangles.

A two-track rail siding is located on the south side of the rail line leading to Launch Points I and II. This siding branches off about 0.5 nm before the rail line curves north into the secured area, and consists of about 3,500 feet of track.

LAUNCH POINT III

Launch Point III (Figure 7) is also a Type I launch facility with one launch pad. It is located on the south bank of the Yemtsa River 3,75 nm northwest of the complex support facility. The area is enclosed on at least three sides by a double security fence.

The single concrete pad is built over the

escarpment along the Yemtsa River. An object on the pad is probably a missile gantry. A missile-ready building is located 1,300 feet south of the pad. Three buildings are located north of the ready building. Several other small structures are located nearby.

A rail spur enters the launch site from the



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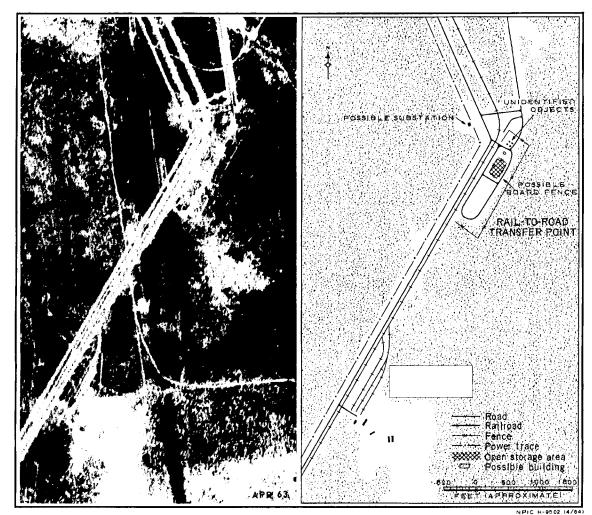


FIGURE 5. RAIL-TO-ROAD TRANSFER POINT.

south, runs north through the ready building, and continues to the launch pad. A road providing access to all other elements of the launch complex enters the area on the east side.

A probable guidance facility consisting of four buildings is situated 3,950 feet southeast of the launch pad. A perpendicular to the axis of the guidance structure through the launch pad indicates a probable pad orientation of 330 degrees plus or minus 5 degrees.

The launch support facility consists of at least 6 barracks-type buildings and 20 other

structures. A double-track utility rail spur with about 3,000 feet of track is adjacent to the launch site on the southeast side. The spur serves a possible heating and/or power plant. A prominent oval road pattern, first apparent in August 1963 is just east of the launch support facility. A probable storage area 3,000 by 950 feet is situated 8,000 feet southeast of the launch site. It contains at least 15 small miscellaneous buildings which may be either quarters or storage units and is connected with the launch site by rail and road.



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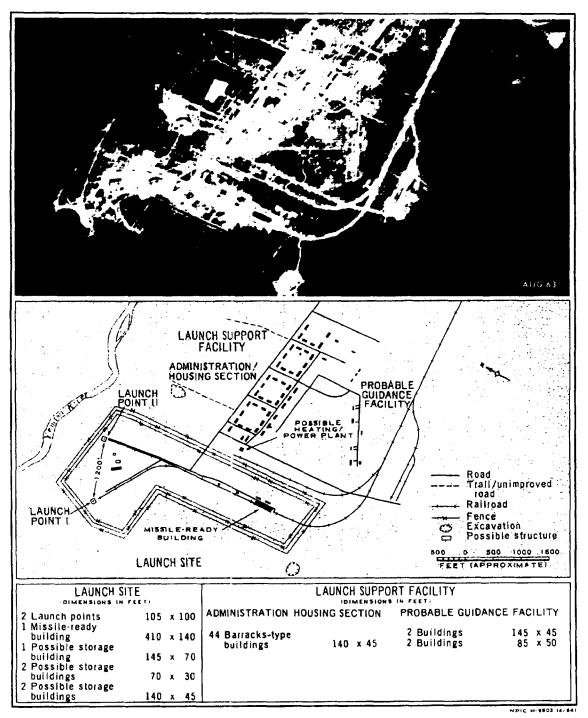


FIGURE 6. LAUNCH POINTS I AND II.

- 8 -



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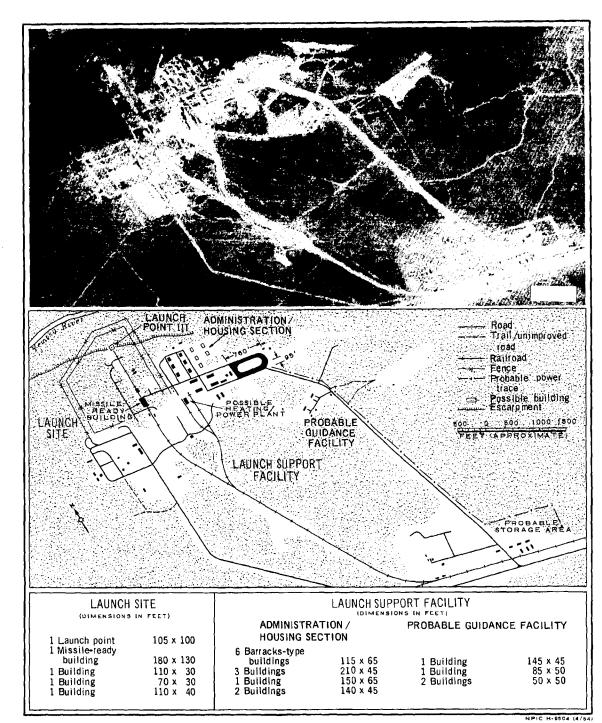


FIGURE 7. LAUNCH POINT III.

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FIGURE 8. LAUNCH POINT IV.

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LAUNCH POINT IV

Launch Point IV (Figures 8 and 9) is also a Type I launch facility with one launch pad. It is located on the southeast bank of a tributary of the Yemtsa River, 3.2 nm north-northeast of the complex support facility.

The launch site, enclosed by a double security fence, forms an irregular rectangle approximately 2,600 by 1,300 feet oriented on a northwest-southeast axis. The single concrete launch pad overhangs a ravine. At least six small unidentified structures are located within the secured area.

A spur of the rail line from Plesetsk terminates at the launch pad. At a point 4,000 feet southeast of the pad, a rail spur paralleled by a road branches out to the north and proceeds to a missile-ready building which is situated at the shallow end of a gully. This ready building has the usual two associated buildings. It is unique, however, in being the only ready building in the launch complex which is outside a secured area, a feature probably related to the presence of a double-fenced underground storage facility in an adjacent ravine. The rail spur and road continue generally east from the missile-ready building through the gully and into the ravine, where they apparently enter the underground storage facility referred to above. This facility may be used for storage of missiles and/or warheads. One building is present on the east bank of the ravine.

Immediately south of this underground storage facility, on the east bank of the ravine, is a storage support/housing area containing at least 30 buildings. Adjacent to the south side of this area and in the ravine is a second roadand rail-served underground storage facility partially enclosed by a double security fence. Both the rail and road spur continue along the gully to this facility from the northern storage facility.

A launch support/housing area with 20 barracks-type buildings and 11 other buildings adjoins the launch site on the southeast and has a three-track utility rail spur with 3,000 feet of track. To the southwest of the three-track spur is a group of at least 29 buildings, most of which appear to be used for storage. At least 9 other buildings lie along the track east of the probable storage area, and appear to be served by a short spur and bypass, as well as a road which connects them with the rest of the launch area.

A probable guidance facility is situated 3,250 feet east of the launch pad. A perpendicular to the axis of the guidance structure indicates a probable pad orientation of 330 degrees plus or minus 5 degrees. It is noteworthy that this guidance facility is offset, so that it is slightly to the east of the launch pad instead of directly behind it as are the guidance facilities at Launch Points I, II and III.

LAUNCH AREA A

Launch Area A (Figure 10) consists of a completed Type IIA launch site and a site support facility and is located on the south bank of the Yemtsa River, 5.4 nm northeast of the complex support facility. Photography of December 1960 upon comparison with later missions, revealed Launch Area A

under construction. Further evaluation of its status was not possible until April 1962

by which time it had been completed.

The launch site, comprising about 90 acres, is in a wooded area and enclosed by a triple security fence about 2,300 by 1,800 feet. An erector/shelter is apparent on each of the elon-

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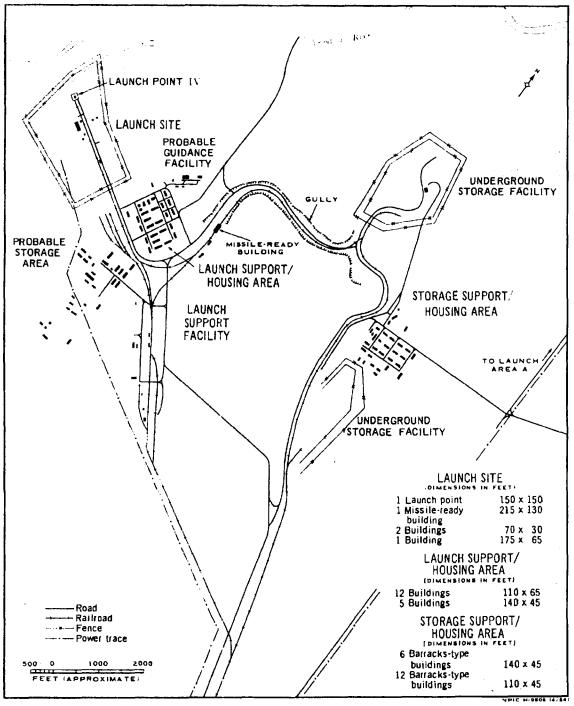
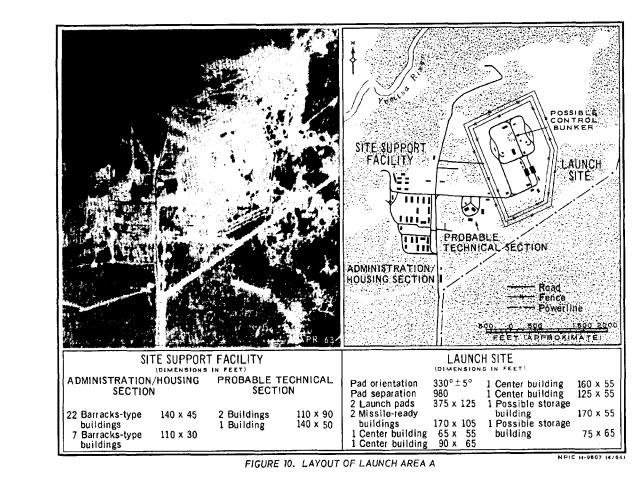


FIGURE 9. LAYOUT OF LAUNCH POINT IV.





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gated pads, which are oriented 330 degrees plus or minus 5 degrees. There are two missileready buildings side-by-side on an apron which is in a central position 800 feet behind the pads.

The center service road is slightly offset to the right, and has three buildings and a possible control bunker along the left-hand side. Thirteen other small <u>buildings are present with-</u> in the secured area. The site support facility is located about 1,500 feet west of the launch site. An administration/housing section contains 29 barrackstype buildings and 8 other structures. A probable technical section is on the southwest side of the access road between the launch site and the administration/housing section. It contains 5 buildings, 3 of which are grouped in a more or less triangular fashion and served by a loop road.

LAUNCH AREA B

Launch Area B (Figure 11) consists of a completed Type IIB launch site and a site support facility and is located on the south bank of the Yemtsa River, 12.5 nm northeast of the complex support facility. It was not present in December 1960 and not iden-





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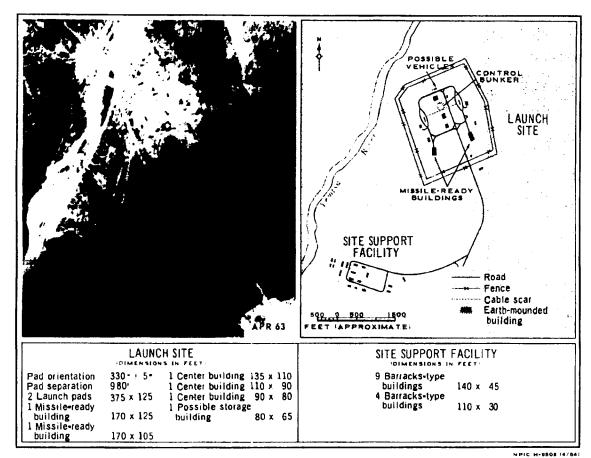


FIGURE 11. LAUNCH AREA B.

tified until February 1962 but was probably under construction as early as June 1961 when a single building of the launch area was observed through a break in the clouds. The launch area was considered to be completed in April 1962

The launch site is in a wooded area and enclosed by a double security fence about 1,900 feet square. An erector/shelter is apparent on each of the elongated pads, which are oriented 330 degrees plus or minus 5 degrees. One missile-ready building is in line with the righthand pad, and 800 feet to the rear; a second missile-ready building, 800 feet behind the lefthand pad, is canted approximately 25 degrees outward.

The center service road is offset to the right, and has three buildings and a bunkered probable control building along the left-hand side.

			At the top of the center service				
road	there	is	a	possible	row	of	vehicles.

The site support facility is located 4,000 feet southwest of the launch site and contains 13 barracks-type buildings and 7 other structures.

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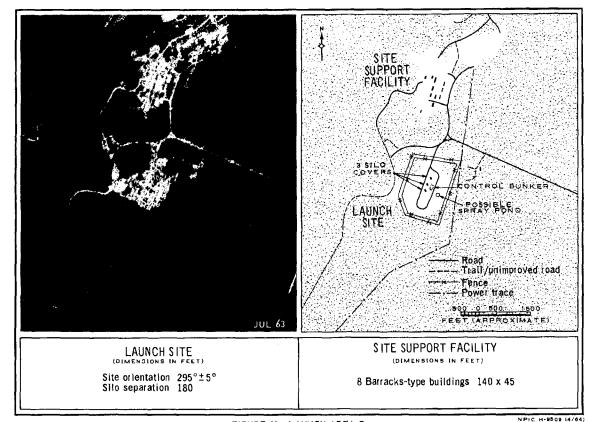


FIGURE 12. LAUNCH AREA C.

LAUNCH AREA C

Launch Area C (Figure 12) consists of a completed Type IIIA launch site and a site support facility and is situated on the south bank of the Yemtsa River, 9.0 nm northeast of the complex support facility. It was first seen in February 1962 _________ at which time excavation was in progress; however, the clearing in which it is situated was present in December 1960 _______ The launch area was considered to be complete in April 1963 _______

The launch site is surrounded by woods and enclosed by a double security fence

about 1,500 feet square. Quality of photography precludes a detailed interpretation of the site, but a loop road pattern, three silo covers, and the position of the control bunker and possible spray pond are visible within the secured area. A perpendicular to the long axis of the site gives an orientation of 295 degrees plus or minus 5 degrees.

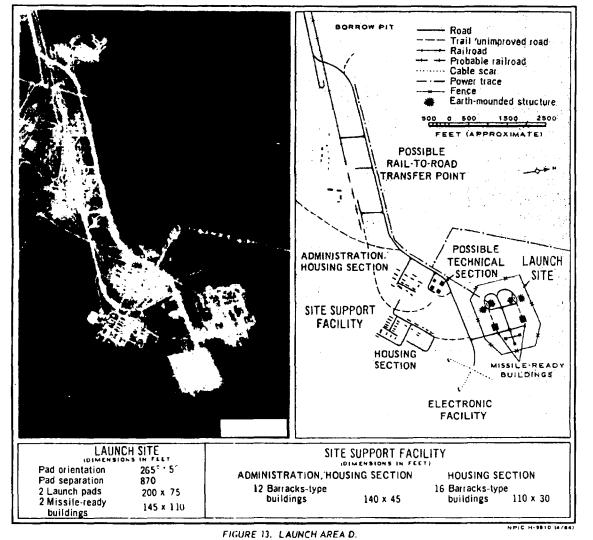
The site support facility is located approximately 2,500 feet north of the launch site and contains 8 barracks-type buildings and 4 other structures.

- 15 -



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LAUNCH AREA D

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in July 1963

Launch Area D (Figure 13) consists of a completed Type IIC launch site and a site support facility and is located 4.9 nm east-southeast of the complex support facility. It was not identified until August 1962), although construction activity was first noted in February 1962 There had been no evidence of construction in June 1961 It was considered to be completed

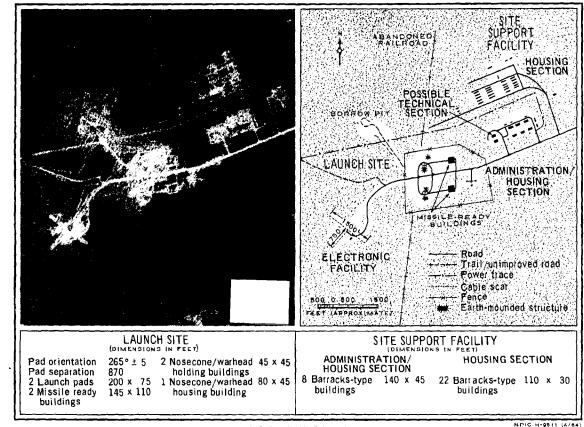
The launch site is in a wooded area and enclosed by a single security fence, generally rectangular, approximately 1,850 by 1,550 feet. Unidentified objects are visible on the pads, which are oriented 265 degrees plus or minus 5 degrees. An inline missile-ready building is situated 650 feet to the rear of each pad. Two earth-mounded structures are adjacent to each





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EIGURE 14. LAUNCH AREA E.

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An electronic facility similar to that at Launch Complex E, TTMTC, is located in a square cleared area almost contiguous to the rear of the launch site on the southeast. A T-shaped probable cable scar with possible small structures at the end of two of the legs is visible within the area. A fouth leg, which

pad.

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Launch Area E (Figure 14) consists of a completed Type IIC launch site and a site support facility, and is located 4.2 nm southsouthwest of the complex support facility. There was no evidence of construction at this site in would form a cross, may be present, but is not well defined.

The site support facility lies about 2,000 feet west-southwest of the launch site and consists of an administration/housing area of 12 barrackstype buildings and 4 other structures, a possible technical section containing 4 buildings arranged in a square adjacent to the northeast of this area, and an additional housing section with 16 barracks-type buildings and 8 other structures.

AREA E

July 1961	Construction activity				
was first noted in Febru	ary 1962				
and identification made	e in August 1962				
It was c	ompleted by July 1963				

- 17 -





The launch site is in a wooded area and enclosed by a single security fence, generally rectangular, about 2,900 by 2,100 feet. Unidentified objects are visible on the pads, which are oriented 265 degrees plus or minus 5 degrees. An in-line missile-ready building is situated to the rear of each pad. Two earth-mounded structures are adjacent to each pad. The center service road is offset to the right. An electronic facility similar to that at Launch Area D is located approximately 3,500 feet from the site and is served by a westward extension of the center service road.

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The site support facility is located about 2,600 feet northcast of the launch site and consists of two groups of buildings including 30 barracks-type buildings and about 10 other structures. A possible technical section, containing at least 2 buildings which are served by a semi-loop road, adjoins the southernmost group on the western end.

			REFERENCES		
PHOTOGRAPHY					
Mission	Date	Pass	Camera	Frames	Classification
	Aug 63				TOP SECRET RUFF
	Jul 63				TOP SECRET RUFF
	Jun 63				TOP SECRET RUFF
	Jun 63				TOP SECRET RUFF
	Apr 63				TOP SECRET RUFF
	Sep 62				TOP SECRET RUFF
	Aug 62				TOP SECRET RUFF
	Aug 62				TOP SECRET RUFF
	Jul 62				TOP SECRET RUFF
	Jun 62				TOP SECRET RUFF
	Jun 62				TOP SECRET RUFF
	Jun 62				TOP SECRET RUFF
	May 62				TOP SECRET RUFF
	Apr 62				TOP SECRET RUFF
	dar 62				TOP SECRET RUFF
	Jul 61				TOP SECRET RUFF
	Jun 61				TOP SECRET RUFF
	Dec RU				TOP SECRET RUFF
	Lug 60				TOP SECRET RUFF
ALLES OF CHART					

REFERENCES

MAPS OR CHARTS

USATC. Series 200, Sheet 0102-9AL, 2d ed, Dec 61, scale 1:200,000 (SECRET)

REQUIREMENT

NPIC, PC 806-63 (partial answer)

NPIC PROJECT

4-368 '63 (partial answer)



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