SENSITIVE OPERATIONS COMPLEX BEREZOVKA, USSR

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PREFACE

This joint photographic intelligence report has been prepared by the Army, Navy, and Central Intelligence Agency in response to general requirements concerning guided missile activity in the USSR. It presents a photographic analysis of a sensitive operations complex and attempts to determine whether it has any characteristics of an operational ICBM launch complex.

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SUMMARY

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A road-served Sensitive Operations Complex, under construction south of Engel's, has been located on photography of The complex consists of a heavily secured operations area, containing four excavations, and three support areas. Because of the early stage of construction at the complex, photographic evidence neither confirms nor negates an ICBM mission; it is equally possible that the complex will engage in some other type of sensitive operation.

25X9

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INTRODUCTION

A Sensitive Operations Complex is under construction near the village of Berezovka, at 51°11'N-46°00'E (see Location Map). It is situated along an improved and partially new highway under construction between Engel's, 17.5 nautical miles (nm) to the north, and Stalingrad, 170 nm to the south. The complex encompasses an area 4 nm long which lies within and on either side of the Ovrag (Ravine) Berezovyy. This ravine, formed by an intermittent stream which empties into the nearby Volga River, ranges in width from 1,900 to 5,000 feet and has escarpments on each side 50 to 60 feet high (see Figure 1). The complex consists of a partially double-fenced operations area, containing four sites of extensive excavating, and three support areas.

The three support areas provide housing, administrative, maintenance, construction and utility facilities for the complex. Accommodations for construction personnel include dormitory space for an estimated 428 persons and housing for 14 families. Quarters under construction for permanent personnel include barracks space for approximately 440 persons and housing for an estimated 270 families.

Power for the complex is provided by an overhead power line from Engel's. Photographic evidence indicates that the complex will not require large amounts of water for its operations. A small building with an adjacent

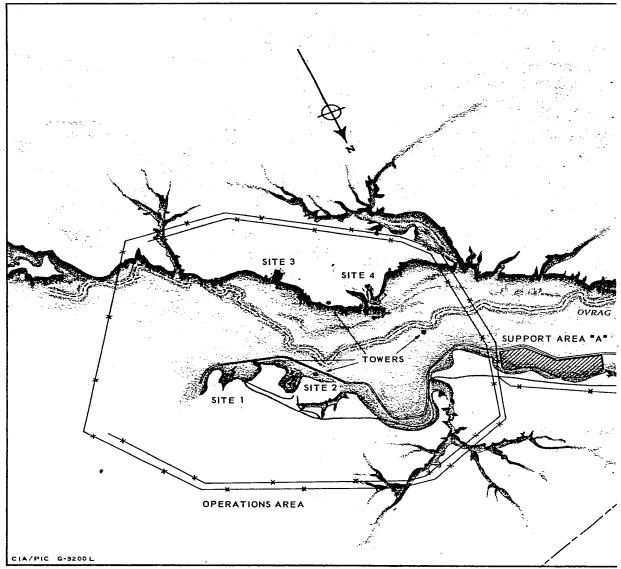
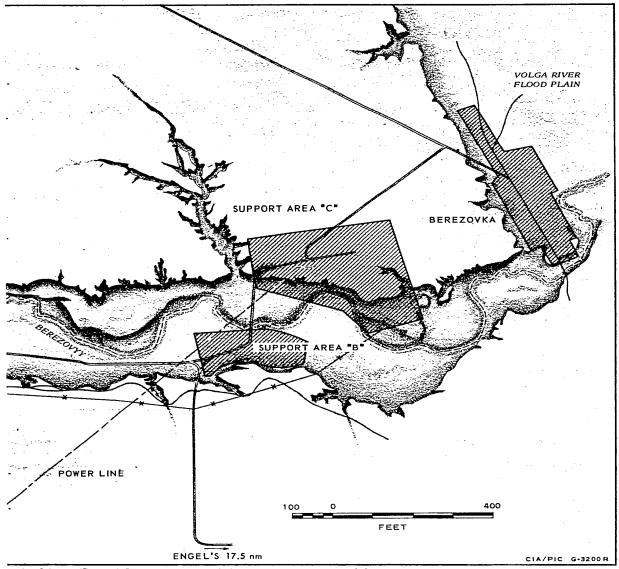


FIGURE 1. SENSITIVE OPERATIONS COMPLEX. The complex lies within and on either



side of Ovrag (Ravine) Berezovyy, and includes an operations area and three support areas.

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mast could provide radio communications with Engel's.

The nearby villages of Berezovka and Krasnoarmeyskoye have no facilities for providing operational support or other services to the complex. External logistical support will probably be provided by the Saratov-Engel's urban area, which has the nearest air and rail facilities. Since there is no evidence that a railroad line will be constructed from Engel's to service the complex, logistical support will probably move along the improved road under construction between Engel's and Stalingrad.

OPERATIONS AREA

Sites 3 and 4.

The Operations Area is located east of and adjacent to Support Area "A", and covers almost three square miles in and around the ravine (see Figure 1). Three sides of the area are enclosed by two wire fences 180 feet apart, while the easternmost side appears to be enclosed by a single wire fence.

The area consists of four excavations, Sites 1 through 4, which are being dug into the escarpments delineating the ravine (see Figures 1 and 2). Sites 1 and 2 are being dug into the north escarpment, while Sites 3 and 4 are being dug into the south escarpment. The excavations apparently are located so as to take maximum advantage of the natural protection afforded by the escarpments. The combined area of the four excavations comprises less than one percent of the Operations Area.

A service road is under construction connecting the Operations Area with the three support areas. The road parallels the north escarpment of the ravine and will serve Sites 1 and 2. The roadbed, filled to a height of at some places, is being extended a short distance beyond Site 1, indicating that the road may eventually serve other sites not yet begun. At the time of photography, there was no evidence of a road network to serve

Because of their early stage of construction, little can be said about the sites themselves. Their status at the time of photography is as follows: 25X1D

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 $\underline{\text{Site 1}}$ - This is a rectangular-shaped excavation, 275 by 140 feet, and of the four sites is in the most advanced stage of construction, with the excavation work probably completed. The earth which was removed from the excavation has been neatly piled on top of the escarpment and in the

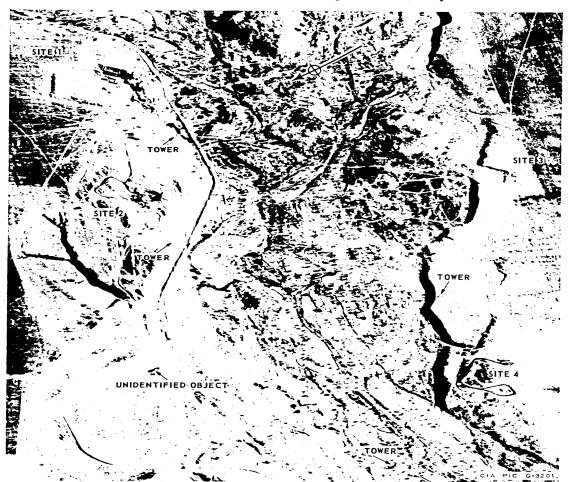


FIGURE 2. OPERATIONS AREA. The area is partially secured by two wire fences and contains four sites of extensive excavating.

ravine between the excavation and the road. There are two probable pieces of equipment at this site.

- Site 2 This site is roughly 325 by 180 feet, and is located 1,650 feet west of Site 1. Excavation is in progress, with two probable pieces of equipment in operation and two vehicles parked nearby. Earth is being dumped on top of the escarpment to the rear of the excavation. There are eight probable vehicles or pieces of equipment on the escarpment between this site and Site 1.
- $\underline{\text{Site 3}}$ This site is in a very early stage of construction. The excavation measures 240 by 145 feet.
- <u>Site 4</u> This site is located 2,700 feet west of Site 3. Preliminary earth moving has apparently just begun. Topsoil has been scraped away in an area roughly 310 by 200 feet behind the edge of the escarpment. There are four probable pieces of equipment present at this site.

Four towers, the functions of which cannot be determined, are located within the Operations Area. Two short three-pole self-supporting towers with an object on top are located at the base of the north escarpment near Sites 1 and 2. A lattice-type self-supporting tower, with a probable small building adjacent to it, is located near the center of the ravine. The fourth tower is located atop the south escarpment, but the type of construction cannot be determined. There are two probable vehicles near the base of this tower.

Two buildings, one 45 by 20 feet and the other 70 by 40 feet, adjoin the fences at the entrance to the Operations Area. An unidentified object, 85 by 20 feet, is located near the roadway 3,200 feet east of the entrance.

SUPPORT AREA "A"

Support Area "A" adjoins the single entranceway into the Operations Area and lies along the road servicing that area (see Figure 3). It consists of a housing section, a portion of which is still under construction, and a construction camp. The housing section has dormitory space capable of



FIGURE 3. SUPPORT AREA "A". The area contains housing facilities, a steam plant under construction, and a construction camp.

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housing an estimated 288 construction workers and will have barracks space for about 440 permanent personnel. A detailed description of these sections follows.

Housing - Partially enclosed by a solid fence are six single-story, gable-roofed buildings feet capable of housing 288 construction

Housing - Partially enclosed by a solid fence are six single-story, gable-roofed buildings feet capable of housing 288 construction unit personnel. Just east of these buildings is a single-story, flat-roofed probable administration building and a two-story, hip-roofed barracks 110 by 55 feet capable of housing 80 permanent personnel. Three probable three-story barracks 110 by 55 feet are under construction nearby which should be capable of housing 360 permanent personnel. A steam plant feet with a stack is being constructed to service this section.

<u>Construction Camp</u> - This camp, which contains several buildings, a batch plant and open storage areas, is apparently supporting construction of the Operations Area.

SUPPORT AREA "B"

Support Area "B" is situated at the intersection of the main road from Engel's with the internal road network serving the complex (see Figure 4). It contains storage facilities and family dwelling units capable of housing approximately 40 families. For discussion purposes the area has been divided into three sections. A detailed description of these sections follows.

Road Intersection - The main road from Engel's intersects the internal service road network at wide-angle turns. At the time of photography, neither the main road nor the service roads appeared to be surfaced. However, the roadbed of the main road from Engel's has been completed, measuring 30 feet wide, and there are no steep grades at any point along this road.

25X1D Storage - The storage facilities are secured by a solid fence and include nine single-story, gable-roofed buildings ranging from to 160 by 45 feet, and several small sheds. The internal service road



FIGURE 4. SUPPORT AREA "B". The area contains storage facilities and family dwelling units.

passes through the middle of these facilities and continues on to Support Area $^{\prime\prime}C^{\prime\prime}$.

<u>Family Housing</u> - This section contains 23 permanent family dwelling units ranging from 25 feet square to 50 by 35 feet, capable of housing approximately 40 families.

SUPPORT AREA "C"

Support Area "C" is the largest of the three support areas, and is located on high ground rimming a portion of the ravine (see Figure 5). It contains housing, administrative, communications, storage, maintenance, construction, and utility facilities, some of which are still under construction. Quarters for construction personnel in this area include dormitory space for about 140 workers and housing for about 14 families. For permanent personnel there is housing for about 230 families. For purpôses of discussion the area is divided into six sections. A detailed description of these sections follows.

<u>Construction Housing</u> - This section contains 7 two-family units and five dormitories capable of housing 140 workers. Several personnel support structures are scattered throughout the section.

 $\underline{\text{Motor Pool}}$ - This section contains 12 buildings associated with the maintenance and servicing of vehicles and equipment. Approximately 150 vehicles are parked in the section.

25X1D <u>Communications</u> - This section contains a single building 45 by 35 feet with an adjacent mast capable of communicating with the Engel's urban area.

Storage - The 10 buildings in this section range from 45 by 30 feet to 205 by 45 feet. A large amount of material is stored in the open around these buildings. An excellent 25-foot wide roadbed has been prepared to service the buildings and open storage within this section.

<u>Utilities</u> - A power substation is located in this section and is secured by a solid fence 290 by 175 feet. About 2,000 feet west of the substation is

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FIGURE 5. SUPPORT AREA "C". The area contains housing, administrative, communications, storage, maintenance, construction, and utility facilities, some of which are still under construction.

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feet with a 110-foot high stack. Nearby, a building

feet is under construction. Two earth-covered structures

feet and two small support buildings are located between the steam plant and the substation.

Housing and Administration - The section contains 20 probable apartment houses, most of them still under construction, and 3 two-family units which should be capable of housing about 230 families of permanent personnel. In addition, a large U-shaped administrative-type building is under construction which measures 170 by 30 feet with two wings each 75 by 25 feet. Several support structures are also under construction in this section.

CONCLUSIONS

- 1. Physical security, coupled with the placement of the sites within the escarpments to afford maximum natural protection, suggests that the complex will be engaged in some type of sensitive operation.
- 2. Because of the early construction stage of the complex at the time of photography, it is not possible to determine whether it will have an ICBM mission or some other type of sensitive operation,
- 3. The permanent housing at the complex, including barracks for about 440 persons and housing for about 270 families, is similar to the standard housing found at most Soviet industrial and highly technical complexes. This suggests that over 700 technical and other highly skilled personnel will be required to support the operations at the complex.
- 4. Since the road to Engel's has been improved and there is no evidence that a rail line will be constructed, the complex will probably be served only by road.

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REFERENCES

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MAP DATA:

AMS. Series N501, Sheet NM 38-2 (Atkarsk), 2nd ed., June 56,

1:250,000 (U)

AMS. Series N501, Sheet NM 38-3 (Saratov), 2nd ed., May 56, 1:250,000 (U)