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Imagery analysis report

Vulnerability Area 108, Shagan River Test Area, USSR

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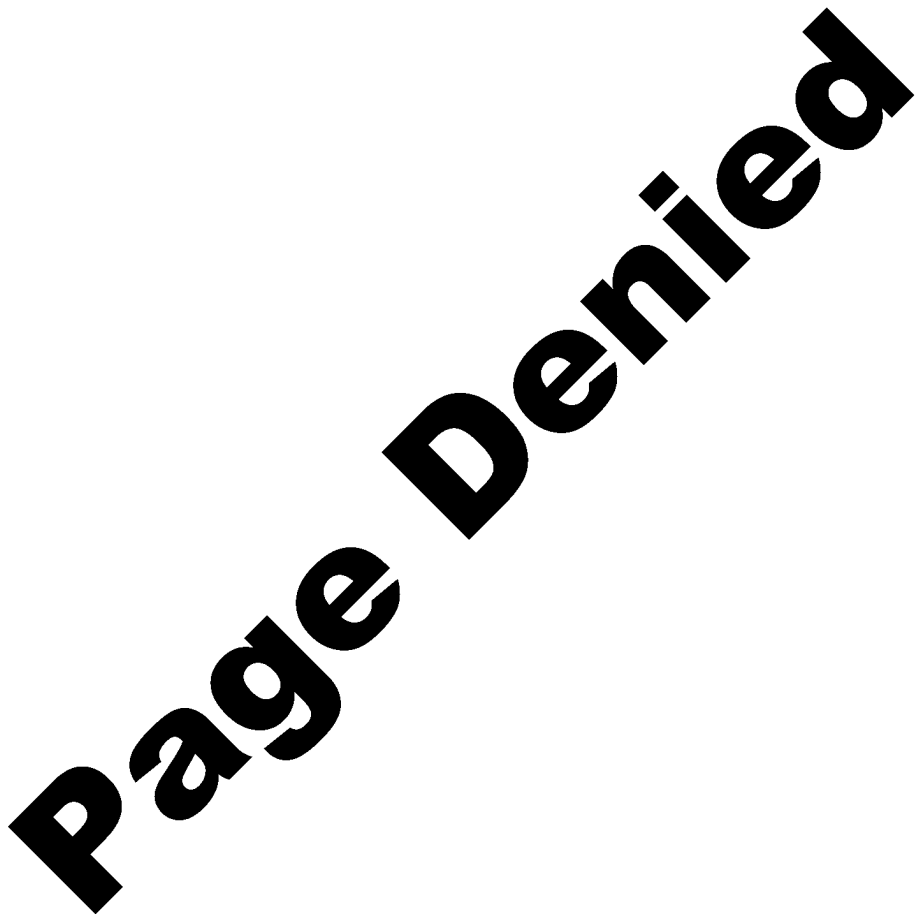

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VULNERABILITY AREA 108, SHAGAN RIVER TEST AREA, USSR

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1. (S/D) This report provides a summary of the activity at vulnerability area 108 at the Shagan River Test Area USSR, from (Figure 1). The report updates a previous NPIC report.[1] 25X1

2. (S/D) Since construction has continued at area 108. At the large conduit/arch structure (Figure 2), additional rectangular conduit sections were installed in the narrow section of the trench. The conduit has an interior height of and a width of Approximately 220 meters of conduit have been constructed to date. Rail sections were next to the trench during most of the reporting period. The rail sections still have not been observed in the conduit, but they have probably been placed in completed portions. Concrete slabs replaced the wood panels on top of the completed portion of the conduit. The western end of the conduit was closed off and the surrounding area was backfilled to grade level. Approximately 60 meters of prefabricated concrete arch sections were assembled over the western portion of the completed conduit. The arches span and are about 15 meters wide at the base. No activity was observed at the wide portion of the trench where the traveling gantry crane is positioned. 25X1 25X1 25X1

3. (S/D) A smaller rectangular conduit was under construction in a trench in the center of area 108 (Figure 3). The conduit, about 100 meters in length, was almost complete. This conduit has an interior height and width of respectively. About 85 meters of concrete arch sections were assembled over the conduit. These arches span 260 degrees (omega shaped). About 15 meters of the arch structure on the east end were covered with rebar mesh. By about of concrete appeared to have been poured into the rebar mesh. It is not yet known whether the arches are a part of the structure or for containing high explosives (HE). If HE is later placed in the arch structure and only the east end of the structure is hardened, then the structure will probably serve as a shock tube or dynamic airblast simulator (DABS). If the entire structure is hardened, then HE will probably be placed throughout the structure and it will serve as an HE simulation technique (HEST) structure. 25X1 25X1 25X1

4. (S/D) A large-bore shaft was drilled about 75 meters from the west end of the conduit between This shaft will probably be used for HE. A probable instrumentation bunker was under construction north of the conduit. Some trenches for instrumentation and timing and firing lines have been excavated. 25X1

5. (S/D) Little activity was observed at the two silo corings in the southern portion of area 108 (Figure 4). The larger of the two corings, designated silo 15, has been identified as a probable command and control silo. The silo is similar to one currently under construction at Serpukhov Radio Communications Station/Hard and to one constructed at Kapustin Yar Missile/Space Test Center At silo 15, the approximate outer and inner diameters of the silo at ground level are respectively. The headworks area is about meters deep and the inner diameter of the silo at the headworks ledge is about A silo base and at least six silo wall segments, about long, were installed into the silo. The inner diameter of the silo after the installation of the wall segments is about A probable headworks base, with outer and inner diameters of about respectively, was assembled next to the silo. No other components have been observed. At the smaller silo, additional coring was observed, but no components were delivered to the silo. 25X1 25X1 25X1 25X1 25X1 25X1 25X1 25X1

6. (S/D) Two large excavations are within area 108 (Figure 1). One excavation is parallel to the east fenceline and the other is parallel to the west fenceline. Little activity was observed in the excavations. Small-bore drilling operations were underway adjacent to the excavations during most of the reporting period. The shafts at both excavations were drilled in a row parallel to the excavations. By [redacted] 25 shafts were adjacent to the eastern excavation and 19 shafts were adjacent to the western excavation. A probable instrumentation bunker was under construction near the eastern excavation and a small linear trench near the western excavation was probably for an instrumentation bunker. 25X1

7. (S/D) A large-bore drilling operation was underway by [redacted] east of the two silo corings. No activity was observed at the probable small-bore shaft west of the large conduit/arch structure or at location 29 in the northwest corner of area 108. 25X1

8. (S/D) An onsite support camp was established southwest of the large conduit/arch structure (Figure 1). The camp consisted of 16 squad tents, a single large tent, a water trailer, and a soccer field. It is estimated that the camp could have housed about 160 persons. However, by the end of the reporting period, the large tent and three of the small tents had been removed.

DOCMENT

1. NPIC. Z-20008/80, IAR-0103/80, Area 108—New Vulnerability Test Site—at Shagan River Test Area, USSR (S), Jun 80 (SECRET/[redacted] 25X1

(S) Comments and queries regarding this report are welcome. They may be directed to [redacted] 25X1
Soviet Strategic Forces Division, Imagery Exploitation Group, NPIC, extension [redacted] 25X1
[redacted] 25X1

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