Photographic Interpretation Report

Hardened Command and Control Facilities Penza, USSR

January 1967

Penza HF transmitting facility 53 21 N 45 19 E Penza HF receiving facility 53 10 N 45 19E

Penza HF Transmitting facility

HF antenna field containing 44 double day/night rhombic antennas and 4 horizontal dipole antennas. A large, low profile, separately secured, earth-mounded control building [] is in the center of the antenna field. The earth-mounded control building is surrounded by at least 4 hardened (subsurface) antennas which are under construction and are irregular in size and shape.

The 44 double rhombic antennas at this facility apparently are constructed to transmit in 2 directions as shown by the transmission direction switch in the center of each antenna clearing. By utilising this bidirectional feature of the transmitting antennas, complete coverage of the major population areas of the USSR is possible.

Four hardened (subsurface) antennas, 2 of which are paired, are also at the transmitting facility. These antennas are considered to be bidirectional, and have a wide beam angle, thus providing wide angle coverage of the USSR. It is quite possible that additional hardened (subsurface) antennas will be constructed at this facility to complete the pairing, to fill in the gaps in the coverage and to provide omnidirectional coverage.

Penza HF Receiving facility

8 double rhombic antennae, 16 fishbone antennas, 2 dipole antennas.

5 hardened antennae, 4 of which are in 2 pairs. Additional hardened antennae may be constructed to fill in the gaps in coverage.

Several rectangular objects are on the top of the earth-mounded control building and are probably ventilators.

5 hardened (sub-surface) antennaes appear to be in the mid-stage of construction.

The typical pattern of 16 rows of parallel antennae elements observed during the construction of most hardened (sub-surface) antennae has not been observed at this facility.

Mounding of the hardened (sub-surface) antennae and mounding of the control building has not been complete.

Chaadayevka hardened command facility

The construction/support area is served by 9 rail sidings ... The area contains a large concrete batch plant, at least 5 warehouse buildings, and open storage. At the southwest end of this area is a housing section which contains 14 multistorey apartment buildings, and at least 7 administrative/support buildings.

The 2 operational parts of this facility are a north and a south bunker area. They contain a total of 7 large bunkers, 8 multistorey apartment buildings, and 2 heating and power plants, one in each of the

areas. Two of the bunkers in each area are adjacent to 2 multistorey apartment buildings. These facilities appear to be connected to the heating and power plant in each area by an underground steamline. The north and south areas are separately secured, and a gate house is at the entrance to each of these areas. The entire facility is served by a central service road which connects the 7 bunkered areas and the construction/support area. Additional structural details are included in table 1.

Within the Chaadayevka facility are several components which appear to be similar to components of the Sharapovo Central Comand Facility near Moskva at 55 10 00 N 37 33 30 E. An illustrated description of the Sharapovo facility and the other known Central Command Operations or Headquarters Facilities were included in a previous NPIC report.

The Chaadayevka Hardened Command Facility can not be negated on [] photography. The complex was first observed on [] at which time the rail facility was under construction. Construction activity at the north and south bunker areas was first observed on []. However, between [] no progress in construction could be observed. On Mission [] 2 additional bunkers designated 3 and 6 were observed under construction. On [] the clearing for a fifth bunker, which is designated 5 on figure 7, was observed and by [] photography[] a total of 7 bunkers were observed under construction. The construction/support facility and the construction of the 7 bunkers continued and on [] photography of [] clearings and 8 apartment buildings were observed near 4 of the bunkers. This construction was continuing when the facility was last observed on [].

No	Bunker data		Apartment data			Distance from	Remarks
	Туре	Construction Status	Quantity	Size (ft)	Construction Status	bunker to apartment (in feet)	
1	Undetermined	Earth covered	No associated apartment building				A heating and power plant is near the bunker
2	Personnel	Earth covered	2	180x55	Under construction	200-250	See figure 10
3	Undetermined	Earth covered	No associated apartment building			500 - ?	-
4	Personnel	Being earth covered	2	180x55	Under construction	500	
5	Personnel	Under construction	2	180x55	Under construction	500	See figure 9
6	Undetermined	Earth covered	No associated apartment building				A heating and power plant is near the bunker
7	Personnel	Under construction	2	180x55	Under construction	500	See Figure 8

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