INTELLIGENCE APPRAISAL

USSR:
BIOLOGICAL WARFARE(U)

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Intelligence Appraisal

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PREPARED BY

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Summary

(S/NOFORN) Strong circumstantial evidence indicates the USSR possesses an illegal store of biological warfare agents and is involved in probable development or production of biological weapons.

Discussion

Background

(S/NOFORN) Since World War II, the intelligence community has received sporadic reports and allegations of Soviet involvement in offensive biological weapons development. Sources of the allegations have ranged from low-level defectors to high-level Soviet academicians. High-level political and military leaders have also alluded to possession of biological weapons. Most of the information has come from overt literature and human sources, as well as some clandestine reporting.

(S/WNINTL/NOFORN) None of the information has described in sufficient detail the biological weapons, the contained agent, or the facilities where these are manufactured. However, the disease-producing agents and types of delivery systems are occasionally specified. Detailed information establishing the credibility of sources has been scarce. Photographic intelligence of prospective research and development centers, suspect production or storage sites, and proving grounds has been extensively studied, but has not yielded a definitive biological warfare (BW) weapon signature.

(S/NOFORN) As a result of overt human reporting and open literature, the intelligence community can adequately monitor and assess Soviet, or any other nation's, capabilities and state-of-the-art in scientific and technological areas that would be important for research, development, production, testing and evaluation of biological agents for warfare purposes. However, analysis of BW-oriented scientific developments is one of the most difficult areas of intelligence. The analyst must continually question whether a particular development is intended for BW purposes. Until a disease-producing agent is placed in a delivery system for the express purpose of injuring or killing men, animals, or crops, it is generally not considered a biological weapon development.

(U) A critical consideration is that from a scientific point of view, no technological barriers prevent any country from developing a biological weapon. Open source literature provides the requisite technical base. Various agents are available from both commercial and natural sources. The means for production and dissemination are widely available at very modest costs.

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(U) The convention prohibiting development, production, and stockpiling of bacteriological (biological) and toxic weapons went into force in 1975. It has no verification requirements and is, in effect, a gentlemen's agreement. This convention calls for a conference of parties to the convention to be held in Geneva during 1980. The conference will review operation of the convention, and will also discuss relevant new scientific and technological developments.

(5/WHINTEL/NOFORN) The intelligence community closely watches all these developments, particularly as they relate to activities within the USSR. In recent years, the USSR has acquired significant technology and equipment, built large-scale biological fermentation facilities, and made progress in other areas considered useful should Moscow decide to pursue production of biological weapons.

(5/WHINTEL/NOFORN) The intelligence community has focused on a number of sites in the USSR categorized as suspect BW production facilities. The controversial nature of these sites within the intelligence community revolves around probable storage/bunker areas with identical configurations at the different sites. While the purpose of these areas has not been conclusively established, they appear to be for storing explosives or explosive components, suggesting weapons activity.

Probable BW Accident in Sverdlovsk

(5/NOFORN) Since late last summer, four separate and unrelated human sources have reported that an accident occurred at a BW institute in Sverdlovsk. The first source reported 300 Soviets died of what a local paper called "Siberian Ulcer," or anthrax. This was allegedly an attempt by local authorities to stem panic caused by these deaths. The source claimed the real cause of death was a leak at one of the "bacteriological warfare" installations. The second source reported that in late May 1979, a persistent rumor heard on the streets of Moscow was that a disaster occurred in Sverdlovsk earlier in the month. Several hundred people supposedly died from an unknown cause that authorities had first thought was diseased cattle near the city. As a result, most, if not all, of the animals were destroyed. Later investigations, according to the rumor, indicated cattle were not the cause, and some speculated that an airborne disease had been the culprit.

(5/NOFORN) By early July, Moscow had still made no official announcement on the rumored disaster, but a third source reported that he heard from three close friends — two steel production engineers and a dentist — about a May accident in Sverdlovsk. One friend lived in Sverdlovsk, and the other two had close relatives living there. In separate conversations, the source learned that people at a Sverdlovsk institute had been affected by a disease and tried to flee in panic, but they were held inside the facility by security personnel. One friend claimed that personnel from several state agencies wanted to flee the city after learning of the accident but were also restrained from doing so.
Recent information from a Fourth source has provided the most detailed description so far of events that transpired in the city. A surgeon in a district hospital at the time of the accident, the source obtained his information primarily through conversations with fellow doctors. He claimed a biological accident occurred inside a military installation in the Chkalov city district of Sverdlovsk where "dispersible bacteriological weapons" are produced.

In late April 1979, the population was awakened by a loud explosion that was attributed to a jet aircraft. Four days later, seven or eight persons from the military installation were admitted to hospital number 29 in the suburb where the military installation is located. Their symptoms were high fever (104 degrees), blue ears and lips, choking, and difficult breathing. They died within 6 to 7 hours, and autopsies revealed severe pulmonary edema plus symptoms of a serious toxemia.

About 6 days after the illness first appeared, the source and other doctors from various hospitals were called together by the district epidemiologist. The number of fatalities had risen sharply, and the source estimated deaths by this time at 40. The epidemiologist announced the outbreak of an anthrax epidemic and gave a lecture on the disease. He claimed the epidemic was caused by an illegally slaughtered cow suffering from anthrax in a town about 10 km northeast of Sverdlovsk. He said the beef had been sold in the suburb where the fatalities were occurring. This explanation was not accepted by the doctors in attendance because the fatalities were caused by pulmonary anthrax as opposed to gastric or skin anthrax, which would be more likely if anthrax-contaminated beef were eaten or handled.

The doctors were ordered to admit all suspected patients and persons in contact with them to hospital number 40, a nine-story building that had been vacated to handle victims of the epidemic. The hospital was taken over by the military and completely sealed off from its surroundings. Most hospital workers were vaccinated, and about 2 weeks after the hospital was converted, all workers and close family members were given daily doses of tetracycline antibiotic.

Other details concerning the outbreak began to leak out in medical circles. The doctors learned that the explosion during the night occurred at a laboratory inside the military installation, and in their opinion, this laboratory was tasked with cultivating agents for biological weapons. The first casualties were a fairly large number of male reservists at the military installation. They were the first to come in contact with the biological agent. More casualties occurred among workers in a ceramics factory adjoining the military installation, even though they had been working indoors. Investigators surmised that ventilators had sucked the agent into the buildings. Since the ceramic factory was downwind from the military installation at the time of the explosion, it received concentrated quantities of the bacilli (agent) in the factory rooms.
(S/NOFORN) Unconfirmed reports claimed that the installation commander, a general officer, committed suicide following the first casualties. Shortly after the epidemic began, the chief epidemiologist from the Ministry of Health in Moscow arrived in Sverdlovsk with several assistants and a large laboratory. He stayed for several weeks. In early May, about 2 weeks after the first casualties, Defense Minister Ustinov allegedly arrived in Sverdlovsk, followed 2 days later by Minister of Health Petrovski. Their visits were not publicized.

(S/NOFORN) Eventually, all persons in the affected city district were ordered to report for vaccination. This allegedly led to serious post-vaccination complications, and the source himself declined to be inoculated. Doctors soon noticed that only those directly exposed to the airborne agent contracted the disease. Persons who were in contact with victims of the disease were not infected, and doctors who performed mouth-to-mouth resuscitation on dying patients showed no symptoms of the disease. Military takeover of the epidemic hospital resulted in concealment of the exact number of casualties, but it was rumored to exceed 200. US, West German, and Soviet broad-spectrum antibiotics were said to be particularly effective against the agent.

(S/NOFORN) The dead were placed in chloramine, a decontaminating and disinfecting compound -- no cremations were possible because of lack of facilities. Relatives were not allowed at the funerals. The ceramics factory was sprayed inside and out with chloramine, and large areas around the military installation were graded and covered with asphalt. Wild animals in a small forest near the military installation were allegedly killed, and most dogs in the city district were picked up and destroyed. On 14 May, the source found an official notice posted on the bulletin board of his apartment building ordering all residents to stay inside between 1400 and 1500 hours since all building roofs and other surfaces in the city district -- an area about 5 km by 7 km -- were to be sprayed from the air. Open areas, fields, and sewage systems were also decontaminated.

(S/NOFORN) By early June, the epidemic had run its course, and in September, the military returned the epidemic hospital to civilian control.

Conclusion

(S/NOFORN) The information accumulated on the accident constitutes strong evidence that a biological production or storage site is at the Sverdlovsk facility. All indications point to anthrax as the causative agent of the disease. An effective lethal dose for a man is estimated to be about 10,000 spores, indicating an extremely large number of anthrax spores were released -- effectively negating any assessment of peaceful or defensive research being conducted there. This flies in the face of provisions of the Convention on the Prohibition of the Development, Production, and Stockpiling of Bacteriological (Biological) and Toxic Weapons signed in 1972 and effective since 1975. Thus, the evidence points strongly to illegal production or storage of biological agents and weapons. (Classified by DoD Dir 5-5200.17 (M-2); review on 5 Mar 10)