During much of its fifty-one years, the Soviet state has been greatly preoccupied with the danger of war. Its leaders have constantly stressed the need to be ready for war and the importance of protecting the population, economy, and administration against an enemy attack. One can say, in fact, that civil defense programs have been in existence nearly from the inception of the Soviet state itself.¹

In the Soviet view, civil defense in the nuclear age has assumed a special urgency. According to Soviet military doctrine, in the event of a nuclear war the enemy is expected to try to destroy not only the military forces, but also the major centers of population, administration, and production so as to deprive the Soviet Union of its war potential as well as break down its national organization and will to fight. Thus Colonel General O. V. Tolstikov, Deputy Chief of Civil Defense of the USSR, alleged in a 1968 publication that U.S. strategic plans against the Soviet bloc were

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considering the "assured destruction of millions of people and up to 80 percent of the industrial potential, and of at least 200 of the largest cities...." Consequently, the official Soviet view holds that civil defense is an important strategic capability which helps to ensure national survival and victory in a nuclear war.\(^3\)

Since 1955 the importance of civil defense as part of the Soviet strategic posture and defense capability has been repeatedly stressed by the Ministers of Defense and by many of the leading marshals and generals. In 1966, the ongoing Soviet Civil Defense program was given an unusually high-level public endorsement at the 23rd Congress of the CPSU, when the General Secretary of the Central Committee, L. I. Brezhnev, said in his address: "We must perfect civil defense...." The Resolution of that Congress included a statement urging the "perfecting" of civil defense and directed that this "must be the constant concern of the entire Party and of the entire Soviet society." In 1967, Brezhnev again publicly called for further improving civil defense in a speech at a Kremlin reception for graduates of Soviet military academies. This high-level endorsement appears to have increased and intensified support by Party and State organs of the civil defense program. An editorial in the November 13, 1968 issue of the newspaper Soviet Patriot states: "Much attention is being paid to the strengthening of the Civil Defense of the USSR...." [italics added.]
ROLE AND MISSION

Soviet writers acknowledge that strategic offensive and active defense systems cannot protect Soviet bloc territory from suffering severe damage in a nuclear war, although some claim that it might be possible to blunt such an attack. They also assume that in such a war the enemy will resort to the use of all weapons of "mass destruction," chemical and bacteriological as well as nuclear.

The main mission of civil defense is said to be:

1. To protect the population against the effects of nuclear, chemical, and bacteriological weapons.
2. To safeguard the administration and economy and assure the continuing operations of the most important sectors of industry, transportation, and communications during wartime.
3. To train the entire population in civil defense.
4. To conduct rescue as well as essential repair and reconstruction work in disaster areas.

Civil defense measures consist of "all state defense measures" which are already carried out in peacetime and "are conducted throughout the country by all state and public organizations under the guidance of Party and Soviet agencies."

In recent years, priority is said to be given to measures for the evacuation of the unessential population, and the dispersal of critical workers and employees from probable targets of attack. In addition the program calls for the sheltering of the population in various types of protective structures. The effectiveness of
these measures are to be reinforced by appropriate urban and economic planning and by a training program for the entire citizenry.

**ORGANIZATION**

Post World War II Soviet civil defense was reorganized in 1961 when a special statute of the Council of Ministers established the present system and changed its name from "Local Anti-Air Defense" (MPVO) to "Civil Defense." At that time management of the program was shifted from the Ministry of Interior to the Ministry of Defense, and is now headed by Marshal V. I. Chuykov, a Deputy Minister of Defense, assisted by a Civil Defense Staff of the USSR.

Soviet civil defense is organized on the basis of a "territorial-production" principle, i.e., it operates at all levels of the territorial-administrative structure, from the national through republics, oblasts, districts, cities and villages, as well as through the economic or functional organization from various ministries down to individual factories, offices, and collective farms. This system makes use of existing national and local economic and public service organizations and facilities for civil defense purposes. At each level, the administrative heads of the territorial organizations, i.e., chairmen of the executive committees of the Soviets or directors of economic units, are responsible for the civil defense program. They are, in turn, assisted by full-time civil defense staffs, which are "the main organizers of all practical activities in the field of
civil defense, and are responsible for the planning and supervision of civil defense measures as well as for the training and direction of units and of the population.

At district and city levels, there are twelve or more services organized on the basis of existing municipal and economic services and facilities, such as Communications, Transportation, Medical, Power, Engineering, Food and Trade, Fire-Fighting, Public Order and Safety, Decontamination, etc. The services and staffs in turn organize nonmilitarized formations, as do also major industrial plants and collective farms.

The formations are manned on a part-time but compulsory basis, and in the current training cycle receive at least 35 hours of instruction. Their commanders received 70 to 84 hours or more of training. The Soviet authorities have published no information concerning the size of the civil defense organization. However, numerous descriptions of activities and exercises are available and appear to indicate that a widespread net of civil defense organizations and formations does in fact exist, and has been provided with a variety of equipment. Some years ago, Khrushchev was reported to have boasted that there were over 20 million persons in the Soviet civil defense organization.

**EVACUATION**

Pre-attack evacuation of the population, especially urban residents, from possible target areas has assumed increasing importance in Soviet civil defense plans in recent years. It is now described as "the main method
of protecting the population." One reason for this is said to be the high cost and technical difficulties of providing effective blast and radiation protection for all the inhabitants of the larger cities and production centers.11

Evacuation is under the direction of commissions, which operate in conjunction with civil defense staffs at city and district levels. Other commissions in the rural areas are responsible for the evacuees on their arrival. The evacuation is to be carried out very rapidly with the use of all means of transportation. There are three categories of evacuees: (a) the non-working population, (b) the employees of the nonessential enterprises, offices or agencies, and (c) the essential workers and employees. The evacuees are to be moved to preselected sites, mainly in the rural areas, where they will be quartered, fed, provided with fallout protection, and given work. Each city district, office, or factory is supposed to know its intended evacuation site. The employed population and their families are to be evacuated as a group by their employers. If time permits, some of the production facilities may also be removed to safety.

The cities, however, are not to be completely abandoned. Some essential administrative and municipal services and critical industrial production, especially war production, are to be maintained. For their protection, these workers are to be dispersed 45 to 120 km. from the cities, while only one work shift at a time will remain at work and will be provided with specially strong shelters.12 If no attack occurs, the work shifts will be
rotated between their place of work and their area of dispersal. The Soviet press described various evacuation exercises which have been held at various factories in different parts of the country.

Soviet civil defense literature and spokesmen devote considerable attention to questions of urban and economic planning aimed at reducing the vulnerabilities of cities and industry to attack. These measures include restricting the growth of cities, encouraging the dispersal of industry, and improving facilities for rapid evacuation. However, Marshal Chuykov has publicly complained that the urban and economic development frequently fails to take into account these civil defense recommendations.

SHELTERS

The Soviet shelter program has undergone various changes. In the 1950s an effort appeared to be underway to progressively provide a major portion of the urban population with at least fallout protection. But as it proved too expensive to attempt to provide the population in the potential target areas with more effective shelters, the effort was abandoned. Recent literature states that "special shelters" capable of withstanding considerable but unspecified blast pressures and designed to protect against heat, radiation, as well as chemical and bacteriological weapons, are built "as a rule" only at important enterprises and administrative agencies, i.e., to protect the more "valuable" elements of the population and the personnel remaining in the target areas after the evacuation. To reduce the cost of these
shelters, it is urged that they be designed so as to permit their being used for other purposes in peacetime, for example, as restaurants, garages, theaters, and so on. This same principle has been used in the adaptation of the various subway systems in the Soviet Union for civil defense purposes.

The permanent shelters are said to be designed for long-term occupancy, with a basic space allocation of 2-2.5 sq.m/person, including passageways (0.5 sq.m/person actual sitting space).\(^{15}\) They are provided with blast doors, an effective filter-ventilation system, air purifiers, toilets, food, water, medical supplies, and so on.

The remaining urban and rural population will apparently have to use a limited number of ready basement and fallout shelters and the subways, and will build additional simple shelters in basements, dugouts and mineshafts, in time of emergency. The available literature and descriptions of exercises appear to indicate that with the help of civil defense formations and of a trained population, there exists a considerable capability for the rapid improvisation and construction of simple shelters. An exercise conducted to prepare a mineshaft to shelter over seven thousand persons, with 100 persons entering every minute, required some 114 man-hours of work. From the description it would seem that the civil defense teams could have completed the work in 36 to 48 hours.\(^{16}\)

As an additional protection, the Soviet program stresses the importance of the use of gas masks and protective clothes by every person in an emergency. Production of individual means of protection and training in their use have been in effect for many years. In rural
areas, the population is instructed in how to protect cattle, food, water, and other supplies against radiological, chemical, and bacteriological contamination.

TRAINING

All adults between the ages of 16 to 60 are subject to compulsory civil defense training and in wartime to compulsory civil defense service. Consecutive training courses were instituted in 1955, each course ranging from 10 to 22 hours and requiring several years for its completion on a nationwide basis. Five courses, consisting of a total of 83 hours of training, were given between 1955 and 1967. In 1967 a new 21-hour training program was begun. In addition, high school students in the fifth, sixth, and seventh classes receive 15 hours of training; those in the upper classes, 35 hours. To some degree, therefore, exposure of the population to the training is cumulative.

Training takes place predominantly at places of work under the direction of the civil defense staffs. The non-working population, except for school children, is supposed to hear lectures organized by their housing committees. The public training program is assisted by various mass organizations such as the Red Cross, the Komsomol, the labor unions, and DOSAAF, the latter a sports and paramilitary training organization with a multi-billion membership. Local Soviets and Party organizations also assist in the training efforts and the procurement of the necessary equipment.
Considerable efforts have been made and continue to be made to popularize civil defense knowledge via the press, radio broadcasts, exhibits, films, lectures, and demonstrations. At the same time, complaints published in the press suggest that the training continues to meet with considerable apathy among the public and sometimes the local administrations. Nevertheless, it seems likely that many millions of Soviet citizens have been exposed to some formal civil defense training.

CIVIL DEFENSE OPERATION

Soviet civil defense entertains plans for extensive rescue, decontamination, and emergency repair and reconstruction work in the wake of a nuclear attack. Rural and evacuated urban specialized formations are expected to proceed to the disaster areas following an attack in order to rescue persons in these areas, help reduce or control the damage, and assist in restoring and maintaining the operations of critical industrial, transportation, and communication facilities where possible. These formations are provided with a variety of equipment, including heavy mechanized equipment, a considerable array of dosimeters, radiometers, chemical detectors, protective clothes, vehicles, and so on. Apparently they will accept considerable exposure to radiation since the lowest level at which an area is considered to be contaminated is 0.5 roentgens/hour. The press publishes frequent descriptions of exercises by these specialized formations. The literature also suggests that the civil defense operations may be assisted by specialized military
units. A military civil defense school has recently opened in Moscow.

CONCLUSIONS

The Soviet civil defense program is not a crash effort, but rather one of long standing. It has evolved in response to progressive recognition of the character of strategic weapons and their effects. The large body of Soviet public data describing actual activities and exercise in all parts of the Soviet Union indicates that considerable efforts have been made over the years to implement it at a cost of what appears to be a significant investment of money and resources. Currently Soviet sources speak not only of measures to be taken in an emergency, but specifically state that shelters are being built and mention the locations of some of them in different parts of the country; that formations are being organized, equipped, and trained; and that large elements of the population are participating in the training courses. In addition to numerous local exercises, civil defense elements have participated in operations dealing with national disasters such as the earthquakes in the Uzbek SSR. However, no information has been published concerning the present capabilities and state of readiness of Soviet civil defense nor about its annual budgets. Presumably Brezhnev's endorsements and the Resolutions of the 23rd Congress of the CPSU may serve to spur the program and possibly improve its ability to demand a greater share of investments and support. Soviet civil defense officials claim that "in
recent years" the civil defense system has become "highly effective and reliable,"¹⁸ but they continue to call for further efforts and improvements.

It is evident that the present system relies heavily on early warning of an attack.-- several days rather than hours. The data also show that the Soviet program gives priority to the survival of those elements of the population which are deemed essential for the preservation of the Soviet military and economic potential and of the administrative-Party organization, i.e., the elements which contribute most to the maintenance and perpetuation of national power.

The other Eastern European Communist states have civil defense organizations and programs largely patterned on the Soviet model, and their leading staff members are trained in Soviet schools. However, their investments in civil defense appear to vary considerably from country to country and their capabilities and state of readiness are unlikely to be uniform.
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