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PROVISIONS FOR EMERGENCY CONTROL IN THE USSR
1955

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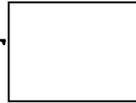
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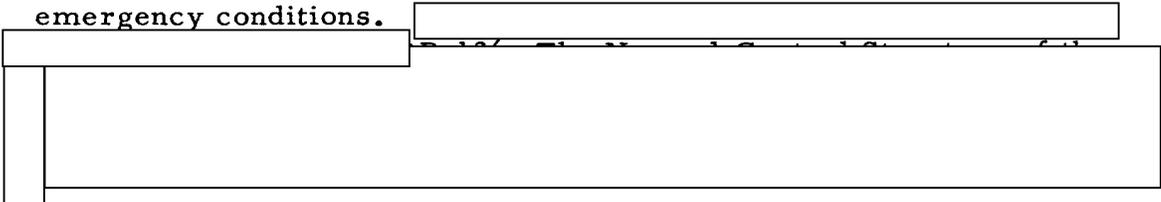
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FOREWORD

This report is the second in a series of studies which analyze the Soviet control structure and its ability to operate in normal and emergency conditions.



This report, which is speculative in nature, is based on reported World War II actions which modified the Soviet control structure and is an analysis of some of the courses of action which might be adopted by the USSR under emergency or wartime conditions.

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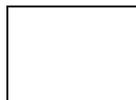


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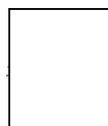
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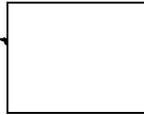
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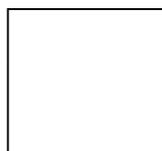


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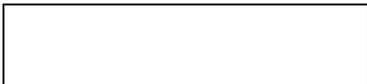
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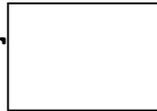
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CIA/SC/RR 135
(ORR Project 41.954)

PROVISIONS FOR EMERGENCY CONTROL IN THE USSR*

1955

Summary

In preparing for wartime operations a great power must consider the effects of possible nuclear attack. The probable destruction of many large cities in the initial stages of war would result in very serious damage to the transport and communications systems. This, together with actual losses of many governmental, economic, military, and other leaders would make administration, operation, and internal control of a country at war exceedingly difficult.

The Soviet administrative structure is highly centralized and tightly controlled. It is therefore particularly vulnerable to disruption of communications and loss of key officials. To prepare for maintenance of control in a war of either offense or defense, the Soviet leaders probably would (1) decentralize authority as far as practicable in peacetime; (2) plan for delegation of authority and modification of the control structure for inclusion in mobilization plans; and (3) prepare for civil defense of the country, particularly for the protection of its leaders, transport, communications, and vital industry.

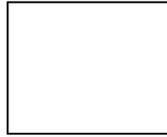
It is logical to assume -- and there is some evidence to indicate -- that Soviet officials are planning emergency or wartime control procedures. Such procedures may be assumed to include an orderly succession of key officials, selected evacuation, alternate headquarters,

* The estimates and conclusions contained in this report represent the best judgment of ORR as of 1 November 1955.

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carefully worked-out mobilization plans, and even alternate control situations (in which the Communist Party, for example, might assume the functions of economic or police officials who were casualties).

A program of gradual decentralization and regionalization of the Party structure would seem to be logically inevitable in any plan to meet the exigencies of modern warfare. The Party is well organized to effect these measures with a minimum of disruption. Under such a program the importance of the Party territorial committee in any area probably will increase, since this committee would be the focus of all activities in its area.

Another probable measure is the planned relocation and establishment of alternate Party headquarters. This program undoubtedly would be meshed with similar programs for the governmental and police structure.

It is also expected that the present distinction between Party and government, or Party and economic, control structures will be lessened. It is possible, indeed, that the Party control structures will serve as the nucleus for a supreme control body consisting of members of all control structures under the chairmanship of the regional Party chairman or secretary.

The nature of Party work and the rigorous qualifications demanded of its members in regard to initiative, education, and ability, plus the long experience of Party officials in controlling all aspects of Soviet life, tend to make the Party the most important control structure in the USSR. In its total ranks of 7.2 million persons the Soviet leaders have an excellent reservoir of talent and ability. Thus the great majority of Party members may be regarded as potential control officials, trained, experienced, and capable of giving support, leadership, and direction to the other control structures.

A few governmental changes occurring recently would work to the advantage of the Soviet government in wartime. These changes have taken the form of an amalgamation, or in some cases elimination, of inefficient organizational units. There have also been

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improvements in the organization of some executive committees. Administrative staffs are being streamlined, and excessive expenditures for administrative purposes are being reduced. Finally, lower and middle-level officials have been granted the right to make some decisions without referring problems to Moscow to be resolved.

Soviet officials have recently been attempting some degree of decentralization of the economic control apparatus. This has taken the form of granting more powers to members of the Council of Ministers, delegating more decision-making authority to individual organizational units, and placing more responsibility in the hands of union-republic officials in the field. Other steps have been taken to improve Soviet economic management.

The Soviet government has been carrying on a long-term plan for regionalizing the economy and for making each economic region both compatible with the other regions relative to current and proposed production and also somewhat independent of the other region. There are, of course, mobilization plans for most sectors of the economy, ready to be implemented at any time. Furthermore, there is a rather well-developed system of state reserves storage bases which stockpile food, materials, and equipment for emergency use. Finally, there have been noted moves to place a limited number of vital industrial installations underground and to disperse others.

Measures taken to assure continuity of military control will be conditioned by World War II experiences and the expectation of control requirements under conditions of nuclear attack. On the basis of World War II practice, the State Defense Committee would probably be revived as the supreme state authority in the USSR. Its military functions would no doubt be exercised by a Stavka, or General Headquarters, composed of the top military leaders. The existence of a combined General Staff in the present Ministry of Defense may mean that little or no reorganization would be needed. Stavka is important as a mechanism for the direct exercise of operational control over field forces without the intermediate command links of the static headquarters such as the Ministry and Military District headquarters. These static headquarters would be

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free to devote full energy and resources to administrative and logistic support of military operations. Wartime practices would undoubtedly involve simplification of the control structure through the amalgamation of one or more Military Districts into Fronts.

Mobilization plans are drawn up in extreme detail during peacetime and implemented by Military Districts through their Military Commissariats at the local administrative levels (city, rayon, and oblast). The Mobilization Plan, as such, is drawn up to be implemented within 30 days and would involve the mobilization of an estimated 7 million men. The chances for successful mobilization are improved by the fact that it is executed at the lowest administrative echelons, many of which are not in major urban areas that present lucrative targets for major aerial attack.

Probable conditions of nuclear warfare make it likely that there will be sharp deviations in the USSR from the usual system of rigid centralization. This regionalization would undoubtedly be accompanied by significant delegations of authority. The Military District or Front organization is a logical focal point for such decentralization.

There are three possible ways in which the relations between military and civil authorities could be expected to change under conditions of nuclear warfare as follows: (1) the absorption of several civil organizations into the military structure (for example, such ministries as Communications and Transport); (2) the declaration of martial law, particularly in Front areas; and (3) the merger of civil and military control structures into a single structure combining both military and civil powers under one authority. This would be similar to the regional State Defense Committees established during World War II.

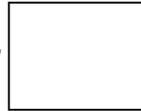
Basic measures for the dispersal of military forces may be regarded as axiomatic, particularly for all forces from division level down. Dispersal is facilitated by basic communications practices requiring each echelon to maintain communications with the next two higher echelons. This gives a natural recuperability against damage to the control structure by giving the vertical control structure

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greater resilience. Some limitations of dispersal programs exist for certain static forces such as Long-Range Aviation, Air Defense (PVO), and Naval Forces. But even here, improved recuperability is possible through the use of alternate facilities and dispersal of aircraft. Present deployment aims of Soviet leaders are believed directed toward considerable expansion of underground facilities. A well-developed dispersal program not only will save military forces but also will strengthen capabilities for relieving the chaos and disruption to control channels that result from nuclear attack.

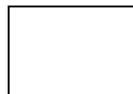
Planning for control of the population is reportedly the concern of a mobilization section of the Ministry of Internal Affairs (MVD) and, presumably, the Committee of State Security (KGB). Although the internal control in the MVD and the KGB is highly centralized and directed from Moscow, both organizations are union-republic rather than All-Union structured, this providing a basis for the establishment of a more decentralized pattern of control and of decision making. It is estimated that, in addition to the normal MVD strength, 100,000 reserve troops could be mobilized on short notice. The KGB is known to have an officer reserve.

The USSR has an extensive, widely organized civil defense system. Since 1949, pressure has been evident to improve its organization, to undertake defense construction, and to increase training. An integral part of PVO, civil defense is the responsibility of the Chief Directorate of Local Air Defense (GUMPVO), an arm of the MVD. Under GUMPVO is a full-time, well-paid body of trained civil defense staff officers who are assigned at all levels of government. Local Air Defense (MPVO) officers are also present in many major enterprises, supervising civil defense preparations in factories, ports, railroad centers, and other economic enterprises.

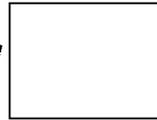
At the primary operating level, the community or the region, civil defense in the USSR stresses the use of all available resources and personnel. Governmental and economic bodies, such as Fire Guard and communications enterprises, are used extensively to furnish operating equipment and crews whose peacetime employment makes them of value in time of emergency. Auxiliary personnel for

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civil defense crews or teams are recruited from workers or from the general population. In the city or region, plans, training, and procurement are carried on under the MPVO office of the city. Civil defense "services" in cities include those for security and order, camouflage, fire fighting, medical aid, damage restoration, chemical defense, communications and reporting, shelter, evacuation, veterinary, and others as determined by local conditions. Civil defense in economic targets of importance is specially organized on a unit basis. The crews are developed similarly to the city services, utilizing the internal guard, fire-fighting organizations, repair crews, and medical organizations, with supplementary personnel added from the workers of the enterprises.

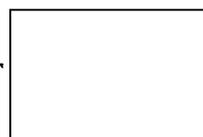
The Soviet system provides for both specialized training of civil defense personnel and training for the average citizen. The Voluntary Society for Cooperation with the Army, Air Force, and Navy (DOSAAF) is the organization charged with giving Air and Chemical Defense (PVKhO) training to its members and to the general population. Its membership is probably over 20 million at the present time, and PVKhO training is compulsory.

By 1949 the USSR had initiated a program of shelter construction, which probably was set up to include air-raid shelters and other civil defense measures in the initial construction of public buildings, factories, schools, and apartment dwellings. Reports of  such construction indicate that the inclusion of air-raid shelters in new buildings was standard practice. The shelters are designed to be gas-proof and to withstand collapse of buildings.

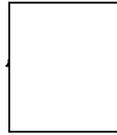
The fact that urban and industrial fire-fighting forces, which are reported to be efficient in the USSR, are also subordinate to the MVD should facilitate their integration into the MPVO system. Fire prevention has been stressed in the USSR, and the new emphasis on concrete construction should steadily reduce vulnerability to fire.

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No realistic instructions for civil defense against presently possible nuclear attack have been released to the general population. Evidence indicates that only key individuals have actually received any such instructions. It seems that the USSR is trying to prepare for nuclear attack by some shelter construction for the most essential personnel and by a general attempt to raise the competence of medical, fire, and other bodies connected with civil defense in order to cope with disaster after it occurs.

There has been no evidence of training for the evacuation of cities. If the USSR adopted a policy of evacuation, however, its civil defense staff, closely allied with an extensive nationwide police structure, would greatly facilitate the execution of such a policy. The millions of DOSAAF members, who have had military and civil defense training, would be available for duty as auxiliary control personnel.

Civil defense training and organization as at present constituted in the USSR would make possible the preservation of many members of the control structure by evacuating some key personnel from areas which are likely targets for nuclear attack and by enlisting others into civil defense units.

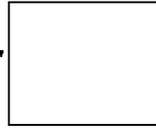
Training, including the removal of civil defense crews from urban areas, has not been detected, although German and Japanese experience in World War II thoroughly demonstrated the futility of stationing air defense personnel in a potential target area. It is probable that in a period of international tension, action would be taken to direct the removal of civil defense crews from urban areas during air alerts. Without substantially altering civil defense instructions, the USSR will be able to include in its active civil defense crews many persons from Party and government who possess valuable managerial and technical skills.

If the USSR were the aggressor, it would have a further advantage. Mobilization planners of the security and military services would not leave unnecessary bodies of troops in major urban areas and would probably evacuate some key personnel and vital records.

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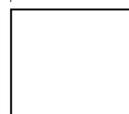
It is concluded that the USSR (1) is aware of the problem of maintaining control under the conditions of modern warfare, (2) is trying to improve and decentralize its control structure, (3) is making a continuing effort to develop civil defense, (4) probably has an overall plan of defense which would logically include provision for preserving the control structure and the facilities necessary for its operation, and (5) is taking measures for defense, both detected and probable, which would operate to improve the ability of Soviet officials to maintain control in a wartime situation.

I. Communist Party Activity and Functions.*

As the supreme controlling organ and driving force of all aspects of Soviet life, the Communist Party would be most active in all measures designed to deal with wartime or emergency situations. Although many of the practices adopted during World War II would have validity in any future war, one major exception is the extent of centralization. During World War II, centralization of industrial and governmental administration was in its most rigid state; however, the overwhelming devastation of nuclear warfare would dictate that present planning for emergency or wartime action be based on decentralization of the control apparatus but with retention of as much central control as possible.

The Party is so organized as to make decentralization feasible. Its actions in this field undoubtedly would be similar to those of economic and government agencies. An intensive decentralization of governmental and economic functions would necessitate a corresponding increase in the authority of local Party agencies for control purposes.

* The factual data upon which this report is based are found in an earlier CIA report. 1/ (For serially numbered source references, see Appendix C.) Documentation is given in this report only for that factual data not presented in the earlier report.



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Action taken by the Party at any particular time would be limited by the availability of potential alternate control centers, with adequate facilities for day-to-day operation of Party and administrative organs. Party actions in relocation would be restricted by the necessity of retaining contact with and control of those economic structures which do not have the physical flexibility of administrative structures.

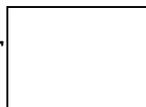
It is probable that present attempts to maintain a separation between government and Party or economic and Party structures would be discarded. This does not mean that Party agencies would replace governmental or economic agencies, but rather that their control would be more direct and immediate. An example of this is seen in World War II practices, whereby Party workers in economic enterprises were converted into special assistant directors, evidently with full authority for economic direction of the plants. Such a practice is feasible because of the longtime experience of professional Party personnel with control functions in economic enterprises.

The expectation and insistence that Party members be the leaders and initiators of programs in all aspects of Soviet life also warrant the assumption that they will control and direct all emergency planning and activities. During World War II, various programs of economic reorganization, retraining and mobilization of workers, relocation of industrial plants, and the supplying of economic and military needs were reportedly under Party leadership. 2/

The key role of Party organs was also indicated in the structure of the State Defense Committee, the supreme war cabinet during World War II. In those areas where regional offices of the State Defense Committee were established, it exercised supreme governing authority. The composition of the regional committees included the four major control structures -- military, MVD, government, and Party. The position of chairman was occupied by the secretary of the regional Party committee. A similar device for consolidating all control structures under Party direction would probably be used in any program for setting up regional governments as focuses of control.

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Other possible organizational measures would be the revival of the former Military Departments in lower echelon Party organizations. These departments, which existed in 1939 but have not been identified at this time, would handle activities concerned with conscription, mobilization, and related matters.

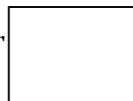
A particularly vital area for Party leadership in wartime or emergency conditions would be in propaganda and agitation fields. In World War II the Party was particularly active in programs for developing patriotism, popular resistance, and similar activities for maintaining public morale and support for the war effort.

The relation of the Party to military bodies during wartime or emergency conditions is problematic. This relation has always been confused by the Party's attempts to maintain political control of the military without impairing military efficiency. Thus, after the poor military performance against Finland in 1940, the institution of political commissars who were co-equals of military commanders was abolished. In 1941-42 it was restored, however, in order to cope with widespread problems of low morale and desertion. At present the political commissar exists as a deputy to the military commander, who has undivided authority. The key to future Party activity in this field would seem to be the extent to which military activities are successful and military forces are reliable. At any rate, the existent political structure in the armed forces is such that strong party control could be reasserted with a minimum of reorganization.

The flexibility of the Party apparatus makes it vitally important for wartime and emergency control. The all-pervasive character of Party operations causes Party members to be knowledgeable in all aspects of Soviet life. This enables the Party to fill substantial gaps in the control apparatus of other agencies -- all the 7.2 million Party members are thus potential controllers. The quantitative aspects of this are, of course, substantially reduced by the fact that most Party members are also members of the other control structures.

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Party importance is also increased by its control of mass organs which are, in effect, junior partners in the Party apparatus. This applies particularly to the organizations of the Young Communist League,* which, because of their closeness to the Party, represent a sizable reserve to be used in the control of other agencies and of the populace.

II. Changes in Governmental Control.

A. Recent and Current Changes.

In considering the operation of the Soviet government under severe emergency or wartime conditions, it is logical to assume the probable formation of an inner wartime cabinet, similar to the State Defense Committee created during World War II (1941-45). The formulating decree for this wartime committee granted "full plenitude of power in the State" to this committee and ordered all citizens and organs in the country unflinchingly to execute the orders of this committee. 3/ This State Defense Committee operated as both an over-all coordinating body and as the highest directing group in Party, military, economic, governmental, and security matters. The committee was composed of the top officials in the USSR at the time-- Stalin, Molotov, Bulganin (who replaced Voroshilov), Malenkov, Beriya, Kaganovich, Voznesenskiy, and Mikoyan. A future severe emergency may result in the formation of a similar committee or group, composed of the leaders of the USSR.

Although there appear to have been few governmental changes that apply specifically to the problem of direction and control in an emergency situation, increasing decentralization is indicated in the recent establishment in some union republic governments of new ministries which are counterparts of the Soviet Ministries of the Coal Industry, Ferrous Metallurgy, Non-ferrous Metallurgy, the Petroleum Industry, and Communications.

* Kommunisticheskoy Soyuz Molodezhi -- Komsomol.





Significant changes in the governmental-economic structure in the spring of 1953 increased the powers of ministers of the USSR, made the work of Gosplan more efficient by reducing its former detailed work, and improved the responsibility and control exercised by the Executive Committees of the local Soviets. 4/

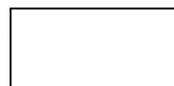
In 1954, some changes were made in oblasts in the three largest Soviet Socialist Republics -- the RSFSR, the Ukrainian, and the Belorussian. In the RSFSR, some oblasts were too large to supervise the agriculture rayons in their areas effectively. They were broken up and new oblasts (Arzamskaya, Balashovskaya, Belgorodskaya, Kamenskaya, and Lipetskaya) were formed (the new Magadanskaya Oblast was formed in December 1953). In the Ukrainian SSR the new Cherkasskaya Oblast was formed and the very small Izmailskaya Oblast was made a part of the larger Odesskaya Oblast. In the Belorussian SSR, 7 large oblasts were formed from 12 small ones, thus streamlining the over-all executive committee staffs and eliminating 11,000 workers from the apparatus of the oblast institutions and organizations. 5/ There have also been improvements in the organization of Executive Committees of rural Soviets in some provinces. 6/

The chief reason for these governmental changes is that they are logical improvements in the administrative-management structure of the USSR. Their significance with respect to preparation for emergency defense is that the changes should help the republics to operate on a more independent basis in an emergency situation.

B. Planned or Probable Changes.

1. Delegation of Powers.

The trend in Soviet governmental organization is toward decentralization and delegation of power to lower government officials, thus enabling them to make more of the operational and localized decisions and streamlining the work of higher officials. The success of the new plan for the delegation of authority cannot





as yet be assessed. Some problems have already developed. It is possible, however, that in many spheres the new system, developed as a peacetime economy move, will be fairly effective at present, and probably will be more effective in emergency or wartime conditions. Decentralization and delegation of power will help the USSR prepare for emergency situations insofar as decision making on a republic or even local basis is concerned.

2. Dispersal of Offices.

Key governmental offices and headquarters are usually located in or near the center of a city. Although there is no evidence of a planned dispersal of governmental offices, it is logical to assume that some such plan exists. Rather extensive published information on modern warfare would suggest that Soviet governmental officials are planning a partial dispersal of key governmental offices.

It is further suggested that in an emergency situation the Soviet officials are planning to utilize existing buildings of sufficient size and durability at some distance from the center of cities. Thus jails, hospitals, industrial buildings, and the like, located on the periphery of cities, might well be the planned alternate governmental control points in an emergency. In this connection the installations most adaptable to communications facilities, and even those having existing facilities of their own, would be logical locations for dispersed governmental offices.

III. Economic Control.

A. Structural Changes.

One notable trend in the Soviet peacetime economic structure affecting emergency preparation is the decentralization within certain economic ministries which has occurred in the past year. These changes appear to be designed to develop greater administrative efficiency and better decisions on the operating level. A more logical administrative organization, as well as more local independence is thus achieved. The "decentralization" of decision-making authority

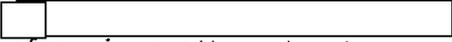


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involves a delegation of authority from a higher to a lower echelon of administration. Although there may be functional delegation within a particular level of administration, decentralization normally concerns a geographical delegation of decision-making authority from a central organization to a subordinate field organization. Thus a delegation of authority in certain matters of raw material procurement from a USSR Minister in Moscow to a field directorate in the Ukraine or to a plant manager in Irkutsk would be an example of decentralization of decision-making authority.

There are also problems inherent in the decentralization process. One theory of decentralization and delegation of decision-making authority is that the more powers are delegated and decentralized, the more closely they are controlled from the top and in fact centralized. This is the paradox -- that the more top management tries to decentralize decision making, the more it must centralize its control of decisions. Although authority may be delegated and decentralized, responsibility (or the bulk of it) must remain largely undelegated and centralized, especially under the Soviet conception of administration. Soviet officials have tried to solve this problem by eliminating many of the intermediate and superfluous links in the chain of command, thus strengthening the relations of the lowest units of production with the central organs of the government and with the economy. 7/ A possible consequence is to strengthen central decision making and thus work at cross purposes to successful decentralization.

The structural changes mentioned earlier tie in with Decree No. 1002 of the Council of Ministries, 11 April 1953, entitled "Increasing Powers of USSR Ministers." The purpose of this decree is to grant to lower level economic officials more decision-making power and duties, and it has already been carried out to some extent,  The decree seems to mark the initiation of serious attempts at economic and governmental decentralization. 9/

The Soviet government in recent years has been attempting to "regionalize" the economy, with a view toward enabling the various

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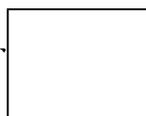


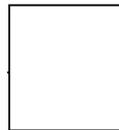


economic regions* to function on a more independent basis, being less dependent on other regions and even on Moscow. It is felt that this policy is economically sound because of the existence of natural resources and some potentially productive farmland in what were previously underdeveloped areas. Military defense probably is not the paramount consideration. Nevertheless, regionalization would aid in emergency defense as well as in the immediate and long-range recuperability of the region. If these regions are administratively and managerially independent or reasonably so, their severance from the Moscow control center should not seriously hamper their ability to recoup after an emergency, given preservation and restoration of certain physical resources. The question is the extent to which the regions are now independent of Moscow in their control and administration.

It is assumed that the Soviet plan to decentralize and improve lower echelon administration has met with some success, and that the Soviet administrative hierarchy at all levels is better able today to sustain interruption from the control center at Moscow than was the case several years ago. Current plans call for additional administrative decentralization, probably with a view toward making the various areas and regions even more independent and self-sustaining in periods of emergency interruption and isolation than is now the case.

A number of problems, not effectively solved, have beset Soviet officials in trying to decentralize their vast administrative and managerial bureaucracy -- inadequate and insufficient delegation of power, confusion among lower echelon officials as to their precise powers, obsolete tables of organization, confusion in chains of command, inertia, lack of initiative of lower officials in making decisions, and conflicting and competitive jurisdictions. 10/ Confusion arises from the duplicity of Soviet officials in delegating some power to lower ministerial officials while simultaneously calling for greater Party and Executive Committee control over the activities of the same lower officials. 11/





It would seem, therefore, that in the foreseeable future only limited success will be achieved by the USSR in decentralizing and regionalizing the administration-management control structures adequately for defense and recuperation purposes.

B. Preparation for Local or Individual Plant Operation.

1. Mobilization Plans.

At the plant level there are mobilization plans and some mobilization stocks which will assist in enabling the plants to convert rapidly to wartime operation. 12/ It is reasonable to assume that important plants have well-worked-out mobilization plans. Most plants have a section or department in charge of mobilization plans and resources. Although each mobilization department (mobotdel) is subordinate to its plant's parent ministry and to the Chief Directorate of State Material Reserves, it is under the general supervision and control of the plant director. 13/

An area or regional mobilization plan may be constructed for one or several established territorial districts. The Chief Directorate of State Material Reserves is divided into territorial directorates, each of these being virtually an entity in itself for stockpiling reserves. Military Districts also relate to mobilization. Thus, a mobilization department within a plant is subordinate to its parent ministerial mobilization department, to a territorial directorate of the Chief Directorate of State Material Reserves, and also to the mobilization directorate of a Military District. 14/

It may be assumed that the USSR is already regionalized for mobilization purposes. The appropriate regions for this purpose are the economic regions and subregions, the territorial divisions of the State Reserves system, and Military Districts. A logical regionalization for emergency conditions would utilize the most efficient arrangement of one or more of these regions and districts.

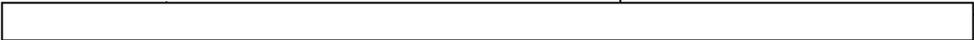
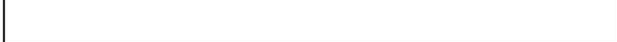




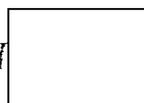
2. Reserves.

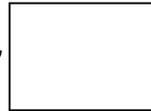
There are several types of stockpiled reserves, as follows 15/: (a) military (grouped by Military District), (b) Sovmin (a small group of reserves directly controlled by the Council of Ministers), and (c) State Reserves ("A large, maneuverable stock of centrally controlled commodities located throughout the USSR, including emergency reserves at the enterprise level.")

The Chief Directorate of State Material Reserves, attached to the Council of Ministers, has a twofold function. It controls and supervises stockpiling of food and material reserves for use in periods of shortages and considerable need. It also controls and supervises the stockpiling of critical items needed for conversion of the economy to wartime operation and would sustain such operation during wartime for a period of several months to 2 years. The organization of the Chief Directorate follows functional as well as territorial lines, with the purpose of making each territory semi-independent as far as raw material and food are concerned in the early days of a war or other emergency. 16/

Over 300 reserves bases or storage depots of the Chief Directorate of State Material Reserves 
 The immediate supervising organs of the reserves bases are the Territorial Directorates, . Nearly one-half of the located bases are east of the Urals. 17/ The Territorial Directorates also have some jurisdiction over mobilization stockpiles in warehouses of industrial plants located within their territories. 18/

The Soviet state reserves system was in existence before World War II and is believed to be functioning smoothly at present. This system is designed, among other things, for emergency use. It seeks to maintain on hand adequate stocks in good condition to support the operation of the regional economy. For example, in Khabarovsk there is a Territorial Directorate controlling about 16 bases, thus contributing to the regional independence of the Khabarovsk area. 19/





Most of the [redacted] Territorial Directorates are in cities of over 600,000 population, located where they can supervise the activity of a number of subordinate bases. Probably all Territorial Directorates have alternate headquarters at nearby subordinate reserves bases, to be used in an emergency.

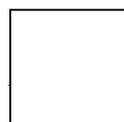
The Territorial Directorates utilize the radio system of the Ministry of Communications for normal operations, but in an emergency situation the reserves traffic might be shunted to the wire facilities of the railroads, since most reserves bases are situated on main railroad or spur lines.

Emergency controls are not such a vital necessity in areas which already have reserves bases and can, according to plan, continue some economic operations without central direction. The State Reserves system has to be prepared to a reasonable extent for disruption of both command and leadership. This system must be counted as a considerable asset in the developing attempts at administrative delegation and regional independence.

3. Modification of Decision Making.

[redacted] it may be assumed that there are carefully worked out plans regarding control officials and the making of decisions in an emergency situation. It is believed that the emergency plan calls for key officials to carry on part of their normal duties and simultaneously to assume additional duties in controlling and directing various high-priority operations.

There may be plans to permit lower officials to assume greater and more varied and extensive decision-making powers in emergencies. Although under normal operation many problems may be referred to higher officials, emergency plans may call for certain types of decisions to be made on the spot, without referring them to higher authorities.



This emergency procedure may be the alternate control plan for decision making by key officials, to go into effect during an emergency. This plan emphasizes sufficient local delegation to meet emergency situations, and at least semi-independence in the whole realm of decision making.

C. Measures Taken to Minimize Loss.

1. Underground and Isolated Plants.

[] of underground and isolated plants existing in the USSR. The locations of some of the underground installations in Economic Region VIII (Urals) are shown as follows:

[] Selected Underground Industrial Installations in Economic Region VIII (Urals) 20/

<u>Location (Vicinity of)</u>	<u>Coordinates</u>	<u>Activity</u>
Kyshtym	55° 44' N - 60° 33' E	Atomic plant
Rezh	57° 23' N - 61° 24' E	Powder plant
Verkhne-Neyvinskiy	57° 16' N - 60° 08' E	Atomic plant
Krasnotur'insk	59° 49' N - 60° 15' E	Heavy water plant
Sverdlovsk	56° 50' N - 60° 38' E	Radar plant
Chelyabinsk	55° 10' N - 61° 24' E	Ammunition plant
Sverdlovsk	56° 50' N - 60° 38' E	Tank plant
Solikamsk	59° 40' N - 56° 45' E	Atomic plant
Sverdlovsk	56° 50' N - 60° 38' E	N. A.
Kamensk-Ural'skiy	56° 24' N - 61° 50' E	Atomic plant
Kanatka	59° 47' N - 60° 42' E	Tank and shell plant
Nizhniy Tagil	57° 54' N - 60° 00' E	Two tank plants

Some of these underground plants or parts of plants are

[]
[] The underground plants located seem largely devoted to atomic or arms production.

Some large industrial plants are located in smaller cities and isolated localities. Examples found in Region VIII are shown as follows:

of Selected Industrial Installations
in Smaller Communities
in Economic Region VIII (Urals) 21/

Location	Coordinates	Activity
Baranchinskiy	58°11' N - 59°36' E	Electric machine building plant
Verkhniye Sergi	56°39' N - 59°33' E	Machine building plant of the Ministry of the Petroleum Industry
Ust'-Katav	54°56' N - 58°10' E	Railroad car building plant (has produced armaments)
Nyazepetrovsk	56°05' N - 59°40' E	Kalinin machine building plant (heavy earth-moving equipment)
Irbit	57°40' N - 63°04' E	Motorcycle plant
Verkhotur'ye	58°52' N - 60°50' E	Chemical plant Agricultural machinery plant
Yugo-Kamskiy	57°42' N - 55°35' E	Petroleum machine building plant (has produced armaments)

It may be concluded that highly selected production activities, mainly military, are utilizing sheltered underground locations to a limited extent. Also, some plants of military-economic significance exist in isolated localities and smaller cities -- those examined are mainly machine building plants.

2. Regionalization and Dispersal.

The emphasized goal of the regionalization of production is the full utilization of resources for maximum satisfaction of national needs, with each region having to develop its own fuel and

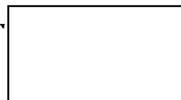


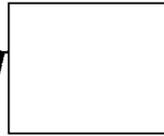
power and to procure local raw materials. The planning of the complex development of economic regions and of republics must, therefore, assure not only correct distribution of the new enterprises to be constructed but also the proper "cooperative organization" of existing enterprises, so that in constructing a new enterprise the problems of supplying the enterprise with raw materials, transport facilities for its output, and the like, will be adequately handled. The proper working out of material allocation for each region should fulfill an important mobilization function in the utilization of the internal resources of each economic region and in the elimination of unnecessary shipments to and from the region. 22/

Since 1940 and earlier the USSR has been trying to plan the development of balanced economic regions. The XVIII Party Congress in 1939 issued directives for the development of economic regions, stressing the necessity for increasing production of fuel, building materials, fertilizer, and consumer goods. The Fifth Five Year Plan (1951-55) calls for extensive regional development, so that the regions are partially independent and yet are able to complement and assist neighboring regions in the supply of needed products. 23/ The 12 major economic regions of the USSR as presently constituted are shown as follows, with their principal industries:

Economic Activity in the USSR, by Region 24/

<u>Economic Region</u>	<u>Principal Industries</u>
I. North and Northwest	Timber, wood-processing, coal, petroleum, and shipbuilding and repair
II. West (Baltic and Belorussia)	Machine building, dairying, and light industry
III. South (Ukraine and Moldavia)	Coal, metallurgy, livestock, machine building, fuel, and construction materials
IV. Southeast (Lower Don and North Caucasus)	Agriculture, petroleum, coal, metallurgy, and light industry





V.	Transcaucasus	Petroleum, cotton, metallurgy, machine building, light industry, and coal
VI.	Volga	Petroleum, grain, fish, machine building, construction materials, electric power, and textiles
VII.	Central	Machine building, power stations, textiles, light industry, metallurgy, and fuel
VIII.	Urals	Metallurgy, machine building, chemicals, petroleum, timber, power, light industry, and construction materials
IX.	West Siberia	Coal, metallurgy, fuel, timber, machine building, grain, and livestock
X.	Kazakhstan and Central Asia	Cotton, nonferrous metallurgy, machine building, and fuel
XI.	East Siberia	Power, metallurgy, heavy machine building, and coal
XII.	Far East	Fish, metallurgy, machine building, shipbuilding, coal, petroleum, timber, and paper

With a view toward further increasing the independence of each of these economic regions, the Fifth Five Year Plan calls for developing and expanding in each region those industries for which the region is best suited, as well as improving the industries in which the region is poorly developed.

The USSR has achieved some measure of regionalization because of the forced relocation which took place during the German occupation in World War II and the postwar efforts mentioned above. Some measure of Soviet achievements in regionalization is shown in Table 1.*

* Table 1 follows on p. 23.



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Table 1

Regional Distribution of Gross National Product in the USSR a/*
Selected Years, 1938-53

Activity and Year	Percent of Total Production				Total Production (Billion 1951 Rubles)
	Regions III and VII (Ukraine and Central Industrial)	Regions I, II, IV, V, and VI (Peripheral European USSR)	Regions VIII to XII (Urals to Pacific)		
Manufacturing					
1938 b/	56	24	19		183
1948	41	24	35		212
1951	42	25	33		342
1953	41	26	33		406
Agriculture					
1938 b/	44	30	26		342
1948	42	28	30		290
1951	41	28	31		316
1953	41	28	31		328

* Footnotes for Table 1 follow on p. 24.

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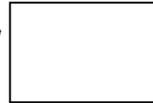


Table 1
Regional Distribution of Gross National Product in the USSR a/
Selected Years, 1938-53
(Continued)

Activity and Year	Percent of Total Production			Total Production (Billion 1951 Rubles)
	Regions III and VII (Ukraine and Central Industrial)	Regions I, II, IV, V, and VI (Peripheral European USSR)	Regions VIII to XII (Urals to Pacific)	
Services				
1938 b/	49	27	24	239
1948	47	26	27	336
1951	46	27	27	418
1953	46	26	28	471
Total Production				
1938 b/	49	27	24	764
1948	44	26	30	839
1951	43	26	31	1,076
1953	42	27	31	1,205

a. 25/.

b. Postwar boundaries.



A sharp movement of industry to the east occurred during World War II, and, although development of industry in the South and the Central Regions fell proportionally, the total industrial output in these regions has shown an absolute increase.

Defense industry (small arms, artillery, and ammunition) moved even more sharply to the east than did industry as a whole following World War II, * as shown in Table 2.

Table 2

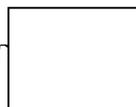
Eastward Movement of Defense Industry
in the USSR since World War II a/
Selected Years, 1938-53

Percent of Total Production				
Year	Regions III and VII (Ukraine and Central Industrial)	Regions I, II, IV, V, and VI (Peripheral European USSR)	Regions VIII to XII (Urals to Pacific)	Total Production (Billion 1951 Rubles)
1938 b/	34	37	29	12
1948	24	19	57	20
1951	23	22	55	44
1953	23	22	55	57

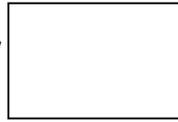
a. 26/

b. Postwar boundaries.

* Before World War I the heavy industry of the USSR was concentrated largely in the Petersburg and Moscow districts and in the Donets and Dnieper districts of the Ukraine, thus making armaments production vulnerable even to land attacks from central Europe.



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As shown here, the eastern areas achieved a sharp increase in the 1938-48 period. This is partly due to the priority evacuation which was given munitions-producing enterprises during World War II. The movement eastward has been achieved in greater measure for defense industry than for manufacturing as a whole.

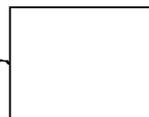
In addition to World War II, other factors have facilitated or induced the development of the armaments industry in the eastern areas. Population and markets, which influence the establishment of enterprises for general manufacture, can be largely disregarded in locating defense industry. Large mineral deposits, particularly in the Urals area, would attract armaments production. The movement eastward may not actually reduce vulnerability since new concentrations in themselves have resulted in the Urals and Siberian areas.

Criticism has been directed against the practice of locating the headquarters of some ministerial trusts and directorates far from their basic producing enterprises. Some gas fields in the Ukraine, for example, are in Drogobycheskaya Oblast, although the directing organization of these fields is not in Drogobych, but in L'voy. 27/ Other criticism is levied at ministries for having in Moscow controlling directorates which would be more logically located in the fields. 28/ This criticism will undoubtedly result in the more reasonable location of some headquarters installations, in conformity with regional and physical considerations.

The population and industrial pattern developing in Siberia may be compared to the western part of the US. The location of Soviet industry and its eastward movement do not differ sufficiently from the settlement patterns of the population to indicate that defense factors are the overriding consideration in the development of regions.

The regionalization thus far described is the planned development of regions in order to make them partially self-sufficient, in addition to developing and utilizing the resources of each region to maximum economic efficiency. This policy has been based mainly on economic considerations, such as reducing transportation costs, but

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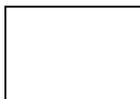
it also has the effect of reducing relative concentration and, in some measure, vulnerability. Any reduction in vulnerability achieved in this manner would be counterbalanced in part by the scanty railroad facilities in eastern areas, which are particularly vulnerable to transportation interdiction. The regionalization plans of the USSR have been marred by inadequate application in some areas and occasional failure to carry out the movement on the part of some lower officials. In addition, certain factors, such as too great expenditure of time, equipment, and money, and location of specific natural resources, serve to limit the effective carrying out of a plan for regionalization.

3. Protective Construction.

Shelter and other protective construction for personnel, materiel, and equipment in economic installations is a basic need in preparing for possible emergency or wartime operation. The USSR has engaged in such construction for some time.

An order was issued in the USSR not later than 1949 requiring shelter facilities to be installed in new buildings. Available [] indicate that air-raid shelters are being included when new industrial buildings are erected. 29/ [] describes excavation of an air-raid shelter near the administration building of an older plant in Khabarovsk. 30/ [] on shelter in industrial facilities in the European Satellites reveals active shelter construction, particularly in Czechoslovakia, Hungary, and Bulgaria. [] working on plans for category 2* shelters in plants. These were supposed to withstand a weight of 1,700 kilograms per square meter. Secret and presumably heavier shelters (category 1) were to be constructed in some defense plants in 1953. 31/ Numerous [] which indicate that important Hungarian factories are equipped with air raid shelters. 32/ It is improbable that provision for such shelters in the Satellites preceded construction in the USSR.

* "Category 2" shelters were World War II Soviet shelters that were supposed to withstand complete building collapse.



[redacted] fire and other protective measures in industrial plants indicate that such measures are fairly widespread. [redacted] it can be assumed that Soviet efforts toward protective construction in economic installations against air attack have been well-conceived and are probably becoming more and more effective.

IV. Military Control.

Measures taken in the USSR to insure the continuity of military control and capabilities for effective action in an emergency will undoubtedly be influenced by the experiences of World War II, conditioned by expected conditions of nuclear warfare. The measures taken are in the following categories: modifications in high command and administration, mobilization, preparations for regionalization through the delegation of authority, substitution of military for civil authority, and dispersal of military forces and facilities.

A. High Command and Administration.

During World War II, basic changes in the Soviet command and administrative channels were effected by the creation of the State Defense Committee and the Stavka or General Headquarters of the Armed Forces.

The State Defense Committee functioned as the supreme state authority in the USSR. Consisting of the five foremost personalities in the USSR, it combined the executive, legislative, police, military, and Party power of the USSR. For the exercise of its military functions the State Defense Committee relied upon the Stavka, both organizations being headed by Stalin.

The Stavka consisted of 12 to 14 top military leaders representing the chief branches, arms, and services. Its major function was to translate military policy decisions of the State Defense Committee into operational and strategic plans, and to provide overall direction of the war. The authority of the Stavka extended also to the then NKVD and NKGB, although neither body was represented on the Stavka. 33/



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The Stavka had no separate organization, utilizing rather the existing staffs of the Army and Navy. The primary significance of the Stavka during World War II was that it represented a divorce of operational from administrative functions in military affairs. In actual direction of military operations it bypassed the Military Districts, and the command chain went directly to front units, so that the existing static structure (Ministry and Military District Headquarters) became for all practical purposes an administrative control organization. Operational command was facilitated further by the practice of combining Military Districts into Groups of Forces or Fronts.

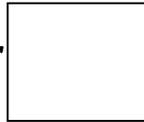
A significant factor in present-day structure of the armed forces that is relevant to the possible revival of the Stavka is that all forces today operate under a unified command of one ministry. During World War II the control of naval and army forces by different ministries necessitated a unified high command such as the Stavka. It may be, therefore, that the present unified General Staff of the Ministry of Defense is, in essence, a peacetime version of the Stavka. If so, the question of revival of the Stavka is academic. The distinction in operational command is, however, a feature of the World War II Stavka that probably would be revived, so that the operational command functions of the Military Districts could be abolished. This would seem certain in combat areas, where the Front or Group of Forces would have replaced the Military District (though retaining a similar headquarters structure).

The significance of such a separation of operational and administrative command is that the continued functioning of Military District Headquarters is not imperative for operational control of the armed forces. Consequently, centralized Soviet control of the military structure is not dependent upon continued operation of Military District Headquarters. Problems of administration and logistics, however, would still depend upon the functioning of the decentralized Military District Headquarters and its Rear Services. The operational-administrative separation is also of significance to the extent that the removal of operational functions from such headquarters could facilitate their assuming added functions such as the exercise of martial law.

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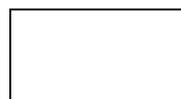
B. Mobilization.

Mobilization for war in the USSR is carried on by Military Districts and their Military Commissariats, which are discussed in a previous report. 34/ The Mobilization Plans, which are worked out in peacetime, are considerably detailed. They may provide for open or secret mobilization, and they embrace every resource of the country.

The human mobilization base is classified by training into 2 categories and by age into 3 classes. Reserve category 1 consists of those reservists who are fully trained and have at least 2 years of active service, and category 2 consists of those conscripts left over after the peacetime forces were brought up to required strength and those deferred for family or other reasons. Both categories are divided into classes -- the first includes those up to 35 years; the second, those up to 45 years; and the third, those up to 50 years. Current estimates of Soviet reserves are 23.9 million men, of which 7.1 million are in category 1 and 16.8 million in category 2. 35/

Mobilization in the USSR has two general phases. The first phase is provided for in the Mobilization Plan. It provides for the expansion of first-priority regular units to wartime strength within a period of M* plus 5 to M plus 10; the expansion of other units and the creation of new units, staffed with fully trained reservists of category 1, by M plus 30. The Mobilization Plan is extremely detailed. It lists the units to be formed; the schedule for their formation; the sources, by district, of personnel and materiel; and the transport to be used in moving units to strategic areas. Officers are assigned to a unit by name, and enlisted men are assigned by numbers. Materiel and transport facilities are assigned to collection points within military commissariats. One source indicates that for this first phase of mobilization, key personnel are ordered to report at M minus 2. 36/

* Mobilization Day.



The second phase of mobilization occurs after M plus 30 and technically is not within the Mobilization Plan. It is drawn up in general terms only, as an operational plan for replacement training and for the formation of new units consisting mostly of reservists in category 2 and the older age classes.

Estimates on the probable mobilization program are shown in Table 3.

Table 3

Estimated Phasing of the Soviet Mobilization Plan a/

<u>Day</u>	<u>Troops</u>	<u>Combat-Ready Divisions</u>	<u>Total Divisions</u>
M	2,500,000	175	
M + 5	4,500,000	175	200
M + 30	8,200,000	320	345
M + 180	11,000,000	320	470
M + 300	12,000,000	420	520

a. indicate that the M + 5 category has been replaced now by an M + 10 category, at which time the number of combat-ready divisions should be 175, while another 125 divisions would be in the process of being mobilized or trained. The new estimate for M + 30 is that there should be 300 combat-ready divisions, with another 50 in training.

The top mobilization level is estimated at about 15 million, of which 12.7 million would be ground forces.



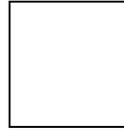
An interesting facet of the Soviet mobilization program is its provision for margins in excess of requirements, which are  as follows:

<u>Category</u>	<u>Percent</u>
Officers	10
Enlisted men	5
Trucks	10
Horses	25 to 30
Wagons	40 to 50

Soviet mobilization planning is so detailed that an initial mobilization of first-priority units -- that is, their expansion to war-time strengths -- could easily be done without too much danger of compromising any plans for immediate aggressive action. This is possible on two counts. The first is that existing units are probably at an average strength of 75 percent of the table of organization. Second, the mobilization program is focused on the rayon level, and as a local activity would not be easily discernible to foreign observers. Moreover, it could be carried out without press or radio publicity, so that the element of surprise would not be lost. The importance of a prior initial mobilization is obvious from the operational point of view, particularly for force units in border areas. It has certain advantages for interior zones also. Such mobilization would give a solid core of forces and materiel for the preservation of public order. It would also enable a concentration of human and other resources for such emergency activities as evacuation of strategic areas, military support to civil measures for defense, fire fighting, first-aid and medical care, and other measures to combat disaster.

Such initial mobilization would probably be confined to interior zones, since mobilization of forces abroad would necessitate substantial troop movements, so that the element of surprise would be lost. Forces abroad probably would remain at about 80 percent of their table of organization strength.





C. Regionalization and Delegation of Authority.

It is probable that the conditions of nuclear warfare would cause a deviation from the Soviet tradition of centralism resulting in lack of authority and initiative at lower echelons of the Soviet military structure.

The expected conditions of nuclear warfare tend to make continued centralism more undesirable in the command structure. It is reasonable to assume that, in order to combat the rigidity and inflexibility of strong centralism which could exist in the revival of a Stavka, the Military District commanders may be given more authority -- if not for military operations, at least for logistics and administration. The advantage of such measures would be that the self-sufficiency of Military Districts under conditions of decentralization would tend to offset any losses in vertical control. Self-sufficiency would also be increased through the unification of several districts under one command, or intensification of lateral communications between districts. This would be very pertinent to the problem of economic self-sufficiency and to relevant questions of logistics. The boundaries of economic regions and Military Districts are not greatly at variance.

The proper delegation of authority in order to increase the independence of Military Districts would also help speed up measures for recuperability and probably make for greater efficiency. These measures also have relevance to another probable course of action, the substitution of military for civil authority.

D. Military and Civil Authority.

Civil-military relations in the USSR could be expected to change in several ways in an emergency. First, in the absorption of several civil organizations into the military structure -- in World War II the Ministries of Communications, Transportation, Maritime Fleet, and River Fleet, and the Chief Directorates of the Hydrometeorological Service, the Civil Air Fleet, and the Northern





Sea Route were thus militarized. ^{37/} A similar change in their status could be expected in another war. The normal quasi-military status of these ministries would make their full militarization very simple.

A second way in which the civil-military relations could change would be through invoking martial law, especially in front areas. It could also be used in the interior zones, as a device for maintaining order during the periods of chaos and panic which might follow conventional or nuclear attack. The importance of martial law is that its complete subordination of civil to military interests gives the military structure control over all the resources of civil control structures.

A third way in which civil-military relations could change would be a merger of the two. This is particularly pertinent to the question of military decentralization and delegation of authority. It would make possible a combination of military and political decentralization through concentration of governmental powers in one body. A precedent for this would be the regional State Defense Committees established during World War II. From the military point of view, a minimum degree of administrative reorganization would be required, since the Military Council of each Military District is made to order for such functions -- particularly if the expected separation of operational and administrative functions occurs. Under normal conditions its membership includes, in addition to the military authorities, the regional Party secretary and the MVD (or KGB) representative on the Military Council. If a representative from the state administration were added to the Council, civil authority would have full representation.

The carrying out of such a system of decentralization or regionalization could be hampered where Military District boundaries cut across republic boundaries. Since this consideration applies to only three of the constituent republics, however, it would not necessarily be a major drawback in view of the advantages to be gained from decentralization.

E. Dispersal.

Basic measures for the dispersal of forces in the USSR in an emergency can be regarded as axiomatic. In the ground forces this would apply to all forces from division level down. Even higher static



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echelons such as district and army headquarters could be expected to take some measures for dispersal. A factor making dispersal feasible is the requirement that each echelon must keep communications contact with the next two higher echelons. Thus direction and control over dispersed units could be maintained unless two successive static headquarters were immobilized. Even then, practices of alternate communications probably could surmount the loss of both of these static headquarters.

Limitations to dispersal do occur with certain static forces such as Long-Range Aviation, PVO, and Naval Forces, but even Long-Range Aviation can gain some recuperability through the use of alternate facilities or the enlargement of others which could easily be converted to strategic bombing needs. Dispersal possibilities are more apparent with tactical aircraft and are reflected in reports of general trends toward dispersion. The USSR is believed to be working on a dispersal policy aiming at one regiment to an airfield. ^{38/} Deployment aims are also reported to include each light bomber and ground attack regiment having 1 home base and 1 alternate. Fighter bases supposedly will be constructed to serve as alternate light bomber bases, with underground fuel and ammunition storage and administrative facilities.

A well-developed dispersal program can be expected not only in order to save the armed forces, but also to aid in relieving the chaos of wartime and minimize disruption of communications.

V. Police Control.

Except for civil defense preparations, which will be treated separately, the chief preparations for wartime operation of the police or security services are largely speculative. During the last war MVD and MGB were merged under Beriya. Beriya himself became a member of the State Defense Committee, together with Stalin, Molotov, Voroshilov, and Malenkov.

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There is within the MVD a Mobilization Subsection under the Personnel Directorate which is charged with the formulation of plans for control of the civilian population in time of war. 39/ It seems probable that this unit has considered the foreseeable problems of nuclear warfare and has developed a scheme of action and organization aimed at maintaining the control structure.

A. MVD.

Although the MVD is organized on a union-republic basis, control presently is exercised centrally -- that is, as if it were an All-Union ministry. In case of attack and isolation, however, the status of ministers in the republics would give them both responsibility and authority to make decisions. As long as a return to the control of Moscow was expected, such field decisions probably would be carefully weighed for conformity with stated or implied Moscow policy.

Units of Border Troops and Internal Troops were called on during World War II to police rear areas of the Army fronts. 40/ This was an added function, in the case of the Border Troops, and units thus employed were dually subordinate to the front commanders and to a special directorate within the Border Guard Headquarters in Moscow. Border Troops and Internal Troops were also used in resettlement of suspected or dissident minorities. In addition to these operations, the possibility of resistance activities in the USSR and Satellites would appear to demand still greater numbers of MVD troops. These would be presumably obtained through recall of reserves and conscription. Reserves have been estimated at 300,000, with a mobilization of 100,000 possible within 5 days.

B. KBG.

The task of ideological guidance and its policing, which belongs to the KGB, was reduced during the last war by encouraging a rise in patriotism and Great Russian nationalism. 41/ Certain religious concessions were made also to the Orthodox Church. 42/





There would probably be concern in any future war over potential resistance in the Baltic areas, the Ukraine, and throughout the European Satellites. This apprehension should lead to a higher concentration of KGB agents in these areas, especially of those with area and language competence. Increased armed forces would also make new demands for personnel in the Armed Forces Counter Intelligence.

Any significant demands for personnel probably could not be met satisfactorily from reserves, so that additional selection of personnel would be necessary.

VI. Civil Defense.*

Inasmuch as civil defense is the physical basis for any emergency control plan, it is included in this discussion. In the USSR, civil defense has been described as an integral part of air defense and is closely associated with two of the primary control structures, the armed forces and the security system. One of its primary objectives would necessarily be the continuance of effective control. To do this, it would have to achieve preservation of sufficient key officials and communication facilities. Adequate civil defense preparations would reduce losses and have a beneficial effect on morale. Poor preparation or no preparation would ensure heavy losses of life and property, which probably would have an adverse effect on the morale of the population and of the armed forces. Such a loss of morale would also weaken the control structure. The examination of the Soviet civil defense system is therefore appropriate.

A. Organization.**

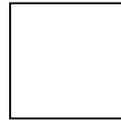
The organization of civil defense in the USSR is well conceived. It involves the use of a full-time corps of Local Air Defense*** staff officers for planning and direction; the maximum use of existing

* Documentation, unless otherwise noted, is fully presented in an earlier CIA report. 43/

** See Figure 1, following p. 38.

*** Mestnaya Protivovozdushnaya Oborona -- MPVO.





facilities, organizations, and services for implementation; and the use of mass social organizations for general training of the population in first aid, air, and chemical defense. A World War II law, whose repeal is unreported, made all able-bodied citizens between the ages of 16 and 50 liable to serve in civil defense assignments.

Air Defense -- or, more precisely, antiaircraft defense* -- is the name given in the USSR to all measures for combating air attack, for denying the enemy opportunity to attack, and for diminishing the consequences of air attack. It includes Active Air Defense** as well as the MPVO. Air defense is the responsibility of the Air Defense of the Country (PVO-Strany), a separate organization under the Ministry of Defense. The Commander-in-Chief for PVO-Strany probably is a deputy minister. Civil defense is coordinated with or monitored by PVO-Strany, and when a city or region is under attack, the PVO commander, if one is present, takes over operational control of civil defense.

1. MPVO Service of the MVD.

The central body of the Soviet civil defense system is a staff corps of specialized personnel known as the MPVO. This body is under the MVD and is administered from Moscow by the MVD Chief Directorate of Local Air Defense.*** Subordinate to GUMPVO at the republic level are directorates, and at oblast and rayon levels, departments. Cities have Headquarters of Local Air Defense. GUMPVO is responsible for the local air defense (civil defense) of the USSR, which includes the appointment of local headquarters staffs, staffs of training establishments, and inspectors to supervise and coordinate activities of air defense teams provided by ministries and local organizations. GUMPVO is also charged with the supervision of civil defense planning and operates a Central Scientific Research Laboratory for research and design.

* Protivovozdushnaya Oborona -- PVO.

** Aviazenitnaya Oborona -- AZO.

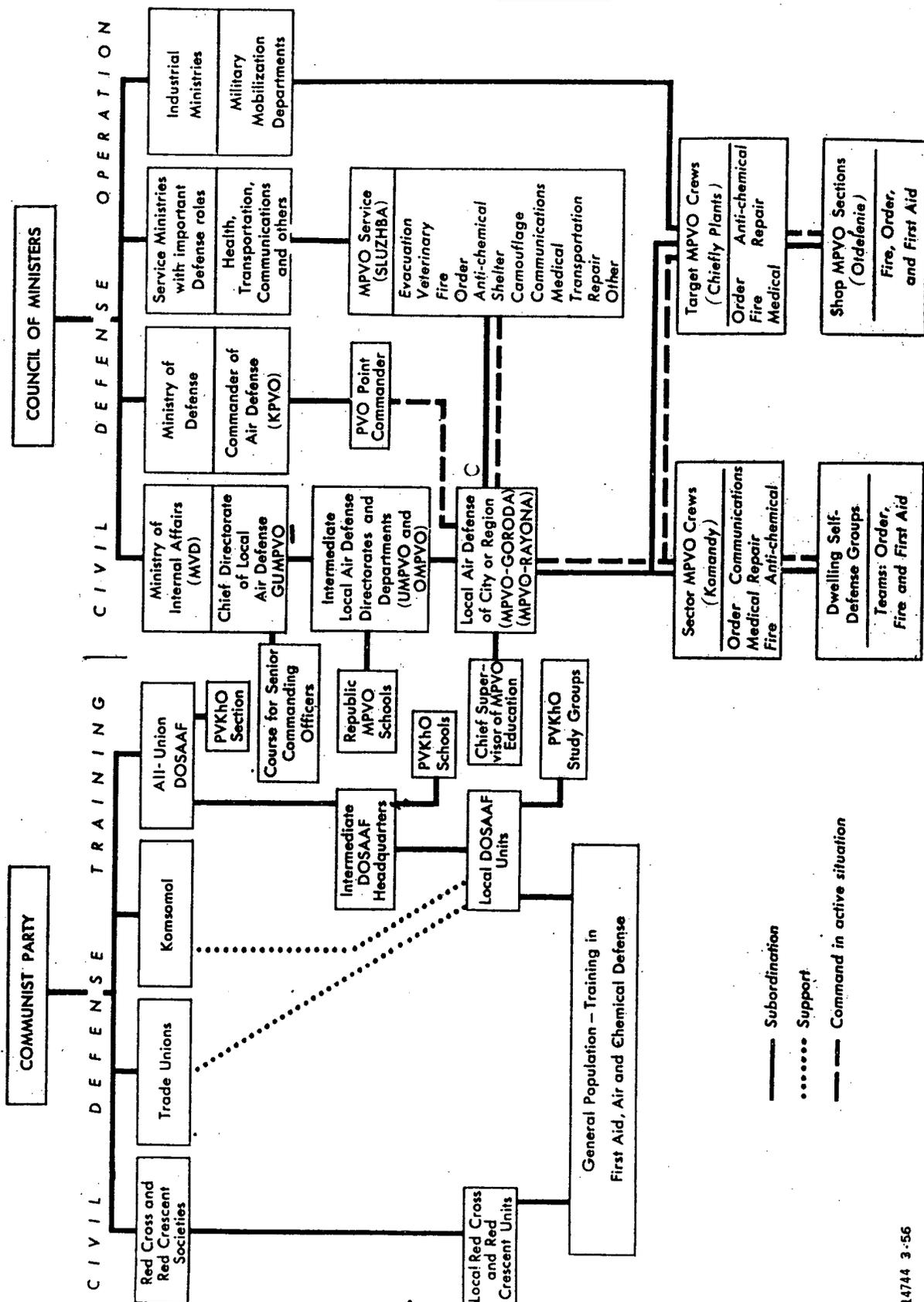
*** Glavnoye Upravleniye Mestnoy Protivovozdushnoy Oboroni -- GUMPVO.



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Figure 1

ORGANIZATION OF CIVIL DEFENSE IN THE USSR



— Subordination
 Support
 - - - - - Command in active situation

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In addition to the national and local offices of the MPVO, there are MPVO officers in important factories, as well as in transportation and communications installations.

In preparing for air defense, the MPVO is charged with the monitoring of new construction both on community-wide scale and in individual installations. It has been reported that each construction trust employs an air defense specialist. MPVO personnel who have been identified in these trusts probably are engineer officers, who are included in the MPVO organizations.

The structure of the MPVO is thus composed primarily of staff and planning personnel at all levels of government, staff officers for local air defense of important industrial installations, monitors for construction, and inspectors.

a. Cities or Rayons.

The basic operational unit of civil defense is the city or rayon organization. All departments of the city or rayon must be integrated into local air defense. Technical facilities of public property and industry must be widely used, and air defense is to be carried out by local governmental and Party bodies, enterprises, public organizations, and large masses of workers.

The responsibility for civil defense rests ultimately with the Council of Workers' Deputies of the city. The chairman of its Executive Committee is the Chief of MPVO. He organizes, prepares, and directs the system through an organization known as the "Staff of MPVO."  a Chief of Staff of MPVO is the actual person in charge of the civil defense organization, communicating directly with GUMPVO in Moscow on civil defense matters.

The civil defense responsibilities of the Chief of MPVO and his staff include the following: (1) formulating plans, (2) staff and unit training, (3) organizing and mobilizing crews and detachments for local air defense, (4) organizing training programs





for specialized personnel as well as for the general population, (5) preparing and coordinating a financial and materials procurement plan, and supervising all these activities through timely controls. In the event of an air raid, the Chief of MPVO and his staff are to direct the forces and facilities of the city in the elimination of the effects of the attack.

In exercising these responsibilities the MPVO of a city organizes and controls the following services: (1) camouflage, (2) fire-fighting, (3) medical, (4) disaster restoration, (5) chemical defense, (6) communications and reporting, (7) preservation of order and security, (8) transportation, (9) shelter, (10) evacuation, and (11) veterinary. Other services may be added in large cities or under special conditions.

b. MPVO Sectors.

Within large city MPVO organizations are found Sector Commands and their crews. The crews are similar in mission and title to the city services and are charged with operations within their area, subject to the directives of the city MPVO staff. A recent report has indicated that air-raid drills were carried out in Stalingrad by "zones" which coincided with police and fire subdivisions of the town.

c. Industrial Targets.

Production enterprises or establishments of great economic or defense importance are considered MPVO targets (Ob'yekt) and have their own MPVO organization. The mission of the MPVO body within a target is to assure the uninterrupted production or functioning of the enterprise under an air attack, including the preservation of the physical plant, personnel, and stocks and the rapid elimination of damage after the attack.

Although the manager of an enterprise is nominally responsible for civil defense, the Chief of MPVO, who must have had special training in civil defense, presumably is the operative head.



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The MPVO of a plant is subordinate both to the Military Mobilization Department of the ministry concerned and to the MPVO of a city or rayon. Among MPVO matters handled by the ministry appear to be planning and reporting, personnel matters, pay, and financing. In tactical matters of civil defense, the MPVO of a plant is subordinate to the city or rayon staff of MPVO. Within the factory, target crews are formed with responsibilities for such functions as communications and warning, order and security, fire fighting, decontamination, medical service, and repairs. Because larger plants normally have their own guard and fire-fighting forces, the reinforcement and training of the order and fire-fighting crews are simplified. Personnel of the existing plant dispensaries or hospitals are the nuclei for the medical crews. In addition to the target crews of a plant, there are shop crews, organized under the shop manager, for decontamination, fire fighting, medical service, and order and security.

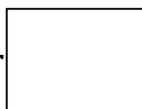
d. Self-Defense Groups.

According to 1952 DOSAAF publications, the local air defense of dwellings is to be accomplished by the formation of self-defense groups, which are formed in each dwelling unit housing 300 or more people. Large apartment blocks may have several groups organized for each 500 to 700 persons. Where dwellings house less than 300 people, the groups are formed cooperatively with those of other buildings.

Self-defense groups consist of a small staff (chief, assistant chief for political work, property manager, and orderly) plus six teams. These are order and observation, fire-fighting, gas decontamination, repair-restoration, medical, and shelter. The commander of the shelter team is the commandant of the shelter.

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2. Voluntary Society for Cooperation with the Army, Air Force, and Navy (DOSAAF).*

a. Aims.

The second important body concerned with passive air defense in the USSR is the Voluntary Society for Cooperation with the Army, Air Force, and Navy.** According to its bylaws, DOSAAF is a "mass organization of the workers of the USSR, established on a voluntary basis with the aim of strengthening the Soviet Army, Air Force, and Navy." The tasks of the society are to disseminate military information among its members as well as the general population and to prepare them for all types of air and chemical defense.

Civil defense training is by no means the only mission of DOSAAF. Its members are also encouraged to acquire military skills in such fields as skiing, marksmanship, flying, parachute jumping, gliding, amateur radio technique, automobilism, motorcycling, horseback riding, the construction of model airplanes and ships, and the breeding of service dogs.

b. History of Paramilitary Societies.

Paramilitary effort on the part of the USSR dates back to the period immediately following the Revolution of 1917. DOSAAF was formed by a merger of three former paramilitary organizations in the fall of 1951. The work of DOSAAF during 1951-53 was carried on by means of an organizational committee, although the bylaws of DOSAAF provided for the All-Union Conference as the highest governing organ. A press recruitment campaign, the general tenor of which was highly critical, was carried on from February to May 1953. Low membership, insufficient guidance, nonpayment of dues, and the low level of training were criticized. Following this criticism a new chairman of DOSAAF was appointed.

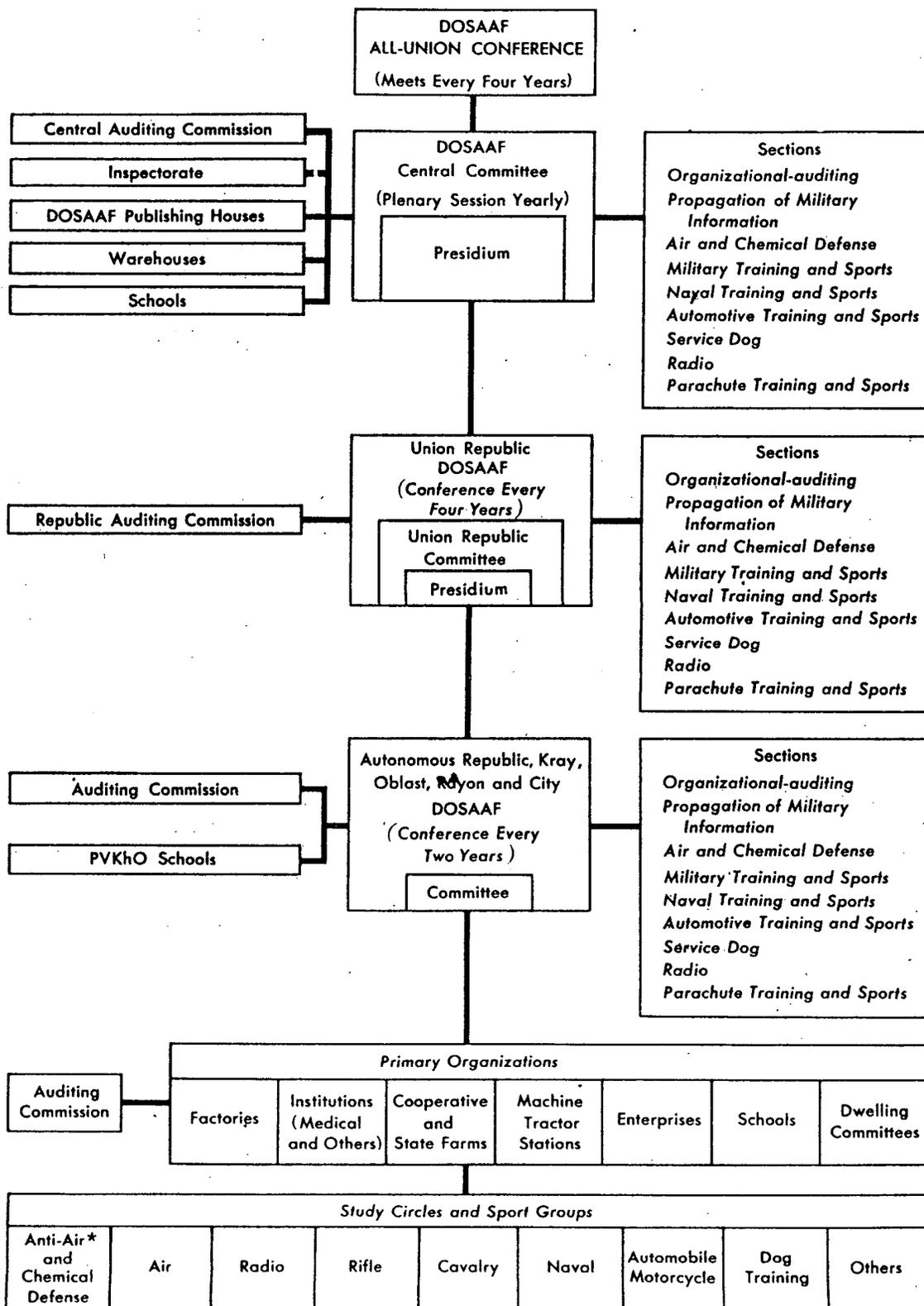
* See Figure 2, following p. 42.

** Dobrovol'noye Obshchestvo Sodeystviya Armii Aviatsii i Flotu -- DOSAAF.



Figure 2

ORGANIZATION OF THE VOLUNTARY SOCIETY FOR COOPERATION WITH THE ARMY, AIR FORCE, AND NAVY (DOSAAF) IN THE USSR

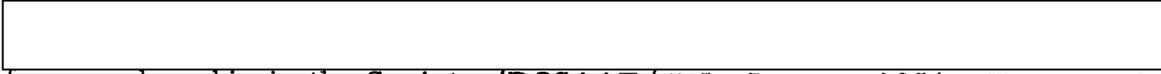


* Compulsory in all primary organizations



In October and November 1953 the DOSAAF Organization Committee published in the society's monthly organ, Voyenniye znaniya, two withering articles on the state of work. The new administration found that membership had increased "only" 48.3 percent in the 2 years since the beginning of DOSAAF. This figure, however, was questionable because of neglected records and even deliberate fabrication. An inspection of records was ordered, and severe punishment was threatened in case of deceit or falsification. Additional criticism was aimed at the low level of participation, the poor recruitment system for instructors, and the unsatisfactory state of supply and sports activity. To encourage membership and participation in DOSAAF activity, an extensive press and radio campaign was initiated culminating in the first All-Union Conference of DOSAAF in Moscow which ended on 29 December 1953. Following this conference, it appears that DOSAAF was able to enlist increased support from other public bodies, particularly from the Komsomol. Although the bylaws of the Komsomol obligated its members to devote time to military study, its members had not been enthusiastic about fulfilling this obligation by entering DOSAAF activity. Pressure on Komsomol members during 1951-52 had apparently been unable to overcome this inertia.

Following the change in leadership and during the period of publicity for the first All-Union Conference of DOSAAF from October to December 1953, 


 In January 1954 a Komsomol kray conference "ordered" its members to improve mass defense work in cooperation with DOSAAF organizations. Trade unions also were warned sharply in the newspaper Trud that they were "obliged to achieve the setting up of primary organizations of DOSAAF in every enterprise, in every institution and establishment of learning, in every state farm and machine tractor station." In October 1953, Komsomol committees and organizational committees of DOSAAF began holding joint meetings.



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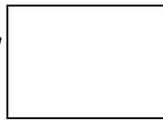
Two interesting reports [redacted] may reflect the effect of the new campaign in the Estonian SSR. Noting that DOSAAF activity was poor in 1952 and 1953, [redacted] that in 1954, urban Komsomols were participating 100 percent in DOSAAF, and that 60 percent of the 1,600 workers in the port of Tallinn had been enrolled in DOSAAF, the younger ones more or less by force. In addition, 90 percent of the port workers had been given short courses in air and chemical defense measures. These reports support and are supported by Soviet claims for increased membership and activity. A TASS transmission of 9 October 1954, for example, claimed that 8,000 new primary DOSAAF organizations were set up in the first 6 months of 1954.

c. Membership.

The size of the membership of DOSAAF has not been announced and is a subject for speculation. The Society for the Promotion of Defense and Aero-Chemical Development; * a direct antecedent of DOSAAF, had an announced membership of 15.5 million on 1 January 1947. Membership in DOSAAF in 1952 is estimated to have been 16 million. Since membership drives accompanied the election and accountability campaigns of 1953 and 1954, there probably have been substantial gains since then. The new measures to gain recruits from the Komsomol and trade unions have been noted above. (Total Komsomol membership was recently announced as 18,825,327). The low age limit (14) of DOSAAF makes it probable that some Young Pioneers have also been recruited. On 3 November 1953 the DOSAAF chairman stated that DOSAAF had a "membership of millions," and on 2 March 1954 he used the term "many millions" and indicated continuing growth. Pravda stated that DOSAAF was one of the largest mass public organizations in the country. 44/ In view of the size of the membership of its predecessor; the manpower reservoirs of the Communist Party, the Komsomol, the trade unions, and others; the evident pressure for enlistment; and the guarded satisfaction expressed, DOSAAF membership appears to be between 20 million and 25 million at the present time.

* Obshchestvo Sodeystviya Oborone i Aviatsonno - Khemicheskoma Stroitel'stva -- OSOAVIAKHIM.

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(In Baku, on the basis of dues payments, DOSAAF membership has been estimated at 25 percent of the population. This proportion may be applicable to urban-industrial areas which have a population of 80 million, but it should be deflated in rural areas.)

d. Organization.

According to its bylaws, DOSAAF's highest governing organ is the All-Union Conference, which meets every 4 years. The Conference decides important questions determining the society's course of action and confirms and makes all necessary changes in the society's bylaws. The All-Union Conference elects its executive organs, the Central Committee and the Central Auditing Commission.

The DOSAAF bylaws also provide for the establishment of DOSAAF organizations and committees on the union and autonomous republic, kray, okrug, oblast, city, and rayon levels.

Primary organizations of DOSAAF may be set up in all enterprises and institutions, kolkhozes, factories, and schools where there are at least three members of the society. DOSAAF membership is open to all citizens of the USSR who have reached the age of 14.

e. Financing and Supply.

The financing of DOSAAF is complex, and many of its aspects are unknown. According to the bylaws, the monetary funds of the primary organization consist of initiation fees, 30 percent of the membership dues, funds allocated by public organizations and institutions concerned with development of the society's activity, and "other" receipts. These funds are spent by the committee for training needs in accordance with estimates made by the general meeting. DOSAAF members pay a membership fee of 3 rubles a year, either in 1 or 2 installments.



Other sources of financial aid as well as contribution of material resources have been reported or discovered. Factories and institutions, in which many DOSAAF units are found, furnish quarters for study groups, committees furnish quarters for oblast and kray units as well as funds from the "local budget." Regular military units give material aid, including the use of military equipment, ranges, and instructors of the regular military establishment.

funds from the Central Committee of DOSAAF indicates sizable contributions from the committee to subordinate DOSAAF units.

3. Red Cross and Red Crescent Societies.

These voluntary societies play a major role in first-aid training for civil defense and in furnishing semitrained personnel for assistance to the medical services of civil defense.

The membership of these units was reported recently at 17 million. As in the case of DOSAAF, primary units are found throughout the country in such locations as factories, collective farms, and schools. Primary units are controlled by committees at the rayon level, which in turn are under the jurisdiction of city or oblast committees. Central control is assured by further organization up through Union-Republic and All-Union Committees.

These units conduct courses in first aid leading to qualification in GSO (Ready for Sanitary Defense) standards. Trained personnel are integrated into the civil defense medical services of the MPVO.

B. Plans and Training.

1. Plans.

Civil defense, like other aspects of the Soviet system, is prepared according to plan -- the present Five Year Plan period



is from 1951 through 1955. Plans are drawn up at the local level on directives from Moscow. In 1941, ob'yekt (target) plans were to be developed on the basis of instructions from the ministry concerned, instructions from the Chief of the target MPVO, and city requirements for the MPVO. Plans probably include procurement, construction, finance, personnel assignments, and training.

It was reported in 1950 that the USSR planned to train 5 million citizens a year in civil defense, and a Soviet publication referring to the 1950 Plan called for enlistment of "tens of thousands" of instructors for the development of air defense study groups. A "special plan" for air-raid shelter construction, probably based on particular legislation, was mentioned in a Soviet manual of 1952. Plans for specific city, sector, and enterprise civil defense groups have not been uncovered, probably because they are subject to strict security controls. Plans at the time of World War II called for a great deal of initiative at the city level, using local functionaries and organizations to form civil defense services, crews, and the like. Directives included the use of groups such as the police, the fire guard, local medical personnel, local communications personnel, transport of the area, communal services, and repair crews as the nuclei of civil defense forces. Auxiliaries were provided by the existent paramilitary society and by the Red Cross and Red Crescent Societies. Detailed planning, as well as recruitment, training, financing, and supervision, was the function of the Chief of MPVO of the city.

2. Training.

Training of the MPVO corps for civil defense is apparently accomplished through various schools and courses. A "Course for Senior Commanding Officers" located in Moscow would logically be a staff college. Republic or kray courses of MPVO [redacted] have most often been related to training for civil defense workers from enterprises. In 1953, [redacted] identified a "Leningrad School" with MPVO training. It is possible that this school is the undergraduate school for MPVO officers, since the approval of the head of GUMPVO was sought for candidates proposed by the MVD.



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According to Soviet publications, the Chief of MPVO of a city is responsible for the training of the command and administrative staff of the MPVO. To help him in this function, a Chief Supervisor of Education is appointed. Tasks entrusted to the Chief Supervisor are planning and implementing local air defense training, supervising instructors, and reporting on completed drills and instruction with a complete analysis of work, including recommended measures to eliminate shortcomings.

3. Technical Facilities Identified with the MPVO.

The MPVO maintains a Central Scientific Research laboratory, which conducts research in development and design aimed at improving techniques and materials for civil defense. Experimental Plant No. 7 of the MPVO is located at Odessa. Its function is unknown.

It has been determined that State Construction Planning Institute No. 2 of the Ministry of Shipbuilding in Leningrad is in some way connected with construction plans for the MPVO, perhaps only for that Ministry's subsidiaries.

reported that in Sverdlovsk apartment shelter plans which originated from the "Planning Institute," Leningrad.

4. PVKhO Schools.

Air and chemical defense* training has been the subject of steadily increasing attention in the DOSAAF program. It has become compulsory for every DOSAAF primary organization to set up study circles for PVKhO. To train instructors, DOSAAF operates a network of schools and training courses. Mention has been made in DOSAAF publications of factories sending workers to the oblast or local PVKhO school for training, and these workers, on their return, are utilized as civil defense instructors. Graduates of these schools are also utilized to teach leaders of self-defense groups from offices, homes, and schools. These PVKhO schools probably are supervised by the MPVO because MPVO officers have participated in examinations of graduates.

* Protivovozdushnaya i khimicheskaya oborona -- PVKhO.

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5. Factory Training.

During the last several years, emphasis has been placed on the formation of DOSAAF primary units in plants, a practice which is undoubtedly aimed in part at providing civil defense training for the target crews and shop sections as well as for the general body of workers. Major plants have the advantage of the presence of a trained Chief of Staff of MPVO. The guard force, firemen, maintenance personnel, and medical personnel of the individual plant are sources of instructors and also form the nucleus for the various civil defense groups. Reports on civil defense drills in ob'yekts are meager.

note that practice alerts were held once a month in a confectionary plant in Kiev, twice a month in a hospital in Baku, and every 6 months at a scientific research institute near Leningrad. It is probable that drills are held periodically in most major plants. This level of training is feasible because DOSAAF organizations are widespread in economic installations, and the majority of workers in these plants must be presumed to have had basic PVKhO instruction. It was noted in a DOSAAF publication that citizens who had passed the PVKhO requirements should be given the course again in 2 years, indicating that, in some areas, at least, the first cycle of training had been largely completed.

6. Training in Schools and Universities.

As noted above, instructors for PVKhO in schools have been trained by DOSAAF. DOSAAF units present in higher schools aim at preparing students as potential leaders for civil defense activities by giving them thorough theoretical and practical training in the organization of passive defense for factories and other economic installations. Children in lower schools also are trained in civil defense in accordance with a special plan. In the autumn of 1953, for example, it was reported that all Estonian school children were to get 8 hours of training in air, fire, and chemical defense. Some gas masks and protective clothing were issued for training.



7. DOSAAF Training Program.

DOSAAF is responsible for civil defense training for the general population. Within each DOSAAF primary unit there must be study groups for PVKhO. Pravda has redefined the priority goal of DOSAAF as the giving of modern PVKhO training to "all" the population. It was reported in 1952 that civil defense instruction was to be given in three phases as follows: first, to members of the Communist Party and its affiliates; second, to industrial workers; and last, to all civilians. The insertion of the word "all" in the Pravda article implies that air defense training has entered the third phase. The training given under the PVKhO program includes instruction on air-raid shelters, construction of trench shelters, first aid, fire fighting and fire-fighting equipment, types of gas and gas detection, and gas defense measures (including gas masks, shelter measures, decontamination, and care of water and food). Other subjects are recognition of types of bombs and warning signals and general familiarization with the MPVO system. On completion of the course those who successfully pass a practical examination are awarded the title of "Ready for Air and Chemical Defense" (Gotovk PVKhO). In view of the past emphasis on introducing DOSAAF and its activities into schools, factories, institutions, state and collective farms, and machine tractor stations, and in view of the recent unusual call for the training of "all" the population, it is possible that most DOSAAF members and workers and students in the above-listed points have been given basic instruction in civil defense. The current goal, then, logically would be to reach the remainder of the population. One indicated that during 1952-53, house managers in the Estonian SSR were put through special MPVO courses by DOSAAF, which would also be timely for the current organization and instruction of the self-defense groups in dwellings.

8. Drills.

Reports of city air-raid drills have been few, but the training carried out in DOSAAF units, institutions, plants, and schools could easily be carried on internally. Blackout driving exercises were reported in Mogilev in 1952. From Stalingrad comes





the only description of an air-raid drill in a sector of a city. As [redacted] it included a blackout, movement of people to shelters, and a stoppage of traffic. The only vehicles on the street were police jeeps, ambulances, and fire trucks. Auxiliary civilian firemen were noted. All personnel (presumably of the civil defense crews) wore gas masks, and simulated "hits" and casualties were part of the exercise. With the current priority for giving civil defense training to the general public, sector and citywide drills will steadily become more feasible.

9. Behavior Instructions for Dwellings.*

a. "Threatening Situation."

Announcement of a "threatening situation" indicating that an air attack is possible is made by radiobroadcast and by publication of the announcement by the Executive Committee of the local Soviet.

In dwellings the house manager is responsible for seeing that blackout is initiated and that the self-defense groups are fully equipped, manned, and aware of their duty posts. Shelters used for various economic purposes are cleaned and made ready, and shelter signs are posted. [redacted]

[redacted] The various teams for self-defense are checked by their leaders, and readiness of materials and personnel is reported to the chief of air defense of the dwelling. Individuals carry gas masks.

b. Air Alarm.

Announcement of an air attack is made by a 3-minute sounding of whistles, sirens, and the like and by radio announcement. Citizens on the street put gas masks in the "ready" position and take shelter as directed. People in dwellings send children and infirm persons to the shelters, cover food and drinking water, and turn off utilities. If they have no other duties, they then

* Based on information as of 1952.





take shelter. Self-defense teams, except those charged with blackout and movement, report to their place of assembly, check or receive equipment, and take shelter. All teams report "ready," if possible, to the house chief.

c. Gas Alarm.

A gas alarm is signaled by striking a metallic object and by radio. All those not in a shelter put on gas masks, and in shelters the gas-filtering mechanism is started.

C. Air-Raid Shelters.

The use of air-raid shelters is being emphasized in passive air defense preparations of the USSR. Noting World War II experience, the newspaper Krasnaya zvezda (Red Star) has said that troops in towns under air attack should make use of cellar shelters. This presupposes the existence of numbers of such structures, and the failure to mention massive, deep-level shelters may indicate either a security restriction or a deficiency in this respect.

During World War II the Moscow subway was used as a mass air-raid shelter, and it has been reported that the subway was in part designed as such. The subway is also reported to have been the location of a key power switchboard and some federal offices. The stations are equipped with ventilating systems which were fitted with filters during the war. At the height of the German air raids it was estimated that 750,000 people were sleeping in the subway. The subway system has been expanded since the war, and plans for further expansion have been announced. A  recently returned from Moscow, felt that the expansion of the subway was unwarranted by transportation demands and described it as "the world's largest and safest air-raid shelter," noting its great depth and central location. A DOSAAF exhibit of 19 April 1953 related to air defense included a picture of a subway station, indicating that the Russians are well aware of the possible use of the subway as a bomb shelter. An underground railway is also under construction





in Leningrad. Aside from these presumably adaptable subways, no mass urban shelter for the civilian population of the USSR have been reported.

It is, however, becoming apparent that the USSR is spending considerable time, money, and materials on a construction program for other types of shelter. [redacted]

[redacted] the first indication of a long-range program of air-raid shelter construction in the USSR. [redacted] "the instructions of the Oblast [Chita] Directorate of the MPVO to make provisions for cellars in all new buildings under construction." Some reports on the existence of air-raid shelters were received between 1949 and 1953, but they hardly made it possible to form any firm conclusions as to the breadth of the order or its implementation. In 1951 and 1952 the DOSAAF publishing house in Moscow published manuals giving schematic diagrams of cellar shelters for masonry apartment buildings.* These manuals are basically civil defense training manuals for the general population. In addition to shelters constructed according to a "special plan," mention is also made of the conversion of existing cellars. It is stated that cellar shelters give protection to the population against shock wave and splinters from demolition bombs alongside the building and against a cave-in of the upper part of the building. These cellar shelters are probably similar to "category 2" shelters of World War II, which were designed to withstand the collapse of the building. In describing a shelter, note was made of smoothly plastered airtight walls to prevent gas leakage, double airtight doors, and a filter ventilating installation which would furnish air directly or through filters. The air was to be drawn in by an electrically powered fan which could be manually operated in an emergency. A shelter, according to the manuals, should have water, sewerage, heat, light, and hand tools for emergencies. A manual [redacted] describes similar plans for a civilian-type shelter and also describes in some detail the filtering system. The fan is ideally connected to two intakes on opposite sides of the building, and the filters proper are in the form of metal canisters, mountable in series to attain the required capacity for filtered air.**

* For sketches of apartment air-raid shelters in the USSR, see Figure 3, following p. 54.

** For sketches of Soviet gas filters, see Figure 4, following p. 54.





[redacted]
[redacted] had worked on masonry construction in the USSR. They described cellar shelters in masonry apartments at such varying locations as Sverdlovsk, Asbest, Pervoural'sk, and Revda in the Urals; Stalingrad on the Volga; and Kiev, Krasnopol'ye, Kadiyevka, and Stalino in the Ukraine. Other [redacted] have reported cellar shelters in Rustavi and in Khabarovsk in eastern Siberia. It thus appears likely that shelter construction has been going forward in implementation of the order of 1949 and of the plan indicated in the manuals of 1951 and 1952.

The descriptions of apartment shelters given by the [redacted] were remarkably consistent with the plans in the publications mentioned above and with each other.* Among the items mentioned were housing built according to "type" and "series" plans and "shelters built in accordance with new air-raid precaution legislation." [redacted] that [redacted] shelter plans stamped "Planning Institute, Leningrad, January 1952."

[redacted]
[redacted] estimates the cellar depth to be 2 to 2-1/2 meters, with walls 40 to 85 centimeters (cm) thick. The estimates of ceiling thickness vary considerably, from 15 to 60 cm, including reinforced concrete plates. The difference in thickness may be caused by variations in the span width or by the inclusion of a finished flooring in some estimates. Priority for certain personnel also may dictate better protection in some instances. The doors to the shelters -- of steel or metal-clad wood -- are double, hermetically sealed with rubber gaskets, and have a gas lock between them. [redacted]

Specified in some descriptions are escape passages which are essentially concrete-lined tunnels with covered manholes at some distance from the dwellings. In apartments where a tunnel is not provided, escape hatches are built into the upper cellar wall. Two toilet

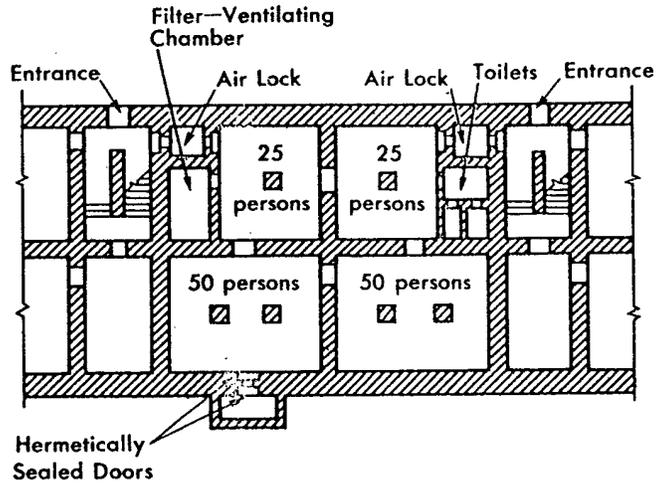
* For a sketch of an apartment air-raid shelter near Kiev, see Figure 5, following p. 54.



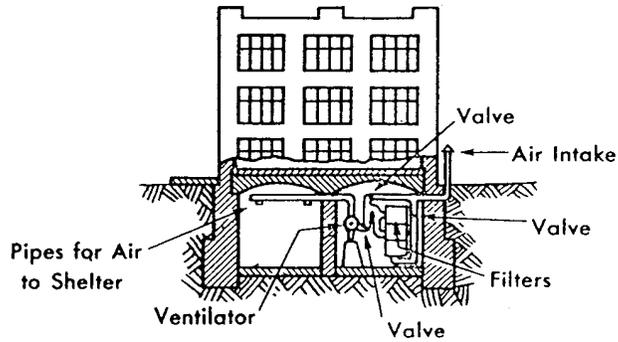


Figure 3

SKETCHES OF APARTMENT AIR-RAID SHELTERS IN THE USSR
(from DOSAAF Manuals)



FLOOR PLAN



VENTILATING SYSTEM

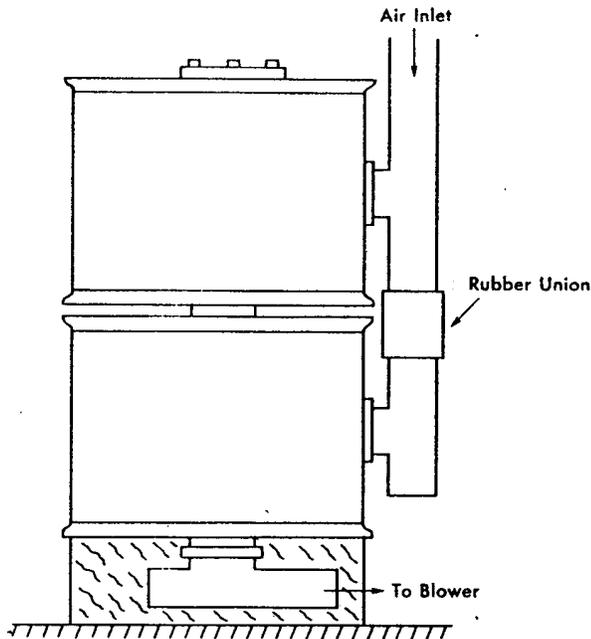


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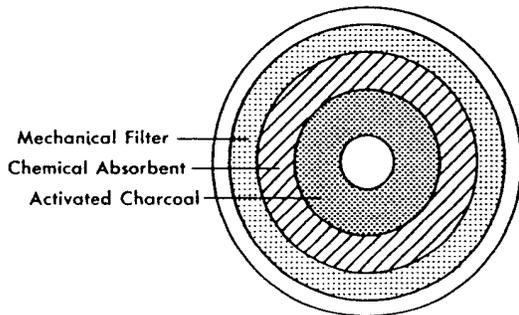
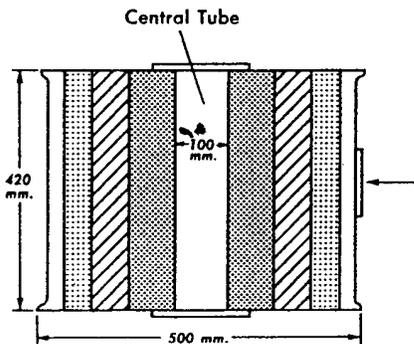


SOVIET GAS FILTERS

Figure 4



FILTER-SORBENT FPU-100



SCHEMATIC CONSTRUCTION OF FPU-350

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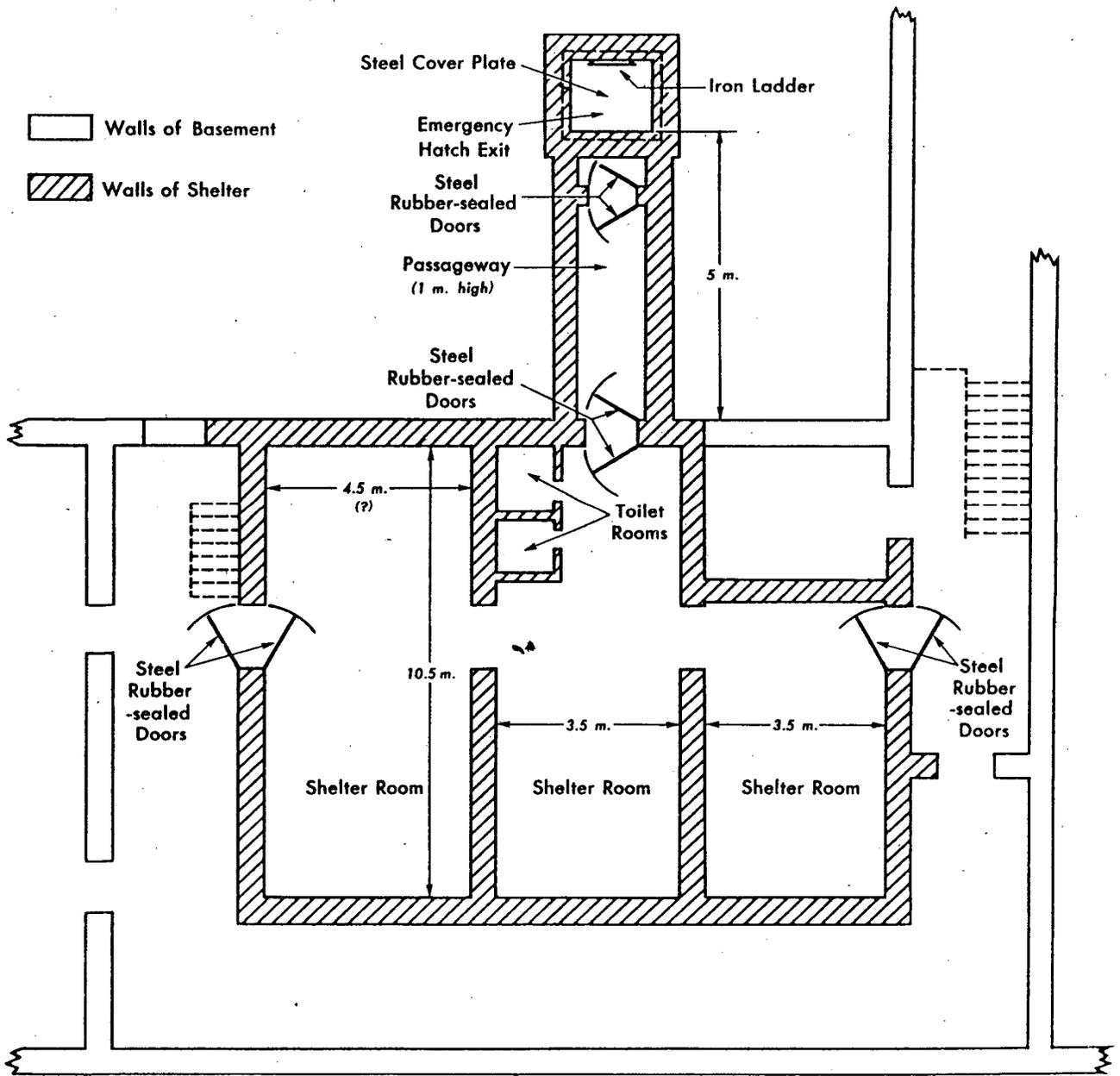


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Figure 5

SKETCH OF APARTMENT AIR-RAID SHELTER



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rooms are customarily installed, and first-aid stations and showers have been identified in some shelters.

One report indicates the use of tile facing on the interior walls of a shelter, and, in another case, inspecting officers insisted on extremely smooth plaster-coated walls. These probably are measures to guard against gas leakage. Other antigas measures described include the hermetically sealed doors (common to all reports) and ventilator ducts for the air-purifying units. Some of the reports noted that filter ventilating devices had not yet been installed. Two reports mention the careful installation of electrical wires entering the shelter, felt that this care was connected with gasproofing. observed a stainless steel gas-detection pipe (three-fourths of an inch in diameter) through a shelter wall connected to the filter ventilating apparatus, and another single report states that pipelines in cellars were splinter-proof.

The walls of the shelters are built of brick, concrete, or stone, with the floor and ceiling of concrete.* Concrete mixtures used in air-raid shelters are reported in two instances. One specified a mixture of 1 part "500" cement to 5 parts sand. (This does not seem probable, may have meant 1 part cement to 4 parts other ingredients.) A more plausible mixture reported was 1 part "400" cement, 2 parts sand, and 2 parts gravel. Cement of good quality ("400" and "500") evidently was not always available, and the substitution of "250" has been noted. One description of the specifications of the steel re-enforcement of ceilings said that the cellar ceiling contained 12-millimeter steel wire mesh, and 5 to 6 tons of iron were used per 100 square meters. This seems high, unless the steel used in structurals was included in the estimate.

The construction of shelters was inspected by military officers. In view of the known role of the MPVO in monitoring civil

* For sketches of apartment air-raid shelters at Stalingrad and Stalino, see Figure 6, following p. 56.

defense construction, it is likely that these were MPVO officers or engineer personnel loaned to the MPVO for inspection purposes.

The above descriptions of air-raid shelter construction cover only about a dozen important industrial locations, cities [] [] There is every reason to assume that similar construction also has been going on in other areas, although no reports on them are now available.

Air-raid shelter construction dates at least from 1949. [] are substantially in agreement that all new masonry construction which [] in 1952 and 1953 included cellar shelters. Several state that shelters were started in 1949 and that in 1950 shelters were generally included in new apartments in Krasnopol'ye, Sverdlovsk, and Stalingrad. Other reports state that "all new buildings since 1951" included cellar shelters in Stalingrad and Stalino. One report says that there are practically no cellar shelters for civilians in the Estonian SSR, but shelters are reported completely ready in buildings used by the armed forces, the militia, and the state security forces. In May 1953, work was in progress to construct air-raid shelters in all government buildings in the Estonian SSR, and they were half completed.

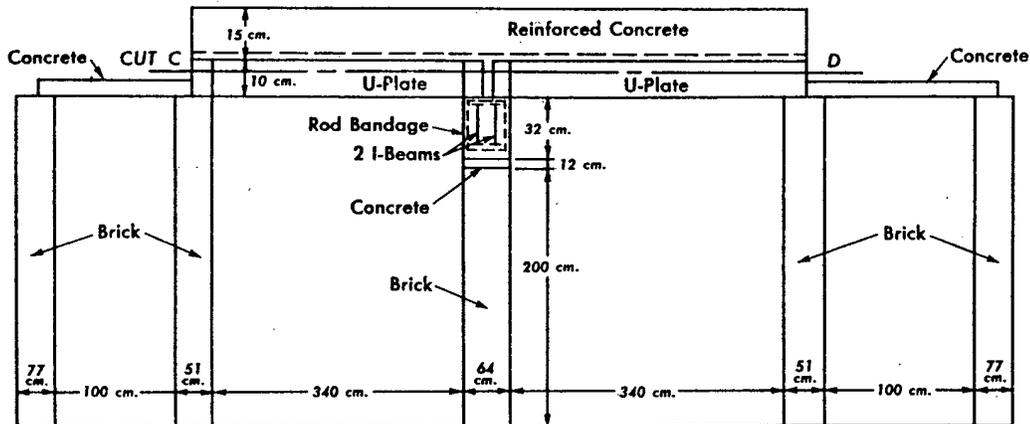
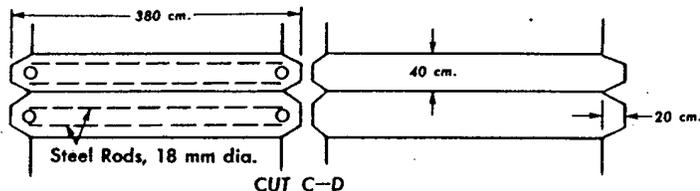
Some priority as to personnel evidently has been used in allocating new apartments and, therefore, air-raid shelters. The earlier construction during 1948-51 probably was largely allocated to Party and government personnel. Some of the [] [] who worked on apartments in 1953 reported that there was grumbling about the allocation of apartments to more privileged groups, but several stated that apartments were also occupied by workers in an armaments plant, employees of a copper combine, postal telegraph employees, coal mine laborers, and others who could be grouped under the heading of workers in essential industry. The logical system of priorities which seemingly has been followed in the provision of improved housing is as follows: first, government, Party, military, and supervisory personnel; second, workers

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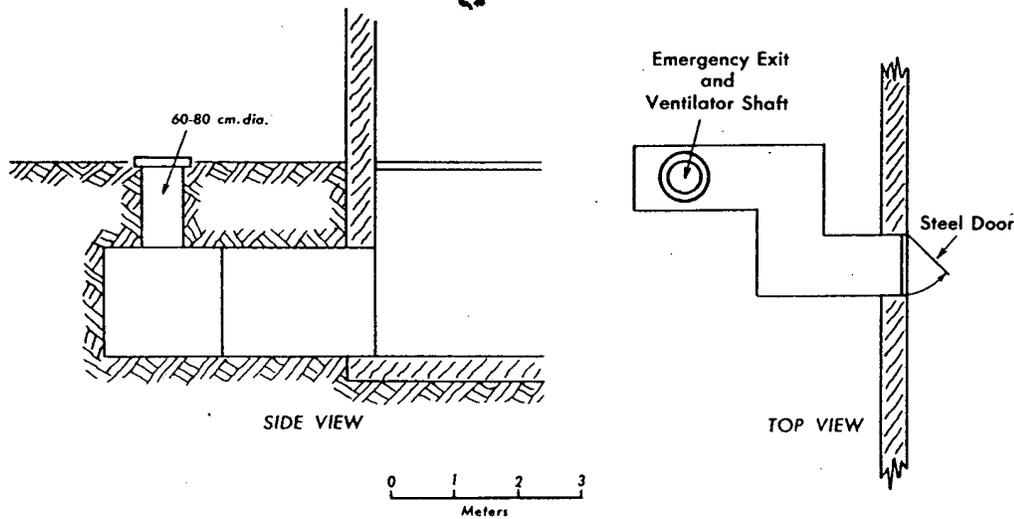
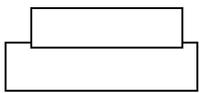


SKETCHES OF APARTMENT AIR-RAID SHELTERS

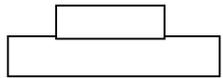
Figure 6



CROSS SECTION OF AN APARTMENT SHELTER



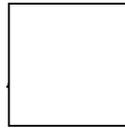
ESCAPE HATCH OF AN APARTMENT SHELTER



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in essential industry with higher paid technicians having first call; and third, the general population as housing becomes available. The lack of apartment shelters reported in the Estonian SSR is an indication that the more important industrial areas in the USSR proper have received priority.

Concurrent with the program for apartment shelters, shelters also have been included in military barracks, government and Party headquarters, club houses, schools, hospitals, and department stores. Some of these were installed as early as 1948, according to reports on the Baku area. In Baku a new Party building with a strong reinforced concrete cellar was completed in 1948. A building rumored to be the new Government House was reported in 1949 to have reinforced cellar rooms with steel doors. The Military Headquarters in Baku likewise has 6 heavily constructed cellar rooms which are 5 by 6 by 3 meters, with rubber-lined iron doors. In the Ministry of Interior Building in Kiev and in the House of the Red Army, large air-raid bunkers with gas locks were reported in 1951. Two other official buildings in Kiev were reported in 1948 to have basements two stories deep.

Plant shelters are also included in new building. These have been reported  in 3 plants in Sverdlovsk, 2 in Stalingrad, and 1 in Odessa. There is no reason to believe that these are isolated occurrences. Considering the Soviet concern for developing and protecting an industrial economy, it cannot be supposed that bomb shelters are not being included in new factory installations.

In areas where formal shelter is not available, the populace is advised to dig dugouts or slit trenches. The areas for these are preselected by order of MPVO officials, but construction is not started until express orders are received. These shelters are woodlined and may be improved by various measures such as to addition of doors, gasproofing, heat, and light.

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D. Medical Aspects of Civil Defense.

The centrally controlled, uniform pattern of the medical system of the USSR is well suited to, and already integrated with, the civil defense program. Under the added strain of wartime conditions, however, the Soviet dependence on inadequate facilities and on a large proportion of poorly trained personnel probably will limit their ability to cope with simultaneous and numerous emergency situations.

1. Organization.

The Medico-Sanitation Service of the MPVO* is superimposed on the normal Soviet public health system.** It utilizes the existing network of therapeutic and sanitary establishments of local health departments and auxiliary medical services as a basis for emergency medical operations under air-raid conditions. As an integral part of the nationwide MPVO system it cooperates with the Soviet Military Air Defense Command and is subordinate to it in time of war. The vertical organization within the Ministry of Health includes a top-level MPVO section at the ministry level, which channels down by way of the existing internal echelons. Horizontal organization is achieved by working agreements and coordinated activity of the various Ministry of Health echelons with the other interested government agencies, public organizations (particularly the Red Cross and Red Crescent Societies), and a number of lay participating elements.

The most important medical defense organizational unit is at the target level. The heads of city or rayon health departments also serve as chiefs of the corresponding MSS MPVO units. These executive medical officers supervise the pertinent medical civil defense training and in time of war are charged with reducing the medical effects of air raids to a minimum. Specialized

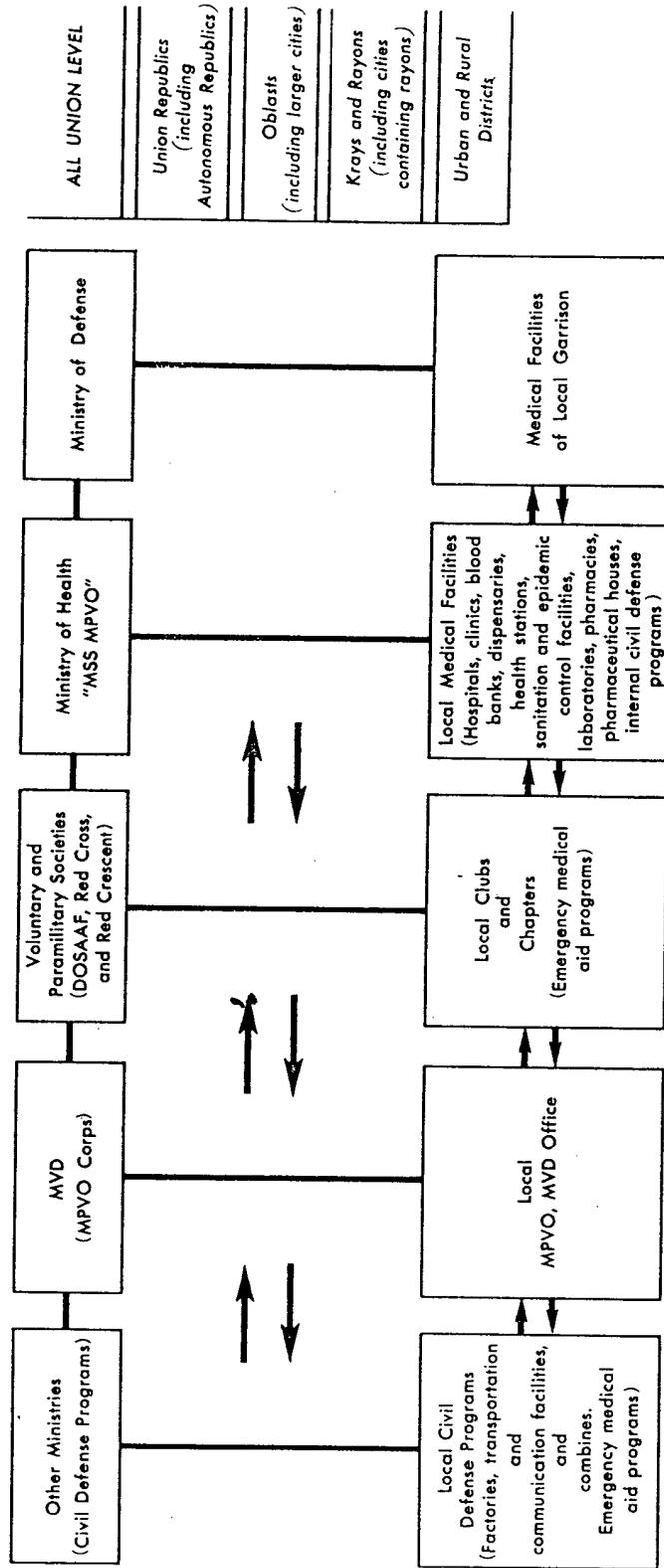
* Mediko-Sanitarnaya Sluzhba -- MSS MPVO.

** For the organization of medical civil defense in the USSR, see Figure 7, following p. 58.



Figure 7

ORGANIZATION OF MEDICAL CIVIL DEFENSE IN THE USSR



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problems related to epidemic control or chemical decontamination under air-raid conditions are the responsibility of the State Sanitary Inspector (Gosinspektor). He is also the assistant chief of the city or rayon emergency medical service.

The city organization coordinates medical defense activities performed by all departments which are operating within the city limits. MSS MPVO units are organized in rayons of cities which are divided into rayons. These are headed by the person who holds the position of chief of the rayon health department.

2. Functions.

The following missions are assigned to the MSS MPVO:

- a. The practical administration of all medical institutions located within the city limits (such as hospitals and drug stores) and their adaptation to the needs of local air defense.
- b. Organization of stationary and mobile facilities for rendering first aid to victims, including the following: stationary and mobile first-aid stations; stationary and mobile dressing stations; stationary and mobile clearing stations; stationary and mobile decontamination stations for the decontamination of the clothing of victims of poison gas; station hospitals; and medicochemical laboratories for the detection and analysis of poison gas in such things as water and foodstuffs.
- c. Furnishing crews and services of the MPVO with medical equipment.
- d. Training and requalifying medical personnel for work in the various medical institutions and crews of the MPVO.
- e. Directing military training of all medical institutions and crews of the MSS MPVO which are designed for use in case of enemy air attack.





f. Registering all medical property found in homes, institutions, and business establishments.

g. Planning and directing the organization and training of the general population (medical units and militia) for medical defense, self defense, and mutual aid. Such work includes the following: first aid and evacuation of the victims of air attack; organization of sanitation squads for the decontamination of areas, clothing, water, and food in case of gas attack; aid stations for those suffering as a result of gas attacks; organization of local defense against air attack within medicosanitary establishments, sanitary and epidemic control measures and maintenance of all means of protection; and sanitary supervision over collective protection facilities during air raids.

3. Support Groups for Medical Defense.

In carrying out its civil defense mission, the MSS MPVO uses the following types of units:

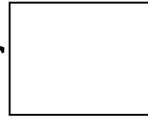
a. Medical Self-Defense Groups.

These groups are trained in first-aid methods and transport of the injured. They are organized before the outbreak of hostilities at dwellings, industrial establishments, and other enterprises. Red Cross and Red Crescent posts substitute for these groups where they do not exist. In 1953 the USSR was engaged in training large portions of the Soviet population in medical defense by means of the "Ready for Sanitary Defense" (Gotov k Sanitarnoy Oborone -- GSO) norm. Sanitary posts, sanitary self-defense groups, and sanitary teams at dwellings, enterprises, kolkhozes, and sovkhoses are formed from groups of people who have completed courses under the GSO training program.

b. MPVO Medical Brigades.

These brigades are organized at industrial or other enterprises and are composed of employees of that particular installation. Detachments are equipped and trained at the employees'





expense. A brigade may include medical MPVO battalions and companies as well as medical teams of the Red Cross.

c. Red Cross and Red Crescent Societies.

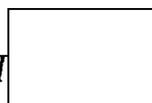
These societies, with a membership reported to be 17 million or more, are also assigned roles in sanitary and first-aid aspects of civil defense operation. The Red Cross civil defense units are formed in cities, rayons, transport systems, kolkhozes, sovkhazes, housing units, factories, and schools. Red Cross or Red Crescent sanitation teams represent reserves of the city or rayon MSS MPVO and are used according to directions given by the city or rayon staff of the MSS MPVO. A Red Cross or Red Crescent sanitation team is composed of 3 groups of 5 people each. Each group is provided with equipment similar to that of a sanitary post. A medical nurse, a doctor's assistant, or an experienced leader of a sanitary post is appointed as chief of the sanitation team. The wide dispersion of the primary units of these societies and their medical and sanitary training make them an important source of medical assistance in time of emergency.

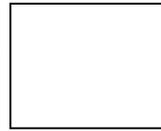
d. First-Aid Detachments.

The detachments consist of 2 medical nurses; 1 medical assistant; and a physician, who heads the detachment. These detachments operate in the focal area which has been affected or in its immediate vicinity. If necessary, they may engage the help of medical posts and other medical units in the area.

e. Medical Transport Teams.

The teams consist of specially designated MPVO transportation units that utilize litters, ambulances, trucks, and other reconverted vehicles.





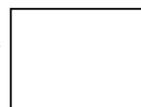
4. Use of Facilities.

The plan for medical aid establishments of the MPVO makes use of medical facilities to care for the different types of air-raid casualties. The medical aid establishments of the MPVO include the following: first-aid stations in hospitals and clinics, bathing stations, stations for anhydrous disinfection, and medicochemical laboratories attached to hygiene and bacteriological laboratories. Schools, clubhouses, motion-picture theaters, institutes, air-raid shelters, cellars, and the like may also be used. Places at which medical aid is given before the injured are treated by a physician include first-aid stations, dispensaries, and hospitals. A first-aid station may have only a feldsher (doctor's assistant), who would be located at a midwife station or an ambulatory polyclinic. First-aid stations give medical aid to persons suffering from light wounds, traumatic injuries, or burns, as well as exposure to nonpersistent toxic agents. Dispensaries give medical aid to all classes of injured and provide temporary hospitalization inasmuch as they are located at hospitals, sanitariums, and health resorts. Because of the lack of qualified surgeons in medical aid stations, surgery is performed in hospitals only -- the function of medical aid stations is necessarily limited to giving first aid and preparing patients for evacuation. If the area under attack is not far from a hospital, there is no need for sending people to medical aid stations.

E. Defense against Chemical Warfare.

The Soviet civil defense program stresses defense against chemical warfare. The few reports of training (in schools, factories, and other localities) generally include observation of chemical defense activities.

Gas masks of high quality (GP-4) were made available to the public in DOSAAF stores in 1953. The design of the GP-4 mask suggests that it was intended for protection against bacteriological as well as chemical agents.



Gas masks and decontamination supplies have been reported to be stored in factories, DOSAAF units, and MPVO warehouses. Although the amount of such material that is available is not known, the level of training and the DOSAAF manuals suggest that key personnel, workers in essential industry, and those expected to perform civil defense duties have gas masks (probably other than GP-4) and protective clothing where required.

The majority of reported air-raid shelters are equipped with filter-ventilating mechanisms or are designed for their installation. As more shelters with such filter mechanisms become available, the vulnerability of the USSR to chemical warfare will decline.

A recent report stresses the effects of chemical attack on an unprepared population, which could be disastrous from the point of view of morale as well as numbers of casualties. If this is true, the increasing numbers of gas-proof shelters, the availability of high-quality gas masks, and widespread chemical defense training should be a psychological advantage in the civil defense of the USSR.

F. Other Aspects of Civil Defense.

1. Supply.

Information on supplies for civil defense in the USSR is meager, and quantitative estimates are not possible. Certain types of supplies applicable to civil defense are stored in various locations.

A World War II manual refers to MPVO supplies, stored in factories, which were to be issued upon notification of a "threatening situation." Postwar reports of civil defense equipment in plants enumerate gas masks, gas-protective clothing, coverlets, stretchers, drugs, and decontamination materials. Important factories were reported to have received gas-protective clothing and boots in 1951.

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There probably is a variety of stores in MPVO and MVD warehouses, including communications equipment, boots, food and clothing, and decontamination supplies.

It has been noted that DOSAAF sells civilian gas masks.

Although no stockpiling in the USSR has been connected specifically with civil defense, many items are stored which would have importance for civil defense purposes. These items include fuel, food, clothing, building materials, communications equipment, automotive equipment, and tools.

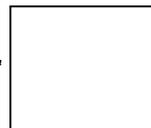
2. Motor Transport.

Motor transport has many potential uses in civil defense, including supplying vehicles for city services and relief columns, for evacuation, and for use by motor messengers. Government control of most vehicles in the USSR should facilitate their use for civil defense purposes.

Civil defense training for bus and truck drivers was reported to have taken place in two [redacted] towns in 1952. This included general air defense training and blackout driving. Another report of 1954 states that autobuses [redacted] must have sets of benches and mounting ladders stored for each truck. Although these trucks are nominally for military use, their potential uses in evacuation and transportation of civil defense disaster crews are obvious.

In the fall of 1954 the automobile-motorcycle clubs of the Committee for Physical Culture and Sports were transferred to DOSAAF. (DOSAAF already was conducting driver training.) The unification of driver training under DOSAAF places qualified drivers under better control for integration into the civil defense system.

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3. Communications.

Instructions indicate that civil defense alarms are to be given by word of mouth, by radio, and by sirens or whistles. In some localities, sirens and loudspeakers have been installed or restored since 1950, and sirens have been periodically tested in Sverdlovsk.

Operations during World War II and published comment indicate that parallel communications (wire, radio, and messenger) are recommended in the USSR to link the air warning service, MPVO command posts and observation posts, and MPVO units in important industrial targets. MPVO offices have purchased telecommunications equipment, and MPVO signal equipment was sent to the Ashkhabad quake area in 1948. Fire and police radio probably would be used for civil defense purposes.

DOSA AF club activity includes radio study groups. They have been active in the installation of radios and wired speakers implementing a 1949 government decision to complete basic radiofication of the country by 1955 (20 million receivers and relay points*). This directly facilitates dissemination of civil defense warnings and information.

DOSA AF radio clubs could be used as a source of operator personnel in the MPVO system.

G. Defense against Nuclear Warfare.

The USSR refrained from describing the hazards of nuclear warfare in open publications until 1954. Release of such information occurred shortly after classified manuals on the subject were disseminated to Soviet troops in the fall of 1953.

In a series of articles in Red Star, which started in January 1954 and ran through most of the year, the physics of nuclear forces, dangers from an atomic explosion, atomic defense

* Probably means wide-diffusion loudspeaker locations.



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for troops, and peaceful uses for atomic energy were discussed. 45/ Red Star is published for the armed forces, but it is an open publication available to civilians. Some of the Red Star information appears to have been copied from US publications. Accompanying the articles were Soviet broadcasts on the same subject, but these were also directed principally to the armed forces.

Instructions for atomic defense for civilians have been occasionally reported since 1947, but generally such instructions have been restricted to selected personnel.

DOSAAF civil defense manuals of 1951 and 1952 omitted mention of nuclear weapons. A manual published in 1954, however, mentioned atomic bombs and their use in World War II by "American Imperialists." A Pravda article in 1954 called for preparation of the population for "modern" air defense. 46/ The insertion of the word modern presumably referred to nuclear defense. Instructions for atomic defense have been mentioned openly. A description of methods for the physical removal of radioactive matter was published in Komsomolskaya Pravda in July 1955. 47/ An article in a DOSAAF periodical indicated that the air and chemical defense training norm will now include some instruction in defense against atomic weapons. 48/

Soviet civil defense plans for protection from nuclear attack are unlikely to become available outside the USSR. Some of the measures already taken for civil defense, as well as the instructions given to troops, are worthy of examination for their possible uses in nuclear defense of the general population.

It has been noted that the USSR has a considerable program under way for the inclusion of shelters in all new buildings. In the Red Star articles on atomic bombs the author stated that there are reliable means of defense against them. Repeatedly mentioning blast effect as the major hazard of nuclear warfare, the use of ground cover, trenches, and prepared shelters was urged as the principal means of reducing casualties. Noting World War II experience, the articles stressed the fact that in urban areas cellar shelters with reinforced or arched concrete ceilings are protected

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from the major blast effect, which dissipated on the upper stories. 49/ This approach is consistent with known shelter design in the USSR, which includes a cellar ceiling designed to withstand the complete collapse of the building. Although information on massive or deep-level shelters is inconclusive except for subways, heavy shelters probably do exist for key government installations. There is no known reference to a mass evacuation plan for urban areas -- however, this lack of evidence does not prove that none has been prepared. No evacuation drills have been reported.

The recommendations for protection against light, as given in a military handbook, are shielding the face, lying down, or taking cover. For defense against fire, the military envisaged organization of fire-fighting details within troop units, providing equipment for combating fire, and various fire-preventive measures such as cutting clearings, plowing, and removing inflammables from troop areas. These plans suggest improved fire-prevention measures, a well-organized fire-fighting force, and increased fire-resistant construction for urban areas.

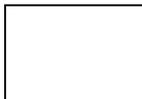
For protection against radioactivity, standardized alarm signals and reconnaissance to detect and combat radioactive elements were recommended. Markings were to be employed for contaminated areas and for passages through them. Individual protective measures recommended were the use of gas-protective clothing and gas masks. One of the Red Star articles mentions the use of gas masks and washing with soap and water as adequate means of protection against radioactive contamination. 50/ In civilian practice these recommendations could be readily translated into the use of chemical defense groups for reconnaissance, the use of civilian gas masks against inhalation of radioactive substances, and the use of public baths and vehicle-washing establishments for decontamination stations. Filter-ventilating systems in Soviet air-raid shelters would presumably be used with the same effect as gas masks for filtering out radioactive particles.

Nuclear defense in the USSR could be superimposed on the existing civil defense structure. The use of cellar shelters, although admittedly not entirely effective, should reduce casualties

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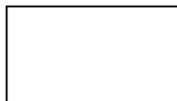
in areas removed from "ground zero." These prepared shelters have the advantages of provisions for gas defense and quick accessibility. The use of headquarters, public building, factory, and subway shelters might also reduce casualties.

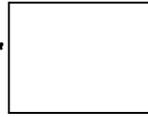
No realistic instructions for civil defense against presently possible nuclear attack have been released to the general population. If an evacuation policy were adopted, however, the Soviet civil defense staff, numerous security personnel, and trained DOSAAF membership would be useful in implementation.

H. Possible Action to Retain Control.

It is relevant to examine lines of action which the USSR might employ to minimize casualties and avoid loss of control under nuclear attack. The USSR exploits at least our open literature on the effects of nuclear weapons 51/ and, it must be presumed, is familiar with the published information as to bomb size (up to 15 million tons), radius of destruction (4 miles), "fallout" danger, and other data regarding the effects of nuclear weapons. 52/ To assume that the USSR has not considered the advisability of some evacuation in the light of current civil defense thinking and publicity would be dismissing Soviet defense officials as totally incompetent.

If the USSR reached a decision to commence hostilities against the US using surprise nuclear attack as the initial weapon, Soviet defense authorities could modify their civil defense practices using presently available organizations. Before deliberate attack they would undoubtedly review all defenses in full expectation of "massive retaliation." The capabilities of Soviet defenses would be reevaluated in the light of the most recent damage information, and the authorities would attempt to take measures to insure continuing control while guarding against loss of the element of surprise. Possible measures would be limited in part by the present control structure, current practices, and material on hand. (It may be emphasized here that the MVD and KGB probably have mobilization sections 53/ for war planning, and that GUMPVO is charged with civil defense planning.) 54/





In view of the above assumptions and the currently discernible aspects of control and civil defense, the adoption of a relatively simple plan might save large elements of the control structure. The alternatives to such a plan would be attempting total evacuation or taking no action at all. Total evacuation is not considered probable because of the lack of observed activity in this field and the chaos that might result from attempting such a measure without involved preparations and practice. Absolute inaction would be unrealistic and is possibly a dangerous underestimation.

1. Suggested Modified Plan.

If a modified plan of civil defense were chosen, the following course of action might be taken:

a. Before D* Day (Possibly Two Weeks).

Renew or issue sealed mobilization orders to implement the plan. (These orders would be opened and acted upon when a "threatening situation" was announced.)

Pressure could be increased on Party, Komsomol, trade union, and governmental personnel to participate actively in the DOSAAF organization and civil defense training. This has, in fact, been occurring in the recent past. 55/

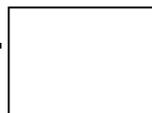
Stockpiles of food, construction material, fuel, and the like in dispersed depots could be slightly increased by holding urban stocks to a minimum level.

b. Shortly before Attack (About H** Minus 8).

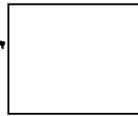
Move some of the following bodies up to 20 miles outside urban areas under cover of maneuvers, training, or routine checking exercises:

* D day -- date of initiation of attack by the USSR.

** H hour -- hour of take-off for Soviet strategic bombers.



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- (1) The armed forces.
- (2) MVD troops not currently engaged in duties necessitating their presence in cities.
- (3) Reserve hospital units, particularly those having personnel situated in central urban areas.

Dispersal of earth-moving and heavy construction equipment from dangerous target areas might be started at this time.

c. Upon Release of Soviet Attack (D Day, H Hour).

- (1) Declare a "threatening situation" and mobilization based on this plan.
- (2) Dispatch a small portion (about 20 percent) of Party and government control personnel in each major city to pre-selected safe locations. There they could set up alternate governmental control centers, about 20 miles from urban areas.
- (3) Disperse transport (water, rail, and motor) not in use (or to be used) to 10- to 20-mile radius.
- (4) Disperse some KGB, Goskontrol, and Gosbank personnel with vital records. (Presumably near alternate Party-Government Headquarters.)
- (5) Assemble and remove (by motor) military reserves and remaining troop units not needed for urban control.
- (6) Alert civil defense forces. Load civil defense equipment on trucks and have loaded trucks stand by at assembly points with additional transport for crews. Set up skeletal civil defense headquarters in protected locations 10 miles from cities.

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(7) Make ready prepared shelters and order population without these to dig hasty type shelter.

d. At Time of "Air Alert" (H plus 2?).

(1) Place population not to be evacuated in shelters, cellars, or prepared trenches. This is in conformance with currently published instructions for behavior under air attack.

(2) Assemble and move out, by vehicle, services and crews of civil defense except a minimum detachment for maintaining order, and firemen engaged in actual fire fighting. These might move to a distance of 10 miles or more unless prepared shelter or good defilade permitted them to be stationed nearer. While training for such movement has not been reported, the experience of Germany 56/ and Japan in World War, 57/ as well as civil defense plans of the US, are consistent in showing that disaster crews and fire equipment should be removed from areas expecting attack in order to avoid losses. 58/

2. Composition of Civil Defense Units.

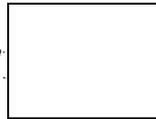
In addition to the removal from target areas of certain control elements included in the armed forces, security troops, and alternate elements of government, more key personnel might be preserved by assigning them to the air-defense crews and services. These services are as follows:

a. Order.

Order crews would probably contain elements of the militia, its auxiliaries, and DOSAAF members. Once the population was placed in shelters, only a small antilooting and control body would be necessary in a city. Self-defense groups of the population have their own order and shelter control bodies, reducing the need for police control.

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b. Communications.

Communications crews are organized for operation and repair of communications facilities and would contain many persons who normally work in the communications system. There seems no good reason to keep personnel other than a minimum operating group in a likely target area. Repair personnel particularly should be evacuated to a safe distance to be available after attack. Some DOSAAF personnel are trained in telecommunications, 59/ and these probably are also enrolled in communications crews.

c. Repair.

Crews for rescue and repair are probably heavily weighted with personnel assigned from public utilities and construction organizations. There seems no valid reason to leave other than minimum operating personnel to undergo attack.

d. Fire.

World War II experience proved the advisability of evacuating fire-fighting crews from cities under potential attack, leaving only those units actually engaged in fire fighting within the city.

e. Medical and Veterinary.

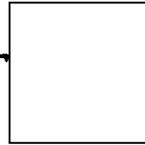
The formation and evacuation of civil defense medical crews would give a further opportunity to preserve for service doctors, nurses, and other medical personnel. It would be advisable to leave in a target area only the minimum number of medical personnel to care for hospitalized persons and emergency cases.

f. Antichemical and Antiatomic.

These crews would probably contain mostly technicians. Chemists, physicists, and teachers of these subjects probably would be the leaders of reconnaissance and decontamination crews.



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g. Plant (Enterprise) Disaster.

There appears to be no compelling reason to keep civil defense crews of economic enterprises entirely within plants in major target areas. These crews could be split on a 3-to-1 or a 50-50 basis with the larger part, or half, being evacuated from the target area in vehicles, to return immediately after attack or just before the "all clear" signal. A nucleus of control and maintenance personnel and skilled workers could be preserved by this measure.

Millions of personnel are being trained for civil defense in and by the DOSAAF organizations. It is therefore presumed that these organizations (plus the Red Cross and Red Crescent Societies for first aid) will furnish the chief recruiting ground for civil defense crews and services. DOSAAF members are screened, the entrance requirements being substantially the same as for the Komsomol. ^{60/} The Party, Komsomol, and trade unions have been constantly urged to support and participate in DOSAAF training. It has been stressed that local air defense crews and services should be made up, using existing local organizations wherever possible. These crews, therefore, will consist of many police, fire-fighting, utility, communications, and medical personnel whose loyalty, position in the control structure, or skills in repair would be valuable both in maintaining control and restoring damage.

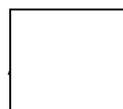
If this or a similar plan were adopted in the USSR, the following groups would be left to take their chances in cellars or other shelter in large cities: (1) the majority of the population, (2) a minimum level of control personnel, (3) prisoners (in urban jails), (4) hospital patients, (5) older people and the unfit, and (6) unreliaables.

3. Advantages of the Suggested Plan.

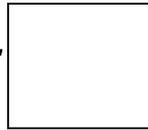
This or some similar plan has obvious advantages which could lead to its consideration by Soviet defense planners. These advantages are as follows:

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a. There is a minimum chance of loss of the element of surprise, since no substantial action occurs until shortly before an attack by the USSR is initiated.

b. Armed forces and unoccupied MVD troops can be removed from target areas. From there they would be available for rescue and control if the city is attacked.

c. Establishment of field hospitals could be initiated before attack by military and reserve units.

d. Some transport would be saved by dispersal or by use in moving troops and air defense personnel to peripheral areas.

e. Loss of life, while large, would be selective as to skills and reliability, ensuring continued control and some ability in reconstruction and repair.

f. Control needs would be minimized during the air alert by placing the general population in shelters. The average citizen may be convinced that this is the best defense.

g. The nature of civil defense crews (including medical, repair, rescue, fire, communications, and the like) can be rationalized to the general population. The movement of troops and reserves would be a normal thing in wartime. The holding of mobile civil defense crews in the area until an actual air alert and returning them immediately after or even before the "all clear" would avoid giving the impression that the general population was being abandoned.

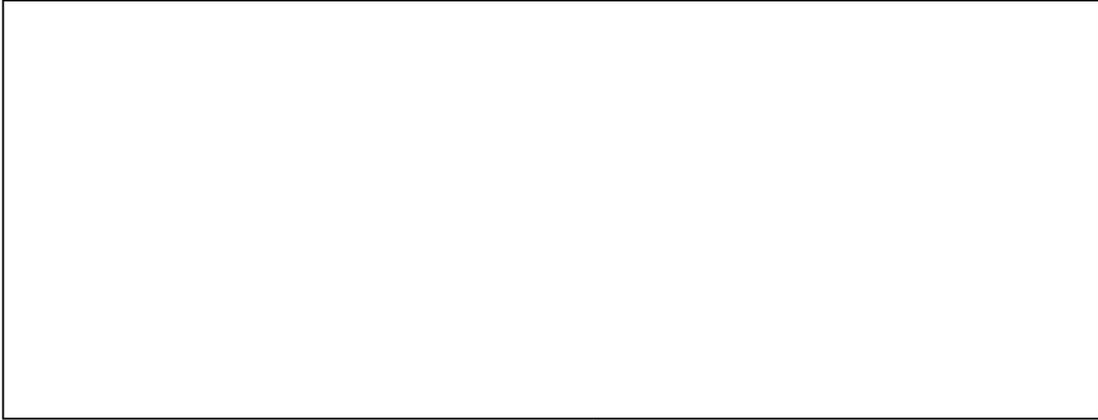
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APPENDIX A



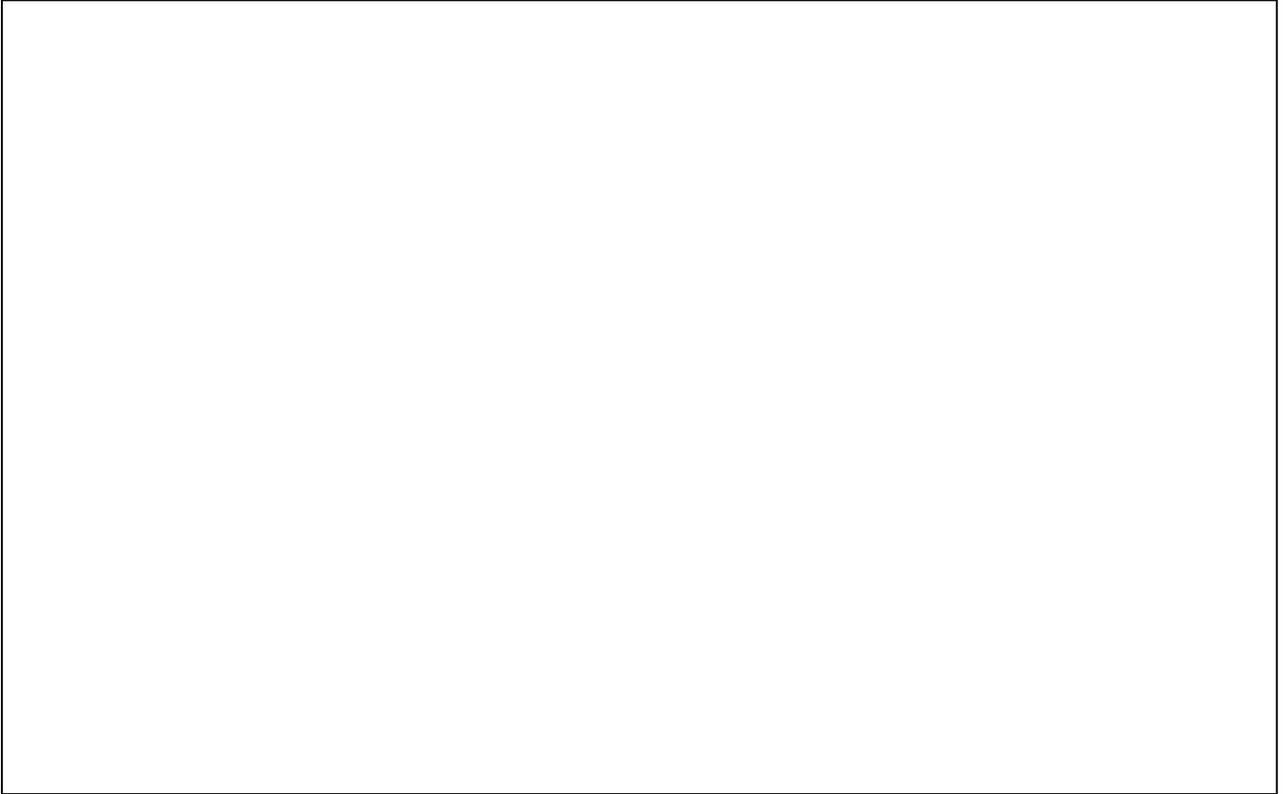
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APPENDIX B



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APPENDIX C

SOURCE REFERENCES

[redacted] used in this report fall into six general categories, as follows: (1) unclassified information available to the general public.

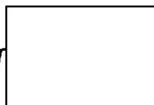
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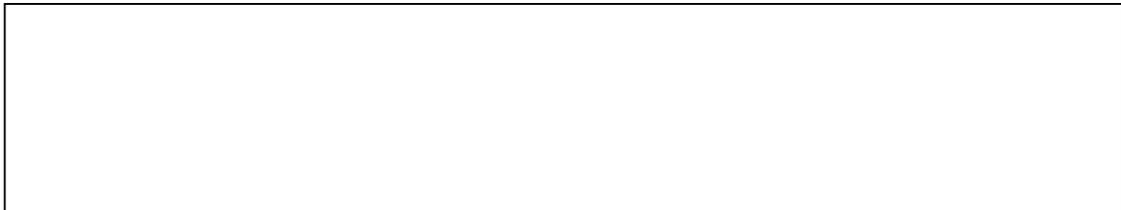
Civil as well as military defense preparations are obviously the subject of strict security controls in the USSR. Published information, while easy to obtain, covers only a limited field.

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Supplementary Source References



22 March 1956



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The source references listed below constitute only those from which identifying numbers have been deleted in the Source References appendix to the report. Some of these references appear in the original report together with other references in connection with the same citation.

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