

AD-A047 754

ARMY INST FOR ADVANCED RUSSIAN AND EAST EUROPEAN STUD--ETC F/G 15/3
SOVIET CIVIL DEFENSE 1975-1976.(U)
MAY 77 J A WYRWAS

UNCLASSIFIED

NL

| OF |
AD
A047 754



END
DATE
FILMED
| - 78
DDC

AD A 04754

2

**US ARMY INSTITUTE FOR ADVANCED RUSSIAN
AND
EAST EUROPEAN STUDIES**



DDC
RECEIVED
DEC 20 1977
E

STUDENT RESEARCH REPORT

MAJ. JOHN A. WYRWAS
SOVIET CIVIL DEFENSE 1975-76

GARMISCH, GERMANY

APO NEW YORK 09053

DISTRIBUTION STATEMENT A
Approved for Public Release
Distribution Unlimited

AD No. _____
DDC FILE COPY

⑧ 1976
SOVIET CIVIL DEFENSE 1975-76

⑨ Student research rept.

⑩ Major John A. Wyrwas

⑪ May 1977

⑫ 36p.

410192

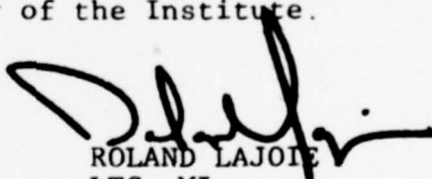
AB

FOREWORD

This research project represents fulfillment of a student requirement for successful completion of the overseas phase of training of the Department of the Army's Foreign Area Officer Program (Russian).

Only unclassified sources are used in producing the research paper. The opinions, value judgments and conclusions expressed are those of the author and in no way reflect official policy of the United States Government; Department of Defense; Department of the Army; Office of the Assistant Chief of Staff of Intelligence; or the United States Army Institute for Advanced Russian and East European Studies.

Interested readers are invited to send their comments to the Commander of the Institute.



ROLAND LAJOIE
LTC, MI
Commander

ACCESSION for	
NTIS	Wire Section <input checked="" type="checkbox"/>
DDC	B.H. Section <input type="checkbox"/>
UNANNOUNCED	<input type="checkbox"/>
JUSTIFICATION	<i>on file</i>
BY	
DISTRIBUTION/AVAILABILITY NOTES	
Dist.	Avail.
<i>A</i>	

SUMMARY

→ This paper is an exposition, from selected Soviet newspapers, of civil defense activities in the USSR from December 1974 to approximately December 1976.*

For an unexplainable reason, the newspapers reviewed contained almost no information about civil defense measures in the heartland of the USSR, the Russian Federated Republic. For this reason the paper is primarily concerned with the southern and western peripheral republics of Belorussia, the Ukraine, Tadzhikistan, Uzbekistan, Kazakstan, Kirgizia, and Moldavia. A few references are made to the Baltic republics, as well as the far eastern oblasts of Amur and Kamchatka, Russian Federated Republic.

→ The main thrust of the paper is concerned with propaganda efforts, practical measures, and shortcomings in civil defense, as noted in those newspapers, and is not intended to be a comprehensive review of all civil defense activities during the two training years. ↑

* The civil defense "training year" begins December 1.

INTRODUCTION

Recently, in the United States, considerable concern has been expressed about apparent efforts of the USSR to prepare itself for protection against the effects of a nuclear attack. Such efforts include a massive campaign to "harden" industrial and military complexes, and educate and train the populace in all aspects of what is commonly referred to as civil defense.

Harriet F. Scott, in the October 1975 issue of Air Force Magazine, provides a broad overview of Soviet civil defense organization and preparation, in order to emphasize that "Soviet leaders regard civil defense as an important element of strategic planning." (31, p. 29).^{*} Her analysis of the Soviet civil defense effort stems largely from a study and understanding of the extensive organization that has been planned in the area of civil defense. But, as she mentioned at a symposium held on March 24, 1977, at the U.S. Army Russian Institute in Garmisch, Germany, very little detail is known about specific measures being taken to protect important installations, about what practical exercises are being conducted to train the population, or about the effectiveness of such training and exercises.

Soviet books and pamphlets describe in detail the organizations which serve the civil defense efforts, as well as practical measures to be taken in training the populace and preparing various facilities for protection from the effects

^{*} Parenthesized numbers correspond to numbered bibliographical entries

of nuclear weapons. But most of these books and pamphlets might be considered as reaching only a narrow segment of the populace. The book, Civil Defense, by Alabin, et.al., provides a very comprehensive description of doctrine, organization, and measures to be taken to save the economy and the populace.

(2) But this book "is intended for Soviet students of engineering-technological and liberal arts institutions." (2-p.xvii). However, such detailed and technical information will only reach a broad spectrum of the populace in an indirect manner.

In an attempt to ascertain and evaluate efforts by the Soviet government to protect important installations and train the people in matters of self defense, this paper will present a review of newspaper articles published during the civil defense training years of 1974-1976, as listed in the Annals of Newspaper Articles (Letopis Gazetnykh Statei). One interesting fact that surfaced is that all of the articles listed in the Annals concern themselves with events in the peripheral republics of the Soviet Union. There is practically no mention of civil defense efforts within the heartland, that of the Russian Republic.

This review will be an attempt to ascertain the type of information, relative to civil defense, which can be obtained from a medium which has comparatively wide audience, and to illustrate the efforts being made to insure that:

"The general compulsory training program provides every citizen with the following minimum civil defense skills:

1. Knowledge of the damaging characteristics of nuclear, chemical, and biological weapons and individual methods of protection against them.
2. Use of collective and individual means of defense.
3. Familiarity with the rules and sequence of action, according to civil defense signals.
4. Knowledge of the sequence of action and rules of conduct during dispersal and evacuation to an outer zone.
5. Appropriate behavior in zones of radioactive, chemical and biological contamination.
6. Skills in giving first aid to oneself and others.
7. Familiarity with the principles and methods of conducting rescue and emergency restoration work in centers of mass destruction." (2-p. 325)

The teaching of these skills falls into two primary categories: propagating information and practical exercises. The stress within the last two years has been on the conduct of practical exercises. So, of course, much more information is available in this regard.

Readers of the Soviet press are well aware that almost all programs described are accompanied by the invariable listing of shortcomings. These shortcomings must also be mentioned and analyzed to provide a basis for evaluating the civil defense program of the U.S.S.R.

The author assumes all responsibility for translation and at the same time gratefully acknowledges the assistance of Dr. Rainer Vadim Grenewitz, Professor of Russian language and Area Studies at the U.S. Army Russian Institute, during the interpretation of particularly difficult passages.

PROPAGATION OF KNOWLEDGE

The Soviet system at all levels places perhaps its greatest efforts in the education of the populace into what is known as the propagation of information (propaganda znanii). This propaganda effort utilizes all the major means of mass media as well as:

"lectures, thematic evenings and quizzes conducted in cities and villages, in collectives, in industrial centers, organizations and institutions. Great interest is instilled in the people by meetings with participants of the Civil and Great Patriotic war and Veterans of Civil Defense and the Voluntary Society for assisting the Army, Air Force and Navy." (39)

Newspapers are well utilized not only to provide information concerning civil defense, but also to make the population psychologically aware of the possibility of war and its consequences. The only manner that they have to alert the people to the consequences is, it seems, by the continual recitation of the accomplishments of civil defense units during World War II. No less than one-tenth of the articles reviewed pertained almost solely to the development of civil defense from 1918, through its present form, as organized in 1961. (5, 21, 24, 26). And, of course, all of the articles published in 1975 make reference to that year as the "thirtieth anniversary of the Great Victory over fascist Germany" (21), or "It is symbolic that the successes of the toilers (in civil defense) will be achieved during the thirtieth anniversary of the liberation of the republic from the fascist invaders." (13)

In addition, the newspapers go to great lengths to make the population aware of the efforts made in the propagation of information. Councils have been created in all republics, oblasts and krais "which consist of the most active propagandists. Their job is to render systematic help to the local (civil defense) staffs in planning propaganda, and to summarize and disseminate the leading experiences in these matters."

(15) The Voluntary Society for Assisting the Army, Air Force and Navy, (DOSA AF), which has committees assigned to all staffs of civil defense, "conducts wide explanatory work for civil defense among the toilers and population creatively using various forms of oral and printed propaganda, radio and television, and organizing monthly and weekly campaigns of civil defense." (33) The volume of oral propaganda is evident in the statement that "in Moscow for example, every year, activists of DOSA AF present to the people about 10,000 speeches and lectures."

These oral propaganda efforts are directed at all citizens from the age of 11-12 on up.

In the Kirgiz Republic, for example:

During the summer, (civil defense) staff workers of ministries and chiefs of facilities of the national economy visited pioneer camps to give lectures and show films several times a month. In this manner more than 52,000 school children received instruction." (39)

The themes of such lectures include "Shelters and Covers Required, Means of Defense from weapons of Mass destruction, Means and Methods of Providing Stability of Work at National

Economic Facilities in Conditions of War Time", and "Activities of the Population Upon the Signals of Civil Defense."
(39)

Special films on civil defense have been produced and disseminated to all civil defense staffs to aid in the massive propaganda efforts. They, of course, are ideal for reaching a wide audience.

In Samarkand, Uzbekistan, the civil defense staff organizes annual film festivals, showing such films as "Functions of a Lifesaving Detachment," "In Case of Alarm," and "The Duty of Each." (23) The film festival held in Gomel, Belorussia, includes films titled "Activities Upon Civil Defense Signals," "Combined Means of Evacuation," and "Rules for Occupying Shelters." (37)

It can only be assumed that radio and television are used to promote the same themes as those of lectures and speeches, since relatively little information is available as to its widespread use. The use of television as a means of propaganda has probably been raised to the highest state of the art in Belorussia. An exercise involving the occupation of shelters in the Brest electric lamp factory was recently televised. Television is also used to instruct the rural population in the "sealing of basements and wells, livestock areas, and other activities related to defense against radioactive contamination." (11)

Occasionally exhibitions are held, such as the one in Frunze, the capital of the Kirgiz republic, which:

"acquainted the people with the structure of the civil defense of the country, and with the organization of the training unit. Means of individual defense, and radiation and chemical detection devices were displayed on stands." (39)

Most of these mass means of communication require congregation or coercion of the population to read or watch them. It is very hard to insure that people read newspapers or watch television or attend films. So efforts are made to insure that civil defense pervades every waking hour, such as in Gomel, Belorussia, where:

"during the summer time, squares, gardens, recreation rooms, and anywhere that people congregate are used to set-up displays of civil defense. In this manner more than 10,000 people were educated." (37)

The people who live outside the range of television, radio, and the distribution of newspapers are not forgotten. Special propaganda-culture brigades and auto clubs visit "field camps, distant pastures and the high mountain ranges of Tadzhikistan. In 1973 more than 400 lectures and conversations were presented on the subject." (33)

The volume of effort put into the propagation of information can probably be summed up by the example of Kamchatka Oblast, not a very large or heavily populated area. During one training year, 120 clubs and houses of culture, as well as 121 libraries, and all raion civil defense staffs "gave 514 lectures and speeches, conducted 777 film showings, 344 thematic evenings, 373 reviews of civil defense literature and made more than 300 placard stands and show cases." (4)

Evidently not all attempts to educate the people are achieving the required results because "in a search for new and interesting form for maintaining the interest of the people" a Civil Defense Day has been instituted country-wide. (3) No information exists on the format but "the culminating event is a demonstration of civil defense units in the center of destruction." (39)

The above-mentioned forms of educating the population to protect themselves and the economic facilities of the country require little effort on the part of the target audience and probably do little to cultivate the necessary "feeling of high responsibility and belief in the effectiveness of the methods of Defense." (33)

Evidently the government recognized this because the method of education was changed in order to promote active participation.

PRACTICAL METHODS

While all efforts prior to the training year which began December 1, 1974 were evidently primarily devoted to publicizing civil defense information, the new training year was marked by the introduction of a new program. The basis for this program was "a transfer from the little effective theoretical pursuits with the population, to practical training."

(28) The purpose of the new program was to use "joint exercises to draw in all leadership personnel, workers, laborers, kolkhozniks and school children." (28) A stated objective of the joint exercises was "to teach the people to quickly and correctly act upon civil defense signals and to skillfully and quickly carry out the work of civil defense measures."

(29)

The joint exercises depended upon the building and equipping of large areas for the conduct of training; referred to in Soviet writing as the training material base (uchebno-material'naia baza). This term is best explained by the definition that "an up-to-date training material base of civil defense consists of environmental areas, training grounds, training classrooms, models, special offices, devices, visual aids, and training equipment." (7) The training ground (uchebnii gorodok) is evidently the focal point of instruction since:

"These areas are used to teach the building of simple shelters; to instruct the use of individual means of self defense, the extinguishing of fires, rescue of victims, the elimination of

emergencies in the communications-energy network, and the decontamination of equipment, land, and installations." (29)

During 1974, the civil defense staffs worked out and disseminated plans for such training sites. (10) According to those plans, the Kiev Scientific Research Institute of Micro-Devices built an entire training complex with "more than twenty areas designated for practicing methods of conducting life saving, emergency restoration of communication and electrical lines, extinguishing of fires and construction of passageways (in obstructed areas). There are also areas for training in methods of first aid, the decontamination of roads, and the disinfecting of clothes, footwear and vehicles." (10)

The construction of the training grounds and the conduct of joint training exercises is described in terms that would indicate an uneven organization or planning process, as well as a lack of materials and funds. For instance, in Moldavia, as late as February 1975, it was reported that the "possibility exists for conducting a great amount of work in constructing and equipping defense installations." (40) In another area of Moldavia, in early 1975, a joint exercise involved the building of two anti-radiation shelters and bathing points, the repair of an emergency generator, and the sealing of basements, cellars, houses, barns, stores, dining halls, and mine shafts from radioactive dust and chemical-biological agents. (29) All in all, during 1974, the Chief of Staff for Civil Defense in Moldavia reported that one-third

of the population took part in civil defense exercises, during which they "repaired and equipped various installations and buildings for self defense, and organized lands, roads and communications networks. They also built anti-radiation shelters under warehouses." (28)

In the Ukrainian industrial region of Dnepropetrovsk, the civil defense staffs of various enterprises are encouraged to build training grounds "on a shared basis" because some enterprises have the necessary materials while others only have the necessary land." (10) Other such communal efforts are also urged in Kiev and Zaporozh'e. (10) In the city of Kuibyshev along the Volga, in the Russian Federated Republic, the executive committee of the City Council also suggested that several enterprises build training grounds on "a shared basis."

(36) After selecting a site of approximately twenty acres, an organization of furniture firms, construction companies and heavy machine industrial complexes completed the construction of the training ground with thirty-two training points. (36)

In rural regions of the Ukraine, work appears to be proceeding at a level which indicates that training grounds are being prepared and utilized.

"Environmental areas ... were created for practical exercises for defense of people, animals, and plants. Work was conducted in preparing anti-radiation shelters in basements and cellars; in sealing water sources, livestock shelters, and graineries ... in Cherkassy Oblast." (10)

In the "Marx" kolkhoz of the same oblast, a construction brigade transformed several basements and cellars into anti-radiation shelters. The kolkhozniks were shown how to do the work by civil defense personnel and "in the course of one month a majority of the houses were equipped with the necessary shelters." (10)

In the Republic of Kazakstan, training grounds and environmental training areas are being built with the "use of locally available material", indicating that no supplies are provided by republic ministries or departments (3). Such a system apparently is in effect in the largest and most heavily populated oblasts of Tselingrad, Dzhezkazgan, Karanda, Aktyubinsk and Alma-Ata.

Some factories and industrial complexes in Kazakstan are credited with being "actual centers for the preparation of leaders and units and the practical training of workers." (3) These include metallurgical enterprises, synthetic rubber factories, the majority of coal mining companies, cotton fabric factories and cement plants. (3) This implies that the factories, per se, have been converted into training grounds, instead of separate training grounds being located in the vicinity of the facility. In other words, they are now equipped with shelters and have been sealed against the effects of radiation, blast, and fire damage. It should be noted that the above-mentioned facilities are producing products easily destroyed by blast and fire. If they, in fact, are so protected, it could be that at least some light industries are apparently

prepared to resist the effects of "weapons of mass destruction." It also provides for on-the-post training and cuts down the cost of building separate training facilities.

Probably the most advanced area in terms of civil defense exercises is that of Belorussia, particularly the city of Gomel and the surrounding region. By 1975, the republic was conducting combined exercises of enterprises and also "entire administrative areas and small cities." (32) So-called "tactical special exercises" were held for "workers, laborers and kolkhozniks who do not belong to specified civil defense units."

"During these exercises the (civil defense) units and the rest of the populace repaired equipment and roads, organized the land, and communications networks. But more importantly, in the course of training, a significant quantity of anti-radiation shelters for training points, general education schools, etc., were built." (32)

In addition, the State University of Gomel has conducted classes on dispersal and evacuation for the non-working population such as housewives and retirees. A practical exercise was also held in which the non-working population was notified to assemble with the workers "at assembly-evacuation points, where they were registered and given space on vehicles, which drove out to the countryside." (37)

Also in the Gomel oblast "eighteen exercises were conducted for assembly and notification, servicing and occupation of refugees (ubezhishchi) and the building of the most simple types of shelters, during the course of a one month (civil defense) campaign." (37)

The careful planning and complex nature of the so-called joint exercises is illustrated by the description of a civil defense exercise held by a kolkhoz in the Geok-Tepe region of Turkmenistan. (6) The planning portion of the exercise lasted two months, during which the managements of the kolkhoz, party and komsomol organizations, the civil defense staffs of the kolkhoz, and rural council of deputies of the workers had to prepare their personnel and make up all deficiencies of individual means of protection, and radiation and chemical detection devices. Material had to be prepared for sealing the houses, administrative offices, water sources, food, etc. The director of the kolkhoz, who is also the chief of civil defense for the kolkhoz, issued an order which defined the work to be done, and the responsible people. This order was transmitted to those party and komsomol leaders tasked with making the operating decisions. The party office held a meeting to discuss and approve the plan laid down by the chief of civil defense. Then the party office held a special seminar with the political officers to discuss the exact method, time, and goals of the exercise. The civil defense units were then informed of these decisions. Only then did the party office inform the director of the kolkhoz to have a meeting with all members of the kolkhoz to inform them of all the decisions which had been taken.

The Rural Council of Workers' Deputies also held a meeting to discuss the decisions of the party office. Their coordination was needed because this was an area exercise in that the kolkhoz not only was practicing its own defense measures but was also

organizing evacuation points within the region, for the capital of the republic, Ashkhabad. After all coordination had been made, and decisions affirmed, then training of the units, kolkhozniks and school children was conducted. Only after all these preliminaries were completed was the order given to begin the exercises.

The director gave instructions to his staff to carry out the preplanned and in many cases already prepared measures. All the participants of the exercise visited a high school, homes, store and a barn to observe how these premises had been sealed against radio-active contamination by improvised methods; i.e., bricks, boards and polyethelene sheets. The participants then spent time wrapping food, drinking water, forage and hay in cellophane. While this was taking place, the civil defense units, to include detection teams, medical teams, fire fighters, and animal and plant protection teams formed up. An air raid signal was given over the radio and the people filed into anti-radiation shelters and the animals and fowl were led to specially prepared shelters.

The artificiality of the exercise as exemplified by the long preparation phase may or may not be significant when compared with the extensive preparations and organization that apparently exist.

The training of the students of the Novosibirsk Institute of Railroad Transport Engineers serves as an example of the training of specialists in more sophisticated methods of civil defense and also serves to illustrate the importance attached

to civil defense in a high level educational institution
(44)

All graduates of that Institute,

"in one way or another will have to work in civil defense matters. The future engineers must learn to solve the most varied problems regarding the defense of national economic facilities." (44)

In order to be prepared to solve the "most varied problems, all students are required to devote 10% of their graduation thesis to civil defense. Their work must include practical experiments during evening, or after class hours. Their civil defense projects must be closely associated with their major course of study and be illustrated by working drawings.

For example, maintenance engineers must produce technical maps and work schedules for decontamination of railroad installations and rolling stock, or make plans for evacuation and work out movement schedules. Construction engineers must produce plans for emergency restoration work or shelters, and make estimations of probable damage to buildings as a result of blast. Bridge engineers must make estimations of probable damage to bridges, make plans for restoration of destroyed bridges and "explore the possibility of duplicate crossings across large water obstacles." In addition "all the engineers are taught methods of predicting damage resulting from nuclear weapons, of determining levels of radiation, and of decontaminating various installations." (44)

In spite of the fact that the training year, beginning December 1, 1974, was to be marked by practical joint exercises, not all republics were planning or conducting such exercises.

In late July, 1975, the Deputy Chief of Staff for Civil Defense of Uzbekistan gave an interview which stressed that "according to plan" the workers of the organization are conducting "measures in the propagation of information of civil defense." (23) He never mentioned the necessity to conduct practical exercises, stating that "every person must know what a weapon of mass destruction is, and what means of defense exist to defend against them." (23) When asked if civil defense has a practical significance in peace time, he replied it did, but that while many people thought first of atomic attack when civil defense was mentioned "we are conducting classes on how to behave during national calamities and industrial accidents." (23) He went on to state that the person who completes the required course in civil defense will be able to give first aid to victims of fires, natural calamities and industrial accidents.

This is an interesting statement, but the discussion of the use of civil defense training, for other than protection against "weapons of mass destruction" is beyond the scope of this paper.

SHORTCOMINGS

In spite of the fact that a comprehensive civil defense training program exists, at least on paper, in the Soviet Union, one may wonder if all the efforts to educate and train the people are having the desired effect. In a society that stresses planning in every aspect of production and services, it would seem that the immense effort required of a facility director to protect everyone and everything in the event of nuclear war, would disrupt planning in the economic sector. A kolkhoz or factory director, who is also the civil chief, must have a difficult time deciding whether the production norm or civil defense plan takes priority. He probably is forced to either require his subordinates work overtime, or forego the completion of one plan or the other.

It is conceivable that a chief of civil defense who is also the director of an economic facility can fulfill his requirements simultaneously. In fact, in the Kirgiz Republic, where it is noted that "protective basements are not planned or even considered and that many houses have basements cluttered with construction debris," the populace is told that the equipping of such places does not require much expense; and even this money can quickly be recovered if "these premises are used for commercial sites, domestic installations, and warehouses" (12) The question arises as to whether a basement cluttered with rubbish, or filled with parts or produce will serve to protect the people. But, it may be better than no shelter at all.

While it has been pointed out that enormous efforts have been made in various visual and oral forms to inform the people of civil defense measures, these efforts do not reach all areas. In Uzbekistan "the propaganda of knowledge to the place of residence leaves much to be desired." (1) Since the radio and television directorate are tasked with promoting civil defense, this indicates that perhaps these media are not cooperating. In the Republic of Georgia "we are awaiting the help of our press, television, radio, theaters and cultural institutions." (41) And, in Tadzhikistan it was noted that while "by all quantitative indicators propaganda ... is significant, its effectiveness does not answer the demands that ... (it) actively promotes the education of all the laborers of the conviction in the effectiveness of defense measures." (9) In Estonia, "there is no clear system in the planning of propaganda of knowledge," and there is "no close contact between the staffs and organs of civil defense and the units responsible for propaganda of knowledge." (27)

In Moldavia the artist guild and the film studios of Kishinev "weakly conduct the work of propaganda of knowledge for the local civil defense staffs." (42)

In Amur Oblast,

"some committees of DOSAAF have relaxed their work Up to now practical measures for the future improvement of propagation of information have not been worked out." (35)

Propaganda efforts are perhaps weakest in the Ukraine, where there "is no job of propagandist in raions or national economic facilities." (11)

Efforts to institute practical exercises on a city and regional scale are meeting with even less success, but it must be remembered that this is a newly initiated program. Apparently, a lack of funds and material has held up the development of the training-material base, without which practical training cannot begin to take place. One example is that of the Yavanskii Raion of Tadzhikistan, which is noted as the most backward in terms of civil defense,

"Already three years have passed since all civil defense staffs received recommendations for creating a training base. However, in this raion, the building of training grounds and environmental areas still has not been planned." (7)

In the largest raion in Latvia, that of the capital, Riga, "work on the creation of an up-to-date training-material base has not been undertaken." (30) The building of training grounds in the city of Kuibyshev is reported as going slowly. In this city of more than one million people, "many housing offices do not have classes equipped for training in civil defense." (36)

In the Kirgiz Republic, it is noted that in many "facilities of auto transport and educational institutions" especially in the Kalinen Raion, there are no up-to-date training-material bases. "There are no training grounds or specially equipped work areas." (43)

In Belorussia, probably the most advanced republic in terms of civil defense, "organizations are slowly preparing the training-material base", which as a result, is "putting a brake on the working out of practical skills." (32)

In the Ukraine, exercises in civil defense "are organized without the corresponding material provisions." (10)

In Kazakstan, "the need for the creation of a quality training-material base is underestimated." (25)

The lack of a training-material base causes the responsible organizations to fall back on the time honored methods of "propagation of information" in order to fulfill the compulsory training objectives.

This brings complaints that in the afore-mentioned Yavanskii Raion of Tadzhikistan, "the planned exercises and training are not being fulfilled." (9) In the Moscow Raion of that same republic, "little attention is paid to the training of units, but neither the population being trained nor the civil defense staffs are taking measures to correct those deficiencies." (20)

In Kazakstan, "unit training is not being carried out in agricultural areas. The leadership has not been instructed on how to conduct classes and exercises." (25)

In Moldavia, "studies of civil defense are being conducted on a low level in some facilities of the ministries of construction and in the rural areas of Kamen, Grigoria, Buchon, Drokiew and Bulkanev." (28)

In Estonia, in the capital and major port of Tallinn and the other major port of Pyarny,

"in the training of the personnel of (civil defense) units, workers, laborers and kolkhozniks, purely theoretical studies are not renounced. Practical studies continue to be replaced by conversations. The passing of practical tests is replaced by oral tests. Very frequently in the course of instruction, attention is given to parade ground reviews and not to practical action. The instruction is ... being oversimplified." (27)

In Latvia, "the preparation ... and training ... is not always conducted with organization. Practical training is replaced by conversation and films." (30)

Even in areas where practical exercises are proceeding in some form, there is a disparity in the training and leadership of such exercises. In some cases, the staff organizations are apparently conducting the required training, but no one else is, as in Kazakstan where,

"It often happens that the leaders, civil defense staffs, and units take part in practical exercises, but the workers and laborers remain aloof and do not consolidate their knowledge in a conducted exercise." (8)

In some cases, the opposite is true. In Latvia, for instance, "representatives of the evacuation commission ... were directed by other workers at exercises instead of by the chiefs of staff." (30)

And then there is the case of the Udmort Autonomous Republic, located about 350 km from Kuibyshev, where "some civil defense leaders forget about training the civil defense staffs," and work directly with the workers. (19) They excuse this by saying that these staffs are "occupied with production affairs." (19)

This by-passing of a staff element has disastrous consequences as noted by a joint raion and city exercise in the industrial area of Uzhevsk, Udmurt ASSR, where the civil defense staffs of the raion, "were so clearly insufficiently prepared for the exercise that nothing in general can be said about its level." (19)

Evidently, the same problem exists in Tadzhikistan, since the chief of staff of civil defense of the republic notes that special attention has to be paid "to the training of the chiefs of staff of facilities, kolkhozes, sovkhozes and raions." (20)

In Alma-Ata, Kazakhstan, many factories have conducted "combined forms of exercises, but the ... chiefs of staffs of civil defense have to master this method..." (3)

These deficiencies in the command structure, at the facility level, have raised calls for more vigilance on the part of the party. As the Uzbekistan Civil Defense Chief of Staff noted:

"The work of civil defense staffs, as always, is conducted under the leadership and with the direct help of local party and council organs. Only in this case, can the main task be successfully resolved." (1)

In the campaign to protect the population, much stress has been put on the psychological preparation of the population:

"If for example, a family sealed their apartment or their home, equipped a basement or cellar as an anti-radiation shelter, they have prepared themselves psychologically to act in conditions of radiation danger, and have acquired valuable practical habits." (37)

By this measurement, the people of Latvia evidently are not prepared. The rural councils of the Deputies of Workers have discovered that:

"The sin has been hidden, that in some kolkhozes, cellars and basements and other underground premises have not been converted for protection of the population and food stuffs; and that the available individual means of protection and detection devices at times are maintained carelessly." (30)

In the Kirgiz Republic, it is becoming more difficult to become "psychologically prepared", since "new basements of a technical type are being built, which are impossible to use as shelters." (12) It appears that central heating will complicate the task of providing readily accessible shelters since otherwise empty space is now occupied by heating plants.

CONCLUSIONS

A reading of Soviet newspapers gives one the impression that considerable effort is being expended, at least in some republics, to protect the people and all facets of the economy, in the event of war.

While only eye-witness accounts will be able to confirm the veracity of these published accounts, certain generalizations can be made.

Most significantly, the government takes extensive measures to inform the population of means of protecting themselves and various elements of the economy from the effects of nuclear, chemical, and biological warfare. On the other hand, no attempt is made, in these newspaper articles, to inform the population of the nature of the effects of those weapons. This may be an attempt to refrain from terrifying the population, which in turn would complicate the avowed aim of "cultivating... belief in the effectiveness of the methods of self defense." (33)

Continual efforts will be made to improve the organizational structure. They are "striving to obtain the same organizational and planning character, (in civil defense), as the training process of the Army and Navy." (3) "Part time staffs of Komsomol have been created" as well as "full time workers in civil defense to do more to help those who are fulfilling their duty in their free time." (9) This will

allow the directors of facilities, who now also serve as chiefs of civil defense, to concentrate on their primary economic tasks.

At least until the beginning of the 1977 training year, the stress seems to be on protection of the people in their places of work. With the exception of two references to preparing for evacuation (6,37), the policy continues to be the preparation of "national economic facilities as genuine centers for the training of workers and kolkhozniks." (25) It may be inopportune to plan evacuation unless people can return to areas which are still capable of functioning.

The saturation of the population with information by mass media means can not help but have some beneficial results. Repetition can only reinforce ideas and ingrain at least some habits in the populace that would serve them in good stead during wartime.

The creation of the training-material base with any degree of sophistication will require enormous expenditures of time and effort and could seriously divert resources from the national economy and detract from efforts by a facility director to fulfill his economic plan.

But even without expending large sums of money and materials, areas can be built with which to train the people. Even the most primitive means of protection, such as narrow trenches, windows sealed with plastic sheets, and food and drinking water sealed in bottles will save many people in a nuclear-chemical-biological environment.

•

As the 1976 training year drew to a close there seemed to be less information published, in the newspapers surveyed, that would indicate that practical exercises have been planned beyond the facility level. It could be that larger joint exercises, such as between raions or oblasts, are too great an undertaking at this time, or are not necessary since it can be expected, in a wartime environment, that there will be such disruption at republic level, to say nothing of the national level, that no advance planning can be made.

From the newspapers surveyed it is virtually impossible to determine how much protection a "training-material base" will provide for the productive components of a factory. In the case of heavy industry, located at some distance from "ground zero", it may be sufficient to protect the people from the initial effects of radiation and heat. After a suitable time interval, and decontamination of equipment, they may be able to resume production.

In the case of all industries located fairly close to ground zero, it may physically be impossible to provide adequate protection to equipment, but at least the skilled labor force can be protected, and later moved to other, undamaged, production centers.

The fact that, almost without exception, all accounts published, in the newspapers reviewed, dealt mainly with the peripheral areas of the USSR, and not with the heartland, may indicate an inordinate amount of secrecy regarding that region. One certainly can not imply that the Russian Federated

Republic, with its high concentration of industry and population is being neglected; only that such information is not readily available. A question for further research remains: "Why do the more important newspapers, such as Pravda and Izvestiia, not inform their readership of the necessity, and means, of civil defense?", as most other republic newspapers apparently do.

Several comments must be made on the widespread teaching of apparently unsophisticated means of protection; i.e., the sealing of doors and windows with tape, the wrapping of food stuffs with cellophane, continual references to simple underground shelters, the covering of wells, etc. In this context a comparison must be made with the U.S., Germany, France, Britain and other developed Western countries. Why do these countries not actively teach such simple methods of protection?

The answer may lie in the fact that it is not necessary. It can safely be said that those aforementioned Western countries already are prepared in that they have bottled goods, packaged foods, well constructed and insulated dwellings, underground piped water sources, and underground basements and parking garages that can serve as protective shelters. Keeping in mind these facts, the Soviet people especially in outlying areas, are extremely ill-prepared and are still trying to "catch-up."

In conclusion, the framework for organization is extensive, the resources are primitive or in short supply and the training is proceeding at various levels of sophistication. But in spite

of all the shortcomings, the USSR has the only active civil defense preparedness program in the world, and it permeates every aspect of life.

BIBLIOGRAPHY

1. Akhundzhanov, S. "Obiazan znat' i umet' kazhdyi iz nas" (It is the Responsibility of Each of Us To Know and Be Able To Do), Pravda Vostoka, February 21, 1975, p. 2.
2. Alabin, N.I.; Shliakhov, I.A.; and Yegorov, P.T. Civil Defense, trans. under the auspices of U.S. Air Force. Washington, D.C.: Government Printing Office, 1976. Originally published in Moscow, 1970.
3. Alybekov, S. "Ne tol'ko znat' i umet'" (It is Not Enough To Know and Be Able To Do), Kazakstanskaia Pravda, March 4, 1975, p.2.
4. Alekseev, V. "Upor - na visokuiu vyuchku" (The Stress is on a High Level of Training), Sovetskii Patriot, January 28, 1976, p. 3.
5. Bakanev, N. "Slavnyi Put'" (The Glorious Path), Turkamanskaia Iskra, October 3, 1976, p. 3
6. _____ "Ucheniia v kolkhoze" (Training in a Kolkhoz), Turkamanskaia Iskra, February 14, 1976, p. 2.
7. Bogdanov, I. "Uchebnaia baza - Trebovaniia dnya" (The Training Base - Present Day Requirements), Kommunist Tadzhikistana, August 21, 1976, p. 3.
8. Chechenko, S. "Eto vazhno znat' kazhdomu" (This is Important for Everyone to Know), Sovetskii Sport, May 13, 1975, p. 2.
9. "Chotby vseгда byt' nacheku" (Always be on the Alert), Kommunist Tadzhikistana, June 1, 1974, p. 3.
10. Chizh, V. "Rezervy kachestva - v destvii" (Quality Reserves in Action), Krasnaia Zvezda, March 16, 1975, p. 2.
11. Dubrovin, M. "Zhiznenno - vazhnye znanie" (Vitally Important Knowledge), Sovietskaia Belorussia, January 6, 1976, p. 3.
12. Fakhrutdinov, M. "Sozdaniia zashchitnovo fonda" (Creation of Protective Resources), Sovietskaia Kirgiziia, July 27, 1976, p. 4.
13. Fanian, D. "V respublike pervye" (First in the Republic), Sovietskaia Moldaviia, July 13, 1974, p. 3.

14. Grekov, V. "Zashchita mirnovo truda" (Defense of Peaceful Labor), Sovetskii Patriot, April 7, 1976, p. 2.
15. _____ "Znat' i umet'" (To Know and Be Able To Do), Krasnaia Zvezda, December 23, 1973, p. 2.
16. "Komitet DOSAAF i grazhdanskaia oborona" (The Committee of DOSAAF and Civil Defense), Sovetskii Patriot, July 31, 1974, p. 1.
17. "Komitet DOSAAF i uchebnyi punkt" (The Committee of DOSAAF and the Training Point), Sovetskii Patriot, November 26, 1975 p. 1.
18. Kruzhin, Peter. "The Streamlining of Civil Defense in the USSR," Radio Liberty Research Bulletin, September 24, 1976, pp. 1-17.
19. Markovi, A. "Slozheniia sil" (Combining of Effort), Krasnaia Zvezda, March 28, 1976, p. 2.
20. Matvyenko, V. "Umei zashchishchat' sebia" (Know How to Defend Yourself), Kommunist Tadzhikistana, March 6, 1974, p. 3.
21. _____ "V postoiannoi gotovnosti" (In Constant Preparedness), Kommunist Tadzhikistana, March 16, p. 3.
22. Mirskii, A. "Zalog uspekha - v sovместnoi rabote" (The Basis for success is Combined Effort), Sovetskii Patriot, October 22, 1975, p. 2.
23. Nasonevi, V. "Grazhdanskaia oborona" (Civil Defense), Pravda Vostoka, July 25, 1975, p. 3.
24. "Na zashchita mirnovo truda" (In Defense of Peaceful Labor), Sovetskaia Moldaviia, October 6, 1976, p. 3.
25. Nikolaev, O. "Na zavershaiushchem etape" (In the Final Stage), Sovetskii Patriot, September 18, 1974, p.3.
26. Osadchi, L. "Vernost' traditsiiam" (Faithfulness to Traditions), Sovetskaia Kirgizia, October 5, 1974, p. 4.
27. Paulman, E. "Kurs - visokaia gotovnost'" (The Program - A High Level of Preparedness), Sovetskaia Estoniia, January 31, 1975, p. 2.
28. Rotar, F. "Kompleksnye uchenie" (Joint Exercises), Sovetskaia Moldaviia, December 18, 1974, p. 4.
29. _____ "Opiraias' na dostignutoe" (Relying on What Has Been Achieved), Sovietskaia Moldaviia, March 21, p. 3.

30. Ruben, U. "Zabota viskoi gotovnosti" (Concern for High Preparedness), Sovetskii Patriot, February 4, 1976 p. 2.
31. Scott, Harriet F. "Civil Defense in the USSR", Air Force Magazine, October 1975, pp. 29-33.
32. Semenov, N. "Grazhdanskaia oborona - prakticheskaia ucheba" (Civil Defense - A Practical Exercise), Sovetskaia Belorussia, January 24, 1975, p. 2.
33. Smirnov, V. "Vospitat' Patriotov" (The Patriots Must Be Educated), Kommunist Tadzhikistana, July 19, 1974, p. 3.
34. "Sodestvovat' aktivno, postoianno" (Assist Actively and Constantly), Sovetskii Patriot, November 30, 1975, p. 1.
35. "Sodestvye grazhdanskoi oborone" (Assistance to Civil Defense), Sovetskii Patriot, November 24, 1976, p. 1.
36. Starikov, A. "Na dolevykh nachalakh" (On a Shared Basis), Sovetskii Patriot, May 12, 1976, p. 2.
37. Tarin, N. "Snorovka i trenirovka" (Skill and Training), Sovetskaia Belorussia, June 24, 1976, p. 3.
38. Titov, V. "Neskol'ka slov o programme" (Several Words About the Program), Sovetskii Patriot, December 1, 1976, p. 3.
39. Turaev, M. "Privlekaia shirokii aktiv" (Enlisting Activists on a Broad Basis), Sovetskaia Kirgiziia, November 12, 1973, p. 3.
40. "Ucheniia na ob'ektakh grazhdanskoi oborony" (Exercises at Civil Defense Facilities), Krasnaia Zvezda, February 13, 1975, p. 1.
41. Vashakidza, A. "Delo kazhdevo" (It Concerns Everyone), Zaria Vostoka, May 15, 1976, p. 2.
42. Vintrenko, N. "Smotr okonchen, sorevnovaniia prodolzhaetsia" (The Review is Finished but the Competition Continues), Sovetskaia Moldaviia, February 25, 1975, p. 2.
43. Volinskii, A. "Delo vseh i kazhdevo" (It Concerns Each and Everyone), Sovetskaia Kirgiziia, June 23, 1976, p. 4.
44. Yachenkov, N. "Podskazanno vremenem" (The Demands of the Times), Krasnaia Zvezda, November 23, 1974, p. 2.
45. Zaivorodinsii, V. "Neotlemaia chast' raboty" (An Integral Part of Work), Sovetskii Patriot, November 10, 1976, p. 3.