SURVIVAL

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MINISTER

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ARNOLD J. LAVOIE
CO-ORDINATOR

C.D. CINDERELLA BECOMES THE (TEMPORARY) BELLE OF THE BALL

ALBERTA EMERGENCY MEASURES ORGANIZATION

GRANDE PRAIRIE LOOKS AT HEALTH

A practical approach to providing trained volunteers for any eventuality has been taken by Grande Prairie, with the formation of a Casualty Clearing Unit, designed to give continuing training and practical experience to first aid and home nursing trainees, Civil Defence Unit Director, Jack Roy, reports.

Working outside Civil Defence control during peacetime, the units will be designed to raise funds for their own medical supplies and to provide social activities for members. During an emergency each unit, working under leadership, will co-operate with rescue personnel in casualty handling to control hemorrhage, immobilize fractures, dress founds, treat burns, relieve pain and shock, initiate record of casualty on an emergency medical tag and supply transport to stretcher cases and other injured to hospital or other medical aid.

Inspired by the problems that volunteers often have little practice in the skills they have learned and that due to failure to provide continuing training, even trained workers often waste time and work without proper purpose when an accident occurs. The unit will be given a minimum of 12 two-hour training sessions a year with a syllabus which includes training films, lectures by doctors, nurses and qualified first aid instructors, rescue training and safety lectures.

Already units have been formed at Goodfare and Demmitt with an active start having been made on a unit at Lymburn. It is hoped that competitions in first aid and casualty handling can be arranged for the conclusion of the training season each year, to promote enthusiasm and assist in maintaining interest in a most worthwhile new innovation which could prove of inestimable value in reducing the effects of farm and bush accidents in a vast country area, as well as preparing trained hands to meet natural or man-made major disasters.

PHOTOS . . .

TOP—Volunteer workers get right down to work following the formation meeting of the new casualty handling station at Goodfare, Alberta. Left to right are Mr. and Mrs. Pete Thiesson and Mr. and Mrs. Cornelius Lieverse operating on an unnamed "victim". Mr. Lieverse, who speaks both Dutch and English, has been a first aid worker since 1935 working with the Dutch Civil Defence during World War Two.

BOTTOM—Effective assistance to the new units was given by the ladies of the McLaurin Baptist Missionary Circle, who, hearing of the need, produced 66 neatly hemmed triangular bandages. Shown above at the presentation of the equipment are, left to right, Mrs. N. Hogg, an old hand at Civil Defence in Grande Prairie; Mrs. Jack Roy, president of the circle; Mrs. H. Unger and Red Cross Nurse Consultant, Mrs. M. Hassall.

Survival is published bi-monthly by Alberta Emergency Measures. In addition to publishing articles which reflect Provincial Government policy, Survival may also publish items by private individuals on subjects of current interest. The views of such contributors are not necessarily subscribed to by the government.

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A PR MAN IN EMOLAND

PROBLEMS IN PUBLIC INFORMATION

THE MAN IN THE STREET IS MUCH MORE THAN JUST A STATISTIC

Editor's note. At the Municipal Conferences held late in 1962, a number of delegates were kind enough to ask us for a copy of the text of our address. In reply to a request from the floor during the Northern Zone Conference, we agreed to publish the speech in this edition of Survival. It is reproduced here very slightly amended from the original.

Almost anything can be misunderstood. An asthmatic who says, "I am going to Arizona for my lungs" could be thought to have been very careless and left them there on a previous visit and a housewife who states, "We are having mother for dinner on Sunday" might be accused of cannibalism and matricide. Even punctuation can make a difference, "The teacher said the headmaster is a fool" is much different from "The teacher, said the headmaster, is a fool". Almost anything can be misinterpreted, misunderstood and twisted out of context if a little thought is given to the process.

The man we are trying to interest in Civil Defence is not prepared to study the facts. His mind is jammed like a jungle with problems of his own, ranging from a wife who looked like a million dollar bill when he married her and now looks like the same sum in loose change and whose schoolgirl complexion graduated in 1947, through grief which includes payments on the car, the mortgage, insurance, credit cards galore, food bills, advertisers who beg him to travel now and pay later and funeral chapels which suggest he pay now and die any time he's ready.

His credit is so bad merchants hesitate to sell him goods for cash and he is harrassed by his boss, he is insecure, lonely and afraid. He is preyed on by a hundred charities he knows deserve his support. Magazine salesmen, Fuller Brush men and cosmetic company representatives ring his doorbell even when he escapes to his home. Every time he washes his car it rains and advertisers tell him that in addition to all his other problems, he probably smells bad.

This potential Civil Defence worker smokes too much. He is worried about his waistline and his children are turning into juvenile delinquents. His wages are insufficient for his needs and when he retreats into his newspaper or turns on his television set, he is exposed to some of the almost unbelievable total of two million advertising messages which assail him every year. If he goes berserk and rushes from the house there is always the commercial on the car radio, the billboard and even matchbook covers to make more demands on his slender resources.

This is the man we propose to ask to assist us without pay. This is the man we must convince that he should prepare for an eventuality he hopes and prays will never come. This poor, overworked mass of coffee nerves and tired blood is to be told, quite truthfully, that unless he spends more money he hasn't got on a fallout shelter and a two-week supply of food, his children may die of leukemia caused by exposure to radioactive fallout. And we must tell him this while he is frantically trying to stretch his salary to cover the cost of this week's hamburger.

You will readily see that our task is formidable, especially when you consider that this man doesn't believe that harm can really befall his family, he is sure that traffic accidents only happen to other people and that seat belts do save lives but that he personally will never need them. He knows that if he joins us he can expect to be laughed at by the very people he is working to save and that he may even be accused of being a warmonger by shortsighted people who fail to realize that a country taking calm precautions must discourage a would-be aggressor.

Let us then accept that we have a difficult job in convincing this poor bewildered specimen that he should give up his valuable leisure to serve his neighbors. That in spite of their ridicule he should take time out from bowling, spectator sports, golf, television viewing, home and school meetings and spare time study which might improve his inadequate earning ability.

To convince him we must inject the facts into his preoccupation with his own problems. It can be done. Many items which were unknown a few years ago have become, not luxuries, but absolute necessities through continued advertising and public relations. Television itself, since its inception ten years ago, has cost the Canadian public 1,200 million dollars on the purchase of new sets alone. Other items which were unknown a few years ago include tape recorders, stereophonic music, home perms, cinemascope, striped toothpaste, fluoride, vodka, magic whiteners, millicell filters and three-way relief from almost anything.

Advertising costs money. When you consider that we are in competition for a few minutes of a man's time, with every other advertiser, you must consider the companies spending fortunes in attempts to capture his attention. In the United States, television billings were up 11.6% for the first half of 1962, and reached the staggering total of $387,772,615.00. Procter & Gamble spent 25 million dollars on television commercials and 5½ million was spent on the single product Anacin during the six months mentioned. Other big TV users during the period were Bufferin which spent close to four million, Bayer Aspirin, over three million, Drisdan and Alka Seltzer each topped two million and since all of these products are headache remedies, we can see just how hard pressed our hero really is.

When we consider that prime television time in Edmonton or Calgary costs well over $100 per minute and that one column inch in the Edmonton Journal costs close to $6.00 (bringing the cost of a full-page ad to about $1000.00) we can see that an extensive program of public information is just too prohibitive in cost for our present budget, and that our policy of running full page advertisements in all Alberta Government Telephone Directories, and a half page in the City of Edmonton Directory, together with exhibits at fairs and the publication of our bi-monthly magazine "Survival" is the best we have been able to manage to date.

In addition to the methods of gaining public attention mentioned, we rely heavily on sending out news releases and trusting that editors will print or broadcast our material. Although we have been quite successful as a general rule, we cannot be assured that our pronouncements will reach the public by this method, and must scatter the seed hopefully trusting that some will reach fertile soil. We must face the fact that the only sure way of reaching John Q. Citizen is to pay for the message to be placed before him.

I am happy to report that, I believe for the first time, a sum of money has been requested for a modest program of public information on a paid basis in the next fiscal year. If this is given approval, we can enter the lists to do battle with the giants of advertising and vie for the attention of the ordinary man—this strange creature who blames fate for his misfortunes, but feels personally responsible when he makes a hole-in-one.

By taking advantage of every opportunity for addressing groups, the distributing federal booklets and talking Civil Defence, aided by a series of paid public announcements in the months ahead, perhaps we can convince the people of our province of the truth of Sir Winston Churchill's words, when, in his last address as Prime Minister, to the House of Commons, he said: "The need for an effective Civil Defence is surely beyond dispute. It presents itself today in its noblest aspects, namely the Christian duty of helping fellow mortals in distress. No city, no family, nor any honorable man or woman can repudiate this duty and accept from others, help which they are not prepared to fit themselves to render in return."

EMO FILM LIBRARY

TWO NEW FILMS

FALLOUT IN AGRICULTURE—U.S.A.

Colour, 23 Minutes, Excellent

A product of the U S. Department of Agriculture, the film uses animated drawings and diagrams to show how radioactive fallout comes into being following a detonation and the processes involved in initial and residual radiation hazards. Alpha, Beta and Gamma rays and particles are discussed and the process of ionization and the destruction of living cells is shown.

Radioactive decay rate is explained in detail and the internal hazard of radioactive particles absorbed in plants or meat and passed on to man, is thoroughly explored. The problems encountered in dealing with Iodine 131, Cesium 137 and Strontium 90 are explained.

Finally, the film shows measures which can be taken by farmers after land has been contaminated by fallout. Scraping, deep ploughing, spreading of lime and changing to crops with different characteristics are a few of the methods demonstrated.

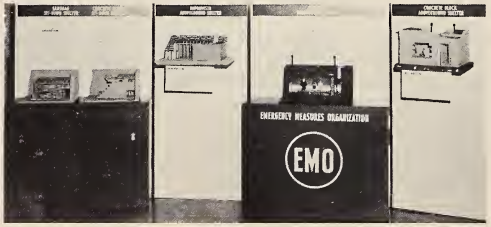
The film is specifically designed to be shown to farmers and puts education before entertainment. Even non-rural residents should find the film of interest since it gives a fully lucid appreciation of fallout and its hazards.

OPERATION CUE—U.S.A.

Colour, 16 Minutes, Excellent

This film is largely similar to the film of the same name reviewed in the November-December edition of Survival. It has now been revised and a single print is available through the usual channels.

The new version is slightly longer than the original version, mainly by virtue of a preface in which the difference between atomic and hydrogen weapons is explained. It states that the effect of the blast, shown taking place at one mile from ground zero, would be equal to that occurring eight and a half miles from a 20 megaton explosion.



NEW DISPLAY AVAILABLE

A new, easily-erected display showing five of the shelters listed on the pamphlet Simpler Shelters, is now available for use at fairs and exhibitions in Alberta.

Models in wood and styrofoam plastic of a sandbag sit-down shelter, a concrete block sit-down shelter, an improved above-ground shelter, a steel tank underground shelter and a concrete block, above-ground shelter, are ingeniously arranged to allow the display to be folded shut into a single crate in a matter of seconds.

Civil Defence Directors are urged to reserve this display well ahead of the dates on which it will be required as a first-come-first-served policy will be strictly observed in its use.

One big problem involved in the use of this display is its extremely fragile construction which could mean repairs being required almost every time it is shipped. When fully opened the unit measures eleven by three feet.

CIVIL DEFENCE IN PEACETIME

Under the heading "Deadly Vapor in Air Gives EMO Real Test," Canada Month reported the leakage of 30 tons of liquid chlorine from a Shell Oil Company tank at Cornwall, Ontario. The result was deadly chlorine gas which within hours crept over the city sending nearly 100 residents coughing and vomiting, to hospital and forcing the evacuation of 200 more from a 30 block area in the northeast section.

Faced with a real emergency, the city of 45.000 acted quickly and soon had Emergency Measures officials, police, firemen, doctors, nurses and hospitals ready to handle whatever might develop. Nothing much did, thanks to a helpful wind pattern, which, if it had changed, might have resulted in a need for total evacuation of the city.

Cornwall's brief tussle with disaster showed EMO quite a lot. Co-ordinator George Upfield sent Ottawa a report that included recommendations for improving the city's ability to provide large-scale emergency measures.

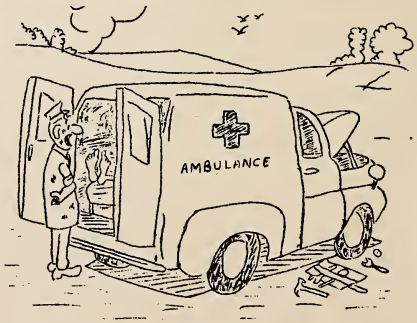
In Alberta, Civil Defence Director of Medicine Hat, Archie Mitchell, recently spoke to Survival editor Jack Day, about the need for special planning to avoid a similar emergency due to ammonia gas in that city. Awareness of the need and advance planning always pay off when an emergency arises.

TELEPOL SURVEY SHOWS PROMISE

The CTV Sunday public opinion survey which debates questions of public interest and then gathers views from 1,000 selected Canadians coast to coast, discussed Emergency Measused activities on November 3, reporting the results the following week. The three questions asked and the answers given were:

1. Do you know what you are supposed to do in case of an attack?
   Answers: Yes—44.9%, NO—52.2%, NO OPINION—2.9%.
2. Do you think any preparations are worthwhile?
   Answers: YES—68.9%, NO—27.8%, NO OPINION—3.3%.
3. Do you think the government should provide bomb Shelters?
   Answers: YES—70.1%, NO—25.8%, NO OPINION—4.1%.

An interesting question we might ask ourselves at the local level is whether our percentage of informed people is higher or lower than the national average. Whatever the answer might be, the survey points up the enormous job still to be done in ensuring that EVERYONE knows the facts.



"Know anything about carburetors?"

(From Acton, England, CD Bulletin "The Five Links")

HOSPITAL DISASTER PLANNING ✚

By Dr. W. Douglas Piercey, Executive Director, Canadian Hospital Association. Condensed from an article in Occupational Health Review, and presented at the Physicians Indoctrination Course at the Canadian Civil Defence College, Arnprior, in March 1962.

Every hospital in Canada must have a workakble disaster plan for two reasons. First: So that it can effectively cope with a local disaster situation. Second: We live in the age of the hydrogen bomb, the inter-continental ballistic missile and fallout. We may not like it, but it is a fact. We cannot say that we will not face a National Emergency in our lifetime. It would appear to be only common sense that hospitals should be prepared for the influx of a large number of casualties and we know that meticulous planning in advance is essential if a hospital is to treat large numbers of casualties on short notice.

Such planning calls for very close teamwork between many groups, the medical staff, the administration, the nursing service, the dietary department, and all supporting departments: engineering, laundry, stores and purchasing. A disaster plan will not get very far without careful liaison with outside agencies like local Civil Defence, police, fire and other municipal departments.

What are some of the essential features in hospital disaster planning? First, there must be a plan of co-operation developed with the local Emergency Measures Organization, the police, press and radio. These are essential to the development of a good plan on paper. Hospital staffs must be adequately notified and plans made for the control of traffic around the hospital, the control of visitors, the handling of information on casualties and the release of information to relatives via press and radio. One has to plan for the evacuation of non-casualty patients from the hospital, and experience has shown that 70 to 80% of hospital patients can be evacuated with good teamwork and arrangements planned in advance. Supposing a 600-bed hospital expects 750 casualties, evacuation will not produce enough beds for the incoming casualties, so after you have planned for the evacuation of patients, you have to plan for the expansion of facilities. Placing extra beds in wards is one method, but even this is not sufficient for a large scale emergency and plans must be made for the use of non-patient areas such as classrooms, nurses' residence, reception rooms and libraries.

Very important is the planning for the reception of casualties. An area must be chosen where casualties are to be received and, following their reception, their quick sorting and distribution has to be considered as a vital part of the overall plan of medical and surgical care for the patient. With such planning goes the provision of supporting services. The provision of adequate nursing services and the feeding of the patient have to be worked out. Plans should be made to use every member of the hospital staff and even auxiliary staff, and this requires the planned use of all supporting services and their personnel. Thus people employed in the engineering department, the laundry and housekeeping departments, need to know what their specific duties will be under the disaster plan.

Casualties are sorted as to injuries and divided into three major categories: first, casualties who are surgical or medical emergencies, requiring immediate or urgent treatment, classed into three sub-groups:

(a) those requiring surgical care, fit for immediate operations and sent to the operating rooms;

(b) those requiring surgical or medical care but in severe state of shock. These will receive initial treatment in the triage area and then be sent to a resuscitation area;

(c) burn cases will be sent to another designated area.

This group with its three sub-divisions is very important, the whole purpose of a disaster plan being to bring good medical attention to casualties as quickly as possible.

The second group are those who will require hospital admission but whose need of medical or surgical attention is not immediate. They are sent directly to designated ward areas. Among this group will be a number of psychiatric casualties, and they are sent to another designated ward area. In the third group are casualties requiring first aid treatment, who do not need to be admitted. After treatment in another designated area they will be sent home.

A number of the medical staff carry considerable responsibility in the function of a plan designed to allow treatment to proceed in an orderly fashion, without chaos. First we will outline the responsibilities of the chief of the surgical department. He is responsible for the functioning of seven units as follows:

The Receiving Unit
The First Aid Unit
The Burn Unit
The Operating Room Teams
Surgical Casualty Wards
The Anaesthetic Units
The Surgical Units

The chief of medicine is responsible for five areas. These are:

Evacuation Unit
Resuscitation Unit
Psychiatric Unit
Non-Casualty Patients
Medical Internes

The Director of Laboratories plays an important part with three areas under his jurisdiction. They are:

The Emergency Lab Service
Blood and Plasma Service
The Morgue Service

The radiologist is responsible for carrying on emergency radiation monitoring and X-ray services, as required, and the chief pharmacist is responsible for all pharmaceutical services.

When planning is completed it may result in a book running up to 200 typewritten pages. It should outline very meticulously everything that one can foresee may happen. After the plan has been worked out, it is essential to have periodic trial runs. This will show up weaknesses in the plan and allow for improvements. It also has the important function of keeping the plan alive. Next is the indoctrination of the whole team as to the part they will play. This calls for developing an awareness of disaster planning throughout the whole hospital organization.

It is very apparent that in an emergency situation of any great consequence the normal doctor-patient relationship ceases. In the case of those patients who are to be evacuated, we do not have time to call each individual doctor and say we want to send Mrs. Jones home. The medical staff has to give that authority to the chief of medicine beforehand. It has to be written into their regulations. Also the 20% or so that remain are not going to have their own doctors looking after them for the next 24 to 48 hours, so the medical staff has to agree that doctor Y will be looking after the patients who remain after evacuation. This applies also to the casualties: you have a stream of casualties coming into your hospital and you are not going to ask them "whom do you wish to look after you?" To make the disaster plan work, we have to allocate whatever doctor has been designated in the plan to look after them.

Because everybody will be working at top speed, and this may carry on for 24 to 48 hours, standard methods of treatment and routine procedure, drugs and equipment are needed, all have to be decided in advance by the hospital staff themselves. They must, through their committee, agree that they are going to treat burns in a certain way, and all burns during an emergency will be so treated. They have to agree to do resuscitation and fractures by a certain method. While methods may differ in each hospital, we are looking for a standard method of treatment in a given hospital, and as far as possible, in all hospitals.

The disaster may happen at two a.m., or it may happen over a week-end. How are you going to notify medical staff? Usually a list of all doctors concerned with the functioning of the disaster plan in any given hospital is drawn up. It is usual to keep one copy at the hospital switchboard, one copy in the doctors' cloakroom, one copy in the home of the chief of staff, a second copy in his office, plus a copy held by the administrator.

For the hospital to function in a Civilian Defence plan, we must remember that the number of casualties requiring hospital care will be markedly increased,

(Continued on Page Seven)

DEMOGRAPHIC FACETS OF A NUCLEAR WAR

Condensed from a long paper based on findings determined by the use of 14 specially designed computers by Dr. Joseph D. Coker, Ph.D., Director of the National Resource Evaluation Centre, U.S.A. THIRD OF FOUR PARTS. (Emphasis of bold face type is ours.)

POPULATION EFFECTS OF DIRECT ATTACK

As a basis for describing attack events I shall assume that a nuclear attack will be made on the United States. My repeated use of the verb "will" does not mean that I believe there will be any such attack. Quite to the contrary, I happen to believe that there will not be a nuclear exchange—unless irrational persons gain control of nuclear weapons or there is a serious miscalculation or accident.

In a nuclear attack, the number of deaths and other casualties will depend on many factors. Among the most important are, the scale and weight of the attack, the percentage of surface bursts, the fission-fusion ratio, yield and distribution of weapons, and the degree of population protection achieved (which in turn depends on the shelter available and on warning, training and human response).

A few rough approximations can be provided. If an attack totalling 1,000 megatons (with 2/3 fission yield) is aimed exclusively at U.S. air bases, total fatalities will approximate 10% of the United States population. The same weight of attack designed to maximize fatalities will kill approximately 40% of the population.

If the weight of the attack is raised to 5,000 megatons, an attack aimed at air bases will produce about 50% fatalities while an equal weight designed to maximize fatalities would kill about 80% of the population. A 10,000 megaton attack would drive these fatality estimates up to about 75% and 95% respectively. A 50,000 megaton attack would kill almost all citizens under either targeting assumption. All of these estimates are based on presently available shelter.

The relationship between the number of blast and radiation casualties will depend on the actual targeting and on the quantity and quality of protection. Under present conditions of protection an attack aimed primarily at nuclear striking force targets will produce more casualties through fallout than through blast; but, if population is the target, blast casualties will far exceed those caused by fallout.

If we introduce the assumption of fallout shelters for everyone, all fallout casualties disappear. On the other hand, the assumption of blast shelters will not eliminate all blast hazards. Blast Shelters can very greatly reduce blast casualties, but economically feasible shelters provide no protection for the people who are in the large area cratered by nuclear detonations. Let us assume an attack of about 5,000 megatons with multiple targets including emphasis on nuclear forces and industry and with a high proportion of surface bursts. Under present conditions, the attack will produce about 120 million U.S. casualties including 90 million fatalities. Because of the assumption of many surface bursts, about half the total casualties are due to fallout. **Therefore, if we assume that everyone has and uses shelter space, the total estimate falls from 120 million to 60 million. If we go one step further and assume that everyone in blast-probable areas is in a blast shelter that provides protection up to 100 pounds per square inch, the casualty total is further reduced from 60 million to 10 million.** If we try to provide conditions that will save these last 10 million, we must assume that the enemy will avoid striking our population centres or that there will be no nuclear exchange at all.

Casualties resulting from any conceivable type or weight of nuclear attack will not be spread evenly over the population. The post attack population will have different age, geographic and occupational compositions. At this point we do not have a valid basis for qualifying the differing effects by age group, but we do know that the very young and the very old have lower survival potentials and hence, the post attack population would be comparatively thin at the age extremes.

In general it appears that certain regions will be likely to emerge with much smaller percentages of their pre-attack populations than the national average. In the United States, New England, the Middle Atlantic regions and California are conspicuously among these. Some estimates, based on present shelter, show New England fatalities to be as high as 75% with a further 10% injured. **The same study suggests about 30% fatalities for the Rocky Mountain area** and 35% for the south-east.

In general, densely populated regions must be expected to lose higher percentages of population than sparsely populated areas, thus any massive nuclear attack will tend to produce a more uniform population distribution.

The labour force available 30 days after attack will represent a significantly lower fraction of the population than the pre-attack force. Later, the available labour force will make up a larger percentage with the recovery of the sick and injured and due to the entry into the force of housewives, retired people and others unemployed at the time of the attack. Certain skill classes such as carpenters, auto mechanics, utility linesmen and truck drivers, usually fare better than average.

By no means all the fatally injured will die immediately, nor will many of the injured become sick immediately. Some of the estimates of our specially designed computer have indicated medical peak loads at about 30 days after attack. Sixty days later most of the fatally injured will have died and all but 5 to 10% of the sick and injured will have recovered.

"According to our calculations, the new bomb should annihilate the world, but of course we can't say anything definite until we have tried it out."
(From "Zivilschutz")

CIVIL DEFENCE IN EUROPE

By HENRY H. SIEMENS
Civil Defence Director, Leduc, Alberta

My baptism of fire and first awareness of man's inhumanity to man came when as a child I lived through World War One. Later I was more vividly impressed when my parents, sister and myself fled the Russian revolution and made good our escape by way of Poland, in 1922. Since these days of my youth I have served for six years with the R.C.A.F. in World War Two and become more convinced than ever of the value of preparedness against any eventuality.

Perhaps because of my background, I have been an eager reader of anything pertaining to Civil Defence in Europe. I devoured newspaper stories and magazine articles avidly and when my wife suggested a trip to Europe in 1962, I agreed happily with the chief aim of finding out all I could about Civil Defence in the countries we planned to visit.

Protocol demands that visitors to Europe are equipped with the proper credentials, and to ensure that we would not be thwarted in our attempts to learn what was being done, we equipped ourselves with letters of greeting and introduction from the Mayor and Secretary-Treasurer of Leduc. It was well that we did, for these letters were to open many doors during our brief stay.

We left Edmonton's International Airport on 25 March, 1962 and in 11 hours arrived at Amsterdam, Holland. After a good night's rest we made our way to the Police Department and were seen by the Commissioner who was Liaison Officer with the Civil Defence authorities. An appointment was made with the Deputy Co-ordinator of Civil Defence, the Co-ordinator being away in the United States, presumably on a mission like our own.

A brief taxi ride brought us to the front of a large, four storey building which housed the Civil Defence Headquarters and the main stores of Civil Defence supplies and equipment, the equivalent of our Provincial Headquarters. Here we were met by the Deputy Co-ordinator, Mr. Kaspers, the Chief of Information and Intelligence, Mr. Peters, and Operations Chief, Mr. von Lindheim. After coffee, we enjoyed a two-hour chat. Mr. Kaspers speaking fluent English and the other gentlemen interjecting remarks only when the function of their branches was touched upon.

As their plan for survival unfolded I realized that it was very similar to our own, the main difference being that due to their system of conscription, many more army personnel are trained. All leaders and directors are issued with cars equipped with two-way radios, and trained monitors have been issued with radiological detection equipment.

Following the interview we were privileged to tour the stores, accompanied by a quartermaster, and were amazed to find a complexity of equipment of every kind and description from instruments designed to determine height. distance and power of a nuclear detonation, through fire pumpers to heavy road machinery.

Our next stop was Zurich, Switzerland where we met the provincial level chief Mr. Gustav Baur and found that the biggest achievements of Civil Defence were in the fields of the army and the building program. All Swiss young men must report for compulsory military service at a certain age. Those medically acceptable serve with the army, the remainder must take Civil Defence training. It is interesting to note that Swiss women cannot vote or be conscripted for Civil Defence. Even so, many women have acknowledged the need and have formed volunteer groups taking mainly nursing training.

In Switzerland all new buildings must have fallout protection. Family dwellings are required to have a shelter big enough to protect the maximum number of people which might be housed in them, apartment buildings must be able to offer similar protection for all residents. I arger shelters have manually operated air conditioning-equipment.

In Germany we were told that the trving times so recently suffered by the people and the division of the country has led to considerable complacency about Civil Defence, with some people indifferent to the need and convinced that any preparation is futile. The provincial level chief of Civil Defence in Stuttgart had little to report except that the country maintains an army-supervised training plan and that a few volunteer groups are currently forming. To overcome public apathy a large scale information program is being run and wartime shelters are being repaired and rebuilt.

In Copenhagen, Denmark, we were privileged to meet Federal Civil Defence Chief Mr. Erick Juhl, who was most emphatic in stressing the need for Civil Defence. Here the training and shelter programs are far advanced. Shelters have been constructed in the forests, the mountains, under most of the buildings and even under the streets. The government supports the erection of shelters in all new buildings, in a manner similar to that adopted in Switzerland although here conscription is run on a lottery system with young people drawing lots to determine whether they will serve in the army or in civil defence.

Time was getting short. Already it was May 4 and we had just two full days left of our trip. We arrived in Stockholm, Sweden in the middle of the afternoon and went immediately to the Civil Defence Headquarters. Despite the fact that an important conference was in progress, we were delighted to confer with the Chief of the Medical Staff, Dr. Waldo Greyerz, who was most interesitng and spoke fluent English.

Sweden places heavy emphasis on shelters, has a comprehensive training program and plans for some evacuation if time permits. Here the shelter system is probably the best in the world and it is claimed that not only is space available for all citizens, but that everybody knows where to go should a war break out.

Much of the country is solid granite rock and as we scouted the city's subways we could see steel doors on either side leading to various shelter areas. Wherever possible office blocks and business establishments also house shelter space, the most interesting being in the centre of Stockholm, the Katarina, a peacetime parkade for 550 cars designed to afford wartime protection for 20,000 people. It has three floors and a roof of granite 60 feet thick. This shelter and three smaller ones have auxiliary lighting plants, propane gas storage, disposal plants, stockpiles of food and plentiful medical supplies.

After two wars and mighty upheavals, Europe knows that security is everyone's business. The people express fear and apprehension, as well they might. Some feel that Russia would not dare to make a nuclear attack out of fear of retaliation, and that the next war will start with the conventional weapons, but they, like us, cannot know for sure what the future holds. As Denmark's Erick Juhl exclaimed, pounding his desk in emphasis, just before we parted, "Mr. Siemens, we MUST be prepared".

HOSPITAL DISASTER PLANNING

(Continued from Page Five)

and we know, because of the concentration of our hospital beds in the large metropolitan areas, that not only will we have to use existing hospitals we would use in peacetime disaster, but we will have to use many improvised hospitals and those in surrounding areas. This calls for an integration of peacetime disaster planning into Civil Defence planning. What is required first, however, is the essential teamwork within the hospital groups themselves in developing workable peacetime disaster plans.

What about the role of the individual hospital in the event of a national emergency? When you consider that 80% of our hospital beds are in target areas and consider the number of casualties which would result from a nuclear attack, it is obvious that existing hospital facilities will have to be augmented. This phase of planning rests with the Emergency Health Services at the Federal, Provincial and Municipal level. Important facets of this planning are the 200-bed improvised hospital, the designation of buildings that can be readily converted into emergency hospitals, and the stockpiling of supplies for use in such an emergency.

Kind of Food or Package	*Possible Salvage Procedure in Case of Typical Foods*		
	Contamination With Radioactivity	**Blast and Fire Damage**	**Water Damage (Polution)**
Perishable: Fresh fruits and vegetables, fish, poultry.	Remove outside portions of lot containing most radioactivity. If remaining contamination is less than emergency tolerance, release interior portions. Washing of fruits and vegetables may be of value.	Look for contamination with poisons. If pathogens are present, sterilize before using.	Wash to remove surface contamination. Cook to kill bacteria.
Nonperishable: Dried fruits and vegetables, flour and grains, bulk sugar stocks.	Remove outside portions of lot containing most radioactivity. If remaining contamination is less than emergency tolerance, remove interior portions. Washing of fruits and vegetables is not feasible.	Look for contamination with poisons. If pathogens are present, sterilize before using.	Prompt sterilization and use of fruits and vegetables. Remove flour and grain which is not caked. Cook before using. Refine sugar.
Cardboard and paper containers.	Remove outside portions of lot containing most radioactivity. If remaining contamination is less than emergency tolerance, release interior portions. Remove dust by brushing. Remove outer wrappers.	Look for contamination with poisons. If pathogens are present, sterilize before using.	If salvage is attempted, sterilize food from water-damaged container before it is consumed.
Canned goods: Hermetically sealed cans.	Wash outside of container with detergent, or remove radioactivity by brushing. Interior portions of stacks may be relatively free of radioactivity.	Look for and destroy cans with ruptured seams or closures. Remove abnormal cans. Look for spoilage from thermophilic organisms.	Sterilize surfaces of cans. Watch for pinholing of metal. Use damaged stocks promptly.
Containers with screw caps, friction type lids, etc.	Wash outside of container with detergent, or remove radioactivity by brushing. Interior portions of stacks may be relatively free of radioactivity. Test contents before releasing for use.	Look for and destroy cans with ruptured seams or closures. Remove abnormal cans. Look for spoilage from thermophilic organisms.	Difficult to remove contamination from beneath or around closure. Sterilize foods before using.

From the July-August Bulletin of the International Civil Defence Organization

A Letter from Lew

Same Address
Sunday January 26, '63

Hi Joe,

Well, we have recovered from Christmas except for a few outstanding bills. It was nice to unite the family if even for a short time and your gifts were just what we needed.

We spent New Year's quite quietly taking stock and were happy that despite our fears, 1962 didn't see a major conflict between East and West, although the minor wars that are still occurring show how persistently the East and West are opposing each other and that getting ready for anything still makes a lot of sense.

As you know, the youngsters thought that sleeping in the fallout shelter was a big game over the holidays, so I decided to try an experiment by turning off the heat and sleeping the whole family in it. The weather has been below zero for several days, but with the curtain drawn, we generated enough heat to be quite comfortable with warm clothes. Weather like thie makes me wonder how many people would decide to stay in the city if an emergency came during the winter. We are fortunate in having made arrangements to come to your place, however if we should be prevented we've got the shelter and know our resources at home and should be safe from anything if we survived the blast and heat.

I see that Bertrand Russell has resigned from the Committee of One Hundred, of which he was Chairman, in Britain. They were the group that was so militant in trying to persuade the government to have nothing to do with nuclear weapons. I think we all agree that it would be a darn good thing if the bomb could be banned by everybody, but personally I'm suspicious that the present lovey-dovey feelings internationally, are just really a further step in communist policy. I think the Cuban affair woke up a lot of people and caused a great flap, but frankly I'm sure that many of our municipal people will quickly fall into the routine of leaving the work to someone else.

I was talking to Harry White, our local Civil Defence Director, a few days ago and he says he's frustrated. It seems the provincial and federal people have been telling him that somebody is going to make arrangements for the control of manpower and transportation in an emergency. He says that thie is terribly important yet all the authorities do is talk without giving him any useful direction. It's a darn shame when we have keen men trying to do a job at the municipal level, that someone higher up keeps thinking about the chiefs and forgetting the Indians who are going to do all the work.

The schools sent a letter home with the youngsters last week, saying that the kids would be sent home if anything serious happened. Seems the Department of Education have said that the shelter available in schools is not very good and there are no facilities for looking after the children for any length of time. I think that this is the best thing that could happen since we would much rather have the kids with us at home. I'm very glad that the schools have been giving this matter some thought and hope you'll start bugging your school board to find out whether they've been sitting down with the local council to plan what they will do in an emergency. Harry says that Red Deer district held a pretty good exercise a while back to find out just what they would do with kids who would have to return to homes in the country. It was their first effort and as you can guess they found a few "bugs" in the system, which they will try to iron out. At least they are getting on with an important aspect of Civil Defence and similar work should be going on all over the province.

We are still waiting for White to produce his little pamphlet for issue in the area. It is supposed to give us the local angle on arrangements for an emergency. It will make vital additional reading to compliment the publications provided by the provincial and federal people. I'm glad I don't have the job of producing it, but I suppose there are a few radio and newspaper people who would be willing to help in making it professional and easy to read.

Must close now. Alice will write to Vi in the next few days with family news. As usual I've been running on. I sure get wound up don't I?

Love from all to all,

Lew

HIGH RIVER EXERCISE SUCCESS

The readable High River Times devoted a front page story and picture to a Civil Defence procedure course held in the town, in its December 20 edition, and scattered a further three pictures through other pages. .

C.D. Director Earl Lewis and his workers performed an exercise in which it was assumed that a nuclear detonation had occurred at Rimbey and that evacuees were streaming into High River. Local Air Cadets assisted as runners and R.C.M.P , Fire, Welfare and Transportation services were given a thorough testing. Southern Zone Officer Larry Jones noted that the average time taken to process any given message was less than ten minutes.

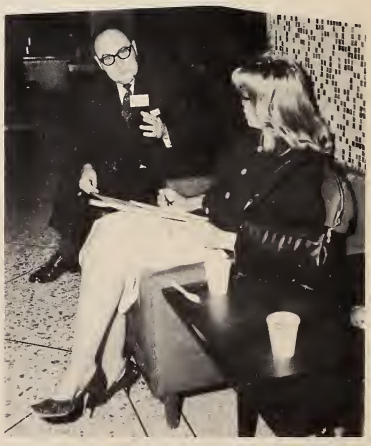
The paper also noted that High River Welfare Services, headed by the Salvation Army's G. Halvorsen would supply 30 members of its staff to assist in the distribution of Sabin Polio Vaccine in the area, scheduled to start in January.

MUNICIPAL CONFERENCE PICTURE PAGE

Well attended Municipal Conferences were held recently in Grande Prairie, Edmonton and Calgary. Top, Fire Commissioner Austin Bridges points to a chart during his presentation; below, left, Mayor R. H. Hume, of Camrose, Chairman of the Control Committee Mr. P. A. Link, Civil Defence Director Pete Fearnehough, also from Camrose and Civil Defence Director for Bawlf, Mr. A. M. Lynnes are shown during a question session at Edmonton. Below right, Civil Defence Director for Hinton, Mr. R. D. Gray, Mayor W. A. Switzer of Hinton and three delegates from Lacombe, Chairman of the Control Committee, Mr. A. E. Wigmore, Deputy Director, Mr. H. Ganson and Unit Director Mr. M. O. Mathison listen to the speaker's answer to a question while Director of Administration Alberta EMO, Tom Gladders recovers the microphone from Mayor Switzer.

Below, Deputy Co-ordinator Alberta EMO, Ernie Tyler discusses the conference with Edmonton Journal reporter Pat Campbell at the Edmonton Jubilee Auditorium. A well written story with eight column (full page width) headline, resulted from the interview.

Delegates at Peace River received copies of the October-November edition of Survival, which was published the day before the Grande Prairie conference. They took advantage of a brief break to catch up on the provincial news.



RED DEER RADIATION MONITORING COURSE

Ralph McPhedran (far left) of the Red Deer fire department, searches for pellets of radioactive cobalt during a practical phase of a Municipal Course in Radiation Monitoring held during January. Instruction was given by Public Health Inspector Jim Wocks, Radiological Officer "Choppy" Stanier and Civil Defence Director Walt Ogilvie. Excellent radio and television coverage was obtained and the Red Deer Advocate devoted almost a third of a page to pictures and stories about the course. Twelve students won diplomas. (Red Deer Advocate Picture.)

CAMERAMAN DOES "TWIST" FOR MINISTER

A cameraman from Calgary's Channel 2 appears to be dancing as he hurries to set up his equipment for filming an interview with Minister L. C. Halmrast and Co-ordinator A. J. Lavoie, prior to the Southern Zone Municipal Conference at the Jubilee Auditorium, Calgary. Announcer Arn Olsen conducted the interview.

NURSES' ORIENTATION COURSE

Fred Wood of the Provincial Fire Commissioner's Office demonstrates a number of lifts to three of the 48 nurses from all over Alberta, who attended a week-long Nurses' Orientation Course, supervised by Nurse Consultant K. Miller, at the Alberta Civil Defence School, in January.

NUCLEAR YIELD METERS SHOWN

Major R. Freeborn (right) demonstrates two versions of meters currently being used by the Canadian Army to determine the size and position of a nuclear burst. One relatively simple design and one more sophisticated meter were shown to delegates at a recently held Target Area Conference at Alberta EMO HQ, Edmonton. Examining the devices are 'left) Civil Defence Director Hugh Davidson and his Deputy, Bill Brown, of Edmonton.

GOOD COMPANY

Proof that the best people read "Survival" came when the recently retired Alberta School Commandant, Fred Jamieson, received this letter from the former Minister of National Defence Doug Harkness. It is nice to know that our provincial publication is reaching high places.

MINISTER OF NATIONAL DEFENCE
CANADA

Ottawa 4,
November 19, 1962.

Dear Fred,

In looking through the September-October issue of "Survival" over the week end I was most interested to come across your picture and the article on the occasion of your retirement. I was delighted with the farewell messages from your friends and associates and should like to take this opportunity of adding my sincere good wishes for every happiness and a thoroughly enjoyable retirement.

Kindest personal regards,

Yours sincerely,

Douglas S. Harkness

Mr. Fred Jamieson,
5709 - 118th Avenue,
Edmonton, Alberta.

QUOTES FROM B.C.

The most recent British Columbia Civil Defence Circular contained a couple of witticisms we enjoyed. We pass them on for your amusement.

When you can see no end to your troubles, remember a diamond is only a piece of coal that has been hard pressed for a long time.

A taxpayer is a person who doesn't have to pass a Civil Service examination to work for the government. (Board of Trade Journal.)

FIRE BOOKLETS FOR SCHOOLS

Fire Commissioner Austin Bridges announced at the November 27 meeting of the Federal EMO Fire Advisory Council, in Ottawa, that plans had been made to distribute the booklet "Fire Prevention Information" to every classroom in Alberta schools.

TWENTY YEARS AFTER

The nuclear age was initiated on December 2, 1942 with the first controlled release of nuclear energy at Stagg Field. In a guest editorial written for The Bulletin of the Atomic Scientists, Harrison Brown brings vividly to life the desperate fears which the world felt during the Cuban crisis in the following words:

OCTOBER 24, 1962: I am writing on a plane en route from Los Angeles to Washington and for all I know this editorial, honoring the twentieth anniversary of the first controlled release of nuclear energy by man, may never be published. This morning, the governments of the United States and Soviet Union were moving relentlessly toward armed conflict in the Caribbean. Missiles and planes stand poised on both sides, ready to deliver their deadly weapons to their targets. By tomorrow, if inflexibility persists or if someone in the Soviet Union or in Cuba or in our own government makes the wrong decision, the great all-out nuclear war, which we have discussed and feared for twenty years, may be triggered. Never in history have people and nations been so close to death and destruction on such a vast scale. Midnight is upon us.

Now our fears are somewhat allayed and the crisis is over for the present, it is perhaps well to be reminded of how close we came, and continue to be, to disaster. Our job is immediate and urgent.

The last shall be verse

The worst had occurred, the bomb had
been dropped.
Survivors—pathetically few,
But the voices still heard when the
fallout had stopped,
Came from people who knew what to do.

The task that was faced by the ones who survived
Gave everyone plenty to do,
But their scars were erased as the country
revived,
When the people were told what to do.

When they'd buried their dead, new buildings arose,
Built by people who knew what to do,
But enough has been said, save one question we pose,
Will the people who knew include YOU?