THE SOVIET UNION is advising its citizens on how to build nuclear shelters quickly in time of war out of straw, soil, reeds and other natural materials. The instructions are based on calculations on how much radiation will be absorbed by a given thickness of material. The calculations agree well with those by Britain's Home Office in its assessment of what British people should build to protect themselves.

However, the Soviet advice takes little account of blast, fireballs or nuclear winter-all undesirable and yet seemingly inevitable consequences of a full-scale nuclear war. In this respect, the Soviet advice to its citizens again differs little from Britain's

The Soviet advice appears in the shape of a booklet, freely available from state bookshops, called The Construction of Rapidly-Erectable Refuges and Anti-Radiation Shelters, by F. I. Ostroukh, It is one of the few up-to-date examples of how the Soviet Union advises citizens on civil defence, and the details are published this week in the University of Sussex's ADIU Report.

The pamphlet, reprinted in 1983, is sprinkled with illustrations of how Soviet citizens should go about building their improvised shelters. The assessments of how thick the material needs to be for protection against both initial radiation, and residual radiation are based on "the coefficient of reductive effect of penetration radiation and radiation in a contaminated area". This coefficient, according to the ADIU Report, is equivalent to the Home Office's half-value thickness, the thickness of a particular



Building for survival, down on the commune

material needed to reduce the radiation by a half.

The most notable difference between the Soviet and British advice is the Soviet's preparedness to build shelters out of just about anything that can be found in an urban or rural landscape.

The shelters described in the Soviet pamphlet are supposed to reduce the amount of radiation received by the occupants by up to 300 times. By covering your living room floor with 50-70 centimetres of soil and hiding in the basement you can do even better, the pamphlet says. In this case, and assuming the floor does not collapse under the weight, radiation can be reduced by up to 600 times the external value.

The pamphlet often refers to "endurance packs" (barrel for human excrement) and a ventilation system driven a bicycle wheel turned by hand.

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of

RUSSIANS EGET N-WAR

> MANUAL By NIGEL WADE in Moscow

NEW Civil manual for Russians tells how to build a nuclear fallout shelter from a bundle of branches or heap of snow. It suggests that radioactive dust may safely be removed from clothing by brushing vigorously with a handful of straw.

As in earlier such publica-tions from the Soviet civil Soviet civil defence organisation the booklet, carried "Something Everyone Should Know and Understand," disguises form ordinary Russians the true horrors of nuclear war.

Its tone is reassuring rather than scary and the text implies that there is a fari chance of survival under nucelar attack. This has consistently been the approach of civil defence propaganda in Russia-evidently to avoid giving any to avoid giving any

grounds for panic.

Soviet civil defence strategy is to keep a sizeable part of the p-opulation working in vital industries after a nuclear war breaks out while the civilian masses are supposed to eva-cuate the cities according to pre-arranged plans.

Destructive potential

Pronouncements by Soviet leadership in the foreign policy field have for some years acknowledged the colossal destructive potential of nuclear conflict and comdemned nuclear was unwinnable.

Soviet scientists and doctors have spoken at many inter-national conferences on the heavy damage nuclear war would do to cities and the nutural environment.

These analyses are rarely published in the Soviet Union, however, apparently because the Kremlin does not want to create a sense of public fear or alarm. Yet most Russians know very well what a nuclear bomb can do and are highly sceptical of reassuring booklets.

bookkets.

There is a common joke about "wrapping yoursself in a sheet and going quietly to the cemetery" when nuclear war breaks out. Soldiers tell of Pte Ivan Invancy who practises holding his rifle stiffly in front of him so that the barrel woun't nielt on his books. bools.

CIVIL DEFENCE

ferring to stay at home with their families.

The fictional chief executive in Threads finds himself lacking some 50 per cent of his team. This proportion of absentees is not inconsistent with our own findings at Local Government News.

This has nothing to do with nuclear free zoning or even adequate training beforehand. It is a basic human reaction which both councils and the Home Office would appear powerless fail to alter.

drama, Threads. It is irony which apparently escaped Mr Eric Alley, chairman of the Association of Civil Defence and Emergency Planning Officers, when he criticised the film during the subsequent discussion on Newsnight

Despite Mr Alley's rather disparaging remarks, Threads should be regarded as a more accurately considered—and more sobering—picture of local authority civil defence under nuclear attack than has ever before authority civil defence which places a serious limitation on ffectiveness of a conwartime control eversing it survives the given to the Britis C. — Yours sincerely, p Cooper. Government News. this aspect effectiveness of tack . Despite Mr supposing It is public. (September 25)
Sheffield is, of course, an enthusiastic supporter of the nuclear free zone movement. The implication of this, Mr Alley maintained, was that as far as civil defence was concerned, Sheffield was "an unprepared city."
And yet what we saw in Threads were arrangements for war-time control far more elaborate than would be found today in many councils which were actually four-square behind the Government's defence policy. The council war room in Threads appeared as tolerably well-equipped and protected — it withstood the collapse of the town hall above it — as one could reasonably expect to find in many a county council such as Sheffield.

The film, in view of the encouragement given to its

encouragement given to makers by Sheffield Ci Council, showed council o cials undertaking their ci

the City offidefence roles irrespective the "nuclear free" views their political bosses. The showed a commitment duty overriding all polit consideration. The real plem, highlighted by the fwas the likelihood that m