FEASIBL
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STANDARDS
SHE
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Protection from radioac

The National Policy on shelt
states that, "In the ever
offer the best single
greatest number of our
series of studies and te
National Resear

"Adequate s
radiation casualties

"Medical pr
death following exp
exist. There is extre
which would provid
small fraction of the

"There is ad
construction of effe

The princ ipal requirements
shelter o cupants and the
the more effective the protect
the most readily availab
shielded by the earth ar
provides good shielding.
walls inc reases their pr

Other construction mate
clay tile filled with sand
wood, co ered with eart
shielding from fallout.

With our own engineering staff [illegible] developed numerous designs of [illegible] "The Family Fallout Shelter" [illegible] tion in the home. [illegible]

Designs for dual-purpose [illegible] and office buildings, [illegible] designs for shelters beneath [illegible] in subways are being [illegible] various materials manufacturers [illegible] economical dual-purpose [illegible]

The American Institute [illegible] based on our designs, [illegible] in Chicago in connection [illegible] exhibit in the coming [illegible] and Los Angeles.

We have also given technical [illegible] developed shelter designs [illegible] in housing developments [illegible]

Adequate fallout shelter [illegible] The lowest figure $2[illegible], [illegible] basements.

Where separate independent [illegible] cost may run $150 per person [illegible] between these two extremes, [illegible] incorporated in new [illegible]

What standards are required?

In planning for fallout protection [illegible] fallout contamination [illegible] for humans, and the type of [illegible]

OCDM has undertaken [illegible] vary from those included [illegible] and builders to specify [illegible]

This chart indicates the [illegible] across Iowa after a [illegible] Base near Omaha. The [illegible] percent fatalities and [illegible] conditions.

When a 10-megaton nuclear [illegible] the earth, an area of blast and [illegible] from ground zero during the first [illegible] the cross-hatched area on the [illegible] During the subsequent 18 hours [illegible] contaminated by fallout as shown [illegible] detonation, fallout would [illegible] hours, about 300 miles to the [illegible]

Without fallout protection, [illegible] would die during the first three [illegible] the yellow and inner green shaded [illegible] which might incapacitate them [illegible] the cumulative outside radiation [illegible] might be as high as 20,000 R. [illegible] Grinnell, 400 R; at Iowa City, [illegible]

Medical advice to OCDM is that [illegible] if the total radiation dose, spread [illegible] days, does not exceed [illegible] dose of more than 200 R within the first few days, [illegible] radiation sickness.

Time is a factor in measuring the [illegible] radiation [illegible] some of the radiation damage. For [illegible] over a period of weeks without [illegible] absorbed in a few days could [illegible]

In wartime, an individual receiving [illegible] to take as much as 900 R in a year [illegible] necessary, of course, to limit [illegible] more or less evenly over the [illegible]

To keep radiation exposure [illegible] sufficient protection in much of this [illegible] shielding afforded by the first floor [illegible] 200 miles from the point of explosion [illegible] the right side of the drawing, will receive [illegible] of that which exists in open areas. [illegible] the cumulative dose to people [illegible] for the first two weeks would be [illegible] would be 100 R on the first [illegible]

At about 130 to 200 miles from [illegible] a home basement should [illegible] sickness. As indicated in the [illegible] will reduce the radiation exposure [illegible] Grinnell remained in the [illegible] interval, their radiation exposure [illegible] Des Moines, the two-week exposure [illegible]

However, better fallout protection [illegible] miles from ground zero. [illegible] basement concrete block shelter [illegible] shelter, which can reduce [illegible] adequate fallout protection [illegible] remained in basements or [illegible] dose of about 100 R during the [illegible] of these cases, the [illegible]

In the event of a nuclear [illegible] United States. The fallout pattern [illegible] complicated than this simplified [illegible] greater radiation intensities [illegible] where homes and home basements [illegible] However, there is no way of predicting [illegible] we cannot advise that the [illegible] area will provide adequate protection [illegible] to provide themselves with the [illegible] fallout shelter manual. With the [illegible] initial blast and thermal [illegible] war.

The success of a program of [illegible] emergency services and, [illegible] monitoring and upon adequate [illegible]

OCDM's National Warning System [illegible] in every State within 90 seconds [illegible] systems spread the public warning [illegible] are alerted in minutes. [illegible] every day at North American [illegible] military warning officers, [illegible]

We are strengthening this system [illegible] system. Our ultimate objective [illegible] that all people will receive [illegible]

OCDM provides funds f[illegible] points in this National W[illegible] by State and local perso[illegible] capability, OCDM also pr[illegible] basis for NAWAS extens[illegible] in each county.

Sirens and other warnin[illegible] percent Federal funds a[illegible] cities in the United State[illegible] remembered that sirens pr[illegible]

Considerable research has be[illegible] economical indoor warning d[illegible] Emergency Alarm Repe[illegible] This system utilizes pow[illegible] individua homes and othe[illegible] regarded as probable. [illegible] be reduced to 15 to 30 m[illegible] to develop the maximum [illegible] relay of information t[illegible]

Standard AM radio, [illegible] adjunct to the warning syste[illegible] particularly valuable in [illegible] advising people when the [illegible]

We have a command com[illegible] call-up at any time. [illegible] and the States. This sys[illegible] the next year will have a [illegible] is placed on police and [illegible] State systems have been [illegible] available under the OCDM [illegible] with the public will be or [illegible]

A national radiological [illegible] public rapidly of danger [illegible] information upon [illegible] and recovery act[illegible]

A network of approximately [illegible] is being established across the country. A [illegible] stations will be at Federal [illegible] the remaining 144 thousand will be [illegible] Each is approximately 15 thousand [illegible] of 150 thousand stations is [illegible] year 1963. The Office of [illegible] ing instruments required [illegible] Government employees.

OCDM and AEC have been [illegible] inexpensive home monitoring [illegible] Such instruments can be used [illegible] to estimate how long a [illegible] it is safe to leave.

OCDM announced last [illegible] radiation instruments for the [illegible] of two instruments and [illegible] to measure (1) dose rate [illegible] to more than 100 roentgens per [illegible] roentgens. OCDM is bringing [illegible] furnishing each State or [illegible] offer instruments in the same [illegible]

OCDM research to improve [illegible] a suitable instrument is described [illegible] packaging, distributing, [illegible] purchase must be reliable [illegible] to be completed this year. [illegible] under consideration may [illegible]

We continue to utilize results [illegible] prototype developments under AEC [illegible] combined with a radio, and [illegible] given by a siren-like noise [illegible] detector in a radio. [illegible] than $20 and in the second [illegible]

Citizens instruments [illegible]
designated for operational [illegible]

Neither will the widespread [illegible]
trained CD monitors. [illegible]

The National Policy on Evacuation [illegible]
or misrepresented. The Nat[illegible]
specifically. It states:

> "Governments [illegible]
> of warning as is practicable [illegible]
>
> (1) 'Evacuation [illegible] target areas [illegible]
> near assumed targets [illegible]
> plans for evacuation [illegible]
>
> (2) "Shelter - [illegible]
> full advantage [illegible]
> protection will [illegible]
>
> 3) "The action to be taken [illegible]"

State and local governments [illegible]
have established evacuation [illegible]
would permit evacuation of [illegible]
2200 counties have developed [illegible]

We emphasize that evacuation [illegible]
execute movement plans [illegible]
dictate such action. [illegible]
of shelter but neither [illegible]

This is the same tactic which [illegible]
conditions of nuclear war. [illegible]
explosion, their chances [illegible]
if they are able to move [illegible]
We would be derelict [illegible]
moves when warning [illegible]

We are placing great emphasis on the [illegible] Evacuation plans should emphasize [illegible] wherever possible. Sometimes it will be necessary [illegible] of intense radiation after an attack.

All of these programs -- warning and communications, [illegible] ing and movement -- together with the measures to [illegible] defense mobilization -- have the basic objective [illegible] National Plan for Civil Defense and Defense Mobilization, [illegible] "deter aggression, and in the event aggression does occur, [illegible] survive, recover and win." Fallout protection efforts [illegible] until the fallout radioactivity subsides to safe levels, [illegible] emergency crews to operate [illegible]

In areas of heavy fallout [illegible] necessary for everyone to remain [illegible] individual family would be [illegible] at the time of attack.

Government action during this period is [illegible] Services." These include [illegible] limited emergency feeding.

Later, as crews were able to [illegible] and Federal Governments could [illegible] emergency feeding and other [illegible]

We cannot say too bluntly that [illegible] individual family and every [illegible] own.

Our economic system depends upon [illegible] across the nation. A city [illegible] able to meet the basic needs [illegible]

As these communities cannot depend [illegible] Plan calls for States and cities [illegible] help for at least four weeks after [illegible] call upon the Federal Government.

OCDM's overall respon[illegible] carried out by using the capabil[illegible]ling to plan. The Department of A[illegible] food, Interior for fuel a[illegible]

These and other resource [illegible] Annexes, which have be[illegible] directors as wel[illegible]

Such problems o[illegible] more immediate surv[illegible]

Announced on May [illegible] reasonable public accep[illegible] letters and inquiries regar[illegible] obtaining appropriations [illegible]

The Federal role has [illegible]

1. Education, [illegible] which can be taken [illegible]

2. Survey of existing s[illegible] the value of existing s[illegible]

3. Research to know [illegible] in existing, as wel[illegible]

4. Prototype design an[illegible] research and demonstra[illegible]

5. Leadership and exam[illegible] appropriate new building [illegible]

6. Incorporation of s[illegible] funded).

I have touched on these p[illegible] taken in the field of [illegible] barrier and do everything p[illegible] Government realizes the [illegible] involving Federa[illegible]

1. The 1961 budget [illegible] shelters in all ne[illegible] suitable. $11[illegible]

2. The Federal Housing [illegible] Administration have [illegible] eligible items in [illegible] In addition, FHA, [illegible] building of fallout [illegible]

3. The Housing and H[illegible] Facilities Adminis[illegible] be included in pro[illegible] under its College H[illegible] Program, and its [illegible]

4. The Department of [illegible] Public Health Serv[illegible] construction under the [illegible] tion of fallout shel[illegible]

5. The HHFA and the [illegible] "Master Planning" grant[illegible] the incorporation of fallo[illegible] In addition, local a[illegible] development impro[illegible] share of the proje[illegible]

6. The Public Housing A[illegible] of ruling that fallou[illegible] housing projects up[illegible]

Survival [illegible] comes.

I have made here three [illegible]

First, fallout prote[illegible] the cost.

Second, the standards of [illegible]

And Third, fallout shelter[illegible] radiological defense[illegible]

January 25, 196[illegible]