

The device consists of a large threaded bolt and nut and a wrench for turning it. These are secured with a seal so that they remain beside the door at all times and are not to be used except in extreme emergencies.

The bolt is inserted into a hole in a steel tab which is set in the shelter wall. The nut is placed on the bolt and in front of the tab, away from the shelter room. The bolt and wrench are designed so that 40 tons of pressure can be exerted on the end of the bolt by a normal person turning the wrench. This can force the vertical door open far enough for a person to slip through.

For our horizontal doors we have adopted this solution by providing three very heavy reinforced and drilled plates equidistant around the doorway and welded to the entryway tube below the door. (These are on the mobile display blast doors and should be seen by anyone who has an opportunity to visit one of those displays.) One of those plates is positioned directly under the rotary hinge pin, so that the pin will not bind when the door is lifted.

The insertion of three bolts in the these plates allows 120 tons of vertical lift to be applied to the bottom of the blast door. Even if someone parks a large Caterpillar tractor on your door, you can easily lift it off far enough to emerge from your shelter. Actually you can move several tractors if they can figure out a way to stack them all on your door.

This arrangement does not solve all possible problems. For example, dense rubble several feet deep and positioned in certain ways could still prevent your exit. This could be offset by building the entryway so that the top few feet of entryway telescopes upward over the bolts instead of just the door. This additional precaution should be considered for public shelters in the streets of large cities.

Such shelters should also have a telescoping air vent that could be screwed upward through the centers of their blast doors. For most private shelters and in most locations, however, the simpler design reduces danger to an acceptable minimum.

Two entryways - never build a shelter with only one! Air supply through the entryway with equipment such as blast valves easily accessible from inside. Redundant air inlets and outlets. No hinges or locks on the doors which could jam under distortion. Self-rescue devices installed inside the doors. These precautions go a long way toward ensuring that your shelter does not become a death trap.

PERCEPTION VS. REALITY

A few years ago, Americans perceived a very great danger. Over 10,000 Soviet nuclear weapons were being aimed at us by our "enemies".

Today, Americans are complacent. They have been told that the custodians of those weapons (which are still being aimed at Americans in numbers over 10,000 and in increasingly effective and dangerous ways) are now our "friends".

The reality is that the Soviet navy has improved by adding another nuclear submarine every six weeks. Soviet missiles have improved in accuracy. They have also improved in