A short reply to "How do I build/buy a shelter?" 7-30-87

There are three basic types of shelters, fallout, blast, and chemical/biological shelters. Shelters can be made to protect from any one of these hazards, or can be protected from any in combination.

The easiest to build is a fallout shelter. All that is required of a fallout shelter is an area that is protected by mass from fallout radiation which consists of alpha, beta, and gamma radiation. The area has to have ventilation appropriate to the climate, season, type of shelter and number of shelterees. Provisions must be made for measuring radiation, handling human wastes, providing light, adequate water and food for several days to perhaps several weeks. A source for plans of these shelters are availble in Lobdell's - An Ounce of Prevention, Kearney's - Nuclear War Survival Skills, from TACDA's various blueprints, and other sources. They range from do it yourself, at practically no cost temporary (temporary = lasting a year or so) units to $1,000 do it yourself permanent units to $10,000 multipurpose room additions.

A blast shelter must be strong enough to withstand overpressure and dynamic pressures from blasts. They must be air tight to accomplish this. This complicates ventilation requirements as a valve, diaphram or member must seal the sytem during over and under pressures. Doors are needed that can seal air tight and withstand over and under pressure. Information sources are again Lobdell, Kearney, TACDA + British Home Office, Marcel Barbier, and various Swiss government publications some of which have been reprinted by Oak Ridge National Laboratory. These shelters are more elaborate but can still be homemade by yourself though they require greater effort and skills than a fallout-only shelter. They can be made of wood, steel, or concrete.

A chemical/biological shelter is any area that prevents air-borne chemical gases or chemical, biological, or toxin particles from reaching the shelterees. An air tight enclosure with activated carbon and small particle filters are the essentials here. A blast shelter can be easily upgraded to a Biological /Chemical shelter with the addition of the needed filters.