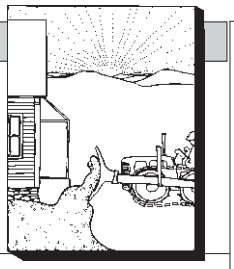
Hypertat: For Where the LivinAin't Easy



by John D. Wagner

Flash Gordon, look out. NASA, hold the launch. It's time to put on your moon boots and stretch out for a freeze-dried cold one inside the super-durable, climate-controlled Hypertat, a "new category of shelter."

Missouri-based Hypertat corporation and designer Michael Jantzen have taken five years to develop the Hypertat structure, and they have great plans for it. It can be used most anywhere; its design is versatile and energy-efficient. From what the manufacturers claim, the Hypertat can take care of any remote-site living requirements, except maybe gassing up your dune buggy or sending out for pizza.

Hypertat Corporation must be doing something right. NASA just bought one of these modular-shelter buildings to conduct research on experimental plants for purifying water and air in closed systems. The agency hopes to use this technology in outerspace eventually.

The modular units are 45 feet long and 17 feet wide. Once assembled, the design allows a 15-foot-wide interior space – that can be extended lengthwise – and a vaulted ceiling 9 feet, 4 inches high. Units can be readily moved and assembled. A 200-square-foot unit packs into a 20-foot container, and two 200-square-foot units can be packed on a standard flatbed or trailer truck. (They ain't cheap though. NASA paid $48,000 for theirs.)

Hypertat claims that two people can handle the heaviest piece, and a single unit can be put up in less than 8 hours. Assembly or disassembly requires no special skills, tools, or equipment. They've designed the system for quick assembly. For instance, the modular-plastic shell attaches rapidly without fasteners, interlocking to form a tough, low-maintenance weatherproof shell. When assembling the units, Hypertat claims, self-locating flanges and special Hypertat-designed clips speed the process. In cold climates, crews can even wear mittens while they work. The modular support frame adapts to uneven terrain with minimal site preparation, and there's no need for a concrete foundation.

Because the units are modular, you can customize the structures into a variety of shapes. They can be linked together to form a multi-roomed living center. Or, say you wanted to build a desert work station or a remote ocean-front research facility, you could adjust the unit's shape for the environment or for your specific needs. (If you're going to retreat to your unit during wartime, Hypertat is really for you. An advertised feature is that the units are readily sealed against chemical warfare! So you can sleep a little more soundly when you hear the missiles land nearby.)

Scientific field stations, or temporary-relief and medical stations, will probably be the major application for Hypertat units, and that's just what the company suggests in their literature. Because they are so easy to ship, a clinic or operating room can be set up with great efficiency. For universities, archaeology, astronomy, geology or life-science research facilities could be put up with little disruption of the environment. After you take it down, it can be reused.

If you are planning for a harsh climate, the structural panels may be factory-insulated to specification, from the lease expensive all-fiberglass R-35 to the most expensive phenolic-foam R-80. In experiments in Barrow, Alaska, with R-55 panels, the Hypertat was considerably more efficient to heat than conventional portable buildings. For example, one day's heating need based on an outside temperature of 50 below zero shows the Hypertat using only 4,660 Btus and conventional portable buildings using 20,709 Btus.

Or, if you are in the sun, Hypertat can be equipped with its own phase-change solar space heater, called Solarounds. Louvered wall ports allow natural lighting, yet they can control and limit solar gain in hot climates. Otherwise, the units accept conventional utilities, including air conditioning, heating, ventilating, wiring, and plumbing. On the interior, the unit accepts acoustic or protective wall coverings. You can use regular drywall, industrial cladding, or Hypertat's Versa-tiles. The structure allows for free placement of windows, doors, rooms, partitions, services, and utilities.

In addition to its weathertight construction and high insulation factor, Hypertat claims high resistance to extreme temperatures, high winds, heavy snows, sea spray and sandstorms. You could probably take it to a Super-Bowl tailgate party and have it come away intact. ■

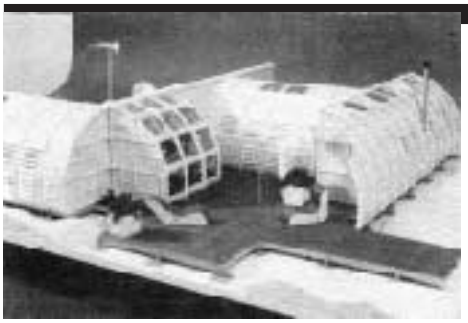
The modular-support frame adapts to most terrain with minimal site preparation.

Finished modulars are 45 feet long; interior space is 15-feet wide, with 9-foot 4-inch vaulted ceilings.

Assembly of Hypertat units requires no special skill or tools and can take less than 8 hours for two people.

Interiors are cozy and easy to heat in cold-weather units compared to other portable buildings.

Modular-plastic cladding attaches rapidly without fasteners, interlocking to form a weatherproof shell.



Because the units are modular, you can customize the structures into a variety of shapes, as shown in this scale model of a research station.