

# Get the *Inside* Story

EXTREME WEATHER AND WEATHER EXTREMES CAN PUNISH THE OUTSIDE OF YOUR COMMO SHELTER.

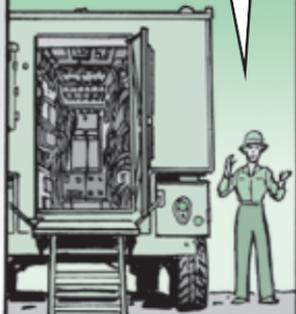
BUT IT'S UP TO THOSE OF YOU WHO WORK AND DO MAINTENANCE INSIDE THE SHELTER TO MAKE SURE THOSE EXTREMES STAY OUTSIDE.



THE IDEAL INSIDE-SHELTER ENVIRONMENT IS COOL AND DRY.

THAT MEANS YOUR MAINTENANCE FIGHT IS AGAINST HEAT, HUMIDITY, AND CONDENSATION.

HERE ARE A FEW TIPS TO HELP *YOU* IN THE BATTLE...



## Ventilation

Closing the door to your shelter makes it nearly airtight. If the outside temperature changes, condensation forms in the closed shelter.

But you say it's dry where you are? All the water you're drinking to stay hydrated is lost in sweat. Inside your shelter, that sweat turns into condensation.

Keep things dry by opening the door's vent cover. Also, turn on the ventilating fan and open the fan vent covers. That will get fresh air flowing through the shelter and across the gear. The airflow helps keep your comms dry.

OPEN THE DOOR VENTS.



When the weather and environment permit, open the shelter's door for an hour or so each day to get rid of moist air.

Don't forget those closed-up shelters in storage. They suffer most from condensation. Check them often and let them breathe when necessary.

Further protection from inside moisture includes MIL-D-3464 desiccant and a commercially available vapor corrosion inhibitor (VCI).

Foam pads impregnated with VCI placed throughout a shelter will allow the VCI vapors to chemically bond to metal surfaces and provide a moisture barrier between the metal and moisture. In an S-250 shelter in storage, seven 10 x 10 VCI pads should provide a year's worth of moisture protection. In an S-280 shelter, you'll need 11 pads.

Desiccants add protection by absorbing moisture and humidity. Use commercially available indicator cards along with desiccants. These cards change color to indicate the moisture level in the desiccant and let you know when to change the desiccant. You will need three indicator cards randomly placed in the shelter. Depending on the humidity level, you will need fifteen 16-oz bags of desiccant for an S-250 shelter and 24 bags of desiccant for the S-280 shelter.



### Mats Matter

If your shelter has rubber floor mats, take a peak underneath. Moisture has a way of collecting under them and forming mold and mildew. If you find moisture, pull up the mats and hang them out to dry. Wipe the shelter floor dry with a mop or rag.

Also, dust and sand finds its way under shelter mats. Keep it out of your shelter before it finds its way into cooling systems. Don't vigorously sweep your shelter! That will just stir up the dust and sand. Make a rule for everyone to shake the sand and dust off clothing and boots before they enter or flying sand and dust will come in the door.



### Overheating

Chances are good that your commo shelter is operating in hot-weather temperatures—120° F or more! Compared to where you're sitting that may even seem cool!

Radios run hot and don't need much outside help to overheat. You must keep your shelter and the equipment in it cool!

Remember these three words to combat overheating—shade, shade, shade. Shade your shelter whenever and however possible. Use anything that'll make shade. Remember, too, that shade moves as the sun goes up and down and as you change the position of your shelter.



Get a canopy, NSN 4940-00-937-2553, for your S-280 shelter. It comes with its own mount hardware.

There is no canopy for the S-250 shelter, but you can get a tarp, NSN 2540-00-937-5530. It comes with a tie rope, but no mounting hardware. Be sure to rig the tarp so there's some space between the tarp and the shelter to let air circulate.

The equipment in your shelter and the shelter itself has cooling systems to aid in your fight against overheating. Some cooling systems can just barely keep up under normal hot-weather conditions. When it's really hot, you've got to do your part to help!

Your part is keeping filters and fans, fins and grills, screens and covers, clean! To do this job right, you have to check those critical clogging areas repeatedly. If you wait until the cooling system is degraded, you have waited too long. Make sure everyone on your shelter team knows their cooling-systems checking responsibilities. Problems arise whenever someone on the team thinks their checks are someone else's job!



## Keep Out the Clutter!

Odds are, a lot of things have found a home in your shelter that don't belong there. Some shelters have the dirtiest, grimeiest gear stacked right next to—or on—delicate equipment.

If that's the case with your shelter, it's time to put out the unwelcome mat! Too many folks who are not in-the-know see the center of your shelter as unoccupied territory to be conquered by their camouflage netting, tents and tent pegs, and personal equipment.

Some of you commo types are guilty, too, as you pitch antennas, cables and generator-related stuff into your shelter.

Every shelter should have a load plan that minimizes the things that can be carried inside. With a plan in hand, it is easier to deny requests for transport of unauthorized equipment.

Even with a load plan, nothing should come inside your shelter that has not been cleaned beforehand. Also, nothing should be tossed inside. Everything should be cleaned and carefully placed.

Are there times when speed may be the most important consideration—even overriding cleanliness and placement? Yes. Life-and-death situations are a present reality. But make sure the urgency in packing outweighs the real possibility of damage to your commo equipment.



## A Final Thought

WHEN IT COMES TO YOUR COMMO SHELTER, STRIVE FOR CLEANLINESS.

A DIRTY AND CLUTTERED SHELTER LEADS TO DAMAGED AND DOWNED COMMUNICATIONS EQUIPMENT.

DAMAGED AND DOWNED EQUIPMENT LEADS TO A FAILURE TO COMMUNICATE. ON TODAY'S BATTLEFIELD, A FAILURE TO COMMUNICATE CAN LEAD TO DEATH.