

TB98 Freezer Test:

April 2008

Objective: Find out what can be done to stop or reduce ice buildup on TB98 Mast and Seatrack.

Products tested:

- ❖ Bare Stainless Steel Mast.
- ❖ Stainless Steel Mast undercoated with Intershield 300 and over coated with **Zyvere**.
- ❖ Stainless Steel Mast undercoated with Intershield 300 and over coated with **Icephobic**.
- ❖ Stainless Steel Mast undercoated with Intershield 300 and over coated with **InterSleek**.
- ❖ Seatrack Plastic Antenna coated with Icephobic and **Zyvere**.
- ❖ Partner Plast 800I Tailbouy with no coatings applied.
- ❖ Tarp or Shield system to deflect water mounted on TB98

All test done with sea water 6 degrees C, Thermal chamber -20C, which warmed up to about -10C when we were in and spraying water. The unit had a large freezer unit and fan that moved air in the chamber.

Time to get down to -20C was about .5 hour from start up at 6C. Unit was a warm or cold chamber but we only used cold.

Sea water was sprayed on the units in 3 steps, using .5l each time. Freeze- Spray, Freez-Spray, Freeze-Spray, and melt to see what melting time is needed.

Results from items tested.

1: Stainless Steel Mast Bare from factory.

The SS mast collected ice very fast and it was not possible to get it off by hand. Accumulation was appx.

1cm over all of the steel with large ice extensions from the radar reflector and collections around joint sections.



Schlumberger

- 2: Mast with undercoat and Zyvere Coating, (used to repel water and dirt on automobiles)
Water froze on this just like the others, but there was improvement over the SS mast
It was possible to flake off bits and melting was much faster.



Conclusion:

Two component coating from Nanovere, added protection to ice build-up.

20 Ft Freezer

