

## The WILCO MARINE

Activities in the replacement of  
RTG's and safety on aids to  
navigation

### **BALTIC AREA (1992)**

Estonia, Latvia, Lituania.

- Hydrographic Surveys, Lighthouse renovation and RTG removals

Replacement of total 29 RTG's

Estonia: 13 units

Latvia: 16 units

KOLKA Latvia (RTG)



# St. Petersburg



## St. Petersburg (1998)

Due to mutual agreements between Federal Russian State and Denmark special conditions applies to:

Survey and planning of replacement of SR-90 (comprising 93 RTG's)

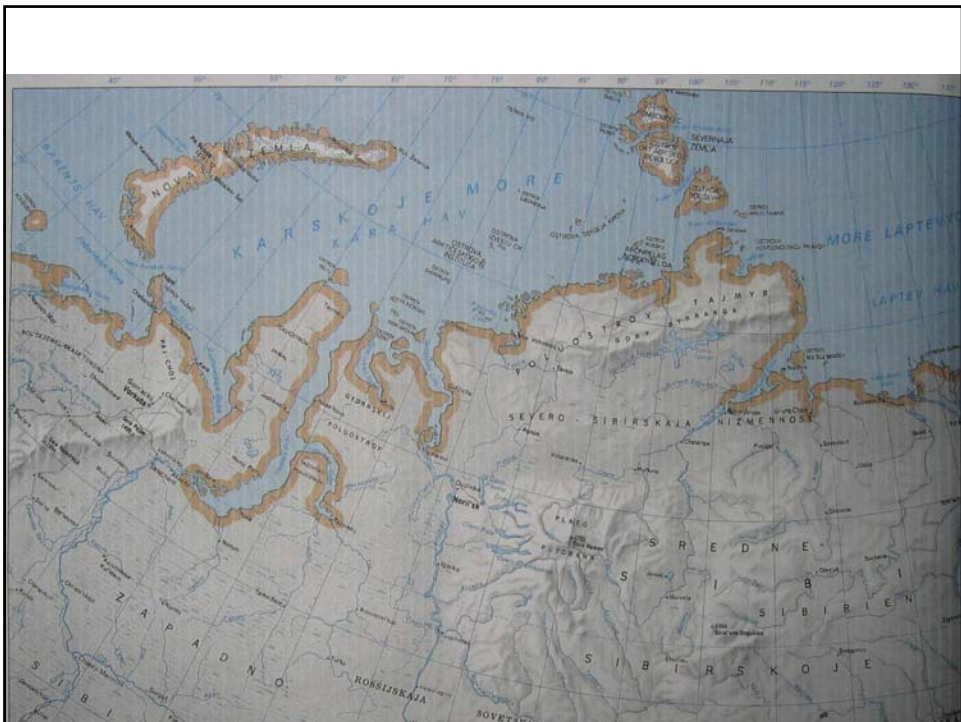
Renovation of 4 test Lighthouses

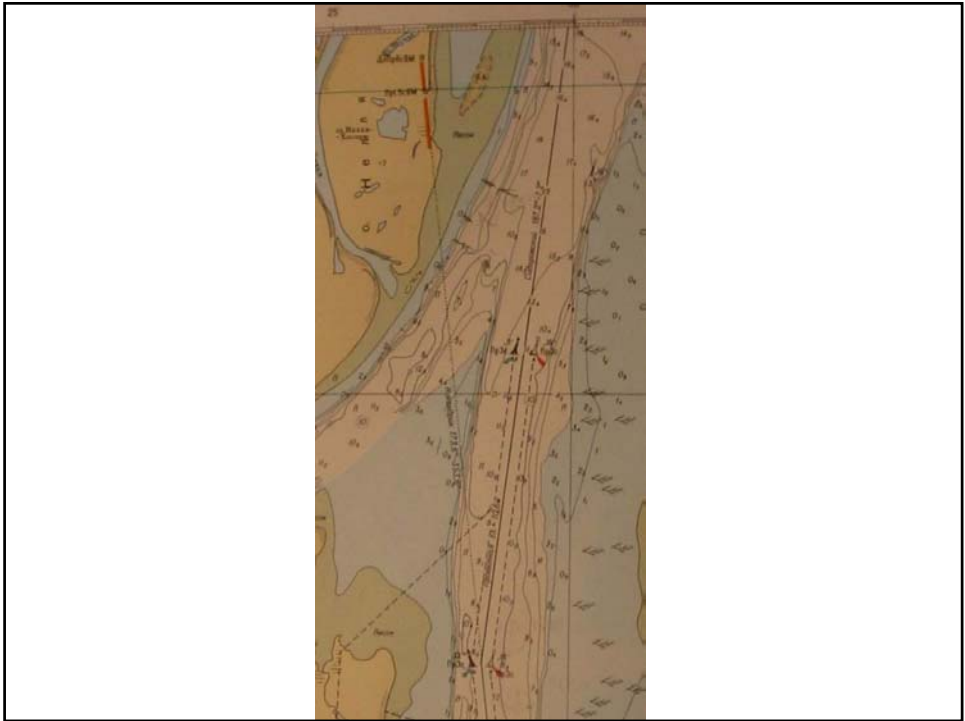
N.S.R.



## The Northern Sea Route

Survey and pilot Project for replacement of RTG's







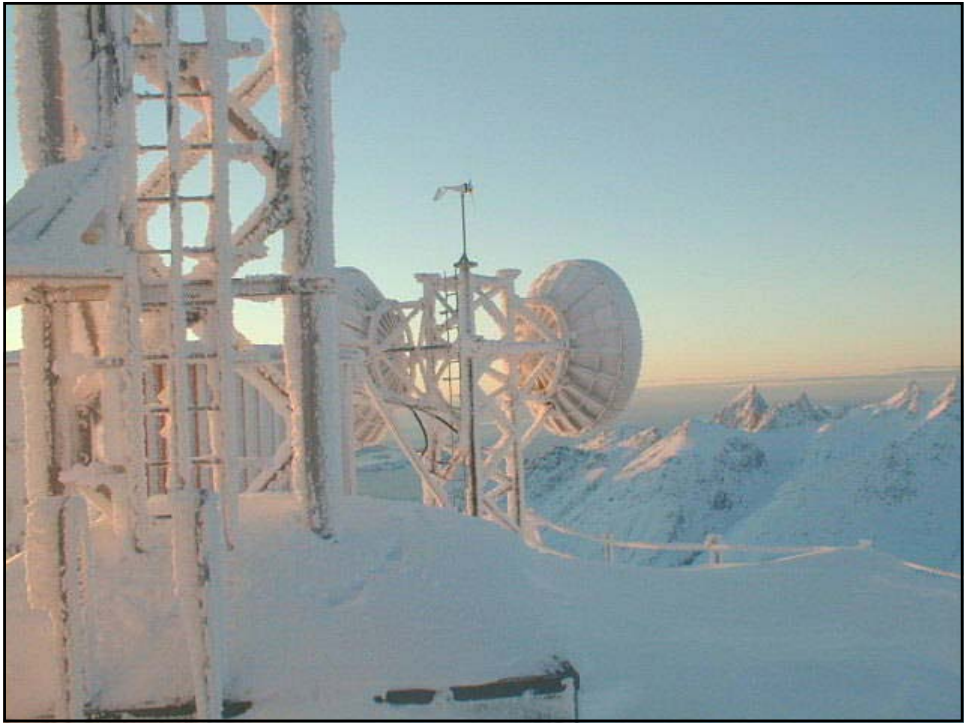
Pilot Project 4 units



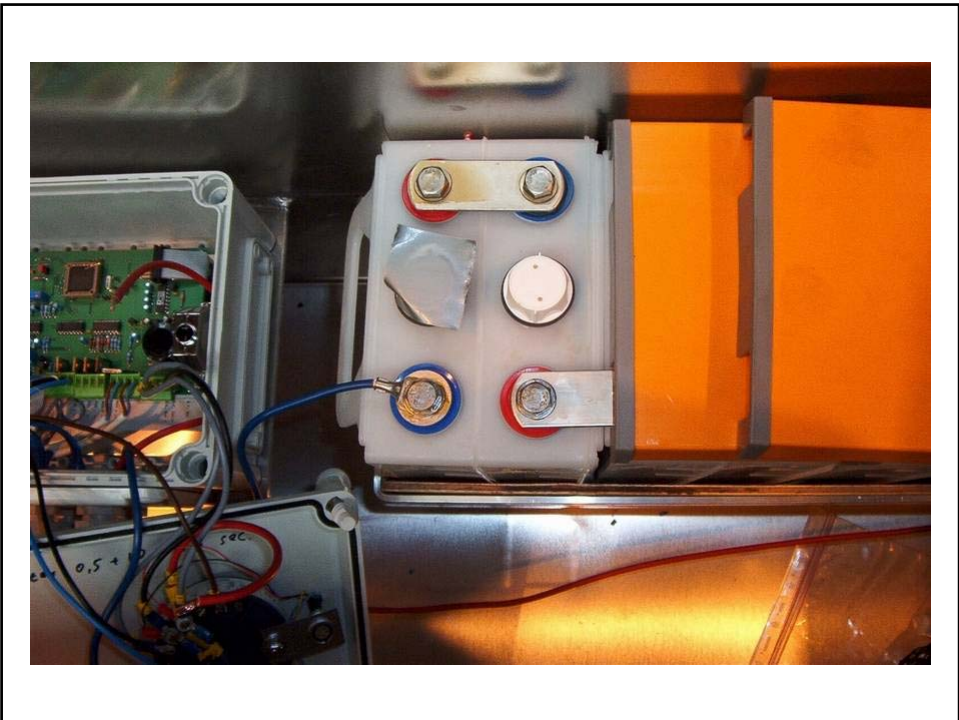
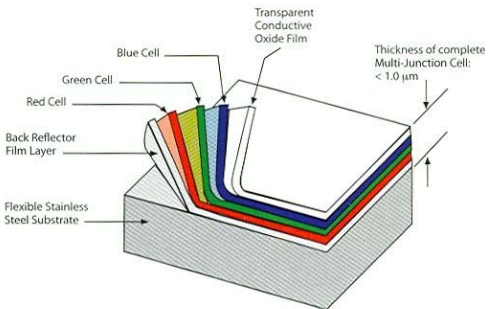


## Wind Generator

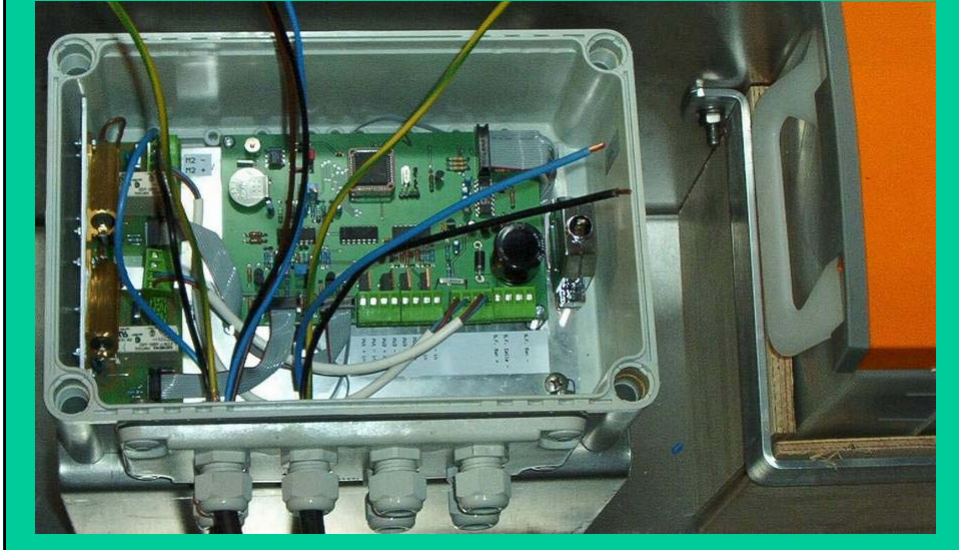




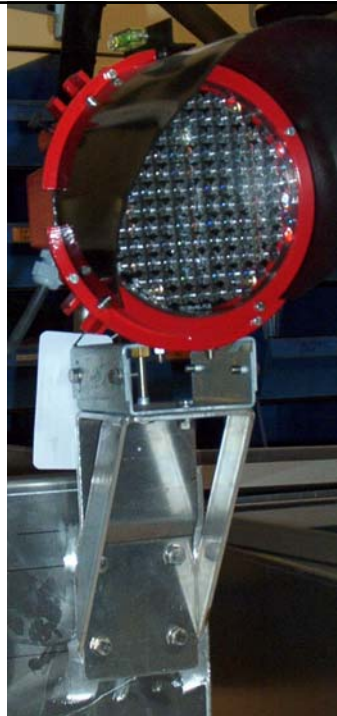
PRODUCT	SHR-17	SSR-64
Rated Power (W)	17	64
Operating Voltage $V_{MPP}$ (V)	9.0	16.5
Operating Current $I_{MPP}$ (A)	1.9	3.9
Open circuit Voltage $V_{OC}$ (V)	13.0	23.8
Open Circuit Voltage $V_{OC}$ at $-10^{\circ}\text{C}$ and $1250\text{ W/m}^2$ (V)	14.8	27.1
Short Circuit Current $I_{SC}$ (A)	2.35	4.80
Short Circuit Current $I_{SC}$ at $75^{\circ}\text{C}$ and $1250\text{ W/m}^2$ (A)	3.07	6.30
Series fuse rating (A)	4.0	8.0
Minimum blocking diode (A)	4.0	8.0
Dimensions (mm)	304.0 <sup>a</sup> x 2194.6	420.0 <sup>b</sup> x 2924.0 <sup>c</sup>
Weight (kgs/m <sup>2</sup> )	7.5 <sup>d</sup>	9.8
Area (m <sup>2</sup> )	0.28	1.22

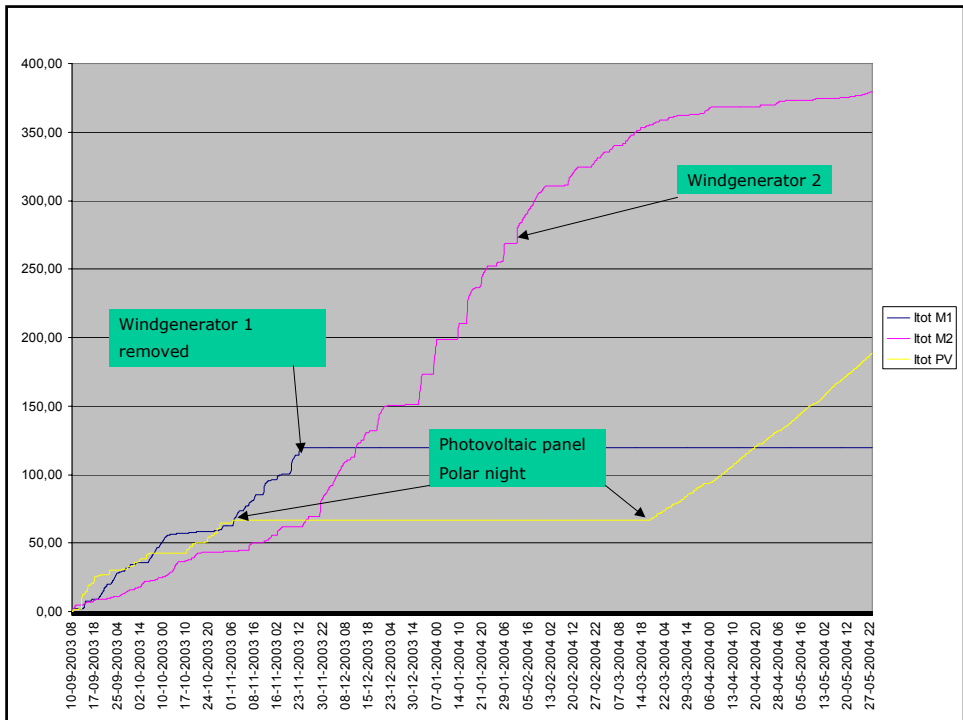
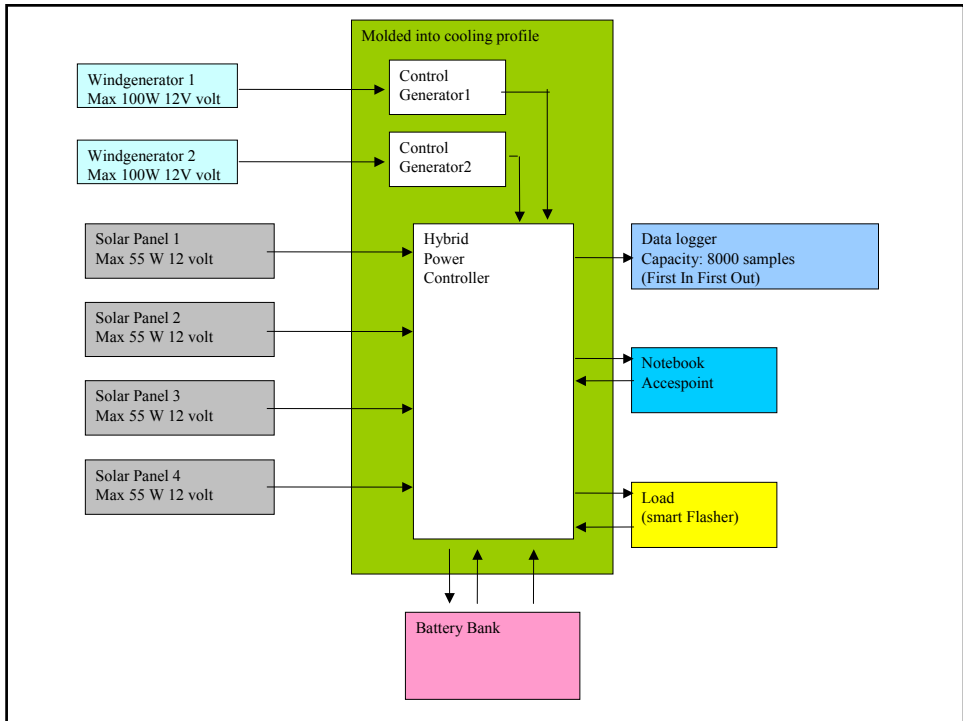


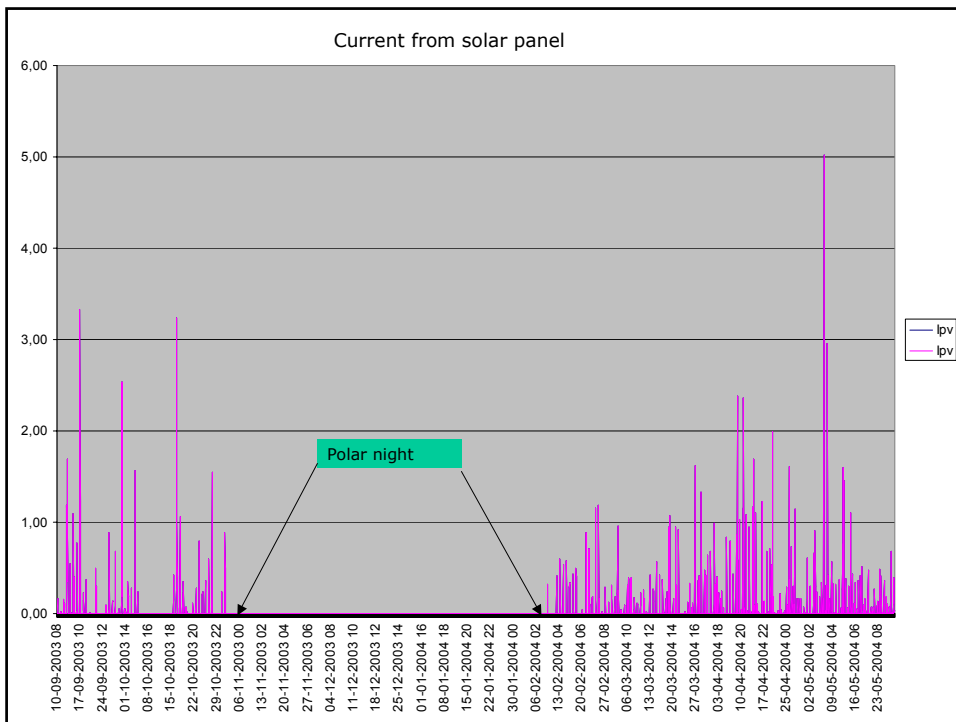
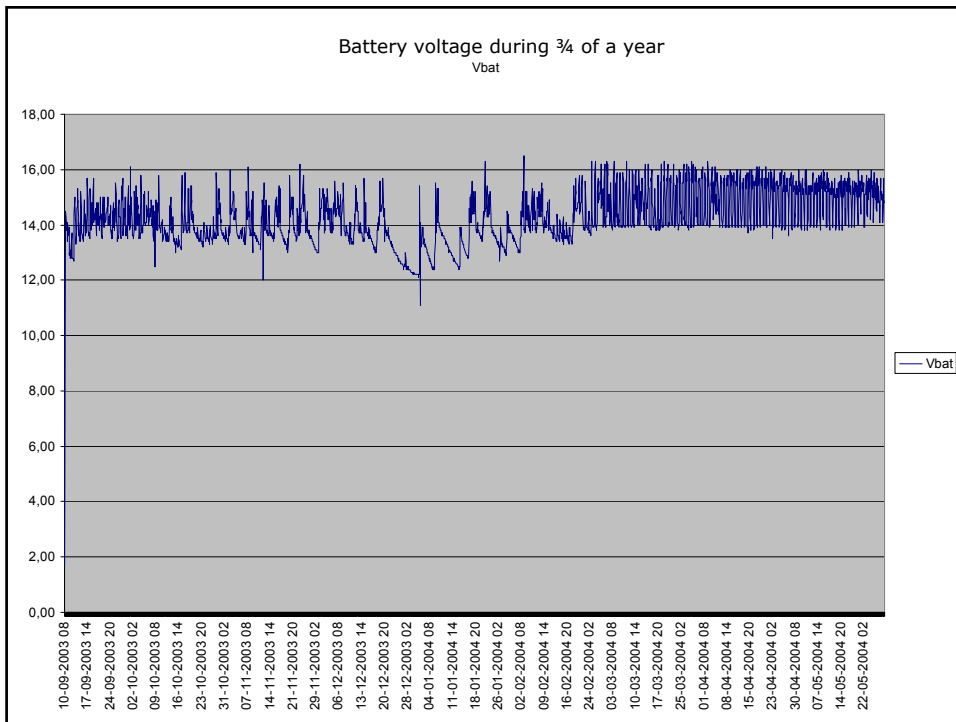
To combine all this items we have invented  
a Hybrid Power Controller (prototype)



LED  
Diode Lantern







Temp1

