

## Battery Assist Option

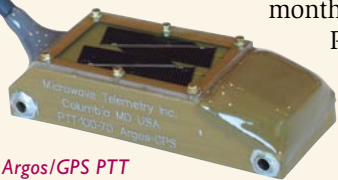
Biologists worldwide are collecting huge amounts of valuable location data from our solar GPS PTTs. However, those tracking birds that remain far north year-round have asked if there is anything we can do to allow them to continue to gather data throughout the winter, when there is little sunlight. To address this need we are now offering a Battery Assist option for our 70g solar Argos/GPS PTT.

Battery Assist is the addition of a backup battery that can power the PTT when there is not enough sunlight to keep the solar rechargeable battery charged. When the rechargeable battery's voltage falls below the threshold necessary for GPS fix acquisition, the backup battery will provide the power necessary to take the fix. Battery Assist provides a back-up power supply for all the PTT functions: GPS fix acquisition, data transmission, and Ground

Track transmission. Alternatively, we can dedicate the back-up battery for Mortality Ground Track alone, insuring enough power to transmit the Ground Track signal for several months even if the

PTT's solar array is no longer exposed to light.

70g solar Argos/GPS PTT with Battery Assist option.



## Solar Assist Option

Our battery powered GPS PTTs, the LC4s, provide biologists with accurate location data from birds which cannot be tracked with solar powered PTTs because of the birds' behavior or habitat. We are frequently asked if there is anything we can do to extend the operational life of the LC4 PTT, or get more data from it. In answer to this request we've created a Solar Assist option for our



105g LC4 PTT with Solar Assist option.

105g LC4 PTT. The addition of a solar array to this PTT will allow it to run on solar power when its solar array is exposed to direct sunlight, thus conserving battery power and extending the operational life of the PTT. With Solar Assist a 105g LC4 could potentially run on solar power during the summer, and save its battery for the dark winter months.

*The choice of these options will add weight to the PTT. Please contact us for details.*

## Do You Remember?

*It has long been a goal of Microwave Telemetry, Inc. to promote satellite telemetry experience and interest for school children by sponsoring school projects. We hope to instill in the students a love of science and engagement in conservation.*

*In our issue of spring 2002, we donated transmitters to Liberty Bell High School to start a satellite tracking project. We often wonder what impact this experience had on the students.*

*We were delighted to hear from Tannis Thorlakson who participated in this project and has since graduated from Liberty Bell H.S. She was kind enough to give us the following update.*



**In** my third year at Harvard College I am completely engrossed in my concentration in Environmental Science and Public Policy. I'm taking classes in climate change and its projected impacts on biodiversity, the chemical cycles of ecosystem processes and the politics behind the environmental movement. But as I stop to reflect on

what initially sparked my passion and shaped my interest for environmental work, I immediately jump to my involvement with the Chelan Ridge Raptor Migration Project.

I was first exposed to the Chelan Ridge project on a seventh grade field trip, where I met my now long-term mentor Kent Woodruff. From our initial discussions blossomed an internship that I continued to work on for the following five years. During my tenure with the Chelan Ridge Project, I learned to identify, capture, band, and measure hawks as they migrated south. I had the opportunity to help release a number of birds equipped with

a satellite tracking system, and spent one winter tracking the movement of a Northern Harrier as she migrated south.

The experience I gained from my internship solidified my continued interest in the environment. Although my focus is no longer on raptor migration, I still turn to my time with the wildlife biologists on Chelan Ridge as a source of motivation for my studies. Through my experiences I've come to appreciate the beautiful diversity and importance of our environment and hope to do my part in ensuring its continued preservation.



Tannis releasing a juvenile male northern goshawk.

Photo by Kent Woodruff