

# History of the Development of PropnetPSK

The first program that was developed was called UIMailer that eventually morphed into PropnetMailer. This was in early 2001, 2002, about the time that Ev Tupis W2EV started the concept of PropNet. The methodology behind this software was to intercept the AX.25 UI frames from Roger Baker's UI-View and create an email message that would be sent to the Catches Yahoo Group – a storage medium that could be used later for data recovery and processed for propagation studies.

At the same time I was developing PSK software, and the idea of using PSK instead of AX.25 was floated. This would allow the Propnet Community to explore other HF bands where AX.25 was not allowed – everything above 10 meters. The first iteration of BeaconNet was born as a single channel PSK receiver that would capture a PSK signal around 1500 HZ for our 10 meter anchor frequency and format those into the same Email format that was used with PropNetMailer.

In Late 2002 as the Propnet Community membership started to climb, along with members from Europe, we decide on establishing some anchor frequencies for specific areas of the world to eliminate some of the congestion that had developed with everyone on 1500 Hz. One of the first ideas was to setup a time slot for every station that was participating, but after a number of failed attempts at keeping everyone on a standard clock, we decided to develop a multiple channel receive that could be tailored to the users taste.

Thus was born the first version of MSPSK/BeaconNet3. Unfortunately as development of this software continued, the sunspot cycle was starting to take its toll, especially on the original frequency of interest 10 and 6 meters. But, interest was starting to develop on 20 and 17 meters so this keep thing alive as we branched out into 10, 40 and even 12 meters.

Sometime in 2003/2004 we introduced the Livex Server. This was an old AX.25 server that was converted for our use and as a data collection point that would also relay our individual catches to the FindU server for posting on the internet. Development of the internet socket proceeded and a brand new program called PropNetPsk (PNP) version 2 was release around mid year.

PNP was unique in that it would allow the user to define the number of channels they wanted to monitor along with defining the limits of those channels. While the software would default to 6 channels spaced 100 Hz apart starting at 1200 Hz, the user could define up to 16 channels.

Over the next 3-4 years, the following refinements and improvements were added to the software:

- Rig control using Hamradio Deluxe, CIV Commander or RG100
- Livex Output monitoring
- Transmit time out timer
- QSO alerting ( still in development) that would notify the user to a QSO request
- Generic PSK terminal

In the fall of 2007 a group of alpha testers was put together to work out a number of bugs that had creped into the software with all of the added functionality A software bug tracking system was also

implemented based on the Eventum Software Tracking system. This system was extremely helpful in reporting bugs, assigning them a tracking number and tracking their progressing during the fix and release cycle of each iteration of the software as it underwent modification.

In the spring of 2008 we released Version 3 of PNP to the general public which was a much improved version over the previous version 2. We are currently working on a few more minor problems in the Alpha testing cycle and will be releasing another update to the software in a few weeks.

One of the major developments that went into this latest round of modification was to allow PNP to interface with the new medium of sound cards that would allow the user to specify individual sound cards for input and output. This would require a major rework of the PSKCORE.DLL library that is the PSK engine that is used in this software. Since the sources for the PSKCORE.DLL are now in the public domain, it was a simple matter of modifying the source to allow the DLL library to accept an additional parameter for the output card. The PSKCORE.DLL file that is now in use with the current version 3 of PNP is now at version 1.21.

Future: There are a couple of things on the horizon. I am exploring the idea of incorporating the MMVARI OCK control as the PSK engine. This would allow the use of not only PSK, but RTTY and MFSK as the modulating medium. I am also looking at a complete rewrite of the sound card interface in PNP to eliminate the need to bring up the Windows mixer and move those controls into the PNP software. This will allow the user to store their individual settings and recall those when the program restarts.

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