IARU Region 1 Conference 2002

San Marino 10 – 15 November

SUBJECT	Proposal – WSJT The use of WJST (PSK 441) in the 144 MHz band
SOCIETY	UBA

Committee	C5.9

Background

Early 2001 K1JT developed a software program called "Weak signal communications by K1JT". The programs makes it possible to communicate via minimal meteor reflection bursts using high communication speeds. It employs 4-tone frequency shift keying (882, 1323, 1764 en 2205 Hz) with a speed of 147 characters per second (8820 letters per minute).

Starting july 2001 the systems was expensively tested in Region 1 (Europe) especially during the Perseids, and this with a very high degree of success. The lack of planning (bandplanning and procedures) was experienced as a definite shortcoming, and resulted in misunderstandings and discussions. Therefore it is necessary to provide a proper place in the bandplanning table and plan proper operating procedures for the use of WSJT.

Where?

It has been established that most of the WSJT transmissions occur in the segment between 144.350 MHZ and 144.390 MHZ. Although strictly spoken WSJT is a digital mode, it isimpossible to use WSJT (PSK441) in the 144.800-144.990 MHz segment, as, in the first place, it concerns the detection and reception of weak signals in SSB (USB). Reception of such signal in close vicinity of the typically strong digital signals in FM mode in that section of the band would be totally impossible.

As this technique is only aimed at supporting meteor-scatter communication it also appears to be best to establish procedures which are similar to the procedures used in HSCW (high speed CW).

Although the correct original denomination of this new mode os PSK441, it is best known as WSJT.

Proposal

Name:

The official name of the mode is **WSJT.**

Bandplanning:

Calling frequency for WSJT is 144.360 MHz.

Procedure:

Chapter Vb (Operating MS-procedures) of the VHF managers handbook should be adapted.

Timing: periods used in WSJT are 30 seconds long

Use of frequency:

1. scheduled contact according the SSB bandplanning
2. random contacts using CQ-calls is 144.360 Mhz using the letter system as in CW.
3. QSO procedures are the same as described in the handbook (point 7)