# FLDigi with PSK31 for Field Day

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Utah Digital Communication Conference 2018

# I took notes so you don't have to!

Notes:      tinyurl.com/udcc-2018

Slides:     tinyurl.com/udcc-2018-slides

Take a Picture or Write Them Down!

# Okay, let's get Started

- Disclaimer… I am an Amateur

  - But I did sleep at a Holiday Inn last night

- FLDigi can do a lot of things

  - We will not cover them all

- This is to get you ready to be successful with Digital Modes, specifically PSK31 for Field Day

# Field Day

- What is Field Day?

- 24 Hours Straight

- ARRL Contest

- Since 1933

- 4th Full Weekend in June
  - June 23-24th for 2018
  - Always Sat to Sun
  - Noon to Noon (kind of)

- Chaos

- Company

- Food

- Party

- Freezing

- Hot

- Camping

- Fun

# Why Digital Modes?

- PSK31 is a "Digital Mode"

- 2 Points Per Contact

- Multipliers

  - Modes vs Frequencies = More Points

  - Basically more chances to work more stations

  - Great with noise

# Why PSK31 out of all the modes?

- PSK31 is Narrow

- 31 baud BPSK modulation

    - about 50 word-per-minute

- Fights QSB

- Approximately 60 Hz Wide

    - 2700 Hz / 60 Hz = 45 Signals

    - Usable from 300-3000 Hz

- No ECC, but it's Quick!

- Used HEAVILY (More Stations, More Points)
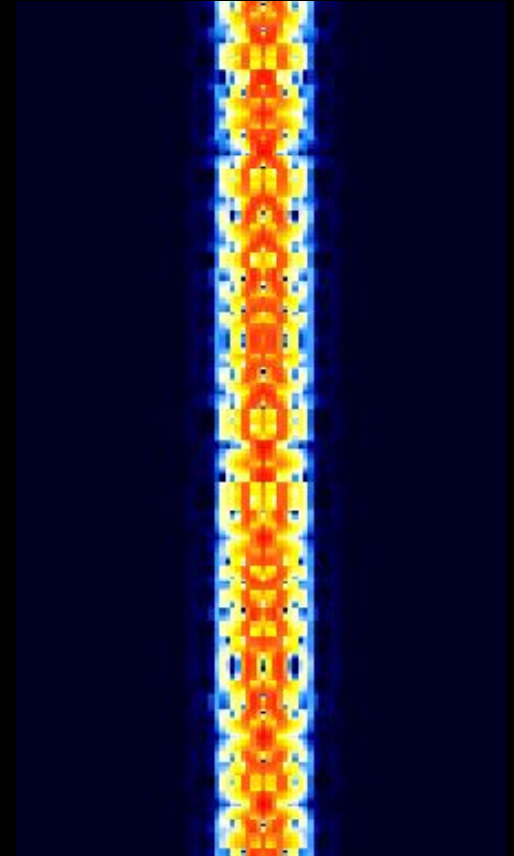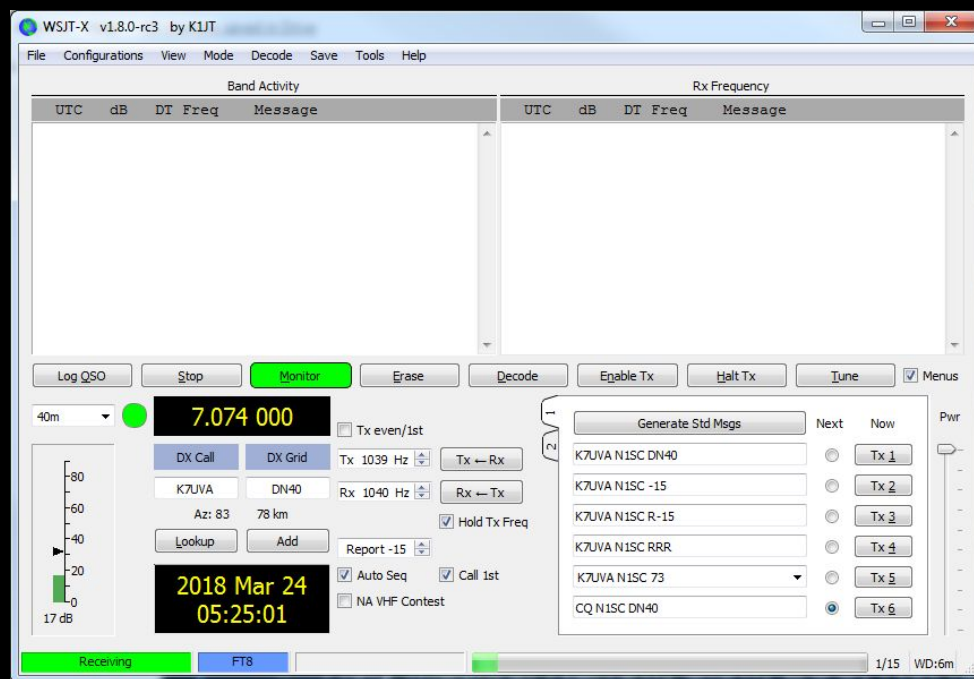
# Other Modes

- Phone (USB, LSB, etc)        1 Point

- CW (morse code)              2 Points

- Digital (PSK31/RTTY)         2 Points

# Other Digital Modes

- FT8   JT65   JT9

  - Narrow

  - Fast (but slow)

  - ECC up the Wazoo

  - Not for Contesting

  - 13 Char Limit

WSJT-X   v1.8.0-rc3   by K1JT

File   Configurations   View   Mode   Decode   Save   Tools   Help

Band Activity | Rx Frequency

| UTC | dB | DT Freq | Message |
|-----|-----|---------|---------|

| UTC | dB | DT Freq | Message |
|-----|-----|---------|---------|

Log QSO | Stop | Monitor | Erase | Decode | Enable Tx | Halt Tx | Tune | ☑ Menus

40m ▼   🟢

7.074 000

☐ Tx even/1st

| 1 | Generate Std Msgs | Next | Now | Pwr |

| DX Call | DX Grid |
Tx 1039 Hz ▲▼   Tx ← Rx

| 2 | K7UVA N1SC DN40 | ○ | Tx 1 |

K7UVA | DN40
Rx 1040 Hz ▲▼   Rx ← Tx

K7UVA N1SC -15 | ○ | Tx 2

Az: 83   78 km

☑ Hold Tx Freq

K7UVA N1SC R-15 | ○ | Tx 3

Lookup | Add

Report -15 ▲▼

K7UVA N1SC RRR | ○ | Tx 4

2018 Mar 24
05:25:01

☑ Auto Seq   ☑ Call 1st

K7UVA N1SC 73 ▼ | ○ | Tx 5

☐ NA VHF Contest

CQ N1SC DN40 | ⦿ | Tx 6

-80
-60
-40
-20
-0
17 dB

Receiving | FT8 | | | 1/15 | WD:6m

# RTTY

- Great for FD

- Fewer Users, difficult to find

- You can jump to RTTY in FLDigi quickly
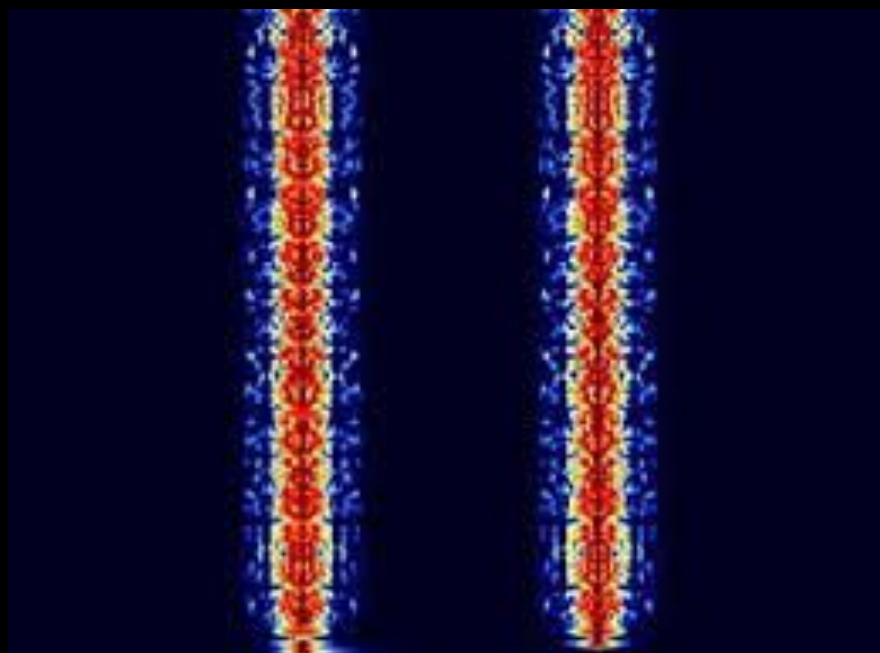
# Download FLDigi

- Precompiled on Source Forge

  - Link is in the notes


- Sudo apt-get install fldigi for Ubuntu


- Mac, yeah sure, why would you do that to yourself?

# Download N3FJP for Logging

- N3FJP is a great Windows Logging Software

  - Don't try it in WINE with Linux, lol

- Paid Product, Not Free

- Better that the built in FLDigi Logging Software

- Better Linking Capabilities and Dup Checking

- More Intuitive and it works

- FDClient and FDServer are gross, ugly and hard to use

# Hardware Considerations

- Second Monitor if possible

    ○ Logging

    ○ FLDigi

- USB Keyboard & Mouse (no trackpad)

- Laptop (with working battery)

- CAT Cable/Interface

- Audio (Signalink USB, RIGblaster, Tin Can & String

# FLDigi Built-in Logging

- Saves in an ADIF format

- Internal Log

- Fllog (plugin)

- Cabrillo Exportable

- Difficult and Ugly

- Combines Phone / CW / Digital Logging

  - With the Client and FD Server

# N3FJP Logging

- Saves in an ADIF format

- Runs locally as a "Server" to interface to FLDigi

- Sync's with the main N3FJP Server

- Cabrillo Exportable for Submitting Logs

- Easy to Use

- Combines Phone / CW / Digital Logging

- SMB not TCP Recommended

- LOTW / eQSL

- Other Contacts (WSJT-X, Phone, Etc)

# Terms

- CQ
- FD
- BTU
- AGN
- PSE

- QSL
- QRM
- QRN
- QSB
- QSY

- K
- KN
- QRZ
- SK

# LOWER CASE IS FASTER

J 111111101              j 111101011
E 1110111                e 11
F 11011011               f 111101
F 11011011               f 111101
SP 1                     SP 1
N 11011101               n 1111
1 10111101               1 10111101
S 1101111                s 10111
C 10101101               c 101111

## Varicode Character Set

# Where To Go?

3.**580** MHz      80 meter

7.**070** MHz      40 meter (regions 1,2)

*7.035 MHz*      *40 meter (region 3)*

14.**070** MHz      20 meter

21.**070** MHz      15 meter

*They're in the Notes!*

# Workflow

- Give your Call, Class, Section

- Get their Call, Class, Section

- Log QSO & Move on



- Hunt & Peck            VS            Running a Frequency

# Let's See FLDigi

Enough Yapp'n your Trap

Show me the program already!

# TNX FOR QSO 73 N1SC SK

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