How to work Field day

SSB: Two modes, either search and pounce (S&P) or RUN.

S&P: Contests <u>do not operate split</u> using SSB. Tune a station and when he ends his CQ you say "W0JV" once and then listen If he comes back to you he will give a class and section ID. Example "4A VT"

You will respond with "K1XXX 2A IA" He will give a TU or 73, record the QSO.

You do not give a signal report, do not say "please copy" do not give your name etc.

RUN: Select a frequency that has the least interference and STAY there.

You transmit and say "CQ field day W0JV" You hear someone calling you. You reply with his call and the following "K2XYZ 2A IA" He gives you his class and section ID. Example: WNY and 2A. You say "Roger" now log his class and section ID. He may say TU or 73, Then say "CQ field day W0JV" and listen again.

Keep exchange to **only what is required**. All the extras slow you down and reduce the opportunity for more contacts!

FT8: SETUP

1. Configure the WSJT software, go to **File: Settings: Advanced tab.** Select special operating activity. **ARRL Field day.** Enter our class and section i.e. 3A and IA in the FD exchange box. Then click OK

Go back to **File: Settings.** Click on General. Enter My call as W0JV, Grid EN41. Under Display click TX messages to Rx frequency window. Click OK.

FT8 operating:

You can either operate in S&P mode or in Run mode. In either case, under the **Decode** button click the box "**Hold TX Freq**". Also click the box "Auto Seq". Using the shift key plus the left mouse button, select a frequency that is clear on the spectrum graph. Whether you are calling CQ (running) or operating S&P, stay on a clear frequency,

RUN: Click the **Enable** button and select CQ FD W0JV . Then wait for the next interval to see if someone calls you. If they do, click on the received message and the FT8 sequence will begin. If no reply, FT8 will call CQ again automatically. Your sequence can end with a RR 73 or 73.

S&P: If you see someone calling CQ on the left chart that you want to contact, click on their CQ and the FT8 sequence will begin with message 2, I,e, K1XYZ W0JV 2A IA. If he doesn't reply, send message 2 again. If no reply after three tries, look for another station.

Another trick, If you see a station sending 73, click on that station and begin your call to him. Don't forget to click your enable button.

As above, keep your exchange brief; move on to the next contact!

ALSO remember you will be operating, in effect, in a split mode where your transmit frequency is different from your receive frequency; FT8 deals with this seamlessly, it is how it all works. You pick a *hole* in the spectrum for your transmit signal in order to maximize the opportunity for your signal to get out and be heard.

Startup Notes:

Power Supplies ON Radio On USB cable connected (or however we are connecting) Computer ON WSJT-X

Computer Notes:

Passwords:

8164

FieldDay

IC7300 serial port:

Varies, depending on number of

serial ports:

Single port Silicon Labs:

CP210x

Radio should be last USB

seen in devices menu

KC0JFQ Radio Interface:

Varies, depending on number of

serial ports:

4-port FTDI: FT4232

cluster of 4 COM numbers

(one may be

missing, so something like

COM4 COM6

COM7 where COM5 is

not there)

Radio should be first COM

port in the cluster.

ICOM7300 Notes:

Radio ON:

 $MENU \rightarrow 2 \rightarrow FT8$

DATA RATE:

Default

STOP BITS:

Default

HANDSHAKE:

Default

CAT CONTROL:

MODE: None SPLIT: None

field_day_instructions.doc

WSJT-S Notes:

Check Radio Matches (or CAT control

won't work)

Configurations: IC7300 Audio: USB Audio CODEC

Advanced: Special ARRL Field Day

> F.D. Exchange: 2A IA may end up 2A IA

Hols TX Freq

General: W0JV

EN41FP

Tx Msg to Rx Freq

KC0JFQ Raspberry-PI/IC-7300 setup

```
#!/bin/bash
FLDIGI='/usr/local/bin/fldigi'
FLRIG='/usr/local/bin/flrig'
ICOM TERM='/usr/local/bin/icom term'
HALO_TERM='/usr/local/bin/halo_term'
WSJTX='/usr/bin/wsjtx'
#
        Get rid of FLDIGI if it's running
#
pkill fldigi
pkill flrig
BAND=$1
POWER=35
if [ -z $BAND ]; then
    BAND=20
                                                 #
    fi
                                                 #
if [ $BAND == "10" ]; then
    FREQ0="28.074"
    FREQ1="28.075"
    EDGE="EDGE_28M"
    EDGE0="28.07,28.08"
    EDGE1="28.000, 28.150"
    EDGE2="28.150, 28.350"
    EDGE3="28.000, 28.350"
elif [ \$BAND == "20" ]; then
    FREQ0="14.074"
    FREQ1="14.075"
    EDGE="EDGE_14M"
    EDGE0="14.07,14.08"
    EDGE1="14.000,14.150"
    EDGE2="14.150,14.350"
    EDGE3="14.000,14.350"
elif [ $BAND == "40" ]; then
    FREQ0="7.074"
    FREQ1="7.075"
    EDGE="EDGE_7M"
                                                 #
    EDGE0="7.07,7.08"
    EDGE1="7.000,7.150"
                                                 #
    EDGE2="7.150,7.350"
                                                 #
    EDGE3="7.000,7.350"
                                                 #
    POWER=50
elif [ $BAND == "80" ]; then
    FREQ0="3.573"
    FREQ1="3.574"
    EDGE="EDGE 3.5M"
    EDGE0="3.57,3.67"
    EDGE1="3.500,3.650"
    EDGE2="7.650,7.850"
    EDGE3="3.500,3.850"
fi
#
#
echo BAND $BAND Meters
#
#
         Initial Power Level
#
         Initial Frequency
#
         Modulation level
#
```

```
$ICOM_TERM -SHAM_CIV PWR=$POWER
            FRQ=$FREQ0 PRE=1
$ICOM_TERM -SHAM_CIV NB=OFF NR=OFF
            M_NOTCH=OFF A_NOTCH=OFF
            AGC=0FF
$ICOM_TERM -SHAM_CIV RIT=OFF XIT=OFF
            VMODE=USB, DATA, FIL1
$ICOM_TERM -SHAM_CIV IC_ACC_AF_LVL=60
$ICOM_TERM -SHAM_CIV MOD_ACC=35
$ICOM_TERM -SHAM_CIV $EDGE=1,$EDGE0
$ICOM_TERM -SHAM_CIV $EDGE=2,$EDGE0
$ICOM_TERM -SHAM_CIV $EDGE=3,$EDGE0
$ICOM_TERM -SHAM_CIV WFALL=SLOW
$ICOM_TERM -SHAM_CIV FRQ=$FREQ1
            TSTEP=100
$ICOM_TERM -SHAM_CIV TUNE
        Let remoter tuner search
        a bit...
sleep 4
$ICOM_TERM -SHAM_CIV FRQ=$FREQ0
            TSTEP=100
$ICOM_TERM -SHAM_CIV -b $FREQ0
$ICOM_TERM -SHAM_CIV MONITOR=ON
            MONITOR=15
$HALO_TERM -SHAM_CMD -r RTS,DTR -t -C
            "rxvl 45,45"
$HALO_TERM -SHAM_CMD -r RTS,DTR -t -C
            "txvl 45,45"
$WSJTX
  For WSJTX, there is several seconds
       between data blocks, so we can
       easily deal with a longer hang
       timer...
$HALO_TERM -SHAM_CMD -r NONE
                                 -t -C
            "txvl 35,35"
$HALO_TERM -SHAM_CMD -r NONE
                                 -t -C
            "rxvl 35,35"
$HALO_TERM -SHAM_CMD -r NONE
                                 -t -C
            "hang 75"
$ICOM_TERM -SHAM_CIV $EDGE=1, $EDGE1
$ICOM_TERM -SHAM_CIV $EDGE=2,$EDGE2
$ICOM_TERM -SHAM_CIV $EDGE=3, $EDGE3
$ICOM_TERM -SHAM_CIV MONITOR=OFF
```

Icom 7300 settings that work:

Connectors

DATA OFF MOD = MIC,ACC

DATA MOD = USB

USB Serial Function = CI-V

CI-V

CI-V BAUD Rate = AUTO

CI-V Address = 94h

CI-V Transceive = ON

CI-V USB PORT = UNLINK From REMOTE

CI-V USB BAUD Rate = 115200

CI-V USB Echo Back = ON