V I R G I N I A   Q S O   P A R T Y

Sponsored by The Sterling Park Amateur Radio Club

Contest Logging Program

Written by WA4ZAJ and NJ4F

CONTEST DATES AND TIMES

March 19, 1994 Start 1800 UTC
March 20, 1994 Stop 0500 UTC
March 20, 1994 Start 1100 UTC
March 21, 1994 END 0200 UTC

LICENSE AGREEMENT

QSO is provided as shareware to any person wanting to operate the Virginia QSO Party. The cost of this software is $5.00. This pricing is only to allow the developers the ability to recapture some of the cost associated with the purchase of diskette, mailings, and documentation reproduction. If you purchase this software from a hamfest, Ham Radio store or by mail, the cost will be $5.00

If you receive this software from another source (BBS, another HAM), you are requested to send $2.00 to the developers of the software.

This license is valid until July 1, 1994. After that date the software will no longer work. This was done to insure that the software would be current each year with the changes made in the contest.

Should you receive a copy of the software for the 1994 contest and wish to use it for the 1995 contest, you should reorder the software after November 1, 1995.

All Fees and comments should be addressed to :

Steve Martin WA4ZAJ
Virginia QSO Party Software
7405 Gresham Street
Springfield, Virginia 22151

PREFACE

QSO is a contest logging program designed to assist both the seasoned contester and the new contester in logging contacts for the Virginia QSO party held in the spring of each year. This software was written by WA4ZAJ with contest input from NJ4F. QSO was written using Clipper Version 5.01a and linked using Blinker Version 2.01. The file structures provided with this documentation are of the standard DBase format, however, the index files are Clipper specific format. Do not attempt to modify the database files with any version of DBase or any other program that reads and writes DBase files.

This software was developed without the assistance of the contest committee, however, after numerous conversations with the contest director, modifications have been made to insure consistency with the 1994 Virginia QSO Party Rules and Regulations. If you need a official copy of the rules and regulations, please send the contest director a request for the official rules with a SASE. This request should be sent to:

W.T. Free
Virginia QSO Party Contest Director
3627 Great Laurel Lane
Fairfax, Virginia 22033-1212

All logs and summary sheets must be sent to the same address and received no later that April 15, 1994 in order to be accepted.

SYSTEM REQUIREMENTS

QSO is designed to be operated on an IBM compatible computer with at least 400K of memory available after all DOS TSR's have been loaded. Although limited success can be obtained operating QSO on a floppy drive system, best performance is obtained when QSO is operated using a hard drive. Prior to release QSO was tested on the following machine types:

NEC multispeed 8088 dual floppy system with basic 640k memory
IBM PS/2 Model 70 (286-12) with a hard drive and 2 MB of memory
IBM PS/2 Model 80 (386-16) with a hard drive and 4 MB of memory
IBM compatible 486-33 with a hard drive and 8 MB of memory

Although the best performance was obtained with the 486-33, QSO ran on all the test machines.

* Important Note about DOS 6.0 *

During testing, it was determined that the configuration of DOS 6.0 using the EMM386.exe device driver and Smartdrive cause QSO to fail. If you are experiencing problems with QSO and DOS 6.0, you should re-configure the EMM386.exe to include the following: Device=EMM386.exe NOEMS. If the problem persist, contact Microsoft for information on the non documented parameters for EMM386 or contact WA4ZAJ at 703-354-2018 for more information.

Installing QSO

QSO is designed to be operated either on a hard drive or the diskette you received QSO on.

Floppy Disk Operation

Should you desire to operated QSO from a floppy, prior to starting QSO for the first time, be sure to make a backup of the diskette. Once you have made a copy of the original diskette use the following steps to start QSO.

1. Insert the copy into the floppy drive

2. Change disk drive to the drive where you inserted the diskette.

3. Type "QSO" to start the software.

Hard Disk Operation

If you will be operating QSO from a hard diskette, you must complete the following steps.

1. Change to the disk drive where you will be installing QSO.

2. If you are not in the root directory, type "cd\." This will change the directory to the root directory of the hard drive. You should see the prompt [drive]:> where drive is the drive letter of the hard drive.

3. At the [drive]:> prompt, type "md QSO". This will create a directory on the hard drive called "QSO" for the QSO software.

4. Change to the "QSO" directory by typing "cd QSO". The DOS prompt should look like [drive]:\QSO>

5. Type copy [fdrive]:*.* (fdrive is the floppy drive you have the QSO diskette in; A> or B>)

6. When all the files have been copied to the hard drive, you will be returned to the DOS prompt.

7.   Type "QSO" to start the software.

Starting QSO

When you start QSO, you will first be presented with a screen showing you the current system date and time. If the times are correct, you can press the "Page Down" key to continue to the title screen. If the date and/or time are incorrect, please adjust the incorrect items. The system date and time is important since QSO derives both the date and the time from the system for logging contacts. Once you have completed this step the following opening screen will appear. This screen will stay on display until all the prefix tables have been loaded into memory.

```
========================================================================
```

Sponsored by The Sterling Park Amateur Radio Club

Contest Logging Program

Written by Steve Martin WA4ZAJ

```
========================================================================
```
Figure 1 - QSO OPENING SCREEN

Once the tables have been loaded, if this is the first time you are starting QSO, you will be required to complete the registration screen. If you have received a copy of this software from someone else, you can change the registration with the "change registration" menu option located on the maintenance menu. QSO will not operate without a registration. Enter the data with care as this data is used for QTH confirmation and report generation.

FIRST TIME REGISTRATION INFORMATION

QSO could not find your registration information. Please fill out the registration information before proceeding. If you need to change this information at a later date, select "Change Registration" from the main menu

Name _____ Call
Sign _____
      Address   _____
             _____ City
     _____ State   ____ County
       _____ Country
  _____ License Class _____ UTC Offset _____

Figure 2 - Registration Screen

First Time Registration

QSO uses the information in the registration screen to confirm the station location and the callsign. Data should be entered into the registration form in the following manner.

Name   Enter your name as it appears on your license.

Call Sign   Enter the callsign of the station you will be
                       operating in the contest. If you are operating

mobile, enter a /M after your call i.e.: WA4ABC/M.

Address   Two lines are included for the station address.

City   Enter the city of the station operation. If you are
                             operating mobile, enter the home location.

State   Enter the state of the station operation. If you
                             are operating mobile, enter the home location.

County   Enter the county where the station is located. If
                             you are operating mobile, enter the home location.

Country   Enter the country of operation.

License Class   Enter your license class.

UTC Offsett   Enter the hour difference for UTC time. If you are
                             in Virginia, the difference will be 5

Once you have entered all the required information, the program will go to the main menu.

     09/06/93   VIRGINIA QSO PARTY   09:09:11   Contest   Logs
Reports   Maintenance   Help   EXIT USE THE <- AND -> KEYS TO LOCATE SELECTION. PRESS THE
ENTER KEY TO SELECT.**Figure 3 - QSO Main Menu**

The main menu is made up of 6 different components; Contest, Logs, Reports, Maintenance, Help and Exit. Selection of any of the 4 options can be obtained by pressing the first letter of the menu option. Each option will pull down another menu with all the sub options listed. Menu navigation can also be accomplished by using the right and left arrow keys and pressing the enter key on the selected menu item. If you have a mouse, you can also select menu items with the mouse.

Contest Pull Down Menu

When you select the contest pull down menu you have two options available to you. These options are:

Continue   This option will allow you to continue logging the contest. All contest contacts are
                            restored from the last session. If you start a contest, quit and want to continue at a later
                            time, this is the option you will use. (See "Using QSO to log contacts")

New   Select this option if you are entering a new contest log. When you select this option, all
                            previous logs will be erased and all totals will be reset to zero. **Use this option with
                            care. Once you have cleared a contest log, there is no way to recover it.**

Logs Pull Down Menu

Edit Log

This option will provide you with a table view of all logged contacts. Use the arrow keys to scroll through the list. Pressing the enter key on a entry will allow you to edit the selected entry. (Note: If you edit an entry in the log, you will not be able to generate any logs until you have recalculated the multipliers. This is a safety feature to insure that the software always generated the correct score.

Purge All Logs

This option will reset all scores to zero and erase all contacts. Please use with caution.

**Screen View
Contest Log**

Prior to printing the contest log, you can view it on the screen by selecting this "Y" option.

Contest Totals

This option will provide you with the current totals.

Reports Pull Down Menu

When you select the reports pull down menu, you have three options available to you. These options are:

Contest Logs Selection of this option will print the contest logs to the printer. Make sure your printer is on-line and ready before selecting this option.

Dupe Report Selection of this item will print your dupe logs to the printer. Make sure your printer is on-line and ready before selecting this option.

Va County Status   Selection of this option will print a chart of Virginia Counties with a grid to mark each band and mode. You may choose to print this chart before starting the contest. The start will serve as a reminder of counties worked.

Maintenance Pull Down Menu

The maintenance pull down menu allows you access to numerous database functions needed to assist you in producing quality results with the QSO software package.

Reindex Databases   If you find that the multipliers are not working correctly, you may need to reindex the databases. Under normal operating conditions, you may never need to reindex the database. This option is included only if you corrupt your indices by loss of power,

Recalculate Multipliers   If you edit your log and change any of the items that calculate your multipliers, you must recalculate your dupes and multipliers. When you select this option, all scores reset to zero and the log is recalculated. Note: If you are using QSO on a floppy drive system, you may not have enough room on the floppy to recalculate the multipliers. In order to recalculate, you must have the same amount of room available that the contest.dbf file occupies. That is, if the contest.dbf file is 100k then you must have 100k of free disk space to recalculate.

Change Registration   If you need to change the registration information entered the first time you started QSO or if you have received a copy from another user, you will need to select this option to change the registration information.

Exit

Selecting "EXIT" will close all files and exit to DOS. All scores, multipliers, dupes and contacts will be saved to the disk.

Using QSO to log contacts

The following figure is the main logging screen of QSO. As you can see from the figure, the screen is made up of two regions.

```
=======================================================================
  QSO      CALLSIGN    COUNTRY/QTH       STATE      BAND        MODE    D    M
=======================================================================
  18       G3ERT/M     ENGLAND           DX         40          SSB          *
  19       G3RTY/W3    FAIRFAX           VA         40          SSB     *
  20       DF4TY       ACCOMACK          VA         40          SSB          *
  21       NJ8K        UNITED STATES     MD         40          SSB          *
  22       WA3FGH      UNITED STATES     MD         40          SSB
  23       VE3ERT      ONTARIO           DX         40          SSB          *
  24       J3QWE       GRENADA           DX         40          SSB          *
  25       W4CCC       DICKENSON         VA         40          SSB


=======================================================================
   CALLSIGN                                       QSO NUMBER   26
   EXCHANGE                                       BAND         40
   STATE                   VA                     MODE         SSB
   COUNTY                                         TIME         02:23:43
   COUNTRY                 UNITED STATES          TIME         09/09/93
   OPERATION LOCATION      SPRINGFIELD            MOBILE       ____


        F2 MODE| F3 BAND UP| F4 BAND DOWN| F5 DATE| F6 LOCATION| F7 EDIT | ESC CANCEL
      =======================================================================
```

Figure 4 - Contest Logging Screen

The first region is the log region. This area will always display the last eight contacts. The items displayed are from left to right: the qso number; the callsign; the Va county or Country; State (if it is a US call but not a VA contact;) or the country (if it is a DX call;) the band of operation; the mode of operation; a check mark if the contact is a dupe and a check mark if the contact is a new multiplier.

The second region is the contest entry region. This is the area where you will enter your contacts.

Callsign   Enter the callsign of the worked station and press the enter key. If you wish to quit logging contacts, type the word "QUIT" in this field and press the enter key.

Exchange   Enter the exchange for the contact. In the Virginia QSO party, the exchange consist of the qso number, and the QTH. (Example: 14 Fairfax). You do not need a signal report for the exchange.

State   The software will default the state to Virginia, however, if the contact is from another state, enter the two letter abbreviation for the state and press the enter key. (Note: If you enter the two letter abbreviation for another state, the program will validate the abbreviation against an internal list. Should your abbreviation not match the list, an error message will appear and you will have to re-enter the state. Refer to the State list included with this package.) If the contact entered is a DX contact, the state field will be ignored.

County   If the state of the contact is Virginia, you wil be prompted for a county. Typing the first letter of the county will present a list of Virginia Counties. At this point you may continue typing the county or you may use the up and down arrow keys to locate the county on the list. Once you have located the county press enter to accept it. If the state of the contact is not Virginia, this field is ignored.

Country   If the contact is a DX contact, the software will attempt to locate the country by the prefix of the contact. Once you have entered the exchange, the cursor will move to the country field where you have the option to press the enter key to accept the software's selection or manually entering the country and pressing the enter key to accept the new country.

QSO Number   This is a computer generated field and can not be edited by the user.

Time   All display times are in the current time zones but all log entries are recorded in UTC using the offset ou provided in the registration screen. The time can not be entered at the logging time but can be changed in the edit mode.

Mobile   This field can not be edited. If you are logging a mobile contact, you must attach the /M on the   call for the system to recognize the station as a mobile. i.e.: WA4ZAJ/M is a mobile contact.   WA4ZAJ is a fixed station contact.

LOG ENTRY FUNCTION KEYS

At the bottom of the screen you will see several function keys that will assist you in the logging of the contacts.

F2   The F2 key is designed to select the mode of operation. The two choices are CW or SSB. Pressing the F2 function key will toggle the mode and the newly selected mode will appear on the right side of the log entry screen.

F3	The F3 key is used to change the band by moving the band up. When you press the F3 function key the band will change to the next higher band. Continued pressing of the F3 key will change the band until you get to 160 meters. The upward progression of the bands are 10, 15, 20, 40, 80, 75, 160. These are the only bands where contacts are allowed for the Virginia QSO party.
F4	The F4 key is used to change the band by moving the band down. When you press the F4 function key, the band will change to the next lower band. Continued pressing of the F4 key will change the band until you get to 10 meters. The downward progression of the bands are 160, 75, 80, 40, 20, 15, 10. These are the only bands where contacts are allowed for the Virginia QSO party.
F5	The date stamp on the log entries is derived from the system date of the computer. Pressing the F5 key will allow you to change the date of operation. This is an important feature for persons who may chose to log the contacts into the software at a later time.
F6	Pressing the F6 key will allow you to change your operation location. This is an important feature since mobiles can move between various counties.
F7	Pressing the F7 function will pop up a box where you can enter a qso number to edit. If you do not know the qso number, you will need to select edit log from the logs menu.
Esc	Pressing the ESCAPE (ESC) key will exit the logging screen and return you to the main menu. All completed log entries will be saved.

REPORTS

The QSO software will produce three different types of reports for you. They are the contest logs (to be mailed to the contest director), Dupe Logs (to be mailed to the contest director), and a Virginia County Status report. All of the reports have been tested using a HP Laser Jet and an Epson dot matrix printer.

Contest Log	The contest log is the log that you will print and send to the contest director at the conclusion of the contest. This report conforms to the standards set up by the contest committee.
Dupe Log	This is the log of duplicate contacts that must accompany your contest logs.
Virginia County Status Report	This is a matrix of the Virginia counties that you can use to mark counties worked.

Two Letter Abbreviations for States

AK	Alaska	MT	Montana
AL	Alabama	NC	North Carolina
AR	Arkansas	NE	Nebraska
AZ	Arizona	NH	New Hampshire
CO	Colorado	NJ	New Jersey
CT	Connecticut	NM	New Mexico
DC	Washington D.C.	NV	Nevada
DE	Delaware	NY	New York
FL	Florida	OH	Ohio
GA	Georgia	OK	Oklahoma
HI	Hawaii	OR	Oregon
IA	Iowa	PA	Pennsylvania
ID	Idaho	RI	Rhode Island
IL	Illinois	SC	South Carolina
IN	Indiana	SD	South Dakota
KS	Kansas	TN	Tennessee
KY	Kentucky	TX	Texas
LA	Louisiana	UT	Utah
MA	Massachusetts	VA	Virginia
MD	Maryland	VT	Vermont
ME	Maine	WA	Washington
MI	Michigan	WI	Wisconsin
MN	Minnesota	WV	West Virginia
MO	Missouri	WY	Wyoming
MS	Mississippi		

Virginia Counties List

ACCOMACK
ALBEMARLE
ALLEGHENY
AMELIA
AMHERST
ARLINGTON
BEDFORD
BLAND
BOTETOURT
BRUNSWICK
BUCHANAN
BUCKINGHAM
CAMPBELL
CAROLINE
CARROLL
CHARLES CITY
CHARLOTTE
CHESTERFIELD
CLARKE
CRAIG
CULPEPPER
CUMBERLAND
DICKENSON
DINWIDDIE
ESSEX
FAIRFAX
FAUQUIER
FLOYD
FLUVANNA
FRANKLIN
FREDERICK
GILES
GLOUCHESTER
GOOCHLAND
GRAYSON
GREENE
GREENSVILLE
HALIFAX
HANOVER
HENRICO
HENRY
HIGHLAND
ISLE OF WIGHT
JAMES CITY
KING AND QUEEN

KING GEORGE
KING WILLIAM
LANCASTER
LEE
LOUISA
MATHEWS
MECKLENBURG
MIDDLESEX
MONTGOMERY
NELSON
NEW KENT
NORTHAMPTON
NORTHUMBERLAND
NOTTOWAY
ORANGE
PAGE
PATRICK
PITTSYLVANIA
POWHATAN
PRINCE EDWARD
PRINCE GEORGE
PRINCE WILLIAM
PULASKI
RAPPAHANNOCK
ROANOKE
ROCKBRIDGE
ROCKINGHAM
RUSSELL
SCOTT
SHENANDOAH
SMYTH
SOUTHAMPTON
SPOTSYLVANIA
STAFFORD
SURRY
SUSSEX
TAZEWELL
WARREN
WASHINGTON
WESTMORELAND
WISE
WYTHE
YORK

Metropolitan areas do not count as multipliers. You must use the county in which they lie.

Virginia QSO Party Software Registration

Name _____Callsign_____

Address _____

City   _____

State _____ Zip Code _____

Serial Number _____

    ==

Where did you receive this software? _____

Do you plan to submit logs? _____ Yes _____ No _____ Undecided

___   I received this software free from another HAM or from a BBS
    and am sending $2.00 to help cover the cost incurred by the
    developers.

___   I bought the software for $5.00

If you have any comments that would help the developers with the version for next year, please include them.

_____

_____

_____

_____

Please mail this completed form to:

<div align="center">

Steve Martin WA4ZAJ
Virginia QSO Party Software Registration
7405 Gresham Street
Springfield, Virginia 22151

</div>