

V4 Build4



User's Manual

Quick Start:

1. Copy ECARSLog.exe, Logger.mdb, ECARSLog.exe.config, and all other files delivered with the program to a folder of your choice (e.g. .../documents/ECARS/ECARSLog.

2. Establish a program shortcut on the Desktop to ECARSLog.exe (NOT to ECARSLog.exe.config). If your computer is configured to NOT show file extensions, CAUTION is advised as ECARSLog.exe.config will show as ECARSLog.exe and ECARSLog.exe will show as ECARSLog. However, ECARSLog.exe, with or without the extension, will be an Application file type, and ECARSLog.exe.config, with or without the extension, will be a CONFIG file type.

3. Launch ECARSLog.exe

4. From the Main form, click NCS Config to open the program configuration utility

5. From NCS Config, enter the NCS callsign, latitude and longitude. Latitudes and longitudes are entered in decimal degrees, not as degrees, minutes, seconds. Northern latitudes are positive. United States Longitudes are negative. Do NOT enter leading zeroes before latitude or longitude. For example, N4HCI's latitude is 37.05187 and longitude is -76.49324. Hit the ENTER key after entering a value for this and all other data entries.

6. Config the Options to use QRZ.com and/or HamQTH.com, to enable the program to obtain and present name, city, and state information, as well as license and birth information, from QRZ and/or HamQTH. Click the radio button for Option to use QRZ if you have an XML level membership, or higher, with QRZ, then enter your username and password into the provided input boxes. QRZ XML memberships are fee based. As of May 2017, an XML level membership in QRZ costs \$29.95. Click the radio button for the Option to use HamQTH if you have an account with them, and then fill in the username and password for HamQTH. There is no paid membership required by HamQTH, but you will need an account for the program to extract information from them.

7. Optionally configure the Universal Export ADI File Parameters. These six variables (frequency, power, gridsquare, rig, RST sent, and RST received) will be part of every QSO record when they are provided. Those variables that are left blank, will not be part of the ADI file. (see Export ADI discussion below)

8. Optionally configure the location (top and left) and size (width and height) initialization parameters for the Contacts Plot window and the QRZ Full Page window and the location for the QRZ Data Popup. These variables are measured in pixels from the top left corner of the main computer monitor (top and left) and are the number of pixels for height and width. A recommended initial set of parameters for both windows is 10,10, 900, 750 and 50, 50 for the QRZ Data Popup location. You will adjust these again in a minute.

9. Optionally configure the Logbook of the World (LoTW) parameters. See the LOTW discussion below. Check 'Enable LoTW Option' if you intend to use ECARS Logger to upload ECARS Check-ins to LOTW. Whether the creation of an ADI file results an upload to LoTW is controlled from the main screen 'Upload to LoTW' radio button but if you want that button to have a default condition of checked, then check the 'LoTW Option Default to 'ON' checkbox on the NCS Config Screen. Finally, enter the file path on your computer to the file TQSL.exe. This tells the program where to find TQSL.exe in order to launch it to upload an ADI file to LOTW.

10. Click the 'Save Changes' button and then the 'Close NCS Config' button to close the NCS Config form.

11. Click the Contacts Plot radio button to open the Contacts Plot window. Drag the window to a location of your choosing and drag its lower right corner to give it the proper size for you. Click the Contacts Plot radio button again to close Contacts Plot.

12. Click the QRZ Full Page radio button and do the same thing for QRZ full page. When the location and size are as desired, click the same radio button to close the window.

13. Click the QRZData radio button and move it to a desirable location on your computer screen.

14. Move the Main form to a convenient location on the monitor.

Click 'Save - Close' on the main ECARS Logger Screen. This will save the location and size information for the QRZ Full Page and Contacts Plot windows, the location of the QRZ Data popup, and the NCS Configuration data settings. If you click the 'Abort' button instead, this information is not saved,
The program is ready to run. Restart ECARS Logger from its shortcut and See the 'Basic Work Flow' discussion below for normal operations.

Description:

The ECARS Log is a standalone executable program that is designed to help ECARS Net Control Operators perform their net control functions more easily. It is designed after the original ECARS Custom Net Manager, Version 7.0, by Robert J Traister, WB4KTC, but was developed with extra tools not present in the WB4KTC version.

🍪 ECARS Log Version 4.0 Buil	d 4 for NCS N4HCI		? ×
Call Sign Check Call Sign KC1MR Name RAY Clear City READIN X> State MA ECARS No 1811	In <> A Suffix List T QWJ/M TOD/Q THR/R ZAZ/R 5 KC1MR	Checked In Numbers Total 5 Mobiles 1 QRP 1 Portable 0 Relayed 2 KC1MR - RAY - 13:52 - READING,MA WA4ZAZ - R- WALLY - 13:52 - INVERNESS,FL WA4THR - R- VIC - 13:52 - BEAR GAP,PA K1TOD - Q - TODD - 13:52 - TAVERNIER,FL KC8QWJ -M - BRIAN - 13:52 - GRAND LEDGE,MI	Find H KC1MR F KC1MR 1
M. Q. P. R O Portable	O Relayed New List	Comments	1
Last Checked In 11/14	/2018 ORION &	FT5K; AMP - ACOM 2000	
Data Last Chg'd 1/1	5/2018		
Session Notes			
Save Record NCS (Config ABORT	Save - Close Edit Data Hints Screen	RZ Data mQTH Data ntacts Plot RZ Full Page mber SQL Data

The ECARS Log provides the following features:

a. manages suffix list development

b. searches an internal database for matches to selected suffixes/call signs in the suffix list

c. automatically fills in Contact information (Call sign, name, city, state, ecars number, last checked in date, date data last changed in the database, and comments) when matches are found in the internal database.

d. maintains a list of people who were checked in during the session with Call sign, Name, time, and QTH

e. Provides small window of either QRZ or HamQTH information on the contact, is so elected. When elected Call sign, Full Name, City, State, etc. is presented

f. If elected, provides Members Since, Date Expires, and ECARS No information from the ECARS Master membership database.

g. If elected, automatically plots each check in on a Google map with lines of bearing from the NCS QTH to the Check Ins QTH

h. If elected, presents a full page QRZ presentation that is automatically updated to each check in.

i. Can save new check in records, or update the data in existing check in records.

j. Provides an option for large screen view of all records in the internal database and allows the user to sort on any field and to edit or delete records

k. Provides an option to create an ADIF file, covering a user selectable start and end data, or a Daily ADIF after each NCS session. Creation of ADI files is provide to allow transferring contact information to LOTW or your primary log program

I. Provides options to export all the records in the internal database via a Comma Separated Variables file, or to replace the records in the internal database with the import of a Comma Separated Variables file.

m. Provide options to upload ADI file records to LOTW automatically when the ADI file is created.

Basic Work Flow

Each time the NCS puts out a call for Check Ins, he enters each suffix/call sign into the suffix box and hits

A	Suffix List
T	
1	QWJ/M
	TOD/Q
3	THR/R
	ZAZ/R
5	KC1MR
7	
9	
	New List

the Enter key, which pushes the suffix/call sign into the suffix list below it. Each succeeding suffix/call sign is added below the previously entered suffix / call sign, maintaining a correct order for the check ins. If the check in is mobile, and the NCS type '/M' at the end of the suffix call sign, the entry will be put at the top of the list, consistent with the priority given to mobiles. Successive mobiles in the same Check In list will be put after each other but at the top of the list. QRP stations can be denoted by adding '/Q' after the suffix call sign or call sign segment and will be listed after mobiles. Portable stations can be denoted by adding '/P' after the suffix call sign or call sign segment and will be listed after QRP stations. '/R' is also available to denote the check in is a relay from another Ham. Relayed check-ins go into the list in the normal order below mobiles, QRP, and portable stations. The NCS then execute the list from top to bottom order.

When all stations on the list have been worked, the 'New List' button at the bottom of the suffix list erases the entries in the list in preparation for developing a new list. The hot key 'Alt-N' will programmatically activate the New List button in lieu of using the mouse.

As the NCS works each contact in a suffix list, he clicks on the suffix/call sign of interest which sends the selected suffix/call sign entry to the Find box on the upper right side of the form, and which results in a search of the internal database for matches to the suffix/call sign. All Call sign matches in the search are shown in the Find list below the Find box, and the information of the first listed match populates the Call sign, Name, City, State, ECARS_No, Last Checked In date, Data Last Changed date, and Comments fields with the information in the database for that first listed match. If the first listed match is not the contact checking in, but a subsequent entry in the list is, clicking on the correct Find list entry will populate the Check In information for that call sign. Alternatively, the NCS can just type the full call sign into the Call sign box and the data fields below the Call sign will fill in with the internal database information.

If the selected Suffix List call sign is not in the database, but is a legal call sign (e.g. 1x2, 2x1, 2x2, 1x3, or 2x3 format), it will be written into the Call Sign text box saving the NCS the trouble of typing it in. He will still need to fill in name, city and state information manually in this case.

The hot keys 'Alt 1' through 'Alt 0' will select the 1st through 10th Suffix List entry in lieu of requiring a mouse to click the entry. Similarly, hot keys 'Shift 1' through 'Shift 0' will select the 1st through 10th Find List entry in lieu of requiring the mouse to click the entry.

If there is no match in the internal database to the suffix/call sign of interest, the NCS manually enters the data in the Call sign, Name, City, State, ECARS No, and Comments fields and clicks the 'Save Record'

button to put the data into the internal database. The hot key 'Alt S' is the same as clicking the 'Save Record' button

If there is a match in the database, but an element of presented information is incorrect, the NCS can correct it, or can add additional information into the Comments box and click 'Save Record' to save the changes.

Once the Check In data is correct, the NCS clicks the 'Check In' button, or uses hot key 'Alt I', and the contact is entered into the check in list. The Check In list entry includes Call sign, Name, Time of Check In , and City/State. If either the QRZ Data or HamQTH Data radio buttons have been selected, the Check In data also includes the "crow flies" distance between the NCS and Check In's QTH based upon the Latitude and Longitude for that call sign in QRZ / HamQTH as appropriate. If the Mobile, QRP, Portable, or Relayed radio buttons are checked ("pushed") the letters 'M', 'Q', 'P', and/or 'R' appear to the right of the checked in call sign to denote that they were mobile, QRP, portable, or relayed. When this is the case, counters will update to indicate the number of mobile, QRP, portable, and Relayed check-ins. A 'Total' number of check-ins counter is also updated for each check in.

lecars Log Versi	ion 4.0 Build 4 for NCS N	14HCI						?	\times
Call Sign Clear Entry Clear Extreme State ECARS No	Check In <i> KC1MR RAY READING MA 1811 Mobile O QRP</i>	A Suffix List L QWJ/M TOD/Q THR/R ZAZ/R KC1MR KC1MR	Mobiles 1 KC1MR WA4ZAZ - R- WA4THR - R- K1TOD - Q - KC8QWJ - M -	Chee ARP ARY WALLY VIC TODD BRIAN	I Portable - 13:52 - READI - 13:52 - INVER - 13:52 - BEAR - 13:52 - BEAR - 13:52 - GRAND	Total 5 Relayed NG,MA NESS,FL GAP,PA NIER,FL LEDGE,MI	2	Find KC1MR KC1MR	SHF FT 1 3 5 7 9
M. Q. P. R	Portable O Relay	ved New List			Comments			I	_
Data Last Checked In	1/15/2018	ORION &	FT5K; AMP - ACC	DM 2000					
Session Notes									
Save Record	NCS Config	APOPT	Savo - Class	Edit Data		Hists Saraan	QRZ Ham(O Conta QRZ QRZ QRZ	Data QTH Data acts Plot Full Page	
DEL Record	To CSV File	Fm CSV File	Export ADIF	Luit Data		Times Screen	O Memi O Uplo O REC O LOTV	ad to LOT (Audacity) V Developn	nent

The program monitors which Call signs have checked in and does not permit multiple current check ins by the same contact.

If an entry in the Check In list is clicked two things happen. For five (5) seconds, a delete button appears below the 'Hints Screen' button and if clicked will delete the selected Check In list entry. The second item that occurs is that the Call sign, Name, City, State, ECARS No, Last Checked In date, date Data Last Chg'd and Comments fields are refreshed with the information for the selected entry in the Check In list. Session Notes provide a place where the NCS can make comments to himself that are not contact specific, and are not saved with the internal database entries for check ins. However, Session Notes are saved in a separate text file and can be searched by hitting the Search key (Alt-F). See also discussion of Session Notes file below.

Each entry into the 'Checked In Listbox' is added to a text file titled 'CheckIns.txt'. If a 'CheckIns.txt' file exists when ECARS Logger is started, the program offers the user the option to reload this information into the Checked In Listbox. This is a useful option if you have a computer freezeup and have to restart. It will allow you to immediately resume with all previous check ins shown in the check in listbox.

Clear Entry Button

The 'Clear Entry' button, to the left of the prospective Check-in information fields, when clicked, clears data from the prospective check-in data fields (call sign, name, city, state, ECARS No, Last Checked In date, Date Data Last Changed, and the comments field. If the 'Member SQL Data' radio button has been selected, and the extra prospective check-in data fields of ECARS No, Member Sense, and Date Membership Expires displayed, they will also be cleared by clicking the 'Clear Entry' button. Hot key 'Alt X' has the same effect as clicking this button.

Supplemental QRZ or HamQTH Data

If properly configured with Username and Password (see NCS Configuration discussion) and if elected by



selecting the QRZ Data radio button or the HamQTH radio button, a small form will be presented that will show basic textual information from QRZ/HamQTH. The image above shows a supplemental QRZ Data window. The supplemental HamQTH window looks the same except for background color. Both windows display Call sign, Full name, City, and State data from QRZ or HamQTH. QRZ also shows the license class and the birth year for the person holding the call sign, whereas HamQTH shows Year licensed and Birth Year. This latter data is only

shown if it exists in the respective QRZ/HamQTH database.

When elected, the QRZ/HamQTH data is updated every time a new call sign is written in the Call Sign box, either automatically or manually. It can also be refreshed by clicking in the Call Sign box, which is useful if you opened the QRZ/HamQTH window with a call sign is already active in the Call Sign box and you want to see its QRZ/HamQTH information.

In addition to providing the textual information, election of the QRZ Data/ HamQTH Data radio buttons results in the contact's QTH location being provided to the program. Contact latitude and longitude is used in conjunction with NCS Latitude and Longitude (see NCS Configuration discussion) to calculate the distance between the NCS and the contact. This distance, in miles, is printed at the end of the Checked In information for each contact, when either the QRZData or HamQTHData radio button is selected.

The QRZ Data popup window can be moved like any Windows window. When moved, the new location (top and left corner point) information is retained and saved when the ECARS Logger is shutdown via its 'Save - Close' button. In this way, the next time the QRZ Data option is selected, it will open in the same location as when it closed. The QRZ Data popup window can be resized but there is no benefit in doing so and any change is sizing is NOT retained from session to session. Neither moving nor resizing information is retained for the HamQTH popup.

Member SQL Data

The ECARS master membership database is maintained on the ECARS website and is available for searching via the Member Lookup utilities on the website. In addition to other information, the master database includes each member's ECARS number, the date his membership expires, and the year of his first membership.

A routine part of most check ins is the recording of the ECARS Number for check ins who are ECARS members. This check-in reported information is kept in the internal database and over time may become inaccurate, either because he has let his membership expire, or the internal database does not show an ECARS number and he has joined ECARS.

Selection of the 'Member SQL Data' radio button will present a 2nd ECARS No field to the right of the first such field. Each time a call sign is entered into the Call Sign box, either automatically or manually, it will result in a background search of the Member Lookup function on the ECARS website and will show the resultant ECARS number, in red ink, in the 2nd ECARS No field, as shown below, but only if the check-in is a current active member of ECARS. It will NOT show this information for former members whose membership has expired.

This same search of the master ECARS membership database will return the 'Date Expires' information which is presented in the 'Date Expires' text box. A 'Member Since' text box will present the year the contact first joined ECARS once that feature is enabled on the ECARS website (still in development as of12/23/2018).

🛞 ECARS Log Versi	ion 4.0 Build 4 for NCS	5 N4HCI			
Call Sign Call Sign Name Clear Entry <x> State ECARS No Member Since (Yr)</x>	Check In <i> N4HCI BOB NEWPORT NEWS VA 4891 4891 Date Expires Lifet: Mobile O QR</i>	A Suffix L T 1 N4HCI 3 3 5 7 7 1 9	Mobiles [Chec	ked In Numbers
M. Q. P. R	Portable O Rela	ayed New Li	st		Comments
Last Checked In Data Last Chg'd Session Notes	11/16/2018 5/1/2017				
Save Record	NCS Config	ABORT	Save - Close	Edit Data	
DEL Record	To CSV File	Fm CSV File	Export ADIF		



Plotting Check In Contacts

Selection of the Contacts Plot radio button will open a Google map webpage. Each time the 'Check In' button is clicked, when the Contacts Plot is active, the City and State for the contact, and the Latitude/Longitude for the NCS, will be plotted on the Google map, with a great circle line of bearing between them. The great circle distance between the NCS and the last check in will be shown in the blue bar at the top of the Google map. All lines of bearing are drawn in red ink except for Relayed check-ins, which are shown in blue ink.

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If the Contacts Plot radio button is clicked again, it will de-select the radio button and close the Contacts Plot window. If the Contacts radio button is clicked again during the same session, it will open as a blank map and will NOT include earlier check-ins that were plotted.

The Contacts Plot window can be resized and moved like any Windows window. When moved, or resized, the new location (top and left corner point) and new size (width and height) information is retained and saved when the ECARS Logger is shutdown via its 'Save - Close' button. In this way, the next time the Contacts Plot option is selected, it will open in the same location and with the same size as when it closed. See discussion at 'Contacts Plot and QRZ Full Page Location and Size and QRZ Data Popup Location Information below'.

Comparison of Distance Calculations

The ECARS Log program offers the NCS two separate determinations of distance between the NCS and the check-in, and they can differ significantly at times. The distance shown in the Checked In Listbox is <u>always</u> the distance between the NCS Latitude and Longitude and the QTH location of the checked in contact, as reported by QRZ/HamQTH. The distance shown in the Contacts Plot is the distance between the NCS Latitude and the City and State shown in the City and State fields for the contact information. There are a number of reasons that the location as noted by City and State can differ significantly from the QTH location, such as:

a. the check in is NOT at his home QTH. If you type his current location in the City/State check in data (e.g mobile, portable), the Contacts Plat will give you the distance to the check in and the Check In list will give you the distance to his home QTH.

b. contact location information on QRZ/HamQTH may be inaccurate due to a recent move, and failure of the Ham to put good data in QRZ/HamQTH. Faulty Lat/Long, grid square, or other provided location information in QRZ or HamQTH, can make the Checked In Listbox distance calculation be erroneous, even when the street address and city/state information at the top of the Ham's QRZ/HamQTH pages are accurate.

c. The HamQTH latitude/longitude often seems to be widely divergent from reality, for reasons not understood by the author.

QRZ Full Page Presentation



A few years later, a buddy and I decided to upgrade to Advanced and we used 6m to practice 13wpm code (him sending to me) and learn theory (me sending to him). Both of us passed our exams at the Federal Building, which seemed to be resonant with the audio of the order machine they used for testing

Selection of the QRZ Full Page radio button will result in the opening of a QRZ webpage in a new window. Each time the Check In button on the Main Form is clicked, or the 'Alt I' hot key is used, the program will automatically send the call sign to the QRZ webpage.

If the QRZ Full Page radio button is clicked while the QRZ window is open, it will de-select the radio button and close the QRZ window.

Each time a check in is added to the Check In list box, when the

QRZ Full Page option is active, the QRZ Full Page display will increment a counter of the number of QRZ URLs it has 'memorized' and provide arrows, '>>>' and/or '<<<', on the QRZ Full Page display, to allow the user to scan back and forth to those other check- ins after they are no longer visible on the ECARS logger screen. The red arrows in the image show the locations of the left/right arrows and the '# of URLs in memory' counter.

The QRZ Full Page window can be resized and moved like any Windows window. When moved, or resized, the new location (top and left corner point) and new size (width and height) information is retained and saved when the ECARS Logger is shutdown via its 'Save - Close' button. In this way, the next time the QRZ Full Page option is selected, it will open in the same location and with the same size as when it closed. See discussion at 'Contacts Plot and QRZ Full Page Location and Size and QRZ Data Popup Location Information below'.

Upload to LOTW

This option on the main ECARS Logger screen will only be present if the NCS Config screen entry for 'Enable LoTW Option' is checked. If this option is checked, then the 'Upload to LOTW' entry will be shown as unchecked and in black ink on a grey background if the NCS Config screen entry for 'LoTW Option Default to 'ON' is NOT checked, and it will be shown as checked and in white ink on a red background, if the NCS Config screen entry for 'LoTW Option Default to 'ON' is checked by clicking the 'Upload to LOTW' radio button on the main screen.

When the 'Upload to LOTW' radio button is checked (white text on red background), any ADI file creation action by the ECARS Logger will result in automatic upload of the created ADI file to LOTW without further involvement or confirmation by the user.

Upload to LOTW is handled by the ARRL's TQSL.exe program using its command line interface, which is transparently filled in by ECARS Logger. This action will launch TQSL.exe and TQSL will provide the user the reports of successful or unsuccessful upload of the ADI file. Once this is complete, the user can close TQSL by clicking on its Close 'X' in the upper right hand corner of its window.

ECARS Logger will provide a Message Box reporting the ADI file was uploaded but this really means that TQSL was launched. ECARS Logger does NOT process or display reports from TQSL.exe of the actual status of the upload.

REC (Audacity)

If the user has a copy of Audacity on his computer, and if he creates a shortcut name 'Audacity' to the file 'Audacity.exe' and places that shortcut in the same folder as the ECARS Logger files, the program will sense the existence of the shortcut and will show the 'REC (Audacity)' radio button. When this radio button is checked, it will launch Audacity.

Audacity is a highly capable, and free, audio recording program that can be used to make audio recordings of your contacts if you have an interface between your rig's audio output and your computer's audio input. This is usually the case if you have digital mode interfaces between the computer and the rig. In my case, the interface involves a SignaLink USB between the computer and rig.

LOTW Development

This option will NOT be present on your copy of ECARS Logger and is used by the author to develop additional features, most recently the LOTW interface.

NCS Configuration

Clicking the 'NCS Config' button at the bottom of the Main form will open an NCS Configuration form as shown here. This form provides the location for configuring variables that are particular to the Net

· · · ·					
FrmNCS_	Config				? ×
		NCS Co	onfiguration Sc	reen	
The EC/ display I data pro require t below.	ARS Logger i Name, City, S tocols: QRZ he user to lo	is designed to enable the NCS to auto State, and other information, based up Z requires an XML subscription to get g in with Username and Password, w	matically calculate Distan on data from either QRZ. this data; HamQTH provi hich will be done automati	ce and Bearing to a checked- com or HamQTH.com. Both des the data at no cost. Both ically by the ECARS logger wit	in contact, and to databases use XML QRZ and HamQTH th the data provided
NCS Call Sign:	N4HCI]	Universal Ex	xport ADI File Paramete	ers
GMT Offset:	5	Enter GMT Offset as number of hours to be added to local time to get GMT. For	ECARS Freq: 7.255	MHz NCS Gridsqu	uare: FM17sb
		example, you add 5 hours to local Eastern Time to get GMT	NCS Tx Pwr: 200	NCS	Rig: OMNI VII
Latitude:	37.051712	Enter Latitude in decimal degrees with positive in northern hemisphere (e.g. 37.4)	RST Sent: 59	RST R	cvd: 59
Longitude:	-76.49385	negative in western hemisphere from Greenwich England (e.g76.7)	Contacts Plot	Top Left Width Height 0 0 1000 701	Parameters for opening location of the Contacts
Option to us	se QRZ.com	Option to use HamQTH.com	QRZ Full Page QRZ Data Popup	0 0 539 467 50 50	Page, & QRZ Data windows. After 1st use, these numbers are values when last closed
Usemame: N Password: •	4HCI	Usemame: N4HCI Password: ••••••	Logbook	of the World (LoTW)	
			TOSI and Disastant	Lo I W Option Default to UN	
	Close NC	S Config Save Changes	Enter (x86)	path to TQSL.exe. TQSL.exe is normally TrustedQSL\'. Be sure to include trailing *	rinstalled in 'C:\Program Files \'

Control Operator, or the size and location of QRZ Full Page and Contacts Plot windows, and QRZ Data popup location, when they are launched by the program. After changing an element of information in any of the input boxes in the NCS Config form, hit the ENTER key. The data in the input box will be written in red ink and, if this is the first change to the form, a new Save Changes button will appear at the bottom of the NCS Config form.

Clicking on the 'Save Changes' button will save all of the information in this form to the tblNCS_Lat_Long table in the Access database 'Logger.mdb'. The user never needs Access to perform any function of the ECARS Log program. All interfaces with the tables in the database are performed by the program.

Clicking on the 'Close NCS Config' button, when there are changes that have been entered in the form data, will result in a popup that requires the user to decide if he wants to save the changes ('Yes' answer) or not ('No' answer). The NCS Config form closes for either answer.

NCS Config Screen fields are described below:

<u>NCS Call Sign</u>: Enter the NCS's call sign in this input box. This data is used as part of the title bar on the Main form. See 'ECARS Log Version 4 Build 4 for NCS N4HCI' in the title bar of one of the Main Form images above. The call sign in this text string is provided from the NCS Call Sign text box input. The Call Sign data is also used as part of the QRZ Data and HamQTH Data login process.

Latitude / Longitude: The NCS latitude and longitude are used

a. in conjunction with contact latitude and longitude information provided by QRZ or HamQTH (if either the QRZ Data or the HamQTH Data radio buttons are selected) to calculate the distance between the NCS and the contact's QTHs for display in the Check In list,

b. by the Contact Plot web form to calculate the distance to the last plotted contact, and

c. by the Contact Plot web form to plot the NCS QTH.

<u>Option to use QRZ.com</u>: Clicking the 'Option to use QRZ.com' radio button causes the Username and Password input boxes to become visible on the NCS Config form, and the QRZ Data radio button to become visible on the Main form.

The Option to use QRZ.com enables the user to obtain limited supplemental QRZ data in a small form window as discussed above in the Supplemental QRZ or HamQTH Data section. QRZ requires the user to have an XML or higher level of membership level in order to get this XML provided supplemental information.

Put your username and password into the appropriate QRZ input boxes on the NCS Config form. Hit the ENTER key after entering each data element.

<u>Option to use HamQTH.com</u>: The 'Option to use HamQTH.com' is identical to the 'Option to use QRZ.com' except for one thing. HamQTH does not require a special membership level in order to provide the supplemental XML data. Note that the latitude and longitude information presented by HamQTH is often of questionable accuracy if the call sign owner has not programmed it with his specific latitude and longitude. In my case, I found HamQTH showing my location about 65 miles WNW of my actual location until I entered my latitude and longitude.

<u>Universal Export ADI File Parameters</u>: The ECARS Log can produce an ADI file for checked in contacts. See the 'Export ADIF' discussion below. The ECARS Log saves call sign, name, and QTH information as part of managing contact check ins but does not collect a number of elements of information normally provided in ADI files. The 'Universal Export ADI File Parameters' on the NCS Config form provides a means for specifying QSO frequency, transmitter power, qridsquare, rig model, RST sent and RST received. When provided via the NCS Config form, these elements will be included in each QSO reported, along with call sign, name, city, and state, in any ADI file exported via the ECARS Log program. The author recognizes that not all QSOs result in 59 RST exchanges, but also understands that contemporary RST exchanges tend to being perfunctory '59' exchanges regardless of the actual QSO conditions. If the user does NOT want to exchange 59 RST reports for each QSO, simply leave the RST Sent and RST Rcvd fields blank.

<u>Contacts Plot and QRZ Full Page Location and Size and QRZ Data Popup Location Information</u>: This section of the NCS Config form allows the user to specify the location (top and left) and size(width and height) parameters for the Contact Plot and QRZ Full Page windows and the top and left location for the QRZ Data popup. When these windows are opened via their radio buttons on the Main form, they will open at the locations and sizes specified by this data.

The user does not usually need to fill in the data in these fields because this data is automatically updated to the location and size of these windows when the ECARS Logger is shutdown using the 'Save - Close' button. However, they are provided on the NCS Config form to allow the NCS to see the location and size information for each of these windows, and to change them if needed to force them to be in a given location on the desktop if the user cannot find them (e.g. loss of the use of a monitor in a multimonitor setup, may result in some of these windows opening off screen).

Edit Data Form

Clicking on the Edit Data button on the Main form will open a new form that provides the user the

	Call_Sign	Handle	City	State	ECARS_No	Data_Last_Ch	Last_Checked	Notes
•	N3JRX	JOANN	LENHARTSVILLE	PA	Non-Member	01/04/1980	01/18/2005	??
	WB4KTC	BOB	FRONT_ROYAL	VA	4226	12/06/2001	10/18/2015	AUTHOR_OF_ECARS
	WB1FPA	том	GOFFSTOWN	NH	1556	12/06/2001	07/02/2012	??
	WA4SOF	JERRY	OIL_CITY	PA	4062	12/06/2001	03/06/2007	??
	WA4SDE	DANNY	WOODFORD	VA	Non-Member	12/06/2001	10/23/2007	??
	WA2SLR	JERRY	ROCKAWAY	NJ	20137	12/06/2001	06/15/2007	??
	W4RFJ	ROGER	RIDLEY_PARK	PA	4283	12/06/2001	02/01/2006	??
	W2RRT	NICK	BROOKLYN	NY	20059	12/06/2001	02/09/2011	??
	W2OEZ	JOHN	CARLE_PLACE	NY	9999	12/06/2001	12/06/2001	??
	W5RDH	BOB	SEBRING	FL	9999	12/06/2001	12/06/2001	??
	W2HP	PETE	FAIR_LAWN	NJ	9999	12/06/2001	12/06/2001	??
	WA3HUP	TOM	BLOOMSBURG_	PA	9999	12/06/2001	12/06/2001	??
	WA2JTP	DENNIS	DUNELLEN	NJ	9999	12/06/2001	12/06/2001	??
	W3RZW	JOE	SILVER_SPRING	MD	3757	12/06/2001	12/06/2001	??
	W3MSG	JERRY	DAGSBORO	DE	9999	12/06/2001	12/06/2001	??
	W3KGL	TOM	SCHUYLKILL_HAVEN	PA	3750	12/06/2001	01/25/2005	??
	W3KG	JOHN	HAVERTOWN	PA	Non-Member	12/06/2001	02/15/2002	??
	W1FP	BOB	COLHESTER	VT	9999	12/06/2001	12/06/2001	??
	NY3A	STEVE	MANCHESTER	MD	9999	12/06/2001	12/06/2001	??
	N4GYN	RAY	COLUMBIA_	MD	Non-Member	12/06/2001	10/03/2011	??
	VA3CRP	GRANT	GRAVENHURST	ON	Non-Member	12/06/2001	12/23/2001	??
	W3ICX	ALEX	CONNELLSVILLE	PA	3765	12/06/2001	02/29/2012	??
	W3HE	PAUL	LAURAL	DE	Non-Member	12/06/2001	02/08/2002	??
	W3BHE	TED	CUMBERLAND	MD	3696	12/06/2001	12/06/2001	??
	W3AF	ROBERT	MOUNTAIN_TOP	PA	Non-Member	12/06/2001	02/02/2002	??
	N2ZHD	DAVE	LIVERPOOL	NY	Non-Member	12/06/2001	01/03/2002	??
	N2YQZ	JOHN	CLIFTON_PARK	NY	Non-Member	12/06/2001	04/23/2002	??
	NEOK	HARLEY	BELDON	MI	9999	12/06/2001	12/06/2001	77

means to sort, filter, delete, or edit the internal data in the ECARS_db table of the Logger.mdb database.

To sort the data, click on one of the data header columns (e.g. Call_Sign). To reverse the sort order, click the column name again.

To filter the data, type into the Filter Box at the bottom of the form. The form re-filters as each character is typed. The data filters based upon a partial string match to the data in every column except the Data_Last_Changed and the Last_Checked_In columns. Unfilter the data by deleting the data in the filter box.

Delete a row of information by clicking on the far left column (left of

the Call_Sign column) to select the row and then hit the keyboard delete key.

To edit any cell, put the cursor in the cell and edit as desired. NEVER TYPE COMMAS (,), QUOTES (") OR APOSTROPHES (') IN ANY DATA FIELD AS IT WILL SCREW UP THE SQL STATEMENTS IN THE CODE THAT SAVE THE DATA and cause the ECARS Logger to crash.

CAUTION: The Close and Save button at the bottom of the form will save any changes made to the 'as filtered' master ECARS_db table in the Logger.mdb database. The 'Close - No Save' button will close the Edit form without saving changes. It is a good practice to always remove the filter before clicking the 'Close and Save' button to ensure that the program does not replace the entire ECARS_db table with a

filtered subset of the data originally in the table.

Export ADIF

The standard for exchanging QSO information between programs (LOTW, ECARS Log, other logger programs) is the ADI file. The ECARS Log is designed to create an ADI file of check ins for any period of consecutive whole days, from 1 day to the span of the database, as chosen by the user.

Call_Sign	Handle	City	State	ECARS_No	Data_Last_Changed	Last_Checked_In	Notes
W7USR	TOM	ORLANDO	FL		02/26/2018	04/16/2018	
K4TJS	STAN	YORKTOWN	VA		04/17/2018	04/17/2018	
K9LPA	MARK	MACON	IL		04/17/2018	04/17/2018	500 WATTS
KB8VIN	STEVE	CARDINGTON	OH		04/17/2018	04/17/2018	
KA1HIR	AL	COVENTRY	RI		04/09/2018	04/17/2018	TS_50
KE8EZT	JOE	SWANTON	OH	8327	03/06/2018	04/17/2018	KENWOOD TS-520 YAESU 840 KENWOOD 440
W9NDU	BARRY	DEERFIELD	IL		04/18/2018	04/18/2018	
K2WPL	BILL	UTICA	NY		02/05/2018	04/18/2018	

The export ADIF process is started by clicking on the 'Export ADIF' button at the bottom of the Main

	Call_Sign	Handle	City	State	ECARS_No	Data_Last_Ch	Last_Checked	Notes
•	WA4THR	VIC	BEAR GAP	PA	4760	06/06/2018	12/22/2018	ECARS DIRECTOR AND NCS
	K1TOD	TODD	TAVERNIER	FL	10243	11/06/2018	12/20/2018	SNOW BIRD FROM QUEBEC TO TAVERNIER FL; PORTABLE VE2 QUE
	KC2VVX	MILT	AUBURN	NY	20681	04/14/2016	12/20/2018	EXPIRED ECARS MEMBER;
	W2EMF	AL	NEW WATERFORD	OH	2915	06/27/2018	12/20/2018	
	VE3ERY	JIM	LONDON	ON		06/26/2018	12/20/2018	NEW AMP EXPECTED 1ST JULY 2018;
	WA4ZAZ	WALLY	INVERNESS	FL	40001	11/26/2018	12/20/2018	70 MI N OF TAMPA; USED TO WORK FOR THE STATE DEPT; PARTIC
	WA1AES	ERNIE	GREENVILLE	CT	10061	03/05/2018	12/19/2018	MOBILE_100W_HAMSTICK
	W2KYM	JIM	NIAGARA FALLS	NY		11/08/2018	12/19/2018	
	K2GUN	CARL	WINTER HAVEN	FL	20952	10/02/2018	12/19/2018	NOT CONVERSATIONALIST
	KB8HFZ	BILL	MARION	OH		11/14/2018	12/19/2018	
	KK4IFF	JIM	HAZARD	KY	4976	08/13/2018	12/19/2018	DIPOLE_OMNI_VII: 120 S OF LEXINGTON: RETIRED AFTER BACK OF
	KC8QWJ	BRIAN	GRAND LEDGE	MI	8304	11/20/2018	12/19/2018	REPAIRS PAGING EQUIPMENT TRANSMITTERS IN SOUTHERN MI N
	KN4LUZ	BILL	BILL TREASURE ISLAND		FL 40092	12/12/2018 12/19/2018	12/19/2018	2 BOATS 62 FT AND 64 FT; CATERPILLAR ENGINES IN BOAT;
	KC9NKI	MARK	FERDINAND	IN 08/14/	08/14/2018	12/19/2018 RETIRED;	RETIRED;	
	N1DWJ	DAVE	UNICOI	TN	1995	02/01/2018	12/19/2018	TS-520 LIMESTONE COVE TN; NCS SINCE 2016;
	N1FGN	LEROY	WEST SUFFIELD	CT	1814	10/25/2018	12/19/2018	
	K3VOX	LEE	SEBRING	FL		11/16/2018	12/19/2018	FLEX 6500;
	KN4GPT	TOM	WELLINGTON	FL	40047	10/25/2018	12/19/2018	BRITISH EX-PAT; SCOUT JAMBOREE WITH BOCA RATON SCOUTS;
	NA1X	JOE	AGAWAM	MA	10099	03/14/2018	12/19/2018	NEW_TS480-HX_SHURE_550_MIC; 10 MI SOUTH OF SPRINGFIELD M
	AB1ZI	CARL	BATH	ME	10241	10/10/2018	12/19/2018	MAKING A HOME BREW LINEAR AMP AND REPAIRING A IC-740 TRAI
	K9DMV	JOE	ALGONQUIN	IL		05/24/2018	12/19/2018	??

form. This opens an Export ADIF form that looks similar to the Edit Data form. When first opened the ADIF form lists every record in the internal database. Two filter input boxes are provide to specify the records of interest based upon the dates listed in the Last Checked In data column. The start date is the first date that should be shown in the filtered data. The End By Date is the first date that should NOT be shown. By this logic, a start date of 4/25/2017 and an

end by date of 4/26/2017 will see one days records for 4/25/2017.

If all the records in the internal database were developed using the ECARS Log program, there will be no exceptions to this filter logic. However, if the data in the internal database was imported from some other program, it is probable that the above filter will result in data for 4/25 and 4/26. If after applying the filter you get one extra day's data, then reduce the filter End By Date by one day. The reason for this difference in filter behavior is that the ECARS Log date entries are actually Date/Time entries and the presence of the time information affects how the filter functions.

Once the filter dates are entered, 'Apply the Filter', 'Delete the Filter', and 'Create ADIF File' buttons becomes visible. Click the 'Apply the Filter' button to see the effects of the filter on the data and to confirm these are the records that you want to have in the ADI file. If the filter is not correct, either corrected the filter dates directly, or click the 'Delete Filter' button to clear the filter and then type in the new filter dates. If you change a filter date directly, re-click the 'Apply the Filter' button to see the effect.

Once the filter is correct and the data shown is what you want in the ADI file, click the 'Create ADIF file' button to create the file. This will present a small popup that informs you that the file will be created in the '/ADIF' sib-folder of the same folder in which the ECARSLog.exe file resides. If the '/ADIF sub-folder does not exist, ECARS Logger will create it. Click OK on the popup to create the file.

ADI files are simple text files having a specific protocol specific format as shown in the image below.

If you have configured the ECARS Logger to be able to upload ADI files to LOTW, and if the 'Upload to LOTW' radio button on the main form is checked ("pushed'), the ADIF.adi file will automatically be uploaded to LOTW with no further action required by the user. (See <u>Uploading to LOTW</u> below). If you want to create the ADI file, but NOT upload it to LOTW, un-check the 'Upload to LOTW' radio button before you click the 'Create ADI File' button on the Export ADIF form, and observe that it is no longer shown with white test in a red background.

ECARS Logger by Bob Goodwin, N4HCI Created 4/29/2017 With credit to ECARS Custom Net Manager Version 7.0 by Robert J Traister, WB4KTC <ADIF VERS:3>2.2 <PROGRAMID:9>ECARS Log <PROGRAMVERSION:20>Version 1.0 Build 01 creation = content = <FOH>

Export CSV

Clicking on the 'To CSV File' button opens the Edit ECARS form with the addition of an 'Export CSV file' button. The data can be filtered via the filter box but the primary purpose of the Export CSV function is to create a file of the entire database that can be imported into other copies of ECARSLog.exe via the Import CSV function. The file is created by clicking on the 'Export CSV File' button, and is created in the same folder in which the ECARSLog.exe file resides. The file is named 'ECARS Log CSV Export.xls'. The file is a text file but is given a Excel extension in order to allow it to be opened easily in Excel. After double clicking the file to open it, Excel will say that the format is not a proper Excel format and asks if you want to open the file now. Answer yes and you will see the data in a large Excel table.

	ECARS_Log_	CSV_Export.	xls					_ = >
	A	В	С	D	E	F	G	Н
1	Call_Sign	Handle	City	State	ECARS_No	Data_Last_Changed	Last_Checked_In	Notes
2	N3JRX	JOANN	LENHARTSVILLE	PA	Non-Member	1/4/1980 0:00	1/18/2005 0:00	??
3	WB4KTC	BOB	FRONT_ROYAL	VA	4226	12/6/2001 0:00	10/18/2015 10:52	AUTHOR_OF_ECARS_CUSTOM_NET_MANAGER_SOFTWA
4	WB1FPA	TOM	GOFFSTOWN	NH	1556	12/6/2001 0:00	7/2/2012 0:00	??
5	WA4SOF	JERRY	OIL_CITY	PA	4062	12/6/2001 0:00	3/6/2007 0:00	??
6	WA4SDE	DANNY	WOODFORD	VA	Non-Member	12/6/2001 0:00	10/23/2007 0:00	??
7	WA2SLR	JERRY	ROCKAWAY	NJ	20137	12/6/2001 0:00	6/15/2007 0:00	??
8	W4RFJ	ROGER	RIDLEY_PARK	PA	4283	12/6/2001 0:00	2/1/2006 0:00	??
9	W2RRT	NICK	BROOKLYN	NY	20059	12/6/2001 0:00	2/9/2011 0:00	??
10	W2OEZ	JOHN	CARLE_PLACE	NY	9999	12/6/2001 0:00	12/6/2001 0:00	??
11	W5RDH	BOB	SEBRING	FL	9999	12/6/2001 0:00	12/6/2001 0:00	??
12	W2HP	PETE	FAIR_LAWN	NJ	9999	12/6/2001 0:00	12/6/2001 0:00	??
13	WA3HUP	TOM	BLOOMSBURG_	PA	9999	12/6/2001 0:00	12/6/2001 0:00	??
14	WA2JTP	DENNIS	DUNELLEN	NJ	9999	12/6/2001 0:00	12/6/2001 0:00	??
15	W3RZW	JOE	SILVER SPRING	MD	3757	12/6/2001 0:00	12/6/2001 0:00	??
16	W2KGL	TOM	SCHUYLKILL_HAVEN	PA	3750	12/6/2001 0:00	1/25/2005 0:00	??

Import CSV



It is also possible to import data from a CSV file and use the imported data to replace (not append to) the data in the main database (ECARS_db table in Logger.mdb). This operation requires great care and attention to detail to be sure that the data being imported is not corrupted with respect to being a CSV file. Commas are only allowed in a CSV file to delimit fields in the file. If the data has commas in it, the program will NOT be able to accurately parse the data into the correct fields. Before you start this process, it would be prudent to make a copy of the file Logger.mdb so that you can restore it to use if a problem occurs during the CSV import process.

To start the Import CSV process, click the 'Fm CSV File' button at the bottom of the main form. This will open a CSV Import form (see picture above). The CSV Import form is designed as a two step process.

Call_Sign	Handle	City	State	ECARS_No	Data_Last_Ch	Last_Checked	Notes
	JERRY	STURGIS	KY	Non-Member	9/13/2016	10/24/2016	??
WZ2Z	BRUCE	WEST BLOOMFIELD	MI	20132	3/1/2017 8:	3/14/2017	??
WZ2Y	JACK	ELMHURST	NY	2825	1/6/2006 1	1/6/2006 1	??
WZ1L	BILL	AMESBURY	MA	1598	1/3/2006 1	1/12/2008	??
WY3T	JOE	LENHARTSVILLE	PA	3756	2/25/2010	8/11/2010	WIFE_JOANNDO
WY2E	FRED	POUGHKEEPSIE	NY	9999	8/11/2015	8/11/2015	ICOM_7000_HAMS
WY2D	RAY	PORT_JARVIS	PA	Non-Member	3/27/2002	3/27/2002	??
WX9DX	JIMMY	TAMPA	FL	Non-Member	12/28/2016	12/28/2016	??
WX8V	GREG	LOUISVILLE	KY	Non-Member	3/1/2016 8:	3/7/2016 7:	ON HIS WAY TO W
WX7P	JANET	BENTON CITY	WA		10/11/2016	10/11/2016	
WX4C	DON	HARRISONBURG	VA	4775	2/1/2006 1	6/22/2015	??
WX2MIG	TONY	SOMERSPOINT	NJ	Non-Member	3/18/2009	3/18/2009	??
WX1WX	ALEX	GAINESVILLE	FL	10069	2/16/2016	2/16/2016	
WX1L	JIM	WOOSTER	MA	Non-Member	8/4/2010 1	8/4/2010 1	??
WW9WZ	DICK	222	IN	9999	8/15/2012	8/15/2012	??
WW5DD	DON	??	??	Non-Member	8/27/2012	8/27/2012	PA
WW40K	VIC	NEWPORT	RI		9/22/2016	9/22/2016	
WW4DB	DON	HOPEWELL	VA	4269	12/9/2001	3/14/2012	??
WW30	PETE	RIDGEWAY	PA	Non-Member	11/28/2011	11/28/2011	NW_PA
WW3K	DON	DURBY	СТ	9999	3/23/2009	3/23/2009	??
WW2BLS	DARRYL	NEW_BURGH	NY	Non-Member	10/31/2011	11/16/2011	??
WW1LP	TONY	ROCKY_HILL	СТ	Non-Member	2/7/2005 1	11/2/2016	??
WV8Z	BILL	CAMBRIDGE	OH	Non-Member	4/11/2007	4/11/2007	??
WV8X	DAN	MARIETTA	OH	Non-Member	2/5/2007 1	2/5/2007 1	??
WV8USA	CHRIS	WILLIAMSTOWN	WV	Non-Member	6/30/2010	10/31/2012	??

The first step, activated by clicking the 'Import CSV file' button, will read the CSV file (named

'ECARS_Log_CSV_Import.csv' into the newly opened form and allow you to peruse and evaluate the quality of the data. The 2nd step, if the data is deemed to be of high quality, is to click the 'Save to ECARS_db' button.

Step 1 does not affect the database at all. Step 2, deletes all data in the ECARS_db table and reads in the data from the datagrid seen in the Import CSV form. If the data is not deemed to be good, click the 'Abort'

button to terminate the CSV Import operation.

A successful import operation requires that the data in 'ECARS_Log_CSV_Import.csv' be correct, and formatted to be compatible with the database table that it will be written into. It must have eight fields. The field names must be in the first row and be named EXACTLY as shown: Call_Sign Handle City State ECARS_No Data_Last_Changed Last_Checked _In Notes

Each of the field names, and each of the associated data elements in the file, must be separated by a comma (","). Other than as field separators, commas must not be used as part of any data field.

For net controllers who decide to evaluate or use the ECARSLog.exe program, the author can be contacted at <u>bobgn1@cox.net</u>, and is willing to convert a user provided database into an import capable CSV file, or to simply load your data into the ECARS_db database table.

Session Notes

ECARSLog.exe maintains (writes to and reads from) a text file names 'SessionNotes.txt' that is located in the same directory as the ECARSLog.exe file is located. All entries into the Session Notes file are prepended with a date and time tag.

While the Session Notes file started out as the place to enter the notes typed by the Net Control Operator in the Session Notes box during his net control duties, it has grown in function to where it now includes the following:

- NCS session notes
- all Check Ins listed
- a date/time stamp of the importing or exporting of files

The Session Notes can be a quick answer to questions after/during a net control session

- a. who was it that reported use of a hex beam antenna?
- b. how many times has WA4ZAZ checked in with me?

c. when did I last export an ADI file? What start date should I use in the ADI file filter to be sure and get all the new check ins?

Hints / Shortcuts

ECARSLog.exe has a modest 'Hint' window that is accessed by clicking on the 'Hints Screen' button at the bottom of the main form, or using the hot key 'Alt H'. The 'Hints Screen' discusses:

<u>Wildcards</u>: The Suffix and Find text boxes allow the use of wildcards. An underscore is the wildcard for 'any character in this position' and the percent sign is the wildcard for 'any group of characters' in this position. All Suffix and Find box searches automatically search with the group wildcard ('%') pre-pended and post-pended to the search string, so there is no need to ever add wild card before or after your search string. For example, if you hear 1D and V in a call sign, you can type in the suffix box "1D_V" (without the quotes) into the suffix box. When you click on it in the Suffix Listbox, it will cause a search

that returns all Call Signs that have any prefix, are from call area 1, and have a suffix starting with D and ending with V.

Х

_		
	Hinte	Screen
	HINUS	Screen

	^	Hot
WILDCARDS		Δva
"_" - Wildcard for single character (w/o quotes)		/ v u
"%" - Wildcard for multiple characters (w/o quotes)		user
(may be used in Suffix and Find Textboxes)		and
HOTVEYS		have
Alt C. Display Complete Check in List		Have
Alt-D Click DEL button when check in highlighted		
Alt-E Click 'ECARS No Lookup' radio button		Δlt-F
Alt-F Open searchable Session Notes window		
Alt-H Click 'Hints Screen' button		to se
Alt-I Click 'Check-In' button		lines
Alt-M Click 'HamQTH Data' radio button		onto
Alt-N Click 'New List' button		ente
Alt-P Click 'Contacts Plot' radio button		ente
Alt-Q Click 'QRZ Full Page' radio button		مامل
Alt-S Click 'Save Record' button		ucic
Alt-X Click 'Clear Entry' button		will s
Alt-Z Click 'QRZ Data' radio button		and
Alt-DownArrow = FIII C/I Name, City, State from QRZ/HamQTH		+h.o
Alt-T to Alt 0 Clicks of TSt to Toth Suffix List entry		thei
Shift 1 - Shift 0. Clicks on 1st to 10th Find List entry		
Ctrl-M. Click 'Mobile' radio button		۸l+_(
Ctrl-Q Click 'QBP' radio button		AIL-C
Ctrl-P Click 'Portable' radio button		page
		list
CAUTIONS		
a. DO NOT HIT 'ALT-F4' KEYS AS IT IS PROGRAMMED BY		than
WINDOWS TO CLOSE THE RUNNING PROGRAM unless deactivated		Whe
via AutoHotKey script.		tha
b. Single quote and double quote characters are NOT allowed in any		the l
		Alt-C
c. Commas should NOT be used in any ECARSLog Field. Use of		orde
detabase		5.00
udidudse.		

Hot Keys

A variety of hot keys are provided to enable the user to avoid use of the mouse to click buttons and data rows as well as to open features that have no buttons to launch them.

Alt-F - opens a search box that enables the user to search through the Session Notes file for any lines having a partial match to the search string entered in the Session Notes search box. If you enter any character in the search box and then delete the search character, the search box will show you all entries in the Session Notes and allow you to manually read through/search the notes. See Session Notes discussion above

Alt-C - opens a text box that shows nearly a full pages worth of entries in the current Check In list. The user might find this more convenient than using the scroll bar to view older entries. Whereas the Main form Check In list presents the newest check in at the top of the list, the Alt-C text box lists them top to bottom in the order in which they checked in.

Illegal Characters

No data field may contain single quote, double quotes, or comma characters. Single quotes and double quotes are prohibited because their use disrupts the construction of SQL command strings that enable searches, or updates of the database. Commas are prohibited because their use disrupts the integrity of CSV files, used to import and export data.

Structure and Organization

The ECARS Log program is designed to work in conjunction with an Access database named 'Logger.mdb'. The Logger.mdb database file has two principal data tables - ECARS_db and tbINCS_Lat_Long.

- The 'ECARS_db' table stores all the contact information developed and includes the fields: Call_Sign, Handle, City, State, ECARS_No, Data_Last_Changed, Last_Checked_In, and Notes.
- The 'tblNCS_Lat_Long stores the ECARSLog configuration information and includes the fields: Call_Sign, Latitude, Longitude, QRZ_Option, HamQTH_Option, QRZ_UserName, QRZ_Password, HamQTH_Username, HamQTH_Password, ECARS_Freq, NCS_Tx_Pwr, NCS_Gridsquare, NCS_Rig, RST_Sent, RST_Rcvd, File_Location, PlotTop, PlotLeft, PlotWidth, PlotHeight, QRZTop, QRZLeft, QRZWidth, QRZHeight, GMT_Offset, LOTW_On_Option, LOTW_Enabled, TQSL_Directory, QRZ_Data_Top, and QRZ_Data_Left. The File_Location field is an artifact of an earlier development and is not used by ECARSLog.exe

The ContactsPlot function, activated by selecting the ContactsPlot radio button, uses an HTML program titled 'MapContacts4pt4.html', served from the ECARS Website ('MapContacts.html' for program versions before Version 4 Build 4). This HTML page interfaces with and uses Googlemaps for plotting check in contacts.

The QRZ Full Page function, activated by selecting the QRZ Full Page radio button, opens the QRZ.com website and feeds call sign information to it as contacts are checked in.

The QRZ Data, and the HamQTH Data, functions extract selected elements of information from QRZ.com and HamQTH.com using XML. QRZ requires an XML or higher membership level to provide the requested information, whereas HamQTH does not.

There are two ECARS No functions in the program. The first, and always present function, is the ECARS No data stored with each contact in the database and is the ECARs No reported by the contact. The data can be an ECARS No, or an empty field. If the Logger.mdb incorporates check in data from previous Net Control operators and logging programs the data may be anything -- question marks, or 'Non Member' are typical variations. This is data entered by the NCS and is generally considered to have been accurate at one time. The second ECARS No function is activated by the ECARS No radio button and reports the data in the ECARS website membership database for the call sign of interest. This second ECARS No function is currently accurate membership information read directly from the ECARS membership database at the time the call sign is entered in the call sign text box.

Like the second ECARS No function, the 'Member Since (Yr)' and 'Date Expires' fields are data from the master ECARS membership database and read into the ECARS Logger with each changed Call Sign entry.

The Export ADI function produces an ADI text file titled 'ADIF.adi'. Clicking the 'Save-Close' button function produces an ADI text file named 'ADIF_mmddyyyy.adi' if the user confirms the desire to create an ADI of the day's check ins during the shutdown by clicking 'Yes' in the Message box that is presented. The 'mmddyyyy' represent the month, day, year (e.g. 12222018) for the date the program is shutting down. Both ADI files are produced in a folder named '/ADIF' in the same folder the ECARS Logger program is installed in.

Session notes, and other ECARS Log event data such as Check In Callsigns, are stored in a test file titled 'SessionNotes.txt'. If the file 'SessionNotes.txt' does not exist, ECARS Logger creates it.

ECARS Log Comma Separated Variable (CSV) Exports are stored in a text file named 'ECARS_Log_CSV_Export.xls'. This file must exist in the same folder the ECARS Logger program is installed in. If it does not exist, clicking the 'To CSV File' button will result in an Exception stopping the program.

ECARS Log Comma Separated Variable (CSV) Imports must be in a file named 'ECARS_Log_CSV_Import.csv' and be properly constructed. See details above.

A file titled 'Version.txt' is distributed with the ECARSLog.exe program and provides Version and Build information. This test file is not managed (either viewable or written) by the ECARSLog.exe program but is a common text file viewable by any text editor (e.g. Notepad).

A file titled 'CheckIns.txt' is created as each check in is added to the Checked In Listbox. When ECARS Logger first starts, if it finds a copy of 'CheckIns.txt' in its folder, it will offer to load that information into

the Checked In Listbox. The user clicks the 'Yes' button to load this data into the Checked In Listbox and 'No' to not load it. The previous version of 'Checkins.txt' is deleted if you answer 'No' and a new file with the same name is created when you add the next contact to the Checked In Listbox. The 'CheckIns.txt' file provides a quick way to recover from a computer problem or freeze up and allows the NCS to reload all prior checked in contacts after restarting his computer. This file does NOT reload Contacts Plot information and is NOT updated when checked in entries are deleted from the Checked In Listbox be clicking the entry and clicking the DEL button.

The author distributes a file called Kill-Alt-F4.exe with the ECARSLogger.exe files. Kill-Alt-F4.exe is an executable file, created by AutoHotKey.com's program 'AHK.exe'. AHK.exe creates script based, and executable, programs that manage hot keys. In this case, the 'Kill-Alt-F4.exe' file overrides and disables the Windows default option in which the 'Alt f4' button combination results in immediate closing of the operating program without any notification to the user or request for confirmation. Since ECARS Logger now uses hot keys, this was deemed desirable to prevent accidental closure of the ECARS Logger during an NCS session by hitting of the 'Alt f4' keys. If the file 'Kill-Alt-F4.exe' exists in the ECARS Logger folder, the program will sense it and will disable the Windows 'Alt f4' program closure functionality. If the user does NOT want the Windows 'Alt F4' program closure functionality to be disabled, remove the 'Kill-Alt-F4.exe' program from the ECARS Logger folder.

All files written by or used by the ECARSLog.exe program are expected to be in the same folder as the ECARSLog.exe program file. It is highly recommended that this folder have no other programs of files in it that are not associated with ECARSLog.exe.

Help Information

In addition to any help provided by the 'Hints' popup, the ECARS Logger form has help information for each button and information field displayed. This help is accessed by clicking the '?' in the upper right corner of the ECARS Logger window of interest and then clicking the button or information field of interest. Each click of the '?' will only support the selection of 1 button/field for Help information. Each subsequent desire for Help on a different part of the ECARS Logger will require reselection of the '?' before clicking the next field help is desired for.



About ECARSLog.exe

ECARSLog.exe was written by N4HCI. Its original incarnation was an Access based program written in Nov-Dec 2015. This program proved to be less distributable due to its requirement that users have Access installed on their computers. The current, expanded incarnation is an executable program written in Visual Basic .Net code within Microsoft's Visual Studio 2017 Integrated Development Environment. This free IDE was recommended to me by Adam Klein, son of WA4THR, Vic Klein, and proved to be an excellent product for software development by an amateur.

Initial product testing and program suggestions were provided by WA4THR, who proved to have an uncanny ability to identify bugs needing to be fixed. Hot keys are NJ2US's suggestion.