

The slide features a dark background with abstract, flowing shapes in shades of red, orange, yellow, and blue. The word "VARAC" is centered in a large, white, serif font.

VARAC

Walter Holmes K5WH

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The slide features the same abstract background as slide 1. The title "Areas of Interest" is centered in a white, sans-serif font.

Areas of Interest

- What is VarAC?
- Software required
- Hardware required
- Vara-HF settings
- VarAC settings
- Operational Choices
- Operational Choices while in QSO
- Other Features
- Further Assistance

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What is VarAC?

- A newer digital mode that allows for keyboard conversations even in weak or low band conditions, typically over HF
- If you remember the old Packet Radio days of the 80's, you may find this similar
- The ability to chat, leave messages, transfer files, check signal reports, and see what stations others have heard recently

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Software Required

- If you use WinLink on HF today, you already have half of the software now
- Vara-HF by EA5HVK
 - Vara v4.6.3 is the latest version
 - <https://rosmodem.wordpress.com/>
- VarAC by 4Z1AC
 - VarAC adds NEW features frequently
 - <https://www.varac-hamradio.com/>



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Hardware Required

- Like most digital mode software, VarAC requires a sound card digital interface
- Most current radios have this built in
- Legacy or older radios may require a Signalink, RigBlaster, RigExpert, just to name a few, or any of the similar type interfaces

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Install Vara-HF & VarAC, then launch VarAC

VarAC by 4Z1AC (V5.1.8)

Settings Logs Resources About UTC: 2022-08-25 15:58:08 NO NEW VMAIL

FREQUENCY: 14.105.000 MyCall: K6WH Connect: CO2DC

SLOT: [] CF: [] Disable PTT: []

DISCONNECT MODEM [] TUNE [] TX [BX] 0/0 Data stream []

VarAC Log

Bnd	Time	Callsign	BW	SNR
20m	15:37	K8AKC	500	-12
20m	15:33	NC3Z	500	+04
20m	15:32	N0KFO	500	-17
20m	15:13	K8HN	500	-21
20m	14:51	KV4LP	500	-15
20m	14:03	A7PSX	500	-19

Last heard CQ calls

Bnd	Time	Callsign	BW	SNR	Slot
20m	15:00	ND1J	500	-12	3

VARA commands

15:51:14 - BUSY ON
15:51:20 - BUSY OFF
15:52:15 - BUSY ON
15:52:19 - BUSY OFF

In QSO with: [] Message: [] IDLE File: [] IDLE

Duration: [] SNR (db): [] Last: [] Avg: [] Mine: []

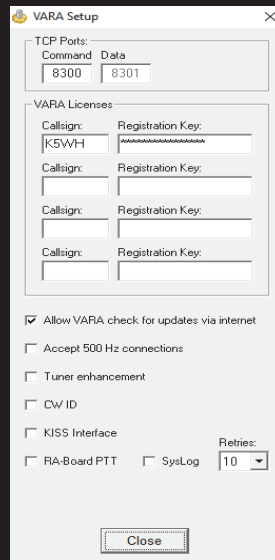
Message currently being sent: [] Messages in queue: [] CLEAR [] EDIT [] PSK REP MAP []

CALLSIGN: [] RST-S: [] RST-R: [] BAND: [] NAME: [] QTH: [] LOC: [] START TIME: [] END TIME: [] Auto log QSO: [] LOG [] CLR []

New message: [] Load canned message: [] Enter to send: [] SEND [] CLR []

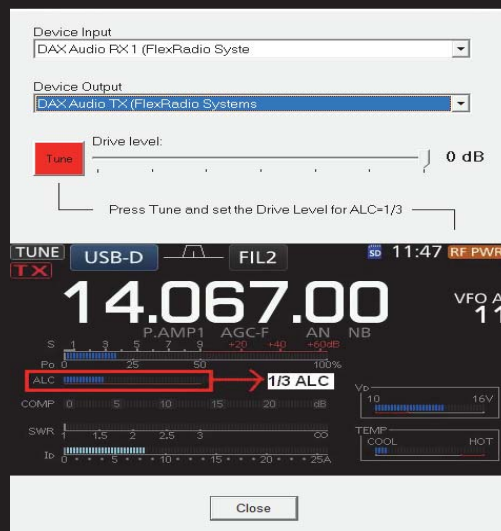
6

Vara-HF Settings, VARA Setup



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Vara-HF Settings, Soundcard



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VarAC Settings, My Information

My Information

Special prefix: / Your callsign: / Special suffix:

Example: / /

[How complex callsigns work?](#)

QTH:

Name: Locator:

RIG:

Antenna:

Use the following tags during a QSO or in your canned messages to share your information:

<CALL>
<QTH>
<NAME>
<LOC>
<RIG>
<ANT>

SAVE AND EXIT

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Rig Control and VARA Configurations

Settings

PTT Configuration

CAT OmniRig DTR/RTS VOX/None

FlexRadio

TEST PTT ON TEST PTT OFF

CAT Configuration

Port: COM5 Baud: 115200 Parity: None Data bits: 8 DTR: LOW StopBits: 1 RTS: LOW

Frequency Control

CAT OmniRig None

FlexRadio

Read freq. every: 2 sec

Mode: USB-D TEST: 7105000

OmniRig Configuration

Rig #: 1

DTR/RTS Configuration

Port: COM1 Type: DTR

VARA Modem Configuration

VARA modem type: VaraHF

VARA file path: C:\VARA\VARA.exe Port: 8300

VARA monitor path (Optional): Port: 8350

QSO Configuration

Call ID TX interval (min): 10

Auto disconnect: 30

Call signs block list:

Auto away status: ON Minutes: 60

File Transfer

Incoming file size limit (bytes): 3000

Incoming files directory: C:\Ham\VaraHF\VaraC\

Outgoing files directory: C:\Ham\VaraHF\VaraC\

Beacons / CQs

Beacon interval (minutes): 15

Digipeat via:

Load last heard history: ON

CQ Slot wait (seconds): 300

Misc.

Debug mode:

Show distance in: MI

Logging

ADIF file: C:\Ham\VaraHF\VaraC\VarAC_qso_log.adf

Send log: NONE IP: Port:

Mode: DYNAMIC Submode: VARA HF

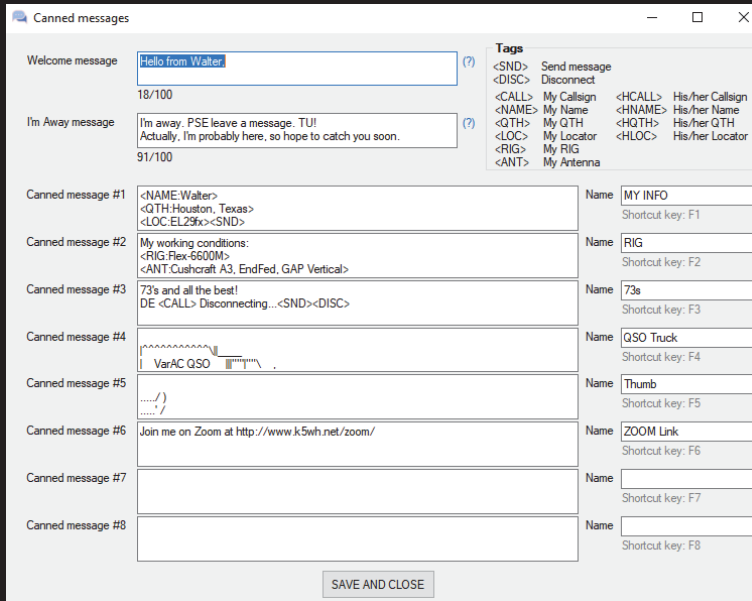
PSKReporter upload: Custom PSK map: &timerange=21600&shov

DOWNLOAD latest CAT command file

SAVE AND EXIT

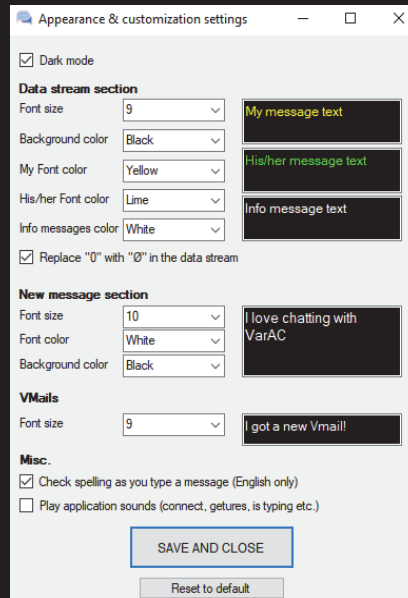
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VarAC Settings, Canned Messages



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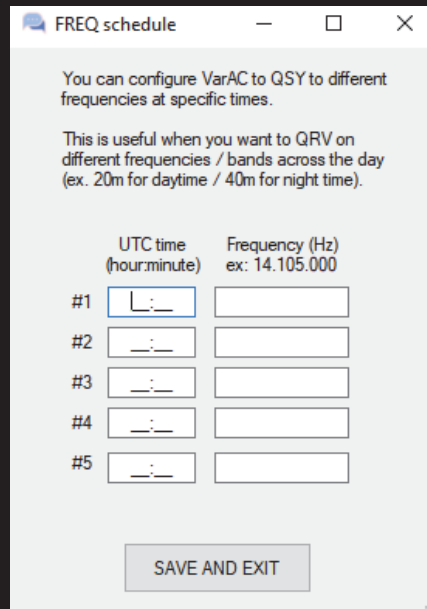
VarAC Settings, Appearance & Sounds



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VarAC Settings, Frequency Schedule

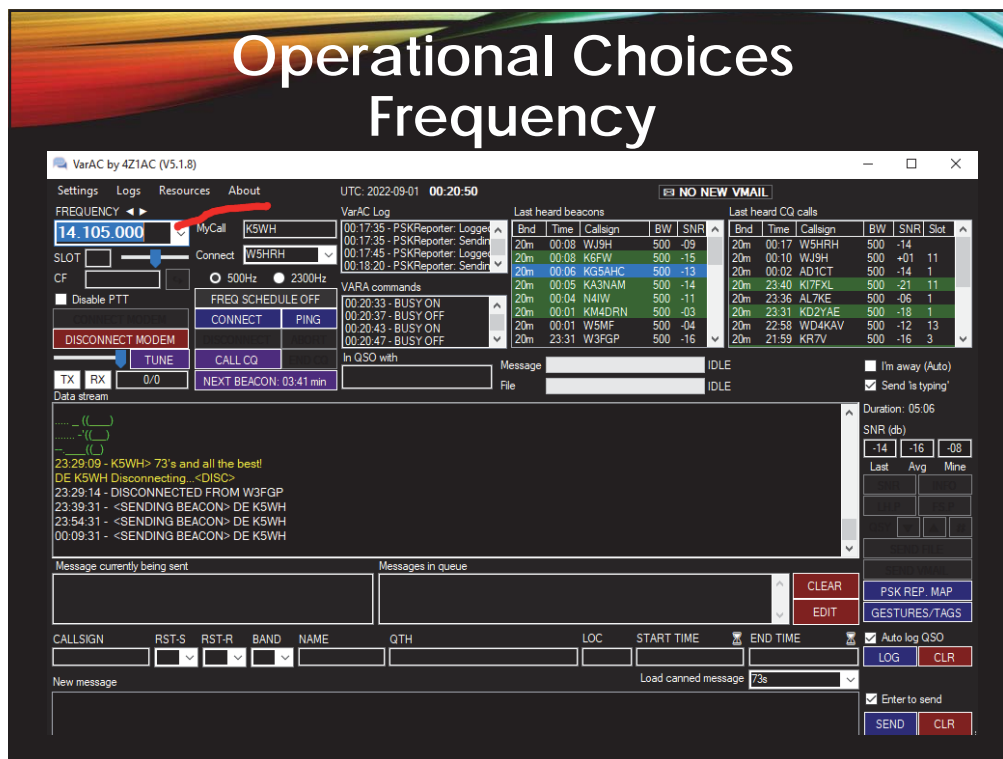
Change frequencies automatically



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Operational Choices

Frequency



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Send Beacons

VarAC by 4Z1AC (V5.1.8)

Settings Logs Resources About UTC: 2022-08-25 22:43:53

FREQUENCY: 14.105.000 MyCall: K5WH

SLOT: Connect: WA2TOP

CF: 500Hz 2300Hz

Disable PTT

FREQ SCHEDULE OFF

CONNECT PING

DISCONNECT MODEM

TUNE CALL CQ

SEND BEACONS

TX RX 0/0

Data stream

```

20:45:06 - <SENDING BEACON> DE K5WH
21:01:06 - <SENDING BEACON> DE K5WH
21:16:06 - <SENDING BEACON> DE K5WH
21:31:06 - <SENDING BEACON> DE K5WH
21:46:06 - <SENDING BEACON> DE K5WH
22:01:07 - <SENDING BEACON> DE K5WH
22:16:17 - <SENDING BEACON> DE K5WH
22:31:17 - <SENDING BEACON> DE K5WH
    
```

Messages in queue: Good afternoon!

CALLSIGN: WA2TOP RST-S: RST-R: BAND: 40m NAME: QTH: LOC: START TIME: 2022-08-25 20:10:09 END TIME: 2022-08-25 20:14:34

New message: Load canned message: MY INFO

SEND CLR

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Call CQ

VarAC by 4Z1AC (V5.1.8)

Settings Logs Resources About UTC: 2022-08-25 22:45:09

FREQUENCY: 14.105.000 MyCall: K5WH

SLOT: Connect: WA2TOP

CF: 500Hz 2300Hz

Disable PTT

FREQ SCHEDULE OFF

CONNECT PING

DISCONNECT MODEM

TUNE CALL CQ

SEND BEACONS

TX RX 0/0

Data stream

```

20:45:06 - <SENDING BEACON> DE K5WH
21:01:06 - <SENDING BEACON> DE K5WH
21:16:06 - <SENDING BEACON> DE K5WH
21:31:06 - <SENDING BEACON> DE K5WH
21:46:06 - <SENDING BEACON> DE K5WH
22:01:07 - <SENDING BEACON> DE K5WH
22:16:17 - <SENDING BEACON> DE K5WH
22:31:17 - <SENDING BEACON> DE K5WH
    
```

Messages in queue: Good afternoon!

CALLSIGN: WA2TOP RST-S: RST-R: BAND: 40m NAME: QTH: LOC: START TIME: 2022-08-25 20:10:09 END TIME: 2022-08-25 20:14:34

New message: Load canned message: MY INFO

SEND CLR

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Connect

Select a callsign to begin QSO

VarAC by 4Z1AC (V5.1.8)

Settings Logs Resources About UTC: 2022-08-25 23:24:11 [NO NEW VMAIL]

FREQUENCY: 14.105.000 MyCall: K5WH VarAC Log: 22:47:22 - SLOT sniffer: Change 22:47:31 - SLOT sniffer: Change 22:47:37 - SLOT sniffer: Change 22:47:40 - SLOT sniffer: Change

SLOT: [] Connect: WA2TOP

CF: []

500Hz 2300Hz

Disable PTT

DISCONNECT MODEM

TUNE

CALL CQ

SEND BEACONS

VARA commands: 23:23:28 - BUSY ON 23:23:32 - BUSY OFF 23:23:56 - BUSY ON 23:24:00 - BUSY OFF

In QSO with: []

Message: [] IDLE

File: [] IDLE

I'm away (Auto) []

Send 'is typing' []

Duration: 04:23

SNR (db): [] [] []

Last Avg Mne

20:45:06 - <SENDING BEACON> DE K5WH
21:01:06 - <SENDING BEACON> DE K5WH
21:16:06 - <SENDING BEACON> DE K5WH
21:31:06 - <SENDING BEACON> DE K5WH
21:46:06 - <SENDING BEACON> DE K5WH
22:01:07 - <SENDING BEACON> DE K5WH
22:16:17 - <SENDING BEACON> DE K5WH
22:31:17 - <SENDING BEACON> DE K5WH

Message currently being sent: []

Messages in queue: Good afternoon! [CLEAR] [EDIT]

CALLSIGN: WA2TOP RST-S: [] RST-R: [] BAND: 40m QTH: [] LOC: [] START TIME: 2022-08-25 20:10:09 END TIME: 2022-08-25 20:14:34 [Auto log QSO] [LOG] [CLR]

New message: [] Load canned message: MY INFO [Enter to send] [SEND] [CLR]

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QSO Bandwidth 500hz or 2300hz

VarAC by 4Z1AC (V5.1.8)

Settings Logs Resources About UTC: 2022-08-25 23:29:13 [NO NEW VMAIL]

FREQUENCY: 14.105.000 MyCall: K5WH VarAC Log: 22:47:22 - SLOT sniffer: Change 22:47:31 - SLOT sniffer: Change 22:47:37 - SLOT sniffer: Change 22:47:40 - SLOT sniffer: Change

SLOT: [] Connect: WA2TOP

CF: []

500Hz 2300Hz

Disable PTT

DISCONNECT MODEM

TUNE

CALL CQ

SEND BEACONS

VARA commands: 23:28:06 - BUSY ON 23:28:12 - BUSY OFF 23:28:50 - BUSY ON 23:28:54 - BUSY OFF

In QSO with: []

Message: [] IDLE

File: [] IDLE

I'm away (Auto) []

Send 'is typing' []

Duration: 04:23

SNR (db): [] [] []

Last Avg Mne

18:56:56 - W3UAV> Hello my name is Tony de W3UAV
18:56:07 - K5WH> de K5WH <R-1Q>
18:56:23 - W3UAV> <R+Q4>
18:56:37 - K5WH> Hello Tony, good afternoon from Texas
18:56:42 - W3UAV> How are you doing Walt from York PA
18:56:59 - K5WH> QSY DOWN 750Hz!
18:57:34 - K5WH> <INFO>
18:57:48 - W3UAV> <NAME: Tony McMonagle><QTH:York PA USA><LOC:FM19PU>
RIG: Flex 6400 with GBRV Inverted V

Message currently being sent: []

Messages in queue: Good afternoon! [CLEAR] [EDIT]

CALLSIGN: WA2TOP RST-S: [] RST-R: [] BAND: 80m QTH: [] LOC: [] START TIME: 2022-08-25 20:10:09 END TIME: 2022-08-25 20:14:34 [Auto log QSO] [LOG] [CLR]

New message: [] Load canned message: MY INFO [Enter to send] [SEND] [CLR]

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Operational Choices while in QSO QSY Down or UP, off calling frequency

VarAC by 4Z1AC (V5.1.8)

Settings Logs Resources About UTC: 2022-08-25 18:58:24

FREQUENCY: **14.104.250** MyCall: **KSWH** Connect: **W3UAV**

DISCONNECT MODEM DISCONNECT ABORT

TX [RX] 67/171 NEXT BEACON: 01:51 min

DATA stream

```

18:56:07 - KSWH> de KSWH <R-10>
18:56:23 - W3UAV> <R+04>
18:56:37 - KSWH> Hello Tony, good afternoon from Texas
18:56:42 - W3UAV> How are you doing Walt from York PA.
18:56:59 - KSWH> QSY DOWN 750Hz!
18:57:34 - KSWH> <INFO>
18:57:48 - W3UAV> <NAME: Tony McMonagle><QTH: York PA USA><LOC: FM19PU>
RIG: Flex 6400 with G5RV Inverted V
    
```

Messages in queue

CALLSIGN: **W3UAV** RST-S: **10** RST-R: **+04** BAND: **20m** NAME: **Tony McMonagle** QTH: **York PA USA** LOC: **FM19PU** START TIME: **2022-08-25 18:55:48** END TIME:

New message: Load canned message

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Load canned message

VarAC by 4Z1AC (V5.1.8)

Settings Logs Resources About UTC: 2022-08-25 18:58:24

FREQUENCY: **14.104.250** MyCall: **KSWH** Connect: **W3UAV**

DISCONNECT MODEM DISCONNECT ABORT

TX [RX] 67/171 NEXT BEACON: 01:51 min

DATA stream

```

18:56:07 - KSWH> de KSWH <R-10>
18:56:23 - W3UAV> <R+04>
18:56:37 - KSWH> Hello Tony, good afternoon from Texas
18:56:42 - W3UAV> How are you doing Walt from York PA.
18:56:59 - KSWH> QSY DOWN 750Hz!
18:57:34 - KSWH> <INFO>
18:57:48 - W3UAV> <NAME: Tony McMonagle><QTH: York PA USA><LOC: FM19PU>
RIG: Flex 6400 with G5RV Inverted V
    
```

Messages in queue

CALLSIGN: **W3UAV** RST-S: **10** RST-R: **+04** BAND: **20m** NAME: **Tony McMonagle** QTH: **York PA USA** LOC: **FM19PU** START TIME: **2022-08-25 18:55:48** END TIME:

New message: Load canned message

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SEND FILE

The screenshot shows the VarAC by 4Z1AC (V5.0.2) software interface. The window title is "VarAC by 4Z1AC (V5.0.2)". The interface includes a top menu bar with "Settings", "Logs", "Resources", and "About". The main area is divided into several sections: "Settings" (Frequency: 14.105.750, MyCall: K5WH, Connect: K0PFX), "VarAC Log" (showing a list of log entries), "Last heard beacons" (a table of beacon data), and "Last heard CQ calls" (another table of call data). A "Data stream" window shows a log of messages, including "23:57:57 - K0PFX> OK" and "23:58:07 - K5WH> use this file to replace yours, and restart VarAC to take effect". A "Message" field is visible, and a "SEND FILE" button is highlighted with a red arrow. Other buttons include "DISCONNECT MODEM", "DISCONNECT", "ABORT", "TX", "RX", "NEXT BEACON: SOON", "CLEAR", "EDIT", "SEND VMAIL", "PSK REP. MAP", "LOG", "CLR", "SEND", and "CLR". The bottom section contains fields for "CALLSIGN", "RST-S", "RST-R", "BAND", "NAME", "QTH", "LOC", "START TIME", and "END TIME".

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SEND VMAIL

The screenshot shows the VarAC by 4Z1AC (V5.1.8) software interface. The window title is "VarAC by 4Z1AC (V5.1.8)". The interface includes a top menu bar with "Settings", "Logs", "Resources", and "About". The main area is divided into several sections: "Settings" (Frequency: 14.104.250, MyCall: K5WH, Connect: W3UAV), "VarAC Log" (showing a list of log entries), "Last heard beacons" (a table of beacon data), and "Last heard CQ calls" (another table of call data). A "Data stream" window shows a log of messages, including "18:56:07 - K5WH> de K5WH <R-10>" and "18:56:23 - W3UAV> <R-04>". A "Message" field is visible, and a "SEND VMAIL" button is highlighted with a red arrow. Other buttons include "DISCONNECT MODEM", "DISCONNECT", "ABORT", "TX", "RX", "NEXT BEACON: 01:51 min", "CLEAR", "EDIT", "SEND FILE", "PSK REP. MAP", "LOG", "CLR", "SEND", and "CLR". The bottom section contains fields for "CALLSIGN", "RST-S", "RST-R", "BAND", "NAME", "QTH", "LOC", "START TIME", and "END TIME".

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Viewing the Vmail

The screenshot shows the 'VarAC Mailbox' window. It features a table of received messages with columns for Status, Time received, To, From, Band, SNR, Subject, and Message preview. The selected message is from 'testino' with the subject 'HOW ARE THINGS GOING?'.

Status	Time received	To	From	Band	SNR	Subject	Message preview
READ	2022-07-26 02:00:45	K5WH	WD4KAV	20m	-14	Just checking in	Hi Walter. I think we had a QSO.
READ	2022-07-24 23:29:24	K5WH	CO2SR	20m	-18		Hi Walter pls for contact Mandv i...
READ	2022-07-21 20:02:57	K5WH	KE5RV	20m	-08	Hi Walter.	Thanks for the note the other da...
READ	2022-07-18 21:50:56	K5WH	CO2DC	20m	-15		TOMORROW STRONG SOLAR
READ	2022-07-17 18:43:21	K5WH	AE4AN	20m	-04	Hello	Just trying out VarAC. Hoe to cul...
READ	2022-07-17 16:23:51	K5WH	KB0FX	20m	-04	Greetings	Good Morning!
READ	2022-07-15 22:00:12	K5WH	NC3Z	20m	+09	FreeDV	Wanted to test out my setup
READ	2022-07-13 23:27:49	K5WH	KE0PDU	20m	-08	Greetings	Thought you were attempting to ...
READ	2022-07-13 21:21:46	K5WH	KV4LP	20m	-13		nice contact, excellent signal etc i...
READ	2022-07-12 01:28:42	K5WH	ALDR	20m	-09		Howdy Walter! How goes digital.
READ	2022-07-08 02:22:36	K5WH	WD4KAV	20m	-14	testino	hi there. Just testino out VarAC ...
READ	2022-07-08 02:12:34	K5WH	KB8CR	20m	-06	Testino repaired antenna	Hi Walt We had a tornado near ...
READ	2022-07-07 16:36:00	K5WH	W6MDA	20m	-14	Thanks	Thanks for the ping... checking o...
READ	2022-07-06 21:10:18	K5WH	W3UJAV	20m	-09	13 Colonies	Hello Walter, just worked all 13 ...
READ	2022-07-06 16:10:50	K5WH	KB0FX	20m	-13	Test	testino the new email feature.
READ	2022-07-06 01:58:35	K5WH	W3UJAV	20m	-14	Hello from Michigan	Hello Walter. Sitting here with fa...
READ	2022-07-05 21:22:45	K5WH	N0KFO	20m	-14	Hello from Central FL	Hi ... Just checking things out ...
READ	2022-07-02 23:31:32	K5WH	N3MEL	20m	-05		Hi Walter hope all is well in Tx L...
READ	2022-07-01 23:42:02	K5WH	WD4KAV	20m	-07	HOW ARE THINGS GOING?	HI WALTER. HOW ARE THINGS...
READ	2022-07-01 20:33:10	K5WH	KB6CIO	20m	-09	Tnx for message	FYI. I have tried FreeDV daily. N...
READ	2022-07-01 19:01:50	K5WH	W0PML	20m	-15	Greetings	Sorry to miss you But it will be ni...
READ	2022-07-01 16:43:06	K5WH	W4HTP	20m	+01	Hello. Walter	Have a happy Independence D...
READ	2022-07-01 14:47:11	K5WH	W3UJAV	20m	+02	See you today on Zoom	Hello Walter. I fell asleep early v...
READ	2022-06-29 01:05:06	K5WH	N1DOU	20m	-16	Contact	This is my first connection on Va...
READ	2022-06-28 00:57:57	K5WH	K2MO	20m	-12	Testino	Test

Buttons at the bottom include DELETE, CLOSE, and a SEND button with an 'Enter to send' checkbox.

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PSK REP. MAP

To show stations on PSK Reporter

The screenshot shows the 'VarAC by 4Z1AC (V5.1.8)' interface. The 'PSK REP. MAP' button is highlighted with a red arrow. The interface includes various controls for frequency (14.104.250), MyCall (K5WH), and Slot (W3UJAV). It also displays a 'Data stream' with log entries and a 'Messages in queue' section.

Key elements visible:

- Settings: Settings, Logs, Resources, About
- UTC: 2022-08-25 18:58:24
- FREQUENCY: 14.104.250 (BUSY)
- MyCall: K5WH
- SLOT: W3UJAV
- VARA commands: 18:58:01 - PTT ON, 18:58:02 - PTT OFF, 18:58:14 - PTT ON, 18:58:15 - PTT OFF
- Messages in queue: [Empty]
- Buttons: DISCONNECT MODEM, DISCONNECT, ABORT, TX, RX, NEXT BEACON: 01:51 min, W3UJAV
- PSK REP. MAP button (highlighted)
- Auto log QSO checkbox (checked)
- SEND and CLR buttons

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Right Click on a callsign for options

- Clear
- Copy All
- Ping (get report)
- QRZ.COM lookup
- PSK Reporter lookup
- Callsign History
- QSY to slot

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Logs

- QSO Log
- Chat History
- Last Heard Log
- VarAC Log
- Open Logs Directory

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Resources

- Quick Start Guide
- User Manuals (EN)
- User Manuals (Non EN)
- VarAC Facebook Group
- VarAC Forum
- Troubleshooting
- FAQ

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Further Assistance

- For any follow-up information or configuration assistance, please contact Walter-K5WH
 - walterh@k5wh.net
- Or join us on ZOOM anytime around the clock
 - <http://www.k5wh.net/zoom/>



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