Radio Tuner

VATSIM has started using the new 8.33 kHz channel spacing for the communication radios. However some simulators don't provide the facility to tune the radios to these frequencies.

There is however a facility built into VATSIM itself that allows one to tune the radio via the text messaging facility provided by the "pilot clients" (vPilot/XPilot/Swift etc.), so sending a text message of ".com1 abc.def" will tune your com1 radio to "abc.def". Thus sending ".com1 122.800" will tune to the Unicom frequency of "122.800" without fiddling about with the incockpit tuning knobs of your radio! This also works for the 8.33 kHz channel spacing even if your simulator isn't actually equipped to!

This programme has been written to make it easy to select the correct frequency and provide the correct text message on your computer's clipboard. All you then have to do is click into your pilot client's message box, press "Ctrl V" to paste in the contents of the clipboard (or use the mouse right click and select paste from the drop-down list of options), and then press "Return" to send the message and VATSIM will tune your radio for you. (Provided you are actually connected to the VATSIM network!)

As the transponder squawk code can similarly be set by a ".x abcd" message this facility has also been built into this programme.

Even if your simulator is equipped to tune the radios to the correct frequency this programme is still useful as it can be used to set the "next" frequency or squawk code required in advance so changes can be made very quickly when actually needed.

(N.b. I prefer "Ctrl V" as it is much quicker than using the mouse right click etc.!)

Basic use

Some regions still use the 25 kHz channel spacing, so ensure the correct spacing is selected from the drop-down list.
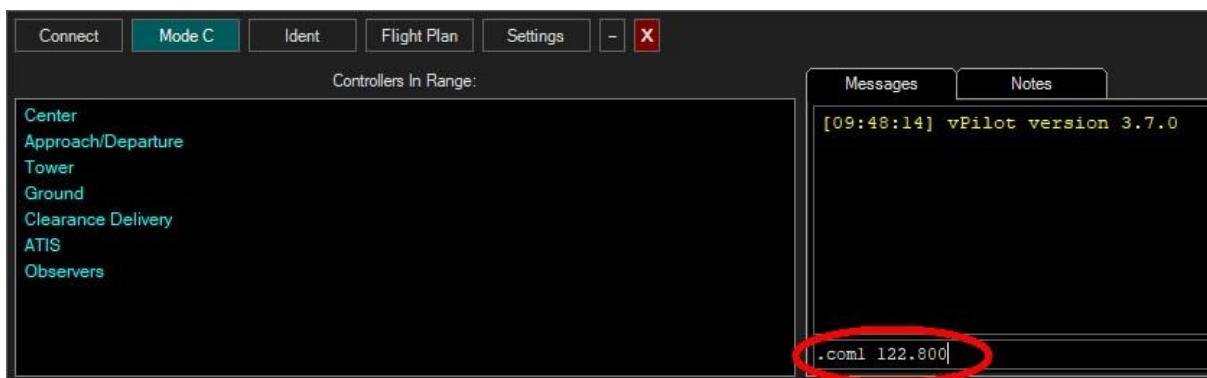

Tuning the Radio

Use the red spin buttons to set the correct frequency. As this is set the required message is automatically sent to the clipboard.

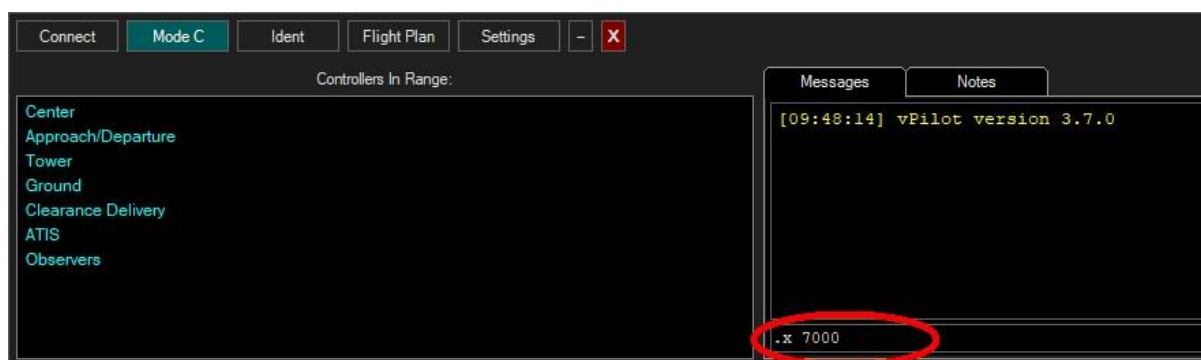Now paste the message from the clipboard into the message box, e.g. in vPilot: -

Then press the "return" key and VATSIM will tune your radio for you.

Adjusting the Squawk code

Use the green spin buttons to set the correct squawk code. As this is set the required message is automatically sent to the clipboard.

So paste the message into the message box – e.g. in vPilot: -

Then press the "return" key and VATSIM will set your squawk code for you.

Resending the message to the clipboard

To resend the ".com1" command to the clipboard click on the green "Radio" button.

Or to resend the ".x" command to the clipboard click on the blue "Transponder" button.

Advanced Use

There are some "standard" squawk codes and radio frequencies, and these can be selected as "pre-set" combinations. E.g. when in the "Manchester Low Level route" you need to squawk 7366, and monitor 118.580, and on leaving the route you will need to switch back to 7000 and 122.800.

These can be quickly selected by using the drop-down list: -

And selecting the required pre-set condition. E.g.

This puts the radio command ".com1 118.580" onto the clipboard ready for VATSIM to tune your radio, after which click on the "Transponder" button to put the transponder command ".x 7366" onto the clipboard.

Adding a new "Pre-set" Squawk Code and Radio Frequency

There are occasions when it is useful to have different pre-set conditions available, e.g. when flying in Australia, outside CAS one should squawk 1200, but switch to 3000 just before entering controlled airspace. So to set this up: -
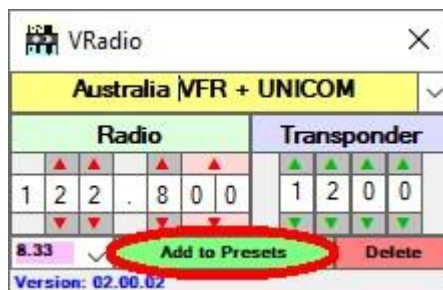
Adjust the Radio Frequency and Squawk Code as required (in this example only the Squawk needs adjusting).
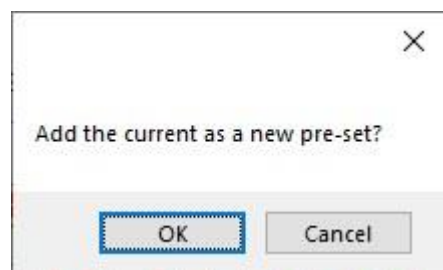
Adjust the "Title" for this set.

Finally click on the green "Add to Presets" button to add this to the list of pre-set conditions

This brings up a "confirmation" window. (This avoids creating unwanted extra pre-sets if the button is clicked inadvertently.)

Clicking "OK" now adds to the selection list.

These steps can be repeated to add further presets as required, e.g. for

VFR inside Australian controlled airspace: -

Removing a "Pre-set" Squawk Code and Radio Frequency

If a preset squawk code and associated radio frequency is no longer required it can be removed from the available list of presets by selecting it via the dropdown list, and clicking on the red "Delete" button
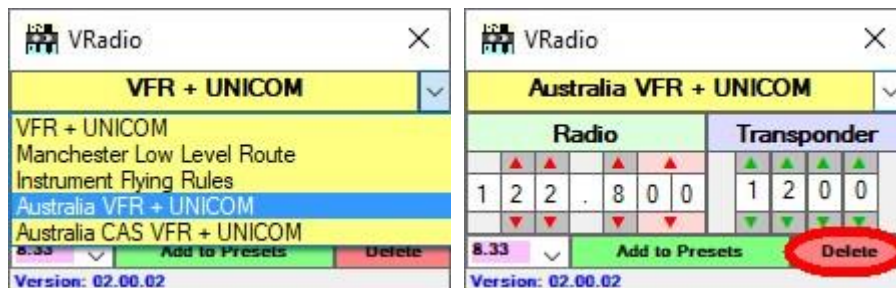
This brings up a "confirmation" window. (This avoids accidently deleting a pre-set if the button is clicked inadvertently.)
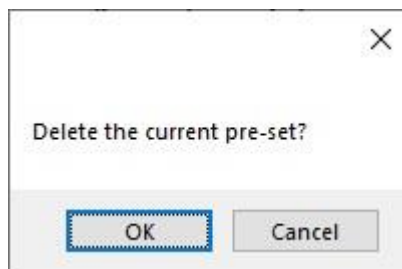
Clicking "OK" now deletes this set.

The programme requires at least one set of Conditions to be available, so if there is only one left on the list this cannot be deleted.

Editing a "Pre-set" Squawk Code and Radio Frequency

There is no method to directly edit a set of conditions. (This would add to the programme complexity and use up processor resources better used by the simulator!)

However by making the required edits (as if adding a new "Pre-set" squawk code and radio frequency) to the existing set, saving/adding it to the list, and then deleting the original the set can be effectively edited.

This does have the slight disadvantage that the edited set is now at the bottom of the list, but as below this can be adjusted!

Editing the order of pre-set list

If the list order is required to be changed, select the item you want to be at the top of the list. (Let's assume we want the "Manchester Low level route" at the top of the list, then the Australian VFR in and out of CAS, followed by UK VFR and UK IFR")

Now add it (as an unchanged duplicate), then select the second item and add that one (again unchanged).

Continue until the lower part of the list contains the items in your desired order.

Now select and delete the first item on the list, and continue/repeat these two actions until the list just contains the required items in your desired order.
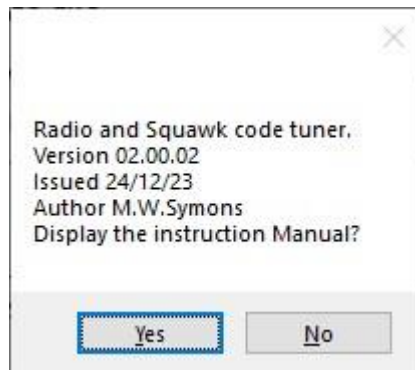
Closing the Programme

When the programme is closed it first checks for any changes to its "preference file".

If a change is detected you will be given the opportunity to save an updated preference file.

The Preferences have been changed.
Save this new set?

Yes   No
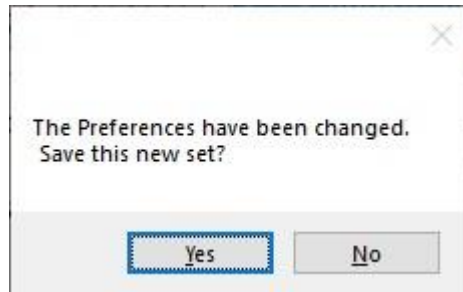
Click on "Yes" to save, or "No" to discard.

If no change is detected, or once "Yes" or "No" have been clicked you will be given the opportunity to view the operator's instruction manual.

Radio and Squawk code tuner.
Version 02.00.02
Issued 24/12/23
Author M.W.Symons
Display the instruction Manual?

Yes   No

Clicking on "Yes" will open this PDF file and close the programme, while "No" will just close the programme.

(N.b. adding a "menu strip" to the programme, or a button to open the manual would have increased its screen "footprint" while opening a PDF document would also use up processor resources better used by the simulator, so to give the opportunity to open the manual at this stage was the best compromise.)