# Layout Of The Screen

We might divide the screen into 3 sections:

- *Menu bar* – the upper menu bar is fixed, yet some of its items might be turned on/off.
- *Main screen* – the main screen is the operational part of the radar screen. Thus its layout can be modified to your own taste.
- *Command line* – the lower command line is used as text input and *single click* info bar.

## Menu Bar

On top of the screen you can find [[The Menu Bar]]:


## Main Screen

When mentioning main screen, we have to think about the radar screen itself. We are not going to go into details concerning radar screen in this section, rather focus on parts of the screen, which are not related to the radar itself.

The documentation of those elements are divided into the separate functions of the main screen's elements:

- The [[Basic Lists]] – The lists similar to those already known from VRC
- The [[Advanced Lists]] – More advanced lists, containing all important information for the different states of flight.
- The [[Distance Separation Tools]]
- The [[Chat Box]]
- The traditional [[Flight Strip]] – as it is known from ASRC and VRC.

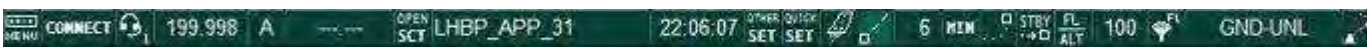
## Command Line


The bottom bar is called [[The Command Line]].

---

# The Menu Bar

On top of the screen you can find the menu bar:



Most of the menu items can be activated with left mouse button as usual, though there are some buttons where right mouse button might be used, too.

# Menu Items


Turn on/off some blocks of menu items, like:

- Show controller login name
- Show file name
- Show primary frequency
- Show ATIS frequency
- Show selected aircraft
- Show clock
- Show leader data
- Show transition altitude
- Show altitude filters
- Show METAR in title

# Connection

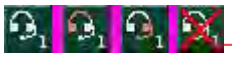

Clicking here will take you to [[Connection Settings]] dialog. The icons with orange border will show you the actual connection mode. These are:

- Unconnected state
- VATSIM connection
- SweatBox connection
- Simulator session hosted by me
- Proxy connection
- Playback logfile
- Non VATSIM server connected (local FSD for simulation)

# Controller login name


During active connection the callsign and your actual rating (in brackets) are shown.

# ~~Voice communication setup~~



~~Voice setup. Select text/voice frequencies for receiving/transmitting. Voice hardware setup (PTT selection), etc.~~

~~Primary frequency status is shown on the icon:~~

- ~~Headphones are orange – receiving~~
- ~~Microphone is orange – transmitting~~
- ~~Red X – the voice subsystem is not initialized (mostly due that a second instance is started) and no voice function is enabled~~

~~In the lights of the new Voice system, these buttons might be changed quite soon.~~

# Primary frequency


Your primary frequency is displayed here. (To change it, go to the voice communication setup.) It turns orange, when you issue a ".break" command, for a position relief. Clicking on the icon the [[Voice Communication Setup]] is opened.

# Voice ATIS


Your voice ATIS compiler can be found here. Letter of the actual ATIS will be shown here. Once your voice ATIS is running, its frequency will be displayed on the right side of the ATIS designator. Clicking on the letter opens the [[Voice ATIS]] dialog.

# Sector files


- Download sectorfiles from providers
- Reopen your last opened sector layouts (.asr files)
- Open – open an existing .asr file
- Close – close the actual .asr file
- Save – save changes to the actual .asr file
- Save As – save the actual .asr file with a different name
- New – create a new .asr file – depending on the loaded plug-ins here you may have several new options to create different type of screens
- Load Sector File – load your main .sct ASRC sector file
- Load Aliases – alias file (.txt), same format as ASRC alias files

- Load ICAO Airlines data – data file to decode ICAO airline codes (ICAO_Airlines.txt)
- Load ICAO Airports data – data file to decode ICAO airport codes (ICAO_Airports.txt)
- Load ICAO Aircraft data – data file to decode ICAO aircraft codes (ICAO_Aircraft.txt)
- Load Load airport coordinates (ICAO.txt)
- Load FSNavigator data – FSNavigator data file for the actual AIRAC (AIRWAY.txt)
- Load VATSIM Server IP addresses – ipaddr.txt file (exported from Servinfo)
- Load additional Server IP addresses – myipaddr.txt file (your personal servers file)
- About EuroScope – current version of EuroScope

# Actual sector layout


The name of the currently displayed sector layout is shown here, if you open more than one `.asr` files and switch between them with `[F7]` then the name of the actual one will here. Clicking on this item will let you manually select another already opened layout.

# Selected aircraft


The name of the currently selected aircraft will appear here.

# Clock


Your system time is shown in UTC (zulu time).

# Other settings


This is the main settings menu for deeper changes in your program.

- Save profile – To save the current configuration in the current profile file
- Save profile as – To save the current configuration in another profile file with another name
- Auto load last profile on startup – If this menu item is checked, EuroScope will load the lastly used profile file on next startup
- Auto save profile on exit – If this menu item is checked, EuroScope will save the current profile file when exiting.

- Save all settings – To save parameters that are not saved in the settings file, call this item. Actually from version 3.0 it is not so important to do it manually as all settings change will be prompted on exit.
- Load all settings – Replace your settings with previously saved ones
- Settings file setup – It opens the dialog box to specify what settings groups are to be saved to what files (see [[Where My Settings Are Saved]])
- General settings – Some general settings such as `ASEL` and `FREQ` key, current squawk range (further details under [[General Settings]])
- Display settings – Select what to be displayed on your radar screen (further details under [[Display Settings]])
- Symbology settings – Set the colors, font sizes, line types and symbols used on the radar screen (further details under [[Symbology Settings]])
- Plug-ins – It opens a dialog box to manage your plugins and plug-in permissions. See the [[Plug-Ins]] dialog.
- TAG editor – Create your own radar tags/labels using this editor (further details under [[TAG Editor]])
- Sounds – Audio notifications can be configured here (further details under [[Sounds Setup]])
- Voice – Voice communication setup (same as the one available through the icon, further details under [[Voice Communication Setup]])
- Active airports/runways – Select airports to be concerned in your traffic prediction lists, select active runways for displaying default procedures (SID/STAR) and accurate distance calculation (further details under [[Active Airports Runways]])
- System messages – It simply opens the ”Messages” tab in the chat area
- Extended centerline setup – EuroScope is able to draw enhanced runway centerlines on your radar screen. (Easy configuration, neat result.)(further details under [[Extended Centerline Setup]]) To turn on runway centerline items go to [[Display Settings]].
- Conflict alert setup – You can setup when an alert is to be displayed (further details under [[Conflict Alert Settings Dialog]])
- Sector ownership setup – Here you can set up how the sector assignment should work (further details under [[Sector Ownership Setup]])
- Range rings around planes – Here you can setup range rings around planes (further details under [[Range Rings Around Planes]])
- Scenario editor – built-in simulator in EuroScope (further details under [[Scenario editor]])
- Save chat to a file – Save the content of your current chat into a text file.
- Save chat to the clipboard – Copy the entire text of your current chat to the clipboard.

# Quick settings


- Show sector inbound list – Show flight strip with all aircraft incoming to the sector
- Show sector exit list – Show flight strip with all aircraft exiting from the sector

- Show departure list – Show flight strip with all aircraft departing from this position
- Show arrival list – Show flight strip with all aircraft close to its destination (if destination is selected as active for arrivals)
- Show flight plan list – Show flight strip flight plans (many filters are available)
- Show conflict list – Show CARD list (many filters are available)
- Show controller list – Show list of controllers (also observers, any connections with ATC clients).
- Show aircraft list – Show a list of predicted traffic that are to enter your airspace, or have already entered it.
- Show voice room list – Indicate the names of those, who are on your voice channel.
- Show METAR list – Display a floating bar showing all METAR requested if checked, otherwise not.
- Show ATIS letter in METAR list – Display the ATIS letter in the METAR list if checked, otherwise not.
- Connect SIL to Top messages – If checked, locks Sector Inbound List flight strip bay under the incoming messages list, otherwise you can put that list anywhere you want on your screen.
- Connect SEL to SIL bottom – If checked, locks Sector Exit List flight strip bay under the Sector Inbound List flight strip bay, otherwise you can put that list anywhere you want on your screen.
- Connect DEP to SEL bottom – If checked, locks Departure List flight strip bay under the Sector Exit List flight strip bay, otherwise you can put that list anywhere you want on your screen.
- Show text messages – As we prefer voice communication, we might miss important text messages coming on our primary frequency. With this option we can display the incoming messages (with time stamp) on top of the radar screen, with double clicking we can hide them and go to answer them.
- Show STBY aircraft – This tool comes handy, when you would like to turn on the radar tags for aircraft that are squawking STBY.
- Show simulated traffic – Traffic falling out of your range are also simulated. This way, you can have information on flights that are not in your range yet. If this option is on when you are not connected to the network you can see all aircraft and controllers online based on VATSIM statistics data.
- Play sounds – Play sound files for certain events, like handoff, etc. Configuration is possible in Other Options -> Sounds.
- Show magnetic north up – If this option is checked then the magnetic north will be displayed to the UP side of the monitor. If unchecked then the true north.
- Enable advanced proxy communication – EuroScope is designed to be easily used in systems with two or more monitors and displays. In this case you should start two instances of ES and connect the second to the main program via proxy connection. In this case both clients will be a full station using only a single VATSIM connection. If advanced communication is enabled then several messages are sent between the clients (e.g. the selected screen item, the opened chat windows, the entered message to the command line etc.) With the help of it you are able to write the command in one instance and click the aircraft in the second one and it will still work. On the other hand when someone is connected to your proxy externally then it is not a good idea to see what

he/she is typing. This flag is set automatically. If a proxy connection is made to the "localhost" client then it is enabled otherwise disabled as default.

## Active airports/runways

Here you may select the airports to be concerned in your traffic prediction lists, select active runways for displaying default procedures (SID/STAR) and accurate distance calculation. Clicking on the left side of the runway designation will select the airport, in the right hand columns the departure and arrival runways can be ticked (further details under [[Active Airports Runways]]).

## ~~Leader line on/off~~

~~Toggle the time/distance vector for all displayed aircraft. (Mind you, it is possible to toggle the leader line of a given aircraft by right clicking on an empty section of the detailed tag.) Clicking with the right menu button a popup list appears that allows a quick setting of the leader lines. In this popup you can select if the leader line is a straight one or if it follows the route.~~

## ~~Leader line type/length~~


~~You may set the type of leader line, depending whether time or distance vector you prefer at the~~ moment. Also, by clicking on the numbered button ("left click" to increase, "right mouse button" ~~to decrease) you can set an exact length for the vectors.~~

## ~~History trails~~

~~Toggle history trails for all aircraft. (Small dots symbolize the previous positions of the aircraft.)~~

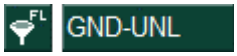
## Show standby aircraft

This tool comes handy, when you would like to turn on the radar tags for aircraft that are squawking STBY. Note that flying STBY planes are always shown in professional mode. In this mode it hides the planes on the ground only.

## Transition altitude


This is just a reminder of the actual transition altitude for you. Set the values with your left and right mouse buttons (”left click” to increase, ”right click” to decrease). Below FL100 the levels can be adjusted by 500 ft, above FL100 by 1000 ft.

## Altitude filter




You may set an interval (open, or closed) in which you want traffic to be displayed. Default value is GND-UNL which means that all traffic is shown on the radar.

## Distance tool

A smart tool for measuring distance and time, checking radials, headings, coordinates, etc. This button calls the ”.distance” command, which can be followed by callsigns, fixes, etc. Selecting the points can be done either by typing the points or by selecting them on the radar by a single mouse click.

## Separation tools

Use separation tool if you are not sure whether two aircraft on converging tracks would require further attention in order to keep the separation between them. With this you can predict what the minimum distance between these planes would be, and when exactly this situation would happen.

## Short METARs


To display the short metar of an airport press `[F2]` type the ”ICAO code” of the airport and hit `[ENTER]` (this is equivalent to command: ‘`.QD XXXX` in the text input ). If a new METAR is

received from the server, it will be shown in orange to draw your attention. By clicking on it (acknowledging it) the color will change to white and also the complete metar is displayed in the status bar. If the place is long enough to show the full metar string then it will be displayed instead of the short version. If you have to display more station data at one time you may run out of space for them (actually it is not a too big area). In this case with a right click you can loop over the displayed metar data. A doubleclick will remove the clicked metar just as `F2` and ”ICAO code”.

# Send screen to the next desktop

This button is hidden unless you have a multi-monitor system. Users with multiple monitors can send the screen to the next monitor using this button.

# Minimize to taskbar

The standard Windows minimize button.

# Maximize/restore window

This is once again the standard maximize/restore Windows button. But a little bit limited behavior. As EuroScope does not have a resizing frame around there is no meaning to make smaller than the screen. So the only difference between maximized and restored state of the screen is that in maximized state even the taskbar is covered by the radar. In restored state the taskbar is visible. My experience shows that when the screen is maximized MSN will show your state *busy* but not in restored state. Clicking here with the right button a popup menu appears that allows you to select the position of the window from a short list.

- Full
- Left half
- Right half
- Top half
- Bottom half
- Left third
- Middle third
- Right third
- Left two third
- Right two third

The selected position is used only if EuroScope is not maximized.

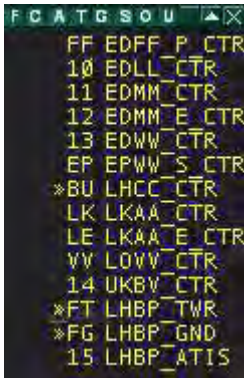
## Quit

No real need to comment this function.

---

# Basic Lists

## The Controller List




This floating bar can be set on any position on screen at user discretion. It displays some information about the controllers in the area of your center.

The top bar allows you to filter which controller positions are displayed on screen by clicking on the buttons located in left part of the floating bar.

- **F –** Displays FSS stations on line (Flight Service Stations).
- **C –** Displays CTR stations on line (Center positions).
- **A –** Displays APP stations on line (Approach positions).
- **T –** Displays TWR stations on line (Tower positions).
- **G –** Displays GND stations on line (Ground positions).
- **S –** Displays ATIS stations on line (ATIS positions).
- **O –** Displays OBS stations on line (Observers positions).
- **U –** Displays unidentified stations on line (Non identified positions).
- *** –** Displays proxy users.

For each position, the following items are displayed in the Controller list:

- Ground to ground communication status

- Ongoing coordination flag indicating that the controller uses radar client that is ready for ongoing coordination.
- The position identifier as defined in the ese file.
- The complete callsign.

The color of the controller means:

- **yellow** – normally
- **pink** – when leaving shortly
- **white** – when no position update in the last 30 seconds and they are assumed to be disconnected.

With a left single click on any position in the list a detailed data is copied to the message area. With a doubleclick you can open a chat window with the controller.

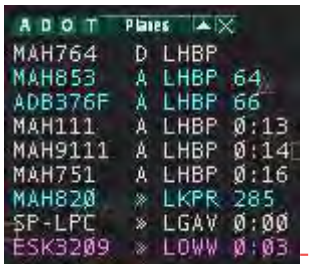
With a right click a special popup menu appears that shows the following items:

- *Listen to frequency* – using this item a normal voice connection to the controller's frequency is added to the voice dialog, where only voice receiving is selected. In addition you can set transmission manually.
- *Leave frequency* – to quickly disconnect from the controllers main frequency channel
- *Get ATIS* – this item calls for the actual ATIS of the controller, the answer will be shown as private message in the chat area,
- *Intercom* – it starts a bilateral communication, where your secondary input and output hardware are used (for transmission use your secondary PTT)
- *Override* – for the caller it works exactly like an intercom call (transmits on the secondary output device, with the secondary PTT), for the receiving unit voice comes on his secondary output, to transmit there is no need to press the PTT secondary voice input and the communication on the primary frequency is transmitted to the other party.
- *Monitor* – listen to the selected controller's frequency, without having the opportunity to transmit on the frequency
- *Accept* – to accept an external ground-to-ground communication call
- *Refuse* – to refuse an external ground-to-ground communication call
- *Disconnect* – to close the active landline connection

**Note**: In the lights of the new voice codec, these functions may not be available for a while.

# The Aircraft List

This floating bar displays the aircraft which are relevant for your position active position. Both the in range and the simulated planes are here. Each line is colored depending on the aircraft state, according to the definition in the data block settings in symbology dialog. A left click on a line selects the aircraft – it can be used as a click on the TAG itself, right click opens the flight plan editor.




- ~~The first item is the aircraft callsign. With a handoff request in progress, a left click opens the handoff popup menu.~~
- ~~The second item can either be an **A**, **D** or <<.~~
  ~~**A** – indicates the aircraft is an arrival for one of the users active airports.~~
  ~~**D** – indicates the same for departures.~~
  ~~>>~~ – indicates the aircraft's destination is outside your sector and the aircraft is going to ~~leave or enter your sector.~~
- ~~The third item is the aircraft departure or destination airport.~~
- ~~The fourth item depends on the aircraft state. For departures it is the assigned squawk, for arrivals it is the distance remaining to the destination airport. When the user is working an active sector which the aircraft is going to enter, it is changed to the time left until entering the sector.~~

~~The list can be filtered by the header left letters:~~

- ~~**A** – is for arrival planes,~~
- ~~**D** – is for departures,~~
- ~~**O** – is for overflights,~~
- ~~**T** – is for tracked planes.~~

# The Metar List

This floating bar displays the METAR stations requested by the controller.
The user requests a METAR by typing the `[F2]` function key or by typing `.QD` then the ICAO code of the requested station. It appears in orange color in the menu bar and in the METAR floating bar in short METAR format.

- Short format line: `DAAG VRB03KT Q1029`
- Long format line: `DAAG 101030Z VRB03KT 9999 FEW020 14/04 Q1029`


If the user clicks on an orange METAR, the change of the METAR is acknowledged, the color changes from orange to blue and it is displayed in long METAR format in the right side of the command line. Using the C button on top left of the floating bar, the user can acknowledge all METAR changes with one click.

Via Quick Settings You can add the current ATIS designation to the METAR lines.

## The Voice List

This floating bar displays information about pilots connected on the controller primary frequency. Two buttons allows filtering of frequencies:

- **F** – Displays pilots connected on PRIM frequency
- **A** – Displays pilots connected on ATIS frequency

---

# Advanced Lists

## Summary Of This Page

There are several different lists available in EuroScope. In addition to those standard lists, additional lists can be added by plugins (for example the Holding List Plugin). All those lists have three small buttons located on the upper left corner of the list window.

The first button on the left defines the size of the list window. The following options are available:

- *unlimited* – in that case, there is no limit to the number of lines in the list window. The lists shrinks or expands according to the number of aircraft.
- *maximum nn* – in that case, the window has a variable size according to the number of aircraft and expands only to the maximal size indicated by the nn parameter.
- *fix nn* – in that case, the window has a fixed length and displays the nn first items.

The second button allows you to define which items are to be displayed in the list window. Full details are described below.

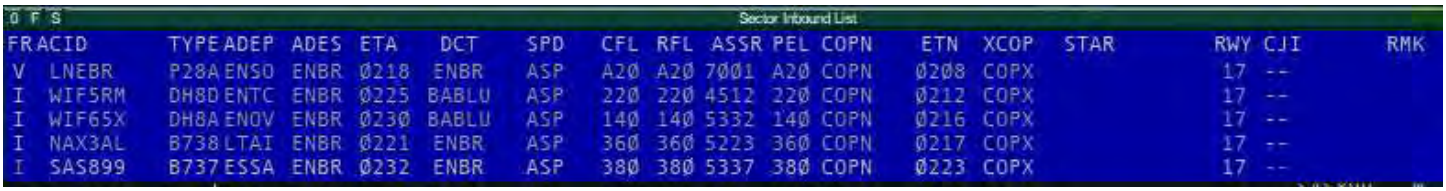
The third button opens the List Columns Setup Dialog to completely customize the lists up to your needs. Full explanation is given at the end of this page.

**Note**: By clicking on the header of a column in each list, the order of the aircraft in the list can be changed. This can be saved in the settings file.

## The Sector Inbound List

The Sector Inbound List keeps track of all aircraft that will enter your sector but are not currently inside. This strip is mostly read only, You can use that list only for ongoing coordination (as

described in [[Controller To Controller Communication]]). The default order of this list is by the estimated sector entry time.



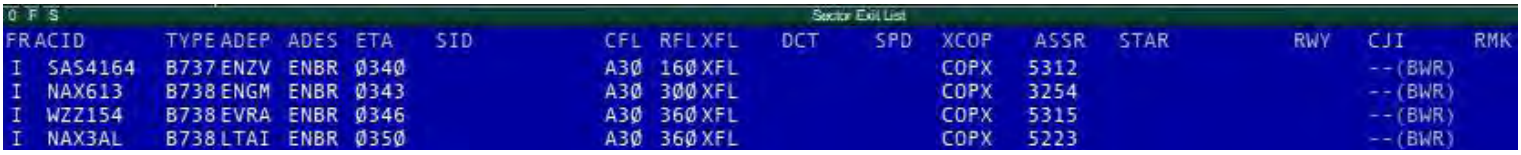

| FR | ACID | TYPE | ADEP | ADES | ETA | DCT | SPD | CFL | RFL | ASSR | PEL | COPN | ETN | XCOP | STAR | RWY | CJI | RMK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| V | LNEBR | P28A | ENSO | ENBR | Ø218 | ENBR | ASP | A2Ø | A2Ø | 7ØØ1 | A2Ø | COPN | Ø2Ø8 | COPX | | 17 | -- | |
| I | WIF5RM | DH8D | ENTC | ENBR | Ø225 | BABLU | ASP | 22Ø | 22Ø | 4512 | 22Ø | COPN | Ø212 | COPX | | 17 | -- | |
| I | WIF65X | DH8A | ENOV | ENBR | Ø23Ø | BABLU | ASP | 14Ø | 14Ø | 5332 | 14Ø | COPN | Ø216 | COPX | | 17 | -- | |
| I | NAX3AL | B738 | LTAI | ENBR | Ø221 | ENBR | ASP | 36Ø | 36Ø | 5223 | 36Ø | COPN | Ø217 | COPX | | 17 | -- | |
| I | SAS899 | B737 | ESSA | ENBR | Ø232 | ENBR | ASP | 38Ø | 38Ø | 5337 | 38Ø | COPN | Ø223 | COPX | | 17 | -- | |

As default the following fields are available in that list:

- *FR* – Flight rule
- *ACID* – Aircraft callsign
- *TYPE* – Aircraft type
- *ADEP* – Departure aerodrome
- *ADES* – Destination airport
- *ETA* – Expected time of arrival
- *DCT* – DCT/HDG
- *SPD* – Assigned IAS/Mach
- *CFL* – Temp level
- *RFL* – Requested level (FP level)
- *ASSR* – Assigned squawk number
- *PEL* – Predicted sector entry level
- *COPN* – Entry coordination point
- *ETN* – Estimated sector entry time
- *XCOP* – Exit coordination point
- *STAR* – Assigned STAR
- *RWY* – Assigned runway
- *CJI* – Next Sector ID

# The Sector Exit List

This list displays all information about the aircraft which are inside your sector and tracked by you. You can modify some of these parameters by clicking on it. In some cases, a popup menu appears like in the detailed TAG and allows you to modify this parameter. The default order of this list is by the estimated sector exit time.



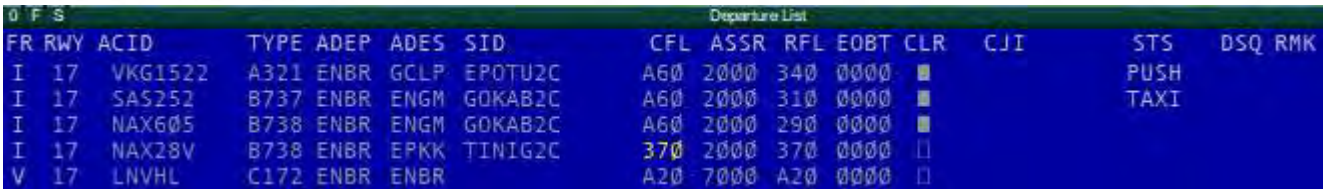

| FR | ACID | TYPE | ADEP | ADES | ETA | SID | CFL | RFL | XFL | DCT | SPD | XCOP | ASSR | STAR | RWY | CJI | RMK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I | SAS4164 | B737 | ENZV | ENBR | Ø34Ø | | A3Ø | 16Ø | XFL | | | COPX | 5312 | | | --(BWR) | |
| I | NAX613 | B738 | ENGM | ENBR | Ø343 | | A3Ø | 3ØØ | XFL | | | COPX | 3254 | | | --(BWR) | |
| I | WZZ154 | B738 | EVRA | ENBR | Ø346 | | A3Ø | 36Ø | XFL | | | COPX | 5315 | | | --(BWR) | |
| I | NAX3AL | B738 | LTAI | ENBR | Ø35Ø | | A3Ø | 36Ø | XFL | | | COPX | 5223 | | | --(BWR) | |

As default the following fields are available in that list:

- *FR* – Flight rule
- *ACID* – Aircraft callsign
- *TYPE* – Aircraft type
- *ADEP* – Departure aerodrome
- *ADES* – Destination airport
- *ETA* – Expected time of arrival
- *SID* – SID selector
- *CFL* – Temp level
- *RFL* – Requested level (FP level)
- *XFL* – Exit level (based on RFL or LoA)
- *DCT* – Assigned Direct/Heading
- *SPD* – Assigned IAS/Mach
- *XCOP* – Exit coordination point
- *ASSR* – Assigned squawk number
- *STAR* – Assigned STAR
- *RWY* – Assigned runway
- *CJI* – Next Sector ID

# The Departure List

The departure list shows you all aircraft currently on the ground on one of your active departure airports. In this list You can assign all essential data for the aircraft and keep annotations on their current clearance status.

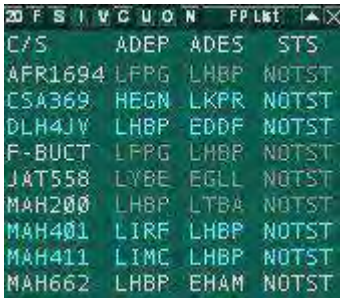



As default the following fields are available in that list:

- *FR* – Flight rule
- *RWY* – Assigned runway
- *ACID* – Aircraft callsign
- *TYPE* – Aircraft type
- *ADEP* – Departure aerodrome
- *ADES* – Destination airport
- *SID* – SID selector
- *CFL* – Temp level (Initial climb, manually set)
- *ASSR* – Assigned squawk number
- *RFL* – Requested level (FP level)
- *EOBT* – Filed planned off block time
- *CLR* – Clearance received memory aid toggle, synced to other ATCs.
- *CJI* – Next Sector ID
- *STS* – Ground movement status selector
- *DSQ* – Clearance request queue tool, **not synced** to other ATCs

# The Flight Plan List

The flight plan list displays all flight plans based on actual radar traffic and simulated traffic.




As default the following fields are available in that list:

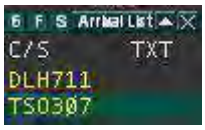
- *C/S* – Aircraft callsign
- *ADEP* – Departure airport
- *ADES* – Destination airport
- *STS* – Flight status
    - *NOTST* – not started
    - *SIMUL* – simulated traffic
    - *TERM* – terminated

You can filter what flight plans are to be shown. The filters are the followings:

- **I** – Show IFR flight plans
- **V** – Show VFR flight plans
- **C** – Show correlated flight plans
- **U** – Show uncorrelated flight plans
- **O** – Show concerned flight plans
- **N** – Show unconcerned flight plans

# The Arrival List

The arrival list displays all traffic that arrived at an active airport.




As default the following fields are available in that list:

- *C/S* – Aircraft callsign
- *TXT* – Scratchpad

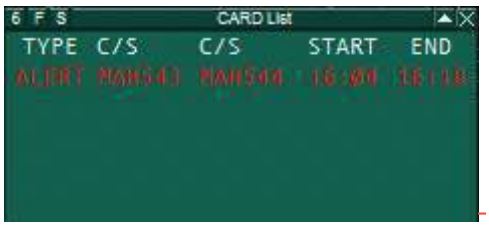
## ~~The piloting list~~

~~This list is for the pseudo pilots of a simulator. All the planes that belongs to the pilot is listed here.~~

~~TODO: picture~~

- ~~*C/S* – Aircraft callsign~~
- ~~*SPD* – Ground speed~~
- ~~*ALT* – Altitude (actual and set)~~
- ~~*HDG* – Heading (actual and set, including turn direction)~~
- ~~*WP* – Next waypoint along the route~~
- ~~*TO* – Take off status~~
- ~~*LAND* – Landing status~~
- ~~*TX* – Taxi instruction~~
- ~~*TXB* – Taxi behind instruction~~
- ~~*HOLD* – Holding poiont~~

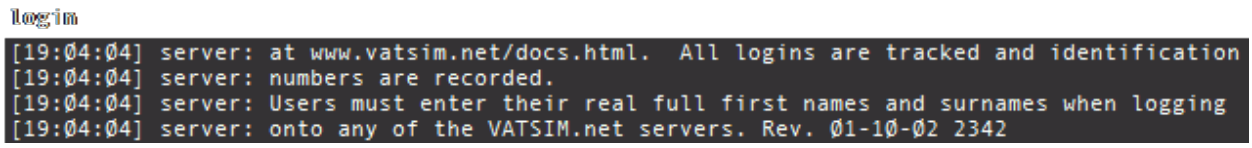
## ~~CARD (Conflict And Risk Display) list~~




~~The list shows warnings (yellow) based on the profile altitudes and alerts (red) if the planes are cleared for the conflicting levels. As default the following fields are available in that list:~~

- ~~*TYPE* – The type of the conflict ('ALERT' or 'WARN')~~
- ~~*C/S* – Conflicting aircrafts' callsigns~~
- ~~*START* – Starting time of the expected conflict~~
- ~~*END* – Ending time of the conflict~~

## The Chat Box




On this picture you can see the message received from the server. You will have the list of names above the box, with whom you are in conversation with. These names can be one of the followings:

- *callsigns* – pilot or controller to indicate private chats
- *frequencies* – to see text messages come and sent
- *server* – to see server messages (welcome and other notifications)
- *Message* – to see EuroScope system message (former message dialog)
- *ATC* – for ATC broadcast messages (not that you can not write here directly, just with the / command)
- *Broadcast* – to see supervisor broadcast messages
- *SUP* – for supervisory request messages

Private messages sent by a network supervisor are visible regardless to the settings being set on the visibility of the private messages in the client (general settings).

To change between them, simply click on the name. To collapse the chat bar, press *[ESC]* and to close it, double click the name, whose chat you wish to close. To jump to your primary frequency, press *[NUM STAR]* (or if you changed it your new primary frequency key). If you receive a new private message from a user, then its callsign will turn blue in the list.

New in v3.1 that you can configure how the new incoming messages are shown in the chat area. You can simply show them, use a highlight color to indicate unread messages, use flashing handlers for unread messages and even requires a one-by-one confirmation of them. See the [[General Settings]] dialog second page about the available options.

---

# Flight Strip

## Flight Strip


When you press the "'F6" button the flight strip is displayed here. The flight strip display is very similar to ASRC.

- In the first column you can see:
  - *callsign*
  - *aircraft information* – based on the flight plan data
  - *flight plan* (A350) and *current ground speed* (G345)
- The second column:
  - *flight plan type* – **I** stands for IFR while **V** for VFR plans
  - *departure and destination airport* – you can see extended information about the airports in the bottom line
  - *alternate airport*
- The third column:
  - *cleared altitude/flight level*
- The fourth column:
  - *final cruising altitude/level*
- The fifth column:
  - *route* – the first two lines contain the flight plan route section
  - *remark* – the flight plan remark section
- The flight strip annotations columns:
  In these three columns you can see the flight strip annotations. For the annotation EuroScope uses the same 3×3 block layout that was invented in VRC. To edit any of the annotations simply click to the place and edit the sting in place. When editing an annotation you can use the TAB key to move between the 9 fields. The fight strip can be pushed to the next controller using the `.ss` (F1+u) command or by RIGHT click on the strip itself. When you initiate a handoff to the next controller EuroScope automatically pushes the flight strip.
- The last column:
  - *assigned squawk* – the top line contains the assigned squawk (it may be empty if no squawk is assigned by any controller so far)
  - *actual squawk* – in brackets; it is not displayed if the assigned and the current squawk equals

The last line contains some information about the selected aircraft, the origin and the destination.

---

# The Command Line

## Command Line


The bottom bar is called the command line. As already mentioned, it functions as text input bar. Anything you type using your keyboard will appear down here. To send a *message to your primary frequency* hit *the primary frequency send key* you defined in you [[General Settings]] and not *[ENTER]*. To *send text messages* or give in *commands* use *[ENTER]* (further details under [[Working with keyboard]])

The right side of this bar is an info bar. Clicking on screen items e.g.: aircraft, controller, ATIS, etc. you can get detailed information. On the left side, the callsign of the currently selected aircraft is displayed. You can clear the content of the command edit and if it already edit deselect the aircraft with the *[ESC]* key.

---

# TAGs -

## TAGs in general

An aircraft is shown on the screen as a radar target or flight plan track, and an associated TAG, that shows the controller relevant and available information on the aircraft's situation and flight. In EuroScope, you always have the possibility to customize the outlook and/or the behavior of all TAG items. For further information on customizing the TAGs, see the [[TAG Editor]] page.

## TAG types

As EuroScope simulates the different radar modes it has the chance to show only that amount of information that would be available for the controller at a specific circumstance – even EuroScope always have all information ready due to the nature of VATSIM. Every TAG family has eight different TAG types:

- *Primary only* – When the transponder is in stand-by mode.
- *Uncorrelated A+C mode* – When the transponder returns A+C mode data, but there is no correlated flight plan data.
- *Uncorrelated S mode* – When the transponder returns S mode data, but there is no correlated flight plan data.
- *Correlated A+C mode* – When the transponder returns A+C mode data and there is a correlated flight plan.
- *Correlated S mode* – When the transponder returns S mode data and there is a correlated flight plan.
- *Flight plan track* – When the system calculates positions based on previous data and flight plan, but there is no correlated radar target.
- *Ground S mode* – In ground mode, when S mode transponder return is available.
- *Ground no radar* – When no radar at all and we simulate the situation that the controller is just looking out of the window (airline name and aircraft type is available only).

The TAG types correlate with the radar identification state of the aircraft. For further information on this topic, refer to the [[Professional Radar Simulation]] page.

Every TAG type has three different states:

- *Untagged*

- *Connected* – sound is played when connection is established
- *Disconnected* – sound is played upon disconnection
- *Ongoing coordination request*‘ – audio notification of incoming ongoing coordination requests
- *Ongoing coordination accepted* – audio notification of accepted ongoing coordination requests
- *Ongoing coordination refused* – audio notification of refused ongoing coordination requests
- *Manual ongoing coordination* – audio notification of manual ongoing coordination
- *New ATIS message* – sound is played whenever a new automated ATIS notification is received
- *Handoff refused* – sound is played when a handoff is refused by another controller
- *Pointout* – sound is played when a pointout of an aircraft is received
- *Startup* – sound is played during startup of EuroScope

**IMPORTANT NOTE**: User sounds will only be valid if its duration is one second or more.

In the *Device* combo box you can define which sound device is to be used for the sounds. You can select from your available devices or use the default Windows output one. All sounds will be played on the device selected here except the startup sound. That is always sent to the default Windows device unit.

---

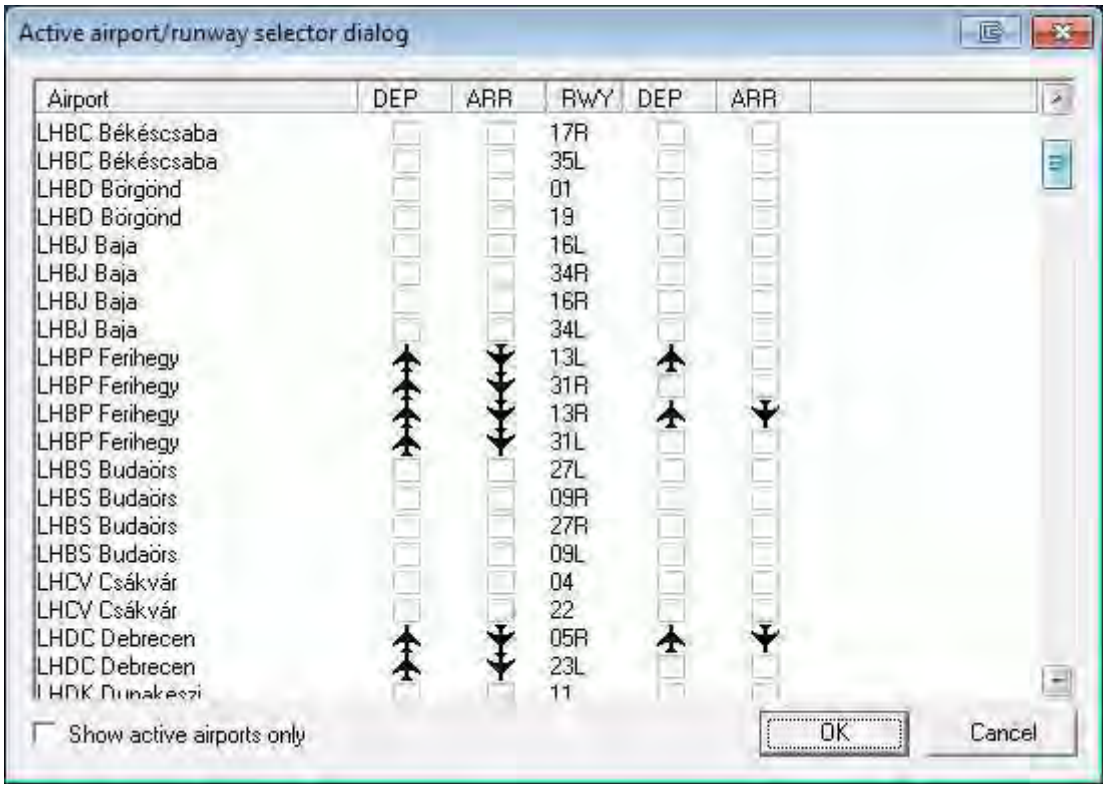
# Active Airports Runways

## Active Airports / Runways

Here you may select which airports are under your control, thus what flights should be listed in the aircraft and departure list. You can activate arrival and departure functionality for each airport separately. In the aircraft list, every arrival or departing flights will be displayed in addition to aircrafts concerned by your sector. If defined in the ESE file’s sector definitions, active airports will be set automatically dependent on the sectors under your control.

You can also set the runways in use regardless of the active airports. The active runways are relevant for the SID and STAR prediction, and optional also for the display of extended centerlines and the calculation of COPX points.

Optional the active airports with runways assigned can be automatically added to the metar list.



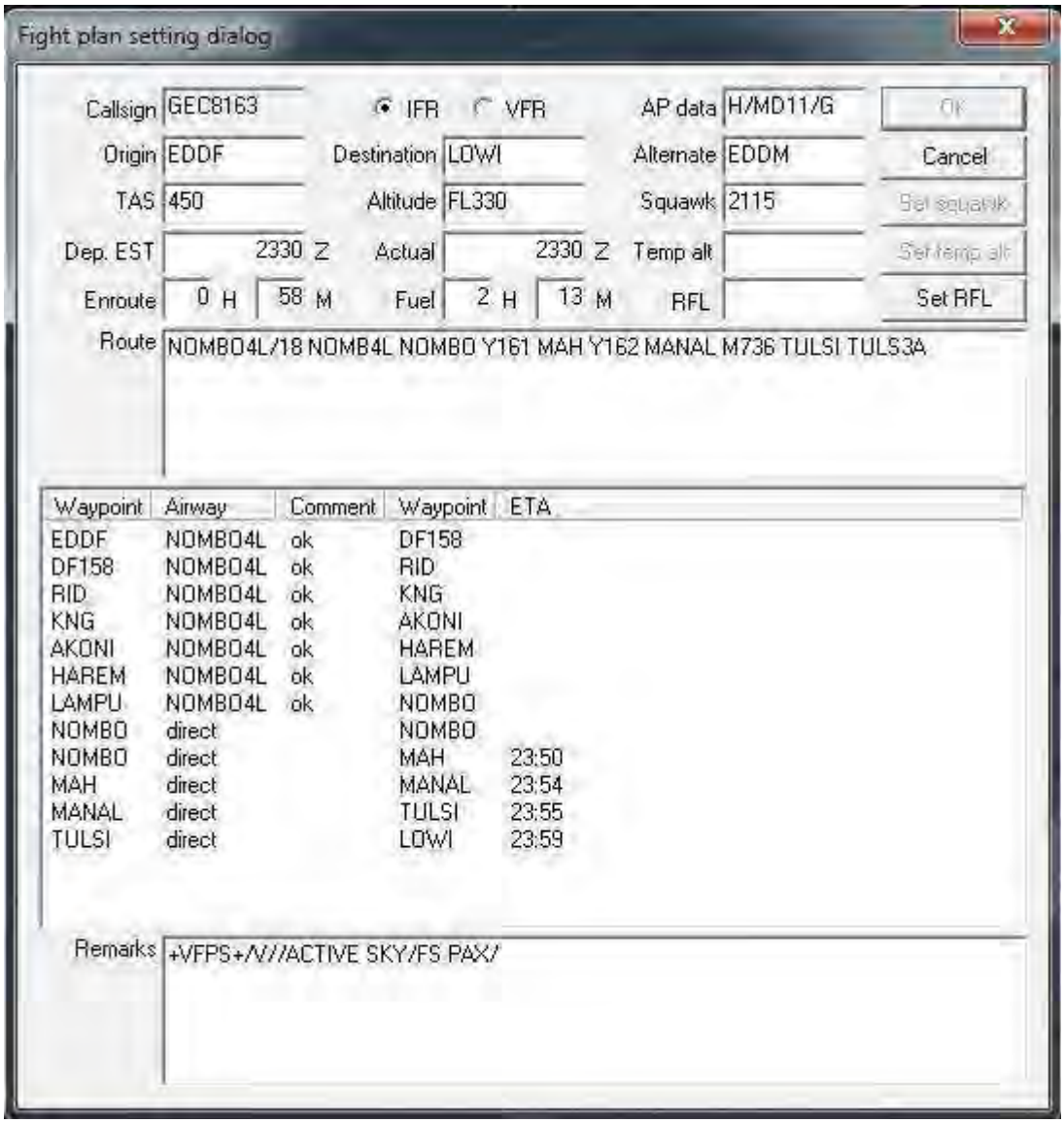

- To make an airport active click on the first two boxed columns next to the airport name. In this example only LHBP and LHDC are selected (both DEP and ARR)
- To select the active departure and arrival runways click the DEP and ARR columns for the given runway. In this example departure runways 13L and 13R and arrival runway 13R are selected for LHBP. In addition to that, for LHDC runway 05R is selected to allow Euroscope the calculation of the correct COPX points.
- You can reduce the list to show only the active airports.

---

# Flight Plan Setting Dialog

## The Flight Plan Setting Dialog

The dialog looks like this:




Most part of the dialog is really straightforward and needs not too much explanation. It contains the most important pieces (not all of them) of a flight plan and makes it possible to be modified. Just edit the values you would like to modify then press *OK* to save or *Cancel* to forget it. You can open the flight plan dialog even if you are an observer or someone else is tracking the aircraft but in this case you will not be able to save your modifications.

Probably the route section is a little bit more interesting then the others. It is a simple text edit box. The addition is that for every single character modification the route is compiled from the string and the extracted point by point route is displayed in the list control below. There you can see all waypoints the airway to that waypoint and a comment about the airway usage. If the aircraft is flying then the estimated time of arrival is also calculated for every point along the route.

There are three other buttons that works immediately and not when saving the dialog:

- *Set squawk* – It assigns the squawk value to the aircraft. If the field is empty the a new squawk is generated based on the controller position.
- *Set temp alt* – It sets the temporary altitude.
- *Set RFL* – It sets the requested flightlevel. EuroScope makes a difference between the requested flightlevel (RFL), which is the level the pilot originally requested when filing his flightplan, and the current or cleared flightlevel (CFL) which is the level currently cleared by the control. CFL is the level accessed by the F5 key.

In [[Professional Radar Simulation]] mode, you can add an ETA for a waypoint directly in the waypoint list in the ETA column.

---

# Message Dialog

## Message Dialog

With EuroScope v3.1, the old Message Dialog has been replaced by a message tab in the chat area.
This tab shows you whenever an error occurs on loading some necessary files or data, and other system informations. It will automatically appear when loading a file fails.

In this example the VATSIM data feed that provides the data for simulated traffic has been loaded successfully.


With v3.1 a new message confirmation system is introduced. The messages are moved two chars to the right and there are three different chars at the first column to indicate the message status:

- *SPACE* – this message does not need to be confirmed (mostly the outgoing messages).
- *O* – this message is not yet confirmed
- * – this message is already confirmed

To confirm a single message click on the O. To confirm all messages of the tab click on the handler with right button.

---

Some Common Error Messages

- *AIRPORT/<RWY name>* – If the route section start with the departure airport name followed by a slash then a RWY designator then it is interpreted as departure RWY is assigned. Same if the destination airport is at the end followed by the slash and the RWY. It is interpreted as RWY is assigned for arrival. If an aircraft has an assigned RWY only the SIDs/STARs of this RWY will be used in the popup menu and in the route extraction.
- *POINT/M085F320* (and *M085F320/POINT*) is accepted. The F320 is compiled as the requested level from the next point. This value is used for the profile calculation and also used as the RFL (if no controller overrides it).

## Flight plan remarks section

- *EOBT=HHMM* – If the remarks section contains the following format string, then HHMM will be compiled as Expected Off Block Time for ground operations.
- *START=HHMM* – Similarly to the above it sets HHMM as the expecte engine startup time.

---

# Working with keyboard

## Working with keyboard and mouse

While EuroScope can be used by simple mouse clicking still there are a lot of things where keyboard makes our life much easier. As they can speed up the work there are several keyboard tricks.

### Editing, Function Keys And Other Key Shortcuts

The [[Editing And Function Keys]] page describes the meaning of several keyboard elements which behave differently than a simple text editor. Many things come from ASRC, so if you have ever used ASRC, you will find them familiar. However in some cases we changed the meaning of the key completely or made it work slightly different.

Alias files are the same that you used for ASRC/VRC, but the extraction of the aliases are completely different.

### Command Line Reference

The [[Command Line Reference]] page contains a complete list of the available commands an their usage.

### Built In Functions

The [[Built In Functions]] page lists the functions you can use in aliases, METAR lines or just when typing in things to the command line.

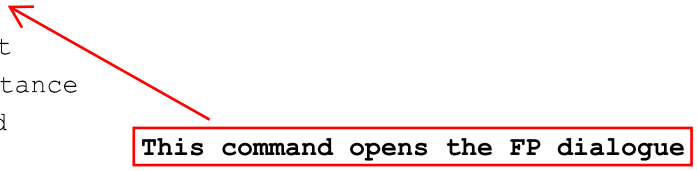
---

# Editing And Function Keys

## Function Keys And Other Key Shortcuts

This paragraph describes the meaning of several keyboard elements which behave differently than a simple text editor. Many things come from ASRC, so if you have ever used ASRC, you will find them familiar. However in some cases we changed the meaning of the key completely or made it work slightly different.

- *F1 key* – As in EuroScope the TAG up and TAG down is available with a double click on the TAG this key has been freed up. Its role is to accelerate issuing commands that are important, yet not so often used. When you first press the F1 key, then *F1* will appear in the command line. Then there are some shortcuts:
  - *F1+1* to *F1+9* – ASR fast load keys as defined in [[General Settings]]
  - *F1+0* – closes the current ASR file
  - *F1+a* – changes to `.am`
  - *F1+c* – changes to `.chat`
  - *F1+d* – changes to `.distance`
  - *F1+f* – changes to `.find`
  - *F1+i* – changes to `.inf`
  - *F1+k* – changes to `.kill`
  - *F1+s* – changes to `.sep`
  - *F1+u* – changes to `.SS`
  - *F1+w* – changes to `.wait`




- *F2 key* – It places the `.QD` command to the command line to display METAR information on selected stations.
- *F3 key* – It places the `.QT` command to the command line to start tracking an aircraft or to accept handoff. Like `.contactme` it also works on the aircraft that is under the cursor making it very simple to accept handoffs.
- *F4 key* – It places the `.QX` command to the command line to drop an aircraft or initiate handoff. Like `.contactme` it also works on the aircraft that is under the cursor.
  **Important**: `.QX` without parameter initiates a handoff to the next controller (if available) instead of dropping target.
- *Shift+F4 key* – It places the `.QY` command to the command line to drop an aircraft. Like `.contactme` it also works on the aircraft that is under the cursor.
- *F5 key* – places the `.QZ` command to the command line to change the final altitude.
- *F6 key* – It displays the flight strip of the selected aircraft in the place of the standard CHAT window.

- *Shift+F6 key* – It places the `.QU` command to the command line to draw the route of an aircraft. It is very rarely used as this function works far better from the TAG.
- *F7 key* – If you are using more than one radar layouts at a time press this key to switch between them.
- *F8 key* – It places the `.QQ` command to the command line to set or clear temporary altitude.
- *F9 key* – It places the `.QB` command to the command line to set squawk code or communication type (`/t`, `/v`, `/r`). For aircraft that is under the mouse it assigns the next available squawk automatically.
- *F11 key* – This key zooms in the radar screen. This is a replacement of the mouse wheel zoom.
- *F12 key* – This key zooms out the radar screen. This is a replacement of the mouse wheel zoom.
- *Ctrl+HOME* – combination sets the original zoom and screen center position for the current ASR file.
- *FREQ key* (as default the numeric STAR keyboard) – First of all it opens your primary frequency chat window. If the command line is not empty (e.g.: a message to a pilot is written in there) then it sends the command line content to the primary frequency, addressing the message to the selected aircraft.
- *ASEL key* (as default the numeric PLUS keyboard) – This is the aircraft selector key. To use there should be some letters typed from the callsign. Pressing this button the first callsign that matches the letters typed before will be selected. You can press the *ASEL* key again to select the next match. You can do it in a loop to see all matching callsigns. From version 3.2 the selection of the planes are ordered by their state. The function will search for the planes in the following order:
    - Assumed
    - Transfer to me initiated
    - Transfer from me initiated
    - Redundant first 30 seconds
    - Redundant
    - Coordinated
    - Notified
    - Non concerned
- *HOME* – If the command line is not empty then it is the good old *HOME* key that moves the cursor to the beginning of the line. But if the command line is empty then it places the `.contactme` command to the editor. Important, if there is an aircraft whose TAG is in detailed mode (the mouse is over it) then the command is executed immediately.
- *INS* – The insert button places the `.QS` command to the command line to set or clear the scratch pad of an aircraft. Like the *HOME* key it is executed immediately on the aircraft which has the mouse over its detailed TAG. In this way you can clear the scratch pad fast.
- *Left Click + Right Click* – Using this combination on a TAG will *stick* it on the screen in it's present position and will not move with the aircraft's target. Moving the TAG will cancel the *ticking* function.

# Editing In The Command Line

Some buttons do not have a real function connected to but simple changes the content of the command line in some way.

- *TAB* – The TAB key has two different meanings depending on the content of the command line:
  - If the line is empty then it selects the next displayed chat window.
  - If the line is not empty then it extracts the function names from the command line and selects next parameter. See later in the *Aliases* section.
- *ESC* – The escape button has three different meanings:
  - If the command line is not empty, then it simply clears it.
  - If empty but has an aircraft selected then it deselects all aircraft. This way you can send messages on your primary frequency to anyone, even if you are unable to select him/her.
  - If empty and no aircraft is selected then it closes the chat window. You can open it again by a doubleclick on any chat name or initiating a new chat (see [[Command Line Reference]]).
- *Ctrl+Up arrow* – The Up key with Ctrl pressed gets the previous line from the CHAT window and puts it into the command line. There you can reedit, copy part of it to the clipboard, etc.
- *Ctrl+Down arrow* – Like the previous but it goes to the next line.
- *Shift+Up arrow* – The Up key with Shift pressed gets the previously entered command to the command line.
- *Shift+Down arrow* – The Sown key with Shift pressed gets the next entered command to the command line.
- *Up arrow* – It scrolls the chat content one line down to see one more line on top.
- *Down arrow* – It scrolls the chat content one line up to see one more line on bottom.
- *Page Up* – It scrolls the chat content three lines down to see more lines on top.
- *Page Down* – It scrolls the chat content three lines up to see more lines on bottom.

**Note**: The primary and the secondary PTT buttons are disabled in the chat window. If you select a key as PTT you will not be able to use it in the command line.

# Aliases

Alias files are the same that you used for ASRC. You can load them as they are and if the functions are implemented in EuroScope as well then you can use them. The general format of one alias line is:

```
.<alias name> <alias value>
```

Where alias name is the short name you would like to type and the value is what should be inserted into the command line as replacement. The alias value string can contain several function calls (see later), parameters `$1`, `$2`, … `$9` and of course free text. An alias value should not contain another alias name. Well it can, but it will not be extended.

The way you can use the aliases are completely different from ASRC. It replaces the alias name to value as you type not only when you send it to somewhere. Just type your message as you like. Whenever a SPACE is pressed EuroScope tests the last word typed and if it starts with a DOT and matches any alias name it will replace the word immediately. It is not necessary to start the alias at the beginning of the line, it is not necessary to be at the end of the line. Only to press a SPACE. This idea makes it possible to see the extracted message before sending it.

As the alias name is replaced immediately the parameter definition should work also differently. As the name replaced EuroScope searches for the parameters. When it founds the first one it become selected in the command line. In this way you just simply type the parameter and the selected portion of the text will be replaced as it works in a normal edit box. When you finish with the parameter just press the TAB key to search for the next parameter place to be selected. When the TAB is pressed EuroScope first test if the same parameter is used in the alias again or not. If used then it will replace that occurrence with the newly typed value too. After that it tries to evaluate all the functions in the line once again. In this way an alias parameter can be parameter of a function too. See the next example:

The original alias is:

```
.cont Contact $radioname($1) on frequency $freq($1)
```

After typing `.cont` and a space the command line will be extended to:

```
Contact $radioname($1) on frequency $freq($1)
```

and the first `$1` will be selected. As you overwrite it with e.g. `AP` and press *TAB* key the line will be changed to:

```
Contact Budapest Approach on frequency 129.700
```

Using this method you should not memorize what parameters comes each after as you see the context before specifying the value. One backward of the method is that it could not recognize if the same parameter is in the line more than once. So in that case one should specify the same value several times.

# Autotext messages

All *autotext*messages use built-in aliases now. If you want to change any of these, just put the respective entry in your alias file. EuroScope will then use this entry instead of the built-in text.

~~The default aliases are as following:~~

- ~~.autoproceed Proceed direct to $1~~
- ~~.autoclearedils Cleared ILS approach RWY $1~~
- ~~.autoclearedvisual Cleared visual approach RWY $1~~
- ~~.autoclimblevel Climb to FL $1~~
- ~~.autoclimbaltitude Climb to altitude $1 ft by QNH $altim($dep)~~