IVAC2 Handbook for BIRD FIR
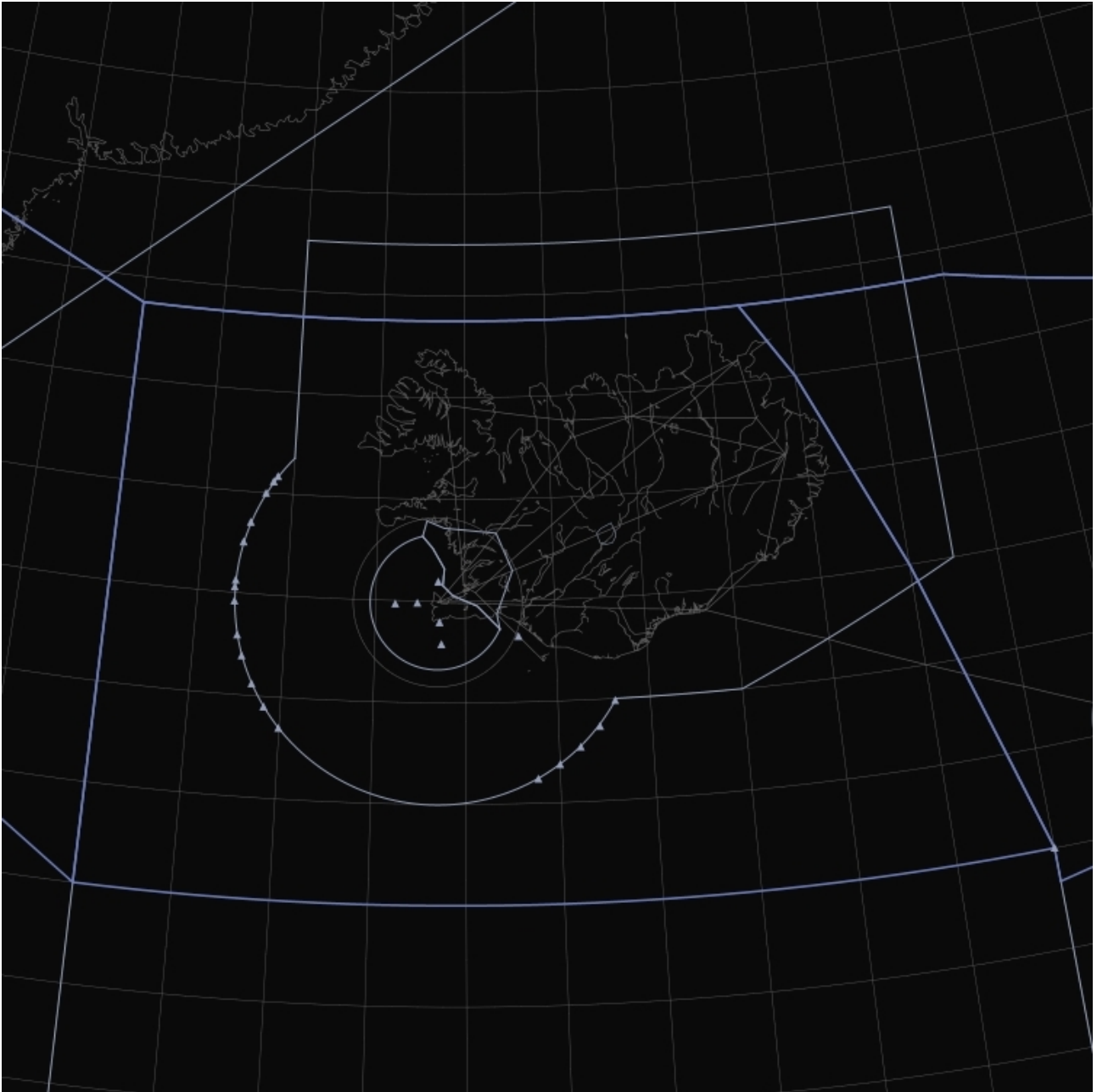
effective 26 APR 18

Contents

Maps

Selection of maps is available via the MAPS button in the top menu. Clicking this button will open the maps menu:

The maps menu contains 11 groups, accessible via the 11 black buttons in the top (note: the button marked with an asterisk is not used). Each group contains a number of maps, which can be toggled on and off by using the buttons below. Note the T button next to each map button. For maps containing text labels, the text can be toggled on or off independently from the main map by using the T button.

Be aware that some maps, for example extended centrelines, are only visible when you zoom in far enough.

There are 1 NM between each marker dot on extended centrelines, for example:
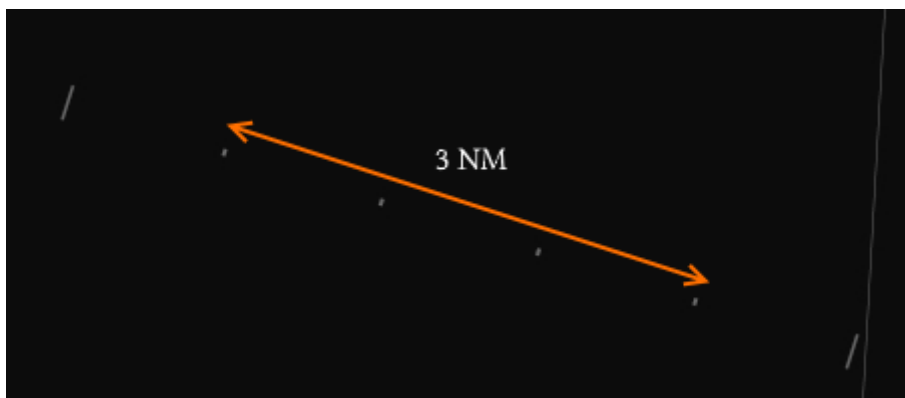
The only exemption is Vagar AFIS which utilizes the RADIS theme used within Copenhagen FIR (EKDK). Please refer to the **Handbook for COPENHAGEN FIR** when controlling as Vagar AFIS.

Map groups

The GEN group contains maps showing boundaries for external ACC sectors (EXT) and a geographical grid (GRID).

The ACC group contains the following maps:

- ADS [200], ADS [300] – approximate coverage of ADS-B receivers for aircrafts flying at FL200 and FL300

- range rings for Faxi TMA (Faxi RR) and Akureyri TMA (Akureyri RR) with intervals of 10 NM between each circle

The ENR group contains the following maps:

- FIXES [PMY], FIXES [SEC] – significant points for en-route navigation

- NAVAIDS – radio navigation aids for en-route navigation

- LOW RTE – lower airspace routes

- RNAV RTE – aerial navigation (RNAV) routes

- ARP [PMY], ARP [SEC], ARP [GL] – reference points for all aerodromes in Iceland and on the Faroe Islands, and for major aerodromes in Greenland

All maps in the ENR group except LOW RTE and RNAV RTE have text labels which can be turned on and off with the T button.

The PMY and SEC groups contain maps with significant points and radio navigation aids related to approach and departure procedures for all major and some minor aerodromes in Iceland and for EKVG airport on the Faroe Islands. In cases of BIKF and BIRK airports there are separate maps for each single runway. For example, clicking on RK [19] will open a map with significant points related to BIRK runway 19.

The GND group contains maps showing taxiway designators, ground route restrictions and stand labels (note: stand labels become visible if you zoom in or activate a SMR apron preset, see below).

The VFR group contains maps of visual reporting points.

The AER group contains maps for aerial sporting areas which include training and gliding areas.

The OBS group contains maps of air navigation obstacles in the FIR (note: only obstacles with an elevation of 500 ft or above are included).

The MIL and PRD groups contain maps of military exercise and training areas as well as prohibited, restricted and danger areas in the FIR. Note that prohibited areas are always shown, and their text labels can be activated by clicking on the map (and not on the T button).

Note that any altitude information within the maps are provided in hundreds of feet.

Presets

Presets are a way to adjust the viewpoint and zoom level of the screen, and turn on or off multiple maps all in one go.

Whenever an ATC position is loaded, the correct preset is loaded automatically.

It is possible to manually load a preset via the PRESETS button in the top menu.

PRESETS			— ×
ACC	APP	SMR	CFG
AR		AR Apron	
KF		KF East Apron [N]	
KF East Apron [S]		KF Terminal	
RK		RK Apron	

There are four preset groups containing a number of presets, which are described in the next chapter.

Preset groups

The ACC group contains presets that are normally used when controlling on an ACC position, among them insets of all ACC sectors and terminal control areas.

The APP group contains presets designed for APP units which include insets of all control zones.

The SMR group is commonly used during normal controlling. Presets in this group allow for a quick and easy way to open a ground view for a certain airport. For example, clicking the KF preset opens a ground view of BIKF airport.
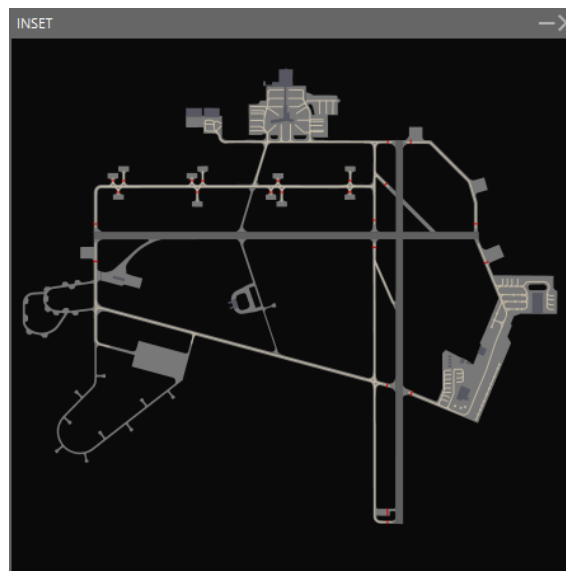
The CFG group contains presets that allow for quick configurations of extended centrelines. This includes Faxi TMA, namely BIKF and BIRK airports, and the possibility to show or hide the offset localizer used at BIAR airport. For example, clicking the Faxi [W] preset will activate the centrelines that are used during westerly winds. Click the RST button anytime to show all centrelines again.

Labels

Within Reykjavik FIR, TERN labels are used at:

- ACC

- approach & departure (BIAR, BIKF, BIRK)

- aerodrome services (BIAR, BIKF, BIRK)

The following label types exist in the TERN system:

- Airborne labels

  - Unconcerned

  - Concerned

  - Assumed

  - Released

- Ground labels

  - Arrival

  - Departure

  - Unknown

Each label looks different depending on whether it is selected or unselected. To select a label, hover the mouse cursor over it.

*(**Note:** In the following chapters the labels used for **ACC** are described in detail. There are separate labels for approach and radar-supported tower units, however, these are based on the ACC labels and differ in the amount and arrangement of the label fields. Vagar AFIS utilizes RADIS labels – for more information please refer to the **Handbook for COPENHAGEN FIR**.)*

Label fields

The following label fields are used, and will be mentioned on the following pages. Refer back to this list when reading the next chapters.

ADES	Destination aerodrome
AFL	Actual flight level (mode C level)
AGATE	Arrival gate
* AHDG	Assigned heading or assigned route
* ASP	Assigned speed
ATYP	Aircraft type
CALLSIGN	Radio callsign
* CFL	Cleared flight level
DGATE	Departure gate
* DRWY	Departure runway
GS	Ground speed
OP_TXT	Operator text – a text field for remarks
* SI	Current ATC sector (if label is not assumed) Next ATC sector (if label is assumed)
TSSR	Transmitted SSR code (squawk code)
WTC	Weight turbulence category (L/M/H/S)

* = field will be blank on unselected labels if no value is set

Important label actions

Each field in a label can have a function. These functions can be accessed by either clicking, double clicking or right clicking a label field. Depending on the label state, different actions will be available.

To open the callsign menu: click the transmitted SSR code *(unconcerned label only)* or callsign.

To point out the track to all controllers: right click the aircraft type *(not available for unconcerned labels)*. This will draw an orange box around the track, which can be seen by all controllers.

To mark the track: right click the callsign *(not available for unconcerned labels)*. This will draw a blue box around the callsign, which can be only seen by you.

To open the flightplan: click the destination field.

To show the flightplan route: right click the destination field.

To send a text message to an aircraft: open the callsign menu and click TEXT *or* hover the label and press F7.

Aircrafts which are CPDLC only (no voice) will be shown with a box around the callsign:

For such flights, automatic CPDLC messages will be sent whenever a cleared level, assigned speed or assigned heading is set, or when a transfer to the next ATC sector is initiated.

Incoming CPDLC messages are visible in the TEXT IN window, which you can open by clicking TEXT IN in the top menu. Note that incoming messages can be clicked once to turn them grey, as a reminder for yourself that the message has been dealt with.

Unconcerned labels

An unconcerned label is a label of an aircraft that is not going to enter your airspace, or when it is not yet known to the system that the aircraft will enter your airspace. Unconcerned labels contain a minimal amount of information.

An unselected, unconcerned label consists of:

| TSSR |
| AFL, GS |

A selected, unconcerned label consists of:
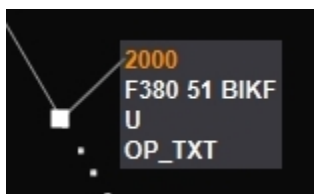
| TSSR |
| AFL, GS, ADES |
| SI |
| OP_TXT |

If an aircraft with an unconcerned label is going to enter your airspace at some point, you must set yourself as the next ATC sector. Do so by right clicking the SI field. This will move the label to the concerned state.

Concerned labels

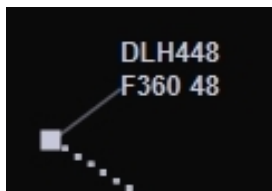A concerned label is a label of an aircraft that is going to enter your airspace in the future.

An unselected, concerned label consists of:

CALLSIGN
AFL, GS
SI, ASP, AHDG, CFL

A selected, concerned label consists of:

CALLSIGN, TSSR, ATYP
AFL, GS, ADES
SI, ASP, AHDG, CFL
OP_TXT

The concerned label gives you information you need to start planning the flight's section through your airspace. More detailed information like COPN (coordinated entry point) or PEL (planned entry level) is available via the flight lists (see respective section below).

If an aircraft is entering your sector from uncontrolled airspace, you must send a CPDLC CONTACT message to let the pilot know they need to contact you. To do so, click the SI field and click the CONTACT > (FREQ) button.

If an aircraft is assumed by another ATC sector, you must wait for this sector to transfer the aircraft to you. If you would like the previous ATC sector to transfer the aircraft right away, double click the SI field. This will make ROF (request on frequency) appear in the label for the previous controller, reminding them to transfer the flight to you.

When the flight calls you (and not before!), accept the transfer by double clicking the callsign field. This will move the label to the assumed state.

Assumed labels

An assumed label is a label of a flight currently assumed by you – basically, all flights on your frequency.

An unselected, assumed label consists of:
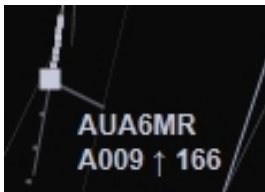
CALLSIGN
AFL, GS
SI, ASP, AHDG, CFL

A selected, assumed label consists of:
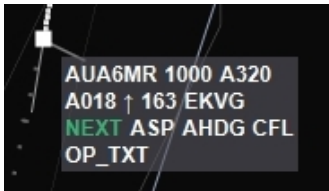
CALLSIGN, TSSR, ATYP
AFL, GS, ADES
SI, ASP, AHDG, CFL
OP_TXT

The first thing you need to do when a label has been assumed is to set the next ATC sector. This is done by clicking the SI field and selecting the correct sector from the menu. If an aircraft will be leaving your sector into uncontrolled airspace, no next sector should be set.

The cleared level, assigned heading/waypoint and assigned speed can be changed by clicking those respective fields. Note: in the cleared flight level menu, CA means *cleared approach* and VA means *cleared visual approach*. LND can be set to indicate a flight has been cleared to land.

To assign a mode A (squawk) code to a flight, click the TSSR field (which will be shown in an orange warning colour if the flight is transmitting a wrong code, or 2000/7000 etc.)

For a flight arriving in or near your sector, you can set the arrival runway by right clicking the assigned heading/waypoint. To set a STAR (standard arrival route), double click the AHDG field.

You can add a note to the label by clicking the OP_TXT field. This note is visible to all controllers.

To transfer the label to the next ATC sector, right click the SI field. Once the next sector accepts the transfer, the label will be moved to the released state. If no next ATC sector is available, release the label by opening the callsign menu and clicking RELEASE.

ATC inputted data can be cleared prior releasing a target to uncontrolled airspace. To do so, either click on DISPLAY and then on WIPE ON REL in the top menu (automatic method) or press ALT + W (manual method).

Released labels

A released label is a label of a flight that was previously assumed by you, and that has now been transferred to the next sector or released to uncontrolled airspace.

An unselected, released label consists of:
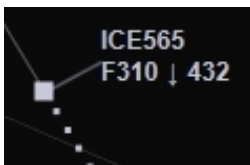
CALLSIGN
AFL, GS
SI

A selected, released label consists of:
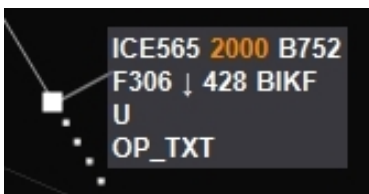
CALLSIGN, TSSR, ATYP
AFL, GS, ADES
SI
OP_TXT

A released label only contains information that allows you to be aware of the flight. Since the flight will not enter your airspace again, you cannot change any of the values in the label.

Ground labels

There are two general types of ground labels: labels for departing traffic and labels for arriving traffic.

An unselected departure label consists of:

CALLSIGN
DRWY

A selected departure label consists of:

CALLSIGN, TSSR, SI
ATYP, WTC, ADES
DRWY, AHDG
DGATE, OP_TXT

Ground labels
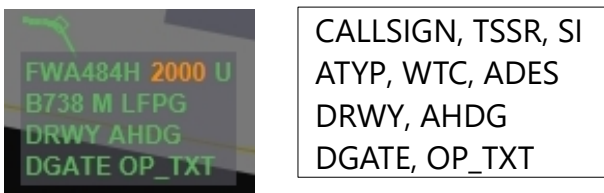
To issue a departure clearance via datalink, double click the AHDG field. This will open the DCL (datalink clearance) window:

Fill out all required fields. Be aware the ALTN SID field can contain additional departures (HDG, OMNI, VEC and VFR) which are not automatically assigned.

When completed, click VOICE if the clearance will be transmitted to the pilot by voice, or SEND DCL to send the clearance via datalink. After transmitting the clearance (by voice or datalink) you need to enter the clearance limit (e. g. end point of a SID or assigned track for a vectored departure) in the label by clicking the AHDG field.

NOTE: Any error in the filed flightplan, such as wrong departure point or a missing equipment code, will make it impossible to send a DCL clearance. For flights that are not going to follow a SID and where no alternate departure is available (see above), the clearance must be issued manually.

If you need to set a departure runway without issuing a clearance (for example for VFR traffic at aerodromes without secondary surveillance radar), simply click the DRWY field.

An unselected arrival label consists of:
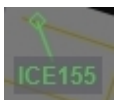
CALLSIGN

A selected arrival label consists of:

CALLSIGN, SI
ATYP, WTC
AGATE
OP_TXT

To set the arrival gate for an arriving aircraft, click the gate field.

By default, ground labels are only shown if you zoomed in far enough to see the ground map of an airport. However, it is possible to see all ground labels by clicking the GND button in the top menu. This can be useful if you quickly need to scan for traffic on the ground at multiple airports.

Note that departure runway and arrival/departure gate can be set even if the label is not assumed. However, you must assume the label if you want to enter anything in the AHDG or OP_TXT field.

ATC information system

The ATC information system is a window containing different information useful when controlling. It can be accessed by clicking the ATC INFO button in the top menu.

The buttons on the right side of the window give access to different pages. To navigate on a page simply right click and select an option from the dropdown menu.

*(**General note:** most recent and detailed weather information can be retrieved via the URLs http://en.vedur.is/weather/aviation/ and, for North Atlantic Tracks, http://www.perkins-aviation.ch/weather/NorthAtlantic.html.)*

EMERG

The EMERG page contains checklists to be used in different emergency situations.

CLS

Allows you to look up the radio callsign of a flight by entering the 3-letter callsign code.

LOC

Allows you to look up the name of an airport by entering the 4-letter ICAO designator.

ATYP

The ATYP page makes it possible to look up performance information for different aircraft types.

NOTAM

The NOTAM window allows you to look up NOTAMs for BIRD FIR. Type in an airport ICAO designator and click Search NOTAMs or click Get all BIRD NOTAMs to get all NOTAMs in the FIR.

(**Note:** further series B & C NOTAMs can be retrieved via the URL https://www.isavia.is/en/corporate/c-preflight-information/notam.)

RUNWAY

The runway page shows the recommended runways in use for airports in BIRD FIR. Please remember that these are only recommendations. NOTAMs are not considered. Be aware that this page might take a few seconds to load when you open it, during which time IVAC2 will appear to be "frozen".

LABELS

The labels window contains an overview of the different aircraft labels. You can hover your mouse cursor over each label field to see different label actions (click, double click, right click).

ATC sectors

Every ATC sector has an unique sector code and a short sector ID.

Sector codes and IDs are visible in the ATC list, which can be opened by clicking the ATC button in the top menu. In the example below, ENOR is the unique sector code and NO is the sector ID.

SI	Short	Freq	Callsign
ENOR	NO	124.775	Norway Control

The sector ID is shown in the SI field in the label when an ATC sector has been set as the next sector. For example, if ENOR was set as the next ATC sector for a flight, the SI field in the label would contain the letters NO. The following sector IDs are used in BIRD FIR:

- Local ACC sectors (Reykjavik Control) have their sector name as ID. For example, Reykjavik ACC Sector E has the sector ID E.

- Reykjavik Control (combined sectors) has the sector ID ACC.

- Radio units (Iceland Radio) have "FSS" plus their sector name as ID. For example, Iceland Radio Sector NW has the sector ID FSS NW.

- Foreign ACC sectors mostly have two letter IDs:
  - ° Nuuk Information: GL IF
  - ° Edmonton Centre: EG
  - ° Gander Centre and Gander Radio: QX
  - ° Shanwick Radio: GX
  - ° Scottish Control: PX

- º   Bodo Oceanic Radio: OB

- º   Norway Control (Stavanger sectors): SV

- º   Norway Control (combined): NO

- Regional approach and tower units (except BIRK) use the last two letters of the ICAO designator followed by APP for approach, RAD for radar, G for ground or D for clearance delivery. Tower units have no suffix. For example: KF APP is Keflavik Approach, AR is Akureyri Tower.

- Reykjavik (BIRK) has the letter "V" followed by APP for approach or G for ground.

- Keflavik Approach (Final) has the sector ID KF FIN.

- AFIS units use the last two letters of the ICAO designator. For example: VM is Vestmannaeyjar Information, VG is Vagar AFIS.

ATIS and voice communications

You can set up a datalink ATIS (D-ATIS) by clicking the VOICE button. Note that a detailed ATIS is only available for units where pilots would be expected to report an ATIS letter on first contact, i. e. only tower and approach units, and only at airports that have an ATIS in the real world.

Access the voice communications panel (VCS) by clicking VOICE in the top menu. The opened window should have a green background (like shown below).
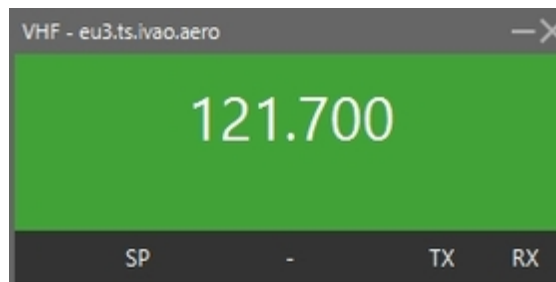
If voice has been disabled, double click the frequency to reconnect:
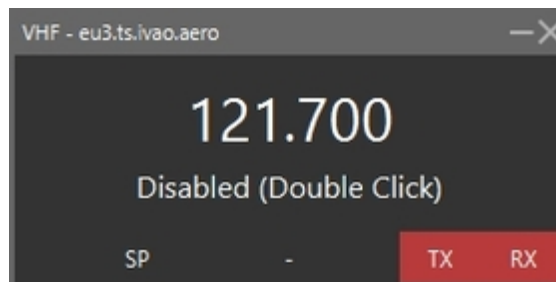
In order to transmit on your voice channel, press and hold the CTRL key (or equivalent key depending on your operating system). Note that the IVAC2 window MUST be in focus while transmitting, otherwise the transmission will not get through. TX will light up in the VCS while transmitting.

The VCS will automatically select your default audio device. If you wish to use another audio device, you need to change your default device in your system setup.

Flight lists

Flight lists are used to get an overview of flights for planning purposes. All flight lists are accessed by clicking FLTLIST in the top menu. The following lists are available:

Sector list

The sector list shows all flights currently assumed by you. It is opened by clicking the SL button.

Sector inbound list

The sector inbound list shows all flights where you are set as the next ATC sector. It is opened by clicking the SIL button.

Departure list

The departure list shows departing flights from one or several aerodromes, or from a specific runway. By clicking the DEP button, a filter window will open. Type in a departure aerodrome and/or runway to select which flights should be shown in the list. It is possible to show many aerodromes at once, for example, by typing "BI" in the ADEP field, all flights departing from aerodromes whose location indicator start with "BI" will be shown.

Approach and tower controllers are encouraged to have a departure list with their aerodrome open at all times.

Arrival list

The arrival list works like the departure list, but for arriving traffic. It is opened via the ARR button.

Holding list

The holding list shows all aircraft assigned to airborne holdings.

When instructing an aircraft to hold, first set the holding fix as the cleared waypoint in the AHDG field in the label. Then, click the callsign of the flight and select HOLD. You can now open the holding list. A dropdown menu will appear, containing all the points where aircraft are presently instructed to hold. Select a point and click ok to open the holding list.

When an aircraft is instructed to leave a holding, click the callsign and click XHOLD.

Appendix

List of aerodromes and heliports

ID	ELEV (ft)	TFC	FUEL	RWY	DIM (m)	SFC	LGT
AA	74	IFR-VFR	JET A1	11-29	799 x 30	ASPH	YES
AR	7	IFR-VFR	AV100	01-19	2400 x 45	ASPH	YES
BA	33	VFR	NL	03-21 12-30	800 x 30 1000 x 30	GRASS GRAVEL	NO NO
BD	26	VFR	NL	04-22	940 x 30	GRAVEL	YES
BL	153	IFR-VFR	AV100	03-21	970 x 27	GRAVEL	YES
BR	151	VFR	NL	06-24	795 x 24	GRAVEL	NO
BW	112	IFR-VFR	AV100 JET A1	06-24	1830 x 45	CONCR	YES
CO	45	IFR-VFR	JET A1	18-36	1000 x 30	GRAVEL	YES
DV	6	VFR	NL	17-35	745 x 24	GRAVEL	NO
EG	76	IFR-VFR	AV100 JET A1	04-22	1850 x 45	ASPH	YES
EH	289	VFR	NL	09-27	732 x 35	GRAVEL	NO
FA	77	VFR	NL	FATO TLOF	RAD14.5 RAD5	GRASS ASPH	YES
FL	243	VFR	AV100	04-22	670 x 18	GRASS	NO
FM	53	VFR	NL	09-27	794 x 28	GRAVEL	NO
GH	283	IFR-VFR	AV100 JET A1	05-23	950 x 30	ASPH	YES
GJ	90	IFR-VFR	NL	04-22	960 x 23	GRAVEL	YES
GR	81	IFR-VFR	NL	17-35	1030 x 23	GRAVEL	YES
GS	1260	VFR	NL	01-19	635 x 35	GRAVEL	NO
HE	1592	VFR	NL	01-19	799 x 19	GRAVEL	NO
H	2019	VFR	NL	17-35	820 x 38	GRAVEL	NO
HK	214	IFR-VFR	NL	02-20	1000 x 30	GRAVEL	NO

ID	ELEV (ft)	TFC	FUEL	RWY	DIM (m)	SFC	LGT
HL	135	VFR	AV100	04-22 11-29	1028 x 58 555 x 52	GRASS GRASS	NO NO
HN	24	IFR-VFR	JET A1	18-36	1500 x 30	GRAVEL	YES
HU	48	IFR-VFR	NL	02-20	1603 x 30	GRAVEL	YES
HZ	385	VFR	NL	10-28	740 x 18	GRAVEL	NO
IS	8	VFR	AV100 JET A1	08-26	1400 x 43	GRAVEL	YES
JA ML	39	VFR	NL	06-24	1500 x 30	DIRT	YES
JN	95	IFR-VFR	AV100 JET A1	07-25	845 x 30	ASPH	YES
KA	149	VFR	NL	03-21	653 x 26	GRAVEL	NO
KE	2038	VFR	NL	10-28	704 x 36	GRAVEL	NO
KF	169	IFR-VFR	AV100 JET A1	01-19 10-28	3054 x 60 3065 x 60	ASPH ASPH	YES YES
KK	117	IFR-VFR	AV100 JET A1	11-29	1199 x 30	GRAVEL	YES
KL	71	VFR	NL	08-26	799 x 26	GRAVEL	NO
KP	36	VFR	NL	12-30	799 x 24	GRAVEL	NO
KR	9	IFR-VFR	JET A1	18-36	1887 x 30	GRAVEL	YES
KU	135	VFR	NL	FATO TLOF	RAD 9.5 RAD 8	GRASS CONCR	YES
KV	263	VFR	NL	FATO TLOF	RAD 14.5 RAD 8	GRASS ASPH	YES
MK	260	VFR	NL	11-29	799 x 39	GRASS	NO
MM	89	VFR	NL	04-22	671 x 22	GRAVEL	NO
MQ	91	IFR-VFR	JET A1	16-34	799 x 30	ASPH	YES
MS FO	110	VFR	NL	FATO TLOF	RAD 14.5 RAD 5	GRASS ASPH	YES
MS IS	18	VFR	AV100	07-25	540 x 45	GRASS	NO
ND	2690	VFR	NL	05-23	890 x 45	GRAVEL	NO
NF	6	VFR	NL	08-26	970 x 23	GRAVEL	NO
PT	120	IFR-VFR	JET A1	17-35	799 x 30	ASPH	YES
QQ	51	IFR-VFR	JET A1	17-35	900 x 30	GRAVEL	YES

ID	ELEV (ft)	TFC	FUEL	RWY	DIM (m)	SFC	LGT
RE	83	VFR	NL	08–26	720 x 27	GRAVEL	NO
RF	25	IFR-VFR	JET A1	05–23	983 x 27	GRAVEL	YES
				11–29	822 x 29	GRAVEL	NO
RG	65	VFR	NL	06–24	1077 x 33	GRAVEL	NO
RK	45	IFR-VFR	AV100	01–19	1567 x 45	ASPH	YES
			JET A1	13–31	1230 x 45	ASPH	YES
RL	1031	IFR-VFR	AV100	02–20	799 x 20	GRAVEL	NO
RS	17	VFR	NL	02–20	780 x 18	GRAVEL	NO
SA	2200	VFR	NL	03–21	740 x 20	GRAVEL	NO
				06–24	1180 x 30	GRAVEL	NO
				10–28	880 x 30	GRAVEL	NO
				13–31	660 x 20	GRAVEL	NO
				18–36	640 x 20	GRAVEL	NO
SF[GL]	165	IFR-VFR	AV100 JET A1	09–27	2810 x 60	ASPH	YES
SF[IS]	47	VFR	AV100	05–23	798 x 30	GRAVEL	NO
				14–32	794 x 30	GRAVEL	NO
SK	118	VFR	NL	12–30	1165 x 27	GRAVEL	NO
SL	260	VFR	AV100	15–33	610 x 20	GRAVEL	NO
				16–34	1020 x 25	GRAVEL	NO
SO	30	VFR	NL	FATO TLOF	RAD14.5 RAD7.5	GRASS ASPH	YES
SR[FO]	305	VFR	NL	FATO TLOF	RAD14.5 RAD7.5	GRASS ASPH	NO
SR[IS]	165	VFR	AV100	06–24	700 x 18	GRAVEL	NO
SS[GL]	33	IFR-VFR	JET A1	13–31	799 x 30	ASPH	YES
SS[IS]	600	VFR	NL	15–33	799 x 18	GRAVEL	NO
ST	43	VFR	NL	07–25	1117 x 33	GRAVEL	NO
SV	1920	VFR	NL	06–24	700 x 35	GRAVEL	NO
SY	70	VFR	NL	FATO TLOF	RAD14.5 RAD7.5	GRASS ASPH	YES
TB	68	VFR	NL	FATO TLOF	RAD14.5 RAD7.5	GRASS ASPH	YES
TE	28	VFR	NL	14–32	1084 x 30	GRAVEL	YES

ID	ELEV (ft)	TFC	FUEL	RWY	DIM (m)	SFC	LGT
TL^{ML}	251	IFR-VFR	JP8	08T–26T	3047 x 42	ASPH	YES
TM	634	VFR	NL	09–27	770 x 28	GRAVEL	NO
TN	64	IFR-VFR	NL	02–20	1199 x 30	GRAVEL	YES
UK	414	IFR-VFR	JET A1	05–23	799 x 30	ASPH	YES
UQ	289	IFR-VFR	JET A1	15–33	900 x 30	GRAVEL	YES
VG	280	IFR-VFR	AV100 JET A1	12–30	1799 x 30	ASPH	YES
VI	81	VFR	NL	07–25	712 x 25	GRAVEL	NO
VM	326	IFR-VFR	JET A1	03–21 12–30	1160 x 45 1199 x 45	GRAVEL GRAVEL	YES YES
VO	10	IFR-VFR	NL	05–23	885 x 30	GRAVEL	YES

List of navigational aids

ID	NAME	VAR	FRQ	REL
AA	AASIAAT	L	336 KHZ	ENR
AKI	AKUREYRI	VOR/DME	113.6 MHZ	ENR
AR	AKUREYRI	NDB	334 KHZ	AR
BL	BLONDUOS	NDB/MKR	351 KHZ	ENR
DA	KULUSUK	L	377 KHZ	ENR
EL	ELLIDAVATN	NDB	335 KHZ	ENR
ES	EGILSSTADIR	NDB	365 KHZ	ENR
GA	GARDUR	NDB	377 KHZ	ENR
GF	REYKJAVIK	L	319 KHZ	RK
GH	GODTHÅB	L	314 KHZ	ENR
GJ	GJOGUR	NDB	340 KHZ	ENR
GR	GRIMSEY	NDB	308 KHZ	GR
HA	HOFSA	NDB	348 KHZ	ENR
HB	HOLSTEINSBORG	NDB	328 KHZ	ENR
HE	HEGRANES	NDB	362 KHZ	ENR
HJ	AKUREYRI	L	319 KHZ	AR
HK	HOLMAVIK	NDB	366 KHZ	ENR
HL	HELGAFELL	DME L	110.7 MHZ 345 KHZ	ENR VM
HN	HORNAFJORDUR	NDB	330 KHZ	ENR
HS	HUSAVIK	L	329 KHZ	HJ
IES	EGILSSTADIR	DME	109.3 MHZ	ENR
ING	INGO	VOR/DME	112.4 MHZ	ENR
IRE	REYKJAVIK	DME	109.1 MHZ	ENR
IS	ISAFJORDUR	NDB	385 KHZ	IS
JAN	JANMAYEN	NDB	362 KHZ	JA[ML]
JV	ILLUISSAT	NDB	367 KHZ	ENR
KF	KEFLAVIK	NDB	392 KHZ	KF
KFV	KEFLAVIK	VORTAC	112.8 MHZ	ENR

ID	NAME	VAR	FRQ	REL
KN	AKUREYRI	L	364 KHZ	AR
KU	KOOK ISLAND	NDB	298 KHZ	ENR
LA	LANGHOLT	NDB	344 KHZ	ENR
MA	MANITSOQ	L	391 KHZ	ENR
MN	EGILSSTADIR	L	382 KHZ	EG
MY	MYGGENES	NDB	337 KHZ	ENR
NB	BOTN	NDB	387 KHZ	ENR
OE	AKUREYRI	L	415 KHZ	AR
OG	OGUR	DME L	110.1 MHZ 400 KHZ	ENR IS
QQ	QAANAAQ	L	336 KHZ	ENR
RE	REYKJANESSKOLI	NDB	316 KHZ	ENR
RF	RIF	NDB/MKR	330 KHZ	ENR
RH	REYKHOLT	NDB	325 KHZ	ENR
RK	REYKJAVIK	NDB	355 KHZ	ENR
SB	BILDUDALUR	NDB/MKR	310 KHZ	BD/TE
SE	SELFOSS	NDB	397 KHZ	ENR
SF	SØNDRE STRØMFJORD	NDB	382 KHZ	ENR
TN	THORSHOFN	NDB	373 KHZ	ENR
TO	AKUREYRI	L	324 KHZ	AR
UP	UPERNAVIK	NDB	399 KHZ	ENR
VA	VAD	NDB	335 KHZ	ENR
VG	VAGAR	L	348 KHZ	VG
VM	VESTMANNAEYJAR	NDB	375 KHZ	ENR
VP	VOPNAFJORDUR	L	393 KHZ	VO