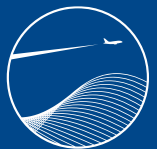


STORADIO.AERO

STORADIO.AERO

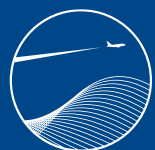
HF RADIO TRAINING MODULE



STORADIO.AERO

STORADIO.AERO HF SERVICE

<https://www.youtube.com/watch?v=u584i7C4T9c>



STORADIO.AERO

STORADIO.AERO – Who are we and what do we do?

STORADIO has a long heritage. It all started in the 1960:s as a part of the Swedish telecom company, Televerket. SAS and Transair were amongst the first customers. As years passed on, the company changed shape and owners. STORADIO is now owned by the Infrastructure Technology Group, Sdiptech, and STORADIO has 300 HF customers and a variety of OCC customers.

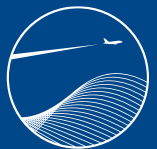
STORADIO OCC and HF services covers a large range of knowhow and professionalism that allows us to bring our comprehensive knowledge of management and service to deliver cost effective and tailormade solutions to our customers.

STORADIO is one of a few independent OCC suppliers who can take care of an airlines needs in OCC services such as, flight planning, flight watch, flight following, runway analysis, crew dispatch and crew planning, hotel and transport for our signed customers. This means that the airline does not have to spend a large sum of money in setting up an OCC office by themselves.

STORADIO can provide system support for OCC, flight planning and crew planning via our partner NAVBLUE.

STORADIO HF Services provides airlines during flight, or on ground, with radio checks, phone patches to dispatch, MCC, medical assistance or even personal phone calls.

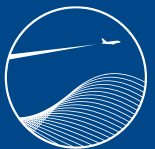
Our HF services also supplies weather information, departure/arrival/position reports, redispach/release and ETOPS messages among other things.



HF RADIO – HOW DOES IT WORK AND WHO CAN USE IT?

The key to successful and reliable HF Radio communications is not only reliant on geomagnetic conditions and equipment. Pilot skill and experience is also very important, when adjusting to the conditions that can quickly change during flight.

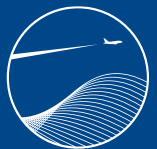
Always consult our HF Propagation chart (www.storadio.aero), before contacting STO Radio. Locate the graph on the Propagation Forecast that best corresponds to your position and choose the nearest STO Radio frequency. Be persistent when trying to establish contact on HF-radio. By persistently trying alternative frequencies and repeating unsuccessful calls after a few minutes you can significantly extend the approximate coverage area available.



HF RADIO – BEFORE A FLIGHT

Always check the propagation chart for the most suitable frequency. If possible, make a HF test from the ground.

Please note, position and environment can obstruct the quality of the test, so if no luck try again when airborne. HF radio should always be in USB-mode (*Upper Side Band*) and not in AM mode.



HF RADIO – DURING A FLIGHT – HOW TO CALL STORADIO

Always check the propagation chart for the most suitable frequency, via our website or via our app.

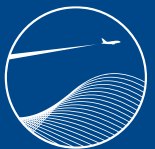
HF radio should always be in USB-mode (*Upper Side Band*) and not in AM mode. The radio transmission must be as clear and concise as possible to avoid any misunderstanding. Use short sentences, and where necessary repeat your message to ensure that it is received and understood. When contacting STORADIO, always first listen in on the frequency, to make sure other traffic is not in progress, then provide the following information at least twice:

1. Flight number / Registration
2. Approximate geographic location
3. The HF frequency used to call.

This will enable the radio operator to select a suitable transmitter to expedite good communication. Please allow 30 seconds for antenna positioning. Our operators at STORADIO listen for voice calls on six monitored kHz frequencies: 3494/23210, 5541, 8930, 11345, 13342, and 17916.

The calls are audible on several directional loudspeakers with at least three loudspeakers for each frequency. If the radio check is successful on one frequency, there is no need to test another frequency.

After check, please maintain SELCAL watch on appropriate frequency to ensure communication from STORADIO/airline ops.



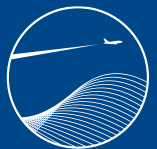
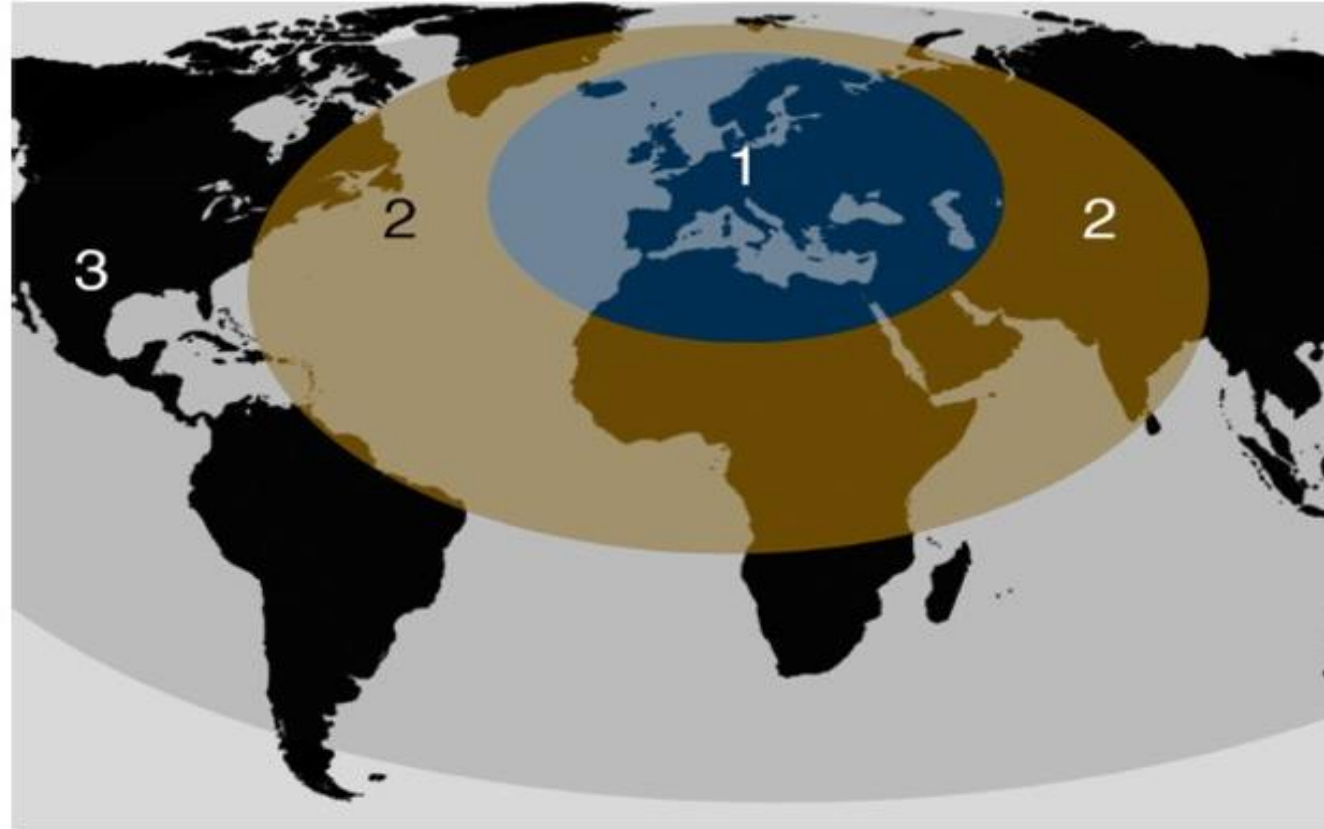
STORADIO HF Coverage

Note:

During **night time** the frequencies 3494 / 5541 / 8930 mainly cover areas 1, 2 and 3.

During **day time** the pilot must use the higher frequencies: 8930 / 11345 / 13342 / 17916 / 23210 in order to cover the same distance.

2/18/19



STORADIO.AERO

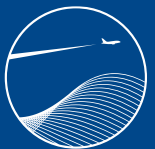
GENERAL RULES

The higher the sun, the higher the frequency

The lower the sun, the lower the frequency

The longer the distance, the higher the frequency

The shorter the distance, the lower the frequency



Using the most appropriate HF radio frequency is crucial when establishing contact with **STORADIO.AERO**

The HF Propagation Forecast will help you choose the appropriate HF frequency given:

1. The time of day/night
2. The atmospheric conditions and geographic location, by showing the most suitable HF frequency for communication with **STORADIO.AERO**.



STORADIO AERO AB
 Box 1242
 SE-131 28 Nacka Strand
 Sweden
 Tel: +46-8-601 79 10
 Fax: +46-8-601 79 49
 AFTN: ESKRYFYX
 TYPE-B: ST00DYF

STORADIO Services:

- Phone Patches
- Operational Message Relay
- Met Information
- SELCAL
- Medical Advice
- Personal Phone Patches

Propagation Forecast Charts:

Using the most appropriate HF radio frequency is crucial when establishing contact with **STORADIO**. The HF Propagation Forecast will help you choose the appropriate HF frequency given: the time of day/night, the atmospheric conditions and geographic location, by showing the most suitable HF frequency for communication with us. Choose the chart diagram that is closest to your geographical location. General rules: The higher the sun, the higher the frequency. The lower the sun, the lower the frequency. The longer the distance, the higher the frequency. The shorter the distance, the lower the frequency.

Note: Vertical axis = Mhz. Horizontal axis = Time (UTC).

Calling STORADIO:

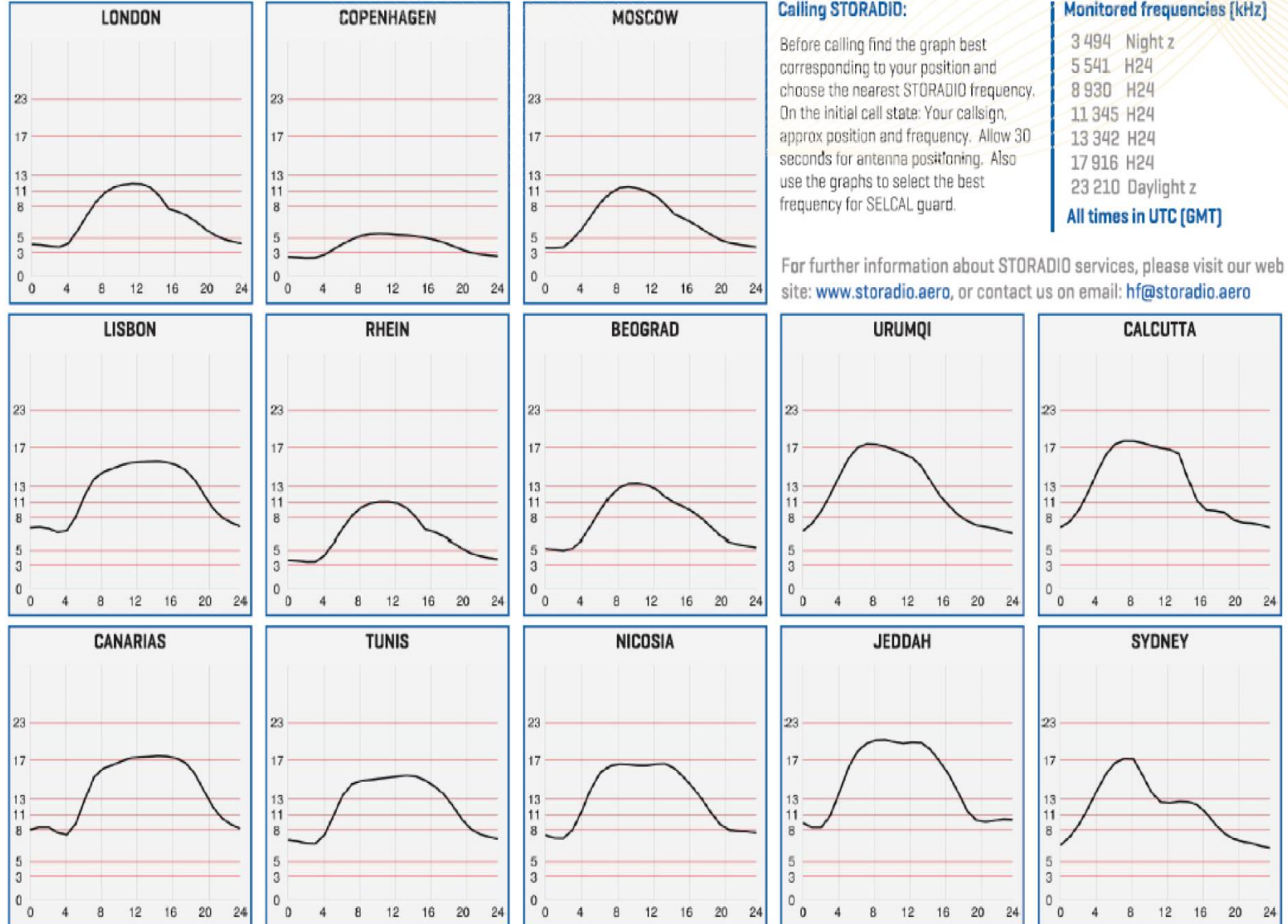
Before calling find the graph best corresponding to your position and choose the nearest **STORADIO** frequency. On the initial call state: Your callsign, approx position and frequency. Allow 30 seconds for antenna positioning. Also use the graphs to select the best frequency for **SELCAL** guard.

Monitored frequencies [kHz]

- 3 494 Night z
- 5 541 H24
- 8 930 H24
- 11 345 H24
- 13 342 H24
- 17 916 H24
- 23 210 Daylight z

All times in UTC (GMT)

For further information about **STORADIO** services, please visit our web site: www.storadio.aero, or contact us on email: hf@storadio.aero



Communicating with STORADIO.AERO

The key to successful and reliable HF Radio communications is not only reliant on geomagnetic conditions and equipment.

Pilot skill and experience is also very important, when adjusting to the conditions that can quickly change during flight.

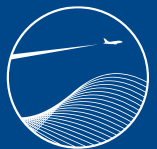
Always consult our HF Propagation chart, via our website or via our app, before contacting STORADIO.

Please allow 30 seconds for antenna positioning, and then repeat. If still no response, go to neighbouring frequencies!

Our operators at STORADIO listen for voice calls on six monitored frequencies:

3494 / 5541 / 8930 / 11345 / 13342 / 17916 and 23210 kHz

The calls are audible on several directional loudspeakers with multiple loudspeakers for each frequency.



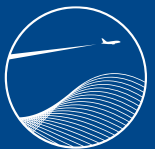
When Communicating with STORADIO

When contacting STORADIO, always provide the following information:

- 1. Flight number / Registration*
- 2. Approximate geographic location*
- 3. The HF frequency used to call*

This will help the radio operator to select suitable transmitters & receivers and expedite good communications. So:

*"Stockholm radio, Stockholm radio
Clipper Three-One-Three, calling Stockholm radio
Overhead Lisbon
On frequency one one three four five"*



SELCAL PART 1

The SELCAL function of the HF-radio is very important.

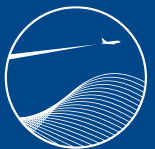
We recommend that the pilot makes an initial SELCAL check with STORADIO when departing and remain on SELCAL Guard with STORADIO.

Then it is not necessary to constantly listen to the noisy HF-frequency and the volume can be turned down, but not off.

The pilot will then be alerted by an optical or acoustic signal when STORADIO has traffic for the pilot.

The chosen frequency may sometimes only be good for a limited period during the flight as the contact frequency varies depending on the time of day and geographic location.

We recommend that you periodically call STORADIO during the flight to check if it is necessary to choose a new frequency.



SELCAL PART 2

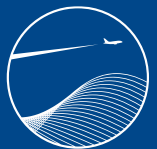
When STORADIO responds to a SELCAL check, our normal procedure is to send a message to the airlines Operations/Dispatch advising them that the flight has *Logged On* to STORADIO and are contactable directly via SELCAL.

Airlines that adopt this standard operating procedure rarely experience difficulties in contacting their flights through STORADIO.AERO.

If SELCAL watch is not maintained on our frequencies, the crew might not be aware of STORADIO's efforts to contact them.

Also neglecting to adjust the frequency selection for SELCAL watch during flight will result in degraded or unavailable Ground-to-Air HF contact.

This is especially important for long haul flights. Air-to-Ground calls under normal solar/geomagnetic conditions are usually the easiest to accomplish.



HOW TO GET IN TOUCH VIA THE WEBSITE:

<https://storadio.aero/>

DOWN LOAD OUR STORADIO.AERO APP TO KEEP UP WITH THE LATEST INFO:

<https://apps.apple.com/se/app/storadio/id1454770530>

FOLLOW US ON LINKEDIN:

<https://www.linkedin.com/company/11872676>

EMAIL US:

info@storadio.aero



THANKS AND ENJOY YOUR HF RADIO SERVICE

