A guide to charts

How to get around with charts?

If you want to fly on Vatsim, charts are a must. But sometimes the amount of different types of charts can be quite overwhelming. This document will help you get started with reading them. Aeronautical charts are specialised maps used by pilots and air traffic controllers for navigation and flight planning, showing essential details such as airport layouts, topography, airspace classifications and navigation aids. They come in different types, such as ground charts, approach charts, arrival charts and many more, each designed to meet specific needs. These charts contain information on airports, terrain elevations and obstacles to help pilots avoid hazards and maintain safe flight paths. They also provide critical data on frequencies and restricted airspace.

1.   Where do I get charts?

Since charts aren't always easy to find, here's a small collection of popular chart providers:

1. A.   Chartfox

Chartfox is a free chart database that contains charts created by different Vatsim divisions (e.g. vACC Switzerland). To use the site, you need to have a Vatsim account.

Pros	Cons
-Free to use	-might not contain all airports
-big database	-No enroute charts

1. B.   Navigraph

Navigraph is a paid service that provides you with Jeppesen charts (one of the largest chart providers in real aviation) and is probably the best-known chart provider in flight simulation. The charts include IFR, VFR and enroute charts. A nice touch is that the Jeppesen charts are numbered, making them easy to find.

Pros	Cons
-complete airport database	-payware
-enroute, VFR and IFR charts	-only Jeppesen charts

1. C.   Vatsim subdivisions/internet

You can find many different charts on the websites of subdivisions (e.g. vACC Switzerland) or on the Internet in general.

| Pros	Cons
-broad variety of charts	-not sorted
-free to use	-might not be up to date

2. Types of charts

In this section we will learn about the different types of charts that exist. IFR charts and VFR charts will be explained in two parts as they are structured differently.

2. A. IFR

### 2.A.1. General/Reference charts

First, there are the General/Reference charts. These charts help pilots to gather information about their origin or destination airport. The charts contain additional information such as airport operating hours, procedures and airspace maps.
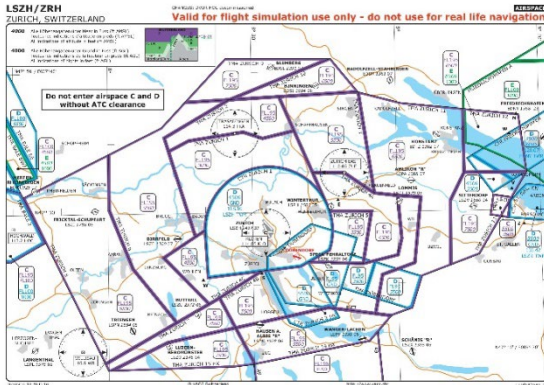
Airspace chart of LSZH (vACC)

2.A.2. Ground charts

Ground charts tell pilots where to taxi and show the names of the taxiways. When preparing your aircraft, you should look at these charts and anticipate the taxiing instructions you may receive. These charts also show closed taxiways, frequencies of important ATC stations and general information that may affect the operation. For Jeppesen charts, we recommend that you look at the "PARKING STANDS" charts, which give you a more accurate picture of the parking areas.
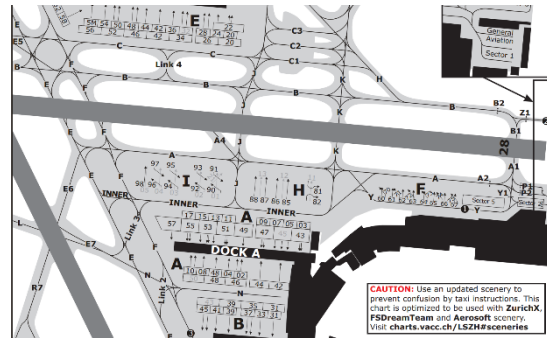
2.A.3. Departure charts

This type of chart is often referred to as a SID chart. On the chart you will find all the necessary information for your departure, such as, initial climb altitude, speed and altitude restrictions, the sequence of waypoints and/or navaids, and the surrounding terrain. Further you will find minimum climb gradients and the frequencies of the corresponding ATC facilities.
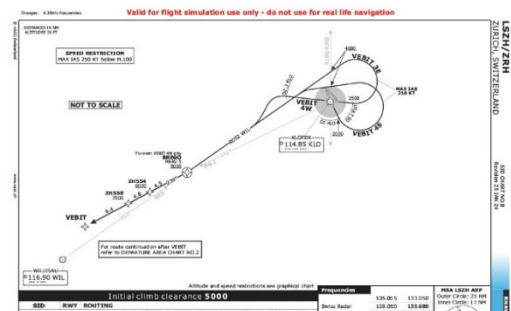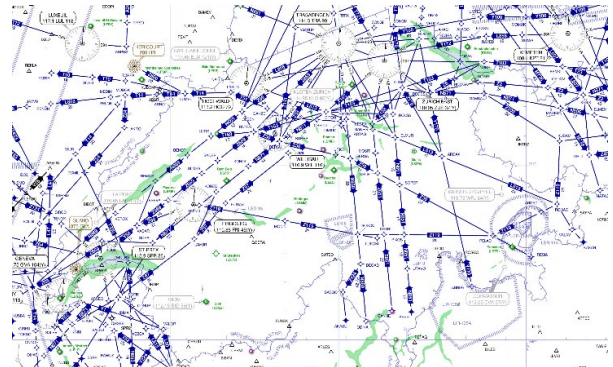

Chart for the VEBIT 3E/4S/4W departures

2.A.4. Enroute charts High/Low

Enroute charts are useful to obtain information about your surroundings when leaving a SID or before entering a STAR/APPROACH. The enroute chart provides information on airways, navaids and airspaces. You can find enroute charts on [Skyvector](#) or in the Navigraph application.

*Enroute IFR-high Switzerland*

2.A.5. Arrival charts

Arrival charts are used to show pilots the terrain on arrival, restrictions and constraints, and the sequence of waypoints on arrival. They also show the holdings and frequencies that will be used when approaching the airport.
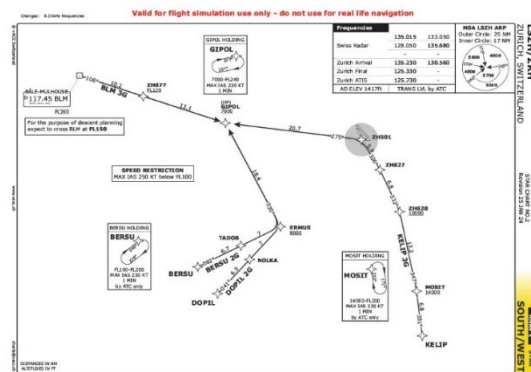
Arrival chart for the RNAV arrivals that lead to GIPOL

2.A.6. Approach charts

Finally, we have the Approach Chart. This chart shows us how to fly our type of approach correctly. We can find out the procedure minimum, final approach course (FAC), and navaid frequency where applicable. We can also find out what frequencies we will be sent on during and after our approach. Sometimes these charts can be confusing as there are many different types of approaches
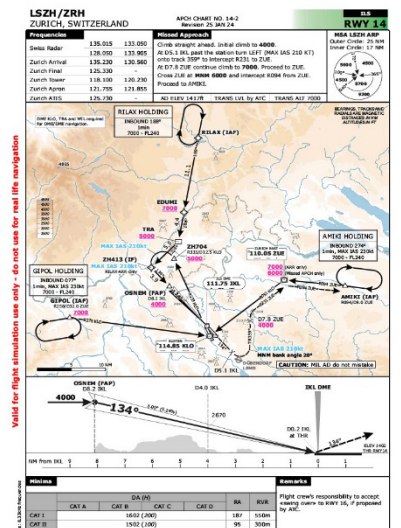

APPROACH CHART for ILS 14 in Zurich

2. B.   VFR

The charts mentioned bellow can be found on various websites. Most of the charts used in Switzerland can be found here, or on skybriefing (paid subscription required) and sometimes also on the homepage of the airfield.

2.B.1.   VAC-Chart

VACs, or visual approach charts, are used by VFR pilots to safely navigate in the vicinity of an airfield. They contain important information about the arrival and departure routings, the required altitudes as well as some special information about the aerodrome and its surroundings, for example local noise abatement restrictions and landmarks.
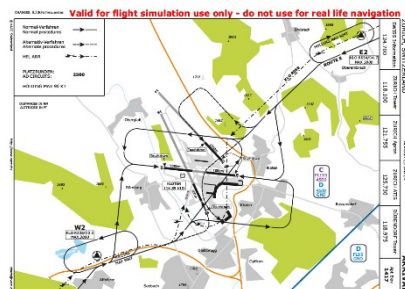
Departure VAC-Chart of LSZH

2.B.2.   Area Chart

The Area Charts are like the VACs but display a bigger overview of the airport's surroundings. However, in exchange there is less information about the airport layout, for example there is no information regarding the traffic pattern, certain frequencies and details about the airport layout can be missing.
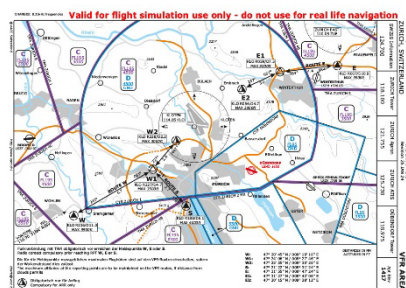
2.B.3.   AD INFO

The AD INFO, short for Aerodrome information, gives the pilot valuable information about the ground layout and available services at the airport. On large airports, there can be more than ten AD INFO charts, Zurich for example has 12. Usually, AD INFO 1 contains the information about the ground layout and runways (At large airports also AD INFO 2). The other pages usually provide information about services and restrictions at the airport, such as handling, available maintenance or fuel and contact information.

2.B.4.   ICAO Aeronautical Chart 1:500'000 (VFR)

The ICAO Chart 1:500'000 is the enroute chart used by VFR pilots for navigation in Swiss airspace. The chart includes extensive information, including airpsaces, airfields, settlements, navigation landmarks, danger- and restricted areas and obstacle altitude and elevations. The ICAO chart is available for free on the internet, found here.

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