

JEPP'S BRIEFING



BY JAMES E. TERPSTRA

This series of articles is designed for instrument pilots who want to get the maximum value from their Jeppesen charts. In last month's article, we covered those seemingly "millions" of chart symbols. This month we'll take a tour of enroute charts.

The portion of the Jeppesen Enroute Chart most often overlooked is the front panel. It contains some helpful information, plus other data that can be critical to flight.

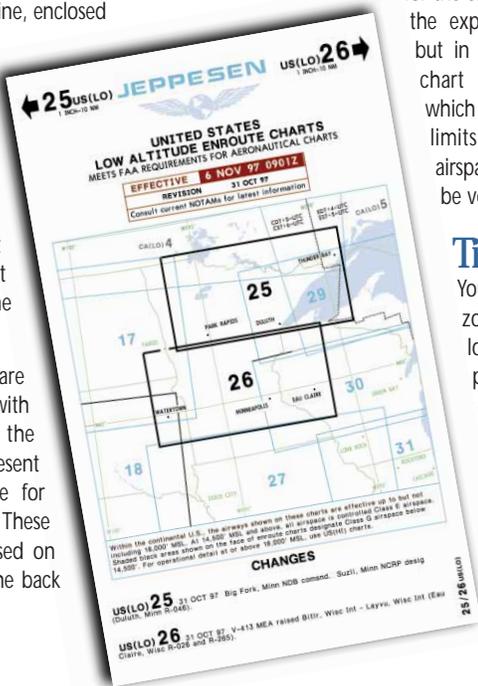
At the top of each chart are two numbers that show the title. Each number has an arrow directing the pilot to turn to the desired geographical area. Immediately below each chart number is the scale of the charts.

As mentioned previously, most nations have agreed to the ICAO 28-day cycle (or every other 28-day cycle for the US and Canada). As shown below in the illustrated enroute chart panel, the effective date of this chart is 6 November 1997. This date represents "day 1" of the cycle. More specifically, the chart is effective at 0901 Zulu.

Within the Neatline

The enroute chart outline, enclosed within the solid line, includes a wealth of information when examined closely. Note the solid lines in the middle of the illustrated enroute chart show that the chart "in your hand" is the US(LO)25 and 26.

A number of cities are included on the chart with a dot located near the city. These dots represent city locations and are for orientation purposes. These also are the names used on the index panels on the back side of the chart.



The Chart Clinic – Second in a Series

On most enroute charts, there are one or more shaded areas on the front panel that represent areas covered by area charts. With the redraw of the low altitude enroute charts in 1997 using better scales, many of the area charts are no longer needed. The location of each area chart is identified by the name of the area chart plus the small city dot.

One of the most useful pieces of information on each of the charts is the information included below the front map layout under the title "CHANGES." Each time a change is made to an enroute chart, the chart is revised, and the change that caused the revision is listed on the front panel of the chart. As an example, in the illustration shown below, the Big Fork, Minnesota NDB was commissioned. Also the Suzli, Minn NCRP (non-compulsory reporting point) has been designated on US(LO) chart 25. To help locate the effected change, the radial from the reference facility (in this case the 046° radial from the Duluth, Minn VOR) is included.

Chart Validity

Pilots trained in the United States know that low altitude airways are good up to, but not including 14,000 feet. They also know that all airspace at 14,500 feet and above is controlled – but what if you are going to fly in South America, in Africa, over Australia? Well, you get the idea.

That is why there is a paragraph just below the chart layout diagram. In that paragraph, there is an explanation of the airspace and airway limits for the chart. In the United States, the explanation is quite simple, but in many areas, the enroute chart covers many countries which all seem to have different limits to their airways and airspace. So this paragraph can be very important.

Time Zones

You will note that the time zone boundaries are not located on the internal portion of each enroute chart, but are found on the front panel. The boundary between time zones is represented by a series of letter "T's." With the change to daylight savings time in the spring and back

every fall, charts include the conversion to Coordinated Universal Time (UTC) for both daylight savings time and standard time within each time zone. This conversion factor can be found toward the top of the Index of Charts on the front panel of each enroute chart.

City Location Guide

Below the list of changes is a City Location Guide to help you find cities much easier. There is a miniature chart layout with the identifier of each panel on the face of the enroute chart as well as a list of all the cities on the chart which have an IFR airport. Some of the cities have more than one airport. As an example, Minneapolis, which has five IFR airports, can be found on panel 2D.

CITY LOCATION GUIDE				
This list contains cities with IFR airports only. A city is listed only once.				
US(LO)25		US(LO)26		
Panel 4	Panel 5	Panel 6	Panel 3	Panel 1
4A 4B 5A 5B 6A 6B	4C 4D 5C 5D 6C 6D	1A 1B 2A 2B 3A 3B	1C 1D 2C 2D 3C 3D	
Alaska, MINN	2A	Grand Rapids, MINN	3C	1C
Alexandria, MINN	2A	Grand Rapids, MINN	3C	3C
Amery, WISC	3C	Green Bay, WISC	3A	3C
Andover, MINN	1B	Green Bay, WISC	3A	2D
Andover, WISC	3B, 3C	Hawley, MINN	4C	2D
Arkansas, ONT	5B	Hawley, MINN	3B	2A
Beauregard, MINN	4B	Hudson, MINN	3C	2C
Beauregard, WISC	4B	International Falls, MINN	3C	2C
Benson, MINN	4D	International Falls, MINN	3A	2A
Bigfork, MINN	3C	Ironwood, WISC	6D	4A
Brainerd, MINN	5B	Ironwood, WISC	6D	4A
Brainerd, WISC	5B	Little Falls, MINN	2D	3A
Buffalo, MINN	3B	Little Falls, MINN	2D	3A
Cambridge, MINN	2B	Madison, MINN	3B	3A
Cambridge, WISC	2B	Madison, MINN	3B	3A
Chaska, MINN	3D	Maple Lake, MINN	3D	2B
Chaska, WISC	3D	Maple Lake, MINN	3D	2B
Chippewa Falls, MINN	3C	Marshall, MINN	1D	2B
Chippewa Falls, WISC	3C	Marshall, MINN	1D	2B
Chisholm, MINN	3D	Menomonie, WISC	1D	2B
Chisholm, WISC	3D	Menomonie, WISC	1D	2B
Clarks Summit, MINN	4C	Menomonie, WISC	1D	2B
Clarks Summit, WISC	4C	Menomonie, WISC	1D	2B
Detroit Lakes, MINN	4C	Midway, MINN	3A	4A
Detroit Lakes, WISC	4C	Midway, MINN	3A	4A
East Troy, WISC	3D	Morris, MINN	1B	5A
East Troy, WISC	3D	Morris, MINN	1B	5A
Evansville, MINN	3D	Morris, MINN	1B	5A
Evansville, WISC	3D	Morris, MINN	1B	5A
Faribault, MINN	3D	New Richmond, WISC	3C	4B
Faribault, WISC	3D	New Richmond, WISC	3C	4B
Fergus Falls, MINN	1B	Olivia, MINN	2C	4B
Fergus Falls, WISC	1B	Olivia, MINN	2C	4B
Forestburg, MINN	4C	Ortonville, WISC	3A	4B
Forestburg, WISC	4C	Ortonville, WISC	3A	4B
Forestburg, WISC	4C	Ortonville, WISC	3A	4B
Forestburg, WISC	4C	Ortonville, WISC	3A	4B

Cruising Altitudes

A reminder showing the appropriate cruising altitudes for VFR and IFR is included in schematic form at the bottom of the front panel. FAR 91.179 says that the east-west hemispheric rules apply only for operations in non-controlled airspace. Therefore, the odd or even thousand-foot altitudes do not apply within controlled airspace since ATC assigns the appropriate altitude for IFR operations. Remember, that degrees 360 through 179, and 180 through 359, apply to the magnetic course and not to the magnetic heading. This is true in the United States but varies occasionally for international operations.

Zig-dex

It sounds like a fancy marketing term (it is) — but it really works! The marketing term for the zigzag index located on the back panel of each low altitude enroute chart is “Zig-dex”. To use the Zig-dex, simply place the thumb of either the right or left hand on the name at the top of the back panel and slide the thumb to the inside of the chart. This will open the chart to the desired area.



To further coordinate the Zig-dex names, refer to the geographical coverage in the first illustration in this article. The names that are shown are the same names that appear at the top of each Zig-dex panel. For example, on the front panel of US(LO)26, Watertown, Minneapolis, and Eau Claire are shown with dots. These are the same names at the top of the back panel.

Also, notice the panel numbers next to the city names at the top of the Zig-dex. These are used as reference numbers for the City Location Guide. For example, use your left thumb and press the panel labeled “2 Minneapolis” and slide your thumb inside and now you should be able to see Minneapolis in the lower right corner which is panel 2D. (If you actually have the US(LO)25/26, try it. It really works!!)

Airspace Restricted Areas

Normally, all of the information concerning special use airspace (SUA) areas are found on the face of the enroute chart near the respective area. In cases where chart congestion limits the amount of room, special use airspace and their limits are listed on the bottom of the front panel just above the cruising altitude symbol, or at the top of the back panel. Additionally, all part-time terminal airspace is included on the chart panel. For example, the Class E terminal airspace around Bemidji-Beltrami County Airport is effective from 0445 to 2345 local times on Mondays through Saturdays, and 0800

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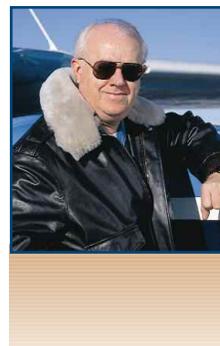
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to 2345 on Sundays. During the other times, it is Class G airspace.

This article concludes the discussion of the enroute text pages and the front and back panel information on the enroute charts. In the next article, the inside of the chart will be explored.



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