



## CHART DESIGN ENHANCEMENTS FOR SIDS, STARS, DEPARTURES, AND ARRIVALS

### PURPOSE

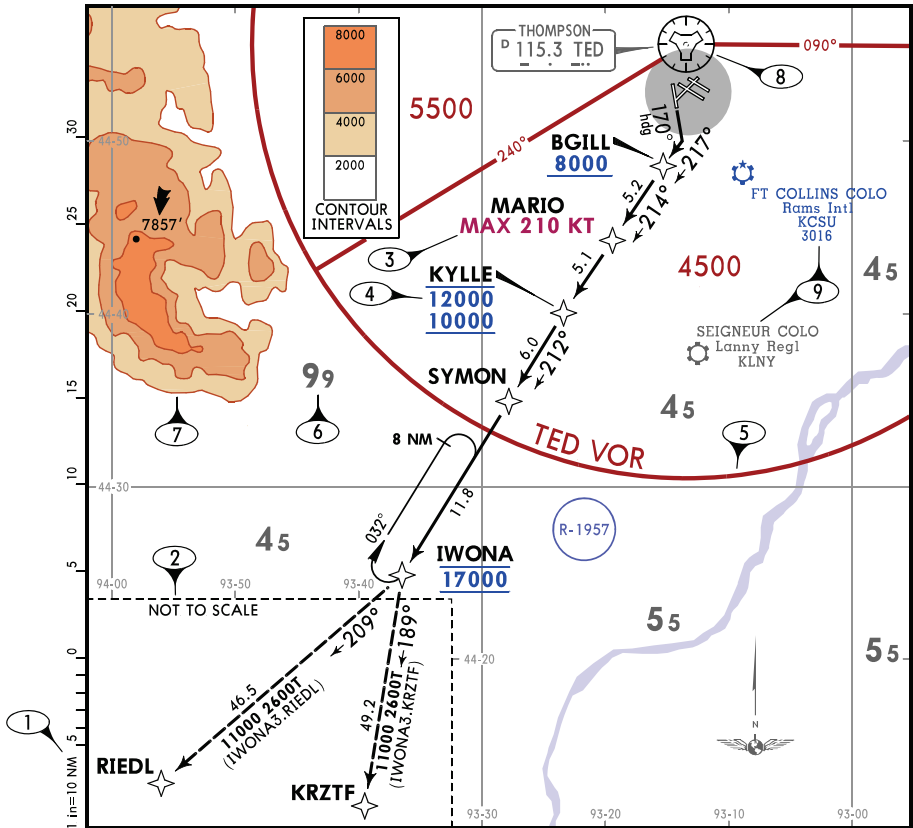
The purpose of this Bulletin is to announce significant enhancements to the graphical depiction of Jeppesen SID, STAR, Departure, and Arrival charts. In the past, Jeppesen has used a Not-To-Scale depiction for the graphical section of SID, STAR, Departure, and Arrival charts. Moving forward, the graphic portion of Jeppesen SID, STAR, Departure, and Arrival charts will now be shown either completely or partially To-Scale. In addition, several other major enhancements will be applied which are geared toward continually improving the overall usability of Jeppesen charts. These enhancements are a direct result of feedback received from you, the customer, which Jeppesen greatly appreciates.

### PHILOSOPHY

To enhance terrain/situational awareness during low level operations, the area in and around the departure/arrival airport will be depicted To-Scale. At times a complete To-Scale depiction will not be practical, in which case Enroute transition segments will be shown Not-to-Scale and will be clearly indicated as such. By using a To-Scale depiction around the departure/arrival airport, Jeppesen SID, STAR, Departure, and Arrival charts will provide enhanced terrain, airspace, and relative distance information.

### ENHANCEMENTS

The sample procedure graphic below depicts the major enhancements being applied to Jeppesen SID, STAR, Departure, and Arrival procedure charts. A brief description of each major improvement is shown after the graphic.





## CHART DESIGN ENHANCEMENTS FOR SIDS, STARS, DEPARTURES, AND ARRIVALS

1. Charting scales are applied, similar to what are used for approach charts, which allow a To-Scale depiction of the immediate area around the departure/arrival airport. The scale used is indicated along the lower left side of the procedure graphic. The normal orientation will be north towards the top of the chart, but other orientations will be used when chart readability can be enhanced. All procedure text will be oriented the same as the procedure graphic.
2. Normally all departure/arrival tracks will be shown within the To-Scale portion of the procedure graphic. At times, transitions to and from the enroute structure will be shown within Not-To-Scale areas. These Not-To-Scale areas will be indicated by a dashed line and clearly marked. It will be fairly common for transition tracks to crossover between To-Scale and Not-To-Scale areas and vice versa.
3. All speed restrictions will now be shown using bold text and a magenta color so as to be easily located. General speed restrictions that apply to the entire procedure will continue to be shown directly below the procedure identifier. Speed restrictions that apply to a specific navaid, intersection/waypoint, or track segment, will be placed next to, or tied to the element as appropriate.
4. The depiction of altitude restrictions has been enhanced two ways. All altitude restrictions will be shown in bold text and will be blue in color to make them easy to locate. In addition, a "Line Above" and "Line Below" depiction will be used to indicate the type of restriction using the ICAO recommendation for the depiction of altitude restrictions.
5. An MSA will be shown in graphical form within the Plan View of the chart indicating the outer limits, all associated sectors, and applicable sector altitudes. The radius of the MSA will be indicated when other than the standard 25 NM. The MSA information will be brown in color for easy identification.
6. Grid MORAs will be charted for the To-Scale areas of the procedure graphic. Values will be shown using a grey color.
7. Generalized terrain contours will be depicted within the To-Scale sections of the procedure graphic to portray areas of higher or rising terrain.
8. The navaid symbols used will be those that are consistent with Jeppesen enroute charts.
9. Airports that are served by the procedure, known as "Also Serves" airports, are depicted using a blue color to distinguish them from other secondary airports. All secondary airports, those not served by the procedure, are depicted using a grey color.

### IMPLEMENTATION PLAN

Jeppesen SID, STAR, Departure, and Arrival charts will be converted using the enhanced charting specifications beginning in December 2016.

Conversion will take place airport-by-airport with all procedures for a given airport released at the same time.

Pilot Training Material is available at [www.jeppesen.com/chart-enhancements](http://www.jeppesen.com/chart-enhancements). This website also provides an Operational Risk Assessment (ORA) for your information.

Inquiries related to this Bulletin may be submitted through established customer support channels or your account representative.