## **Los Angeles Terminal Navigation Chart**

## **Meeting 12-02**

Ron Haag, FAA/AJV-321, introduced a proposed new charting product, the Los Angeles Terminal Navigation Chart. This product represents a hybrid of the current Helicopter Route Chart, Sectional Chart & Terminal Area Chart. Ron stated that the chart was conceived after the Hudson River mid-air collision between a Piper PA-32R and a Eurocopter AS350 on August 8, 2009. One of the items discussed with the NTSB was simplification of complicated Class B airspace. Although AeroNav Products cannot revise regulatory airspace, it is thought that perhaps this new product could simplify and better display that airspace for both copter and fixed-wing users.

The Los Angeles area has one of the busiest and most complex airspace areas in the country, including, an irregularly-configured Class B area, 4 Class C areas and 14 Class D areas. The LA area also supports multiple helicopter routes and VFR Flyways that further complicate the airspace.

Ron <u>provided a presentation</u> of the current chart depictions of the LA airspace, showing examples of Helicopter, Sectional, Terminal Area and Flyway Charts. He then compared them to the proposed Los Angeles Navigation Chart.

A number of features and chart enhancements were presented:

- 1. Greater use of colors and screening to aid in the depiction of various chart features:
  - a. Class B, C, D floors are screened
  - b. Airspace borders are masked, making intersecting linework more easily distinguished.
  - c. Terrain relief colors are more distinguishable
  - d. VFR Flyways are depicted in orange
  - e. Helicopter routes are depicted in green
- 2. The chart combines Helicopter, Sectional, Terminal and Flyway Chart attributes. (Helicopter routes currently appear only on Helicopter Route Charts.).
- 3. The proposed six-month update interval of this product will provide helicopter pilots with a regularly updated chart with more current information. (Helicopter charts are currently only updated upon request and often several years can go by before a new helicopter chart is released.)
- 4. The chart scale has been increased, providing more visually distinguishable chart attributes.
- 5. The entire LA Class B airspace appears on one side of the chart. (On the current helicopter chart, the airspace is split between both sides of the chart.)

The prototype chart was developed in cooperation with the LA VFR Airspace Task Force and was well received by that group when the final was presented in January of 2012. The chart was also been displayed at EAA AirVenture and the ATCA Conference during CY 2012 and received positive feedback from potential users at both venues.

Lev Prichard, APA-American Airlines, commented that he approved in general of the chart, but was concerned about its readability at night and under redlight conditions. Rick Dunham, FAA/AFS-420, inquired as to the electronic display (Electronic Flight Bag [EFB]) aspect, and whether the colors that work well on paper will work as well on EFBs. Ron replied that the chart was still under development and that one of the items pending in the process within the FAA is a human factors review. This review will include assessment of color usage on the chart and will address readability at night and under redlight conditions.

George Sempeles, FAA/AOV-310, commented on the NextGen aspects that may come into play in the future, where a chart like the LA Terminal Navigation chart displayed on an EFB, may be viewable in discreet layers.

Lev commented that safety-wise, he believes that the inclusion of helicopter information on the new chart is very beneficial and would be an aid to situational awareness for fixed-wing pilots in areas where heavy helicopter activity is to be expected.

John Gale, NBAA, raised concern with regard to a helicopter pilot's ability to read the chart clearly, given the additional "clutter" in comparison to today's Helicopter Route Charts and considering the "egg beater like" flight experience/environment in a copter where the movement of the aircraft can make the reading of charts more challenging.

Ron replied that helicopter pilots who had the opportunity to view the concept chart were somewhat resistant to the new chart. In contrast, Ron added that the VFR fixed-wing community was very receptive to the new chart. Ron expressed that this chart may not replace the current Helicopter Route Chart series if copter pilots have major objections and that final decisions have not yet been made.

Ted Thompson, Jeppesen, inquired as to the expected timeline. Ron commented that a December 2012 meeting is schedule with the LA VFR Airspace Task Force review the chart. There are still some vetting & review processes within the FAA yet to be accomplished before the chart can be readied in its final form for official release. Once those processes are complete, Ron estimated that the chart would be able to go out within a short period of time.

The question was raised as to whether this chart would be expanded to all Class B airspaces areas. Ron responded that this chart species would only be done by request, that the LA chart was created in response to specific needs/requests from LA area users and that there are no current plans at this time to expand to all 30 Class B Terminal areas.

**ACTION:** Ron Haag, FAA/AJV-321, to report back on progress of the LA Terminal Navigation Chart as it proceeds through the approval process.

## **Meeting 13-01**

Ron Haag, AJV-321, <u>reviewed the presentation topic</u> and briefed the audience on the actions taken since the last ACF. Ron reiterated that the Los Angeles Terminal Navigation Chart prototype was created to address various safety concerns raised by specific users of the LA pilot community.

Ron stated that since the last ACF, the military had expressed their support for the new chart. Ron added that in December, he visited Los Angeles and transferred the task of securing feedback from the LA pilot community to the Western Service Center. To date, the only issues that have been raised are those relating to the colors used to depict various airspace types. There is still a need to secure feedback, specifically from the LA helicopter pilot community.

Valerie Watson, AJV-3B, inquired as to whether there had been any discussions within the Visual Team on whether the LA Terminal Navigation chart was intended to replace the existing LA Helicopter Chart and potentially other related charts like the LA VFR Terminal Airspace Chart (TAC) or Flyway chart.

Ron replied that, at least at this point in time, the LA Terminal Navigation Chart is considered a "one off" and there is no plan to expand this chart into a series for all Class B areas or helicopter-intense regions. There is no intention to eliminate any of the existing VFR chart series, even in the Los Angeles area.

Ron further stated that, due to financial constraints, maintenance of this single chart is under review.

Both Melissa McCaffrey, AOPA, and Lance Christian, NGA, asked whether caution area notes would be published on the body of the chart?

Ron responded that yes, they would be charted as supplied by source.

Lev Prichard, APA, asked if the LA Terminal Navigation Chart product can be done as a digital product with the ability to turn on and off different layers.

Ron replied that digital publication of layered data is a long term goal for all of the VFR charts, but is not available presently.

**ACTION:** Ron Haag, AJV-321, to report back on progress of the LA Terminal Navigation Chart and plans for publication.

## **Meeting 13-02**

Rick Fecht, AJV-321, reviewed the history of the LA Terminal Navigational Chart. To date, no decision has been made as to whether to put the Terminal Navigational Chart concept for LA into full production.

Melissa McCaffrey, AOPA, expressed that the California group that had initially requested the LA Chart was eager to see the chart go into production and that feedback from the General Aviation (GA) community as a whole was very positive.

Chris Criswell, AJV-22, inquired as to whether there had been any discussions about moving forward with the human factors evaluation of the new chart, specifically with regards to use of the chart at night (i.e., red light cockpit environment).

Rick commented that because there has not been a firm decision to move the chart into production, there have been no discussions regarding a formal human factors evaluation.

John Moore, Jeppesen, commented that even though no actions are currently being taken to move forward with the new chart, a human factors analysis could be of huge value and the outcome of the analysis could potentially contribute to the decision on whether AeroNav Products should ultimately publish the chart.

Valerie Watson, AJV-3, commented that once there has been a decision made on the production of the Terminal Navigation Chart and if it impacts any existing chart products (i.e., Helicopter, Terminal Area Chart, etc.), this briefing topic would be reopened for discussion and input. Given the current financial environment and lack of a decision to implement the new chart, it was moved that this topic would be closed.

STATUS: CLOSED