

Government/Industry Aeronautical Charting Forum (94-2)
Washington, DC
September 26 - 29, 1994

1. Opening Remarks

The four day meeting was held at Air Transport Association headquarters in Washington, DC and hosted by Mr. Bill Thomas, ATA. Mr. Paul Best, FAA/AFS-420, Co-Chair of the ACF, opened the TERPs portion of the Charting Forum on September 26, 1994. Minutes of the two day TERPs Forum are being generated by FAA/AFS-420 and will be sent out to participants at a later date.

Mr. Dick Powell, FAA/ATP-220, Co-Chair of the ACF, opened the Charting Forum on September 28, 1994 at Air Transport Association offices with a thanks to Mr. Bill Thomas, ATA, for hosting the forum. Mr. Powell noted the user groups represented and commented on the Working Group presentations and numerous agenda items to be covered. ACF 94-2 Attendees are at Attachment 1. Minutes of ACF 94-1 were approved with one addition. Mr. Thomas, ATA, stated that ATA does not support an airport diagram format that does not conform to current Jeppesen Sanderson chart size (Agenda Items 93-1-024, 93-1-029).

2. IAP Reformat (Agenda Item 92-1-006, Change Depiction of Communication Frequencies on IAPs to Top of Page; Agenda Item 92-1-012, Warning and Caution Notes; Agenda Item 92-1-013, Print Size and Readability; Agenda Item 92-1-014, Use of Icons; Agenda Item 94-1-039, Changes to the Terminal Procedures)

Dr. Steve Huntley, Volpe National Transportation System Center (VNTSC), reported on the results of a test phase that had general aviation pilots fly with the reformatted IAPs. These pilots found information faster with the prototype chart than with the standard NOS chart and they made no mistakes with the prototype. They also overwhelmingly preferred the new format. The results of this latest test are consistent with previous laboratory, simulator, and in-flight evaluations of the new format. Lt Col Claude Richards, DMA, believed that the new format is better than the existing one but had two questions: (1) Is there anything unsafe about the old format or anything about the new format that increases safety, and (2) Is the cost of implementing the new format justified by its advantages? The weight of numerous field tests suggests that there is nothing unsafe about the old format and that the new format does increase safety, if not quantifiably, then at the least by making it easier to find the data, requiring less time spent studying the chart and reducing, if not totally eliminating, errors when extracting the data. Ms. Dalia Marin, NOS, presented the production impact of converting to the new format (Attachment 2). Four scenarios were considered: converting all charts at one time, converting a chart at a time, converting all charts at a given airport (airport by airport), and converting all charts in a given TPP volume (volume by volume). Concern about having two different formats being used at the same time and the affect this might have on flight safety essentially reduced the options to converting all at one time or volume by volume.

NOS briefed the costs (dollars and work years) associated with the two options and introduced a third option, that of converting all at once through use of automation. The costs of this third option were less than either of the other two. The recommendation was made

and approved to pursue converting all charts at once through use of automation and overtime. AOPA, ALPA, and ATA emphasized their desire to implement this new format as soon as possible.

Action: Mr. Dick Powell, FAA/ATP-220, will coordinate with NOS to address cost requirements (dollars and work years), and timeframe for implementation of the reformat effort. Mr. Powell will report on this at the next ACF meeting.

3. Obstruction Chart - Engine Out Working Group Report (Agenda Item 92-1-003, Obstruction Data to Support Takeoff Performance Calculation; Agenda Item 93-1-027, Obstruction Data in Digital Format; and, Agenda Item 94-2-048, Digital Obstruction File on Disk)

Mr. Wes Te Winkle, FAA/AFS-430, chair of the Working Group reported that NOS survey crews would begin on October 1, 1994 to collect the low level data required to support both a close-in obstacle digital data information base and a distance obstacle chart (ICAO Type C). The cost estimate for chart compilation was provided by NOS and will range from \$13,000 to \$21,500 per chart. Cost for a Versatec Plotter paper copy will be \$5.10 and a mylar copy will cost \$25.00. The ACF recommended that NOS determine the cost of a mylar overlay that contains no terrain contour data. NOS indicated that the cost could be as little as one-tenth of the original chart compilation cost projection. FAA noted that there are no funds in the FY95 budget for this effort. Mr. Te Winkle will coordinate cost alternatives with Ms. Linda Cushing, NOS, and report back to the Working Group. NOS also reported that a Universal Data Delivery Format (UDDF) is being developed by the WG so that the collected obstruction data is available in a usable form to the public. FAA indicated that their General Counsel is considering the question of using a federal bulletin board to disseminate the data. The current plan is to include only the newly surveyed airports in the digital database. If all airports are to be included, then a prioritized list will be required from the user community. The ACF did not have a preference between a bulletin board and disks for data dissemination. Mr. Tom Young, ALPA, asked that a reasonably priced product be available in the field ASAP. The Working Group, after examining alternatives, will determine if they want to change their formal recommendation for a ICAO Type C obstacle chart.

Action: Mr. Te Winkle, FAA/AFS-430, will coordinate with Ms. Cushing on alternatives and their costs and will report on Working Group recommendations. Mr. Dick Powell, FAA/ATP-220, will report on the FAA's General Counsel decision on the data dissemination issue.

4. GPS Overlay and GPS Charting Working Group Report (Agenda Item 93-1-030, GPS Overlay and GPS Charting)

Mr. Denny Newport, FAA/xxx-xxx, reported on the new prototype GPS IAP charts. Highlights were: local area differential, flyover and flyby waypoints, four letter idents, and course and distance to missed approach waypoint. It was noted that the Working Group's symbology for flyover versus flyby waypoints was adopted from existing IACC specifications but was exactly opposite from the SAE G-10 symbology. The SAE G-10 symbology for flyover and flyby waypoints is the same in both terminal and enroute publications. The SAE G-10 symbol for a flyover waypoint is a waypoint symbol with a circle around it; a flyby waypoint is a waypoint

symbol by itself. Mr. Powell, FAA, indicated that a Cartographic Change Proposal (CCP) had been sent out on this and that if the proposed symbology causes concern then the reply should so state. If the symbology approved differs from the SAE G-10 symbology, then separate databases will have to be maintained for GPS approaches and FMS approaches.

Action: Mr. Denny Newport, FAA/xxx-xxx, will report on the CCP results and their affect on the prototype.

**5. Minimum IFR Altitude Working Group Report
(Agenda Item 92-2-018, Charting Minimum Altitudes on Enroute Low Altitude Charts)**

Mr. Steve Lucchesi, FAA/ATP-220, reported that the IACC had approved this requirement. Mr. Ben Zollman, NOS, reported that the charts would reflect this change effective Mar 95.

Action: Closed

6. AOPA Safety Foundation and IACC Task Group 25 VFR Charting Recommendations (Agenda Item 94-1-040, Parachute Jumping Areas; Agenda Item 94-1-041, Class C Airspace; Agenda Item 94-1-042, Communication Frequencies; and Agenda Item 94-1-043, Class B Airspace)

Mr. Tony Ragazzo, NOS, briefed the new IACC TG 25 recommendations to improve VFR charts. The AOPA Safety Foundation recommendations have been included in these changes. Recommended changes are listed at Attachment 3. ACF members were asked to provide comments on their Topic Priority Sheet.

Action: Mr. Dick Powell, FAA/ATP-220, will report on the ACF comments and, as appropriate, the status of implementing the recommended changes.

7. Standard Taxi Routes Report (Agenda Item 93-1-024, Depict Boundary of Aircraft Movement Area on Aerodrome Charts, and Agenda Item 93-1-029, Standardized Taxi Routes)

Mr. Steve Lucchesi, FAA/ATP-220, reported that IACC Task Group 30 had developed an airport diagram prototype to address runway incursions and new low vis surface movement procedures (standard taxi routes, land and hold short data, surface movement and guidance control systems). The current airport diagram format (5" x 8") is too small to depict all data required. Mr. Lucchesi indicated that the smallest size that would still allow for legible data was 10" x 10" and that this is a multiple of the current government enroute charts (5" x 10"). The symbology that will be used and the data to be depicted were discussed. Only those airports that have standard taxi routing or SMGCS plans will have their airport diagram published in the 10" x 10" format. Once the IACC concurs, a paper prototype will be produced and distributed for public comment. Lt Col Claude Richards, DMA, stated that DMA would continue to produce airport diagrams in their current 5" x 8" format with tab data in the front of the TPP volume instead of on the face of the airport diagram.

Action: Mr. Steve Lucchesi, FAA/ATP-220, will report on the status of the IACC TG 30 recommendations.

8. New Planning Chart Report (Agenda Item 93-1-021, Low Altitude Planning Chart)

Mr. Ben Zollman, NOS, briefed that the new four color planning chart approved at the last ACF meeting would go into production in May 1995, would be totally automated and be revised annually. He briefed the new features on the chart and noted that AOPA and the Air Force had provided substantive comments. Mr. Dick Powell, FAA/ATP-220, noted that the planning chart had been funded.

Action: Closed

9. Loose Leaf Terminal Procedures Publication (Agenda Item 94-2-058)

Ms. Linda Cushing, NOS, briefed the ACF on comments received from the public concerning problems with the new NOS loose leaf format TPPs. Most of the comments have indicated that they do not like the new format, that the holes obliterate JDate and Amendment No./Date data, that the pages easily rip out because of poor paper quality, that the rings make the book too bulky, and that the rings affect the magnetic compass. Ms. Cushing indicated that NOS was adding the JDate and Amendment No./Date data to the bottom of the page. NOS is also looking at increasing the paper quality and offering the TPP in both loose leaf and perfect bound formats. Both of these initiatives would have a significant impact on product cost. Ms. Melissa Bailey, AOPA, indicated that they would be willing to develop a survey of their members to determine their opinion. Lt Col Claude Richards, DMA, stated that they too will ask the Services for their opinions. Mr. Dick Powell, FAA/ATP-220, requested AOPA and DMA coordination of the survey through his office and FAA Flight Safety.

Action: Ms. Melissa Bailey, AOPA, and Lt Col Claude Richards, DMA, will coordinate a single survey questionnaire for their users through Mr. Dick Powell, FAA/ATP-220, and FAA Flight Safety. Ms. Bailey and Lt Col Richards will report on the results of the survey at the next ACF meeting.

10. Agenda Item 92-1-002 State-produced Aeronautical Charts (NASAO)

NASAO has not had a representative at ACF 94-1 or ACF 94-2 to give the results of a NASAO-sponsored survey on state-produced aeronautical charts.

Action: Closed

11. Agenda Item 92-1-003 Obstruction Data to Support Take-off Performance Calculation (Jeppesen Sanderson)

See paragraph 3 of these minutes for status

12. Agenda Item 92-1-006 Depicting Communication Frequencies on IAP Charts (DOT/VNTSC)

See paragraph 2 of these minutes for status

13. Agenda Item 92-1-011 Use of Color on IAPs (ALPA)

Mr. Charles Guy, ALPA, reported that Jeppesen Sanderson is now producing some IAPs using color for terrain contours. ATPAC has yet to take action on this topic. Flight Safety Foundation's Controlled Flight Into Terrain (CFIT) Working Group presented several recommendations for ACF consideration.

Action: ??

14. Agenda Item 92-1-012 Warning and Caution Notes (ALPA)

Agenda Item 92-1-013 Print Size and Readability (ALPA)

Agenda Item 92-1-014 Use of Icons (ALPA)

See paragraph 2 of these minutes for status

15. Agenda Item 92-1-015 Obstacle and Terrain Contour Depiction (ALPA)

See Agenda Item 92-1-011 for comments. Mr. Rudy Ruana, Jeppesen Sanderson, indicated that they would provide the FAA with a list of airports that they are using for their color terrain contours. Mr. Tom Young, ALPA, noted that the Canadians do not use color, instead they use cross-hatching to indicate terrain. Mr. Steve Lucchesi, FAA/ATP-220, stated that since our IAPs are to scale only within the 10 NM ring (Jeppesen's whole plate is to scale), depiction of terrain would be misleading. The FAA will coordinate with AOPA to determine the level of interest in the use of color and terrain contours on IAPs.

Action: Mr. Dick Powell, FAA/ATP-220, will coordinate with AOPA to determine the level of AOPA member interest in use of color and terrain contours on IAPs. Ms. Melissa Bailey, AOPA, will determine if this is a suitable subject to add to the TPP survey questionnaire (Agenda Item 94-2-058) that will be used with AOPA members. Mr. Powell will report results at the next ACF meeting.

16. Agenda Item 92-2-016 Equipment Requirements on IAP Charts (FAA)

Mr. David Eckles, FAA/AVN-220, stated that AVN would have to initiate action on the 8260.19 to allow for this to be charted. Mr. Steve Lucchesi, FAA/AATP-220, stated that the other, previously approved, recommendations concerning placement, type size and font, etc., would be addressed with the IACC.

Action: Mr. David Eckles, FAA/AVN-220, will take appropriate action on the 8260.19 to allow this requirement to be charted. Mr. Steve Lucchesi, FAA/AATP-220, will take appropriate action with the IACC to address applicable specification changes. Mr. Eckles and Mr. Lucchesi will report on their implementation efforts at the next ACF meeting.

17. Agenda Item 93-1-020 Eliminate NOS Terminal Change Notice (NOS)

Mr. Dick Powell, FAA/ATP-220, handed out the FAA/AVN-220 developed guidelines for what will be charted as a CCP NOTAM in the Change Notice. Ms. Dalia Marin, NOS, stated that NOS was currently following those guidelines. FAA/AVN-220 and FAA/National Flight Data Center believe that NOS should relook at the extent of their compliance with the guidelines.

Action: Ms. Dalia Marin, NOS, will ensure that NOS is complying with AVN-220 guidelines.

18. Agenda Item 93-1-021 Low Altitude Planning Chart (FAA)

See paragraph 8 of these minutes for status.

19. Agenda Item 93-1-024 Depict Boundary of Aircraft Movement Area on Aerodrome Charts (ALPA)

See paragraph 7 of these minutes for status.

20. Agenda Item 93-1-025 Noise Abatement Procedures (CA DOT/DOA)

Mr. Dick Powell, FAA/ATP-220, reported that FAA/ATP-120 considers this a local procedure design issue and not an FAA procedure. Therefore, it should not be charted. ATA and ALPA representatives questioned if the FAA should be in the business of charting (and maintaining) each airport's local noise abatement procedures. The ACF concurred that noise abatement procedures should not be charted.

Action: Closed

21. Agenda Item 93-1-027 Obstruction Data in Digital Format (EDS)

See paragraph 3 of these minutes for status.

22. Agenda Item 93-1-028 Terrain Data Base (Jeppesen)

Mr. Dick Powell, FAA/ATP-220, reported that the FAA, DMA, Jeppesen Sanderson and airline representatives had met three times to address the releasability of DMA's DTED. Mr. Powell stated that the ACF had been instrumental in bringing this issue to light and encouraging all parties to work toward a resolution. ATA is coordinating specific terminal and enroute areas where DTED will be required and, once determined, will forward them to DMA.

Action: Mr. Bill Thomas, ATA, will forward coordinated DTED requirements to DMA for action. Mr. Dick Powell, FAA/ATP-220, will report the status at the next ACF meeting.

23. Agenda Item 93-1-029 Standardized Taxi Routes (FAA)

See para 7 of these minutes for status.

24. Agenda Item 93-1-030 GPS Overlay and GPS Charting (FAA)

See para 4 of these minutes for status.

25. Agenda Item 93-1-031 Depiction of AWOS on Sectional Charts (FAA)

Mr. Steve Lucchesi, FAA/ATP-220, reported that the IACC specification has been changed to include this requirement. NOS VFR Sectionals will include AWOS information beginning December 1994.

Action: Closed

26. Agenda Item 94-1-032 Elimination of the ILS/LOC Feathers on Enroute Low Altitude Charts (FAA)

Mr. Dick Powell, FAA/ATP-220, reported that the ACF had disapproved this requirement and stated that this information is not appropriate for enroute low altitude charts.

Action: Closed

27. Agenda Item 94-1-034 Reformat of Enroute Low Altitude Chart L-19 (NOS)

Mr. Ben Zollman, NOS, reported that they had developed a reschemed and rescaled chart in accordance with user comments and recommendations. Prototypes were provided to ACF members for evaluation, and the evaluations were positive. The next issue is IACC approval and funding. Lt Col Claude Richards, DMA, and Mr. Steve Huntley, VNTSC, indicated that the current format is preferable to NOS's reformatted L-19. Ms. Melissa Bailey, AOPA, will take another look at this issue with DMA's and VNTSC's nonconcur in mind.

Action: Lt Col Claude Richards, DMA, and Ms. Melissa Bailey, AOPA, will relook at their respective agency/association positions and provide comment to Mr. Dick Powell, FAA/ATP-220. Mr. Powell, FAA, will report the status of this issue at the next ACF meeting.

28. Agenda Item 94-1-036 Part-time Tower/Approach Control Communications Symbolology (FAA)

Mr. Dick Powell, FAA/ATP-220, reported that the FAA was still staffing this issue and would, if appropriate, submit an IACC Requirement Document to change the IACC specification.

Action: Mr. Dick Powell, FAA/ATP-220, will report on the status at the next ACF meeting.

29. Agenda Item 94-1-038 Charting of Military Training Routes (MTR) (FAA)

Mr. Dick Powell, FAA/ATP-220, reported that the FAA was still staffing the issue of putting MTR data in the Airport/Facility Directory.

Action: Mr. Dick Powell, FAA/ATP-220, will report on the status at the next ACF meeting.

30. Agenda Item 94-1-039 Changes to the Terminal Procedures (FAA)

See paragraph 2 of these minutes for status.

31. Agenda Item 94-1-040 Parachute Jumping Areas (AOPA)

See paragraph 6 of these minutes for status.

32. Agenda Item 94-1-041 Class C Airspace (AOPA)

See paragraph 6 of these minutes for status.

33. Agenda Item 94-1-042 Communication Frequencies (AOPA)

See paragraph 6 of these minutes for status.

34. Agenda Item 94-1-043 Class B Airspace (AOPA)

See paragraph 6 of these minutes for status.

35. Agenda Item 94-1-048 Chart Pricing (FAA)

Mr. Dick Powell, FAA/ATP-220, stated that the Working Group (established at ACF 94-1) had met to discuss the future of chart prices, FAA and NOS funding levels, ways to keep prices down, possible tradeoffs, and legislation affecting cost recovery. Since funding levels for FY95 were projected to be cut, this would have led to dramatically increased prices for NOS products. Final legislation did not reduce FY95 levels so the FY95 product prices will remain the same as FY94. It was noted that FY96 budget will contain significant funding cuts. The Working Group will remain as established and meet as required to address future funding and pricing considerations.

Action: Closed

36. Agenda Item 94-2-047 Charting Mag Anomalies on Airport Diagrams (FAA)

Mr. Dick Powell, FAA/ATP-220, presented a chart subscriber's request that magnetic anomalies be charted on NOS' airport diagrams. Jeppesen Sanderson charts this information on their airport diagram. NOS puts this information in their Airport/Facility Directory (A/FD). The airport diagram was designed for surface movement, not for departures; therefore, magnetic anomaly information is not appropriate on the airport diagram. The FAA's Regional Office concurs with having the information in the A/FD. Mr. Rudy Ruana, Jeppesen Sanderson, stated that with the current structure of the NOS product line, the A/FD is an appropriated place for the anomaly data. Mr. Tom Young, ALPA, noted that there is a large sign at LaGuardia Airport (the airport at issue) to call pilots' attention to the magnetic anomaly and that a note on the airport diagram is not only not necessary but would add to chart clutter.

Action: Closed

37. Agenda Item 94-2-048 Digital Obstruction File on Disk (Compuflight)

Mr. Cecil Teets, Compuflight, requested that NOS make their Digital Obstruction File (DOF) available on disk in the Universal Data Delivery format. The current hard copy data sheets require that the data be entered manually, thereby increasing risk of error. Mr. Charles Branch, NOS, reported that the DOF should be available on disk in Spring 1995 and that search criteria have been built into the database. The DOF will include only those man-made obstacles that affect NOS charts. Also see paragraph 3 of these minutes.

Action: Mr. Charles Branch, NOS, will report on the status at the next ACF meeting.

38. Agenda Item 94-2-049 Modifications to Terminal Procedures Publication (FAA)

Mr. Dick Powell, FAA/ATP-220, presented a chart subscriber's request that the size of NOS approach plates be increased by 25%, that the size of the altitude, frequency and distance information type be increased by 50% and made darker. The ACF noted that the reformat of the approach plates (see paragraph 2 of these minutes) would make the information much easier to find and therefore would not require a size increase or boldening. The ACF disapproved the recommendation to increase page size, citing current standard sizes as meeting the need.

Action: Closed

39. Agenda Item 94-2-050 Airport Location Identifiers on Charts (FAA)

Mr. Dick Powell, FAA/ATP-220, presented a chart subscriber's request that all aeronautical charts (WAC, Enroute, etc.) carry the three-letter airport location identifier, as the current Sectional and Terminal Area charts do. Mr. Ron Bolton, NOS, stated that due to chart scale, this would present a cartographic space constraint problem. Mr. Tom Young, ALPA, asked how the airports to be shown would be identified and who would identify them. Mr. Steve Lucchessi, FAA/ATP-220, stated that the cost of implementation would be prohibitive. The ACF disapproved the recommendation.

Action: Closed

40. Agenda Item 94-2-051 Enroute Low Altitude Chart Suggestions (FAA)

Mr. Dick Powell, FAA/ATP-220, presented a chart subscriber's request that a symbol be developed to indicate when an airport can be used as an alternate when forecast weather is IMC. Representatives from DMA, ATA, and AOPA noted that this information should not be put on an enroute chart; that it is used for preflight planning, changes with weather and airport capability, and has nothing to do with procedural information. The ACF disapproved the recommendation.

Action: Closed

41. Agenda Item 94-2-052 Depiction of HIWAS Facilities (FAA)

Mr. Dick Powell, FAA/ATP-220, presented an FAA employee's request that HIWAS be depicted on Low and High Controller Charts, SIDs, STARs, and IAPs. Mr. Powell stated that the FAA was considering adding HIWAS information to the A/FD and the Controller Charts. Representatives from ATA, ALPA, and DMA noted that HIWAS information is already contained on Enroute charts and that it was not appropriate to depict it on SIDs, STARs, and IAPs. The ACF disapproved the recommendation.

Action: Closed

42. Agenda Item 94-2-053 Charting Permanent Laser Sites (FAA)

Mr. Dick Powell, FAA/ATP-220, presented an FAA employee's suggestion that information on laser sites be published on Sectional charts, and in IAPs, the A/FD, and NOTAMS. The data is currently published in the Special Notice area of the A/FD; publishing it elsewhere in addition would make it more readily accessible to the user. Lt Col Claude Richards, DMA, stated that charting the permanent laser sites would not necessarily provide any more of a safety factor than that provided by publishing them in the A/FD. Mr. Tom Young, ALPA, believed that permanent laser sites should be charted on Sectional charts. Because there are no regulations on reporting laser sites to the FAA, the FAA would need to take on the responsibility for reporting them (i.e., serve as official government source) in order for sites to be officially charted. The ACF approved the charting of permanent laser sites on Sectional charts. Mr. Steve Lucchesi, FAA/ATP-220, noted that this would require a change to IACC specifications. Mr. Powell requested that the IACC address the issues of symbology and chart applicability through a Requirement Document.

Action: Mr. Steve Lucchesi, FAA/ATP-220, will take appropriate action with the IACC to address applicable specification changes. Mr. Lucchesi will report on the implementation efforts at the next ACF meeting.

43. Agenda Item 94-20-54 Charting Class B Airspace on Sectional Charts (FAA)

Mr. Dick Powell, FAA/ATP-220, presented an FAA employee's suggestion that lateral distances for Class B airspace be included on Sectional charts. Class B airspace is located in the terminal airspace and is included in the 30 NM Mode C depiction on Terminal Area charts. Lt Col Claude Richards, DMA, believes this would add to chart clutter and, additionally, is not what the Sectional chart is intended for. The cost of purchasing a Terminal Area chart is relatively minor compared to the cost of adding and maintaining Class B data to the Sectional chart. The ACF disapproved the recommendation.

Action: Closed

44. Agenda Item 94-2-055 Charting Airports on IAPs (FAA)

Mr. Dick Powell, FAA/ATP-220, presented an FAA employee's suggestion that airports within 10 NM of the primary airport be charted on the IAP, along with the remote communications outlet frequency. Ms. Dalia Marin, NOS, reported that the current procedure is to chart only those airports underlying the approach segment that have a similar runway layout. Using the IAP to chart airports within 10 NM does not fall within the IAPs intended use. The remote communications outlet frequency is charted when not other reliable frequencies are available. The ACF disapproved the recommendation.

Action: Closed

45. Closing CommentsThe next meeting (ACF 95-1) of the Aeronautical Charting Forum will be March 27 - 31, 1995 at NOS/Aeronautical Charting Division in Silver Spring, Maryland. TERPs issues will be addressed March 27 and 28, and charting issues will be addressed March 29, 30, and 31.

Aeronautical Charting Forum 94-2
Attendees

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