

Government/Industry Aeronautical Charting Forum
Meeting 93-01
Washington, DC
June 29 - July 1, 1993

I. Opening Remarks

Mr. Tom Young, ALPA, welcomed everyone to Aeronautical Charting Forum (ACF) Meeting 93-1, held at ALPA Headquarters.

Mr. Dick Powell, FAA/ATP-220, Co-Chair of the ACF, welcomed the open participation of all the user groups represented and noted the progress that had been made on various agenda items from the ACF 92-2 meeting. He covered the agenda outline and format, noting the addition of Working Group reports and special presentations. ACF 93-1 Attendees are listed in Attachment 1.

Mr. Paul Best, FAA/AFS-420, Co-Chair of the ACF, noted that the TERPs agenda was very heavy and growing. He suggested that ad hoc discussions would address how the workload should be handled, possibly by forming a subgroup to meet separately.

Mr. Young, Mr. Powell, and Mr. Charles Guy, ALPA, discussed the relationship between the ACF and the SAE G-10 Aeronautical Charting Subcommittee. All believed that continued participation in both groups would be beneficial. The SAE is more attuned to long range issues, standards, and accepted practices, with emphasis on reaching formal, written positions. The ACF, on the other hand, is more informal in that consensus is reached without voting.

II. Outstanding Charting Topics

92-01-02 State-produced Aeronautical Charts (NASAO)

Dick Powell and John Moore, NOAA/ACD/R&T met with NASAO on January 6, 1993 to discuss this issue. After that meeting, they sent a letter to Mr. Scott, NASAO, with proposed questions for a NASAO-sponsored survey on state-produced aeronautical charts.

Tom Quinlan, FAA/ASA-100, is checking on internal FAA policy differences with respect to state chart legality, but did note that the FARs do not require a current NOAA Sectional chart in the cockpit.

Glenn Rizner, NASAO, indicated that they will be conducting their survey at the Oshkosh Airshow with State aviation officials.

STATUS: OPEN

ACTION: Glenn Rizner will address the results of the survey at the next ACF meeting. Tom Quinlan will report on the FAA position.

92-01-03 Obstruction Data to Support Take-off Performance Calculation (Jeppesen Sanderson)

Wes Te Winkle, FAA/AFS-430, Chair of the Obstruction Chart - Engine Out Working Group, reported on the [recommendations of the Group](#). The ACF approved the recommendations. Other comments: limit the area to be charted; build charts that can be used to develop both SIDs and escape routes; put compass roses on VORs; overlay the airway system and powerlines; get FAA Air Traffic involved in the effort (SID procedures); have NOS survey crews capture obstruction data for the Engine Out Chart when they conduct an OC survey. Prototype charts, manually compiled by NOAA for Grand Junction and Medford, were presented. Another meeting of the Working Group is scheduled for July 21-22 at NOAA, where these prototypes will be discussed further.

STATUS: OPEN

ACTION: Wes Te Winkle will report WG recommendations at the next ACF meeting.

92-01-05 Depicting Fix Information on SID Charts (AOPA)

Ms. Gail Sterling, FAA, reported that the revised SID and STAR Orders were at the printers and would be in the field by mid-July. The Orders do not contain the ACF-proposed changes, e.g., fix data on Vector SIDs and common points to link SID/STAR between airport pairs. These changes will be included in Change One, which will be sent to the ATPAC for comment prior to being published. The ACF commended Ms. Sterling for her efforts.

STATUS: OPEN

ACTION: Ms. Sterling will report on Change One to the SID and STAR Orders at the next ACF meeting.

92-01-06 Depicting Communication Frequencies on IAP Charts (DOT/VNTSC)

Dick Powell reported that no member of the Volpe NTSC was able to attend, but that they had provided the results of the ACF evaluation of the VNTSC prototypes. Only 17 responses had been received, predominantly from the DoD, FAA, and NOAA. The civil aviation community had, by and large, not yet responded. Therefore, rather than take the results as indicative of an ACF consensus, Mr. Powell recommended waiting for further input. Mr. Bill Thomas, ATA, indicated that ATA members were flying with very similar VNTSC prototypes and recommended tabling this to await further replies and the results of the ATA evaluation.

STATUS: OPEN

ACTION: Dick Powell and Bill Thomas will provide forum members with an update on user comments at the next ACF meeting.

92-01-08 Electronic Charting - Standardization of Symbology (ALPA)

Tom Young reported that ALPA had forwarded this issue to the ATPAC and not yet received a reply, and also that the SAE G-10 committee had published an Aeronautical Requirement Document requesting the issue be studied. ALPA requested that FAA, NOAA, and Jeppesen continue to provide representatives to the SAE G-10 committee meetings. ACF consensus was to keep this issue open and await SAE action.

STATUS: OPEN

ACTION: ALPA will report on the SAE efforts at the next ACF meeting.

92-01-09 Electronic Charting - Standardization of Color (ALPA)

See Agenda Item 92-1-8, except that SAE G-10 has not yet published an ARD on this.

STATUS: OPEN

ACTION: ALPA will report on the SAE efforts at the next ACF meeting.

92-01-10 Electronic Charting - Security (ALPA)

Mr. Steve Smith, ASA-500, briefed the ACF on the issue. Current paper charts have the producer's logo, which provides the user with a sense of security. Digital databases do not provide that 'logo' and some sort of digital signature is needed to validate and verify the originator/producer. An encryption and verification system could cost as little as \$15 per set.

Tom Young indicated that ALPA would not want the user to be able to change the FMS data within the database. They want a 'Read Only' capability within the cockpit. An auto checksum routine would confirm that no changes had been made to the database, either manually or due to solar activity. ALPA will address this with their certification group, and with Jeppesen, Honeywell, and RTCA.

STATUS: CLOSED

92-01-11 Use of Color on IAPs (ALPA)

ALPA reported that the ATPAC is addressing this issue.

STATUS: OPEN

ACTION: ALPA will report on the ATPAC efforts at the next ACF meeting.

92-01-12 Warning and Caution Notes (ALPA), 92-01-13 Print Size and Readability (ALPA) and 92-01-14 Use of Icons (ALPA)

See comments for Agenda Item 92-01-06

STATUS: OPEN

ACTION: See comments for Agenda Item 92-01-06

92-01-15 Obstacle and Terrain Contour Depiction (ALPA)

ALPA reported that the ATPAC is addressing this issue.

STATUS: OPEN

ACTION: ALPA will report on the ATPAC efforts at the next ACF meeting.

92-02-16 Equipment Requirements on IAP Charts (FAA)

Mr. Jim Nixon, FAA/AVN-220, recommended that the Notes section, currently in small type, should be resized to the same size as the current "RADAR REQUIRED" note. Mr. Rudy Ruana, Jeppesen, and Mr. Paul Best, FAA/AFS-420, recommended deleting the note itself. Members from ALPA, FAA/AVN-220/AFS-420/ATP-220 and Jeppesen will meet to discuss the need to put the note on the chart.

STATUS: OPEN

ACTION: Rudy Ruana, Jeppesen, will report on this group's efforts at the next ACF meeting.

92-02-17 Charting Private Airports on Sectional Charts (AOPA)

Dick Powell reported that the FAA Counsel interprets the IACC specifications to state that private airports 3,000 feet or longer, or having landmark value, will not be removed from the charts even if the owner asks for it to be removed. Removing airports from the Sectional charts is not a trend and was the result of a specific request from the FAA to NOAA. AOPA will provide the FAA with a list of airports they want restored. NOAA will provide the FAA with a copy of their request that specific airports to be removed. NASAO added that abandoned airports that have landmark value should also be charted and that they will provide the FAA with an FAA/AL-600 June 20 letter to this effect.

STATUS: CLOSED

92-02-18 Charting Minimum Altitudes on Enroute Low Altitude Charts (USAFFSA IFC)

Mr. Steve Lucchesi, FAA/ATP-220, Chair of the Minimum IFR Altitude Working Group, [presented the Group's recommendations](#). The ACF approved the recommendations and also indicated that pilots needed to be educated on the criteria for establishing the Off Route Obstruction Clearance Altitude (OROCA) figure. Mr. Charles Branch, NOAA/ACB, said that the OROCA figures would be available in the digital file.

STATUS: OPEN

ACTION: The USAFFSA IFC will submit a proposed IACC Requirement Document to the DoD IACC Member Point of Contact and report on its status at the next ACF meeting.

92-02-19 Perceived FMS Application Problems (Jeppesen Sanderson)

Tom Young, ALPA, suggested an FAA Advisory Circular be written to address the FMS database issues, especially for GPS waypoints. RTCA DO 201 states that databases should comply with ARINC 424 specifications. It was uncertain who within FAA should address FMS and electronic databases. The ATA's FMS Task Force might be the most appropriate group to work this.

STATUS: OPEN

ACTION: Tom Young will monitor the ATA efforts and report on them at the next ACF meeting.

III. New Charting Topics

93-01-20 Eliminate NOAA Terminal Change Notice (NOAA)

Captain Dick Muller, NOAA/ACD, recommended that the Terminal Change Notice (TCN) be eliminated for the U.S. IAPs and instead be produced similar to the Alaska TCN, i.e., on an as required basis. Procedures included in the TCN are determined by the NFDC in a generally arbitrary manner. Eliminating the TCNs will save about \$120,000 each year. Necessary procedural changes will be disseminated via Special Notice.

Mr. Steve Isaacs, FAA/AFS-820, asked why NOAA can't top punch the TCN the same as the IAP volumes, so that pilots can carry both books in the same binder. FAA will set up a meeting with ATP, AVN, NFDC, and NOAA to look at this issue.

STATUS: OPEN

ACTION: Dick Powell will report on the results of this meeting at the next ACF meeting.

93-01-21 Low Altitude Planning Chart (FAA)

Dick Powell, FAA/ATP-220, presented a prototype Low Altitude Planning Chart that could replace both the Flight Case Planning Chart and the IFR/VFR Wall Planning Charts. These charts were discontinued due to FY93 budget constraints. An FAA/NOAA Working Group developed the prototype. Melissa Bailey, AOPA, approved the prototype and asked for a production date. David Carter, HAI, requested that the Gulf Coast VFR Chart be continued instead of producing this Low Altitude Planning Chart. The ACF was asked to mark up the prototype with desired changes prior to August 1.

STATUS: OPEN

ACTION: Dick Powell will report on the results of the ACF markups at the next meeting.

93-01-22 Depict Multicom Frequency for Non-Towered Airports (CFI Suggestion)

Depicting the multicom frequency for non-towered public airports with no FSS or UNICOM would reduce pilot uncertainty, decrease the possibility of pilots using the wrong frequency and increase flight safety. Steve Lucchesi, FAA/ATP-220, said that the IACC Requirement Document that added the CTAF to the charts also allows the multicom frequency to be charted, if necessary. The ACF consensus was that this problem has already been solved by the IACC RD.

STATUS: CLOSED

93-01-23 Depict Recommended Traffic Pattern Altitudes at Non-Towered Airports (CFI Suggestion)

It was suggested that the recommended traffic pattern altitudes be depicted on the VFR charts, in addition to the airport information already shown. This could improve adherence to the recommended altitudes and would be helpful to pilots.

This information is contained in the AFD, and to chart it would be repetitious and add clutter. The consensus of the ACF was to disapprove this suggestion.

STATUS: CLOSED

93-01-24 Depict Boundary of Aircraft Movement Area on Aerodrome Charts (ALPA)

Tom Young, ALPA, indicated that ICAO Annex 4 contains international standards for identification of the boundaries of air traffic control services on aerodrome charts. The criteria in the FAA's Surface Movement Guidance and Control Systems Advisory Circular, to be published shortly, will establish new criteria for low visibility operations. Surface movement requirements will differ depending on whether the aircraft is located within a movement or non-movement area. Pilots need to know the boundary of areas where an FAA clearance to enter is required, as well as the frequency to be used to obtain this clearance.

Information on these areas is maintained within the FAA Regions and is based on letters of agreement with individual airports. The ATPAC, ICAO and IACC Task Group 30 are addressing this issue.

STATUS: OPEN

ACTION: Steve Lucchesi, FAA/ATP-220 and IACC Task Group 30 Chair, will report on this at the next ACF meeting.

93-01-25 Noise Abatement Procedures (CA DOT/DOA)

Noise Abatement procedures are contained in numerous sources, but no one source contains them all. The California Department of Aeronautics believes that listing noise abatement procedures on the FAA Form 5010-1 under "Remarks" and marking them for inclusion in the A/FD during inspections would correct the problem. This information is important enough to be listed as a separate sub-heading under the A/FD's Remarks section. NBAA and Jeppesen concur with the proposal.

FAA/ATP-220 will coordinate this with both ATP-120 and Airports. Some noise abatement procedures do not take safety considerations (vertical/horizontal separation) into account; liability issues should also be addressed.

STATUS: OPEN

ACTION: FAA/ATP-220 will staff this internally and report at the next ACF meeting.

93-01-26 Fixes/Waypoints Not Displayed on Enroute Low Altitude Charts (AOPA)

Since all fixes and waypoints are not displayed on the U.S. Enroute Low Altitude charts, pilots must refer to the TPPs to get complete IAP, SID, and STAR fix and waypoint information. Having this information readily available in a single publication is critical to flight safety, especially during the critical phases of arrival and departure. AOPA recommended that the Enroute Area Chart scale be changed to 1" = 8NM from 1" = 5NM so the chart can contain additional IAP, SID, and STAR fix and waypoint data.

ALPA also supports the single chart during critical phases of flight concept. However, they have already submitted a proposed change to the new SID and STAR Orders to have the SID terminate and the STAR originate in the enroute structure. Jeppesen also supports this concept.

AOPA supports ALPA initiative and therefore withdrew this.

STATUS: CLOSED

93-01-27 Obstruction Data in Digital Format (EDS)

Obstruction data used in Obstruction Charts (OC) is only available in hard copy format; updating data is time consuming, labor intensive, and open to human error. Recommendation is to make current obstruction data available in digital format, allowing for an automated update process.

The ACF concurred with the recommendation to make OC obstruction data and the digital obstruction file available to the public in digital form.

STATUS: OPEN

ACTION: Dick Powell, FAA/ATP-220, will coordinate with NOAA and report on the efforts at the next ACF meeting.

93-01-28 Terrain Data Base (Jeppesen)

Mr. Don Sellars, Jeppesen Sanderson, [briefed the ACF](#) on the Controlled Flight Into Terrain (CFIT) accident and fatality rates and Jeppesen's request for FAA's assistance in gaining authorization to use limited amounts of Defense Mapping Agency (DMA) terrain data for civil purposes. Eventually, terrain data for worldwide coverage will be needed; however, there is an immediate need for terminal area coverage. Jeppesen is sensitive to the issue of classified terrain data. They are attempting to open a dialogue with DMA to discuss possible showstoppers and changes that could be made to the DMA data that would alleviate the classified/security concerns. DMA could provide about 90% of the worldwide terminal area data required.

ALPA totally supports the Jeppesen effort to develop a worldwide terrain database. DMA questioned how Jeppesen would define the requirement. Jeppesen needs terrain data within 50NM of specific airports, and could provide a list of those airports to the FAA.

STATUS: OPEN

ACTION: Dick Powell, FAA/ATP-220, will forward a list of airports that Jeppesen would like to DMA

and also request a meeting between FAA, DMA, and Jeppesen to discuss this issue. The meeting will open a dialogue to determine DMA's concerns with releasing DTED. Subsequent to that meeting, FAA will formally request DMA DTED.

93-01-29 Standardized Taxi Routes (FAA)

Mr. Willie Card, FAA/ATP-120, Mr. Mike Harrison, FAA/ASD-10, and Mr. Don Sellars, Jeppesen, briefed the ACF on their efforts to develop standardized taxi routes. The user community desires electronic Airport Diagrams - as a moving map display in the cockpit. The FAA would like to have an automated system to give aircrews standard taxi routings without human intervention - to reduce verbiage, to be used as a pilot planning tool, and to take advantage of future automation. The airport surface would be treated like the airway system, with waypoints at intersections and hold points, and Standard Taxi Charts (i.e., SIDs on the ground).

At Chicago O'Hare, the FAA is working with Jeppesen to produce a black and white taxi chart. Jeppesen noted that using colors to differentiate produced indistinguishable shadings on paper charts and using different charts for each runway resulted in too many charts. A possible solution would be to establish runway colors based on quadrants, and standardize that nationally. Tom Young, ALPA, suggested that this also be addressed at the next SAE G-10 meeting.

Dick Powell, FAA/ATP-220, indicated that IACC Task Group 30 is addressing this issue also.

STATUS: OPEN

ACTION: Dick Powell and Tom Young will report on the efforts of their respective groups at the next ACF meeting.

93-01-30 GPS Overlay and GPS Charting (FAA)

Jim Moore, FAA/AFS-420, briefed the ACF on the recommendations of the GPS Working Group he chairs. The recommendation is to keep all approaches on separate pages rather than combine several on a page. The drawback to this is the extra cost of separate pages; the benefits are less clutter and short lead time to publish (no IACC spec changes required).

Jeppesen recommended moving toward a coordinate-based system for IAPs, and away from our current system of an approach chart for each runway and each NAVAID. ALPA concurred with the coordinate-based system and separate GPS approach plates. The ACF concurred with both recommendations.

STATUS: OPEN

ACTION: Jim Moore, FAA/AFS-420, will report on the efforts of the GPS Working Group at the next ACF meeting.

93-01-31 Depiction of AWOS on Sectional Charts (FAA)

Mr. Mike Lenz, FAA/ASP-200, briefed the ACF on a recommendation to add the AWOS frequency to visual charts. After discussion, it was agreed to submit a requirement to add the AWOS frequency on a third (or last) line of the airport data block. The AWOS line would read - "AWOS-A EVC 308Khz". The ACF concurred.

STATUS: OPEN

ACTION: Mike Lenz will submit a proposed IACC Requirement Document to Dick Powell, FAA/ATP-220, for the IACC to consider.

IV. Closing Comments

The next meeting, Aeronautical Charting Forum 93-02, will occur December 13-16, 1993 in Washington, DC. TERPs issues will be addressed December 13 and 14 at NBAA Headquarters. Charting issues will be addressed December 15 and 16 at ALPA Headquarters.

**Aeronautical Charting Forum 93-01
Attendees**

Tom Young	ALPA	206-687-5905
John McCormick	ALPA	310-376-3456
Wally Roberts	ALPA	714-498-3456
Mike Lenz	FAA/ASP-200	202-366-5982
John Bell	FAA/ASA-100	202-366-6422
Bob Beatty	USAFFSA IFC/AI	210-652-5071
Mark Cato	USAFFSA IFC/IP	210-652-4674
Jim Nixon	FAA/AVN-220	405-954-3382
David Eckles	FAA/AVN-220	405-954-3382
Dennis Newport	FAA/AFS-420	202-267-3745
Tom Quinlan	FAA/ASA-108	202-366-6341
Charles Guy	ALPA	703-689-4321
Rudy Ruana	Jeppesen	202-331-7727
Paul Smith	NBAA	202-783-9000
Bill Thomas	ATA	202-626-4011
Ronald Clenney	FAA/AVN-210	405-954-4164
Glenn Rizner	NASAO	301-588-0587
Melissa Bailey	AOPA	301-695-2212
Stephen Isaacs	FAA/AFS-820	202-267-7413
Bill Hammett	FAA/ATM-613	202-267-9288
Pat Fair	FAA/NFDC	202-267-9290
Steve Lucchesi	FAA/ATP-220	202-267-9304
John Moore	NOAA/ACD/R&T	301-713-2631
Dick Powell	FAA/ATP-220	202-267-9244
Paul Best	FAA/AFS-420	202-267-8277
Ron Priddy	NACA	202-833-8200
Carol Beaver	NOAA/ACD	301-713-2619
Richard Muller	NOAA/ACD	301-713-2619
Ronald Bolton	NOAA/ACD/ACB	301-713-2836
Charles Branch	NOAA/ACD/ACB	301-713-2817
Far Arrington	DMA/PRA	703-285-9339
Jim Danaher	NTSB	202-382-6835
Gail Sterling	FAA/ATP-130	202-267-9330
Cecil Teets	Compuflight	516-625-0202
Willie Card	FAA/ATP-120	202-267-9336
Mike Harrison	FAA/ASD-10	202-287-7096
Don Sellars	Jeppesen	303-784-4394
David Carter	HAI	703-683-4646