

Government/Industry  
Aeronautical Charting Forum (ACF) 99-01  
April 27-30, 1999

**1. Opening Remarks**

The forum was held at the Air Line Pilots Association offices in Washington, DC. Mr. Howard Swancy, FAA/AFS-420, chaired the Instrument Procedures portion of the Charting Forum on April 27-28, 1999. Separate minutes of that meeting are being generated and will be sent to those participants.

Mr. Dick Powell, FAA/ATA-100, Chair of the ACF, opened the Charting Forum on April 29, 1999 with thanks to Mr. Kevin Comstock, ALPA, for hosting the forum. Mr. Powell asked participants to fill out the Attendee List and include their e-mail address. Minutes of ACF 98-02 were accepted, with modifications made by Mr. David Lewtas, ICAO/AIS, to note that there are two ICAO Study Groups – the Aeronautical Data Modeling Study Group and the MAP Study Group. ACF 99-01 attendees are at Attachment 1.

**2. Wide Area Augmentation System (WAAS)**

Mr. Glen Martin, ATA-6, briefed the status of WAAS-SATNAV Implementation Plan, signed in early April. The Plan has goals defined by phase of flight - Airport Surface Movement, Departure and Arrival, Enroute, Oceanic. A National ATSOIT Conference has been scheduled for July 1999 to focus on implementation issues. The WAAS IOC has slipped again from June 1999 to September 2000, with an initial commitment to 50 approaches. The FAA has established ATO-402 to focus their satellite navigation efforts.

**Action:** None, for information only.

**3. ICAO AIS/MAP Divisional Meeting**

Mr. Dave Lewtas, ICAO, briefed the status of the recommendations raised at the ICAO AIS/MAP Divisional meeting. The ICAO Council has accepted the AIS/MAP Report and it is now available from ICAO. The ICAO Aeronautical Data Modeling Study Group, established in January 1999, is evaluating the ICAO and EUROCAE database models. The goal is to have the evaluation completed by the end of this summer. The ICAO MAP Study Group, scheduled to meet in November 1999, is addressing the following issues: electronic aeronautical chart display, terrain databases (Amdt to Annex 4 in 2001), true vs magnetic, computer navigation fixes (Amdts to Annex 4 and Annex 15 will depend on Obstacle Clearance Panel coordination and approval), airport obstacle charts in digital form (Amdt to Annex 4 in 2003), electronic exchange of aeronautical information via datalink (air/ground), and AIS/MAP personnel licensing and training guidelines. ICAO AIS/MAP is proposing a new symbol for ADIZ that is similar to the depiction on ONCs and JOGs. ICAO is also evaluating depiction of significant terrain on IAPs (proposal was similar to Ugly Baby recommendation but responses to ICAO from the pilot community indicated a preference for AMA-style depiction). The German representative asked about any ICAO effort to address copyrighting of charts. ICAO is not yet addressing this issue.

**Action:** Mr. Dave Lewtas, ICAO, will keep the members informed of issues and progress.

#### 4. ICAO Y2K Issues

Mr. Dave Lewtas, ICAO, briefed the Year 2000 Program that ICAO has to assist States in providing safe, reliable air navigation services through the year 2000. States have been asked to send a letter to ICAO by July 1, 1999 addressing their compliance efforts. A Y2K webpage has been established at [www.icao.int/y2k](http://www.icao.int/y2k). ICAO letters, to be sent in May 1999, will recommend that no significant changes be submitted by the States for AIRAC cycle dates 9/9/99, 12/30/99, and 1/27/00. Significant changes were not defined.

**Action:** Mr. Dave Lewtas, ICAO, will keep the members informed of issues and progress.

#### 5. Aeronautical Survey Program

Mr. Brad Kears, NOAA/NGS, Manager of the FAA Survey Program, briefed on the aeronautical survey program. The main program goal is to provide digital information to NOS/AC&C to produce digital and paper charts. The program also provides data to NFDC and AVN. The FAA determines survey requirements and their priority for airport aerial photography. Obstruction evaluation is done by Field Surveys with the latest aerial photography. Computer assisted automated mapping will be done through the Aeronautical Integrated Revision System (AIRS), with an IOC of October 1, 1999. The AIRS marries geographic data to produce a vector display. It is expected to cut 4 months off the current production timeline. It currently is used to produce digital layout diagrams and digital obstruction charts. NGS hopes to combine source information from aerial photos, hyper-spectral imaging, side angle radar (SAR), and satellites. Mr. Wally Roberts asked when digital files could be purchased. Mr. Dick Powell explained that making the information available to the public -in a more timely manner, in digital form, and on the Internet - is the goal, but it's still in development. Mr. Kears stated that they currently provide the information to AVN in digital form, and are working on providing the digital form to both NFDC and AC&C. Mr. Al Palmer, USAASA, noted that the Army also uses 405 for their survey standards and asked Mr. Kears if NGS would coordinate with them in developing format standards. Mr. Ron Bolton, AC&C, stated that there is a need to greatly expand the survey program to cover a 30 nm radius around the ARP, versus the current program that covers only the area that is an extension of the runway centerline. Mr. Roy Maxwell, Delta, challenged the Aeronautical Survey Program to provide not only point data of obstructions, but also the data between those points (e.g. not only the antenna on top of a building, but also the corners of that building). Mr. Mike Riley, NIMA, asked Mr. Kears to coordinate with their people in NIMA St Louis. They would like to have a standardized worldwide database. Mr. Lewtas, ICAO, stated that ICAO maintains an airport characteristics database.

**Action:** None, for information only.

#### 6. IACC Task Group 31, IAP Chart Issues (93-01-030, 96-02-078, ICAO identifiers on GPS approaches, magnetic versus true orientation, contours, Volpe reformat, division of TPPs)

Ms. Dalia Marin, AC&C, briefed that the IACC Specifications for non-precision GPS approaches have been submitted to the IACC for their approval.

**Action:** Closed

#### 7. Terminal Procedure Publication Split

Mr. Eric Secretan, AC&C, briefed that several TPP volumes might have to be split. The printing contractor cannot handle loose-leaf books that are larger than a given size and six of the current volumes are rapidly approaching that size. Mr. Secretan provided a chart that documented the

decline in loose-leaf book sales to the public and NIMA. Mr. Randy Kenagy, AOPA, was asked if he would be agreeable to polling their membership concerning the elimination of loose-leaf volumes. FEDEX asked when the Government would be publishing their IAP charts on a CD-ROM. Mr. Dick Powell, FAA, noted that this is being looked at for the future. An ACF Ad Hoc Committee was established to discuss this issue; member list is at Attachment 2.

**Action:** Mr. Eric Secretan, AC&C, will Chair the Ad Hoc Committee and report the status at the next ACF meeting.

#### **8. FMS/GPS/RNAV/Free Flight Chart**

Ms. Pat Fair, FAA/ATA-130, briefed that the IACC Task Group 33 had developed a prototype and sent it out for comment. Comments have been favorable. The Task Group, meeting in November 1999, will refine the specifications and produce another prototype for comment. The current prototype has GPS/RNAV routes and has evolved from the original concept of an RNAV/Free Flight chart.

**Action:** Ms. Pat Fair, FAA/ATA-130, will report on the status at the next meeting.

#### **9. El Toro/Santa Ana Class C Airspace (99-01-114)**

Due to the closure of El Toro MCAS, the Control Tower may become a part-time or irregular hour facility. The current Santa Ana Class C airspace abuts the El Toro Class C airspace and once the El Toro CT status changes, the El Toro airspace will become 'dead' Class C even though it will continue to be charted. The FAA will take this on for immediate action so that any changes can be made prior to the next cycle cutoff date.

**Action:** Mr. Paul Gallant, FAA/ATA-400, and Mr. Dick Powell, will work this and report on the status at the next meeting.

#### **10. US Government Databases**

Ms. Natalie Miller, FAA/ATA-100, briefed on IACC Task Group 34 issues. An IACC National Aeronautical Data Environment (NADE) will be created to allow NIMA, FAA, AC&C to maintain their own databases and pull data as needed from the NADE. The goal is to make the data model complement the ICAO database. The IACC will maintain the NADE.

**Action:** None, for information only.

#### **11. ATA Chart, Database and Avionics Harmonization Committee**

Mr. Jim Terpstra, Jeppesen, briefed the committee's prioritized top ten recommendations on harmonizing charts and automated systems: redesign of existing NPAs to accommodate VNAV; altitudes at precision FAFs; unnamed stepdown fixes; waypoints in EFIS but not in database or charts; waypoint names longer than five letters; duplicate navaid and waypoint identifiers; different altitudes for the same point on STARs and approaches; magnetic variation tables used in course calculations; and, VNAV angles depicted on charts. ACF members were invited to attend the next CDAH meeting May 25-27, 1999, in Washington.

**Action:** Mr. Jim Terpstra, Jeppesen, will report on the status of the committee at the next mtg.

**12. Ugly Baby Project (92-01-006/011/012/013/014/015, 94-01-039, 95-01-065, 96-02-084)**

Mr. Eric Secretan, AC&C, noted that the TAA Order is being rewritten and a letter has been sent with guidance on developing TAA. The IACC is coordinating Requirement Documents on changing the chart format to the Volpe format and depicting the TAA. The Volpe format will be implemented airport by airport and can be implemented almost immediately after IACC approval. The FAA requested that the first 50 WAAS approaches have all the new formats on them (Volpe, TAA, and terrain). The biggest challenge in depicting terrain is the extra two days of cutoff time required to print the colored terrain. Mr. Barry Strauch, NTSB, stated the NTSB recommendation that all approach and navigation charts include terrain depiction. Specifically, the NTSB recommends that terrain be depicted on the Area charts and IAP charts. The ICAO criteria (which is the same as the Ugly Baby spec) will be used for terrain depiction. The IACC has not yet submitted a Requirement Document on terrain depiction. Mr. Terry Laydon, AC&C, noted that manpower and funding shortages may delay implementation of Volpe format and TAA. Mr. Powell recommended that the IACC develop a prototype of the Los Angeles Area Chart with terrain depicted.

**Action:** Mr. Eric Secretan, AC&C, will report on the status of implementation at the next meeting and will bring an Area Chart prototype.

**13. VFR Waypoint Ad Hoc Committee (98-01-110)**

Mr. Randy Kenagy, AOPA, gave the AOPA training presentation (on CD) that will be used to train pilots on VFR Waypoints. VFR Waypoints will be first used on the July 15, 1999 editions of the San Diego TAC and the Los Angeles TAC. FEDEX recommended that a comment be added to the AIM, cautioning pilots to exercise extra vigilance when using VFR Waypoints because of the precision navigation capability of GPS. Normal VFR navigation does not usually offer the opportunity for multiple aircraft to arrive at the precisely same point in space as does the GPS. Mr. Dick Powell will ask the ATSOIT to take on the issue of a note in the AIM.

**Action:** Mr. Randy Kenagy, AOPA, will report on the status at the next meeting.

**14. EuroControl and Charting**

Mr. Ken Reid, EUROCONTROL, gave a briefing on the role of EUROCONTROL and aeronautical charting. As well as developing pan-European Standard Aeronautical Required Practices (SARPs) that are coordinated with ICAO, they are also responsible for an Aeronautical Charting Task Force. The efforts of EUROCONTROL would be more effective if their SARPs were in line with the efforts of U.S. Government and Industry. One of the most pressing issues is the lack of compliance with ICAO standards. Technology and graphical depiction will revolutionize the cockpit and EUROCONTROL is looking at those issues with an eye to working toward international cooperation. EUROCONTROL has developed an interactive capability, "SkyView", published in CD-ROM format. The viewing tool will be available on the web. When terrain data becomes available, it will be included.

**Action:** None, for information only.

**15. Parachute Jumping Areas on VFR Charts (94-01-040)**

Mr. Glen Martin, FAA/ATA-6, briefed on the FAA coordination efforts to get the frequencies collected and charted.

**Action:** Mr. Glen Martin, FAA/ATA-6, will report the status at the next ACF meeting.

**16. Adding GPS Waypoints to Charts (96-02-078)**

Mr. Eric Secretan, AC&C, reported that the IACC Requirement Document has been modified to limit charted GPS Waypoints to those that tie-in the enroute structure to IAPs.

**Action:** Mr. Eric Secretan, AC&C, will report the status at the next ACF meeting.

**17. No Military Landing Rights Available (97-01-088)**

Mr. Mike Riley, NIMA, briefed that contract fuel availability, landing fees, and tiedown capability is not required on Sectional charts as long as the information is contained in the A/FD. Mr. Riley will provide NFDC a list of those airports that have contract fuel availability so that they can be published in the A/FD.

**Action:** Mr. Mike Riley, NIMA, will report on the status at the next ACF meeting.

**18. Depiction of Class B Airspace on LAX Visual Charts (97-02-102)**

Mr. Randy Kenagy reported that there are now no requirements for adding radial information to the Los Angeles Sectional.

**Action:** Closed

**19. ARTCC Frequencies Charted for Lost Comm (97-02-103)**

Mr. Dick Powell reported that he has not yet received a response from the IACC.

**Action:** Mr. Dick Powell, FAA/ATA-100, will report on the status at the next ACF meeting.

**20. Charting ATCAAs (97-02-105)**

Ms. Pat Fair, FAA, reported that ATA-130 and ATO-400 were coordinating on the submission of a Requirement Document to the IACC for charting the ATCAAs on the Enroute High Charts.

**Action:** Ms. Pat Fair, FAA/ATA-130, will report on the status at the next ACF meeting.

**21. Airport Names (98-01-108)**

Mr. Eric Secretan, AC&C, briefed the AC&C perspective on this issue and presented a handout that graphically laid out the problems. There about 2500 airports that have a name that is different from their associated city name. One solution is to add the associated city name to the charted airport name when they are different. This would eliminate the additional 'look up' step and would leave the TPP and A/FD organized as they are now, by city. However, there would be an additional cost to implement this and additional text on the chart could increase chart clutter. Mr. Randy Kenagy, AOPA, recommended that this be broken into separate issues and that the first effort be to place city names on the IFR Low Enroute charts. The format should be city name/airport name (abbreviated as necessary). FEDEX and NBAA asked that airport identifiers also be placed on the IFR Low Enroute charts. The ACF concurred with both requirements. Mr. Powell recommended that the ICAO "K" prefix issue be added to this requirement. Mr. Dave Thompson, FAA, will submit a Requirement Document to the IACC with all three of these

requirements. As an additional aspect of this naming convention, Mr. Roy Maxwell, Delta, recommended that the Form 5010 be changed to ask the airport manager to designate a 20-letter maximum airport name for use on aeronautical charts only. Mr. Powell, FAA, will take the 5010 issue back to the appropriate FAA office.

**Action:** Mr. Eric Secretan, AC&C, will report on the status at the next ACF meeting.

#### **22. MOA NOTAM Information on Visual Charts (98-02-111)**

Mr. Glen Martin, FAA/ATA-6, stated that MOA activity will be provided to the pilot by the FSS. He recommended that the chart tab data have a footnote telling the pilot to contact FSS for MOA-activity outside of the times indicated in the tab. Since MOAs, Warning and Alert Areas are non-rule areas, this information can be added and maintained through the NFDD. Mr. Riley, NIMA, is concerned that the flying public would not know of MOA activity unless they specifically asked the FSS for that information. Mr. Kenagy, AOPA, noted that the current practice of indicating MOA use 'by NOTAM' does not provide sufficient information and is misleading because the FAA does not issue NOTAMs on MOAs. Mr. Paul Gallant, FAA/AFS-400, briefed that the AIM will be rewritten to inform the pilot that they must inquire of the FSS as to MOA activity. Mr. Powell, FAA, will ensure that a Requirement Document is submitted to change the chart tab data panel.

**Action:** Mr. Dick Powell, FAA/ATA-100, will report on the status at the next ACF meeting.

#### **23. Airport Gate Coordinates (98-02-112)**

Mr. Dick Powell, FAA, noted that discussions have been held within the FAA but that there has been no resolution. The slant suffixes and RNP aspects of this issue are still being worked. Mr. Dave Lewtas, ICAO, noted that when the ICAO amendments to the specification are approved, he will forward them.

**Action:** Mr. Dick Powell, FAA/ATA-100, will report on the status at the next ACF meeting.

#### **24. Orlando/Tampa Terminal Area Chart**

Mr. Randy Kenagy, AOPA, requested that flyway charts for the Orlando and Tampa airspaces be published together as a separate chart, and not on the back of their respective TACs. Mr. John Brennan, AC&C, noted that a Orlando/Tampa 'superchart' is in the works. The TAC information would be on one side and the flyway chart for both areas would be on the back side. Mr. Kenagy noted that this would not help pilots in the preflight and strategic planning stages because the superchart would be extremely cumbersome due to its size. The ACF recommended production of the superchart.

**Action:** Mr. Randy Kenagy, AOPA, will report on any feedback at the next ACF meeting.

#### **25. Closing Comments**

The next meeting will be November 1-5, 1999 at AC&C offices in Silver Spring, MD. The Instrument Procedures part of the Forum will be held on November 1-3, and the Charting Forum will be held on November 4-5, 1999.

Attachment

Aeronautical Charting Forum 99-01 Attendees

Kevin Comstock	ALPA	703-689-4176	Fax: 4370	comstockk@alpa.org
Simon Laurence	ALPA			
sjlawrence@compuserve.com				
Wally Roberts	ALPA	360-687-5904	Fax: 5093	wally@terps.com
Tom Young	ALPA			
youngtny@worldallessnet.com				
Randy Kenagy	AOPA	301-695-2149	Fax: 2214	randy.kenagy@aopa.org
Roy Maxwell	Delta Air Lines	404-715-7231	Fax: 7202	roy.maxwell@delta-air.com
Ken Reid	Eurocontrol/AIS-MAP	+32-2-729-4730	Fax:	ken.reid@eurocontrol.be
Bill Hammett	FAA/AFS-420 Consultant/ISI	410-257-9280	F:286-8842	isicomm@snet.net
Mike Webb	FAA/AND-730/Navy			mwebb@arinc.com
Glen Martin	FAA/ATA-6			glen.martin@faa.gov
Dick Powell	FAA/ATA-100	202-267-9308	F:493-4266	dick.powell@faa.gov
Juergen Mies	FAA/ATA-100	202-267-9310	Fax: 5322	juergen.mies@faa.gov
Brenda Hawkins	FAA/ATA-110			
Valerie Watson	FAA/ATA-110			valerie.watson@faa.gov
Natalie Miller	FAA/ATA-120	202-267-9279		natalie.miller@faa.gov
Pat Fair	FAA/ATA-130	202-267-9290	Fax: 5287	pat.fair@faa.gov
Dave Thompson	FAA/ATA-130	202-267-9303	Fax: 5287	david.k.thompson@faa.gov
Paul Gallant	FAA/ATA-400			paul.gallant@faa.gov
Ellen Crum	FAA/ATA-400	202-267-7824	Fax: 5305	ellen.crum@faa.gov
Bill Mosley	FAA/ATO-120	202-267-9255		bill.mosley@faa.gov
Pat Crawford	FAA/ATO-402			patricia.crawford@faa.gov
Thomas Meyer	FAA/ATO-402/AMTI			thomas.ctr.meyer@faa.gov
Gary Powell	FAA/ATO-402	202-267-9967		gary.ctr.powell@faa.gov
Maurice Anders	FAA/AVN-160	405-954-5919		
Brad Alberts	FEDEX			jbalberts@fedex.com
Richard Wright	Helicopter Assoc Intl			dick.wright@rotor.com
David Lewtas	ICAO AIS/MAP	514-954-8163	Fax: 6759	dlewtas@icao.int
Dave Goehler	Jeppesen			dgoehler@jeppesen.com
Jim Terpstra	Jeppesen	303-784-4401	Fax: 4111	jimterps@jeppesen.com
Michael Outman	Naval Fit Info Group			
outman.michael@hq.navy.mil				
Robert Conyers	NBAA	973-379-0863		conyers@aau.com

Mike Riley	NIMA/COTF	703-264-3003	Fax: 3133	rileym@nima.mil
Russ Wall	NIMA/GIMA	314-263-4806	Fax: 4247	wallr@nima.mil
Brad Kearsse	NOAA/NGS	301-713-3169	Fax: 4315	wkearse@ngs.noaa.gov
Travis Ritter	NOAA/NGS			tritter@ngs.noaa.gov
Terry Laydon	NOS/AC&C/Director	301-713-2619	Fax: 4587	terry.laydon@noaa.gov
Ronald Bolton	NOS/AC&C/ACD	301-713-2836	Fax: 1248	ron.bolton@noaa.gov
Charles Branch	NOS/AC&C/ACD/AIB	301-713-2817	Fax: 4489	charles.branch@noaa.gov
Dalia Marin	NOS/AC&C/ACD/ENB	301-713-2925	Fax: 4410	dalia.marin@noaa.gov
Howard Stewart	NOS/AC&C/ACD/ENB	301-713-2925	Fax: 4410	
	howard.stewart@noaa.gov			
Art Dodds	NOS/AC&C/ACD/IAP	301-713-2958	Fax: 4410	arthur.dodds@noaa.gov
John Brennan	NOS/AC&C/ACD/VCB	301-713-2952	Fax: 4410	john.t.brennan@noaa.gov
Donna Gallant	NOS/AC&C/ACD/VCB	301-713-2944	Fax: 4410	donna.l.gallant@noaa.gov
Kim Behrns	NOS/AC&C/P&PM/PCG	301-713-2628	Fax: 4587	kim.j.behrns@noaa.gov
Greg Yamamoto	NOS/AC&C/P&PM/PCG	301-713-1982	Fax: 4587	
	greg.yamamoto@noaa.gov			
John Moore	NOS/AC&C/R&T/T&M	301-713-2631	Fax: 1960	john.moore@noaa.gov
Eric Secretan	NOS/AC&C/R&T/PE&D	301-713-2631	Fax: 1960	eric.secretan@noaa.gov
Barry Strauch	NTSB/AS-50			strauch@ntsb.gov
Doug Edsall	USAASA/AI			
	edsalldo@belvoir.army.mil			
Al Palmer	USAASA/AI			
	palmera@belvoir.army.mil			
Erik Eliel	USAF/AIS			
	erik.eliel@randolph.af.mil			
Jim Sackreiter	USAF/AIS			
	jim.sackreiter@randolph.af.mil			
Ann Behrns	USAFFSA/XOIA	240-857-6721	Fax: 7996	
	behrnsa@andrews.af.mil			



NOS Terminal Procedures Publication  
Split Issue  
Ad Hoc Committee

Kevin Comstock  
Randy Kenagy  
Natalie Miller  
Pat Fair  
Maurice Anders  
Bob Conyers  
Russ Wall  
Marsha Adelson  
Eric Secretan  
Ann Behrns

ALPA  
AOPA  
FAA/ATA-120  
FAA/ATA-130  
FAA/AVN-160  
NBAA  
NIMA/GIMA  
NOS/AC&C/P&PM/PCG  
NOS/AC&C/R&T/PE&D  
USAFFSA

703-689-4176  
301-695-2149  
202-267-9279  
202-267-9290  
405-954-5919  
973-379-0863  
314-263-4806  
301-713-2629  
301-713-2631  
240-857-6721

comstockk@alpa.org  
randy.kenagy@aopa.org  
natalie.miller@faa.gov  
pat.fair@faa.gov

conyers@aau.com  
wallr@nima.mil  
marsha.adelson@noaa.gov  
eric.secretan@noaa.gov  
behrnsa@andrews.af.mil