May 27, 2008

Dear Forum Participant

Attached are the minutes of the Aeronautical Charting Forum, Instrument Procedures Group (ACF-IPG) held on April 22, 2008 and sponsored by Advanced Management Technology, Incorporated (AMTI), Arlington, VA. An office of primary responsibility (OPR) action listing (Atch 1) and an attendance listing (Atch 2) are attached to the minutes.

Please review the minutes and attachments for accuracy and forward any comments to the following:

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The AFS-420 web site contains information relating to ongoing activities including the ACF-IPG. The home page is located at:
http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afs/afs400/afs420/acfipg/
This site contains copies of past meeting minutes as well as a chronological history of open and closed issues to include the original submission, a brief synopsis of the discussion at each meeting, the current status of open issues, required follow-up action(s), and the OPR for those actions. We encourage participants to use this site for reference in preparation for future meetings.

ACF Meeting 08-02 is scheduled for **October 21-23, 2008** with the FAA's National Aeronautical Charting Office (NACO), Silver Spring, MD as host. Meeting 09-01 is scheduled for **April 28-30,** 2009 with the National Geospatial-Intelligence Agency (NGA) as host at the US Geological Survey (USGS) facility, Reston, VA.

Please note that the **meetings begin promptly at 8:30 AM**. Please forward new issue items for the 08-02 IPG meeting to the above addressees not later than October 2nd. A reminder notice will be sent.

We look forward to your continued participation.

Thomas E. Schneider, FAA/AFS-420
Co-Chairman, Aeronautical Charting Forum,
Chairman, Instrument Procedures Group

Attachment: ACF-IPG minutes

GOVERNMENT/INDUSTRY AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
Meeting 08-01 Arlington, VA
April 22, 2008

1. Opening Remarks:

Mr. Tom Schneider, AFS-420, Flight Standards co-chair of the Aeronautical Charting Forum (ACF) and chair of the Instrument Procedures Group (IPG) opened the meeting at 8:30 AM on April 22, 2008. Advanced Management Technology, Incorporated (AMTI), hosted the meeting at their Arlington, VA headquarters. Tom Reiss made welcoming and administrative comments on behalf of AMTI. A listing of attendees is included as attachment 2.

2. Review of Minutes of Last Meeting:

Bill Hammett, AFS-420 (ISI) briefed that the minutes of ACF-IPG 07-02, which was held on October 23, 2007 were electronically distributed to all attendees as well as the ACF-IPG Master Mailing List on November 20, 2007. A revision to issue 04-01-250 was requested by ALPA and made. An additional revision to issue 07-01-274 was requested by ALPA during the review and will be made. The revisions are shown in shaded text. The revised minutes are accepted as distributed.

3. Briefings:

Mike Webb, AFS-420, provided a briefing on the newly formed U.S. Instrument Flight Procedures Panel (USIFPP). The new panel was formed by AFS-420 and is modeled after the ICAO IFPP, which progressed from the former Obstacle Clearance Panel (OCP). The goal of the USIFPP is to expedite development, coordination, and implementation of TERPS criteria changes by having all involved parties working in unison. Formerly, TERPS criteria were developed through the TERPS Working Group (TWG), which included only the TERPS signatories. Criteria were then formally coordinated through other lines of business whose interests may not have been considered in the criteria development process. This often led to long delays as criteria was refined to meet all expectations. As we progress to a performance based National Airspace System (NAS), it has been determined that criteria development must include other lines of business; e.g., Aircraft Certification, Air Traffic, procedure developers, avionics performance specialists, airport infrastructure personnel, etc. The IFPP will include the former TWG and these additional representatives with the goal of better communication and coordination up front to speed up the criteria development and implementation process. Civil and industry input will be through the ACF-IPG and the PARC. A copy of Mike's slides is provided here 

4. Old Business (Open Issues):

a. 92-02-105: Review Adequacy of TERPS Circling Approach Maneuvering Areas and Circling at Airports with High Heights Above Airports (HAAs).

Bill Hammett, AFS-420 (ISI), provided an update on the proposed new TERPS criteria for circling that was briefed at meeting 06-02 as received from Jack Corman, the AFS-420 lead criteria specialist. The new circling criterion is still planned for TERPS change 21, which is currently in the final editing phase and will be circulated for coordination in the near future. An evaluation to determine if a maximum HAA value should be established where circling would not be authorized

will not be accomplished for this change. Further comments on the new criteria are welcome and may be forwarded directly to Jack Corman at jack.corman@faa.gov or TJ Nichols at thomas.j.nichols@faa.gov. Tom Schneider, AFS-420, emphasized that Change 21 is the number 1 priority for the conventional TERPS criteria specialist. Rich Boll, NBAA, asked if the draft was available. Tom responded that it would be placed on the AFS-420 web site and all notified when the draft entered coordination.

Status: AFS-420 to keep the group apprised of progress on criteria coordination. Item Open – Pending Publication (AFS-420).

b. 92-02-110: Cold Station Altimeter Settings (*Includes Issue 04-01-251*).

John Swigart, AFS-470, briefed that the contracted MITRE study to evaluate risk assessment is underway. He stated they wanted to consider a few additional assumptions for the study and that a full briefing will be provided at the next ACF-IPG meeting. Al Herndon, MITRE, added that some of the original assumptions originally briefed were false and the study had to be re-run with corrected assumptions. Tom Schneider, AFS-420, asked whether consideration has been given to including MVA charts in the study. John replied that he is uncertain; however, en route operations are included and perhaps that would include MVAs as well. Mark Ingram, ALPA, stated that everyday US aircrews fly over/to Canada, Alaska, Russia, etc., without a clue regarding cold temperature procedures. Bill Hammett, AFS-420 (ISI), asked why only the lower 48 states are included in the study. Tom responded that if the lower 48 states are impacted, adjustments would automatically include Alaskan procedures. Frank Flood, ACPA, added that the problem is not new. It has been published in the Boeing Performance Manual since 1985 although the onus is always on the pilot and the carrier. The problem is not just within the FAA, but with pilot education material; e.g., the Instrument Procedures Handbook and the AIM. AFS-470 will continue to monitor the study and provide a full briefing at the next meeting.

Status: AFS-470 will continue to track the issue and report. Item Open (AFS-470).

c. 96-01-166: Determining Descent Point on Flyby Waypoints (Originally: Definition of "On Course").

John Swigart, AFS-470, briefed that he is the new specialist for this issue. He realizes the issue has been on the "back burner" for some time and promised that he will work with MITRE to provide an update at the next meeting. Rich Boll, NBAA, requested the status of AC 90-94 and the new AC 90-RNP which is under development and being worked through the PARC. Mark Ingram, ALPA, asked whether this should be an issue for the USIFPP. Tom Schneider, AFS-420, responded perhaps so, since an AC revision is involved. John added that the issue is being addressed by several groups.

Status: AFS-470 to continue efforts to resolve the issue and develop AIM material. Also provide update on status of draft AC 90-RNP. Item Open (AFS-470).

d. 98-01-197: Air Carrier Compliance with FAA-specified Climb Gradients.

Tom Schneider, AFS-420, briefed that at the last meeting, it was recommended that he, as the Chair, write the PARC requesting their intervention in assuring the recommendation for incorporation of the AC 90-101 language into AC 90-100 is followed through. Tom stated the letter was submitted on December 5, 2007. A copy was included in the meeting handout material and is attached here  . Tom also followed up the letter with emails to the PARC Co-Chair on March

13th and April 14th; however, no response has been received. Roy Maxwell, Delta Air Lines, stated that airlines do not have the all-engine aircraft performance data from the manufacturers that would allow a pilot to determine whether the all-engine climb gradient requirements can be met. To simply ask carriers to provide the information to the pilot isn't going to make that happen. Rich Boll, NBAA, stated his organization is interested in more generic information; e.g., "the average climb gradient from takeoff to a specified altitude", not so much a detailed analysis like that required for engine out operations. Mark Ingram, ALPA, stated that regardless of who is responsible for calculating climb gradients, the pilot is responsible for meeting them. Roy noted that as a performance engineer, he doesn't see a meaningful way of providing the information to the pilot because the flight path is not a straight line, and the climb gradient is not constant. Rich added that climb gradients are mandatory when published on ODPs per the new Part 97.20 and Part 91.175(f). Frank Flood, ACPA, stated that situational awareness is key. There are aircraft performance tables available that Air Canada uses to provide their pilots something upon which to base a "go" or "no-go" decision. Rich said that he had been told by Learjet that this type of performance data is not provided in part due to varying speed/configuration profiles that the flight crew may use on takeoff, which makes it difficult to produce such data. Roy responded that this is probably because FAA hasn't provided the parameters needed to develop the data. Rich also suggested this issue be elevated to the USIFPP as Aircraft Certification may need to be involved. In order to implement a 4D NAS, we will need to know where aircraft are, and projected to be, laterally and vertically; perhaps the Takeoff and Landing Performance Assessment Aviation Rulemaking Committee (TALPA ARC) may want to look at the issue. Roy is a member of this ARC agreed to take the issue to this group; however, he noted this group may consider this issue beyond their scope. The ARC is first addressing landing procedures and will address takeoff performance later in the year. Tom will ensure the issue is forwarded to the USIFPP and will follow up on the letter to the PARC.

Status: 1) ACF-IPG Chair will forward the issue for USIFPP consideration and follow up PARC actions. 2) Roy Maxwell will bring the issue before the TALPA ARC for consideration. Item Open (ACF-IPG Chair and Delta Air Lines).

e. 02-01-238: Part 97 "Basic" Minima; ATC DP Minima, and DP NOTAMs.

Dan Reese, AJR-32 (OST), stated that the re-write of Order 7930.2 is underway and the inclusion of SIDs and STARs as procedural NOTAMs is under consideration; however, this may be delayed until implementation of the ICAO format. Bill Hammett, AFS-420 (ISI), stated that the entire US NOTAM system is undergoing evaluation to conform to ICAO standards and format. The target date for ICAO compliance is August 2009. The plan is to combine the military and civil systems into a single national NOTAM system. At a recent planning meeting, Bill recommended that all procedure NOTAMs fall under a single ICAO type. This recommendation was well received.

Status: AJR-32 to continue efforts to revise Order 7930.2 to include SIDs and STARs with all other instrument flight procedure NOTAMs. Item Open (AJR-32).

f. 02-01-241: Non Radar Level and Climb-in-hold (CIH) Patterns.

Bill Hammett, AFS-420 (ISI) briefed that at the last meeting, Pam Coopwood, AJT-2300, briefed the FAA was forming a new Planning and Procedures Group under System Operations, AJR-5000, to jointly work air traffic procedural policy. She also introduced Tim Swope, a contractor from Joint Venture Solutions (JVS), who will work in the new office. Subsequent follow-up discussions with Tim reveal that the new office will not be formed and the Terminal and En Route Service Units will represent themselves on policy and procedural matters. Dan Diggins, ATO-T, briefed that he has recently been tasked to manage the Strategic Operations Group, AJT-22, a new office under

ATO-T. The primary goal of the new Group is to prepare the NAS for ADSB; however, the Group will also address other policy issues. Dan apologized for the past poor participation of the Terminal Service Unit. His new Group is not fully staffed, but is being ramped up quickly. His group will follow up the controller training recommendations for this issue.

Status: The newly formed ATO-T Group will ensure controller training on impromptu climb-in-hold assignment. Item Open (AJT-22).

g. 03-01-247: Holding Pattern Criteria Selection and Holding Pattern Climb-in-Hold Issues.

Dr. Sherri Avery, AFS-450, briefed she has recently taken over the holding study. There has been some recent progress; however, the holding pattern software tool was delayed due to erroneous pilot assumptions. New logic has been developed and the software tool is expected very soon. Conventional holding evaluations will be accomplished first to be followed by an RNAV holding assessment.

Status: AFS-450 to continue ASAT/simulator analysis and report. Item Open (AFS-450).

h. 04-01-250: RNAV and Climb Gradient Missed Approach Procedures.

Tom Schneider, AFS-420, briefed that the AIM change presented at the last ACF-IPG was published in the February 2008 AIM. He also briefed that at the last meeting, it was recommended that the Chair write AFS-600 and AFS-800 requesting climb gradient requirements be emphasized in various other mediums requested by ALPA including the Instrument Flying Handbook, Practical Test Standards, and various pilot proficiency exams, to name a few. The letter was written; a copy was included in the meeting handout material and attached here  Bill Hammett, AFS-420 (ISI), recommended the issue be closed. Kevin Comstock, ALPA, disagreed and requested the Chair send a follow up letter to obtain a response from AFS-600 & 800 on actions taken.

Status: The Chair will follow up the initial letter for actions taken by AFS-600 and 800. Item Open (ACF-IPG Chair.

i. 04-02-258: Vertical Navigation (VNAV) Approach Procedures Using DA(H); OpSpec C073.

John Swigart, AFS-470, briefed that there has been little progress on this issue since the last meeting due to related issues that must be resolved first. He further briefed that work is continuing on the 120-series Advisory Circular. Ted Thompson, Jeppesen, asked why HBAT 99-08 was removed from publication and what document replaced it. John will check this out.

Status: AFS-470 to: 1) Continue to work the issue and revise HBAT 99-08, and 2) Advise Jeppesen what publication replaced HBAT 99-08. Item Open (AFS-470).

j. 05-01-259: Visual Climb Over Airport (VCOA).

Tom Schneider, AFS-420, briefed that with the formation of the USIFPP, a departure working group will be addressing this issue. Since this is a conventional criteria issue, it will not receive a high priority. The next meeting of the departure working group is April 30th.

Status: AFS-420 will continue to track the VCOA issue and report. Item Open (AFS-420).

k. 06-01-262: More Flexible Hold-in-Lieu (HIL) Alignment Options For Public RNAV IAPs.

Bill Hammett, AFS-420 (ISI), provided an update as received from Jack Corman, the AFS-420 lead criteria specialist. The more flexible HIL criteria, recommended through the ACF, is now contained in Order 8260.54A, *The United States Standard for Area Navigation (RNAV),* which was signed on December 7, 2007. Government agencies will implement the new criteria when software is developed. The FAA Module 1 delivery is due in late Fall of 2009 and acceptance is expected in early 2010. Third-party procedure developers must follow the new criteria immediately. Brad Rush, AJW-321, briefed that IAPA software mandates a 90 degree maximum and this requirement has also been incorporated in Order 8260.52.

Status: CLOSED

l. 06-02-264: Uniform Standard for Use of Climb Gradients in Public IAPs

Brad Rush, AJW-321, briefed that all work has been completed for the requested procedure amendments. San Francisco was amended in February, 2008. The amendment for Burbank, which was scheduled for June, has been slipped to July 31, 2008. Kevin Comstock, ALPA, asked how Jeppesen would depict the information. Ted Thompson, Jeppesen, replied they chart procedures as indicated on the 8260-series form. Brad requested the issue be closed and Rich Boll. NBAA, agreed. **Status:** CLOSED.

m. 06-02-267: Pilot Option to Use Standard Timing for RNAV IAP Holding Patterns

Sherri Avery, AFS-450, briefed that using standard timing in-lieu-of specified leg lengths for RNAV holding has been included in the AFS-450 holding pattern study initiated under related issue 03-01-247.

Status: AFS-450 to include timing for RNAV holding in the study. Item Open (AFS-450).

n. 06-02-268: Lack of Graphic Obstacle Departure Procedures (ODPs).

Brad Rush briefed that the NFPO is still addressing the complex ODP lists submitted by NBAA and Continental Airlines as well as correcting the discrepancies noted in the AFS-420 memorandum of September 15, 2006. He estimates all work relating to the AFS-420 discrepancy list will be complete by July 31, 2008. Brad also added that all complex ODPs on the NBAA and Continental priority lists (see Editor's note below), as well as KDCA, which was requested by ALPA, are being reviewed to determine whether they meet graphic charting requirements. Those that do are then being entered into the NFPO Production schedule for conversion to graphic depiction. Rich Boll, NBAA, commented that he had checked the list and didn't see all the requested ODPs. Brad will follow this up. Per tasking at the last meeting, Ted Thompson, Jeppesen, stated that Jeppesen received the FAA's spreadsheet revising SID designations and corrected what Jeppesen charts had incorrect titles. He noted that the 8260-15B for the SID at Grand Junction, CO did have the "Obstacle" box checked. Brad agreed to validate the source for this procedure and coordinate the results with Ted. Rich Boll, NBAA, stated that he had also discovered several RNAV STARS that still had the "Type A/B" annotation vice "RNAV 1/2. Rich agreed to forward these to procedures to Brad and Ted to resolve.

Status: 1) The NFPO continue efforts to graphically chart complex ODPs and report progress; 2) NFPO validate that the "Obstacle" box is not checked on the Grand Junction SID; and, 3) NBAA forward incorrectly annotated RNAV STARs to the NFPO for correction. Item Open (AJW-321 and NBAA).

Editor's Note: *Post meeting, Brad Rush noted that three of the requested locations (Sheppard AFB/Wichita Falls Muni, TX, Eielson and Elmendorf AFBs, AK) for graphic ODP depiction are under the purview of the USAF. Tom Schneider, AFS-420, has forwarded the request for graphic publication of these ODPs to AFFSA.*

o. 07-01-269: Diverse Vector Areas (DVAs).

Bill Hammett, AFS-420 (ISI) briefed that at the last meeting, Pam Coopwood, AJT-2300, stated the FAA's new System Operations Planning and Procedures Group, AJR-5000, would address this issue. However, as noted during discussion of issue 02-01-241, the new group was not formed; therefore, on January 28, 2008, the issue and related correspondence were forwarded to the ATO Terminal Service Unit (Gary Norek, AJT-23), for action. It appears nothing has been done within Air Traffic since the last meeting to address the issue. Tom Schneider, AFS-420, briefed that AFS-420 is currently revising FAA Order 8260.46, *Departure Procedure (DP) Program*. DVA documentation requirements have been included in the draft 8260.46D. A charting change IACC Requirements Document (RD) has also been prepared and forwarded to the IACC Member Points of Contact (MPOC) for consideration. Rich Boll, NBAA, asked if DVAs would routinely be established when a diverse departure analysis was conducted. Tom responded no; the requirement for DVA establishment is up to the air traffic facility. Dan Diggins, AJT-22 stated that his new organization would be addressing this issue. He believes there are two specifics involved, criteria for DVA development and policy for DVA establishment. From reviewing the past history, it appears from the minutes that many terminal facilities are issuing radar vectors to departures believing they have a DVA established. Others are using radar vectors for departures whether they have a DVA established or not. Rich Boll, NBAA, briefed that informal research by his organization in the Western Service Area indicates there are only approximately 10 DVAs established. Kevin Comstock, ALPA, asked whether there is a list of locations with DVAs established. Brad Rush, AJW-321, responded that a NFPO query through the ATO Service Area FPOs indicated they have no record of any DVAs being established. Rich added that NBAA pilots, at some locations, have experienced ATC issuing a heading to fly on takeoff concurrent with their ATC clearance and then asking pilots to verify that it meets obstacle clearance requirements. *(**Editor's note**: There is a provision for this request in Order 7110.65, paragraph 4-3-2-c-3. Provisions for vectoring below the MVA are specified in 7110.65, paragraph 5-6-3)*. Tom said this would be an issue for ATPAC as it involves controller procedures. Richard Kagehiro, AJE-32, indicated that is acceptable for controllers to issue an initial heading to be flown after departure; however, it may not necessarily be considered a "radar vector" prior to the controller saying "radar contact". Kevin added that it appears any ATC interpretation that pilots have the responsibility for terrain and obstacle avoidance when given a heading to maintain along with their take-off clearance is inconsistent with the intent of Order 7110.65 paragraph 4-3-2-c-3 and Example, and appears to contradict Part 91.123, which requires pilots to follow ATC instructions. In addition, 7110.65, paragraph 5-6-3 a through c, should be re-written. Currently it appears to read that ATC can vector below MVA as long as the vector avoids obstructions shown on the radar scope. Anywhere there is an ODP but no DVA, there is no assurance that all relevant obstructions are on the radar scope. Dan confirmed that once a controller defines a specific track across the ground; e.g., issues an initial departure heading, ATC is responsible for terrain/obstacle clearance. The supporting rationale is that ATC took away a pilot's ability to laterally maneuver their aircraft either using an approved ODP or visually avoiding terrain/obstacles in a specific direction until proceeding on course (as listed in AIM paragraph 5-2-8).

There was further discussion indicating that perhaps Air Traffic should publish guidance that controllers cease issuing diverse vectors at airports where a published ODP exists unless a DVA has been formally established under current directives. Dan agreed to take action to ensure proper guidance is provided controllers. Bill added that the guidance must apply to both the Terminal and En Route specialties as ARTCCs are increasingly assuming more terminal type control duties due to part-time terminal facilities. The discussion was lengthy and yielded several IOUs: Brad and Dan will jointly research the number of valid DVAs. The NBAA list will be used to help in this effort. [***Note**: Jeff Struyk, NGA, requested a copy of the validated list when completed.*] Dan and Richard Kagehiro, AJE-31, will jointly develop controller guidance. Tom will continue to track DVA documentation and charting

Status: 1) AJW-321 and AJT-22 will jointly determine the number of valid DVAs; 2) AJT-22 and AJE-31 will jointly ensure controller guidance is developed for radar vectoring departures at airports where an ODP is established; and, 3) AFS-420 will continue to track DVA documentation and charting during the re-write of Order 8260.46. Item Open (AJW-321, AJT-22, AJE-31, and AFS-420.

p. 07-01-270: Course Change Limitation Notes on SIAPs.

Tom Schneider, AFS-420, briefed the following input as received from Jack Corman, the AFS-420 lead criteria specialist: "Current TERPS criteria has supported the conventional airway/feeder route connections in the past and Notes are not currently "required". This may change when reviewed for a future TERPS change. In the current work plans, this is low priority and the issue will be addressed through the USIFPP.

Status: AFS-420 to monitor progress through the USIFPP. Item Open (AFS-420).

q. 07-01-272: Using an ODP in lieu of the Published Missed Approach Procedure.

Tom Schneider, AFS-420, briefed that new AIM language was developed in concert with AFS-410 and has been submitted for publication in the August, 2008 AIM. The change adds a new paragraph 5-4-21-c (remaining paragraphs are re-numbered) as follows:

> c. Initiating a go-around after passing the published MAP (for example, a balked landing) may result in total loss of obstacle clearance because the aircraft flight path may not fall within missed approach procedure protected area. To compensate for the possibility of reduced obstacle clearance during a balked landing/go-around, a pilot should consider the airport operating environment, including known natural (trees/vegetation) and man-made obstacles. At some airports, pilots may wish to refer to airport obstacle and departure data prior to initiating an instrument approach procedure. Such information may be found in the "TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES" section of the U.S. TERMINAL PROCEDURES publication. Depending upon the airport operating environment, characteristics of the published missed approach procedure, overall aircraft performance capability, and other relevant considerations, pilots may wish to take one or more of the following actions after initiating a balked landing/go-around beyond the published MAP:
>
> 1. Where practical, re-establish the aircraft laterally and vertically on the published missed approach procedure (for example, a straight-ahead climb, as rapidly as possible, may be all that is necessary to re-join the missed approach segment. Re-joining a turning missed approach may also be possible if the turn point has not yet been reached.).

2. Adjust aircraft climb performance as necessary for the local environment (i.e., climb as rapidly as possible to avoid obstructions that would not have been factored in the design of the published missed approach procedure since the climb would have started earlier).

3. Maintain visual conditions and reattempt landing, if practicable.

4. Where available, fly a published obstacle departure procedure (ODP) for the relevant runway.

5. Comply with ATC instructions when Radar vectors have been issued or can be requested.

NOTE: As soon as possible, pilots should coordinate with and/or inform ATC of their intended actions.

Tom advised that this change had been submitted for publication. If anyone has any requested changes to the above text to forward them to him NLT June 15 in order to allow time for coordination to meet the July 31 cutoff for the February AIM. Roy Maxwell, Delta Air Lines, stated that the change supports language published in AC 120-29A (***Editor's Note:*** *see paragraphs 4.3.1.8 and 6.2.16*). Rich Boll, NBAA, suggested this change be included in the next revision to the IPH and also forwarded to AFS-600/800 for inclusion in Practical Test Standards. Kevin Comstock, ALPA, recommended that the ACF should follow up with the appropriate FAA branches (including the ATO) and other organizations (e.g., Jeppesen, LIDO, etc.) to make sure ACF recommendations have been properly implemented. There have been times in the past where ACF has closed an issue before it is fully resolved and sometimes we find out years later that the issue still exists. (***Editor's Note:*** *The Chair would like to add for the record that this may have been true in the past; however, current practice is to leave issues open until fully resolved).* Kevin added the ACF also needs to do a better job of making sure all parties have been coordinated with before changes are made and record who from what organizations signed off on the change. This will ensure better record keeping and provide the ability to justify changes and answer questions after implementation. Kevin also recommended that the Terminal Service Unit develop controller awareness training regarding the possibility of a pilot using the ODP in lieu of the published Missed Approach Procedure (MAP); Dan Diggins, AJT-22, agreed to follow up on this. Frank Flood, ACPA, mentioned San Francisco as an airport of concern noting that most (if not all) air carrier pilots will fly the missed approach because it is what is programmed in the data base. Richard Kagehiro, AJE-31, questioned whether the Forum was considered an Advisory Committee. Bill Hammett, AFS-420 (ISI), replied no and provided a verbal history on the coordination of Order 7910.5, *Aeronautical Charting Forum,* through FAA's General Counsel that allowed exemption of the Forum from the federal Advisory Committee Act. Richard then asked whether the AIM change was coordinated through Air Traffic. Tom replied that he would have to check this process. Rich then asked what regulatory guidance allows pilots to use an ODP in lieu of a published MAP. Tom agreed to research this.

Status: 1) AFS-420 will track the AIM submission and prepare follow up memos to AFS-600/800. 2) AJT-22 will ensure controller awareness training material is developed.
Item Open - (AFS-420 and AJT-22).

Editor's Comment: *On Thursday, the last day of the Charting Group's meeting, Tom Schneider, AFS-420 and Chair of the ACF-IPG, briefed that on Wednesday, Richard Kagehiro, AJE-31, advised that he had contacted the ATO Publications Group, AJR-31, and taken action to stop the publication of the AFS-400 requested AIM change noted above. Tom had hoped that Richard would have attended the last day of the meeting to explain his rationale to the Forum; however, Richard was not in attendance. Tom briefed that this action is setting a dangerous precedent. The AIM has an office of*

primary responsibility (OPR) for each paragraph and AFS-400 is OPR for paragraph 5-4-21. It is concerning that an office other than the OPR, who may not fully understand the reason for the change, could have the influence to stop changes requested by the OPR without proper justification. Tom added that he had discussed the AIM change with Dan Diggins, AJT-22, and he, as the Terminal Service Unit representative to the ACF-IPG, has no issue with the proposed change. Roy Maxwell, Delta Air Lines, again emphasized that the language in the AIM change echoes and clarifies guidance that is already published in AC 120-29A. Tom will work this development through AFS-400 and ATO channels. As of May 16, consensus on the proposed AIM change could not be reached between AFS-400, AJW-3, AJE-31, and AJT-22; therefore, the AIM change originally submitted for publication on July 31 has been withdrawn. A follow-on meeting will be scheduled with the aforementioned parties to reconcile the differences and prepare a submission for the March 12, 2009 AIM publication.

r. 07-01-274: AIM Information Regarding ODP Minimum Crossing Altitudes

Bill Hammett, AFS-420 (ISI), stated that the AIM change briefed at the last meeting was published in the February 2008 AIM. Tom Schneider, AFS-420, briefed that subsequent to the last meeting, his office has received several inquiries regarding charting dual altitude restrictions at the same fix on SIDs. Tom went on to add that there has been a requirement to annotate both “ATC” and obstruction crossing “MCA” altitudes on SIDs since Order 8260.46A was published on 10/16/00. Bill briefed this requirement arose from ACF issue # 92-02-103, submitted by ALPA regarding the GABRE SID at KLAX. Controllers were routinely holding aircraft down and vectoring departures off the SID, then advising the pilot to re-join the SID and disregard the 11,000 restriction at GABRE. The 11,000 restriction was for ATC purposes; however, ALPA pointed out that approximately 9,300' was required for obstruction clearance. This fact was unknown to the pilot who was at the mercy of ATC monitoring to ensure obstruction clearance. The ACF recommendation was to publish a MCA on SIDs when required for obstruction clearance to provide pilot awareness of underlying obstructions. This was the basis for the 8260.46 policy change and subsequent charting of an MCA at GABRE. Kevin Comstock, ALPA, stated that the language in Order 7110.65, paragraph 4-2-5, and AIM paragraph 4-4-10-g, should be revised so that it is consistent with AIM paragraph 5-2-8-e-7 - not allowing MCA altitudes to be cancelled by controllers. Brad Rush, AJW-321, stated that MCA is an en route term and should not be used on other than en route airways. Bill responded that although the Pilot/Controller Glossary definition of MCA refers to en route operations, it should be understood that the meaning is applicable wherever used. The MCA flag icon is also described in the Terminal Procedures Publication (TPP) legend page for SIDs and STARs. The MCA flag has been on the GABRE SID for years and the “(MCA)” annotation has been on the ZEFFR SID for quite some time. James Taylor, AFFSA, stated that all published altitude restrictions should be considered mandatory unless removed by the controller. Richard Kagehiro, AJE-31, recommended that changes to Order 8260.46 be held in abeyance until ATC, AFS, and pilots are all in agreement. Ted Thompson, Jeppesen, noted that database coding can only reflect one altitude per fix. Kevin recommended that both the ATC altitude and MCA altitude be charted, but only the "(MCA)" be put next to the appropriate altitude and not "(ATC)" next to the ATC altitude to save on chart clutter; however, there was no consensus on this recommendation. At this point in the discussion, Rich Boll, NBAA, introduced a new issue closely related to the issue under discussion - See Issue 08-01-280, which has been inserted below. As noted in the three examples in the issue paper there is a lack of standardization in depicting altitude restrictions. For example, the ZEFFER SID at Reno (KRNO) is depicted on the government charts with both MCA and ATC designations in accordance with Order 8260.46.

However, the EDETH SID at Salt Lake City (KSLC), which also has obvious ATC and obstacle requirements, does not. Lastly, the GABRE SID at Los Angeles (KLAX) uses an MCA icon (flag) vice the "(MCA)" annotation. Rich also noted that the newly implemented RNAV SIDs at KSLC have experienced numerous altitude violations due to the use of "at or below" initial restrictions. As a result, KSLC TRACON began issuing a hard 10,000' initial altitude assignment concurrent with the initial ATC clearance. He added that lost communications instructions should be published on the KSLC RNAV SIDs because pilots complying with the initial 10,000' initial altitude assignment per Part 91.185 may lose obstacle clearance flying these SIDs in the event of lost comm. Rich closed by adding that there may be significant human factors issues associated with current practices. Ted Thompson, Jeppesen, stated that they had historically only charted one altitude; the one which matched the database coding. They are now charting dual altitudes when specified on the procedure source. Kevin stated that the publication of the obstruction clearance altitude is important knowledge for the pilot. He added there is no reason this safety information should only reside with ATC; providing the MCA altitudes to pilots creates a good redundancy in the aviation system. This would be especially helpful if an aircraft lost communications when assigned an altitude lower than a published MCA. Dan Diggins, AJT-22, stated that it is common for controllers to take an aircraft off (both vertically and laterally) an assigned procedure. Rich interjected that when this happens ATC "owns" the aircraft. During the discussion, a suggestion was made that anytime ATC removes an aircraft from a SID they stay removed until in the en route structure. Bill noted that this was also suggested during the discussion of issue 90-02-103; however, ATC rejected this proposal. He then asked the status of the "climb via" phraseology issue. Paul Ewing, AJR-37 (AMTI), stated the issue is still being worked by the RNAV/RNP office. Rich proposed another possible way to handle this issue is to publish MOCAs on all segments of the SID. Brad Rush commented that MOCAs are currently only required on SID transitions. Jaques Beaudry, NAV Canada, pointed out the initial segment MOCA would be higher than the runway so the pilot would be in violation of the MOCA immediately after taking off. Tom confirmed that adding a MOCA along a route where an aircraft is climbing to achieve en route obstacle clearance is impractical and could cause pilot confusion. After much discussion, it was agreed to combine new issue 08-01-280 with this issue and form an ad-hoc working group to resolve all related DP issues to include: Order 8260.46 policy, ATC procedures, AIM revisions, graphic DP charting specifications, using "MCA" on SIDs vs. development of a new designation, etc.. Tom Schneider agreed to chair the working group. A listing of those who signed up to participate in the DP working group is attached here  .

Status: AFS-420 will chair an ad-hoc working group to address both issues and recommend resolutions. Item Open - (AFS-420).

Editor's Note: *New issue 08-01-280, which is now included in this issue follows:*

GOVERNMENT/INDUSTRY AERONAUTICAL CHARTING FORUM
Instrument Procedures Group
April 22, 2008

RECOMMENDATION DOCUMENT

FAA Control # 08-01-280

Subject: Minimum Obstruction Clearance Altitudes Depicted on Standard Instrument Departures (SIDs)

Background/Discussion: *FAA Order 8260.46C, Departure Procedure Program, paragraph 10(f)(1), Charting Minimum Altitudes, requires that SIDs (both conventional and RNAV) must depict minimum altitudes for obstruction clearance; and, where appropriate, any required minimum ATC altitudes. Where these differ, documentation of both minimum altitudes is required on the 8260-15 form. Appendix 5 (Non-RNAV DP's) and Appendix 6 (RNAV DP's) of this Order require that SIDs accommodate ATC and obstruction clearance requirements by documenting the ATC altitude followed by the altitude required for obstruction clearance. Charting agencies must depict the obstruction altitude as a minimum crossing altitude (MCA). An example of the application of this requirement may be seen on the attached ZEPHR THREE RNAV SID at Reno, NV (RNO).*

Some recently published Graphic DP's fail to depict minimum obstruction clearance altitudes in accordance with the above stated requirements. Two examples of SIDs that do not comply are the EDETH ONE (RNAV) at Salt Lake City, UT (SLC) and the GABRE SIX at Los Angles, CA (LAX), both of which are attached. Further, there are several other Graphic DPs currently in coordination that also fail to depict the minimum altitudes for obstruction clearance.

The failure to provide minimum altitudes for obstruction clearance on SIDs published at airports located in mountainous terrain, coupled with the absence of lost communication procedures on these same SIDs, creates a serious hazard to a departing aircraft whenever ~~if~~ ATC intervenes with the published climb instructions and if communication with ATC is

subsequently lost. Without minimum obstruction clearance altitudes depicted on these Graphic DP's as required by 8260.46C, a pilot is unable to apply the requirements of 14 CFR 91.185 and 14 CFR 91.191 following loss of communication with ATC. This raises the very significant potential for a controlled flight into terrain (CFIT) event.

Further, without minimum altitudes for obstruction clearance published on the Graphic DP, a pilot is unable to apply the recently issued guidance contained in AIM 5-2-8 (e)(7):

> ***7.*** *If an altitude to "maintain" is restated, whether prior to or after departure, previously issued "ATC" altitude restrictions are cancelled. All minimum crossing altitudes which are not identified on the chart as ATC restrictions are still mandatory for obstacle clearance. If an assigned altitude will not allow the aircraft to cross a fix at the minimum crossing altitude, the pilot should request a higher altitude in time to climb to the crossing restriction or request an alternate routing. ATC altitude restrictions are only published on SIDs and are identified on the chart with "(ATC)" following the altitude. When an obstruction clearance minimum crossing altitude is also to be published at the same fix, it is identified by the term "(MCA)."*

The above guidance was added to the 14 February 2008 edition of the AIM in response to ACF-IPG agenda item 07-01-274. The purpose of this change was to emphasize that an altitude restriction not identified on the chart as an ATC restriction is mandatory for obstruction clearance purposes. NBAA feels that this ACF-IPG agenda item cannot be closed until Graphic DP's properly depict minimum altitudes for obstruction clearance in accordance with 8260.46C.

Recommendations:

All Graphic DP's should be designed and charted in accordance with the criteria contained in FAA Order 8260.46C with respect to fix minimum altitudes for obstruction clearance (MCA) and for air traffic purposes (ATC). Further, the future revision to the 8260.46 Graphic DP's should require the charting of the applicable MOCA for all non-vector procedure legs.

An immediate review of all Graphic DP's published since the issuance of the "C" revision to the 8260.46 Order should be initiated to ensure that minimum crossing altitudes for obstruction clearance are properly charted. Priority should be given to SIDs established at airports located in designated mountainous terrain as specified in 14 CFR 95, Subpart B. Further, all Graphic DP's currently in coordination should also be reviewed for compliance with 8260.46C.

To ensure that controllers fully understand the design implications of altitude restrictions and climb gradients published on all DPs, both ODPs and SIDs, whether textually or graphically depicted, ATO-T should provide additional guidance through an appropriate means, i.e. Air Traffic Bulletin, Mandatory Briefing Item, and/or revision to the 7110.65 Handbook, regarding which altitude restrictions and/or climb gradients cannot be canceled or otherwise amended by the controller. This guidance should further advise that tactical intervention applied to departing aircraft should not unduly restrict the aircraft's ability to meet a climb gradient established for obstruction clearance, to achieve a (MCA) crossing altitude established for a fix, or the MOCA for a leg as published on the Graphic DP.

Comments: *This recommendation affects all Departure Procedures, especially SIDs that have both ATC and obstruction clearance requirements, developed in accordance with FAA Order 8260.46C & future revision and Air Traffic Organization's guidance to air traffic controllers.*

Submitted by: Richard J. Boll II
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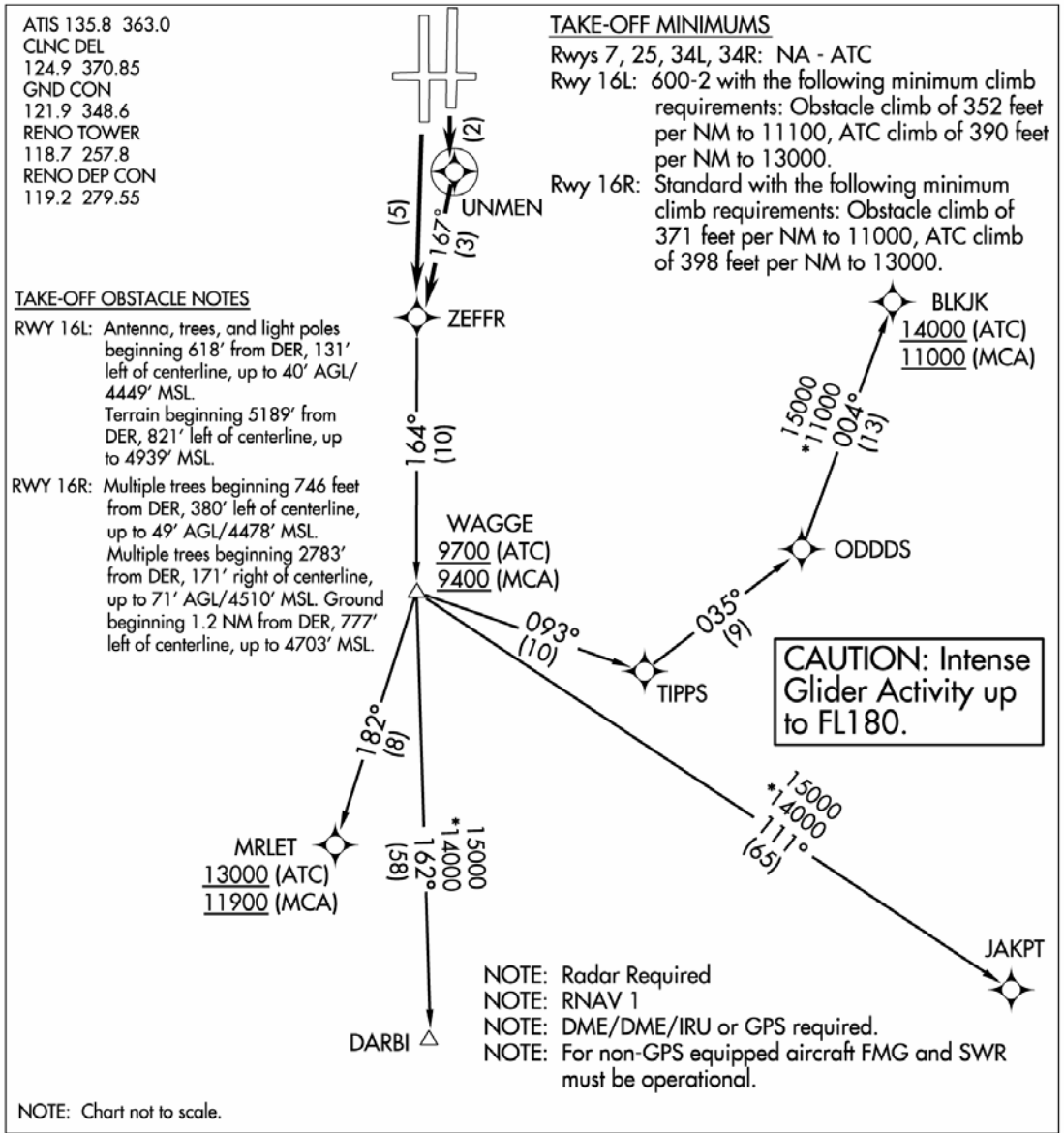
FAX: 202-331-8364
E-mail: richard.boll@sbcglobal.net
Date: April 08, 2008

(ZEFFR3.ZEFFR) 08045

ZEFFR THREE DEPARTURE (RNAV)

SL-346 (FAA)

RENO/TAHOE INTL (RNO)
RENO, NEVADA



SW-4, 14 FEB 2008 to 13 MAR 2008

SW-4, 14 FEB 2008 to 13 MAR 2008

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 16L: Climb direct UNMEN, then via 167° track to ZEFFR, Thence...

TAKE-OFF RUNWAY 16R: Climb direct ZEFFR, Thence...

....via (transition) or (assigned route). Maintain 15000. Expect clearance to filed altitude five minutes after departure.

BLKJK TRANSITION (ZEFFR3.BLKJK)

DARBI TRANSITION (ZEFFR3.DARBI)

JAKPT TRANSITION (ZEFFR3.JAKPT)

MRLET TRANSITION (ZEFFR3.MRLET)

ZEFFR THREE DEPARTURE (RNAV)

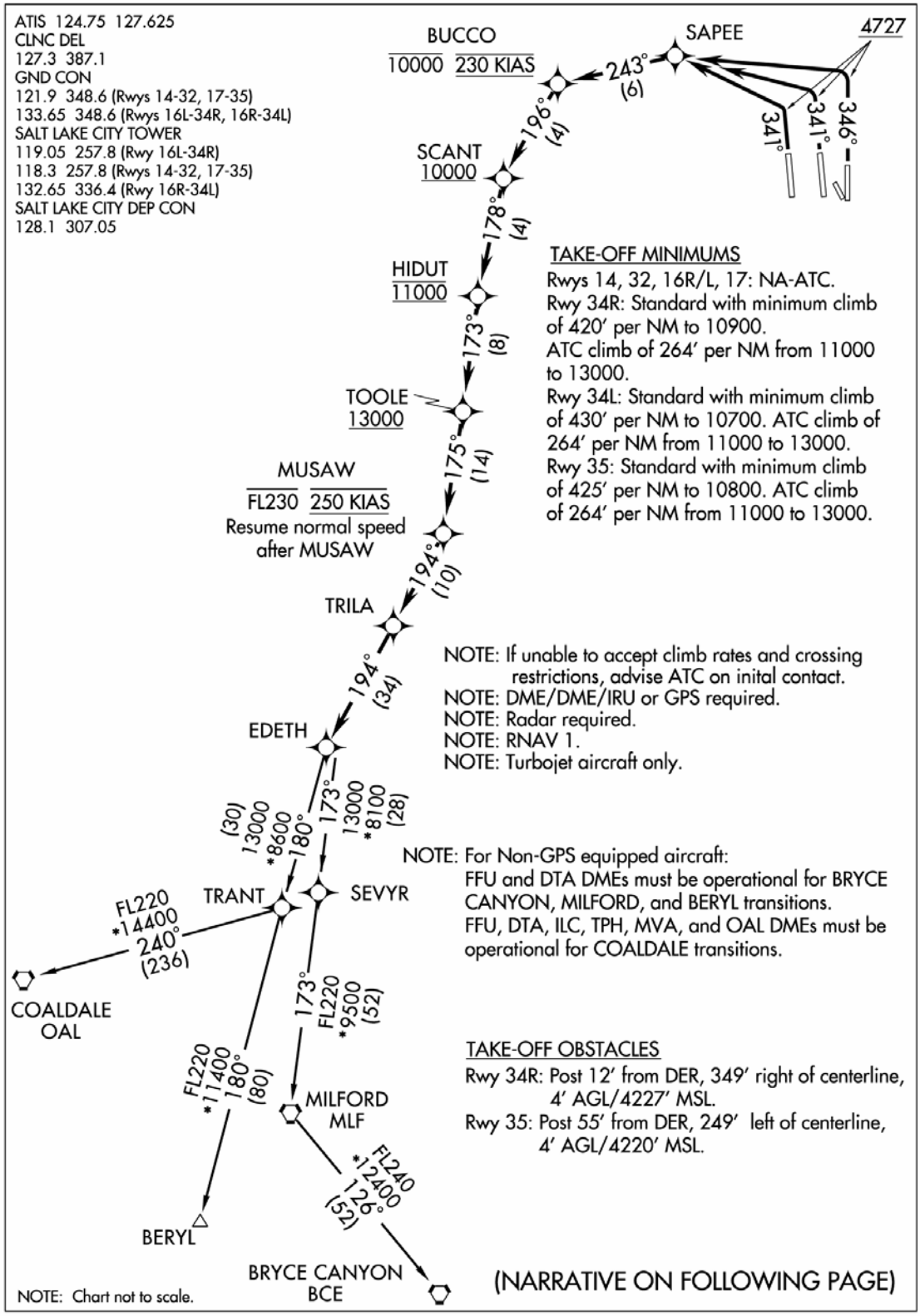
RENO, NEVADA
RENO/TAHOE INTL (RNO)

(ZEFFR3.ZEFFR) 08045

(EDETH1.EDETH) 07354 SL-365 (FAA)

EDETH ONE DEPARTURE (RNAV)

SALT LAKE CITY INTL(SLC)
SALT LAKE CITY, UTAH



SW-4, 13 MAR 2008 to 10 APR 2008

SW-4, 13 MAR 2008 to 10 APR 2008

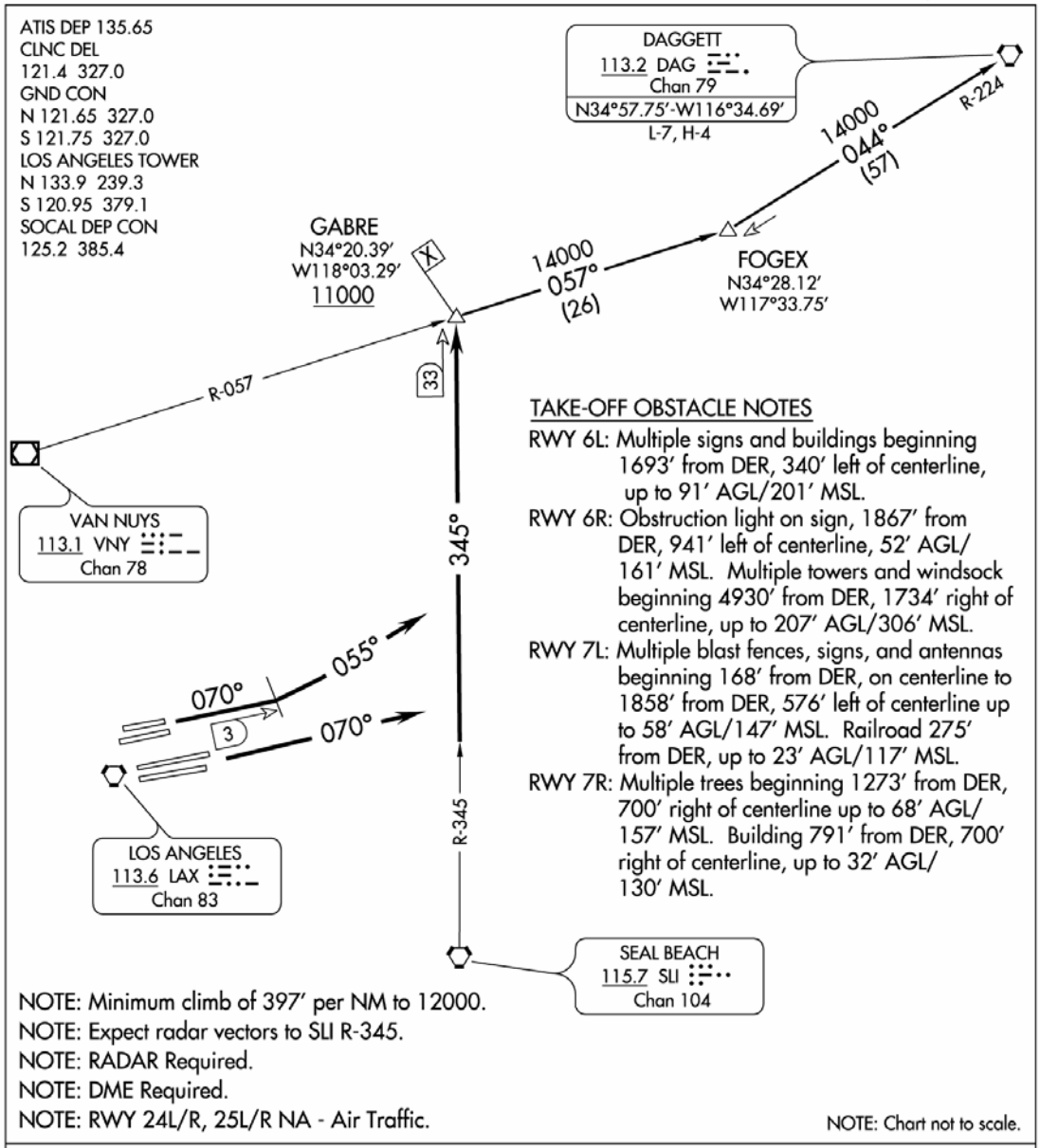
EDETH ONE DEPARTURE (RNAV)
(EDETH1.EDETH) 07354
SALT LAKE CITY, UTAH
SALT LAKE CITY INTL (SLC)

(GABRE6.GABRE) 08101

GABRE SIX DEPARTURE

SL-237 (FAA)

LOS ANGELES INTL (LAX)
LOS ANGELES, CALIFORNIA



SW-3, 10 APR 2008 to 08 MAY 2008

SW-3, 10 APR 2008 to 08 MAY 2008

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 6L/R: Climb heading 070° until the LAX VORTAC 3 DME, then turn left heading 055° for vector to SLI R-345. Thence....

TAKE-OFF RUNWAY 7L/R: Climb heading 070° for vector to SLI R-345. Thence....

....via SLI R-345 to GABRE INT. Then via (transition) or (assigned route).

DAGGETT TRANSITION (GABRE6.DAG): From over GABRE INT via VNY R-057 and DAG R-224 to DAG VORTAC.

GABRE SIX DEPARTURE

LOS ANGELES, CALIFORNIA
LOS ANGELES INTL (LAX)

(GABRE6.GABRE) 08101

s. 07-02-278: Advanced RNAV (FMS/GPS) Performance of Holding Patterns Defined by Leg Length

Sherri Avery, AFS-450, briefed that this issue has been included in the holding pattern study. Advanced FMS holding allows pilots to see exactly where they are flying but not whether they have containment in the holding protected area. Sherri further briefed that an initial review indicates that the containment areas are better than thought. She showed several examples where if the FMS flew the specified leg length as **inbound** vice **ATD outbound**, the aircraft would still be contained. Rich Boll, NBAA, questioned how this is possible when the avionics will fly whatever outbound is necessary to achieve the specified inbound leg length, Tom Schneider, AFS-420, questioned whether all FMS' are performing the same way. Rich responded that ARINC 424 only specifies coding of the inbound leg track and a length (distance). Adrienne Funk, AJW-352 reminded the group that this distance is not specific to either the outbound or inbound leg. Bill Hammett, AFS-420 (ISI), stated that this could be a serious safety issue, especially when holding in areas tightly constrained by terrain. Steve Barnes, AFS-450, re-iterated that if the correct template is used, it is not a safety factor. Either slant range or inbound leg length will provide containment. There is no indication that it is a significant safety issue; however, it will be assessed in the study. Tom added that as an interim measure, AFS policy terminated using smaller RNAV holding pattern templates and requires conventional criteria application for all holding. Ted Thompson, Jeppesen, briefed that this issue has been discussed at the Jeppesen Standards Group. At present there is no forum addressing this coding issue. Ted has recommended that it be considered by the ATA sub group designated to address FMS programming standardization. Mark Ingram, ALPA, stated that something needs to be done to study how FMS' are flying holding patterns especially on SIDs and STARs. Rich recommended something similar to the study MITRE accomplished on SID and STAR lateral flight tracks. Kevin Comstock, ALPA, recommended the issue be brought before ARINC. Tom stated that the AFS-420 representative on the ARINC 424 committee is aware of the issue

Status: 1) AFS-450 to continue to work the issue with input from AFS-470 and provide updates; and, 2) AFS-420 pursue insurance that ARINC coding specifications are in consonance with holding pattern containment requirements.
Item Open (AFS-450/470 and AFS-420).

5. New Business:

a. 08-01-279: Expected Airplane Performance on Instrument Departure Procedures

New issue introduced by Rich Boll, NBAA. NBAA believes that the AIM language relating to aircraft performance on departures is not clear in affirming that underlying TERPS and Pans-Ops criteria are based on all engines operating. The NBAA recommendation includes specific AIM changes. The Forum consensus was that the recommended NBAA changes are valid. Tom Schneider, AFS-420, recommended the issue be forwarded to AFS-410 for editorial review and consideration for inclusion in the Mar 12, 2009 AIM Change. Bruce McGray, AFS-410, accepted the task.

Status: AFS-410 to coordinate the requested AIM change for March 2009 publication.
Item Open (AFS-410).

b. 08-01-280: Minimum Obstruction Clearance Altitudes Depicted on Standard Instrument Departures (SIDs)

New issue introduced by Rich Boll, NBAA, regarding charting of dual (ATC and obstruction clearance) altitude requirements on SIDs. This issue was brought into the discussion of issue 07-01-274 and the group as a whole recommended the two issues be combined and both worked by the ad-hoc departure working group.

Status: Issue is combined and will be tracked with Issue 07-01-274. CLOSED

c. 08-01-281: Cold Temperature Annotations on RNAV (GPS) Approaches

New issue introduced by Mark Ingram, ALPA, for Bill Royce, Boeing Flight Operations. Boeing is concerned that the charted note, "Baro-VNAV not authorized below XX deg C" inappropriately targets baro-VNAV as unsafe. The note could lead pilots to fly a "dive and drive" methodology, which is also affected by temp. Kevin Comstock, ALPA, pointed out this issue was brought to the ACF by Ted Thompson, Jeppesen, in 2001 (Issue 04-01-251). At the same meeting the issue was presented, it was combined with Issue 92-02-110 and then never discussed again. Tom Schneider, AFS-420, advised that the note quoted above is outdated. The correct notes required in the current Order 8260.19 are: "For uncompensated Baro-VNAV systems, LNAV/VNAV NA below ____°C (____°F) or above ____°C (____°F). For RNAV RNP procedures, use: "For uncompensated Baro-VNAV systems, Procedure NA below ____°C (____°F) or above ____°C (____°F)". Tom added that revised AIM language has been forwarded for publication on July 31 that will emphasize that temperature limitations do not apply to flying the LNAV/VNAV line of minima using approach certified WAAS receivers when LPV or LNAV/VNAV are annunciated to be available. Brad Rush, AJW-321, said it will take years to modify the thousands of currently published approaches with the old note to the new note language. Bill Hammett, AFS-420 (ISI) stated that cold temperature corrections are used by ATC at some USAF locations. Dan Diggins, AJT-22, questioned whether the procedures were controller or pilot initiated. James Taylor, USAFFSA, responded that USAF pilots are instructed to apply cold temperature corrections to approach procedures as they deem necessary as long as the altitude is identified as "at or above". Mark will further research the issue and report at the next meeting. A copy of Bill Royce's briefing slides is attached here 

Editor's Addition: *Although not presented at the meeting, the following pre-meeting input on the issue was developed by Jack Corman, the AFS-420 lead RNAV criteria specialist, and is provided for historical purposes: "It is important to note that for ILS, when airport temperatures are very low, the vertical path of the glide slope does not change; therefore, the ILS obstacle clearance surface continues to provide obstruction clearance. In this case, an additive to DA can compensate for low temperature. In Baro-VNAV, when airport temperatures are very low, the vertical path flattens. A coded 3 degree path in reality (without cockpit indications) becomes somewhat less than 3 degrees. The obstacle clearance surface still protects for 3 degrees; however, when the realized glidepath is less than 3 degrees because of cold temperatures, required minimum obstacle clearance is not provided - the colder the temperature, the greater the hazard (loss of obstacle clearance). The hazard becomes excessive below the published temperatures; hence a note prohibiting Baro-VNAV is published. A DA additive in these cases is of little benefit, since the aircraft is actually below the protected path from the FAF inbound, not just at DA. An additive to the FAF altitude and DA is better, but we haven't officially quantified (universally blessed for obstacle clearance) the values to use. They may well be like those depicted in the table*

depicted in the presentation. Until such action is officially taken, I see no alternative to the published note unless some other ops spec mandated action can assure the aircraft flies the designed path."

Status: ALPA will coordinate with Boeing to see if the new note language satisfies the Boeing concern so that the issue may be closed. Item Open (ALPA).

6. Next Meeting: ACF Meeting 08-02 is scheduled for **October 21-23** with NACO, Silver Spring, MD scheduled as host. Meeting 09-01 is scheduled for **April 28-30** with NGA as host at the USGS facility in Herndon, VA. Meeting 09-02 is tentatively scheduled for **October 27-29** with host TBD.

Please note the attached Office of Primary Responsibility (OPR) listing (attachment 1) for action items. It is requested that all OPRs provide the Chair, Tom Schneider (with an information copy to Bill Hammett), a written status update on open issues not later than October 3, 2008 - a reminder notice will be provided.

7. Attachments (2):
1. OPR/Action Listing.
2. Attendance Listing.

AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
OPEN AGENDA ITEMS FROM MEETING 08-01

OPR	AGENDA ITEM (ISSUE)	REQUIRED ACTION
AFS-420	**92-02-105** (Circling Areas)	Provide update on draft criteria coordination.
AFS-470	**92-02-110** (Cold Weather Altimetry)	Track issue and provide full report on MITRE study.
AFS-470	**96-01-166** (Descent Point on Flyby Waypoints. Originally "on course")	Develop AIM material and provide status report on draft AC 90-RNP.
ACF-IPG Chair Delta Air Lines	**98-01-197** (Air Carrier Compliance With Climb Gradients)	ACF-IPG Chair: Follow up PARC actions and forward issue to USIFPP. Delta Air Lines: Present issue to TALPA ARC for consideration.
AJR-32	**02-01-238** (Departure Minimums and DP NOTAMs)	Revise Order 7930.2 to include SID/STAR NOTAMs with all other instrument flight procedure (IFP) NOTAMs.
AJT-22	**02-01-241** (Non-radar Level and Climbing Holding Patterns)	Ensure controller awareness and education on what holding patterns are authorized for CIH.
AFS-450	**03-01-247** (Holding Pattern Selection Criteria)	Continue research/evaluation on the issue and report.
ACF-IPG Chair	**04-01-250** (RNAV and Climb Gradient Missed Approach procedures)	Follow up on actions taken for development of pilot educational by AFS-600 and AFS-800.
AFS-470	**04-02-258** (VNAV IAPs using DA(H) and OpSpec C073)	Jointly address the issue with AFS-410. Advise Jeppesen what publication replaced HBAT 99-08.
AFS-420	**05-01-259** (Visual Climb Over Airport)	Continue working the issue through the USIFPP and report.
AFS-450	**06-02-267** (Option to Use Standard Timing for RNAV Holding Patterns)	AFS-450: Add to holding pattern study.
AJW-321 NBAA	**06-02-268** (Lack of Graphic Depiction of Complex ODPs)	AJW-321: Continue efforts to correct DP discrepancies and chart complex ODPs. Also validate source for the Grand Junction SID. NBAA: Forward list of incorrectly annotated RNAV STARs to NFPO.

AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
OPEN AGENDA ITEMS FROM MEETING 08-01

AJW-321 AJT-22 AJE-31 AFS-420	**07-01-269** (Diverse Vector Areas)	AJW-321 and AJT-22: determine the number of valid DVAs AJT-22 and AJE-31: Jointly develop controller guidance for vectoring departures. AFS-420: Develop DVA documentation policy for Order 8260.46 and track charting specifications
AFS-420	**07-01-270** (Course Change Limitation Notes on IAPs)	Monitor issue through the USIFPP.
AFS-400	**07-01-272** (Use of ODP in Lieu of Published Missed Approach)	Jointly, with AJE-3, AJR-3, and AJT-2, develop AIM language to resolve the issue for publication in March 2009.
AFS-420	**07-01-274** (AIM Information Regarding ODP Minimum Crossing Altitudes). Also includes **08-01-280** (Minimum Obstruction Clearance Altitudes Depicted on SIDs)	Establish and chair an ad-hoc working group to address and resolve issues relating to DP altitude restrictions.
AFS-450 AFS-470 AFS-420	**07-02-278** (Advanced RNAV (FMS/GPS) Holding Patterns Defined by Leg Length)	AFS-450: Address the issue in conjunction with the holding pattern study. AFS-470: Provide input on the issue for the study. AFS-420: Address AIRNC coding practices to ensure containment.
AFS-410	**08-01-279** (Expected Airplane Performance on DPs)	Coordinate the NBAA recommended AIM changes for publication in March 2009
ALPA	**08-01-**281 (Cold Temperature Annotation on RNAV (GPS) IAPs)	Coordinate to determine if revised policy for chart notes satisfies Boeing concerns.

AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
ATTENDANCE LISTING - MEETING 08-01

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Criswell	Chris	FAA/AJR-321	202-267-9302	christopher.criswell@faa.gov
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Kuhnhenn	Juergen	Lufthansa (LIDO)	41448286546	juergen.kuhnhenn@zrh.lido.net

AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
ATTENDANCE LISTING - MEETING 08-01

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