June 3, 2002

Dear Forum Participant

Attached are the minutes of the Aeronautical Charting Forum (ACF), Instrument Procedures Group, held April 29-30 at the National Aeronautical Charting Office (NACO), AVN-500, Silver Spring, MD. Attached to the minutes are an office of primary responsibility (OPR) action listing, and an attendance listing.

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

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AFS-420 is updating an Instrument Procedures Group page for the AFS-420 web site. The site update should be completed in later June and will provide copies of the minutes of the past two meetings. It will also provide 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, required action, and OPR. The site may be accessed directly at the following address: http://terps.faa.gov/acf-web/index.htm. We encourage participants to use this tool for reference in preparation for future meetings.

ACF Meeting 02-02 is scheduled for **October 21-24, 2002** and will be hosted by the Air Line Pilots Association (ALPA) at their Herndon office. Meeting 03-01 is scheduled for **April 28-May 1, 2003** with the Aircraft Owners and Pilots Association (AOPA), in Frederick, MD as host.

Please note that the **meetings will begin on Monday** vice Tuesday. Please forward new issue items for the 02-02 Instrument Procedures Group meeting to the above addressees not later than September 27. A reminder notice will be sent.

We look forward to your continued participation.

Norman B. LeFevre, AFS-420
Co-Chairman, Aeronautical Charting Forum
Chairman Instrument Procedures Group

Attachment: ACF minutes w/atch.

GOVERNMENT/INDUSTRY AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
MEETING 02-01 Silver Spring, MD
April 29-30, 2002

1. Opening Remarks:

Mr. Norm LeFevre, AFS-420, Flight Standards co-chair of the Aeronautical Charting Forum (ACF) and chair of the Instrument Procedures Group (IPG) opened the meeting at 9:00 AM on April 29, 2002. The meeting was held at the National Aeronautical Charting Organization (NACO) in Silver Spring, MD. Mr. Terry Laydon, Deputy Program Director, AVN Aeronautical Information Services, AVN-500, made welcoming and administrative comments on behalf of NACO. A listing of attendees is attached.

2. Review of Minutes of Last Meeting:

Minutes of the last meeting (ACF 01-02), which was held on October 23-24, 2001, were electronically distributed on November 13. No comments were received and the minutes were accepted as distributed.

3. Briefings:

a. Status Report on ACF SID Letter.

Bill Hammett, AFS-420 (ISI), briefed the Flight Standards progress thus far. Order 8260.46, *Departure procedure (DP) Program* has been re-written and is undergoing AFS-420 final review. The Order should be ready for formal coordination within next 30-45 days. All parties will have 30 days to comment under the formal comment period. Bill asked that responders meet the suspense date for comments, as time will be critical. The revised Order will separate Departure Procedures (DPs) into two categories, Obstacle Departure Procedures (ODPs) and Standard Instrument Departures (SIDs). ODPs may either be published textually or graphically depending on complexity; SIDs will always be published graphically. The key point for pilot and controller education is that an ODP may, and in some cases must, be flown without ATC clearance in the absence of another departure route assignment (SID or radar vector) by ATC. A SID must always be assigned by ATC. A copy of the draft definitions for the pilot controller glossary is included as Attachment 2. The target date of February 20, 2003 is still planned. This is in consonance with the AIM and AIP AIRAC chart publication date. To meet this effective date, all work must be completed and forwarded for publication by August 8, 2002.

b. Revised Order 7910.5A, Aeronautical Charting Forum.

Bill Hammett, AFS-420 (ISI), briefed the group that the revised order was signed by AFS-1 on April 1st and has been forwarded for reproduction and distribution. A copy will be posted on the AFS-420, IPG home page. Bill agreed to provide an advance electronic copy to anyone desiring one. Item closed.

c. Precision Runway Monitor (PRM) Procedure Identification.

Norm LeFevre, AFS-420, briefed that "PRM" would remain in the procedure title for these type approaches as a result of the ACF input. As to the question by ALPA as to whether CAT II/III minima could be applied to a PRM procedure, Norm responded no. This operation would violate Part 91.175(b) unless there is a PRM procedure with CAT II/III minima published. Brad Alberts, FPA, stated that he recommended that controllers not use PRM procedures when the weather is below PRM minimums. Marty Walker, ATP-120, and Norm responded that the pilot is responsible for determining minimums. Steve Bergner, NBAA, echoed that controllers should stop PRM approaches when weather deteriorates. Wally Roberts, ALPA, recommended adding CAT II/III minima to the charts. Bill Hammett, AFS-420 (ISI) recapped the original issue stating that "PRM" would be retained in the procedure title to emphasize the pilot/controller bond as requested at a previous Forum. Norm followed up stating that if industry has a requirement for CAT II/III PRM procedures, the request should be made through the Regional Airspace and Procedures Team (RAPT). Kevin Comstock, ALPA, recommended that the CAT II/III minima question should be pursued through another medium, the ALPA ATS group. Item closed.

d. Obstacle Accuracy Code Application.

Norm LeFevre, AFS-420, briefed FAA accuracy code application policy and queried the forum if it could be eliminated. Wally Roberts, ALPA, responded that his organization could accept elimination in initial segments; however, he supported application in final and intermediate segments. Mike Riley, NIMA, questioned, flight inspection capability to validate obstacles. A short discussion ensued regarding how obstacles were entered into the Vertical Obstruction File. Wally further stated that flight inspection must be more assertive in obstacle QC. No conclusions were reached. The issue was presented for ACF IPG discussion only and will not be addressed further. Item closed.

4. Old Business (Open Issues):

a. 92-02-104: TERPS paragraph 323a, Precipitous Terrain Additives.

Norm LeFevre, AFS-420, briefed the FAA's automated precipitous terrain program. Basically a computer model will determine if the terrain is precipitous, then the automated program will determine the minimum amount of adjustment. Revised precipitous terrain criteria will be included in TERPS change 21. FAA will include automation software, which requires digitized terrain data with the TERPS change. How this will be accomplished; e.g., web site, software disk, etc., is still under discussion.

> ***Editorial Note:*** *The following proposed TERPS change schedule is provided: Change 19 was delayed due to managerial change in AFS-420. It is targeted for AFS-1 signature by the end of May. Change 20, which will only include a new Chapter 3, Takeoff and Landing Minimums should be in formal coordination by June 1st. Change 21, which will include the precipitous terrain software as well as new circling approach criteria, is targeted for formal coordination/comment by the end of September.*

Status: AFS-420 will continue tracking the program and report at the next meeting. Item Open (AFS-420).

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

Norm LeFevre, AFS-420, briefed that the new circling criteria, proposed for inclusion in TERPS, Change 21 will be applied to all airports above 6,000 feet MSL. FAA will then bring the application to sea level. Wally Roberts, ALPA, provided a briefing on the Air China accident at Pusan, Korea (he believes the airport used TERPS circling criteria). Wally's briefing displayed current TERPS and Pans-Ops criteria as well as the FAA proposed criteria for CATs C and D. Wally, supported by Steve Bergner, NBAA, was critical that the proposed 4500' overshoot area, parallel to the runway, was too large and should be tapered from the outside turn area toward the runway threshold. Wally, supported by NBAA and Brad Alberts, FPA, also recommended unanimously that the Cat D area be increased to accommodate 180Kts. Wally emphasized that ALPA recommends that the new TERPS criteria be applied, especially for CAT C & D aircraft ASAP. NBAA and FPA supported this recommendation. Norm agreed to take the message back to AFS-420.

Status: AFS-420 to track publication of the new criteria and consider early implementation for CATs C and D. Item Open (AFS-420).

c. 92-02-110: Cold Station Altimeter Settings.

Norm LeFevre, AFS-420, briefed that the FAA had a meeting in mid-April to discuss some Baro-VNAV temperature compensation test results from the Technical Center in Atlantic City. AFS-420 is coordinating to have Clyde Jones, the AFS-400 National Resource Specialist (NRS) for weather related issues, to lead this effort. Norm also stated that AFS-420 believes that a single point of contact should help move this effort and the weather NRS is the logical office to do so. If accepted, Clyde will be briefed that industry desires to participate in this effort and that AFS, ATP, AIR, DOD, ALPA and AOPA all have expressed an interest in this issue.

Status: AFS-420 will continue reporting on the issue until transferred. Item Open (AFS-420).

d. 93-01-121: Provision of Current IAP Procedural Directive Guidance to the Aviation Community (AC90-XX).

Norm LeFevre, AFS-420, briefed that the Flight Standards contract to produce the directive is progressing. An expanded outline of Chapter 1 and an initial draft outline of Chapter 2 have been received. The contract has an the end of year deadline to produce the product. Norm is also pressing AFS-4 to ensure that funding will be available for 6-month updates. Jim Terpstra, Jeppesen, questioned whether the writing group was told exactly what the product to include, i.e., to replace AC 91-1A. Norm said it was doubtful and that he would ensure this was done.

Status: AFS-420 will: 1) ensure the contract writer is clear on specific goals and objectives of the publication, and 2) monitor contractual support and report. Item Open (AFS-420).

96-01-155: Operational Status for OROCA Use.

Gary Powell, ATP-104, briefed that he has researched this issue from its origin and to say it is confusing is an understatement. Gary stated that FAA policy is that controllers do not use the OROCA for off route altitude assignments, rather they use a minimum IFR Altitude (MIA), developed under Orders 7210.3 and 7210.37. OROCA and MIA are similar for obstruction clearance criteria; however, the MIA lateral dimensions are flexible to allow optimum air traffic use of available altitudes, whereas the OROCA areas are based on 1 degree square grids. Marty Walker, ATP-120, disagreed stating that controllers regularly do assign OROCAs. Wally Roberts, ALPA, stated that adding TAAs to all RNAV charts would satisfy ALPA's initial concern. After a lengthy discussion over obstacle data bases, OROCA and MIA development, etc., Bill Hammett, AFS-420 (ISI), stated that if the OROCA was an acceptable altitude, then it should be authorized for controller use in Order 7110.65 and pilot educational material should published in the AIM. Bill added that several issues which impact other offices must be addressed, to wit: 1) OROCA evaluation must be included under the OE/AAA program in Order 7400.2 – OPR is ATA-400; 2) A NOTAM policy must be developed to promulgate off-cycle changes – OPR is ATP-300; 3) Controller procedures must be developed and AIM material published – OPR is ATP-120; and, 4) OROCA use should be coordinated through General Council to determine if the OROCA should be placed under Part 95 and to ensure it will satisfy part 91.177 requirements – OPR is AFS-420. No one agreed to spearhead the effort, nor was there consensus for closure.

Status: AFS-420 will coordinate the issue through AGC and report. Marty Walker will research the issue through ATP-100 to determine controller need. Item Open (ATP-104).

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

Norm LeFevre, AFS-420, briefed that there is no avionics system that will tell the pilot when the aircraft reaches the bi-sector point in turns and that he has requested that AFS-410 respond to the issue. The following day, Hooper Harris, AFS-410, provided an in depth briefing on the issue noting the requirements of Part 91.181, the pilot practical test standards for course maintenance, and the pilot guidance published in AIM paragraph 5-4-7(c). Hooper noted that the bi-sector concept does not fall within any of the above guidance. Hooper proposed that new guidance be developed through the ACF to address descent after a flyby waypoint/fix to include positive course guidance requirements and an acceptable definition of "on course" (within 10?, off the peg, etc.). These solutions may require resolution of additional issues; e.g., minimum segment lengths may have to be extended, turn protection areas may need enlarging, new practical test standards may need to be developed and pilot education material revised. Steve Bergner, NBAA, recommends establishing speed standards for turns, especially at Intermediate Fixes. Steve also recommended that VNAV avionics that do not provide bi-sector information have their certificate withdrawn. Wally Roberts, ALPA, also recommended a 200 KT speed limit and a crosscheck of distance from the fix prior to starting a turn. Al Herndon, MITRE, noted that the problem also exists in the en route environment. Brad Rush, AVN-160, recommended that FAA avoid using "should" in future avionics specifications. Jim Terpstra, Jeppesen, added that existing TERPS criteria should not be modified due to the large number of procedures in print. He added that avionics standards must not be revised "after the fact". Hooper agreed that AIM guidance

could resolve the issue and agreed to draft AIM language in concert with Wally for presentation at the next meeting.

Status: AFS-410 to draft AIM guidance in concert with ALPA for presentation at the next meeting. Item Open (AFS-410 and ALPA).

g. 97-01-175: Pilot Duties to Confirm GPS Database.

Hooper Harris, AFS-410, addressed this issue. He noted that databases do not receive the same level of review as the corresponding chart. The database logic is certified but not the actual data. He provided a concept for a FSIB and information to be added to AIM paragraph 1-1-21o that included the following pilot responsibilities: 1) Check the currency of the database, 2) Check NOTAMs, 3) Verify that the correct procedure was retrieved, 4) Verify the waypoint string (names and altitudes), and 5) perform a reasonableness check. Steve Bergner, NBAA, asked if database NOTAMs should be required of database providers. The consensus was yes. Brad Rush, AVN-160, asked if there was a conflict between the printed chart and the database, which has precedence. The group consensus was the paper chart. The requirement for database NOTAMs must be addressed by the NOTAM Working Group, chaired by ATP-300. The ACF concurred with Hooper's recommendations and the issue may be closed.

Status: AFS-410 to develop a FSIB and applicable AIM material. Item Closed.

h. 97-01-177: Non-collocated DME Use at/inside FAF.

Kevin Comstock, ALPA, reported that the FAA has committed to 177 DME systems. He will continue to monitor progress through the CAST initiative and report as necessary.

Status: Item Open – Inactive (ALPA).

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

Jim Gardner, AFS-200, responded to the issue and was provided an update by Wally Roberts, ALPA. Wally re-stated that the FAA has no requirement for operators to provide performance data to be in the cockpit. Jim provided a short briefing on POI requirements and procedures for Part 121/135 operators and stated that AFS-200 has had no time or resources to address this particular issue. Wally briefed that ALPA had also raised the issue with FAA's General Council in 1998, but has received no response. Jim suggested that ALPA follow up that correspondence which could elevate the issue in AFS-200. Wally agreed to do so.

Status: ALPA to follow up their letter to AGC and to garner support for elevating the issue within AFS-200. Item Open (ALPA).

j. 98-01-199: RVR Accuracy and Conflict with Flight Visibility.

Dave Metzbower, AFS-410, recapped the two issues and provided a history of the current Part 91.175 as taken from the Federal Register report dated January 8,1981. The underlying background indicates that the flight visibility requirement is written in stone; however there is

nothing to connect flight visibility with RVR. It appears that the only time a problem exists is when the SIAP has only RVR published. Hooper Harris, AFS-410, then provided a proposed solution. He recommended the tables be revised to reflect a conversion from RVR to visibility; e.g.,

SIAP Minimum (SM /RVR)	Prior to FAF Req	Landing Flight Visibility
½ mile	½ mile	½ mile
½ mile or 2400 RVR	½ mile	½ mile
2400 RVR	2400 RVR	½ mile

The group agreed to this solution. Wally Roberts, ALPA, requested that guidance should be published emphasizing that only the pilot is the determining authority for visibility assessment. Hooper agreed to take the following actions: 1) Expand the RVR conversion table as noted above, 2) Develop an AIM change, and 3) Initiate the necessary rule change.

Status: AFS-410 to: 1) Expand the RVR conversion table; 2) Develop AIM change; and, 3) Initiate necessary rule change. Item Open (AFS-410).

k. 98-01-206: Washington DC P-56 Airspace and KDCA IFR Departures.

Brad Rush, AVN-160, briefed that the DPs were ready for publication last year, but held back after the events of September 11. ATC priority listing now has the procedures scheduled for publication on December 25, 2003. Brad will monitor the status and report at the next meeting.

Status: AVN-160 will continue to track procedure processing and publication. Item Open (AVN-160).

l. 98-01-209: Consolidated STAR Items Transferred from Charting Portion.

Gary Powell, ATP-104, briefed that FAA Order 7100.9C, *Standard Terminal Arrival*, was published on 11/14/01. The revised Order provides guidelines that standardize the publication of STAR procedures. The revision includes RNAV criteria and updates the responsible offices and activities for processing STAR requests. Proponent responsibilities for canceling and requesting STARs were also added. STARs development and publication will remain a responsibility of Air Traffic due to staffing levels at AVN-100. Gary also briefed that, related to this issue, Order 8260.43A*, Flight Procedures Management Program*, has been published. This Order provides guidance for initiating and processing requests for public and special instrument and visual flight procedures including RNAV procedures. The Order also establishes a Regional Airspace and Procedures Team (RAPT) at each FAA regional office as the point of contact for standardized consideration, prioritization, and processing of requests for new and amended flight procedures. Jim Terpstra, Jeppesen, asked what, if any, action is being taken to convert Special STARs to public procedures. Gary responded that once flight-testing is complete, as many procedures as possible would be made public. Gary recommended closure of this issue and the group agreed.

Status: Item Closed.

m. 99-01-215: Radar Required SIAPs.

Brad Rush, AVN-160, provided ALPA a periodic spreadsheet indicating progress. The spreadsheet, which is primarily of interest to ALPA, is not attached. Anyone desiring a copy may contact Brad or Kevin Comstock, ALPA. Kevin noted that the process is proceeding slower that desired.

Status: AVN-160 will continue to provide progress updates at each meeting per ALPA's request until work is complete. Item Open (AVN-160).

n. 99-02-216: Elimination of Excess Verbiage on DP's and STARs.

Bill Hammett, AFS-420 (ISI), briefed that AFS-420 is still working this issue in conjunction with AVN-100, AVN-500, and ATA-100. Expanded guidance as well as revised 8260-15 series forms will be included in Order 8260.46 revision. Current proposals include an annotation that all transitions need only be published graphically (no follow on text). Additionally, the phrase "…thence as depicted…" is currently being used wherever possible to eliminate verbiage. Gary Powell, ATP-104, advised that the ATP-120 IOU to revise the AIM STAR language has been submitted for publication. It was suggested by the group that STAR phraseology be standardized and explained; e.g., "South Flow" vs. "Landing South". Mitch Scott, ATA, questioned the term "Standard Minimums" as related to DPs. Wally Roberts, ALPA, stated that Ops Specs are the standard for a specific carrier. Jim Terpstra, Jeppesen, led a discussion on the "T" symbol and agreed that pilots need to be aware when Ops Specs override standard takeoff minimums. This issue will be worked off line.

Status: 1) AFS-420 revise, as necessary, associated DP forms and Order 8260.46.
2) ATP-120 to process AIM change. Item Open (AFS-420 & ATP-120).

o. 99-02-219: Application of TERPS Paragraph 289.

Pat Fair, ATA-130, briefed that the IACC responded that different charting of obstacles was too complex to accept. Jim Terpstra, Jeppesen, agreed. Norm LeFevre, AFS-420, briefed that AFS-420 does not believe it appropriate to publish TERPS criteria in the AIM and will not pursue adding an explanation of paragraph 289. The fact that the procedure was developed under TERPS, processed in accordance with current directives, and made available for public comment through the Federal Register should ensure pilot confidence. Norm suggested the issue be closed. The group concurred.

Status: Item Closed.

p. 00-02-225: TERPS Paragraph 251b(2)(c) – Visual Area Obstacle Clearance

No update required. Issue has been resolved pending publication of TERPS Change 19.

Status: Item Open – Inactive (AFS-420).

q. 00-02-229: Turbine Powered Holding

Norm LeFevre, AFS-420, briefed that Flight Standards has studied the issue and believes that it is not an aircraft Category issue, but rather a performance issue. He also noted that AFS-420 did not process the requested correction to eliminate the Category A and B annotation from AIM paragraph 5-3-7j2(b)(2) due to staffing constraints. Wally Roberts, ALPA, noted that Order 7130.3, *Holding Pattern Criteria*, paragraph 2-8b (1) allows 175 knot restricted holding up to FL 300. This is nearly impossible for high performance air carriers. Wally recommended an altitude (jet) limitation on 175-Knot holding to FL 180. Norm agreed to take this suggestion to AFS-420 for consideration. Marty Walker, ATP-120, agreed to include a briefing article in the Controller Bulletin to sensitize ATC to the fact that 175-Knot holding may cause problems for some aircraft.

Status: 1) AFS-420 to revise AIM paragraph 5-3-7j2(b)(2). 2) AFS-420 to consider revision to Order 7130.3. 3) ATP-120 to include article on 175 Knot holding in the next Controller Bulletin. Item Open (AFS-420 and ATP-120).

r. 00-02-230: SIAP Deceleration Segment and High Bypass Fan Engines

Norm LeFevre, AFS-420, briefed that Jack Corman, also of AFS-420, provided the following input: Boeing has completed simulations of 747, 757, 767, and 777 aircraft and forwarded data to AFS-420. These data are being incorporated into ASAT simulation for further tests and data reduction. Expect delivery of performance standards to criteria writers in early summer, and criteria in coordination in the fall (2002). Norm also requested that industry provide a consolidated input on exactly what is desired. Jim Terpstra, Jeppesen, recommended that the ATA Task Force be the focal point for this consolidated input to the ACF and agreed to bring the subject up at the next ATA meeting, June 25-27. Brad Rush briefed that the KLAX procedure revisions were charted on April 18th.

Status: 1) Jeppesen bring the issue before the ATA Task Force meeting in June and return the consensus to the ACF and AFS-420. 2) AFS-420 to continue ASAT modeling and criteria development. Item Open (Jeppesen & AFS-420).

s. 01-01-233: Requiring Reported Ceiling on Mountain Area SIAPs With High HAT/HAA Values

There was no further input from ALPA. Bill Hammett, AFS-420 (ISI), reiterated that this issue was before the subgroup several years ago and there was no support for ALPA's position at that time and the issue eventually removed from the agenda. Jim Terpstra, Jeppesen, requested the rationale for the recommendation. Wally Roberts, ALPA, provided background regarding an aircraft accident in Alaska. Jim responded that it did not seem necessary to penalize all operators for one incident. There was no further support for the recommendation; therefore ALPA withdrew it from further discussion.

Status: Item Closed.

t. 01-01-234: Designation of Maximum Altitudes in the Final Approach Segment

Steve Bergner, NBAA, stated that his organization had coordinated with Air Traffic Management at KORL and was briefed that removal of the final approach segment altitude restrictions would severely impact capacity. Brad Rush again noted the inconsistencies of the restriction points, the restriction altitudes, and the missed approach altitudes for the KORL SIAPs. Norm LeFevre agreed to recommend a Flight Standards retroactive review of the KORL SIAPs in question from a safety perspective. Bill Hammett, AFS-420 (ISI), noted that the current revision to Change 3 to Order 8260.19 will include a note under paragraph 857t: *"NOTE: Maximum or mandatory altitudes should be avoided where ever possible, especially in the final approach segment"*. Bill also noted that the ATP-120 IOU to resolve the contradiction in pilot instructions between the AIM, paragraph 5-4-5b; FAAH 8083-15, page 10-22; and the PCG definition of Missed Approach has not been accomplished. Marty Walker, ATP-120, assured the group that it would be in the next possible revision.

Status: 1) AFS-420 will conduct a review of KORL SIAPs from a safety perspective. 2) ATP-120 will address the AIM and PGC contradictions. Item Open (AFS-420 and ATP-120).

u. 01-02-235: Harmonization of RNAV DPs

Steve Bergner, NBAA, recapped the issue stating that his organization did brief the issue at ARINC. The bottom line is that pilots need to know who can fly what. Norm LeFevre, AFS-420, briefed that his research indicates that there is no FAA/AIR guidance in work. Jim Terpstra, Jeppesen, briefed a proposal for ARINC 424 RNP specifications. ARINC 424-17 will include guidance that RNP values for every leg be indicated to the pilot. Norm LeFevre, AFS-420, will continue to follow up the issue with AIR and report back to the ACF.

Status: 1) AFS-420 will continue to work the issue with AIR. Item Open (AFS-420).

v. 01-02-236: Vertical Descent Angle (VDA) Charting

Jim Terpstra, Jeppesen, explained the CNF "sensor FAF" concept and that current Advisory Circulars (ACs) explain that sensor FAFs must be at 4NM. Jim has worked with AFS-420 to get sensor FAFs moved to 7NM for CAT A&B and to 6 NM for CAT C&D when the descent gradient at 4 NM is greater than 400 ft/NM. This will provide a better descent gradient. There is a problem in achieving this however, as AFS-420 created the sensor FAFs without AVN involvement. Jim volunteered that Jeppesen would create Form 8260-2's to support these CNFs provided AVN-100 will QC them. Brad Rush stated that current resources preclude his office getting involved with reviewing and processing Jeppesen forms. Brad restated that Jeppesen should not be changing a procedure government documented and added that these no-FAF SIAPs with GPS overlays should be removed from publication ASAP, preferably via AFS docket action. Norm LeFevre agreed to pursue this issue in AFS-420. See related issue 02-01-244.

Status: AFS-420 to review the issue and make recommendations accordingly. Item Open (AFS-420).

5. New Business:

a. 02-01-237: Intermediate Fix (IF) Charting**.**

New issue presented by Wally Roberts, ALPA recommending that the Intermediate Fix on SIAPs be identified by placing "(IF)" on the plan view of charts at the fix as is currently done at the FAF and IAF. ALPA believes that this would bring US charts into agreement with many ICAO member charts and provide pilots an easily identified method of knowing where transition from the terminal to final approach phase of flight occurs. Jim Terpstra, Jeppesen, and the Forum, en toto, expressed support for the recommendation. Norm LeFevre, AFS-420 agreed to accept the issue for action. AFS-420 will prepare a requirements letter for IACC consideration. Order 8260.19 will also require change to provide guidance on 8260-series form completion to identify the IF for charting agencies.

Status: AFS-420 to: 1) prepare requirements letter for IACC consideration and 2) revise 8260-series form completion instructions. Item Open (AFS-420).

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

New issue presented by Wally Roberts, ALPA. ALPA is concerned that NOTAMs relating to DPs are promulgated as NOTAM Ds vice FDC NOTAMs. Bill Hammett, AFS-420 (ISI), briefed current NOTAM policy in Order 8260.19 is dictated by ATP-300 under Order 7930.2, *Notices to Airmen*. Currently, textual DP NOTAMs use the FDC process. Graphic DPs and STARs use NOTAM Ds. Initial coordination with Gary Bobik, ATP-320, indicates that they are agreeable to having DP and STAR NOTAMs use the FDC process. Bill has suggested that this change occur on 20 Feb 2003 in consonance with the return of the term SID. The cut off date for submission to meet the February date is August 8, 2002. Bill and Gary Powell, ATP-104, have agreed to provide recommended text to Gary Bobik ASAP to facilitate the change. Once it is assured that the change will be made to Order 7930.2, Order 8260.19 will be revised accordingly. Wally also expressed concern that AVN-100 is, in at least one instance, applying new criteria/policy to an ATC DP without reviewing the basic IFR Departure Procedure and associated weather minimums. ALPA recommends that if one DP is revised under new standards, then all DPs for that airport be concurrently reviewed. Norm LeFevre AFS-420 took an IOU to pursue a policy change for Order 8260.19 to accommodate this.

Status: 1) AFS-420 and ATP-104 to forward recommended changes to Order 7930.2 to ATP-320 (See Note below). 2) AFS-420 consider policy to require review of all DPs at a given airport when new criteria is applied. Item Open (AFS-420).

Editors Note: *Recommendations were forwarded to ATP-320 on May 20th.*

c. 02-01-239: Minimum Vectoring Altitude (MVA) Obstacle Accountability; Lack of Diverse Vector Area (DVA) Criteria.

New Issue presented by Wally Roberts, ALPA. Wally expressed concern that not all obstructions are accounted for in determining the MVA and therefore some MVAs are invalid. ALPA acknowledges that MVA chart (MVAC) design must remain under the purview of air traffic; however, the final MVA altitude for obstruction clearance must be validated by AVN

under AFS policy guidance. Wally noted that MVACs are the most critical element used for obstruction in ATC today and should be made available to pilots, yet they are nearly impossible for the public to obtain. Marty Walker, ATP-120, noted that MVACs are owned by air traffic and public availability will have to be addressed through AAT. Wally further suggested that MVACs should be processed under 97 as SIAPs are, or as a Part 95 altitude. Wally then noted the variance between the 3 NM radar obstacle clearance within 40 NM of the radar antenna and the 4 NM pilot obstacle clearance requirement of Part 91.177. He also mentioned the Part 91.177 absolute 1000/2000 obstacle clearance requirements for pilots. MVAs, in many cases, allow reduction to the 2000' designated mountainous area ROC requirement "…to achieve compatibility with terminal routes or to permit vectoring to an IAP". These variances allow pilots to unwittingly violate Part 91.177 when accepting a radar vector. Bill Hammett, AFS-420 (ISI), expressed that while MVAC design policy must remain within Air Traffic's realm, criteria for MVAC obstacle clearance should be expanded in TERPS and that the 200'AGL Assumed Adverse Obstacle concept should be a mandatory requirement to ensure obstacle clearance. Insofar as Wally's concern over the lack of diverse vector area (DVA) criteria, Norm LeFevre, AFS-420, responded that this criteria is in TERPS Change 19. ALPA will continue to address MVAC availability through AAT.

Status: AFS-420 to: 1) coordinate with AGC to determine whether MVACs should be processed under Part 95/97; and, 2) expand MVAC criteria in TERPS. ALPA: Continue coordination to make MVACs publicly available. Item Open (AFS-420 & ALPA).

d. 02-01-240: ICAO Holding Pattern Safety Issue.

New issue presented by Wally Roberts, ALPA. ALPA believes that a January CFIT aircraft accident in Tulcan, Ecuador indicates deficiencies in both the application of holding pattern criteria and standardization of procedural data notes by some ICAO member states. Wally recommends that the ACF should initiate action to have the US representatives to ICAO recommend modification of Pans Ops criteria to resolve these issues. Norm LeFevre, AFS-420, briefed that this action is beyond the purview of the ACF. He recommended that ALPA forward this issue to the ICAO Operations Panel, chaired by Lyle Wink, AFS-400, with an information copy to Lynn Boniface, AFS-420, the US representative to the Obstacle Clearance Panel. Wally agreed to do so. No further action required of the ACF.

Status: Item Closed.

e. 02-01-241: Non Radar Level and Climbing Holding Patterns.

New issue presented by Wally Roberts, ALPA. Wally expressed concern on two areas relating to climb-in-hold (CIH) pattern evaluations. In some cases, AVN is not evaluating CIH patterns to 310 Knots as required by TERPS. Compounding this issue is that there are no chart notes to limit pilot airspeeds when required by a lesser airspeed CIH evaluation. Lastly, ALPA is concerned that controllers are unaware of airspeed and obstacle clearance specifications when impromptu CIH requirements arise; e.g. returning to the en route structure from the missed approach holding pattern specified on the Kona Int'l airport, HI. Norm LeFevre agreed to accept the issue for study within AFS-420 for possible criteria and/or policy requirements.

Status: AFS-420 to review the issue and make recommendations. Item Open (AFS-420).

f. 02-01-242: LPV Minima Charting.

New issue presented by Hank Cabler, AFS-410. Hank provided a briefing on the FAA concept to implement a new type approach using the Wide Area Augmentation System (WAAS). FAA proposes charting an LPV minima line on the existing RNAV approach chart in the section currently reserved for GLS minimums. This proposal was originally presented at the ATA FMS Task Force and recommended for presentation and consensus at the ACF. Jim Terpstra, Jeppesen stated that the first WAAS SIAPs are targeted for publication in July/August, 2003. The majority of the group expressed approval with the charting concept. Mitch Scott, ATA, stated that ATA does not support this change and requested that a RNP line of minima be published. He further stated that LAAS provides better benefits than the proposed LPV concept. Marc Henegar, Alaska Airlines, stated that his organization would support WAAS, but not at the expense of RNP. Norm LeFevre will take the issue to the Aeronautical Information Service Working group (AISWG) for further consideration and report back.

Status: AFS-420 to take the issue to the AISWG and report. Item Open (AFS-420).

g. 02-01-243: Holding Pattern Definition.

New issue presented by Jim Terpstra, Jeppesen regarding holding pattern definition for RNAV holding. Jim recommends that AIM guidance similar to that provided for DME holding (see AIM figures 5-3-5 and 5-3-6) be provided for RNAV/GPS holding. The group consensus was favorable. Norm LeFevre agreed to coordinate the issue with AFS-410 and make AIM revisions accordingly.

Status: AFS-420 to work with AFS-410 and make AIM revisions as necessary. Item Open (AFS-420 & 410).

h. 02-01-244: Cancellation of GPS Overlay Approaches.

New issue presented by Norm LeFevre, AFS-420. AFS is advocating removal of “or GPS” approaches anytime that a stand-alone GPS approach is published at an airport. He further supports removing “or GPS” authorizations from all conventional SIAPs that require a course reversal at the FAF, either procedure turn (PT) or hold-in-lieu of PT. Jim Terpstra, Jeppesen, briefed that this would have no impact on FMS users. Norm agreed and noted that once “or GPS” is removed, then TSO-C129 equipped aircraft could not fly the conventional SIAP using GPS as the navigation source. Several representatives expresses opposition to blanket removal of “or GPS” approaches at airports that had a stand-alone GPS procedure unless the stand-alone procedure served the same runway. Norm withdrew that portion of the issue, but held fast to the second part of the recommendation regarding removing those “or GPS” approaches with a course reversal at the FAF. He briefed that users would keep the option of retaining necessary “or GPS” approaches through the RAPT. Mike Brown, AOPA, asked if there would be a method of circulating a list of “or GPS” procedures proposed for cancellation. He also would like to further coordinate an official AOPA response to the proposal.

Status: AOPA to coordinate and forward a formal response to the proposal to AFS-420. Item Open (AOPA).

i. 02-01-245: Along-Track-Distance (ATD) Stepdown Fixes for RNAV with LNAV and LVAN/VNAV Minima

New issue presented by Mike Brown, AOPA, expressing concern that FAA policy is prohibiting stepdown fixes in the final approach segment (FAS) when a RNAV approach is published with both LNAV and LNAV/VNAV minima. The absence of a stepdown fix for the LNAV only procedure can result in significantly increased MDAs thereby penalizing the low end user. Mike recommends that stepdown fixes should be incorporated in RNAV procedure design when TERPS criteria allows and offered two recommendations for consideration; 1) publish a single chart incorporating the stepdown fix with two lines of minima, or 2) publish separate LNAV and LNAV/VNAV approach charts. The consensus of the group is that FAS step-down fixes provide a benefit and should be included where allowed by criteria. Norm LeFevre, AFS-420, will work with Brad Rush, AVN-160, to develop policy mitigate the issue.

Status: AFS-420 to develop policy in concert with AVN-160 to correct policy to allow stepdown fixes on procedures with vertical guidance. Item Open (AFS-420/AVN-160).

6. Next Meeting: The next ACF meeting (02-02) is scheduled for October 21-24 with the Air Line Pilots Association (ALPA) in Herndon, VA as host. Meeting 03-01 is scheduled for April 28 – May 1 with the Aircraft Owners and Pilots Association (AOPA) in Fredrick, MD as host.

7. Attachments (3):

1. OPR/Action Listing.
2. DP Definitions.
3. Attendance Listing.

Please note the attached Office of Primary Responsibility (OPR) listing (attachment 1) for action items. It is requested that all OPRs provide the AFS-420 co-chair (with an information copy to Bill Hammett) a written status update on open issues not later than September 30 - a reminder notice will be provided.

AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES SUBGROUP
OPEN AGENDA ITEMS FROM MEETING 02-01

OPR	AGENDA ITEM (ISSUE)	REQUIRED ACTION
AFS-420	**92-02-104** (Precipitous terrain adjustments)	AFS-420: Track program and report.
AFS-420	**92-02-105** (Circling areas)	Track status of new criteria. Consider early implementation for CAT C&D.
AFS-420	**92-02-110** (Cold weather altimetry)	Transfer to AFS Weather NRS as OPR. Track effort & report.
AFS-420	**93-01-121** (AC 90-XX)	Ensure contract writers are clear on goals. Monitor contractual support and report.
ATP-120 AFS-420	**96-01-155** (OROCA use)	ATP-120: Determine controller need/use. AFS-420: Address issue through AGC
AFS-410/ALPA	**96-01-166** (Descent point of flyby waypoints. Originally "on course")	AFS-410, in concert with ALPA, to develop AIM language to resolve the issue and report.
AFS-410	**97-01-175** (Pilot duties to confirm GPS database)	Develop FSIB and applicable AIM material.
ALPA	**97-01-177** (Non-collocated DME use at/inside FAF)	Status is Open/Inactive. ALPA to report CAST initiatives as deemed necessary.
ALPA AFS-200	**98-01-197** (Air carrier compliance w/climb gradients)	ALPA: Follow up on letter to AGC. AFS-200: Work issue and report.
AFS-410	**98-01-199** (RVR accuracy vs. flight visibility. Also use of RVR minima)	Expand RVR conversion table. Develop AIM change. Initiate necessary rule change and report.
AVN-160	**98-01-206** (P-56 airspace vs. KDCA IFR departures)	Track processing/publication & report procedure status.
AVN-160	**99-01-215** (Radar required SIAP's	Provide procedure status list to ALPA.
AFS-420 ATP-120	**99-02-216** (Excess verbiage on DP's & STAR's)	AFS-420: Revise DP forms. ATP-120: Submit AIM change.
AFS-420	**00-02-225** (Visual area obstacle clearance – TERPS 251b(2)(c) & 251b(3)	Status is Open/Inactive pending publication in TERPS Change 19

AFS-420 ATP-120	**00-02-229** (Turbine powered holding)	AFS-420: Revise AIM paragraph 5-3-7j2(b)(2) and consider revision to Order 7130.3. ATP-120: Holding article for ATC Bulletin.
Jeppesen AFS-420	**00-02-230** (SIAP deceleration segment and high-bypass fan engines)	Jeppesen: Address issue at ATA Task Force. AFS-420: Study interm. seg. DG policy.
AFS-420 ATP-120	**01-01-234** (Designation of maximum altitudes in the final approach segment)	AFS-420: Do safety review of KORL SIAPs. ATP-120: Address AIM and PCG contradictions.
AFS-420	**01-02-235** (Harmonization of DP's)	AFS-420: Follow up issue with AIR.
AFS-420	**01-02-236** (Vertical descent angle (VDA) charting)	Work issue and make recommendations.
AFS-420	**02-01-237** (Intermediate Fix Charting)	Prepare requirements document for IACC and revise 8260-15 series forms.
AFS-420 ATP-104	**02-01-238** (Departure Minimums and DP NOTAMs)	AFS-420 and ATP-104: Forward info for DCP to ATP-320. AFS-420: Consider policy to review all DPs at an airport when any DP is revised.
AFS-420 ALPA	**02-01-239** (MVA Obstacle Accountability and Lack of DVA Criteria)	AFS-420: Coordinate with AGC to determine if MVAs should be Part 95/97 and expand MVA criteria in TERPS. ALPA: Continue efforts to obtain MVACs.
AFS-420	**02-01-241** (Non-radar Level and Climbing Holding Patterns)	Work issue and report.
AFS-420	**02-01-242** (LPV Minima Charting)	Work issue through AISWG and report.
AFS-420/410	**02-01-243** (RNAV Holding Pattern Definition)	Jointly work AIM/AIP revisions.
AOPA	**02-01-244** (Cancellation of GPS Overlay Approaches)	Forward a formal response to the issue to AFS-420.
AFS-420 AVN-160	**02-01-245** (ATD Step-down Fixes for LNAV and LNAV/VNAV RNAV SIAPs)	Jointly work issue for policy and application.

Proposed Pilot/Controller Glossary (PCG) Definitions

The following definitions are contained in draft order 8260.46B, *Departure Procedure (DP) Program,* and should also be included in the Pilot/Controller Glossary to ensure correct terminology understanding by all users of the NAS.

INSTRUMENT DEPARTURE PROCEDURE (DP) – A preplanned instrument flight rule (IFR) departure procedure published for pilot use, in graphic or textual format, that provides obstruction clearance from the terminal area to the appropriate en route structure. There are two types of DP, Obstacle Departure Procedure (ODP), printed either textually or graphically, and, Standard Instrument Departure (SID), which is always printed graphically.

(See IFR TAKEOFF MINIMUMS AND DEPARTURE PROCEDURES, OBSTACLE DEPARTURE PROCEDURES, and STANDARD INSTRUMENT DEPARTURES.)
(Refer to AIM)

ODP – (See OBSTACLE DEPARTURE PROCEDURE)

OBSTACLE DEPARTURE PROCEDURE (ODP) – A preplanned instrument flight rule (IFR) departure procedure printed for pilot use in textual or graphic form to provide obstruction clearance via the least onerous route from the terminal area to the appropriate en route structure. ODPs are recommended for obstruction clearance and may be flown without ATC clearance unless an alternate departure procedure (SID or radar vector) has been specifically assigned by ATC.

(See IFR TAKEOFF MINIMUMS AND DEPARTURE PROCEDURES and STANDARD INSTRUMENT DEPARTURES.)
(Refer to AIM)

SID – (See STANDARD INSTRUMENT DEPARTURE)

STANDARD INSTRUMENT DEPARTURE (SID) –A preplanned instrument flight rule (IFR) air traffic control (ATC) departure procedure printed for pilot/controller use in graphic form to provide obstacle clearance and a transition from the terminal area to the appropriate en route structure. SIDs are primarily designed for system enhancement to expedite traffic flow and to reduce pilot/controller workload. ATC clearance must always be received prior to flying a SID.

(See IFR TAKEOFF MINIMUMS AND DEPARTURE PROCEDURES, and OBSTACLE DEPARTURE PROCEDURE.)
(Refer to AIM)

Attachment 2

AERONATTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
ATTENDANCE LISTING - MEETING 02-01

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AERONATTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
ATTENDANCE LISTING - MEETING 02-01

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*** = Monday Only**				
**** = Tuesday Only**				