

**GOVERNMENT / INDUSTRY AERONAUTICAL CHARTING FORUM
INSTRUMENT PROCEDURES GROUP
Meeting 94-01 January 31-February 1, 1994
NBAA Offices/Washington, DC
(Transcribed/Reformatted)**

Editor's note: No official transcript was located. These minutes/notes are from participant notes.

1. **Opening Remarks:** Activities opened by Paul Smith, NBAA. Chair assumed by Paul Best, AFS-420. A participant suggested future meetings in April and October. Weather was cold, windy and inhospitable.

2. **Briefings:** None

3. **Review of Minutes of Last Meeting:** Meetings of last AFC (93-01) were not read due to unavailability. Meeting concentrated on TERPS issues first two days, then planned to cover non-TERPS matters the following two days.

4. **Old Business (Open Issues):**

a. **92-02-100** TERPS Visual Descent Point (VDP)

(From Frank Parr AVN-210 notes) ALPA would like VDP established wherever there are straight-in minimum for a non-precision approach. After discussion, ALPA agreed to rewrite this proposal with recommendations for the forum. ALPA will rewrite proposal with recommendations. **Action: Item Open (ALPA)**

b. **92-02-101** Turbojet Straight in Maneuvering Considerations in Non-Precision Standard Instrument Approach Procedures (SIAPs)

(From Frank Parr AVN-210 notes) straight in minimums on non-precision SIAPs are not always usable. Need VDP. Need more restrictions on category C & D aircraft. ALPA agreed to rewrite this item because it was not completely explanatory. They feel it should go to a working group. **Action: Item Open (ALPA)**

c. **92-02-102** IFR Departure Procedures and Standard Instrument Departures (SIDs)

(From Frank Parr AVN-210 notes) Chapter 12 is out of date, and SID/STAR criteria should go to AFS. ALPA commented that taking a pilot off a SID for a radar vector, then advising him he is on his own, isn't "cricket". The forum set up a sub group to address the issue: APLA; AFS; ATC; and AVN. **Action: Item Open (ALPA, AFS, ATC and AVN)**

d. 92-02-103 Minimum Crossing Altitude (MCA) on Obstacle Clearance SIDs.

(From Frank Parr, AVN-210 notes) the problem of a SID in one direction with an engine out procedure going in another is causing chagrin among pilots and ATC. This problem will be addressed by a SID/STAR working group (to be formed) for report and recommendations at the next meeting. **Action: Item Open**

e. 92-02-104 TERPS Paragraph 323a, Precipitous Terrain Additives

(From Frank Parr AVN-210 notes) the problem is field offices do not always apply these criteria in a proper manner. AFS (?) will get guidance to the field. **Action: Item Open (AFS -?)**

f. 92-02-105 Review of Adequacy of TERPS Circling Approach Maneuvering Areas and Circling at Airports With High Heights Above Airports (HAA's)

(From Frank Parr AVN-210 notes) Winds at low levels have caused concern over adequacy of circling areas, which can allow a controller to put an aircraft outside protected airspace. Nobody seems to have a handle on wind. One attempt to get data from NOAA by Charlie Guy was not fruitful. ALPA volunteered to get the information so we could apply it to the UDSS to determine real effects. They were not successful. We should add circling to the task of PT area/holding area simulation. **Action: Item Open (AFS-420)**

g. 92-02-106 Circling Approach Maneuvers at Airports with Very High Heights Above Airports (HAAs)

(From Frank Parr AVN-210 notes) ALPA suggested problems in mountainous areas in use of circling minimums and asked they be curtailed. They suggested use of more detailed charts if circling is established so pilots would know of obstacles. This issue will be addressed in the new SID/STAR working group. **Action: Item Open (SID/STAR working group)**

h. 92-02-107 Questionable Accuracy Of FAA Obstacle Data Used in the Construction of Instrument Approach Procedures.

(From Frank Parr AVN-210 notes) Problem of procedures specialists using sectional charts in developing an approach. Also one charting agency overstated the accuracy of some of its data. This was corrected in the revision to the FAA 8260.19. Word went to the procedures folks that topographical charts must be used on all procedures. Sectionals are not sufficiently detailed in the contours. **Status: Item Closed.**

i. 92-02-108 Application of Holding Pattern Criteria in Instrument Flight Procedures

(From Frank Parr AVN-210 notes). Initial comments were on the item submission. Difficulty is with increasing speed without increasing holding pattern template sizes. AVN-210 is working on this. Present holdup is ATP and comments by other AFS employees. See also item 93-01-123. ALPA problems with holding, procedure turns and circling areas are more of a 'global' problem. With the Band-Aid fix in place, AVN-210 will proceed to address the bigger issue of holding and will continue to address the issue. **Action: Item Open (AVN-210)**

j. 92-02-109 Holding Pattern Wind Assumptions

(From Frank Parr AVN-210 notes) ALPA had agreed to provide winds aloft data for discussion of the problem. Winds at higher levels go up to 190-200 knots. A wind of 150 knots was experienced at BOS at 1500 feet one time. Basic data is not readily available, and this will be a part of an AVN-210 project. **Action: Item Open (AVN-210)**

k. 92-02-110 Cold Station Altimeter Settings

(From Frank Parr AVN-210 notes). This issue was not discussed. A study is done and has been presented to AFS. Responsibility was given to AFS-420 & AVN-220 to handle. **Action: Item Open (AVN-220 and AFS-420)**

l. 92-02-111 TERPS NDB System Accuracy Assumptions

(From Frank Parr AVN-210 notes) ALPA contends that the NDB accuracy was changed to 5 degrees from 6 without specific testing to determine to 2 and 3 sigma what the accuracy is. Discussion also included NDB ROC being 50 feet higher than VOR. Subject was closed and tabled. **Status: Item Closed.**

m. 92-02-112 Procedure Turn Maneuvering Area and FAA Directive Information

(From Frank Parr AVN-210 notes). There are problems with the PT maneuvering when INT PT is utilized. ALPA is going to put together some better comments on the issue. **Action: Item Open (ALPA)**

n. 92-02-113 TERPS Paragraph 289 Close-in Final Approach Segment Obstacles

(From Frank Parr AVN-210 notes) TERPS paragraph 289 obstacles are not marked on the transmittal form as REQUIRING depiction on the final approach plate publication, so are not always published. ALPA would like to have mandatory depiction. This issue was not addressed. It is to be remanded to the special working group or somewhere. **Status: Item Closed.**
Editor's note; this was closed (withdrawn) at meeting 92-02

o. 92-02-114 FDC NOTAMs and use of Inoperative Components Table by all Users

(From Frank Parr AVN-210 notes) Inoperative components in navigation systems require that minimums be increased for users at that time. If this occurs for NOS chart users, no problem. Tables are available. Not so for Jeppesen subscribers. Jeppesen stated they would be glad to print tables if asked by users. ALPA withdrew this item. They will take issue to charting meeting and have Jeppesen print the tables. **Status: Item Closed.**

Editor's note; this was closed (withdrawn) at meeting 92-02

p. 92-02-115 Instrument Approach Procedures Automation (IAPA) System

(From Frank Parr AVN-210 notes) ALPA is concerned that IAPA could possibly not be producing procedures which are correct. They requested that FAA release the algorithms and resultant areas for scrutiny by users. This item was not addressed at the meeting. **Status: Item Closed.**

Editor's note; this was closed (withdrawn) at meeting 92-02

q. 92-02-116 FAA Quality Control During Development of Instrument Procedures and FAA Training of TERPS Personnel

(From Frank Parr AVN-210 notes) ALPA complains of poor QC possibly caused by the PLATO system never being updated (possibly not sending specialists to update training). After discussion ALPA withdrew this item again. **Status: Item Closed.**

Editor's note; this was closed (withdrawn) at meeting 92-02

r. 93-01-117 Inadequacy of Lateral Obstacle Clearance at Turning Facility FAFs

(From Frank Parr, AVN-210 notes) VOR and NDB facilities, when used as FAF, may not provide sufficient obstacle clearance when a turn is required. Lateral clearance is not increased. ALPA suggests that criteria be revised to provide for leading and lagging turns over the facilities in these cases. AFS-420 will provide this item to the TWG. **Action: Item Open (AFS-420)**

s. 93-01-118 Inclusion of Forms 8260-2 and 8260-9 with FAR 97 Rulemaking of Original and Amended SIAPs

(From Frank Parr, AVN-210 notes) Information on 8260 forms is no longer published in the federal register. It is not easily available to users, and should be available in regions at low cost without FOIA request. The answer was that they already are. All users have to do is ask at the Regional Office. **Status: Item Closed.**

t. 93-01-119 Obstacle Collision Risk Definition for GPS Terminal Instrument Procedures

(From Frank Parr, AVN-210 notes) ALPA requests that studies be made on GPS accuracy. Frank advises they already are. Copies were sent to various groups, including (we believe)

ALPA. NBAA will send copies of the T-39 tests ASAP, and these were mailed on February 3 to those requesting (Tom Young, ALPA and Danny McClain, AFFSA). **Action: Item Open (NBAA)**

u. 93-01-120 Portrayal of Final Approach Segment descent Gradients on High Descent Gradient SIAPs

(From Frank Parr, AVN-210 notes) If circling only is authorized, there is no limit on the descent gradient for straight-in approach, yet many pilots will execute same when possible. ALPA wants descent gradients published so the pilot does not have to calculate. Lyle Wink, AVN-220 says OK. Paul Best, AFS-420 said it would take a while as they might do this during the quarterly review of procedures. The AT Handbook would need changing, as would the 8269.19. **Action: Item Open (Unassigned, but must be done)**

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

(From Frank Parr, AVN-210 notes) AC 90-1A was done long ago to guide the public in the use of TERPS criteria. Initiated by what is now AVN-210 (Newhouse & Parr) then promulgated by AFS-420 (Stanne). All members agreed this would be advisable. ALPA will help pay for the work. Lyle will also. Bob Dame was suggested as perpetrator. No progress has been made on this because of budget. AFS-420 will oversee. **Action: Item Open (AFS-420)**

w. 93-01-122 Use of Mandatory Altitudes on SIAPs

(From Frank Parr, AVN-210 notes) Issue requiring better control over altitude assignment at some IAP fixes. A short discussion caused this item to go to the charting segment of the meeting with assignment to the ATPAC. **Status: Item Closed. (Moved to ACF Charting Group)**

x. 93-01-123 Symbolic Depiction of Holding Pattern Authorization and Limitations in a Common Manner; Update of Holding Pattern Criteria

(From Frank Parr AVN-210 notes) A paper has been written by Wally Roberts, ALPA which has merit. It covers many items in the holding criteria which I have seen as potential areas which could use improvement. I told Wally and Tom Young, ALPA I would like to insert these concepts into Gerry's upcoming project and they agreed. I promised to keep them in the loop. NBAA will monitor and report. **Action: Item Open (NBAA) and AVN-210)**

5. New Business:

a. 94-01-124 SIAP Segments – Use of Initial Approach Fix

(From Frank Parr AVN-210 notes) A question arose that the IAF is part of a SIAP, yet it is understood in general that a pilot may begin an approach at a point other than the IAF. If the IAF is a part of a SIAP then can a pilot be violated if he/she does not use the IAF? After some

discussion this item was regulated to the ATPAC for further discussion. **Action: Item Open (Refer to ATPAC)**

b. 94-01-125 Holding Airspeeds

(From Frank Parr AVN-210 notes): Discussion centered on reasons for holding (for absorbing delays, climbing, eliminating PT, or weather). Also, speeds in the current holding template criteria order are not really the best for emerging aircraft (150-165 might be better). Turboprop aircraft are not separately identified either. ALPA's suggestion is to look at an overall revision of the 1967 criteria (which was developed in 1962). Discussions on a "Band-Aid" fix for now, then go on and make a better diagnosis and change as appropriate. ALPA agreed, and FAA will keep them in the loop during the effort. ALPA will participate. **Action: Item Open (ALPA)**

c. 94-01-126 Widths of Feeder and Initial Approach segments in New Criteria

(From Frank Parr AVN-210 notes) New criteria defines feeder widths $\frac{1}{2}$ that of previous criteria in both the primary and secondary area. ALPA suggests that such reduction should not be accomplished just because it feels good; it should be the subject of testing and statistical analysis with user input. FAA Order 8360.36 is still under refinement at this time and the concept/methodology/rational will be presented to users. **Action: Item Open (TBD)**

d. 94-01-127 Step Down Fixes Displayed in Whole Mile Increments

(From Frank Parr AVN-210 notes) Unavailable. **Action: Item Open**

e. 94-01-128 Reduce ROC for NDB Approaches by 50 Feet

(From Frank Parr AVN-210 notes) Unavailable. **Action: Item Open**

6. Attachment:

ACF 94-01
Attendance Roster

Attendees	Organization
Paul Best	AFS-420
Dick Powell	ATP-220
Charles Branch	NOS/ACB
Tom Young	ALPA
Wally Roberts	ALPA
Paul Smith	NBAA
Charles Guy	ALPA
John Bell	AFS-400
Frank Parr	AVN-210
Howard Swaney	USAASA
Cliff Danhauser	FAA
Lyle Wink	AVN-220
Danny McClain	AFFSA
Rudy Ruana	Jeppesen
Bill Thomas	ATA
Don Chollakie	ATA
Steve Lucchasi	ATP-220
Tom Quinlan	ASA-100
Bill Hammett	AMT-613
Joe Hart	
David Eckles	AVN-220
John Moore	NOAA/ACD
Patrick Walsh	Delta Airlines
Migdaila Mario	NOS