

**GOVERNMENT/INDUSTRY AERONAUTICAL CHARTING FORUM**  
**Instrument Procedures Group**  
**April 27-28, 1999**  
**HISTORY RECORD**

**FAA Control # 99-01-215**

**SUBJECT: Radar Required SIAP's**

**BACKGROUND/DISCUSSION:** TERPs criteria envision all non-radar (other than ASR/PAR) SIAPs having ties to the en route structure, from feeder route to initial approach segment, through the intermediate segment to the final approach segment. Only where the feeder route or initial approach segment can be satisfied by existing en route structure does TERPs negate the requirement for these SIAP components. An intermediate segment is always required to blend the prior portion of the SIAP into the final approach segment. (Only on-airport VOR or NDB SIAPs without final approach fixes (FAFs) haven't intermediate segments.) TERPs permits initial approach segments to be in the form of ATC radar vectors. It is ALPA's view that this particular TERPs criterion was included in TERPs as an alternative method of providing ATC vectors to the intermediate segment, in addition to standard, non-vectored terminal routes. For unknown reasons, the FAA TERPs policy holders agreed at some past time to permit some SIAPs to be published where the only method of transition from the en route structure to the intermediate segment would be via ATC radar vectors. These SIAPs do not have ties to the en route structure and are annotated "radar required." FAA Handbook 8260.19C, Flight Procedures and Airspace discourages the charting of "radar required" SIAPs. Nonetheless, such procedures have proliferated. Further, there has emerged a pattern of charting of such radar-required SIAPs without charted intermediate segments. ALPA believes this to be a clear violation of TERPs criteria. In any case, it is contrary to sound human-factors considerations and to the established concept of charting the intermediate segment in both the plan and profile view of approach charts. The lack of an intermediate segment on an approach chart increases the opportunity for ATC error and removes the pilot/controller balance and crosschecks provided by being on a published segment prior to the FAF.

**RECOMMENDATION:** All SIAPs, other than ASR/PAR procedures, have full non-radar routing from the en route structure to the final approach segment, with the exception of PRM approaches (and only where PRM SIAPs are supplanted by alternative non-radar ILS SIAPs serving the same runway). The note "radar required" should be eliminated as an option, except on PRM SIAPs, and with one unusual exception: where terrain prohibits the establishment of an initial approach segment on an ILS, and where the airport has redundant approach procedures. (SLC Runway 17 could be eligible for such treatment, but must have a published intermediate segment. This SIAP, as well as PRM SIAPs, should be annotated: "Radar required. Vectors to the final approach course mandatory.") Where ATC desires to provide vectors most of the time, they have the authority to deny use of non-radar feeders and initial approach segments during normal operations. Yet, those segments would be charted for use by NORDO aircraft, and during periods of terminal radar failure, and would give the local ATC facility the option to use such non-radar routes during light traffic periods, perhaps when sectors are combined and staffing is reduced.

**COMMENTS:** This affects AFS directive policy to AVN-100, as set forth in Handbook 8260.19C and related directives.

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**INITIAL DISCUSSION (Meeting 99-01):** The issue was presented by ALPA; however, time constraints precluded time for discussion. All attendees were requested to study the issue and forward comments to Dave Eckles, AFS-420, who will prepare a status update paper for the next meeting. The intermediate segment portion of the issue has been resolved via AFS-420 policy guidance to AVN-100. **ACTION: AFS-420.**

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**MEETING 99-02:** Dave Eckles, AFS-420, presented a status update paper on the issue. It is a joint AFS and AAT position that radar vectoring has long been recognized method of providing procedure entry. Policy guidance in Order 8260.19 requires annotation of procedures where radar is the primary medium to transfer from the en route structure to the final approach course. Policy also requires a minimum of one non-radar transition route in the event of radar/communications failure. AFS-420 has also provided guidance to AVN-100 on April 2, 1999 to ensure that all 'Radar Required' SIAP's have an associated intermediate segment. Wally Roberts, ALPA, noted that there seems to be a proliferation of this type procedure and asked why. Brad Rush, AVN-110, responded that AVN serves several customers, including ATC. In some cases, ATC will hold up SIAP development and processing unless radar is the initial segment navigation source. He went on to note that AVN does ensure that there is at least one non-radar SIAP at each airport. Wally stated that all SIAP's should have a non-radar transition from the en route environment. AVN-110 took the IOU to further study the issue and report.

**ACTION: AVN-110.**

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**MEETING 00-01:** Brad Rush, AVN-160, addressed this issue. AVN-100 has reviewed and determined all radar SIAP's that are charted with FAF only. Work is underway to add intermediate segments. ALPA had submitted a "top 10" priority list which has been worked and now is requesting a time-line on the remaining procedures. Brad agreed to provide a list. Kevin Comstock requested the issue remain open to assess progress.

**ACTION: AVN-160.**

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**MEETING 00-02:** Brad Rush, AVN-160, briefed that AVN-100 is 50% through adding intermediate segments to the 77 SIAP's charted with FAF only and annotated "RADAR REQUIRED". A schedule of progress is included as attachment 3. He also stated that this issue has been elevated and is an AVN priority item. Kevin Comstock, ALPA, requested a schedule of remaining work at the next meeting and Brad agreed to provide one.

**ACTION: AVN-160.**

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**MEETING 01-01:** Brad Rush, AVN-160, briefed that AVN-100 had completed about 60% of the procedure revisions. Brad suggested that the issue be closed and that his office would

continue to provide ALPA periodic spreadsheets indicating progress. Kevin Comstock, ALPA, recommended the issue be carried as open until all work was complete. Brad agreed and AVN-160 will continue to provide progress updates at each meeting until work is complete. **ACTION: AVN-160.**

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**MEETING 01-02:** 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. AVN-160 will continue to provide progress updates at each meeting per ALPA's request until work is complete. **ACTION: AVN-160.**

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**MEETING02-01:** 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 than desired. **ACTION: AVN-160.**

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**MEETING 02-02:** Brad Rush, AVN-160, provided ALPA the bi-annual 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. **ACTION: AVN-160.**

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**MEETING 03-01:** Brad Rush, AVN-101, provided ALPA the bi-annual 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. There are five procedures remaining to be fixed, two of which are encountering environmental problems. AVN-101 will continue to provide progress updates at each meeting per ALPA's request until all work is complete. **Item Open (AVN-101).**

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**MEETING 03-02:** Bill Hammett, AFS-420 (ISI), briefed that Brad Rush, AVN-101, provided ALPA the bi-annual 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. Work has been completed on all identified procedures with the final three currently awaiting flight inspection. Bill suggested that the issue could be closed; however, Mark Ingram, ALPA, requested it remain open until totally complete. **Item Open (AVN-101).**

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**MEETING 04-01:** Brad Rush, AVN-101, provided ALPA the bi-annual spreadsheet indicating progress. All procedure development work has been completed. The last procedure amendment has been forwarded for charting on June 10<sup>th</sup>. Brad recommended the issue be closed. Kevin Comstock, ALPA, concurred and thanked Brad for the AVN-100 response to this issue. **Issue Closed.**

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