

## **AIR TRAFFIC PROCEDURES ADVISORY COMMITTEE**

**(ATPAC)**

**SUBJECT:** Minutes of the 130th Meeting

**SUMMARY.** The 130th meeting of ATPAC was held at CGH Corporate Headquarters, 600 Maryland Avenue, Washington, DC, on January 15 and 16, 2008. Representatives were present from FAA, ALPA, AOPA, APA, COA, HAI, NASA, NATCA, NBAA, and USA. The meeting was called to order by Wilson Riggan, Chairman, at 9:00 a.m. on Tuesday, January 15. ATPAC 129 minutes were discussed and approved with changes to AOCs 93-6, 108-1, and 116-1.

The Executive Director's report was presented by Ms. Kerry Rose, Acting Executive Director, who thanked CGH for permitting the use of their meeting room; She discussed the status of Congressional hearings for Bobby Sturgell as the FAA Administrator; the continuing resolution; changes to ATPAC member organizations; a call for nominations for the position of committee chair; and a change to the previous policy of briefings on agenda items. One new area of concern (AOC) was presented and no Safety Items were submitted for consideration. There was one visitor from Runway Safety scheduled for Q&As.

Updates were submitted in writing to agenda items regarding Runway Safety, Wake Turbulence, NAVAID Naming Protocols, and Class B airspace.

### **AGENDA.**

- Call to Order/Roll Call
- Recognition of attendees
- Review/Approval of Minutes of the 129th ATPAC Meeting
- Call for Safety Items
- Executive Director's Report
  - Review of DCPs
  - IOUs
- Review of Areas of Concern
- Adjournment

**CALL TO ORDER.** The Chairman, Mr. Wilson Riggan, called the meeting to order at 9 a.m. at CGH Corporate Headquarters, 600 Maryland Avenue, Washington, DC, on January 15 and 16, 2008. Representatives were present from FAA, ALPA, AOPA, APA, COA, HAI, NASA, NATCA, NBAA, and USA.

The following persons were in attendance or visited during the two-day meeting:

Wilson Riggan, APA, Chairman  
Steve Alogna, Contract Support, ATO-R  
Harvey Hartmann, NASA/ASRS  
Harry Hodges, FAA  
David Young, FAA

David Rivers, NBAA  
Bob Streigel, ALPA  
Danny Aguerre-Bennett, NATCA  
Darren Gaines, NATCA  
Joe McCarthy, FAA  
Glenn Morse, COA  
Sydney Tutein, USA  
David York, HAI  
Vince Polk, NATCA  
Kerry Rose, Acting Executive Director, ATPAC  
Tim Swope, Contract Support to AJR  
Pete Lehmann, AOPA  
Joseph White, FAA

**REVIEW/APPROVAL OF MINUTES OF THE 129th MEETING.**

ATPAC 129 minutes were discussed and approved with corrections to AOCs 93-6 (Action Complete), 108-1 (deleted as Action Complete), and 116-1 (ATPAC Recommendation #2 restored).

**INTRODUCTION OF SAFEY ITEMS.**

None were introduced. Permanent agenda items remain Runway Safety issues, Class B Airspace, Wake Turbulence, and NAVAID Naming Protocol. These items will appear as agenda items for all meetings and representatives from these respective areas will be asked to provide a written update or, if necessary, a briefing on significant activity regarding these items.

**EXECUTIVE DIRECTOR'S REPORT**

Ms. Kerry Rose, Acting Executive Director, presented the report.

**INTRODUCTION OF NEW AREAS OF CONCERN (AOC).**

One was presented for consideration.

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## ATPAC UPDATE

### AREA OF CONCERN 93-6

10/5/98

SAFETY ITEM: NO

#### **SUBJECT: Runway Incursions by Taxiing Aircraft**

**DISCUSSION:** In response to the upward trend in runway incursions, a RE&D Subcommittee was tasked with developing recommendations to address this upward incursion trend.

At ATPAC 91, we were briefed on the RE&D recommendation that the FAA “expeditiously amend FAR 91.129(i) to require a specific ATC clearance to cross any runway.” The FAA has indicated that this rule change will be a long, slow process. Furthermore, despite the urgency of the recommendation, the FAA has not taken any action on this item.

**SUGGESTED ATPAC ACTION:** Until such time that the FAA changes 91.129(i) and, as an interim measure, ATPAC should recommend that the taxiing aircraft to hold short for positive clearance to taxi across all runways.

**93**—AOC deferred pending additional discussion.

**94**—Executive Director provided an overview of the AOC. The recommendation to update the FAR is being reviewed. Question raised regarding the status of the Runway JSAT. Joint commercial and general aviation JSAT is being established. The JSAT is planned for February. Joint commercial and general aviation JSAT is being established. A MITRE model at Midway (Chicago) is currently being developed. Completion is targeted for end of summer/beginning of fall. Suggestion to have MITRE provide a briefing to the committee at the next meeting regarding parameters for the model.

**95**—Status update was provided by Sue O’Brien, Runway Safety Program Manager, ATO-102. AOC deferred pending testing in Long Beach. Update will be provided in July.

**96**—Executive Director provided status update of Long Beach testing. Further updates will be provided at the next meeting. Discussion centered on why ATPAC has not made a formal recommendation regarding this AOC. Other members stated that a recommendation may not bring about a solution. Suggestion made to wait for the results of the Long Beach testing. One member stated that there is a significant difference between the test and the FAR change. Copy of test plan will be provided at the next meeting. Once the committee hears further test results and reviews the test plan a decision will be made whether to pursue the concern further.

**97**—Runway Safety Program Manager, Sue O'Brien, ATP-20, and Staff Specialist, Del Meadows, briefed the committee. A copy of MITRE Report (test plan), Taxi Hold-Short Procedure, was distributed to the committee, as requested. Lighting issues discussed. There was a comparison of U.K. lighting procedures versus procedures in the States. An update of the Long Beach testing will be provided in January.

**98**—The Long Beach Test has been delayed due to issues with pilots, unions, and the airport manager. No action has been taken since the October 1999 meeting. A briefing will be provided to the committee at the April 2000 meeting.

**99**—Update provided by Del Meadows, ATP-20. A question was raised that if the FAR was changed, why not change the 7210.3 to be incorporated into a facility's operation manual. The result of changing the FAR or writing procedure will only make a small difference. JSAT will analyze data and come up with strategies and will determine which ideas will be implemented with a JSIT.

**100**—Denny Lawson, ATS-20, provided a program status update. Since the last meeting, a workshop with all 9 regions and a symposium in which the users were invited had been held.

**101**—Steve Shaffer, ATS-20, informed the committee of the current initiatives being addressed by the Runway Safety Program Office. The issue has been introduced at the JSIT. AOC will be deferred pending updates in January.

**102**—ATS-20 provided a briefing paper to the committee. Points discussed were:

- Amending FAR 91.125(I).
- Enhanced operational tower controller training.
- Memory enhancement techniques training for tower controllers.
- Pilot/Controller communication phraseology review.
- Air traffic teamwork enhancement (ATTE) training.
- NOTAM system improvement.

**103**—Steve Shaffer, ATS-20, provided a status briefing to the committee. Air Traffic is responsible for Enhanced Tower Control Training and OJT for Controllers. Flight Standards is responsible for Education and Awareness of Airport and Vehicle Operators. AC Runway 121 & 125 is currently on the Federal Register for comment. Foreign Pilot Training in compliance with ICAO Standards is scheduled to be completed in the 2002 timeframe.

A meeting was held w/ATP and AFS regarding the FAR that was the original concern of this AOC. Runway Safety JSAT forwarded the issue to the JSIT and it remains on the top 10 list.

**RECOMMENDATION #1: ATPAC remains concerned that the runway incursion rate continues to increase. ATPAC urges the FAA to expedite the process to change**

**FAR 91.129i to require a specific ATC clearance to cross any runway as recommended by the runway incursion RE&D committee and the NTSB.**

Vote taken and recommendation adopted.

**104**—The Executive Director reported that the Office of Runway Safety has committed funds in FY02 for modeling of the procedure to require a specific ATC clearance to cross any runway. The evaluation will specifically target the issues of airport capacity, safety, controller workload, efficiency, and frequency congestion. ATP is in the process of developing a test plan that will address every conceivable scenario. A decision based on the results of the evaluation should be available by December 2001. Status update will be reported in October.

**105**—ARI briefing given by Mike Lenz. Expect testing to begin in first quarter of calendar year 2002, possibly at NASA Ames, funding secured by ARI. Will look at controllers for the facilities being simulated, to participate. Have chosen a few airports to look at with a lot of crossing taxiways and runways, but not necessarily the busiest. Decision made collaboratively between ATP, ARI, and NATCA. Test plan has not been completed due to other priorities.

Launching some initiatives related to 91.129i. Methodology to do simulations, review studies, look at ATC procedures associated with TIPH. Approximately 10 airports brought up that would likely lend themselves to this type of operations. MITRE developed and published a test plan a few years. Goal is to develop and conduct work to have a report for Runway Safety Summit in August 2002.

**106**—ARI briefing by Mike Lenz. Working on risk assessment and analysis looking at “taxi to,” taxi into position and hold (TIPH), and multiple landing clearances to identify hazards and manage the risks associated with selected procedures. Analyzing data for last 3 years. Not a lot of information available on multiple landing clearances. Will be using TAAM model in analysis. Model will run traffic as you program it, but will not tell you how many errors.

Will accept any input from industry. It was suggested that it would be interesting to look at international standards for the procedures, but it was brought up that the total number of flights is less in Europe and there are language differences as well. It was also suggested to get industry more directly involved in the analysis.

**107**—ARI briefing provided by Mike Lenz. Talked about the risk assessment and analysis work dealing with 91.129, TIPH and multiple landing clearances. The final report is due May 31, 2002.

**108**—Due to a scheduling conflict, no briefing was available at this meeting. Update will be provided at meeting 109.

**109**—Status update provided by Mike Lenz of the Runway Safety Office. Background information regarding NTSB and Runway Incursion JSAT recommendations were discussed. Copy of briefing provided to members.

ADSYSTECH provided the committee with a briefing regarding the status of TIPH operation Risk Assessment.

Update will be provided at the next meeting.

**110**—The Executive Director read the status update provided by the Office of Runway Safety. The test at NASA Ames has been discontinued. An analysis will be performed beginning with benchmark OEP airports. The TIPH risk analysis is expected to be completed in FY 2003.

**111**—Mike Lenz briefed the committee. Talked about how the risk assessment for TIPH was being conducted and what results had been seen to date. A recommendation on TIPH will be forthcoming.

**112**—91.129i verbiage read to the committee. Question regarding why a risk assessment will not be done on 91.129 issues. A number of workgroups have been addressing the issue of 91.129i. One solution would increase frequency usage. Comment made, this addresses taxiing, but not the runway that you land on. There is a problem with the wording. The evaluation of the paragraph needs to be reviewed. The interpretation is unclear. AIM paragraph needs to be revised.

**113**—Briefed by Mike Lenz, ARI. Discussed risk assessment and analysis process for TIPH, 91.129, and multiple landing clearances. Talked about Runway Status Light concept.

Analysis for 91.129 is on-going. This includes a questionnaire for facilities.

[PowerPoint presentation is available on the website].

**114**—Runway Safety has comments from ATPAC and NTSB and are still conducting their analysis. They will have more information at the April Meeting.

**115**—LaGretta Bowser, ATO-R, briefed the committee. Currently a survey of all ATCTs is being conducted regarding 91.129. Additional input/feedback is being requested from any interested user group. The analysis done so far does not support change. AT and AF will make the final decision. A copy of the report was requested.

**116**—The ATO-R representative was unable to attend the meeting. A briefing will be provided at the next meeting.

**117**—Briefing from LaGretta Bower, ATO-R. All air traffic facilities surveyed. Varied responses from no impact to extensive impact. Analysis shows the only a few incursions are due to 91.129.

Consensus reached that amending 91.129 would not change much. The Committee decided to withdraw Recommendation #1. Update will be provided in January.

**118**—The following was provided by LaGretta Bowser, ATO-S, for briefing to the committee:

A draft final report is complete. A copy will be forwarded to the committee no later than 3/31/05. An update will be available at the next meeting in April.

**119**—The ATO-S representative was unable to attend the meeting, but provided the following information.

Air traffic has requested ATO-S to expand the criteria used in the analysis for 91.129i. Work is continuing and a copy of the final report will be forwarded and the response to the NTSB will be forwarded when complete.

**120**—LaGretta Bowser (ATO-S) briefed the committee. Workgroup has completed analysis on events from 1998 through April 2005. Of 1366 runway events examined, 28 events found of which only a small subset was 91.129. The NTSB did not completely agree with the findings because of the criteria used.

ATO-S is continuing to work the recommendation and will brief the Vice President's for AF (Davis) and AT (Johnson) prior to the October meeting. The options will be full rulemaking (2-5 years) or nothing at all.

**121**--LaGretta Bowser (ATO-S) briefed the committee. Air Traffic has been briefed on the findings concerning 91.129. Options are for rulemaking or to do nothing at all. No response on the direction of this issue has been received. The NTSB has not changed their position on this issue.

**122**--LaGretta Bowser (ATO-S) briefed the committee. No decision has been made regarding rulemaking. Has a complete safety case been made for changing the FAR? ATO-S representative does not think so. Input requested. Can we mitigate the risk? Can we manage without changing the FAR? ASRS reports indicate that "site specific" signage could help alleviate problems such as this.

**123**-- LaGretta Bowser (ATO-S) briefed the committee. Safety risk mitigation (SRMD) needs to be completed.

**124**-- LaGretta Bowser (ATO-S) could not attend this meeting and will be scheduled to brief during 125.



**125** – LaGretta Bowser briefed that the SRMD should begin 120-days after the anticipated “Line Up and Wait” DCP is issued possibly in April 2007.

**126** – It was agreed that Ms. Bowser will be asked to update the committee at 127.

**127** – Ms. Bowser briefed on status of

**128** – Discussion focused on the committee’s continual interest in this item and the need to stay ahead of actions taken or proposed.

**129** – It was determined that this item would be closed in favor of identifying it as an agenda item that would require an update and/or briefing by the Safety organization when and if relevant changes were made or proposed.

**130** – N/A

**CURRENT STATUS: ACTION COMPLETE – CONVERTED TO AN AGENDA ITEM**

**RECOMMENDATION #1: ATPAC remains concerned that the runway incursion rate continues to increase. ATPAC urges the FAA to expedite the process to change FAR 91.129i to require a specific ATC clearance to cross any runway as recommended by the runway incursion RE&D committee and the NTSB.**

**IOU: Runway Safety will be tasked to present a written status report for each meeting.**

## ATPAC UPDATE

### AREA OF CONCERN 102-2

1/24/2001

SAFETY: No

#### **SUBJECT: Instrument Approach Clearances to Other than IAF**

**DISCUSSION:** ALPA is still receiving reports that ATC is clearing aircraft direct to intermediate or final approach fixes, and then expecting aircraft to execute a straight-in instrument approach procedure (“IAP”). In fact, with the proliferation of RNAV/GPS IAPs this practice appears to be on the increase.

The instrument approach procedure design criteria do not account for descent gradient or course change factors that occur when aircraft begin an instrument approach procedure on an ad hoc basis. The only exception to beginning an IAP at an IAF is where vectors to the “final approach course” (in accordance with 7110.65, 5-9-1) place the aircraft in the proper position to do a straight-in approach.

When an aircraft is not vectored in accordance with 5-9-1, the aircraft must be cleared over an IAF (or simply “cleared approach” to leave the pilot free at remote locations to do the procedure as required by AIM directives, etc.). Controllers need to be reminded that arrival over an IAF that is not approved on the face of the procedure for “NoPT” requires the pilot to do a course reversal.

The requirements set for in 7110.65, 4-8-1, are intended to apply to all IAP clearances, except for those conducted specifically under the provisions of 5-9-1. In recent discussions with ATP-100 staff, ALPA has learned that some quarters within Air Traffic Services consider Chapter 4 of 7110.65 to apply only to non-radar operations, rather than being the chapter that is the foundation for all IFR operations. Either this needs to be cleared up, or the language of 4-8-1 needs to be restated in Chapter 5.

Further, the language in 4-8-1 that refers to the intermediate fix is confusing, ambiguous, leads to endless speculation, and serves no valid operational purpose.

As protected airspace areas are reduced in RNAV and emerging RNP IAPs, bypassing a designated IAF increases the risk of an aircraft leaving protected airspace and colliding with an obstacle, in addition to the risks of violating turning and descent gradient requirements.

Also, ALPA understands that some controllers believe that the intent of 5-9-1 is satisfied by a clearance direct to an intermediate or final approach fix, followed by a “radar monitor.” This is incorrect as it negates the requirement to intercept final at not more

than a 20-30 degree angle, and at the appropriate minimum distance from the approach gate.

**SUGGESTED ATPAC ACTION:** A training bulletin be issued to all controllers reviewing the intended requirements of 7110-65, 4-8-1. This would include a reminder that this paragraph applies to all IAP clearances except for vectors provided in accordance with 5-9-1. Further, a reminder that the “intent” of 5-9-1 is not satisfied by simply clearing an aircraft directly to an intermediate or final approach fix, then merely observing the aircraft on radar. Finally, a reminder that a clearance for an IAP over an IAF that is not approved for “NoPT” on the face of the chart will require the pilot to execute the prescribed course reversal, thus ATC separation services should be provided with that expectation in mind.

In 4-8-1 the present language “Standard Instrument Approach Procedures shall commence at an Initial Approach Fix or an Intermediate Approach Fix if there is not an Initial Approach Fix...” should be amended to delete reference to the phrase “Intermediate Approach Fix.” The only time an approach should begin at an intermediate approach fix is where vectors in accordance with 5-9-1 have been onto the approach course outside of the intermediate fix on a “radar required” IAP that has no IAF’s.

(See related agenda item “Vectors to the IAP Course Prior to a Published Segment”). Finally, 4-8-1 should have language that makes it absolutely clear that the provisions of this paragraph apply in both a radar and non-radar environment, excepting only radar vectors provided in accordance with 5-9-1.

**102**—Wally Roberts, ALPA, presented the AOC including a November 2000 letter from ALPA to the FAA, which expressed the concern. Executive Director reported that the FAA has drafted a response to the letter and that it is currently in coordination. The committee opted to wait for the FAA’s response.

**103**—Deferred for discussion at next meeting.

**104**—Wally Roberts provided an update to the committee. Concerns were raised regarding the confusion of mixing procedural notes and system requirement (equipment) notes. Additional wording was suggested to distinguish equipment vs. procedure note. ATP and AFS need to jointly work the issue.

**RECOMMENDATION #1:** **Form a FAA workgroup comprised of AFS, AVN, AAT, NATCA, and ALPA to work the issue and provide solutions to the problem.**

Flight Standards will take the lead to make this happen.

The Flight Standards representative provided a brief overview of the issue. This is not a site-specific issue and controllers are doing the best with what they have. AVN and AFS will work together with the controllers to determine criteria for TERPS and the impact.

A specific fix should not be targeted. Flight Standards takes the responsibility and commitment to work and explore the issue.

**105**—Meeting with Wally and AFS to discuss issues has not yet occurred. After the meeting occurs, there will be a decision as to whether or not a workgroup should be formed. Request to review list of attendees and ensure that the proper attendees are there to obtain the desired results/outcome. Will try to have meeting in conjunction with the charting forum.

**106**—Did not get discussed at the past charting forum. AFS will try to get the parties together before the April meeting.

**107**—The Flight Standards representative was unable to attend meeting 107. The AOC will be updated at the July meeting.

**108**—FAA has had some internal discussions, but has had some difficulty getting all parties on the phone. Don Porter and Bruce Tarbert, ATP-104, briefed the committee on this AOC. DCP and CBI training are being edited to address GPS equipment and T approach issues. CBI training is targeted for release in September. Product will be presented for review in January and possible implementation in June/July 2003 timeframe.

**109**—Bruce Tarbert, ATP-104, briefed the committee. DCP's have been finalized and signed. Training is expected to be out in April 2003, which will include TAA's. Consideration was given to distances from IAF and intercept angle. AVN looking to see if additional guidance regarding speed is required.

**110**—A Draft DCP was submitted to committee for review. A question was raised regarding the "IF (IAF)" notation on the diagram. A briefing will be provided at the next meeting to clarify the concerns.

**111**—Some work has been done within Flight Standards, but there has not been a meeting of all the appropriate parties.

**112**—AFS-420 workgroup has been formed to write-up a plan and proposed guidance. Development of a controller and pilot training initiative will be addressed. Workgroup's progress will be reported at the next meeting.

**113**—AFS representative was unable to attend the meeting and provide an update. Question was raised whether the charting forum was working this issue.

**114**—AFS representative was unable to attend the meeting and provide an update.

**115**—AFS representative was unable to attend the meeting and provide an update.

**116**—AFS representative was unable to attend the meeting and provide an update.

117—New AFS representative at this meeting. Draft DCP for the AOC has been written. An update will be provided in January.

118—AFS was unable to attend the meeting, but indicated to the committee that a reenergized effort will be made on this AOC. The committee wanted to emphasize that there had been considerable work done on this AOC by AFS and that there should not be a need to start over again.

Committee wanted to reiterate its recommendations to AFS.

119—AFS brought up the issue before the Technical Review Board. A review of the ATO-W DCP for vectoring has been completed and was concurred with.

The committee requested for AFS to look at RNAV aircraft on the conventional side.

120—DCPs are scheduled for publication in February 2006. Question: Would it have application to conventional procedures? ATO-T would have to provide feedback.

**RECOMMENDATION #2: Determine/implement this type approach if it can be used by conventional aircraft.**

121—Clarify of Recommendation #2 was discussed and approved. It now reads:

**RECOMMENDATION #2 (Revised): Determine/implement this type approach if it can be used by RNAV aircraft on a conventional approach.**

ATO-T is still researching this issue with the RNAV office.

122—RNAVs have ability to go to other than designated IAF. Published for RNAV on RNAV approach. Our AOC asks whether it can also be for conventional approach. Can the aircraft also meet altitude of IAF? It is there for RNAV. Should also be there for conventional approach. Operationally, this gives the controller more flexibility, less workload, streamlines operations.

This should be presented to RNAV office. ATO-T will draft a DCP.

123 – ATO-T will research and put out appropriate on the recommendation.

124 – ATO-T (Madison) will follow-up on DCP to present to RNAV/RNP Office.

125 – Dave Madison advised that AFS-400 is looking into this AOC and is working the group's concerns. After group discussion, Harry Hodges, Flight Standards, agreed to follow-up and advise ATPAC of status.

126 – Jeff Williams, RNAV/RNP Office, provided an explanation. Discussion at 127 will determine if this is sufficient to satisfy the AOC.

**127** – Harry Hodges gave his opinion that RNAV equipped aircraft may proceed to conventional intermediate fixes. Also discussed was the various levels of RNAV capabilities so that all RNAVs are not compatible to accomplish successful navigation during a conventional approach. Jeff Williams was non-committal as to the answer to the AOC but will look into the applications as was AFS-100. The consensus was that Jeff and David Madison should discuss and resolve.

**128** – Discussions centered on the particular equipage of the aircraft. Ben Grimes concurred and will coordinate with RNAV Office to accomplish without SMS.

**129** – Don Frenya/Kerry Rose will determine the status of SRMD action and Joe McCarthy will address the issue with ATO-T for reports at 130.

**130** – Joe McCarthy will work with ATO-T regarding the SRMD and DCP will check status of DCP.

**CURRENT STATUS: DEFERRED**

**RECOMMENDATION #2 (Revised): Determine/implement this type approach if it can be used by RNAV aircraft on a conventional approach.**

**IOU: ATO-R**

**ATPAC UPDATE**

**AREA OF CONCERN 105-3**

**10/12/2001**  
**SAFETY: No**

**SUBJECT: Cleanup of FAR's and AIM**

**DISCUSSION:** There is a possibility that several typos or actual errors exist in the government issued FAR's and/or AIM. It is requested that the appropriate FAA offices review the attached list, and if errors should be found, correct those errors at the earliest opportunity with the government printing office. In those cases where error is not found, an explanation should be forwarded to ATPAC for review

**SUGGESTED ATPAC ACTION:** Forward the attached to appropriate FAA office(s) for review and explanation.

**105**—There is a process mentioned in AIM for making changes.

**RECOMMENDATION #1: In accordance with suggestion ATPAC Action.**

**106**—No progress has been made on this AOC. Update at April meeting.

**107**—Due to resource constraints, Air Traffic does not have the personnel to conduct a thorough review and clean up of the AIM.

**108**—ATP will work on the specific AIM changes that were noted in the AOC when it was originally submitted.

**109**—DCP's are being prepared for AIM/AIP changes. Memorandums to appropriate offices regarding FAR changes are being processed.

**110**—DCP and FAR changes are in process.

**111**—DCP and FAR changes are in process.

**112**—DCP and FAR changes are in process.

**113**—DCP and FAR changes are in process.

**114**—DCP and FAR changes are in process.

**115**—DCP and FAR changes are in process. Draft changes regarding flight levels in Class G airspace was provided to the committee.

**116**—Changes continue to be processed.

**117**—DCP and FAR changes are in process.

**118**—DCP and FAR changes are in process.

**119**—Changes to AIM paragraph 3-3-1 concerning IFR altitudes in Class G airspace have been published. Additional DCP and FAR changes are in process.

**120**—DCP and FAR changes are in process.

**121**—DCP and FAR changes are in process.

**122**—DCP and FAR changes are in process. FARs transferred to ATO-R for processing.

**123**- ATO-R is investigating the remaining changes to the FARs and will report progress at the next meeting.

**124** - ATO-R is investigating the remaining changes to the FARs and will report progress at the next meeting.

**125** – This AOC contains recommended actions in the CFR regarding 14 CFR 91.126(d), 91.127(c), 91.155, 91.157 (b) (4), and the AIM. The Office of Airspace & Rules has addressed these items and the proposed resolution will be discussed at 126.

**126** – Steve Alogna will determine the status of these items and report at 127.

**127** – This item was not addressed due to time constraints.

**128** – Steve Alogna will address at 129.

**129** – Personnel issues precluded an update. This item will be addressed at 130.

**130** – ATO-R submitted a written report advising that all recommended changes have been addressed.

**CURRENT STATUS: ACTION COMPLETE**

**RECOMMENDATION : N/A**

**IOU: N/A**



## ATPAC UPDATE

### AREA OF CONCERN 112-1

7/28/03

SAFETY: No

**SUBJECT:** Clarification of “Direct” Clearance

**DISCUSSION:**

It has been pointed out that a clearance to fly “direct” to a city, for example, ELP, where the airport and the VOR share the same spoken name, yet are not co-located, leads to confusion as to whether or not the clearance was to the airport or to the VOR. The AIM and the 7110.65 do not specifically identify which location is intended. In light of the implementation and expansion of RNAV procedures nationwide, it might be time to specifically identify the desired destinations in both of these documents. When queried about this potential disparity many controllers presented opposite answers while pilots also responded on both sides of the issue. The pilots who believe they’ve been cleared to the airport are inserting runway extensions (to the runway of choice) into FMC databases and allowing LNAV/GPS to fly them to that point. The controllers are relying on the approach controller to redirect the a/c onto the arrival as needed for spacing. With the intent of RNAV/LNAV of reducing communication transmissions and consistency of track it is time to clarify this issue.

**SUGGESTED ATPAC ACTION:** That ATPAC discuss this issue and add a note and/or an example in both the 7110.65 and the AIM indicating that the controller will specify when the clearance limit is not to the airport of intended landing.

7110.65 Para. 4-2-5a1

AIM Para. 4-4-4 (new “d”???)

Note: In cases where the airport and VOR share the same name, it is intended that the airport is the clearance limit unless otherwise stated.

**112**—Committee advised to await FAA’s response prior to drafting a recommendation.

**113**—Discussion was held about different handbook changes that could be made concerning this issue. One member brought up that NAVAID names not on the airport should be changed to distinguish from the airport identifier. Changes to VORs would be easy with a maximum of 1033 needing to be changed.

ATP will find out if ATA-100 is currently working on this issue.

**RECOMMENDATION #1: The FAA change the names of NAVAIDS, which are the same as the name of the airport, and not located on airport property.**

**114**—Anything in the future will have different names and anything that is in existence has been grandfathered in. ATP has requested that ATA-100 look at section 3 of 7400.2E. An update is expected in April. The group would also like to see a copy of the memo from ATP to ATA.

**115**—ATA is just beginning work on the issue. No update available at this meeting.

**116**—ATA is working the issue and will provide a briefing to the committee at the October meeting.

**117**—Update provided by ATO-R representative. List of airports was produced and memo sent to field. Issues will be dealt with on a case by case basis.

Data provided to committee. A data rerun of 0-5 miles was done and showed over 1000 airports. Are we fixing the problem by changing the names? Is there another way?

Research needs to be done on the pilot/procedural side and the manuals before it can be decided if this is a big issue.

**118**—Searches indicate that there are hundreds of airport/NAVAID names that are the same. Discussion about whether this is a problem. At a long distance it may not, but closer in it may be a problem. It was noted that if pilots are not sure they have been cleared to the airport or the NAVAID, then they should ask the controller.

Question asked: what is the actual breakdown based on distances? FAA provided the following:

Total	~1400
Less than 1 mile	972
1-2 miles	72
2-3 miles	51
3-4 miles	77
4-5 miles	72
Greater than 5 miles	155

**119**—Based on information from meeting 118 should this issue be continued? Several members said yes. After discussion it was decided that the committee would amend Recommendation #1 as follows:

**RECOMMENDATION #2: The FAA change the names of NAVAIDS, which are the same as the name of the airport, and are greater than 2 NM from the airport reference point.**

**120**—ATO-R is working the issue. No update is available at this meeting.

**121**—Analysis shows approximately 350 NAVAIDS with the recommended requirement. Several are part of airways, etc., which leads to rulemaking and has to be done by service areas. This could be a burden. Also, local authorities are likely to raise issues.

**122**—ATO-R sent a memo to service areas asking for a list of non-collocated NAVAIDS and airports with the same name. No response has been received. This process will be time consuming to the service areas. Can we track what gets changed in the process of other charting work? Needs discussion to see who initiates the process and how it is done. Should we start with further out first, within 5 nm, etc?

**RECOMMENDATION #2 (Modified): The FAA change the names of NAVAIDS non co-located NAVAIDS with the same name and greater than 5NM from the airport, prioritizing by distance and tied to review cycles.**

**123** – There has not been a lot of response from the service areas on the memo noted at meeting 122. ATO-R will be putting together a strategy to get more response. Some of the changes will require rulemaking. ASRS has been getting reports of confusion in this area. There may be some handbook changes (AIM, 7110.65) that will clarify the situation in the interim prior to name changes. ATO-R will look into this.

**124** – ATO-R will re-visit with Service Areas. No input has been received to-date. Dick Powell is developing a process to solicit prompt action from the service areas.

**125** – Nancy Kalinowski briefed that communications with the Service Areas has not been completed and that the initial queries were not conclusive. She advised her office will continue efforts to resolve this AOC.

**126** – Steve Alogna will obtain the status of this AOC and report at 127.\

**127** – ATO-R will send direction to Service Areas regarding this issue.

**128** – Service Areas have directions to rectify this issue. It was acknowledged that this may be a long term fix because of the complexity and cost of moving/renaming NAVAIDS.

**129** – AIM will be asked to brief annually on status beginning at 130.

**130** – Action Complete

**CURRENT STATUS: ACTION COMPLETE. \_ CONVERTED TO AN AGENDA ITEM**

**RECOMMENATION #2 (Modified): The FAA change the names of NAVAIDS non co-located NAVAIDS with the same name and greater than 5NM from the airport, prioritizing by distance and tied to review cycles.**

**IOU: ATO-R (AIM) will be tasked to present a written status report for each meeting.**

## ATPAC UPDATE

### AREA OF CONCERN 116-1

7/14/04

SAFETY: No

**SUBJECT: Revision to FAAO 7110.65 and the AIM**

#### **DISCUSSION:**

**REFERENCES:** FAAO 7110.65, paragraph 4-2-5b: NOTE; AIM, Sections 4-4-9g and 5-2-6-e-7.

The possibility of a misunderstanding between pilots and controllers during the issuance of an ATC clearance has been identified during discussions on the application of “Climb Via” in the RNP/RNAV Phraseology Work Group meetings and should be corrected.

Specifically, in accordance with the references stated above, the use of the term “maintain” when used in conjunction with the initial ATC clearance issued prior to departure *could* be understood to be an amended clearance and have the possible affect of canceling altitude restrictions contained on the DPs issued in the same initial clearance. In considering this issue it is important to remember the following:

- The definition of “maintain” as contained in the P/C Glossary has not changed.
- The application and sequence of the term “maintain,” and the omission of previously issued altitude restrictions (including those on published DPs) is the key to understanding the procedure.

Each of the above references refers to a “**restating**” of the previously issued altitude to “maintain,” and the omission of any restrictions contained in a DP that would have applied. When the term “maintain” is used in the initial ATC clearance, *it is not a restatement*, but instead is one of the items included in the basic departure clearance data as contained in FAAO 7110.65, paragraphs 4-3-2 and 4-3-3, and paragraph 4-4-3 of the AIM.

While ALPA believes the possibility of a misunderstanding of the currently accepted procedure is small, ALPA realizes the task of ATPAC is to eliminate any such possibility to the extent possible. Therefore, ALPA recommends the following changes to both the AIM and FAAO 7110.65:

#### **SUGGESTED ATPAC ACTION:**

1. Revise FAAO 7110.65, Paragraph 4-2-5-b: NOTE: to read as follows: (New material is in bold and italics.)

*The term “Maintain,” when used in issuing an altitude assignment as an item in the initial ATC clearance delivered to an aircraft prior to departure, does not constitute an amended clearance that cancels altitude restrictions issued by ATC or contained on any DP issued as an integral part of the same clearance. The depicted or assigned altitudes apply. However, in subsequent transmissions, restating a previously issued altitude to maintain is an amended clearance. If altitude to “maintain” is changed or restated, whether prior to departure or while airborne, and previously issued altitude restrictions are omitted, altitude restrictions are cancelled, including DP/FMSP/STAR altitude restrictions if any.*

2. Revise AIM Paragraph 4-4-9g to read as follows: (New material is in bold and italics.)

The guiding principle is that the last ATC clearance has precedence over the previous ATC clearance. When the route or altitude in a previously issued clearance is amended, the controller will restate applicable altitude restrictions. *The term “Maintain,” when used in issuing an altitude assignment as an item in the initial ATC clearance delivered to an aircraft prior to departure, does not constitute an amended clearance that cancels altitude restrictions issued by ATC or contained on any DP issued as an integral part of the same clearance. The depicted or assigned altitudes apply. However, in subsequent transmissions, restating a previously issued altitude to maintain is an amended clearance.* If an altitude to “maintain” is changed or restated, whether prior to departure or while airborne, and previously issued altitude restrictions are omitted, altitude restrictions are cancelled, including DP/FMSP/STAR altitude restrictions if any.

3. Revise AIM Paragraph 5-2-6-e-7 as follows: (New material is in bold and italics)

*If, after the initial ATC clearance has been delivered and acknowledged, an altitude to “maintain” is restated, whether prior to departure or while airborne, previously issued altitude restrictions are cancelled, including any DP altitude restrictions that applied.”*

Appropriate cross-references should be annotated for each of these changes.

**SUGGESTED ATPAC ACTION:** That ATPAC review this item and recommend changes to FAAO 7110.65 and the AIM.

**116**—Committee expressed differing views on how clearance should be issued. Question – Does maintain cancel restrictions? This may be systemic and more than just an AIM change.

Committee requested to get RNAV and international offices views on the subject. Discussion will be held at October meeting.

**117**—Briefing from Bruce Tarbert, RNAV and Don Porter, CSSI. “Climb Via” is a new phraseology procedure being developed by the PCCP workgroup. Comply with

Restrictions will be done away with when this is developed. Simulations will be done in the December/January timeframe. It was suggested that the workgroup bring in international to work on the issue together. This would decrease exceptions.

**118**—The following information was provided by the RNP Office:

BACKGROUND: As a result of ATPAC’s AOC 116-1, and the Committee’s recommendation, the RNP Program Office (ATO-R/RNP) tasked the Pilot/Controller Procedures and Phraseology (P/CPP) working group to discuss this issue at its October meeting. The P/CPP was established to address RNAV and RNP implementation issues, and is made up of air traffic, aviation, and union subject matter experts. The P/CPP reviews, assesses and proposes changes to ATC procedures and phraseology and is tasked by the RNP Program Office with incorporating those changes into FAA Order 7110.65, the AIM and AIP.

DISCUSSION: After lengthy discussion the P/CPP came to the following conclusions: if used as prescribed, the phrase "maintain" is clear and unambiguous; that this is an ATC training issue; and to create another "situational" (on the ground vs. in the air) definition for the use of “maintain” would create further confusion.

RECOMMENDATION: ATO-R/RNP concurs with the P/CPP and makes the following recommendations:

1. In the near term, develop a Mandatory Briefing Item (MBI) for ATC facilities that discusses this issue and gives the necessary guidance to correct the problem.
2. Include this issue, complete with a description of the problem and the correct applications and uses for the maintain phraseology, in the next RNAV and RNP Computer Based Instruction (CBI) that is currently under development and due to be completed in March. Distribution to facilities is planned in the June/July timeframe.
3. Make any necessary changes to the appropriate sections of the FAAO 7110.65, the AIM and the AIP to add clarity and emphasis where needed.

Discussion by the committee brought out these points:

- Confusion is on the pilot’s part not the controller.
- TB would not address this issue.
- Need to go to the POI’s, training schools, etc. to help

Update requested in April to see the definitions.

**119**—Update provided by Bruce Tarbert and Don Porter of the RNP office.

Issue “Maintain” initial clearance. Because it has different meanings in different circumstances a training issue has arisen. An ATB article has been drafted and a CBI that addresses the issues is under review. Handbook changes will be look at if necessary.

In initial clearance it is not possible to clear above SID altitudes without canceling prior SID altitudes. Altitude is a legal part of the clearance and has to be included. System Operations is looking at this issue.

**120**—The RNAV office was unable to provide an update for the Anchorage meeting. Updated status will be provided in October.

**121**—Update provided by Don Porter of the RNAV Office. There are several issues with “maintain” in SIDs and STARs. It is a problem for both pilots and controllers. A better definition may need to be looked at by Don’s group. One solution is to insert waypoint to define altitude. (Ex. “Descend via Baxter1, after Laady maintain 080.”) Meaning should be the same in the air as on the ground. Training issues are forthcoming.

**122**—“Descend via” has been in the book for a year and not all know about it. Lots of ASRS reports on the confusion. “Maintain” also causing confusion, including while aircraft are descending. Issue – With a restriction on SIDs/STARs does “maintain” cancel restriction? Yes. The above issues need to be given to Don’s group. Training is a must. There needs to be a basis understanding. Also, suggest an ATB on phraseology. Issue of ICAO harmonization also needs to be addressed.

**123** – The RNAV office representative was unable to attend this meeting and will be invited to meeting 124.

**124** – Per Bruce Tarbert, RNAV/RNP Office, Don Porter is working on the draft DCP.

**125** – A DCP will be developed and put into process by Dave Madison, ATO-T, who will also coordinate with Flight Standards.

**126** – Dave Madison was unable to attend and report on this AOC.

**127** – This item was not discussed due to time constraints.

**128** – ATPAC recommendations were submitted and discussed. Ben Grimes advised a change to the PCG has been issued. A DCP has been issued by ATO-T with ATPAC recommendations.

**129** – Joe McCarthy was brought up to speed on this issue and will report on progress at 130.

**RECOMMENDATION: In the near term, develop a Mandatory Briefing Item (MBI) for ATC facilities that discusses this issue and gives the necessary guidance to correct the problem.**



1. **Include this issue, complete with a description of the problem and the correct applications and uses for the maintain phraseology, in the next RNAV and RNP Computer Based Instruction (CBI) that is currently under development and due to be completed in March. Distribution to facilities is planned in the June/July timeframe.**
2. **Make any necessary changes to the appropriate sections of the FAAO 7110.65, the AIM and the AIP to add clarity and emphasis where needed.**

**CURRENT STATUS: DEFERRED**

**RECOMMENDATION 2:** AOC 116-1 discussed in-depth the issues involving the application of the term “Maintain”. However, a review of the AOC revealed that an important additional item should be added to the suggested ATPAC action in that AOC. That is, the addition of a third application of the term “maintain” in the Pilot/Controller Glossary. This is necessary because the current definition does not address the issue of the term’s meaning when applied in amended clearances, and that is a source of the existing problem.

For reference: Maintain is currently defined in the Pilot/Controller Glossary as:

- a. *Concerning altitude /flight level, the term means to remain at the altitude/flight level specified. The phrase “climb and” or “descend and” normally precedes “maintain” and the altitude assignment; e.g., “descend and maintain 5,000.”*
- b. *Concerning other ATC instructions, the term is used in its literal sense; e.g., maintain VFR”*

The following is proposed as a revision to the above definition of “maintain” as it now exists. The new material is in italics:

- a. Concerning altitude /flight level, the term means to remain at the altitude/flight level specified. The phrase “climb and” or “descend and” normally precedes “maintain” and the altitude assignment; e.g., “descend and maintain 5,000.”
- b. *Concerning the use of the term in amended clearances prior to or after departure. If altitude to “maintain” is changed or restated in the amended clearance, and previously issued altitude restrictions are omitted, altitude restrictions are cancelled, including FMSP/STAR altitude restrictions if any.*
- c. Concerning other ATC instructions, the term is used in its literal sense; e.g., maintain VFR”

**130** – Joe will discuss with ATO-T and report at 131.

**IOU: Joe McCarthy, ATO-R**

## ATPAC UPDATE

### AREA OF CONCERN 116-3

7/14/04  
SAFETY: No

**SUBJECT:** ILS Glide Slope Critical Area Advisory

**REFERENCE:** AIM 1-1-9k2(b)(2)

**DISCUSSION:** The above referenced paragraph in the AIM does not accurately reflect what terminology pilots should use when advising ATC they will conduct a coupled/autoland approach when the weather is above 800-2. The example used in the paragraph “*Glide slope signal not protected*” is an advisory that would be issued by the control tower in response to pilot notification of a coupled approach.

Another issue contained in this paragraph that ATPAC needs to discuss is that the ILS critical areas are only protected when the aircraft is inside the middle marker (MM). Considering the fact that MM’s are located approximately 3500ft from the runway threshold, which is entirely too short a distance to be useful for such approaches, and they are being removed at the majority of locations, it appears necessary to replace the term MM in this paragraph with “Final Approach Fix (FAF).” This would be in line with the Glide Slope Critical Area comments contained in AIM paragraph 1-1-9k(2).

The use of coupled/autoland approaches has become more common with the fleet of highly automated aircraft operating in the inventory, and the ILS critical area requirements need to be updated to reflect this fact.

**SUGGESTED ATPAC ACTION:** That ATPAC discuss this issue and recommend the following:

1. That the pilot advisory example contained in the above referenced AIM paragraph be replaced with the following sample advisory: “*(Name of tower)(Callsign) coupled/autoland approach.*”
2. That the term MM contained in the above referenced AIM paragraph be replaced with the term **FAF** or **OM**, whichever is the most appropriate.

**116**—MSP has a glideslope critical area issue with a certain taxiway. Many aircraft use the coupled approach most of the time. Comment that when issuing ILS procedures it should be known that the aircraft is coupled without having to broadcast it on the frequency. This will be a capacity issue because aircraft must be certified to “autoland.” If not certified, they can’t fly CATIII. AFS needs to be involved in this issue.

### **RECOMMENDATION #1:**

- 1. That the pilot advisory example contained in the above referenced AIM paragraph be replaced with the following sample advisory: “(Name of tower)(Callsign) coupled/autoland approach.”**
- 2. That the term MM contained in the above referenced AIM paragraph be replaced with the term FAF or OM, whichever is the most appropriate.**

**117**—Office of Primary Interest (OPI) has been contacted. Committee will be provided status when available.

**118**—There was concern that the OPI would understand the issues being addressed and would make the proper handbook changes. The OPI will be contacted and a discussion will be held at the next meeting.

**119**—800&2 and below is protected, not above. If there is no compelling evidence then policy should not be changed. Possibly change 7210.3 to designate a runway for autoland approaches to CAT II/III runways. Alternate is maintenance recertification.

### **RECOMMENDATION #2:**

**That the FAA ATO develop guidance to achieve the following:**

**FAA Order 7210.3, Facility Operation and Administration, should be changed to have terminal facilities with CAT II or CAT III approaches include procedures to accommodate “coupled” or “autoland” operations per FAA Order 7110.65, 3-7-5b to include protecting the critical area. This should include controller awareness of the need to accommodate these operators and may include designating a preferred runway and arrival procedures for these operations.**

**120**—Several ideas were provided on this AOC:

- Consider designating autoland/coupled approach runways as per Recommendation #2.
- Provide more education to controllers.
- Obtain development help from Anchorage office (Motzko).
- Certification could relax the 90 day requirement for autoland/coupled approaches.
- Determine which airports could dedicate a runway for these approaches.

AT and AF will work on the dedicated runway issue.

### **RECOMMENDATION #3: Synchronize the AIM to the 7110.65/PCG definition of ILS Critical Area.**

**121**—Instruction issued to controllers to issue and protect the approaches when able. ATO-T said there is no need for having airports dedicate runways for this purpose. Airports need to be aware of the need and accommodate as much as possible.

**122**—Article in ATB regarding facility’s handling coupled/autoland approaches. There are 2 issues. Autopilot cert. issues and flying coupled because ops. specs. /company require it. If the critical area is unprotected the pilot is out on a limb. There is a disconnect between certification, AFS, AT, and the POIs.

**RECOMMENDATION #1 (Revised Part 1):**

**That the pilot advisory example contained in the above referenced AIM paragraph be replaced with the following sample advisory: *(Call sign) AUTOLAND or COUPLED APPROACH.***

**Add: The tower will advise if the ILS critical areas are not protected with the following sample advisory: *ILS critical areas not protected.***

**123** – Comment that ATC is not aware of the requirements for autoland/coupled approaches. Would an ATB article help address this issue? AFS could look at the requirements because they are the ones that impose them.

ATO-T will work Recommendation #1 and the chair will provide draft language for Recommendation #3. As previously reported, Recommendation #2 will not be implemented.

**124** – Common language was defined by the group and will be submitted. Mark Cato will write an article for pilots and Flight Standards highlighting the committee’s new thinking on the coupled/autoland issue and Harry will consider that as a starting point for coordination for an HBAT item. Also, Dave and John will develop a DCP to reflect the following ATPAC recommendations:

**Recommended changes included deleting references to Autoland in Coupled Definition and Coupled in Autoland Definition.**

**AUTOLAND APPROACH-** An autoland approach is a precision instrument approach to touchdown and, in some cases, through the landing rollout. An autoland approach is performed by the aircraft autopilot which is receiving position information and/or steering commands from onboard navigation equipment.

1. Note: Autoland approaches are flown in VFR and IFR. It is common for carriers to require their crews to fly autoland approaches (if certified) when the weather conditions are less than approximately 4,000 RVR.

**COUPLED APPROACH-** A coupled approach is an instrument approach performed by the aircraft autopilot which is receiving position information and/or steering commands from onboard navigation equipment. In general, coupled nonprecision approaches must be discontinued and flown manually at altitudes lower than 50 feet below the minimum descent altitude, and coupled precision approaches must be flown manually below 50 feet AGL.

1. Note: Coupled approaches are flown in VFR and IFR. It is common for carriers to require their crews to fly coupled approaches (if certified) when the weather conditions are less than approximately 4,000 RVR.

### **7110.65 Recommended change**

#### 3-7-5. PRECISION APPROACH CRITICAL AREA

1b. Air carriers commonly conduct "autoland" operations to satisfy maintenance, training, or reliability program requirements. Promptly issue an advisory if the critical area will not be protected when an arriving aircraft advises that an "autoland" approach will be conducted and the weather is reported ceiling of 800 feet or more, and the visibility is 2 miles or more.

### **Recommended change includes flight crew notification to Approach Control**

#### **AIM 1-1-9k2**

##### k. ILS Course Distortion

1. 1. All pilots should be aware that disturbances to ILS localizer and glide slope courses may occur when surface vehicles or aircraft are operated near the localizer or glide slope antennas. Most ILS installations are subject to signal interference by surface vehicles, aircraft or both. ILS CRITICAL AREAS are established near each localizer and glide slope antenna.

2. ATC issues control instructions to avoid interfering operations within ILS critical areas at controlled airports during the hours the Airport Traffic Control Tower (ATCT) is in operation as follows:

(a) Weather Conditions. Less than ceiling 800 feet and/or visibility 2 miles.

(1) Localizer Critical Area. Except for aircraft that land, exit a runway, depart or miss approach, vehicles and aircraft are not authorized in or over the critical area when an arriving aircraft is between the ILS final approach fix and the airport. Additionally, when the ceiling is less than 200 feet and/or the visibility is RVR 2,000 or less, vehicle and aircraft operations in or over the area are not authorized when an arriving aircraft is inside the ILS MM.

(2) Glide Slope Critical Area. Vehicles and aircraft are not authorized in the area when an arriving aircraft is between the ILS final approach fix and the airport unless the aircraft has reported the airport in sight and is circling or side stepping to land on a runway other than the ILS runway.

(b) Weather Conditions. At or above ceiling 800 feet and/or visibility 2 miles.

(1) No critical area protective action is provided under these conditions.

(2) A flight crew, under these conditions, should advise the approach control, "(Call sign), autoland approach." to request that the ILS critical areas are protected.

#### EXAMPLE-

Glide slope signal not protected.

**(Note added)**

Note: Aircrews navigating a precision or non-precision approach other than autoland by engaging the autopilot should not expect critical area protection if the weather is at or above ceiling 800 feet and/or visibility 2 miles.

3. Aircraft holding below 5,000 feet between the outer marker and the airport may cause localizer signal variations for aircraft conducting the ILS approach. Accordingly, such holding is not authorized when weather or visibility conditions are less than ceiling 800 feet and/or visibility 2 miles.

4. Pilots are cautioned that vehicular traffic not subject to ATC may cause momentary deviation to ILS course or glide slope signals. Also, critical areas are not protected at uncontrolled airports or at airports with an operating control tower when weather or visibility conditions are above those requiring protective measures. Aircraft conducting coupled or autoland operations should be especially alert in monitoring automatic flight control systems.

(See FIG 1-1-7.)

**NOTE-**

Unless otherwise coordinated through Flight Standards, ILS signals to Category I runways are not flight inspected below 100 feet AGL. Guidance signal anomalies may be encountered below this altitude.

**125** – The ATPAC recommendation was validated and will be forwarded for action by ATO-R.

**126** – Dave Madison was unable to attend this meeting for ATO-T.

**127** – Ben Grimes will check into the status of this recommendation and report at 128.

**128** – Ben Grimes advised the committee that ATO-T non-concurred with the recommendation.

**129** – Discussions were centered on the committee’s desire to resolve what they perceived to be a critical flight issue that should be addressed.

**130** – Wilson Riggan will provide a memorandum for submission to ATO-T through Kerry Rose.

**CURRENT STATUS: DEFERRED**

**RECOMMENDATION #1 (Revised Part 1):**

**That the pilot advisory example contained in the above referenced AIM paragraph be replaced with the following sample advisory: *(Call sign) AUTOLAND or COUPLED APPROACH.***

**Add:** The tower will advise if the ILS critical areas are not protected with the following sample advisory: *ILS critical areas not protected.*

recommended changes included deleting references to Autoland in Coupled Definition and Coupled in Autoland Definition.

**AUTOLAND APPROACH-** An autoland approach is a precision instrument approach to touchdown and, in some cases, through the landing rollout. An autoland approach is performed by the aircraft autopilot which is receiving position information and/or steering commands from onboard navigation equipment.

**1. Note:** Autoland approaches are flown in VFR and IFR. It is common for carriers to require their crews to fly autoland approaches (if certified) when the weather conditions are less than approximately 4,000 RVR.

**COUPLED APPROACH-** A coupled approach is an instrument approach performed by the aircraft autopilot which is receiving position information and/or steering commands from onboard navigation equipment. In general, coupled nonprecision approaches must be discontinued and flown manually at altitudes lower than 50 feet below the minimum descent altitude, and coupled precision approaches must be flown manually below 50 feet AGL.

**1. Note:** Coupled approaches are flown in VFR and IFR. It is common for carriers to require their crews to fly coupled approaches (if certified) when the weather conditions are less than approximately 4,000 RVR.

#### 7110.65 Recommended change

#### **3-7-5. PRECISION APPROACH CRITICAL AREA**

**1b.** Air carriers commonly conduct "autoland" operations to satisfy maintenance, training, or reliability program requirements. Promptly issue an advisory if the critical area will not be protected when an arriving aircraft advises that an "autoland" approach will be conducted and the weather is reported ceiling of 800 feet or more, and the visibility is 2 miles or more.

**Recommended change includes flight crew notification to Approach Control**

#### **AIM 1-1-9k2**

#### **k. ILS Course Distortion**

**1.** All pilots should be aware that disturbances to ILS localizer and glide slope courses may occur when surface vehicles or aircraft are operated near the localizer or glide slope antennas. Most ILS installations are subject to signal interference by surface vehicles, aircraft or both. ILS CRITICAL AREAS are established near each localizer and glide slope antenna.

**2.** ATC issues control instructions to avoid interfering operations within ILS critical areas at controlled airports during the hours the Airport Traffic Control Tower (ATCT) is in operation as follows:

**(a) Weather Conditions. Less than ceiling 800 feet and/or visibility 2 miles.**

**(1) Localizer Critical Area. Except for aircraft that land, exit a runway, depart or miss approach, vehicles and aircraft are not authorized in or over the critical area when an arriving aircraft is between the ILS final approach fix and the airport. Additionally, when the ceiling is less than 200 feet and/or the visibility is RVR 2,000 or less, vehicle and aircraft operations in or over the area are not authorized when an arriving aircraft is inside the ILS MM.**

**(2) Glide Slope Critical Area. Vehicles and aircraft are not authorized in the area when an arriving aircraft is between the ILS final approach fix and the airport unless the aircraft has reported the airport in sight and is circling or side stepping to land on a runway other than the ILS runway.**

**(b) Weather Conditions. At or above ceiling 800 feet and/or visibility 2 miles.**

**(1) No critical area protective action is provided under these conditions.**

**(2) A flight crew, under these conditions, should advise the approach control, “(Call sign), autoland approach.” to request that the ILS critical areas are protected.**

**EXAMPLE-**

**Glide slope signal not protected.**

**(Note added)**

**Note: Aircrews navigating a precision or non-precision approach other than autoland by engaging the autopilot should not expect critical area protection if the weather is at or above ceiling 800 feet and/or visibility 2 miles.**

**3. Aircraft holding below 5,000 feet between the outer marker and the airport may cause localizer signal variations for aircraft conducting the ILS approach. Accordingly, such holding is not authorized when weather or visibility conditions are less than ceiling 800 feet and/or visibility 2 miles.**

**4. Pilots are cautioned that vehicular traffic not subject to ATC may cause momentary deviation to ILS course or glide slope signals. Also, critical areas are not protected at uncontrolled airports or at airports with an operating control tower when weather or visibility conditions are above those requiring protective measures. Aircraft conducting coupled or autoland operations should be especially alert in monitoring automatic flight control systems.**

**(See FIG 1-1-7.)**

**NOTE-**

**Unless otherwise coordinated through Flight Standards, ILS signals to Category I runways are not flight inspected below 100 feet AGL. Guidance signal anomalies may be encountered below this altitude.**

**IOU: ATPAC – Wilson Riggan will work with Don Frenya/Kerry Rose to develop recommendations for submission to Rich Jehlen.**





## ATPAC UPDATE

### AREA OF CONCERN 117-1

10/5/04

SAFETY: No

#### **SUBJECT: Definition of the term “Airborne”**

**DISCUSSION:** Pilot reports to ALPA have made us aware that some ATC Towers are applying an unusual definition of “airborne.” The definition being used is that an aircraft is “airborne” when the aircraft rotates and the nose wheel comes off the ground. The significance of the definition relates to an aircraft landing or departing behind another aircraft that is departing from the same runway. FAA Order 7110.65, paragraphs 3-9-6 and 3-10-3, Same Runway Separation, permit controllers to apply minimum distances between succeeding arriving or departing aircraft if the controller can determine distances by reference to suitable landmarks and the other aircraft is airborne.

The “rotation” concept is used to enhance capacity, according to one tower support specialist. This is based on the idea that, at least in the case of Category III aircraft, the aircraft is beyond the maximum abort speed and the takeoff will occur. Another stated reason was that an arrival aircraft will not touch down immediately after crossing the landing threshold and the other aircraft will be “in the air,” i.e., all parts of the aircraft separated from terra firma, before the arrival touches down.

**SUGGESTED ATPAC ACTION:** Discuss the need for including a definition of airborne in the Pilot/Controller Glossary and make an appropriate recommendation.

**117**—Pilot feel they are being pushed too much and it is a safety issue. Comment made that pilot learn they can’t cross the threshold with another aircraft on the runway. Suggested possible solutions were MBI, procedures telcon for discussion. Update will be provided when available.

**118**—What exactly defines airborne? Nose wheel off, all wheels off? Should this be standardized and publicized? One member indicated that a number of court cases said it should be “all wheel off.” It was noted that if it is “all wheels,” then capacity would be affected. Noted that pilots would be concerned with the legality of “should they have made the landing.”

Discussion posed solution of an ATB, a PCG changes, etc.

**Recommendation #1: A definition of “Airborne” should be put in the Pilot Controller Glossary.**

**119**—AFS has not finalized the definition. Draft DCP will be provided when available.

**120**—ATO-T’s consensus is that the definition should be when “all wheels are off the ground.” Memo sent to AFS-200 on whether they agree with ATO-T.

**121**—ATO-T feels that all wheels off the ground is airborne. An MBI is under draft.

Should we be validating this first? How does AFS define airborne? Can we assume that current practices have acceptable risk? Recommendation that this issue be tabled until an SMS analysis and evaluation/study can be accomplished.

**122**—ATO-T says the definition is wheels off the ground. Recommendation #1 will be implemented.

**123** – ATO-T provided language for the new definition, which will go out for comment. Question was raised about looking into the possibility of changing the language to be “nose wheel off.” Perhaps a safety study/risk assessment can be done that will allow some form (e.g. category of aircraft) of this application. ATO-T will research this question through AFS.

**124** – This recommendation in SRM process now with AOV per Dave Madison.

**125** – AOV is still in the process of determining if the raising of the nose wheel alone meets safety requirements.

**126** – This item was not discussed at this meeting. Steve Alogna will check into status and report at 127.

**127** – The status of this item was not determined.

**128** – A DCP is being circulated defining “airborne” as all parts of the aircraft off the runway.

**129** – Discussion was that this item is in DCP status or in-line for an SRMD.

**130** – Jesse Gaines advised via email that DCP is still active but not complete.

**CURRENT STATUS: DEFERRED**

**RECOMMENDATION #1: A definition of “Airborne” should be put in the Pilot Controller Glossary.**

**IOU: ATO-T. An update on progress will be requested for #131.**

## ATPAC UPDATE

### AREA OF CONCERN 120-2

7/13/05

SAFETY: No

**SUBJECT:** Low Altitude Alerts

**DISCUSSION:** When an aircraft is executing a Visual Approach and the controller receives a Low Altitude Alert, there is no phraseology to tell the pilot a suggested action.

**SUGGESTED ATPAC ACTION:** Change the 7110.65 to reflect phraseology to issue to an aircraft when a low altitude alert is given on a visual approach.

**120**—Paragraph 5-14-2 includes the phraseology to be used. Some facilities in the field feel that this can't be used for visual approaches or VFR aircraft.

**RECOMMENDATION #1:** Write an ATB that will clarify the phraseology that should be used.

**121**—The ATB is being rewritten to include a reference to paragraph 2-1-6.

**122**—Review of the draft ATB completed by the committee. Publication will follow.

**123** – ATB is in signature process.

**124** – Per Dave Madison, ATO-T, status was unknown as of this meeting but possibly at the VP level for review.

**125** – The committee discussed PCT NOTICE 7110.35A (or B) and has come to the conclusions that:

The committee believes that there exists among FAA personnel the idea that the provisions of this notice, particularly Para. 7-3, preclude or forbid the issuance of a safety advisory to ADIZ aircraft on their frequency. The committee takes the position that the over-arching responsibility under Section 2 – General, specifically 2-1-6, Safety Alerts, is still applicable, regardless of whether any other services are being provided, such as the “basic radar services” referred to in 7-3.

The committee further cites the Notice's paragraph 5, which states clearly that the Notice's provisions do not supersede or replace anything in existing Orders (such as 7110.65). Even without a statement to that effect in the notice, the committee believes that the fundamental responsibility for a safety alert to a known aircraft about a known hazardous situation could not be avoided or denied by such a notice anyway.

126 – Scott Proudfoot will obtain a current copy of the PCT Notice for review at 127 and this AOC may be combined with AOC 120-3.

127 – This item not discussed due to time constraints.

**CURRENT STATUS: DEFERRED**

**RECOMMENDATION 1:**

- a. PCT Notice 7110.35A (or B) be revised to state clearly that safety alerts remain a first-priority responsibility and are not precluded by Para. 7-3 of this notice.
- b. Controllers at PCT be advised of this clarification by an appropriate, auditable method.

**RECOMMENDATION 2: The following should be added to PCT N7110.35: ADIZ aircraft shall not be advised of radar contact, therefore they should be treated as in a non-radar environment. This provision notwithstanding, Para. 2-1-6 requirements still apply, however. Low altitude and other safety alerts shall still be issued as necessary.**

**IOU: ATO-R forward ATPAC recommendation to ATO-T for review.**

128 – Ben Grimes briefed the committee that it is the opinion of ATO-T that sufficient guidance is available as the radar facility is required to pass alert information to the VFR tower thereby enabling the alerting of a pilot who is deemed too low for conditions.

**REVISED RECOMMENDATION 1: FAA Order 7100.65, para 2-1-6 be revised to reflect the replacement of “as appropriate” with if applicable since the current verbiage implies that the controller MUST use the stated methods to correct a low altitude condition when it should be only an option since during a Visual Approach none of the methods may apply regarding the DH, etc. ATPAC will submit recommendation to ATO-T**

129 – Recommendation will be written by Wilson Riggan and forwarded to Rich Jehlen for consideration.

130 – A memo was written and forwarded to ATO-T for their action.

**IOU: ATO-T**

## ATPAC UPDATE

### AREA OF CONCERN 123-2

4/19/06

SAFETY: No

#### **SUBJECT: Aircraft Vertical Performance Data**

**DISCUSSION:** Paragraph 4-4-9d of the AIM contains broad guidance for pilots relating to aircraft descent and climb rates. Specifically; the second sentence of the paragraph begins with the words “*Descend or climb at an optimum rate consistent with the operating characteristics of the aircraft.....*” This phrase is all encompassing and does adequately recognize that specific climb and descent performance criteria is largely controlled by flight management system vertical guidance programs, aircraft type, and specific operator procedures. Therefore, specific performance criteria are not included in the paragraph, nor are there any regulatory requirements relating to this subject. Most pilot operations manuals only contain information extracted from paragraph 4-4-9 relating to a requirement to notify ATC if a climb or descent of at least 500ft per minute cannot be sustained.

However, Appendix A of FAA Order 7110.65 contains climb and descent figures for most aircraft operating in the ATC system. If the purpose of this information is to provide controllers guidance on what performance they may expect from aircraft they are controlling, they may be working with erroneous data. Also, Note 2 of paragraph 4-5-7e of FAA Order 7110.65, refers to descent rates contained in the AIM: “ *Controllers need to be aware that the descent rates in the AIM are only suggested and aircraft will not always descend at those rates.*” ALPA believes that this paragraph was originally intended to refer to the performance figures contained in Appendix A of 7110.65, as there does not appear to be any correlation to what is contained in the AIM.

**SUGGESTED ATPAC ACTION:** That ATPAC review this information and recommend that Note 2 of paragraph 4-5-7e, FAAO 7110.65 either be deleted or changed to pertain to the data contained in Appendix A of the Order, and, that the data contained in Appendix A be reviewed to insure it reflects the most accurate and complete performance information for controller guidance.

**123** – Chart needs to be updated or removed. Each chart is based on certification. How pilots fly it can be different. Appendix redone when LAHSO was being worked. ATO-T will coordinate with Certification, then evaluate whether chart should remain.

**124** - ATO-T will coordinate with Certification then evaluate whether chart should remain.

**125** – Due to insufficient time for the appropriate discussions this AOC will be further deferred until 126.

**126** – The current status of this item is unknown and should be worked by ATO-T.

**127** – This item’s status remains unreported.

**128** – Ben Grimes reported that this item will be discussed at an August meeting and a determination will be made to revise, eliminate climb characteristics, and/or eliminate the table.

**129** – This item was again discussed as needing updating or cancellation because it is not current with aircraft performance.

**130** – A report received via email advised that a panel has been convened to discuss this item as it relates to ICAO directives.

**CURRENT STATUS: DEFERRED**

**RECOMMENDATION: Chart needs to be updated or removed.**

**IOU: ATO-R will check on the status of panel discussions and report at #131.**

## ATPAC UPDATE

### AREA OF CONCERN 123-4

4/19/06  
SAFETY: No

#### **SUBJECT: Speed Assignment Procedures for Arriving Aircraft**

**DISCUSSION:** Neither FAA Order 7110.65 nor the AIM contains clear guidance for controllers or pilots relating to airspeed management during STAR/RNAV arrivals. Specifically, when an airspeed is issued by ATC for sequencing, it is not clear when a pilot may reduce that airspeed in order to comply with regulatory airspeeds contained at fixes depicted on the arrival chart. While specific procedures relating to altitude management during such arrivals are included in both publications, the same type of guidance for airspeed management is not. Pilot reports and local procedures implemented by an FAA Center confirm this problem.

ALPA believes this issue can be resolved by revising FAAH 7110.65, Para 5-7-2, and AIM section 4-4-11 as follows:

**7110.65, Para 5-7-2:** Add sub paragraph **e.** as follows:

*“If a STAR/arrival procedure is issued after a speed assignment, pilots will be expected to comply with speed restrictions contained on the published arrival procedure. If ATC assigns a speed for sequencing **after** a STAR or other transition arrival procedure has been issued, pilots are expected to maintain that speed until further advised. It is the controller’s responsibility to ensure speed assignments are managed to allow pilot compliance with 14 CFR Section 91.117.”*

**AIM section 4-4-11:** Add new paragraph **f.** as follows and adjust remaining subparagraphs alphabetically as required: The existing **NOTE** following the current paragraph 4-4-11e, Example 2, should now follow the proposed paragraph **f.**

*“When a STAR/RNAV transition is issued **after** a speed assignment, pilots should comply with speed restrictions contained on the published arrival. If ATC assigns the speed **after** the clearance for a published arrival procedure, pilots are expected to maintain that speed until further advised.”*

**SUGGESTED ATPAC ACTION:** That ATPAC review this issue and consider approving the above recommendations.

**123** – Controllers assign what they need and are aware of the restrictions on the procedures. Discussion on DFW arrivals and constraints on route in relation to speed. Needs to be education of both pilots and controllers.

**RECOMMENDATION #1:** Add appropriate notes to the AIM and the 7110.65.

**124** – ATPAC further refined its recommendation as follows:



**7110.65, Para 5-7-2:** Add sub paragraph **e.** as follows:

*“When a SID/STAR is issued after a speed assignment, pilots will comply with speed restrictions contained on the published procedure. When a speed is assigned **after** a SID/STAR has been issued, pilots will maintain that speed until further advised. It is the pilot’s responsibility to ensure speed assignments are managed to permit compliance with 14 CFR Section 91.117.”*

**AIM section 4-4-11:** Add new paragraph **f.** as follows and adjust remaining subparagraphs alphabetically as required: The existing **NOTE** following the current paragraph 4-4-11e, Example 2, should now follow the proposed paragraph **f.**

*““When a SID/STAR is issued **after** a speed assignment, pilots will comply with speed restrictions contained on the published procedure. When a speed is assigned **after** a SID/STAR has been issued, pilots will maintain that speed until further advised.*

**125** – Due to insufficient time for the appropriate discussions this AOC will be further deferred until 126.

**126** – This item was not reviewed at 126. Steve Alogna will check status and report at 127.

**127** – This AOC was discussed however further coordination was needed.

**128** – David Young will coordinate with Ben on an existing proposal with a goal to satisfy this AOC.

**129** – Clarification of the status of this item is needed.

**130** – ATO-T advised that the current directives are sufficient. David Young will revisit issue with ATO-T and report findings at #131.

**CURRENT STATUS: DEFERRED**

**RECOMMENDATION: Add appropriate notes to the AIM and the 7110.65.**

**IOU: ATO-E David Young will work ATO-T to clarify and resolve this issue and report at #131.**

## ATPAC UPDATE

### AREA OF CONCERN 123-5

4/19/06

SAFETY: No

**SUBJECT:** Clarification of LLWS versus Gust Spread

#### **DISCUSSION:**

1. A fundamental difference between LLWS and Gust Spread lies in its predictability and the expectation by the pilot. LLWS manifests itself as a predictable, abrupt gain or loss of airspeed of 20 kts or more within 2000 ft agl; but not both. It is usually encountered along a sloping frontal surface near the ground or at the top of an inversion layer. Pilots along the same glideslope separated by minutes or seconds will experience similar gains or losses in airspeeds. On the other hand, gust spread associated with windy, turbulent flow usually results in gains **and** losses of airspeed which may exceed 20 kts within 2000 ft agl. Although it feels like LLWS to the pilot; the nature of the phenomena does not allow the forecaster to tell the pilot whether to expect a gain or a loss of airspeed on final approach. Indeed, pilots along the same glideslope separated only by minutes or seconds may experience opposite effects with respect to gain and loss of airspeed just prior to landing.

2. A potentially serious problem arises in that when a pilot mistakenly reports Gust Spread as LLWS in PIREPs, it gets reported as fact to other users in the aviation and meteorological communities. When Gust Spread are reported as LLWS some aviation meteorologists feel obliged to put it into Terminal Aerodrome Forecasts (TAFs) and Area Forecasts (FA's). Thus a negative feedback loop is created making it difficult to dispose of this mis-reported and over-forecast weather phenomenon; LLWS.

3. Although Gust Spread feels like LLWS at the time of its occurrence, the pilot must be prepared to handle the unknown; **gains or losses** in airspeed just prior to landing, whereas with LLWS the pilot need only be prepared to handle one or the other (not both) on final. Thus on days where pilots report gains and losses in airspeed of 20 kts or more, Gust Spread (GS) may be an appropriate way to forecast wind speed fluctuations of plus/minus 20 kts or more within 2000 feet agl. Thus a TAF wind that reads: 24020G35KT (GS +/- 20 kt) may be a simple way to denote gains/losses of airspeed of 20 kts or more on final. The pilots know to be prepared for either condition just prior to landing. LLWS as it is currently used in TAFs and FAs is fine, but does not deter the pilots from reporting LLWS when in fact the condition does not exist.

4. Introducing the concept of Gust Spread and placing it into TAFs and FA's would help to provide a clearer picture of low level winds to meteorologists and aviators; thus enhancing flying safety at airports. Over time and with some education, pilots, and those people placing PIREPs into the dissemination system could make the distinction between

the two phenomena and give the flying community at large a better feel for tricky landing conditions at airfields nationwide.

**SUGGESTED ATPAC ACTION:** ATPAC review and determine the merit of this proposal.

**123** – LLWS is defined by Meteorologists as predictable and measurable with weather conditions but “Gust Spreads” are not and therefore should be recognized in transmitted/published advisories regarding such events.

ATPAC found merit in this suggestion and will bring it to the attention of NCAR by a memo from the chair to the FAA.

**124** – Memo from the chair has been written and ATPAC awaits a reply.

**125** – Due to insufficient time for the appropriate discussions this AOC will be further deferred until 126.

**126** – Wilson will write the proponent requesting further information.

**127** – This AOC is deferred awaiting a response from the proponent.

**128** – A letter was written to the proponent with no response received. Ben Grimes will contact a specialist in weather to obtain information on the validity of this AOC.

**129** – This issue was dropped by a clerical error and will be reinstated for resolution.

**130** – The committee determined that lack of response from the proponent and the AOC lacked evidence to proceed as a systemic issue.

**CURRENT STATUS:** ACTION COMPLETE

**RECOMMENDATION:** NONE.

**IOU:** N/A.

## ATPAC UPDATE

### AREA OF CONCERN 123-6

4/19/06

**SAFETY: Yes**

**SUBJECT:** Precision Obstacle Free Zone (FAA Order 7110.65, Paragraph 3-7-6)

**DISCUSSION:** The procedure is not realistic and is a definite safety hazard. The only realistic control instruction is: “Go around.” You can’t expect the pilot to adjust his minima this late in the approach.

**SUGGESTED ATPAC ACTION:** That ATPAC recommend that the FAA rescind this paragraph immediately through a GENOT and direct controllers to issue go-around instructions if the POFZ is not clear.

**123** – The committee expressed concern that the dimensions and activity in this “zone” may change on short final and change the actual minimums for the approach that may be contrary to the operator’s.

ATO-T will work the issue through a GENOT and report to the committee in July.

**124** – The paragraph in question was rescinded by GENOT at the committee’s request. ATPAC will investigate status with NCAR.

**125** – Due to insufficient time for the appropriate discussions this AOC will be further deferred until 126.

**126** – Subsequent to the meeting this item was published by ATO-T despite objections by ATPAC whose members recommended a controller initiated go around when conditions warranted and traffic was in the POFZ.

**127** – This item was not addressed due to time constraints.

**128** – This item was tabled and not re-addressed.

**129** – The committee agrees that this issue needs to be addressed as it might place the aircraft in dangerous proximity to hazards without sufficient time for prudent reaction.

**130** – Wilson maintains the IOU to complete a proposal for an MBI

**CURRENT STATUS: DEFERRED**

**RECOMMENDATION: Controller initiated Go Around.**

**IOU: ATPAC. Wilson Riggan will write a proposal for the committee's approval and coordinate with Don Frenya/Kerry Rose.**

**ATPAC UPDATE**

## AREA OF CONCERN 123-7

4/19/06

**SAFETY: Yes**

**SUBJECT:** Four Digit Express Carrier Call signs

**DISCUSSION:** Moderate to busy terminal facilities and en route sectors are experiencing an increasing problem with very similar sounding, 4-digit call signs with express carrier companies. Some carriers have been able to drop the first digit of the call sign when every flight number begins with the same first digit, but those carriers that use different banks of flight numbers cannot. The problem with these high concentrations of 4-digit call signs is frequent miscommunications due to the fact that all of the call signs look and sound somewhat alike. Example: SKY6845, SKW8845, SKW6885, SKW6485. Example: LOF8036, LOF8026, LOF8040, LFO8044. Example: TCF7744, TCF7444, TCF7774, TCF7770. To often pilots reply to clearances intended for other aircraft due to the similar sounding call signs.

**SUGGESTED ATPAC ACTION:** There needs to be some encouragement by the FAA or the RAA/ATA to take into consideration the difficulties with communications with the concentration of similar sounding call signs nationwide. For the express carriers that have all of their flight numbers in the same "1,000 bank" of numbers, they should be required to drop the first digit for ATC purposes. This could be done in coordination with flight dispatchers. For those express carriers that have flight numbers in different banks or series of numbers, an option would be to replace the first 2 digits with a single letter at the end of the call sign. Example: SKW6845 would be SKW45G, SKW6485 would be SKW85H, SKW8885 would be SKW85G, etc. Assign a single letter to the first 2 number combination in a flight number so that it is consistent nationwide. SKW6845 would be SKW45G just as COM6845 would be COM45G. Inconsistency between different carriers would be very difficult to manage.

**123** – Can a working group in the PARC address this? The DCP (Pilot Controller Phraseology) subgroup may have human factors information or other input. (Contact is RNAV shop). CDM may also be another possibility for working the issue with AFS involvement.

**124** – ATO-S will be queried to determine if sufficient human factors studies exist to warrant a recommendation through appropriate channels to request 3-digit call signs be utilized vice 4-digit. NASA also expressed concurrence with the AOC and the need for action. The committee will consider asking the CDM group to address this item.

**125** – Due to insufficient time for the appropriate discussions this AOC will be further deferred until 126.

**126** – This item was discussed and decided that further information gathering was appropriate.

**127** – A memo will be written outlining this AOC and presented to ATO-T

**128** – The ATPAC recommendation memo was approved by consensus and will be submitted to ATO-T with Wilson’s signature.

**129** – A written recommendation was presented to Rich Jehlen for consideration of ATPAC’s recommendations.

**130** – A formal request will be made to ATO-T for action.

**CURRENT STATUS: DEFERRED**

**RECOMMENDATION #1: FAA investigates solutions through appropriate channels.**

**RECOMMENDATION #2: Action should be initiated to investigate and remedy.**

**IOU: ATO-T**

**ATPAC UPDATE**

**AREA OF CONCERN 124-1**

**SUBJECT:** Controller Identification of Aircraft Types

**DISCUSSION:** ALPA has received reports from pilots that indicate controllers are issuing traffic using a generic type of identifier such as “RJ” or “Regional Jet” as opposed to the phraseology required by FAAO 7110.65, Paragraph 2-4-21. ALPA further contends that due to the significant differences in these types of aircraft it is no longer practical to describe them in such generic terms as is being done in the NAS. With some “RJs” and/or “Regional Jets” carrying from 50 to over 100 passengers, the likelihood of misidentification of types when traffic is issued, increases and could create a hazard during many critical phases of flight such as visual approaches where one aircraft must visually identify the traffic to follow. It was felt that sufficient guidelines are available for controllers in 7110.65 but that a refresher of current issues may be helpful.

**SUGGESTED ATPAC ACTION:** That ATPAC coordinate with

**RECOMMENDATION #1:** Mandatory training for controllers in the form of an Air Traffic Bulletin or other required training be accomplished to ensure this situation is brought to the attention of controllers and corrected.

**125** – Due to insufficient time for the appropriate discussions this AOC will be further deferred until 126.

**126** – After discussion it was determined that Steve Alogna will draft a recommendation for ATPAC to present to ATO-T for an MBI/ATB.

**127** – Time constraints did not permit discussion of a proposed memorandum.

**128** – The committee agreed on a memorandum for submission to ATO-R.

**129** - A written recommendation was presented to Rich Jehlen for consideration of ATPAC’s recommendations.

**130** - A formal request will be made to ATO-T for action.

**CURRENT STATUS:** DEFERRED

**RECOMMENDATION:** The following information be included in an MBI/ATB:  
\*F/ET The generic term “Regional Jet” of the early 90’s was correctly described as a large corporate-sized airplane capable of carrying 50 passengers and powered by 2 engines that were usually stationed under the vertical stabilizer. The Bombardier CRJ-100 was such an airplane. As the need for a larger version of the “RJ” grew so



**did the airplane itself with other aircraft manufacturers making their own versions. For instance, the newest Bombardier RJ-900 has the same physical shape as the preceding “RJs” but is capable of seating over 85 passengers. The newest Embraer entry to this market is the E-195 with engines under the wings as on B737 and seating capacity from 108-122. As you can see issuing traffic on these variants leaves considerable room for interpretation by the pilot. Will the pilot receiving instructions for Visual Separation to follow the “RJ” pick the 50 passenger or the 122 passenger jet behind? Is this the one you want the receiving aircraft to sequence behind or is it the other “RJ?” The accurate identity of these various types of jets is becoming more confusing to the pilot and tower community alike.**

**It is the controller’s responsibility to ensure the positive identification of traffic issued so the pilot may see and/or follow. The only way to make sure the traffic is the one that is intended is to issue the full type description of the traffic such as, “Embraer 195” or “Bombardier CRJ-100.” When you transmit, “Do you have it in sight?” or “Follow the (blank),” be sure both you and the pilot are talking and looking for the correct airplane.**

**IOU: ATO-T**

**ATPAC UPDATE**

**AREA OF CONCERN 124-3**

**7/12/06**

**SAFETY: No**

**SUBJECT:** Class B Airspace Visual Approach Clearance

**DISCUSSION:** ALPA articulated the concerns of pilots that some are being cleared for visual approaches below the floor of Class B Airspace which violates the tenets of the AIM, Paragraph 3-2-3d 1.

**SUGGESTED ATPAC ACTION:** Awaiting input from Mark Cato.

**RECOMMENDATION:**

**125** – Due to insufficient time for the appropriate discussions this AOC will be further deferred until 126.

**126** – This item not reviewed at 126 and will carry over to 127.

**127** – It was agreed that a memorandum of recommendation will be offered at 128.

**128** – A memorandum was agreed to and will be presented to ATO-T

**129** – It was agreed that this issue is of significant importance for the committee to request an annual briefing on progress beginning at 130. It will therefore become a recurring Agenda Item.

**CURRENT STATUS:** ACTION COMPLETE – CONVERTED TO AN AGENDA ITEM

**IOU:** ATO-T will be tasked to present a written status report for each meeting.

**ATPAC UPDATE**

**AREA OF CONCERN 125-2**

**SUBJECT:** Gear Down Advisory

**DISCUSSION:** Representatives from AOPA, Navy, and Air Force advocated the safety aspects of the advisory and that despite occurrences at non-towered airports it was felt that the value of the advisory would carry-over from towered airports. The discussion questioned the cost-benefits and the specifics of gear-up landings. In addition, discussions centered on FAA liability, pilot responsibility, and the problems with change. Air Force and Navy reps that use the procedure were unanimous in that this is a good procedure. FAA (ATO-T) and NATCA think this is a bad idea. FAAH 7110.65, Para 2-1-24 states that the reminder does not put any responsibility on the controllers—it is still a pilot responsibility.

**SUGGESTED ATPAC ACTION:** Members were asked to accumulate qualitative and quantitative evidence that this is in fact an issue in the NAS.

**RECOMMENDATION:** Wait for further definitive information and discuss at 126.

**126** – Discussion regarding where further definitive data may be obtained to support an ATPAC recommendation.

**127** – The committee agreed that further information was needed.

**128** – It was agreed that sufficient information existed to suggest FAA take action to investigate and to mitigate the occurrences of wheels up landings by including phraseology for FAA controllers as the military. Possible exceptions might be for major air carrier airports or exempting Part 121 and 135 operations.

**129** – It was decided that the current information is not sufficient to submit for a change in the 7110.65, 7210.3, or AIM therefore Heidi Williams agreed to coordinate with Don Frenya/Kerry Williams to develop a strategy and document to support the argument for this recommendation.

**130** - A formal request will be made to ATO-T for action.

**CURRENT STATUS:** DEFERRED.

**IOU:** ATO-T.

**ATPAC UPDATE**

**AREA OF CONCERN 125-4**

**SUBJECT:** Confusion on Descent During Non-Precision Approaches

**DISCUSSION:** Discussion was primarily concerning possible misunderstandings when the pilot was not given definitive altitude guidance in relation to a published segment of a non-precision approach.

**SUGGESTED ATPAC ACTION:** Obtain clarification of the question and collect data regarding this issue. Tom Barclay, NASA ASRS, will provide data for dissemination and further discussion at 126.

**126** – Discussion with visitor Jeff Williams concluded that a fix on the published approach must be utilized and in the aircraft database. Steve Alogna will obtain data on recurrent training for controllers regarding IAP and report at 127.

**127** – This item was not discussed due to insufficient time.

**128** – This item was not discussed due to insufficient time.

**129** – ATPAC discussion highlighted the incomplete information available to pilots on charts for IFR approaches when a defined point for descent is unclear and not fully understood by the pilot/controller communities.

**130** – Discussions with ATO-T found that recurrent training is available for terminal controllers regarding approaches and that according to the .65 the controller in the Naples incident complied with the requirements regarding instructions to maintain a safe altitude until “established.” Therefore, further discussion will be needed to determine if this AOC meets the charter’s criteria for continued efforts or does not rise to the level of being a pilot education issue or having implications in the entire NAS.

**CURRENT STATUS: DEFERRED**

**RECOMMENDATION:** ATPAC recommends an MBI designed to clarify controller responsibility when issuing approach clearances at airports with non-precision approaches and the importance of accurate altitude information.

**IOU:** ATPAC. Further discussion will be needed to determine if this AOC meets the charter’s criteria for continued efforts or does not rise to the level of being a pilot education issue or having implications in the entire NAS.

## ATPAC UPDATE

### AREA OF CONCERN 126-1

**SUBJECT:** ATIS Integrity

**DISCUSSION:** Examples of erroneous ATIS messages were given. On occasions mentioned, conflicting data was transmitted regarding approaches in use and airport closure.

**SUGGESTED ATPAC ACTION:** Craft a recommendation for ATPAC concurrence and submission to ATO-T for review.

**128** - This item was not discussed due to insufficient time.

**129** – There was discussion regarding the automation capabilities of ATIS and the task that must be performed by controllers to ensure the most accurate information is disseminated to aircraft.

**130** - Jesse Gaines responded via email that his organization felt that sufficient guards are in-place and that this AOC does not represent a national issue. This was accepted by the committee.

**RECOMMENDATION:** That an MBI be developed to make controllers aware of possible shortcomings in automated ATIS functions and the actual operations of ATIS

**CURRENT STATUS:** ACTION COMPLETE.

**IOU:** N/A

## ATPAC UPDATE

### AREA OF CONCERN 126-2

**SUBJECT:** Procedures for Use of Time to Meet Restrictions

**DISCUSSION:** The committee looked at current regulations that mandate the controller must issue the clock time to the restricted aircraft and the time the aircraft must comply with the given restriction.

**128** – The committee discussed the AOC with its submitter, Mr. Bill Holtzman from ZDC. The discussion centered around the need for a time hack when issuing a time based restriction. It was agreed that no change would be appropriate in the oceanic or non-radar environs but that omission of the additional verbiage in a radar environment would reduce controller transmissions, pilot misunderstandings, and add clarity.

**129** – David Young advised that several versions of proposed DCPs have been presented to his management for their consideration.

**130** - David Young's organization would not concur on ATPAC recommendation based on what may have been incomplete information. David Young will re-address the issue based on ATPAC feedback and report at #131.

**RECOMMENDATION:** ATPAC opined that giving the aircraft a time to reach/leave an altitude followed by the minutes needed to achieve would suffice and not complicating the issue with clock time.

**CURRENT STATUS:** DEFERRED

**IOU:** ATO-E David Young will re-address the issue with data given by the committee and report on progress of this item at #131.

## ATPAC UPDATE

### AREA OF CONCERN 127-1

**SUBJECT:** Abbreviated Departure Clearances (Cleared as Filed).

**DISCUSSION:** Charts were presented that displayed RNAV procedures and anecdotal information regarding controllers not adhering to them. This non-adherence and/or inaccurate application caused pilots to utilize NAVAIDs such as MMs (ATL) that were for a different approach, caused confusion regarding application of speed and conformance to the SID in the case of radar vectors, and depending on the particular FMS, caused waypoints to be dropped when direct clearances or vectors were issued.

**SUGGESTED ATPAC ACTION:** Due to insufficient time for the appropriate discussions this AOC will be deferred until 126.

**126** – Discussions were held with Jeff Williams and will be brought to the attention of ATO-T.

**127** - AOC accepted by committee without recommendation.

**128** – This AOC was inadvertently dropped from the minutes and was not discussed.



**AIR TRAFFIC PROCEDURES ADVISORY COMMITTEE**

**AREA OF CONCERN & AGENDA ITEM  
Submission Form**

(Check one)

<input checked="" type="checkbox"/> Area of Concern → Safety Item? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  <input type="checkbox"/> Agenda Item	
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**SUBJECT:** Abbreviated Departure Clearances (Cleared as Filed)

**REFERENCES:** FAAO 7110.65, Section 4-3-3 d, NOTE 1;  
 AIM Section 5-2-4: PCG Definition “Cleared as Filed”  
 AIM paragraph 5-2-4, Abbreviated IFR Departure Clearance Procedures

**DISCUSSION:** FAAO 7110.65, 4-3-3 d, NOTE 1, contains the following statement: “ **SIDs are excluded from “cleared as filed” procedures**”. This statement is confusing since it is imbedded in the Section titled “Abbreviated Departure Clearances,” and the examples given in that section include SIDs assigned in the abbreviated clearances issued. The following is the PCG definition of Cleared as Filed: “*CLEARED AS FILED - Means the aircraft is cleared to proceed in accordance with the route of flight filed in the flight plan, This clearance does not include the altitude SID Transition.*”

While the PCG definition is clear, neither it nor the NOTE referenced above explains how a SID is included in the abbreviated departure clearance when both FAAO 7110.65 and the PCG definition say they are excluded from such clearances. The AIM, paragraph 5-2-4 d, f, and g.1, does a better job of addressing the issue but it too needs a minor revision.

**RECOMMENDATION:** That ATPAC review this issue and approve the following recommendations:

1. That NOTE 1 in FAAO 7110.65, Section 4-3-3 d. be revised as follows:  
*“Cleared as filed” procedures only apply to the route of flight filed. SIDs and the initial altitude to maintain are appended to an abbreviated clearance when assigned by ATC.”*

2. That the first sentence of AIM 5-2-4, 4, f. be revised as follows:  
*“Cleared to (destination) airport as filed” does NOT include either a SID, SID transition, or the en route altitude filed in the flight plan.”*

Newman,  
Association

Captain Larry  
Air Line Pilots  
March 27, 2007

### **P/C glossary**

**CLEARED AS FILED-** Means the aircraft is cleared to proceed in accordance with the route of flight filed in the flight plan. This clearance does not include the altitude, SID, or SID Transition.

### **AIM 5-2-4. Abbreviated IFR Departure Clearance (Cleared. . .as Filed) Procedures**

a. ATC facilities will issue an abbreviated IFR departure clearance based on the ROUTE of flight filed in the IFR flight plan, provided the filed route can be approved with little or no revision. These abbreviated clearance procedures are based on the following conditions:

1. The aircraft is on the ground or it has departed visual flight rules (VFR) and the pilot is requesting IFR clearance while airborne.
2. That a pilot will not accept an abbreviated clearance if the route or destination of a flight plan filed with ATC has been changed by the pilot or the company or the operations officer before departure.
3. That it is the responsibility of the company or operations office to inform the pilot when they make a change to the filed flight plan.
4. That it is the responsibility of the pilot to inform ATC in the initial call-up (for clearance) when the filed flight plan has been either:

(a) Amended, or



(b) Canceled and replaced with a new filed flight plan.

**NOTE-**

*The facility issuing a clearance may not have received the revised route or the revised flight plan by the time a pilot requests clearance.*

b. Controllers will issue a detailed clearance when they know that the original filed flight plan has been changed or when the pilot requests a full route clearance.

c. The clearance as issued will include the destination airport filed in the flight plan.

d. ATC procedures now require the controller to state the SID name, the current number and the SID transition name after the phrase "Cleared to (destination) airport" and prior to the phrase, "then as filed," for ALL departure clearances when the SID or SID transition is to be flown. The procedures apply whether or not the SID is filed in the flight plan.

e. STARs, when filed in a flight plan, are considered a part of the filed route of flight and will not normally be stated in an initial departure clearance. If the ARTCC's jurisdictional airspace includes both the departure airport and the fix where a STAR or STAR transition begins, the STAR name, the current number and the STAR transition name MAY be stated in the initial clearance.

f. "Cleared to (destination) airport as filed" does NOT include the en route altitude filed in a flight plan. An en route altitude will be stated in the clearance or the pilot will be advised to expect an assigned or filed altitude within a given time frame or at a certain point after departure. This may be done verbally in the departure instructions or stated in the SID.

g. In both radar and nonradar environments, the controller will state "Cleared to (destination) airport as filed" or:

1. If a SID or SID transition is to be flown, specify the SID name, the current SID number, the SID transition name, the assigned altitude/flight level, and any

additional instructions (departure control frequency, beacon code assignment, etc.) necessary to clear a departing aircraft via the SID or SID transition and the route filed.

***EXAMPLE-***

*National Seven Twenty cleared to Miami Airport Intercontinental one departure, Lake Charles transition then as filed, maintain Flight Level two seven zero.*

2. When there is no SID or when the pilot cannot accept a SID, the controller will specify the assigned altitude or flight level, and any additional instructions necessary to clear a departing aircraft via an appropriate departure routing and the route filed.

***NOTE-***

*A detailed departure route description or a radar vector may be used to achieve the desired departure routing.*

3. If it is necessary to make a minor revision to the filed route, the controller will specify the assigned SID or SID transition (or departure routing), the revision to the filed route, the assigned altitude or flight level and any additional instructions necessary to clear a departing aircraft.

***EXAMPLE-***

*Jet Star One Four Two Four cleared to Atlanta Airport, South Boston two departure then as filed except change route to read South Boston Victor 20 Greensboro, maintain one seven thousand.*

4. Additionally, in a nonradar environment, the controller will specify one or more fixes, as necessary, to identify the initial route of flight.

***EXAMPLE-***

*Cessna Three One Six Zero Foxtrot cleared to Charlotte Airport as filed via Brooke, maintain seven thousand.*

h. To ensure success of the program, pilots should:

1. Avoid making changes to a filed flight plan just prior to departure.
2. State the following information in the initial call-up to the facility when no change has been made to the filed flight plan: Aircraft call sign, location, type

operation (IFR) and the name of the airport (or fix) to which you expect clearance.

**EXAMPLE-**

*"Washington clearance delivery (or ground control if appropriate) American Seventy Six at gate one, IFR Los Angeles."*

3. If the flight plan has been changed, state the change and request a full route clearance.

**EXAMPLE-**

*"Washington clearance delivery, American Seventy Six at gate one. IFR San Francisco. My flight plan route has been amended (or destination changed). Request full route clearance."*

4. Request verification or clarification from ATC if ANY portion of the clearance is not clearly understood.

5. When requesting clearance for the IFR portion of a VFR/IFR flight, request such clearance prior to the fix where IFR operation is proposed to commence in sufficient time to avoid delay. Use the following phraseology:

**EXAMPLE-**

*"Los Angeles center, Apache Six One Papa, VFR estimating*

**FAAO 7110.65, Paragraph 4-3-3d**

**d.** When no changes are required in the filed route, state the phrase: "Cleared to (destination) airport, (SID and SID transition, as appropriate); then, as filed." If a SID is not assigned, follow with "As filed." Specify the assigned altitude; and, if required, add any additional instructions or information, including final requested altitude if different than assigned except if Pre-Departure Clearance (PDC) is utilized.

**PHRASEOLOGY-**

*CLEARED TO (destination) AIRPORT;*

*and as appropriate,*

*(SID name and number) DEPARTURE,  
THEN AS FILED.*

*MAINTAIN (altitude); (additional instructions or information).*

*If a SID is not assigned,*

*CLEARED TO (destination) AIRPORT AS FILED.  
MAINTAIN (altitude);*

*and if required,*

*(additional instructions or information).*

**EXAMPLE-**

*"Cleared to Reynolds Airport; David Two RNAV Departure, Kingham Transition; then, as filed. Maintain niner thousand. Expect flight level four one zero, one zero minutes after departure."*

*"Cleared to Reynolds Airport as filed. Maintain niner thousand. Expect flight level four one zero, one zero minutes after departure."*

**NOTE-**

**1. SIDs are excluded from "cleared as filed" procedures.**

**2. If a pilot does not wish to accept an ATC clearance to fly a SID, he/she is expected to advise ATC or state "NO SID" in his/her flight plan remarks.**

**P/C Glossary: *CLEARED AS FILED*-** Means the aircraft is cleared to proceed in accordance with the route of flight filed in the flight plan. This clearance does not include the altitude, SID, or SID Transition.

**129** – Discussion regarding the intent of the original AOC

**130** – Withdrawn by proponent.

**CURRENT STATUS: WITHDRAWN**

**RECOMMENDATION: NONE**

**IOU: ALPA will resubmit under a renumbered AOC that details the objective with suggested language. This original AOC has changed to a differentiation with "climb via."**

**ATPAC UPDATE**

**AREA OF CONCERN 129-1**

**SUBJECT: Cancellation of Takeoff Clearance.**

**DISCUSSION: This AOC was submitted by ALPA after issues were expressed regarding the possible misunderstanding of controller initiated cancellations of takeoff**

clearances. The discussion highlighted the extreme jeopardy this procedure places the aircraft and crew in as it may be utilized inappropriately to preclude Operational Errors and/or Deviations, Traffic Management initiatives. Also discussed was a Boeing study that related that this activity is the most dangerous for the aircraft and crew of any aviation regime owing to the fact that the crew, in many cases, does not have sufficient time to analyze the information being given to determine the best course of action based on speed, weight, and other particular flight parameters. It was suggested that the .65, .3, and AIM be changed to include wording that would apply more stringent rules on controllers. Also stated was that the controller consider speed, weight, weather, etc in the determination to apply instructions for an abort. All agreed that to quantify these data would be impossible for the controllers and place an untenable liability on both controllers and flight crews that would not likely result in the desired outcome. Further discussion focused on the difficulty in addressing the culture of controller's desire to prevent/avoid OE/Ds and the possible conflict with the pilot's responsibility.

**130** – ALPA submitted the recommendation below and it was approved by type committee.

**SUGGESTED ATPAC ACTION:** ALPA with assistance from Don Frenya/Kerry Rose will write a proposed MBI that would highlight the danger of these activities and apprise controllers of the appropriate circumstances in which it might be used.

**CURRENT STATUS:** DEFERRED

**RECOMMENDATION:** The following MBI is proposed.

**DRAFT MANDATORY BRIEFING ITEM**

Cancellation of Takeoff Clearance, FAA Order 7110.65, Paragraph 3-9-10

In the past year there were three reported events involving high performance aircraft that highlight the need for a review of the application of this procedure. In each recorded incident, the clearance was cancelled when the aircraft was accelerating rapidly, near the decision speed, and no reason was given. A high-speed abort was the result in each case and in one case, overheated brakes and tires caused the high-pressure tire plugs to explode several minutes after the aircraft stopped. Additionally, a search of the NASA ASRS database revealed several events that highlighting the safety concerns that result from high-speed aborts.

In the first event, the Cancel Takeoff Clearance instruction was issued because the pilot of another aircraft on an intersecting runway advised the tower that he could not hold short of the intersection. The cancel takeoff instruction was issued to avoid a loss of procedural separation even though the aircraft would have been airborne well before the intersection. The second event involved an aircraft that failed to hold short of the runway at a down field taxiway. A third event included a takeoff cancellation that dealt with a weather alert.

Cancellation of take-off clearances issued to jet aircraft can result in high-speed aborts, which in turn creates a high-risk maneuver for these type aircraft. For controllers to properly apply this procedure, an understanding of what happens in the cockpits of these aircraft is necessary.

The cancellation of a takeoff clearance for a jet aircraft, after the aircraft starts rolling down the runway, is a controller decision that can have serious consequences for the aircrew. The speed of the aircraft is critical. Normally, a low-speed abort (initiated at less than 80 knots airspeed) is easily accomplished. Between 80 knots and lift-off, the aircraft is in a “transitional phase” between the ground and airborne phases of flight. At that time, a high-speed abort is a critical procedure because the aircraft may not be able to stop on the runway and there is a high risk of departing the end of the runway resulting in damage or even loss of the aircraft, passengers and cargo.

During the “transitional phase,” the aircraft captain must decide to stop or continue the takeoff based on the nature and severity of any aircraft malfunction and the speed and rate of acceleration of the aircraft. The higher the speed, the greater is the risk in aborting the takeoff due to the possibility of insufficient runway to stop the airplane. Controllers must be aware that pilots are trained to continue the takeoff except in the case the most severe aircraft malfunctions. A high-speed abort is one of the most dangerous events a pilot could encounter in a high-performance aircraft. Blown tires and overheated brakes are expected and significant aircraft damage is possible.

Controllers do not know the speed of the aircraft in knots or miles per hour, but they can judge relative speed and acceleration and they generally know the time an aircraft takes from start to rotation and the point on the runway where specific aircraft rotate. After about one third of the takeoff roll distance, the aircraft is in the “transitional phase” where acceleration is rapid and the probability of a safe abort decreases. In most cases, it only takes about 10-15 seconds for the aircraft to reach that phase. The cancellation of a take-off clearance is an option always available, but controllers must be aware that pilots may elect to continue the takeoff based on their instantaneous assessment of their situation.

When canceling a take-off clearance, evaluate the need to maintain procedural separation standards versus the increased safety risks associated with a high-speed abort.

For review: FAA order 7110.65, 3-9-10. CANCELLATION OF TAKEOFF CLEARANCE.

Cancel a previously issued clearance for takeoff and inform the pilot of the reason if circumstances require. Once an aircraft has started takeoff roll, cancel the takeoff clearance only for the purpose of safety.

***NOTE-***

*In no case should a takeoff clearance be canceled after an aircraft has started its*

*takeoff roll solely for the purpose of meeting traffic management requirements/EDCT.*

***PHRASEOLOGY-***

***CANCEL TAKEOFF CLEARANCE (reason).***

Stating the reason for the cancellation may assist the captain in his decision making process and will definitely assist in the pilots' actions following that decision to stop or go.

Sounds complicated, but controllers need to know that a high-speed abort is a critical pilot procedure for pure jet powered aircraft and the pilot may not abort the takeoff solely because of the controller's instruction. Be prepared to deal with that eventuality. Recognize the difference between low-speed and high-speed abort situations. Manage traffic to avoid use of the cancel takeoff procedure and as paragraph 3-9-10 says: "Once an aircraft has started takeoff roll, cancel the takeoff clearance only for the purpose of safety."

**IOU: ATO-T for review of recommendation.**

**ATPAC UPDATE**

**AREA OF CONCERN 130-1**

**SUBJECT**: Offshore Speed Restrictions.

**DISCUSSION**: This AOC was submitted by COA with a letter that ruled in part that all aircraft operating under civil registry operating outside the US (12 NM) will not exceed 250 knots below 10,000 feet. The committee took exception to the interpretation of FARs.

**SUGGESTED ATPAC ACTION:** Tasking will be assigned to determine if this is the correct interpretation and if so to express ATPACs objection to the rule.

**CURRENT STATUS:** DEFERRED

**RECOMMENDATION:** ATPAC recommends that the 250 knots rule not apply outside US airspace for US registered aircraft.

**IOU:** Steve Alogna will query the Office of the Chief Counsel regarding the interpretation of 14 CFR 91.117(a).

**LOCATIONS/DATES FOR FUTURE MEETINGS.** The Chairman announced the following ATPAC meeting schedule:

ATPAC 131: April 15-17, 2008, Baltimore Marriott Inner Harbor Hotel at Camden Yards, 110 S. Eutaw St., Baltimore, Md. 21201.

ATPAC 132: July 15-16, 2008. CGH Corporate Headquarters, Eighth Floor, 600 Maryland Avenue, Washington, DC.



ATPAC 133: November 3-5, 2008. Coordination in progress to meet at the Marriott-Wardmann Park Hotel concurrent with the ATCA Convention. TBD

ATPAC 134: January 13-15 with travel days January 12 and 16, Meeting site TBD, Location: San Juan, Puerto Rico

**ADJOURNMENT:** The meeting was adjourned on January 16.

- AOC 102-2 Instrument Approach Clearances to Other than IAF
- AOC 116-1 Revision to FAAO 7110.65 and the AIM
- AOC 116-3 ILS Glide Slope Critical Area Advisory
- AOC 117-1 Definition of the Term "Airborne"
- AOC 120-2 Low Altitude Alerts
- AOC 123-2 Aircraft Vertical Performance
- AOC 123-4 Speed Assignment Procedures for Arriving Aircraft
- AOC 123-6 Precision Obstacle Free Zone
- AOC 123-7 Express Carrier Call-Signs
- AOC 124-1 Controller Identification of Aircraft Types
- AOC 125-2 Gear Down Advisory
- AOC 125-4 Confusion on Descent During Non-Precision Approaches
- AOC 126-2 Procedures for Use of Time to Meet Restrictions
- AOC 129-1 Cancellation of Takeoff Clearance
- AOC 130-1 Offshore Speed Restrictions

THE PRECEDING IS CERTIFIED TO BE A TRUE AND ACCURATE SUMMARY OF THIS MEETING.

Richard Jehlen  
Executive Director, Air Traffic Procedures  
Advisory Committee