

## **AIR TRAFFIC PROCEDURES ADVISORY COMMITTEE**

**(ATPAC)**

**SUBJECT:** Minutes of the 131<sup>st</sup> Meeting

**SUMMARY.** The 131st meeting of ATPAC was held at the Marriott Inner Harbor Hotel, Baltimore, MD, on April 15 and 16, 2008. Representatives were present from FAA, APA, ALPA, ATCA, COA, NBAA, NATCA, PWC, and NASA. The meeting was called to order by Wilson Riggan, Chairman, at 9:00 a.m. on Tuesday, April 15. ATPAC meeting #130 minutes were discussed and approved with changes to the format and cleanup of some technical items.

The Executive Director's report was presented by Mr. Rich Jehlen, Executive Director, who thanked PWC for permitting the use of their meeting room; He 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; NextGen; the status of the position of VP-Safety; and suggested alternatives to the site of the January meeting. One Safety Item was submitted for consideration regarding changes to LAS operations and deferred pending further investigation by ATO-R. Wilson Riggan was thanked for his service to the committee.

Updates were submitted in writing to agenda items regarding Runway Safety, Wake Turbulence, NAVAID Naming Protocols, and Class B airspace (see page 3).

### **AGENDA.**

- Call to Order/Roll Call
- Recognition of attendees
- Review/Approval of Minutes of the 130th ATPAC Meeting
- Call for Safety Items
- Executive Director's Report
- Review of Areas of Concern
- Adjournment

**CALL TO ORDER.** The Chairman, Mr. Wilson Riggan, called the meeting to order at 9 a.m. at the Marriott Inner Harbor Hotel, Baltimore, MD on April 15 and 16, 2008. Representatives were present from FAA, APA, ALPA, ATCA, COA, NBAA, NATCA, PWC, and NASA.

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

Rich Jehlen, Executive Director  
Wilson Riggan, APA, Chairman  
Steve Alogna, Contract Support, ATO-R  
Harvey Hartmann, NASA/ASRS  
Harry Hodges, FAA  
David Rivers, NBAA  
Bob Streigel, ALPA

Danny Aguerre-Bennett, NATCA  
Glenn Morse, COA  
Kerry Rose, FAA  
Richard Kagehiro, FAA  
Nancy Kalinowski, FAA  
Jim Hamilton, UPS

**REVIEW/APPROVAL OF MINUTES OF THE 130th MEETING.**

ATPAC 130th minutes were discussed and approved with corrections.

**INTRODUCTION OF SAFEY ITEMS.**

One was introduced by ALPA regarding proposed changes to LAS runways and was deferred pending further investigation by ATO-R. ALPA's main concern was the process being utilized to ensure the Safety Management System was fully engaged by the FAA. ATO-R will advise the committee by email of the results of their fact finding. 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. Rich Jehlen suggested ATO-R would coordinate to determine the number of NAVAIDs involved in the Naming Protocol and the status of activity.

**EXECUTIVE DIRECTOR'S REPORT.**

Mr. Rich Jehlen, Executive Director, presented the report.

**ELECTION OF NEW CHAIRPERSON IN ACCORDANCE WITH ATPAC CHARTER.**

The committee, by voice acclaim, elected Ms. Danny Aguerre-Bennett, the primary representative of member organization NATCA, as the new chair. Ms. Aguerre-Bennett's term will begin at meeting number 132 in July.

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

Two were presented for consideration with one accepted (AOC 131-1) as presented by AOPA.

## **AGENDA ITEMS. SUMMARY OF AGENDA ITEMS FROM MEETING 131**

### **AGENDA ITEM: Wake Turbulence Program**

Work continues on the effort to take the waiver that was approved for operations at STL for closely spaced parallel runways and expand the availability of the solution to 4 additional airports

Wake Turbulence Mitigation for Departures (WTMD) project has been approved by the EC to proceed towards a Final Investment Decision. The Wake Program is working with ATO.T (Terminal) in order to transition the project to Terminal for implementation

Work has begun on the concept development of a wind based solution for arrivals to closely spaced parallel runways, Wake Turbulence Mitigation for Arrivals (WTMA)

A project to determine the feasibility of performing a Recategorization to the wake turbulence categories is underway, in partnership with Eurocontrol and coordinated through ICAO

Work continues on the separation standards for the A380 and a modification to the ICAO State letter is anticipated this year, The first A380 air carrier operation to the USA is expected to be October in SF0

Effort has begun to establish the separation standards for the 8747-8

### **AGENDA ITEM: NAVAID Naming Protocol.**

From Eastern Service Area: In July 2006, System Operations Airspace & AIM has provided us with a list of NAVAIDs that have the same name as a nearby airport but are more than 5nm apart. We have been asked to determine if the single name is creating any confusion for the users or AT. The AT facilities responded that those specific airports/NA VAIDs did not cause any conflicts. Afterwards I begun soliciting from the ARTCC's (to be followed by ATCTs) any same name airports/NAVAIDs that they new existed in their airspace. I had received a response from ZME. Then in Sept 2006, the transition to one Service Center occurred and this project had been put aside,

From Central Service Area: Actions are Progressing to address the ATPAC recommendations and quarterly reports will be provided.

From Western Service Area: The specialist reported he found eight airport/navaid facilities that fit the above scenario. Four were in Seattle Center's airspace and four were in Salt Lake Centers airspace. He spoke with individuals from both QA offices and they said it has never been an issue. From this sampling, it appears to not be an issue.

## **AGENDA ITEM: Class B Airspace**

The following report is from Jesse Gaines' office: "Class B After compilation of requested data from the field all facilities that responded that they were without exception expected to follow the rules as established by the FAAO 7110.65. Those that believe their Class B was in need of modification were instructed to begin the process with their service areas with the knowledge that the process could take up to 18 months to complete. At Y2K meeting last week the airline representatives advised FAA that they would like to be included in the process of the Class B mods as they also had concerns."

## **AGENDA ITEM: Runway Safety**

### **Call to Action**

On August 15, 2007, the FAA Runway Safety Call to Action Committee issued several recommendations to address improving runway safety across the NAS. In response to the Call to Action Committee recommendations the Air Traffic Organization, Terminal Service (ATO-T) convened a Safety Risk Management (SRM) Panel of subject matter experts to evaluate safety of the Committee recommendations. Those recommendations are:

- Change CFR 9 1.129(i) —Taxi To  
— Line Up and Wait
- Detailed Taxi Instructions
- Takeoff Clearances
- Restrict Multiple Runway Crossing During Taxi
- Landing Clearances

### **Change CFR 91.129 (U - Taxi To:**

Call to Action Recommendation: NTSB Recommendation A-OO-67, to amend 14 CFR 91.129 (i) to require the pilot to receive a clearance to cross all runways.

Current System: 14 CFR 91.129 (i) — Take-off, landing, taxi clearance. No person may, at any airport with an operating control tower, operate an aircraft on a runway or taxiway, or take off or land an aircraft, unless an appropriate clearance is received from ATC. A clearance to "taxi to" the takeoff runway as needed to the aircraft is not a clearance to cross that assigned takeoff runway, or to taxi on that runway at any point, but is a clearance to cross other runways that intersect the taxi route to that assigned takeoff runway . A clearance to "taxi to" any point other than an assigned takeoff runway is a clearance to cross all runways that intersect the taxi route to that point.

Panel Recommendation: The Panel recommends implementation of the change with no

additional safety requirements.

Suggested Change: 14 CFR 91.129 (i) - Take-off, landing, taxi clearance, No person may, at any airport with an operating control tower, operate an aircraft on a runway or taxiway, or take off or land an aircraft, unless an appropriate clearance is received from **ATC**. A clearance to taxi is not a clearance to cross any runway, or to taxi on a runway at any point.

Status: The “Taxi To” SRMD (change to 91.129(i)) is with ATO-T. ATO-5 non-concurred, identifying a hazard addressing the transition period while pilots and controllers learn the new procedure. Coordination has been ongoing between ATO-T and ATO-S since this hazard has not been addressed in previous assessments. The Panel met on 3/11/08 to attend to the safety concerns. The new version of the SRMD is within ATO-T for signatures and will be sent to ATO-S and AOV,

#### Line Up and Wait:

Call to Action Recommendation: NTSB recommendation to conform to ICAO phraseology. Line Up and Wait (LUAW).

Current System: FAA utilizes position and hold (TIPH) phraseology.

The panel met for 3 days starting on 3/4/08 to analyze the NTSB recommendation to adopt the ICAO Phraseology “Line Up and Wait”. The panel consisted of NATCA, ALPA, AOPA, IATA, DOD and ATO representatives. An initial analysis has been completed. The panel is waiting for additional data and a human factors and flight standards perspective to complete the study.

Panel Recommendation/Status: An initial draft SRMD will be completed for the panel. Once additional data is received, the panel will reconvene to finish the analysis and make a recommendation to the proposal. Voice recordings of ATC operations are being reviewed to see how often certain words are used in day to day operations. Also, runway safety data is being collected for the panel to review.

#### ***Other associated items of interest:***

##### Detailed Taxi Instructions

Call to Action Recommendation: Mandatory explicit progressive taxi instructions including directional turns to all aircraft/vehicles to and from ramps and runways.

Current System: Currently, FAA Order 7110.65, Paragraph 3-7-2 calls for “progressive” taxi/ground movement instructions when requested by the pilot or operator, or when the air traffic controller deems it necessary due to traffic, field conditions, or visibility. The panel analyzed mandatory explicit progressive taxi instructions including directional turns to all aircraft/vehicles to and from ramps and runways.

Panels Recommendation: The Panel's recommendation is to proceed with implementation of mandatory detailed taxi instructions with the safety requirement that directional turns are *optional*, depending on needs at individual airports.

Status: This SRMD was approved Terminal issued a notice on March 31, 2008 with implementation on 05/19/08.

Takeoff Clearances:

Call to Action Recommendation: Implement NTSB recommendation A-07-47: Prohibit the issuance of a takeoff clearance during an airplane's taxi to its departure runway until the airplane has crossed all intersecting runways,

Current System: Effective July 22, 2007, Air Traffic changed the phraseology for takeoff clearances. If the takeoff clearance is issued before the aircraft crosses all intervening runways, restate the runway to be crossed with the takeoff clearance. Example: Cross runway 24L, runway 24R cleared for takeoff. Stating the runway to be crossed with the departure clearance increases situational awareness for the air traffic controller and the pilot. It is not uncommon for radio communications transfer to occur before an aircraft crosses all runways en route to or reaching the approach end of the assigned runway. Restating the crossing clearance helps to decrease the likelihood of an aircraft departing the wrong runway.

The call to action SRMP analyzed NTSB recommendation A-07-47

Prohibit the issuance of a takeoff clearance during an airplane's taxi to its departure runway until after the airplane has crossed all intersecting runways.

Panel's Recommendation: The Panel recommends elimination of this Call to Action Committee recommendation and continuance of Notice N JO 7110.473 as part of FAA Order 7110.65. Panel consensus is that Notice N JO 7110.473 would eliminate wrong runway departures and that no additional safety benefit is gained from the more restrictive recommendation.

Status: Terminal will proceed with implementation of the Call to Action recommendation. The Safety Risk Management Document (SRMD) was approved by AOV. ATO-T is continuing work towards implementation. We will have a draft document change proposal out to the field for comment in April. We anticipate this to be in final to the field by mid June and implementation 30 to 45 days after.

**Restrict Multiple Runway Crossing During Taxi:**

Call to Action Recommendation: NTSB Recommendation A-00-68 that calls for the FAA to, "Amend Federal Aviation Administration Order 7110.65R, Air Traffic Control,

to require that, when aircraft need to cross multiple runways, air traffic controllers issue an explicit crossing instruction for each runway after the previous runway has been crossed.”

NTSB Recommendation A-00-68 calls for the FAA to, “Amend Federal Aviation Administration Order 7110.65, Air Traffic Control, to require when aircraft need to cross multiple runways, air traffic controllers shall issue an explicit crossing instruction for each runway after the previous runway has been crossed.”

Current System: Multiple runway crossings are allowed with one clearance,

Panel Recommendation: The Panel found that implementation of A-00-68, in conjunction A-00-67 would provide a safety benefit at most airports in the National Airspace System (NAS). Implementation of the change without all of the safety requirements would introduce new high risks to the NAS. The Panel determined prompt implementation of A00-68 with all safety requirements will offer immediate safety benefits to reduce runway incursions. To expedite implementation of the change and associated safety requirements, the Panel developed an implementation plan, The implementation plan is necessary to assure that the change is implemented in the proper sequence to avoid introducing high risks into the NAS.

Status: Based on implementation of the “explicit runway crossing clearance change to CFR 91.129 (i)”, Terminal will proceed with the Call to Action recommendation to issue a runway crossing clearance for each runway. Currently, ATO-T, ATO-S and AOV are holding discussions in reference to the implementation plan (safety mitigations). ATO-T will meet with Human Factors to develop what will be needed in regard to a taxi time/situational awareness study. ATO-T will reconvene the panel if needed once an agreement is made between ATO-T, ATO-S and AOV on the panel’s suggested mitigations and how the study will be handled.

### **Landing Clearances:**

Call to Action Recommendation: NTSB recommendation A-00-70; FAA should adopt landing clearance procedures to conform to ICAO procedures, ICAO procedures are to clear an aircraft to land only after the preceding aircraft has crossed the landing threshold. Also a recommendation was made to restrict the distance a landing clearance may be issued.

Current System: FAA Order **7110.65** states that a landing clearance to a succeeding aircraft in a landing sequence may not be withheld as long as separation is maintained when an aircraft crosses the landing threshold.

Panel Recommendation/Status: The SRMD is being prepared. The panel has held numerous meetings both in DC and via telcon to address this proposal. The panel is reviewing risk mitigation associated with the proposal. The panel has also been asked to

consider the impact of restricting the number of aircraft that could be issued a landing clearance at any given time or restrict the distance the aircraft would need to be from the runway before a landing clearance. The panel is looking at other options and considering alternatives to ensure proper runway separation associated with successive arrivals, i.e. enhance controller/pilot awareness

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## 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.

**131** – Agreed that further coordination be done between the RNAV and ATO-T offices to ensure no duplication of effort.

**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 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.

**131** – Scott Casoni advised the referenced paragraphs do not exist. Discussion was that a recommendation from ATPAC remains to obtain clarification of terms regarding “maintain.” Kerry Rose will contact the RNAV office in order to connect with the PARC’s phraseology group so as to establish a connection with the groups, charters, and processes.

**IOU: 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.

**131** – It was determined that FAAO 7110.65 had been changed to reflect the ATPAC recommendation leaving only the AIM to be addressed by this proposed change in Para 1-1-9k2.

**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.**

**131-** Wilson Riggan provided ATPAC recommendation for submission to AIM.

**IOU: ATO-R – ATPAC’s recommendation will be presented to AIM for review and consideration.**

## 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.

**131** – The recommended action from ATPAC to define airborne has been concluded as being all parts of the aircraft must be in the air.

**CURRENT STATUS: CLOSED**

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

**IOU: NA**

## 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.

**131** – A memo is being considered by ATO-T for application of ATPAC recommendation in FAA) 7110.65, Para2-1-6.

**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.

**131** – Various groups are being polled with the intent to determine their use of the .65 appendix with a goal to determine if the chart is valid enough to continually update or eliminate for controller use.

**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 #132.**

## 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.

**131** – Richard Kagehiro, ATO-E, advised that the RNAV office has developed a draft DCP and is in the process of impaneling an SRM group. Larry Newman advised that the PARC had developed phraseology to address the issue.

**CURRENT STATUS: DEFERRED**

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

**IOU: ATO-R Kerry Rose will check with RNAV office to report status of this AOC at 132.**

## 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.

**131** – Wilson presented a draft of the ATPAC recommendation for submission to ATO-T for their action.

**CURRENT STATUS: DEFERRED**

**RECOMMENDATION: Controller initiated Go Around.**

**IOU: ATO-R. The recommendation below will be presented to ATO-T for their review.**

*The FAA has identified an area near the runway which must be kept clear of ground traffic in low IFR conditions (300-3/4) in order to maintain the Target Level of Safety (TLS) with respect to the approaching aircraft. This area is defined as the Precision Obstacle Free Zone (POFZ). The subject of this AOC is to address the issue of what the controller and pilot actions should be in the unlikely event of a POFZ transgression. The ATPAC held extensive discussions on this issue, including briefings from Flight Standards risk analysis personnel and input from various airline, pilot, and controller groups, as well as Air Traffic Terminal and Systems Operations representatives. The distance of approximately 3/4 mile out on final was identified as the longitudinal location at which the approaching aircraft's collision risk with the encroaching ground traffic has increased beyond the TLS. If the approaching aircraft goes around prior to that point, it never enters the dangerous zone and thus its risk never exceeds that limit. Alternatively, once passing that point, going around creates the very risk we seek to avoid due to the potential for lateral drift and drift-down during the go-around procedure.*

*ATPAC believes the recommended actions below will provide pilots and controllers with an effective and easily understood mitigation to a POFZ violation and ensures maximum protection of the POFZ up to but not beyond the point where the Target Level of Safety becomes negatively impacted by the execution of a "go around."*

***ATPAC recommends that the FAA take the following actions:***

- *Identify the point on the approach beyond which the TLS is no longer supported if the aircraft goes around due to an object infringing on the POFZ.*
- *The identification of this point on approach must consider human factors data so as to allow for the communication of a "go around" instruction and the pilot's reaction time for initiating the procedure. From our discussions with Flight Standards, we believe that point will be approximately one mile out on final.*
- *Once this point is identified, the FAA should develop procedures which will ensure that one of the following two actions occur:*
  - *If an aircraft is outside the identified point on approach and an object (aircraft, vehicle, etc.) violates the POFZ, the controller issues "go around" instructions to the aircraft on approach.*
  - *Or, if an aircraft on approach has passed that point and an object violates the POFZ, the controller does not issue "go around" instructions, but reverts to existing ILS Critical Area / Runway Incursion procedures.*
- *As this procedure may appear counter-intuitive, include a "note" to the procedure in JO 7110.65S explaining the purpose of this change.*

**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. Too 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.

**131** – The memorandum below was presented to ATO-T for their action that represented ATPAC’s position.

*The Air Traffic Procedures Advisory Committee (ATPAC) has identified a potential problem in the use of four-digit calls signs used primarily by Air Taxi operators at busy hub airports. These operators are generally in support of legacy carriers and therefore, in order to maintain schedule delivery integrity, operate in close time proximity and with air carrier peak times. This actual and increasing potential for error, in the committee’s consensus, should be corrected to protect both aircraft and controllers.*

*ATPAC requests you initiate action to ensure this potential problem area is addressed. The committee recommends that this may be accomplished through coordination with the appropriate airlines and supported by an MBI in the form of Computer Based Instruction or an Air Traffic Bulletin to emphasize to ATC personnel.*

**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.

**131** – ATO-R will present the memo below to ATO-T for their review.

*The Air Traffic Procedures Advisory Committee has identified a potential problem in ATC phraseology and procedures. ATC at many locations when issuing clearance for Visual Approaches may provide relevant traffic information and instruct the aircraft to “Follow” the designated traffic. The ATPAC Committee has been made aware that in some locations the traffic being issued is being limited to a description such as, “ Follow the RJ.” It is our opinion that this is an insufficient description owing to the large*

*variety of “RJs” in the system and the likelihood for the aircraft issued Visual Approach clearance identifying and following an incorrect aircraft. These RJs may now range from King Air size to DC9 size and we feel that these types must be made clear to the following aircraft.*

*ATPAC requests you initiate action to ensure this potential problem area is addressed. The committee recommends that this may be accomplished through an MBI in the form of Computer Based Instruction or an Air Traffic Bulletin.*

**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 Embracer 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, “Embracer 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 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.

**131** – ATO-T has action memorandum with ATPAC recommendation as listed below.

*The Air Traffic Procedures Advisory Committee (ATPAC) has identified a potential problem in the frequency of occurrence of wheels up landings primarily in the general aviation community. Our initial information gained from NASA ASRS reports and from AOPA indicates this may be an item that a change in FAA procedures could help mitigate.*

*ATPAC requests you initiate action to investigate the possibility of changing FAA Order 7110.65, Chapter, paragraph 2-1-24, Wheels Down Check, to apply to FAA controllers as well as military. The committee has discussed this issue extensively and is of the opinion that significant savings in monetary losses to aircraft and personal injuries to aircrews and passengers may be prevented at towered airports. Also discussed was the advisability of permitting the exemption of this potential change of rules, for example,*

*at airports where the primary traffic is multi-pilot aircraft, FAR Part 121 or 135, and minimally servicing to general aviation.*

**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.

**131** – Discussion concluded that this item did in fact rise to a systemic issue that deserved to be addressed in an MBI for controllers and pilot education regarding approaches to airports with non-precision approaches.

**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:** Steve Alogna will co-write proposed MBI with Bob Striegel for presentation to ATO-T and ATO-E.

## **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.

**131** – A memo will be written and addressed to ATO-E for their review that outlines the committee’s recommendation.

**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 Will be presented with the following memorandum of recommendation:

*ATPAC RECOMMENDATION TO ATO-E REGARDING PROCEDURES FOR USE OF TIME TO MEET RESTRICTIONS. ATPAC AREA OF CONCERN (AOC) 126-2.*

*First, the committee would like to address some of the misconceptions about this proposal. Arguments have been heard about whether or not it is reliable control technique to use computer-generated, predictive “vector lines” to evaluate the time till routes cross. Similarly, arguments have been heard about whether it is employing “positive control” at all to issue an altitude crossing restriction which might in any way seem close to the capability of the aircraft. While we think of those situations more in a climb situation than a descent, similar risks exist in both. The Committee makes no effort to insert itself into the evaluation of how one might “ensure” positive control in such a situation. It is a moot point to consider those issues anyway, based on the fact that there is already such a clearance provided for in the 7110.65.*

*Also, it is important to note that the above arguments exist without regard to the verbiage one uses with which to refer to the clearance limit time by which we instruct the aircraft to achieve the required altitude. Those arguments apply as surely with our current phraseology as they would with that which is proposed. There is no additional control*



*inherent in one description of a time event over that inherent in any other way of describing that same time.*

*Separately and distinct from the above issues, the Committee chooses to address the situation of how to describe it once the decision has been made to clear an aircraft to achieve an altitude by a particular moment in time. Such a moment can be described in a number of ways, two of which are: referring to a specific time on the controller's clock on the one hand ("Climb to reach FL350 by 1525Z; time now 1522 and three quarters"), and on the other hand, referring to the passage of a specific period of time after a radio transmission ("Climb to reach FL 350 in two minutes").*

*The Committee believes that the benefits of the proposed version of a time description include: eliminating the need for UTC references, eliminating the excess verbiage created by the time check, and eliminating the mental math required on the part of the controller in order to compute the time limit and on the part of the pilot in order to evaluate, then record and/or remember the difference between the airplane's clock and the controller's clock and to continue to apply that difference for the length of time it takes to achieve the altitude. The proposed phraseology would provide additional accuracy by replacing the relatively coarse units of a quarter minute with the accuracy with which one can read a sweep second hand (which is required equipment on all IFR aircraft).*

*The Committee also wishes to note that the proposed time description is already in relatively common use in the field, despite its variance from the currently-prescribed phraseology. Thus the proposed phraseology is, much to the chagrin of some, well-tested. While never valid as a reason to approve an idea, the fact that it has been in use already for a long time has provided an opportunity to uncover unanticipated problems. The Committee was not able to identify any.*

***Committee Recommendation:*** *ATPAC recommends that the phraseology change in this proposal would be a positive one which would improve the precision of a control clearance, reduce the verbiage necessary to issue the clearance, make it easier for the controller to describe to the pilot, and make compliance easier for the pilot, both in understanding and in its accomplishment.*

## **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.

**131 - PROPOSED MBI FOR TERMINAL CONTROLLERS REGARDING CANCELLATION OF TAKEOFF CLEARANCE**

*In the past year there were two 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 tires high pressure 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 one case 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. A 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.*

*High-speed abort procedures and the inherent risks are an integral part of the training programs for pilots of high performance aircraft. Because of the risk of departing the end of the runway and damage to the aircraft and passengers or cargo, a high-speed abort is one of the most dangerous events a pilot could encounter in a high performance aircraft. Even if the aircraft does not depart the runway, damage to aircraft can be significant and occasionally, catastrophic. Pilots are taught to closely evaluate “lower level” system malfunctions as speed increases during the takeoff roll because, unless a major problem occurs, it is proven that it is safer to takeoff than to execute a high speed abort.*

*Once incident following a high-speed abort event a few years ago resulted when an aircraft that was on takeoff roll at a high speed and the tower received an EDCT for that aircraft and the controller cancelled the takeoff clearance.*

*In light of these events, the paragraph and its application should be reviewed to determine if controller awareness of the safety implications of issuing a cancellation of a takeoff clearance should be enhanced. The overall guidance should be that a cancellation of a takeoff clearance should be issued after the start of the takeoff roll only if there is a substantial risk of collision. The considerations for issuance of the cancellation must be greater than traffic management initiatives such as MIT requirements and/or EDCT. We realize that a hard and fast rule cannot be written, that the safety of the procedure resides in the controller’s judgment, and the decision to abort must reside in the cockpit. But it appears that some education would be helpful to expand on the guidance in FAA order 7110.65 and perhaps controller training.*

**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.

**131-** Coordination was accomplished with AGC and the FAA has clarified its position and stated in recent publications that pilots of US registry do not have to conform to Class B rules in international areas.

**CURRENT STATUS: CLOSED**

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

**IOU: NA.**

## **ATPAC UPDATE**

### **AREA OF CONCERN 131-1**

**SUBJECT:** AFSS Pre-Flight Briefing on SUA

**DISCUSSION:** This AOC was submitted by AOPA. The contention is that AFSS specialists are only required to provide pilots with a briefing on SUA “ Upon request.” AOPA suggests that this be changed to a requirement for specialists to provide this

information without request and that it be made a mandatory briefing item for flight plan filing. The committee's discussion regarding this proposal was that of the increased workload for AFSS specialists and the actual number of pilots that did not want the information versus those that may have violated SUA because the information was not given. ATPAC agreed to make this suggestion an AOC for tracking purposes and that AOPA would attempt to obtain more definitive information on justification and provide supporting data

**SUGGESTED ATPAC ACTION: None.**

**CURRENT STATUS: DEFERRED**

**RECOMMENDATION:** AOPA will gather data regarding this AOC and present it at #132 for further committee consideration.

**IOU: AOPA.**

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

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

ATPAC 133: November 3-5, 2008. The Marriott-Wardmann Park Hotel, Washington, DC concurrent with the ATCA Convention.

ATPAC 134: January 13-15, 2009 Miami, Florida. Site TBD

ATPAC 135: April 21-22, 2009 Washington, DC. Site TBD

**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