AERONAUTICAL CHARTING MEETING
Charting Group
Meeting 23-02 – October 24-26, 2023

RECOMMENDATION DOCUMENT

FAA Control #23-02-382

Subject: Procedure Amendment Effective Date
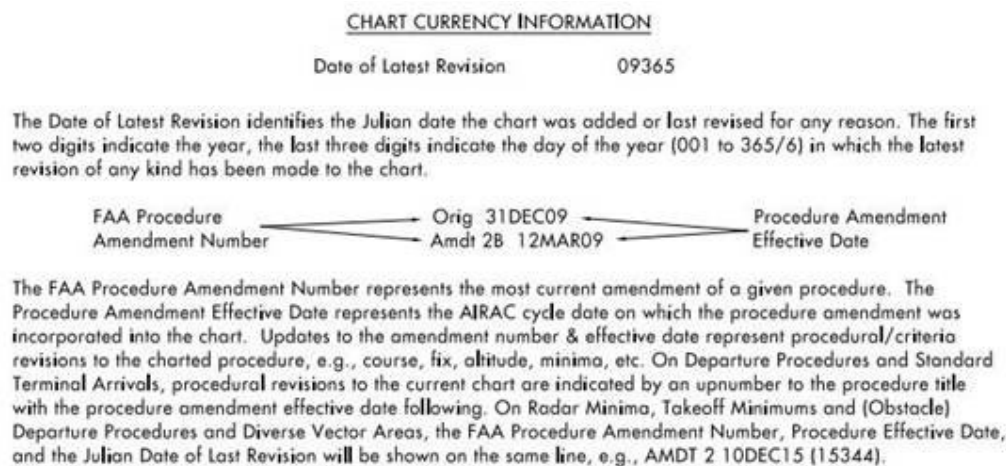
Background/Discussion:

The topic was brought up initially in 07-02-98 and the original RD is as follows.

Charting does not support the requirements in AC 90-101, AC 90-96, JAA TGL-10, MMEL (PL-98, Navigation Databases, MMEL Code 34) or the 3 August 2006 NTAP containing guidance to operators and pilots on verification of the accuracy of navigation data in an expired navigation database. Use of a chart to validate the aeronautical (fix) data in an out-of-date navigation database may lead to a violation of FAR 91.503 (a) which states: "The pilot in command of an airplane shall ensure that the following flying equipment and aeronautical charts and **data,** in current and appropriate form, are accessible for each flight".

This item led to the creation of the Procedure Amendment Effective Date. The date was to help pilots determine quickly if they could use a procedure with an expired database. The explanation of this date in the Chart User's Guide explains it's for procedural type changes and the date represents the AIRAC cycle date they were implemented.

The FAA Procedure Amendment Number, located on the left bottom margin below the City, State, represents the most current amendment of a given procedure. The Procedure Amendment Effective Date represents the AIRAC cycle date on which the procedure amendment was incorporated into the chart. Updates to the amendment number and effective date represent procedural/criteria revisions to the charted procedure, e.g., course, fix, altitude, minima, etc.

Same in the TPP:

CHART CURRENCY INFORMATION

Date of Latest Revision   09365

The Date of Latest Revision identifies the Julian date the chart was added or last revised for any reason. The first two digits indicate the year, the last three digits indicate the day of the year (001 to 365/6) in which the latest revision of any kind has been made to the chart.

FAA Procedure ———→ Orig 31DEC09 ←——— Procedure Amendment
Amendment Number ——→ Amdt 2B 12MAR09 ←——— Effective Date

The FAA Procedure Amendment Number represents the most current amendment of a given procedure. The Procedure Amendment Effective Date represents the AIRAC cycle date on which the procedure amendment was incorporated into the chart. Updates to the amendment number & effective date represent procedural/criteria revisions to the charted procedure, e.g., course, fix, altitude, minima, etc. On Departure Procedures and Standard Terminal Arrivals, procedural revisions to the current chart are indicated by an upnumber to the procedure title with the procedure amendment effective date following. On Radar Minima, Takeoff Minimums and (Obstacle) Departure Procedures and Diverse Vector Areas, the FAA Procedure Amendment Number, Procedure Effective Date, and the Julian Date of Last Revision will be shown on the same line, e.g., AMDT 2 10DEC15 (15344).

 The AIM provides a little different understanding. It explains this date and that a pilot cannot use the database depending on the charted date.

AIM: 1-2-3 Note #4

The navigation database should be current for the duration of the flight. If the AIRAC cycle will change during flight, operators and pilots should establish procedures to ensure the accuracy of navigation data, including suitability of navigation facilities used to define the routes and procedures for flight. To facilitate validating database currency, the FAA has developed procedures for publishing the amendment date that instrument approach procedures were last revised. The amendment date follows the amendment number, e.g., Amdt 4 14Jan10. Currency of graphic departure procedures and STARs may be ascertained by the numerical designation in the procedure title. If an amended chart is published for the procedure, or the procedure amendment date shown on the chart is on or after the expiration date of the database, the operator must not use the database to conduct the operation.

8260.19 Section 8-3-4
Provides guidance for the charted elements that are being changed and necessary action. The below is a sample of table 8-3-1 that represents the possible changes. Not all the items listed would result in a database change. Items such as Minimums and time distance table for example.

06/29/2020   Order 8260.19I

Table 8-3-1.

Para #	C = Cancel & Reissue A = Amendment B = Abbreviated Amdt P = P-NOTAM N = Amdt not required	C	A	B	P	N
8-3-4.a(1)	Title 14 CFR, part 97 subpart changes as a result of a change in equipment required to fly the procedure; e.g., 'LOC" to "ILS or LOC"; "ILS" to "LOC", etc. [see paragraph 8-2-2.b].	X				
8-3-4.a(2)	Procedure ID changed from "VOR-A" to "VOR-B", etc.	X				
8-3-4.a(3)	An "L", "C", or "R" runway designation is added or removed from the procedure title; e.g., "VOR/DME RWY 18L/R" is changed to "VOR/DME RWY 18L."	X				
8-3-4.a(4)	NAVAID providing final course guidance relocated and causes final approach course ground track to change.	X				
8-3-4.a(5)	Straight-in minimums added or deleted that require change to the procedure ID; e.g., "NDB RWY 28" to "NDB-A", or "NDB-A" to "NDB RWY 28."	X				
8-3-4.a(6)	Special procedure converted to a public, 14 CFR part 97 procedure.	X				
8-3-4.a(7)	Runway moved and parameters exceed the values in paragraph 8-3-4.e(2)(a), and the current numbering is retained; e.g., Runway 14/32 is moved 400 feet NE.	X				
8-3-4.b(1)	Airport/heliport identifier change.		X	X		
8-3-4.b(2)	Airport associated city name or state is changed.		X	X	X	
8-3-4.b(3)	Name, facility type, and/or identifier of NAVAIDs are changed, including those mentioned in the "Additional Flight Data" and "Missed Approach" blocks of procedure forms.		X	X	X	
8-3-4.b(4)	NAVAIDs/marker beacons are decommissioned.		X	X	X	

Recommendations:

1. Is the Procedure Amendment Effective Date intended to provide pilots the ability to determine if they can use a procedure with an expired database? If so then we need to evaluate the changes that are being made per 8260.19 Section 8-3-4 against the database values to determine if the database values change as well.

2. If the intent is to provide only the AIRAC cycle in which procedural changes have been made then the AIM language needs to be revised to remove the database portion.

3. If this date is not being used or overcome by events then remove it from the chart.

Benefits:
1) Would adoption of the recommendation prevent or reduce the likelihood of occurrence of accidents or incidents? Yes

2) Would adoption of the recommendation mitigate a known or potential safety hazard? Yes

3) Would adoption of the recommendation resolve a known or potential issue creating operator or Air Traffic Control system errors? No

4) Would adoption of the recommendation increase operational or system efficiencies? Not applicable

5) Would any additional benefits be recognized by adoption of the recommendation? Depending on the recommendation but additional benefits are a more useful product and decrease work load for pilots and FAA charting.

Comments:

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MEETING 23-02

Aaron Jacobson, Boeing/Jeppesen, presented a recommendation regarding the procedure amendment effective date on procedures published in the Terminal Procedures Publication (TPP). He explained that the date was added to the charts as a result of a 2007 ACM recommendation ([RD 07-02-198](#)). The intent was to provide pilots with a way to ensure their database is current, however there is a conflict in the definition. The TPP defines the date as the publication cycle on which a procedure amendment was incorporated on the chart. The Aeronautical Information Manual (AIM) defines the date as a way for a pilot to verify that their database is current. Aaron pointed out that there are changes on a chart that will result in an updated procedure amendment date that might not result in a database change, e.g., minima changes.

Aaron suggested three options to remedy this problem:

1. If the Procedure Amendment Effective Date is intended to provide pilots the ability to determine if they can use a procedure with an expired database, chart producers need to evaluate the changes that are being made per FAA Order 8260.19 Section 8-3-4 against the database values to determine if the database values are still current.

2. If the intent is to provide only the AIRAC cycle in which procedural changes have been made, the AIM language needs to be revised to remove the database verification portion.

3. If this date is not being used or has been overcome by events, then it should be removed from the chart.

Kevin Allen, American Air Lines, said they can fly with an expired database if they verify the data. He said the effective date on the charts is often nebulous, so they verify each segment is correct in the data.

Rich Boll, NBAA, said he was on the original working group when the procedure amendment effective date was added. The purpose was to provide a means to the pilot to verify that the procedure on the chart matched the procedure that was coded in the database. Before that pilots had to go line by line through the procedures, verifying courses, altitudes, waypoint positions, and making sure everything was the same before they could use an expired database. If Table 8-3-1 in FAA Order 8260.19 has been modified to add items that do not affect the path of the procedure, it needs to be changed. He does not think Options 2 and 3 are viable options. NBAA is opposed to removing the procedure amendment.

John Collins, ForeFlight, agrees with Rich. He also said many Flight Management Systems (FMS) specifically include this method as the means of validating the usability of the approach data. He agrees that it should not be removed.

Diane Adams-Maturo, FAA/AFS-420, said Table 8-3-1 is used by procedure designers to determine whether they need to cancel or issue an amendment, an abbreviated amendment, or a P-NOTAM. It is not intended to indicate anything else. Rich asked

whether the procedure amendment effective date would change if something like the tower control frequency changed. Jeff Rawdon, FAA/AFS-420, said there are changes to the chart that have nothing to do with the procedure source data, like an airport frequency change. If a frequency is changed, the Julian date would be updated, but not the procedure amendment effective date since there is no procedure amendment. However, there are items on procedure amendments that will not affect the coding. For example, someone could use an amendment to add a chart note. The chart note is not coded but does result in a change to the procedure and the procedure amendment effective date. Rich said he does not think that was the original intent of adding the procedure amendment effective date.

Pat Mulqueen, FAA/AJV-A440, said we may have overcome the original intent over time. He said the Instrument Flight Procedures team uses Table 8-3-1 to determine what to do for a change but said every change they make goes to coding for an update to the Coded Instrument Flight Procedures (CIFP) dataset. The only thing not changed in the CIFP is a T-NOTAM. He said he thinks this is a bigger issue, and it needs to be investigated internally first before any decision is made.

Aaron pointed out that the definitions in the Chart Users' Guide and the TPP says, "Updates to the amendment number and the effective date represent procedural/criteria revision to the charted procedure." The question is what causes the amendment number and effective date to change and does it change the database. There is a lot of heavy lifting on the part of pilots to compare the database and the charted procedure. If the change does not affect flying the procedure, the date should not change. He pointed out that in some cases the procedure amendment date on some Jeppesen charts does not match the procedure amendment effective date on the FAA's charts, since Jeppesen's charts follow the original intent of RD 07-02-198.

Rich asked whether the original working group recommendations are still available. Jennifer Hendi, FAA/AJV-A250, said she can investigate that history, but it sounds like the original intent has been overcome. Rich said the procedure amendment effective date is for confirming and validating that the procedure matches the database when a procedure changes inflight, which happens occasionally.

Steven Madigan, Garmin, said Garmin regularly works P-NOTAMs with changes that aren't coded and have nothing to do with the path of the procedure, but they still roll the amendment number and effective date up. He asked how amendment changes that don't affect the database are intended to be made. Pat said Steven asks a good question. There are changes that occur, such as requirements notes or minima, that a pilot needs to know about but don't impact the procedure or the coding. Pat recommended a working group to figure out whether we really have a problem with the way we're doing things.

Jennifer Hendi, FAA/AJV-A250, summarized this issue will be discussed further at the ACM Recommendation Review Group. She will report back at the next meeting.

STATUS: OPEN

ACTION: Jennifer Hendi, FAA/AJV-A250, will bring this issue to the ACM Recommendation Review Group for discussion and will report back at the next meeting.

MEETING 24-01

Jennifer Hendi, FAA/AJV-A250, reported that the ACM Recommendation Review Group (ARRG) believes the current agency methodology of updating the procedure effective date on procedure amendments is appropriate. The group did agree that the current Aeronautical Information Manual (AIM) guidance could be confusing. Jennifer said Joel Dickinson, FAA/AFS-410, is planning to update the AIM as part of another project he is working on that includes several updates. The revised language will be ready to share at the next ACM. This issue needs to remain open as the AIM guidance is either revised or changed to point users to the Terminal Procedures Publication (TPP) explanation which we believe is correct and complete. Jennifer said she understands that this may not be the result that was hoped for, but it would be a big change to our current processes and to the criteria to back this up now and only change the procedure amendment date if the coding changed.

Rich Boll, NBAA, disagreed with changing the AIM. He said the procedure amendment date is charted so the pilot can compare a procedure that is charted with the date in the database. That was the intent of the original ACM issue from 2007 that added the procedure amendment date. Dan Wacker, FAA/AFS-420, said there are other changes that can be made to a procedure that will change the amendment date that will not affect the coding. Rich said that should not be the case and not what was intended in the original Recommendation Document (RD) from 2007.

Steve Madigan, Garmin, informed the group that there are many changes every effective date that rolls up the amendment date that do not affect the coded path of the procedure.

Bill de Groh, APA, said that it was his understanding from the original issue in 2007 that we needed to find a way to check that as the effective date changes, those procedures that have changed mid-flight can still be used because nothing procedurally has changed. Jennifer said it would be a huge undertaking to go back and make the changes needed to capture the date as originally intended. Rich said that change does need to be made because how it's being used now was not the intent of adding procedure amendment dates in the first place. John Collins, Boeing/Foreflight, agreed with Rich about the original intent of the 2007 RD.

Aaron Jacobson, Boeing/Jeppesen, suggested to follow-up on what causes the date to change. He said the date should not be changed if the coding hasn't changed. That is how Jeppesen looks at the data and will not change the date unless something affecting the coding has changed. Jennifer replied that the FAA never updated the date based solely on coding changes.

Jeff Rawdon, FAA/AFS-420, referenced Table 8-3-1 from FAA Order 8260.19. This table gives guidance to the procedure developer as to which process they need to follow to get a procedure updated. He said you can have amendments, abbreviated amendments, and Notice to Air Missions (NOTAM) that don't necessarily affect the coding of the procedure. Pat Mulqueen, FAA/AJV-A440, added that every procedure that gets amended goes through the coding team. They then update the Coded Instrument Flight Procedures (CIFP).

Krystle Kime, FAA/AJV-A222, stated that the guidance that is published in the TPP legend exactly describes how Terminal Charting has been implementing the procedure amendment effective date since the original specification change was implemented. Her team does not have a way to determine what has changed in the coding. Krystle thinks the Aeronautical Information Manual (AIM) should be updated to match the TPP, so we are accurately explaining how the date is being used today, even if that was not the original intent. Then Rich should submit a new RD so the FAA can investigate providing the date that industry needs in the future. Jeff said, that for legal reasons, effective dates are still needed to document when a procedure has been revised that has nothing to do with coding. If it is decided that something needs to be done to capture a date for the coding, it will have to be captured differently because we still need a procedure effective date for the form. Krystle agreed.

Jennifer said the industry concerns have been heard and further internal discussions are needed before determining a path forward. She said she will update the group on the FAA investigation of this issue at the next ACM.

STATUS: OPEN

ACTION: Jennifer Hendi, FAA/AJV-A250, will report on FAA discussions regarding the procedure amendment effective dates and will report back at the next meeting.

MEETING 24-02

Jennifer Hendi, FAA/AJV-A250, reported that since the last ACM there has been more discussion between FAA/AJV-A and FAA/AFS-420 on this topic. She said we do not have a universal way forward yet and that she is planning to arrange further discussion that will include industry.

Rich Boll, NBAA, thanked Jennifer and asked her to include ALPA in the future discussion. He said he thinks we need to come up with a solution, otherwise we have a lot of documents that need to be changed.

Steve Madigan, Garmin, stated that he'd like to be involved in the discussions as well. Aaron Jacobson, Boeing/Jeppesen, John Collins, Boeing/Foreflight, and Darrell Pennington, ALPA, also requested to participate. Rich stated that he still thinks the original purpose of the date is important. Bill Tuccio, Garmin, said we need to consider how important this information is in a data driven world.

STATUS: OPEN

ACTION: Jennifer Hendi, FAA/AJV-A250, will report on FAA/Industry discussions regarding the procedure amendment effective dates and will report back at the next meeting.