

AERONAUTICAL CHARTING FORUM
Charting Group
Meeting 16-01 – April 26, 2016

RECOMMENDATION DOCUMENT

FAA Control # 16-01-325

Subject: Priority of Terminal Procedure Amendments

Background/Discussion:

FAA is deploying new RNAV SIDs and RNAV STARs at the major airports in the United States. The Metroplex project leverages the capabilities of RNAV systems to gain greater efficiencies in the traffic management at these locations. These SIDs and STARs often have complex lateral and vertical routing, including multiple altitude and speed constraints. While every effort is made during the design stage to mitigate potential airspace conflicts or user issues, inevitably usability issues often arise shortly after the publication of the procedure.

A recent example is the DYAMD Two RNAV STAR at San Francisco (SFO) (see FIG 1). The final altitude constraint on the procedure at ARCHI was amended by NOTAM from an “at” 7000’ MSL constraint to an “at” 8000’ MSL constraint:

KSFO SAN FRANCISCO INTL

FDC 5/0051 (A1963/15) - STAR SAN FRANCISCO INTL, SAN FRANCISCO, CA.
DYAMD TWO ARRIVAL (RNAV) CHANGE ALTITUDE RESTRICTION AT ARCHI TO
READ: 8000. ALL OTHER DATA REMAINS AS PUBLISHED. 02 OCT 13:30 2015
UNTIL 01 OCT 23:59 2016 ESTIMATED. CREATED: 02 OCT 13:13 2015

A check of the FAA’s IFP Information Gateway reveals that there no plans to amend or update the procedure to reflect the NOTAM, was released as a temporary NOTAM as identified by the “ESTIMATED” annotation in the NOTAM text.

While it remains the responsibility of the pilot-in-command to familiarize themselves with all available information prior to a flight, implementing these critical procedural changes by NOTAM with a long effective date and without high priority level for the publication of a revised procedure increases the likelihood that these critical changes will be missed in actual line operations.

It must be noted that a temporary NOTAM such as the example above will not result in revisions to the navigation database. It remains the responsibility of the pilot to change the fix restriction once the procedure is loaded into the RNAV system’s active flight plan

Recommendations:

NBAA recommends that flight procedure development associated with the core US airports prioritize changes to terminal arrival and departure procedures (i.e. RNAV SIDs and RNAV STARs) through the Regional Airspace & Procedures Teams (RAPT) to address amendments to any altitude constraint, speed constraint, or “Top Altitude” that is published on the procedure. These changes are critical to the vertical navigation of the aircraft when controlled by the RNAV system, and require coding changes in the navigation database.

NBAA recommends that FAA Order 8260.43B be amended to permit the facility issuing a NOTAM requiring a change in the aforementioned items be able to request from the RAPT priority amendment and publication of these changes on RNAV SIDs and RNAV STARs at the earliest opportunity by the assignment of a “Priority 1” designation.

Comments: This recommendation affects:

FAA Order 8260.43B Flight Procedures Management Program

Submitted by: Richard J. Boll II

Organization: NBAA

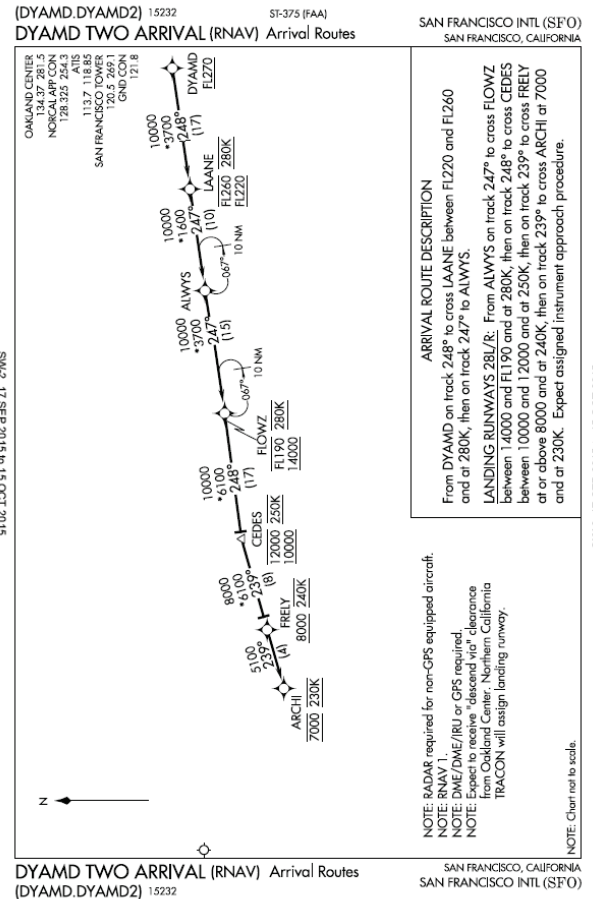
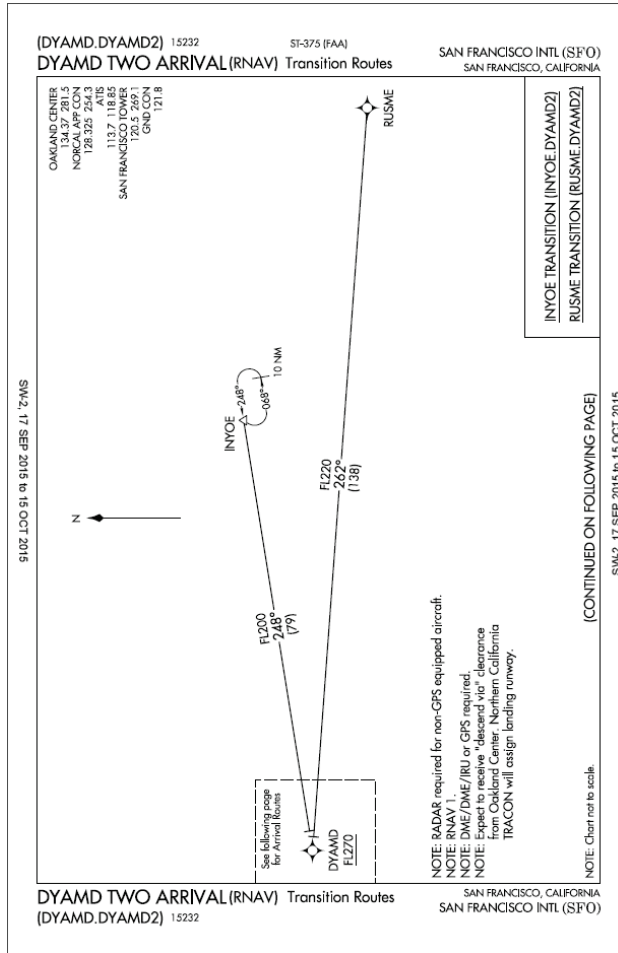
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Fig 1



INITIAL DISCUSSION – MEETING 16-01: John Kernaghan (NBAA) briefed that the SFO DYAMD TWO RNAV STAR final altitude at ARCHI was scheduled to be amended to 7000, along with a change to the associated Class B airspace floor. The STAR amendment was processed, but the Class B change was not, which put arrivals below the floor of the Class B airspace. A temporary NOTAM was issued to amend the DYAMD TWO to 8000, but it looks like an 18 month fix. Even though it is the responsibility of the pilot-in-command to be familiar with all NOTAMs, this violated the 224 day NOTAM limit because a temporary NOTAM does not revise the data base or the charts. NBAA requests a change to FAA Order 8260.43B, Flight Procedures Management Program, to prioritize the timing and importance of related procedure development. Bob Lamond (NBAA) added they just heard the Western Service Area, Regional Airspace and Procedures Team (RAPT) has stopped meeting due to a backlog of scheduled procedure development work with publish dates more than two years out. The Metroplex projects seem to always have issues and there needs to be a way to affect corrections sooner without using 18 month temporary NOTAMs. Tom Schneider (AFS-420) said the T-NOTAM has a 224 day limit, and again spoke of the revision work under way with FAA Order 8260.43B. Bennie Hutto (NATCA) said there is ATC phraseology to correct issues like this (preferable to NOTAMS), and added the DYAMD THREE STAR is scheduled for publication in July 2016 addressing the problem. Bob said this is the first NBAA heard of the July publication for the DYAMD THREE. Brian Townsend (American Airlines) agreed with Bennie that ATC using phraseology is a quick fix, however even though NOTAMs are the legal fix, procedure via NOTAM is not good and there needs to be an expedited process in place for these corrections. Lynette Jamison (AJR-B1) reminded the group that “estimated” NOTAMs (i.e., “EST” following the expiration date of the NOTAM) drop out of system at 224 days (In this case, October 2). Lev Prichard (APA) asked if a NOTAM will just drop on an important issue like this, and Lynette said yes, adding it is the responsibility of the NOTAM originator to monitor NOTAMs to determine if it is still needed. Tom said he believed that the NOTAM issuer would be notified before it expired and dropped, and Bill Rabek (ATL ARTCC) said they are not notified. Lynette said if the NOTAM Manager system is used to issue the NOTAM, there will be a three day notification; the ARTCCs do not use this system and do not get the notification. Lev said this shows work is needed on the issue. Lynette said there is no one person looking at these; no oversight; no specific office is looking at STAR NOTAMS with “PERM”; nor are the old “FIT NOTAMS” that are still in the NOTAM system being monitored. Valerie asked if these “old NOTAMS” are being cleaned up when STAR oversight is turned over to AFS, and Tom said no; these are ATO items. Lynette added it should be the responsibility of the issuing authority to ensure validity of all the NOTAMS they have issued. The discussion had moved off the original topic of the agenda item and the discussion ended. Tom Schneider will take the IOU to monitor progress of the Order 8260.43 revision and report back at the next meeting on the latest proposed changes.

Status: AFS-420 will monitor Order 8260.43 revision work under way (by AFS-460) and report back. **Item open: AFS-420**

MEETING 16-02: Tom Schneider (AFS-420) briefed from slide (used in issue 12-01-299 also) ([VIEW](#)) on proposed changes to Order 8260.43, Flight Procedures and Management Program, regarding priority of IFR procedure amendment. Rich Boll (NBAA) asked when this Order is anticipated to be published. Tom advised that AFS-460 is the POC, a

complete rewrite is underway and a meeting is scheduled for November 1-3. Additionally, since this Order is signed by the Administrator, it will take longer than normal in the coordination/approval process.

Status: Track status on progress of Order 8260.43. **Item open:** AFS-460

MEETING 17-02: John Bordy (Flight Procedure Standards Branch) stated draft Order 8260.43C is in internal coordination, with some language on prioritization. John indicated this change may not directly address the original issue, which is related to long-standing STAR NOTAMs that don't have a corresponding amendment scheduled within the FAA's work plan. It appears a process needs to be developed to ensure a STAR procedure amendment project is scheduled whenever ATC issues a NOTAM affecting a STAR and that NOTAM is intended to change the STAR permanently. John asked Bennie Hutto (NATCA), who is assigned to the PBN office, if they could work together to identify improvement opportunities to the STAR NOTAM and STAR procedure amendment process to ensure NOTAMs aren't active for extended periods of time. This will require coordination with the Service Area Flight Procedure Teams as well. Rich Boll (NBAA) said the original item was brought by an altitude revision on a STAR and the time cycle to address the issue needs to be more rapid. Rich recommended "slots" be allotted within the production cycle so STAR revisions (particularly those tied to large projects) could be addressed/amended rapidly. Rich said we are still allowing temporary NOTAM (T-NOTAM) to exist for 224 days, and then cancelling and reissuing them to reset the 224-day allowance for T-NOTAMs. John indicates that FAA policy is that T-NOTAMs are not to be canceled and reissued; however, Rich indicated it is happening because slots aren't allotted to amend the STARs. John stated we're still not sure what the process is to add projects to amend STARs, but acknowledged we need to fix the process to reduce long-standing NOTAMs. Rich asked if it's possible to include STARs within the permanent NOTAM (P-NOTAM) process; John agreed to look into this. Gary McMullin (Southwest Airlines) concurred with Rich's suggestion to include STARs in the P-NOTAM process to reduce the number of long-standing NOTAMs. Bennie mentioned the term "P-NOTAM" is used in Order 8260.19H; however, that term is not used in Order 7930.2R; John agreed to research.

Action Items:

John Bordy will inquire if it's possible to provide relevant excerpts from draft Order 8260.43C to the NBAA.

John Bordy and Bennie Hutto will work jointly on STAR NOTAM process improvements to ensure STAR NOTAMs generate a timely project to amend the STAR.

John Bordy will research the P-NOTAM history to determine the feasibility of expanding it towards STARs (currently they are limited to ODPs and approach procedures).

John Bordy will research usage of the term "P-NOTAM".

Status: Item will remain open.

Meeting 18-01: John Bordy (Flight Procedures and Airspace Group) stated this pertains to STARs that have long term NOTAMs, without a mechanism to generate an amendment to remove the NOTAM. A recent query showed approximately 40 STARs with a NOTAM over a year old (224-day limit on Temp NOTAMs applies), with some on procedures that do not exist anymore. There are permanent NOTAMs on STARs also which are not consistent with policy. Since STAR NOTAMs are issued by the ATO, John asked if there were any suggestions from ATO on how to remedy these issues. John suggested education is needed on NOTAM policy in FAA Order 7930.2. He asked if there is a POC, within the ATO, that could be identified to assist with this issue. Gary Fiske (AJT-24) said the Airspace procedures office in the ARTCC would probably be where the responsibility would be. John said there are two issues: the 40 NOTAMs over a year old, and that these either need to be eliminated if no longer needed or amendments to the procedures need to start. Awareness is needed throughout that once a NOTAM is issued that is intended to be of a permanent nature, and then immediate action is required to get the procedure scheduled for amendment. Bennie Hutto (NATCA) agreed the existing process is not working even though facilities review NOTAMs daily. John said AJV-5 has a minor role in STARs, and Gary suggested using the OSG to clear existing STAR NOTAMs (determine if they are valid still). Bennie concurred. John will write Gary Fiske an e-mail outlining the problem, and Gary will take this e-mail to his management to push out to the service centers. John will call the service centers to inquire about initiating projects to clear existing identified STAR NOTAMs. John Bordy said an additional area of possible discussion is considering the use of P-NOTAMs on SIDs/STARs (questions on procedure naming and tracking) but that will be a longer-term initiative.

Action Items:

- John will provide an e-mail to Gary Fiske outlining the problem, and Gary will take to his management to push out to the service centers.
- John will contact the service centers to look at the 40 identified NOTAMs and identify a path forward to clear them.

Status: Item open.

Meeting 18-02: John Bordy (Flight Procedures and Airspace Group) reminded the group that this issue is specific to STAR procedures. A previous action for Gary Fiske to identify an ATC POC to work with on this issue was completed. John stated IFP NOTAM policy, as specified within FAA Order 7930.2, is applicable to STAR procedures. This policy prohibits the use of permanent NOTAMs (P-NOTAMs) for STARs and limits the timeframe that a temporary NOTAM (T-NOTAM) can be active. However, examination of active NOTAMs indicates P-NOTAMs are being issued contrary to policy and that in many cases T-NOTAMs are being left active without any action akin to amend the STAR (which would allow cancellation of the T-NOTAM). STAR NOTAMs are issued by ARTCC facilities, and it's John's belief that education regarding NOTAM policy and responsibilities related to ensuring projects are entered to schedule STAR amendments are lacking. John will work with the ATC POC that was identified so these issues can be corrected. Rich Boll, NBAA, said this was an NBAA issue originally and this does not answer their original request, which was to amend the FAA Order

8260.43 so NOTAM issuing facilities could request a higher priority from the RAPT. John Bordy suggested the use of P-NOTAMs could be examined applying to STARs as well and agreed to bring this issue back to his management for discussion. Discussion followed related to STAR naming and amendment numbering of procedures and the changes that would need to occur to support use of P-NOTAMs. Gary McMullen (Southwest Airlines) agreed with Rich Boll that this is a safety of flight issue, and stressed there should be a mechanism to be able to correct procedures within one publication cycle.

Action Items:

- John Bordy will discuss with his management the possibility of expanding the use of P-NOTAM for STARs.
- John Bordy will look into issues on possible STAR procedure up numbering to support P-NOTAMs.

Status: Item open.

Meeting 19-01: John Bordy, Flight Procedures and Airspace Group, briefed the issue directly from the [slide](#): discussing a summary and current status. A completely new process is now in for prioritizing the production schedule of all procedures within the NAS as described within the recently published Order 8260.43C. ATC facilities can now add input for priority. John Bordy indicated new language has been added to draft Order 8260.19I reiterating that STAR NOTAMs are limited to 224 days as currently described within Order 7930.2, Notices to Airmen (NOTAM). Language has also been added to inform designers that STAR amendments must be submitted as soon as possible after NOTAM issuance. At the previous ACM meeting, it was asked why IFP P-NOTAMs could not be used to effect amendments to STARs and SIDs (currently not allowed by policy). John Bordy stated the idea has merit, and will be introduced as a new agenda item at the US-IFPP in June. John Bordy asked Rich Boll if he was amendable to closing this item in light of the recent publication of Order 8260.43C and the new language within draft Order 8260.19I. Rich Boll stated this issue could be closed, but that he would like a new item introduced (for tracking purposes) related to the proposal to expand use of P-NOTAMs to STARs and SIDs.

Action Item:

- John Bordy will submit a new agenda item to the US-IFPP with a proposal to allow use of IFP P-NOTAMS for STARs and SIDs.
- John Bordy will draft a new agenda item for the next ACM related to the proposal to expand use of IFP P-NOTAMs for STARs and SIDs.

Status: Item open.

Meeting 19-02 John Bordy, FAA Flight Procedures and Airspace Group, briefed the issue summary and current status from the [slide](#). Order 8260.43C was published in April, 2019 and established an Instrument Flight Procedures (IFP) Prioritization Team, but the status of the team

startup is unknown at this time. Language was added to Order 8260.19I emphasizing the 224-day NOTAM limit. The STAR NOTAM policy was moved to Order 7930.2, Notices to Airmen (NOTAM) for facility awareness on NOTAM issuance. There was an action from ACM 19-01 to submit an issue to the US-IFPP as a proposal to allow the use of P-NOTAMs on SIDs & STARs. This issue was submitted and was accepted, but incorporated with another item to improve the amendment process. A working group is being established, and anticipated for December to start work. Rich Boll, NBAA, will introduce a new agenda item on the P-NOTAM issue later in the meeting.

Action Items:

- FAA Flight Procedures and Airspace Group will report on status of WG activity on P-NOTAMs
- (from closed issue 18-01-335) FAA Flight Procedures and Airspace Group will discuss IFP prioritization team factors at the next meeting

Status: Item Open

Meeting 20-02: Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the issue summary and current status from the [slide](#). Jeff showed language added in Order 8260.19I for STARs. In addition, Jeff discussed related P-NOTAM working group activities from ACM IPG issue 19-02-345. There are concerns about creating unintended consequences, such as more P-NOTAMs for the pilot to review and up-numbering issues with STARs and SIDs. The names of IFPs remain the same with an amendment, but the name of STARs and ODPs change in the databases with the change in number. AJV-A is working to define a method to address this concern. Work is ongoing on this, but no method has been decided on. In addition, Jeff showed slides and discussed considerations and factors in IFP prioritization. Rich Boll, NBAA, recapped the history of the issue, and hopes the P-NOTAM process will help resolve the process. Jeff advised the item will stay open, and Susan Walker, FPAG, advised she is working with AJV-A on this. STARs already have an abbreviated amended process which is working well.

- Flight Procedures and Airspace Group will brief P-NOTAM status at ACM IPG 21-01.

Status: Item Open

Meeting 21-01: *(Editor's note: due to an oversight, this item was briefed out of sequence from that planned in the agenda. It appears in these minutes at the point in the meeting in which it was discussed.)* Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the issue summary and current status from the [slide](#), and added this is related to issue 19-02-345. Sue Walker, FPAG, briefed there have been many discussions regarding the high visibility and priority of NOTAMs. The issue was addressed with the Instrument Procedures Validation Team to assign a higher priority to working procedures with NOTAMs, adding there is new work with Aeronautical Information Services on an abbreviated amendment process for SIDs. The Flight Procedures teams will be brought into the process to identify candidate procedures for the abbreviated amendments. Jeff said this will move forward in conjunction with issue 19-02-345.

Pat Mulqueen, FAA Aeronautical Information Services, agreed with Sue, and said if they receive a project identified as an abbreviated amendment and not requiring flight inspection, the completion should be quicker. Gary Fiske, FAA ATC Procedures (Terminal) Team (AJV-P310), questioned what other states are doing when confronted with the same issues. TJ Nichols, FPAG, said other states operate under different regulatory framework, and it is likely easier for other states to perform those amendments.

- Flight Procedures and Airspace Group will brief status of the P-NOTAM process revision status at ACM 21-02, in conjunction with issue 19-02-345

Status: Item open

Meeting 21-02: *(Editor's note: this item was briefed out of sequence in conjunction with issue 19-02-345.)*

19-02-345: Use of P-NOTAMS on SID/ODPs and STARs and 16-01-325: Priority of Terminal Procedure Amendments: Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the issues together from the [slides](#), since they will have the same solution. Both recommendations relate to P-NOTAM process revision issues. Pat Mulqueen, FAA Instrument Flight Procedures Group (AJV-400), briefed there is already an abbreviated amendment process in Orders 8260.46 (for SIDs) and 8260.3 (for STARs), but what is not obvious is they are incrementally numbered with each revision, as they would be for full amendments. AJV-A does not want to add P-NOTAMs into the system for SIDs and STARs. Sue Walker, FPAG, briefed there is ongoing discussion on priorities and also what requires an abbreviated or full amendment, adding more work is needed. Rich Boll, NBAA, stated the original issues were raised because there are large numbers of NOTAMs in the system that affect procedures, issued as 224-day T-NOTAMs, then re-issued rather than being resolved. This information is not in the FMS database possibly leading pilots to miss the information. Rich does not care if abbreviated amendments or P-NOTAMs are used, but believes the charts and/or databases need to be updated. He added that no matter how well procedures are quality checked, problems arise once they are flown, and those problems need to be addressed more quickly. Rich asked what would be a best practice once these problems are identified under existing orders. Pat indicated he understood the point, and added that if the issue is one of safety, it should be fixed with an abbreviated amendment as soon as possible. Pat agrees if the T-NOTAM has been out for 224 days the change needs to be made permanent, but does not feel a P-NOTAM is the best method. Bennie Hutto, NATCA, said the orders allow some things, like raising an altitude on an abbreviated amendment, but not lowering one, as that would require a full amendment. Bennie questioned if we could add some items to the abbreviated process, since it takes a long time for some simple amendments. Pat agreed, but added some things that look simple actually are not, and Flight Inspection can be required due to certain changes. AJV-A needs room in their schedule for high-priority projects, and scheduling is always an issue for them. Mike Stromberg, UPS, said if anything related to safety of flight is being placed on a NOTAM, it needs to be in a database and charted as soon as possible. Rich agreed with Mike, and said RD 19-02-345 was submitted to see if the P-NOTAM process, as used for approaches, could be utilized for simple 'pen and ink' changes rather than using the 224-day T-NOTAM process. He stated that since it

appears that process will not work, NBAA would suggest closing this issue, but leaving the more important RD 16-01-325 issue open. Rich suggested possibly another avenue, such as a ‘we made a mistake’ process for some cases (such as an incorrectly documented and charted altitude) that could be corrected in the following chart cycle. Pat said there is a similar process for new metroplex system errors to correct identified issues on the prior chart cycle. Sue said Flight Standards would help revise anything necessary to expedite the process of changes like this. Pat said we should refine the abbreviated amendment process to make simple changes, and feels that should be easy to do. Jeff summarized the discussion that the attendees felt the Agency should work on a process to fix errors quickly. Bennie said the metroplex post-implementation process discussed earlier was not originally designed to fix identified problems, but it is used that way. Joshua Fenwick, Garmin, said he supports Rich’s proposal for the change and Garmin feels the same about the issue, and prioritizing corrections for coordinates or altitudes is important. The group consensus was to close RD 19-02-345. RD 16-02-325 will remain open, with an effort to prioritize quicker corrections for high-interest problems. Valerie Watson, FAA Charting Products Integration Team (AJV-A250), said there used to be a chart correction process to correct chart errors, which probably would not work now, but there should be an error correction process. Dan Wacker, FPAG, added we should ensure the procedure is also looked at for criteria changes during an abbreviated process, but Pat said they do look at safety cases at the same time, and will update the procedure if any are identified.

Actions: Close RD 19-02-345. RD 16-02-325 will remain open. The Agency will continue to work toward an abbreviated amendment process to prioritize quicker corrections for significant issues with SIDs and STARs.

Status: Item 19-02-345 closed

Status: Item 16-01-325 open

Meeting 22-01: Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the issue summary and current status from the [slide](#). Susan Walker, FPAG, briefed she and Pat Mulqueen, FAA Instrument Flight Procedures Group (AJV-400), worked this issue together. STARs now go through a “quasi-abbreviated” amendment process, and this is working well and Pat has agreed to utilize the same process for SIDs. There is a list of items that qualify for an abbreviated amendment for SIDs in Order 8260.46, however STARs have a different list. P-NOTAMs will not be used on either SIDs or STARs. Based on the information presented, Jeff recommends the item be closed. Pat emphasized the process is for high priority SIDs and STARs to go through the Flight Procedures Team (FPT) Office as an abbreviated revision, and be worked as such. The items that qualify for an abbreviated amendment do not affect the flight profile of the aircraft, a redesign or environmental evaluation, and do not require a flight inspection. Altitude changes may qualify for an abbreviated amendment, and would require a flight inspection review. Michael Stromberg, Independent Pilots Association (IPA)/UPS, commented that a NOTAM changing a descent altitude can be flown by the pilot, but cannot be charted and flown without flight inspection, and this abbreviated process would be helpful. Pat said on a T-NOTAM, the process allows for a rapid abbreviated amendment to the procedure if

followed correctly. Pat said the only drawback is that on abbreviated amendments the procedure may not be fully revised to meet current criteria. Rich Boll, NBAA, said since T-NOTAMs are only supposed to be out 224 days, this amendment process would help, and wants to ensure the abbreviated process would solve the issue prior to closing the issue. Sue said the Instrument Flight Procedures Validation Team evaluates priorities, and the ATO needs to identify to the FPT the priority of a SID or STAR if expedited action is necessary. Rich also pointed out the input of non-airport sponsors to the [IFP Gateway Portal](#) appears to be unavailable, and are able to input comments for open procedures, but not for amendments. Order 8260.3 says you do not need to be an airport sponsor to make a flight procedure change recommendation, so they would like it opened back up. Steve Madigan, Garmin, concurred it is hard for non-affiliated commenters to make recommendations through the IFP Gateway. With these changes Rich said he would agree to close the issue. Dan Wacker, FPAG, asked if Rich would prefer an abbreviated amendment for a single altitude change, for example to eliminate a T-NOTAM, when the entire procedure actually needs a full amendment, recognizing the full amendment could take several years. Jeff pointed out that both could happen. Pat added the work request would need to get to them, reminding the group that SIDs and STARs go through ATO, and approach procedures go through the airport sponsors. The group agreed to close the issue.

Status: Item closed.