

GOVERNMENT/INDUSTRY AERONAUTICAL CHARTING FORUM 02-02

October 23-24, 2002

Recommendation Document

Subject: FAA-Approved Obstacles Not In Public Obstacle Data

Background/Discussion: One of the significant data components of NACO's Digital Aeronautical Information CD (DAICD) is the Digital Obstacle File (DOF). The DOF is supposed to contain every structure that was the subject of a FAR 77 Aeronautical Study (Obstruction Evaluation Case, or simply OE Case), and which structures were subsequently built. Over the years of assessing selected terminal instrument procedures, ALPA has learned that OE-approved obstructions failed to appear in the public DOF with some frequency. During our recent assessment of revised circle-to-land minimums at Lihue, Hawaii (PHLI) two significant obstacles, one of which is the controlling obstacle, do not appear in the public DOF. As the result of considerable time and investigation we were able to obtain the OE case numbers from each of the affected sponsors. See the attached topographical map for location and obstacle data of these two examples.

Recommendation: That the FAA undertake the necessary steps to assure that all recorded OE case structures that are built appear in the public DOF. The accuracy and integrity of the DOF must improve if the national transition to RNP instrument flight procedures is to succeed.

Comments: This recommendation affects various internal FAA directives, policies, and the public DOF circulated as part of the DAICD every 56 days.

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MEETING 02-02: ALPA has requested that all OE/AAA approved obstructions be included in the NACO Digital Obstruction File, which is part of the FAA's Digital Aeronautical Information CD. In addition, ALPA requested that the accuracy of the obstruction data in the DOF be improved. Mr. Charles Branch reported that the DOF was created to support charting, generally obstacles 200' or greater. It was reported that automated OE/AAA might solve this problem partially. Mr. Dick Powell stated that if Air Traffic has determined an obstruction is not a hazard and it is below 200' that it may not appear in the DOF. It was pointed out that to meet the ALPA recommendation, the 7400.2 would have to be rewritten. Mr. Branch stated that AVN is looking at reengineering the DOF to support the request. ALPA stated that the obstacle reengineering being done by AVN is acceptable. Mr. Dick Powell stated that there is now a new OE tool that AT is using and that this tool should help the FAA move forward. **ACTION:** ATA-100, NACO and AVN.

MEETING 03-01: Mr. Mark Ingram, ALPA, provided a background update on this issue stating ALPA's concern that some OE obstacle data may not be available in the DOF. Mr. John Brennan stated that procedures for the flow of obstacle data (7460.2 Part 77 obstructions) are well defined and that information that flows from the regions at a rate of 300-400 obstacles a week to AVN. He stated that the FCC database is also checked for obstacle data. Mr. Brennan stated that all obstacle information that NACO receives goes into the DOF.

MEETING 03-02: Meeting canceled.

MEETING 04-01: Mr. Mark Ingram, ALPA, stated ALPA's concern that some OE obstacle data is not available in the DOF. Mr. Ingram made reference to two obstructions on the final at Lihue Hawaii, one of which is the controlling obstruction. Mr. Eric Secretan, AVN-503, stated that obstructions under 200 feet are not in the DOF. Obstructions under 200 feet will be added to the DOF if the obstruction is a man made controlling obstruction, or if requested by Flight Procedures. Mr. Secretan stated that the Obstruction Repository System (ORS) would contain man-made and natural obstructions under 200 feet. ORS should be available after October 2004. **ACTION:** AVN-100, AVN-200 and AVN-500.

MEETING 04-02: Mr. Eric Secretan, NACO, provided a brief update on the Obstruction Repository System (ORS). Mr. Secretan stated that once the ORS is modeled, current obstacles would need to be incorporated and the duplicate record issue would need to be resolved. Resources are an issue and as a result the full implementation of the ORS is several years down the road. (NACO anticipates ORS replacing their current obstacle database within a year.) The ORS screens have not been developed. Mr. Secretan stated that OE/AAA data maybe accepted without verification if the data meets ORS business rules. Automation to link OE/AAA to the ORS is a problem. Mr. Terry Laydon, NACO, stated additional work would need to be completed prior to the ORS accepting the OE/AAA data. Mr. Secretan stated that the ORS will be a web-based service that will allow for selecting different obstacle types and will include proposed obstacles. Mr. Brad Rush, NFPO, stated that there is an issue with proposed obstacles that are not built. Mr. Rush explained that numerous sites could be requested for one obstacle. The unused proposed sites remain in the file. These sites would need to be flagged for removal from the database. Mr. Mike Riley, NGA, asked if there is a data exchange agreement between NGA and AVN. NACO and NGA currently exchange and ingest the NACO DOF and NGA foreign obstacle data. Mr. Rush stated that obstacle data is a difficult process to collect; there is no guarantee that any database has all the obstacles. The ORS requirements will be to capture all this data with no minimum elevation for obstacles. The initial release will replace the DOF and include all manmade obstacles according to FAR Part 77. A future release will include

all obstacles, manmade as well as natural with no height restrictions. Mr. Bill Hammett, AFS-420, inquired if NACO could add obstacles under 200 feet to the current database. Mr. Secretan responded that if requested NACO would add obstacles under 200 feet to the DOF. FAR Part 77 requires certain obstacles under 200 feet to be in the DOF, all obstacles received via 7460, no matter what the height. Mr. Mark Ingram, ALPA, asked if the two obstructions on the final at Lihue Hawaii would be added to the DOF. Ms. Rosemarie Longobardo, NACO, stated that NACO would add the obstructions based on the FCC database as source. **ACTION:** NACO.

MEETING 05-01: Mr. Eric Secretan, NACO, provided a brief update on the Obstruction Repository System (ORS) and the Digital Obstacle File (DOF). Mr. Secretan reported that ALPA identified several controlling obstacles, under 200 feet, which were not included in the DOF. The DOF was originally designed to support NACO charting, and most obstacles under 200 feet are not charted. The two obstructions identified by ALPA at Lihue Hawaii were added to the DOF. NACO is in the process of developing a comprehensive database that will include all natural and man-made obstructions, as well as digital terrain. The ORS database will include obstacles that are used for charting, obstacles used for procedure design, and OE/AAA. The ORS system is still being structured and will need to go through population and verification stages. Full implementation of ORS is several years down the road. Ms. Rosemarie Longobardo, NACO, stated that many of the obstacles that are on airports are processed as non-rule and never get a 7460 issued. This is most likely what happened at Lihue Hawaii. Mr. Bill Hammett, AFS-420, questioned if all obstructions on the OC chart were added to the DOF. Ms. Longobardo responded that only those obstructions that are known to penetrate the FAR Part 77 obstruction plane are added. Mr. Hammett stressed the importance of this information for procedure design. Mr. Secretan reiterated that the intent of ORS is to incorporate all obstacle data. OE/AAA will provide ORS with the bulk of the obstacle data. However, OE/AAA requires NACO verification of these obstructions along with the assigned NACO number and accuracy code. Mr. Brad Rush, NFPO, stated that AVN has taken upon itself to create ORS. This database will include all obstacle sources, including digital terrain, digital elevation models, obstacles, and all OE/AAA. Mr. Rush stated that AVN is not receiving the necessary information from Air Traffic. Air Traffic approves the OE 7460, the tower is built and NACO never receives the information. Mr. Rush questioned why NACO is reporting on the OE/AAA issue. OE/AAA is an Air Traffic program and Mr. Kevin Haggerty, ATO-R, should provide the update at the next ACF. In conclusion, Mr. Secretan suggested that the ACF Members provide recommendations on what data should be included in the ORS. **ACTION:** ACF Members and ATO-R.

MEETING 05-02: Mr. Kevin Haggerty, ATO-R, was unable to attend the ACF. Ms. Val Watson, Cartographic Standards, will attempt to obtain a response from Mr. Haggerty to add to the minutes. *Editor's note: No response was available at the time of print for these minutes.* **ACTION:** ATO-R.

MEETING 06-01: Mr. Kevin Haggerty, Obstruction Evaluation Service, provided the following update. The FAA is actively working to improve the processes for collecting and dissemination of obstacle data in the NAS. Over the last four years the Obstruction Evaluation Service Office has been working towards automating the 7460-1, Notice of Proposed Construction or Alteration, in nine regions. Currently 86% of all reported 7460-1s are filed electronically. Evaluations and responses are all submitted electronically with the results posted on the web at <https://oeaaa.faa.gov>. There is no paper submitted for those studies filed electronically. These are immediately added to the website where the public can view the site and determine the impact proposed structures will have on the NAS. Next in the automation process is the 7460-2, Notice of Actual Construction or Alteration. During this automation process several issues have arisen with the -2, NACG, and other user groups. The Obstruction Evaluation Service is

working to resolve the automation issues. In addition, there are current logic issues that don't conform to the automation process, which need to be resolved. Mr. Haggerty will provide access to the actual OE/AAA working site. Interested persons should contact him at 202-267-9219. Mr. Scott Jerdan, NACG, commented that some of the issues were being worked independently of the ACF, through the Aeronautical Information Service Working Group (AISWG) and that NACG is also working directly with Kevin at the bi-weekly Configuration Management Board meetings. Mr. Haggerty informed the group that the -2s can now be submitted completely digitally. In the past the paper -2 was submitted to Air Traffic (Obstruction Evaluation Service) for review prior to going to the NACG. Now with the digital -2, NACG receives the information much quicker. The -2 is immediately put on the web for use by the airlines and other interested user groups, after it is reviewed for completeness by the Obstruction Evaluation Service. The information can then be easily downloaded. Mr. Mark Ingram, ALPA, asked if the paper mailers are still being sent to effected airports. Mr. Haggerty responded that they are in the process of eliminating the paper mailers and in the near future all correspondence will be electronic. Mr. Bill Hammett, AFS-420/ISI expressed his concerns about the issue being worked by two different groups, at the ACF and the AISWG. Mr. John Moore, NACG, recommended that the ACF issue be closed and the issue remains open at the AISWG. Mr. Hammett requested that Mr. Haggerty participate in the quarterly AISWG meetings. The next meeting will be held on July 12, 2006 at the NACG facility in Silver Spring, Maryland. **CLOSED.**
