



## AIRCRAFT OWNERS AND PILOTS ASSOCIATION

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June 29, 2005

Ms. Lynne E. Puetz  
Director  
Office of Global Navigation (PV)  
National Geospatial-Intelligence Agency  
3838 Vogel Road  
Arnold, MO 63010-6238

RE: National Geospatial-Intelligence Agency (NGA) notice of intent to withdraw aeronautical data and products from public distribution

Dear Ms. Puetz:

The Aircraft Owner's and Pilots Association (AOPA), representing more than 404,000 general aviation pilots nationwide, opposes the National Geospatial-Intelligence Agency (NGA) proposed action to withdraw aeronautical data and products from public distribution by October 1, 2005. The NGA action will adversely affect security, safety and have a negative economic impact on civil aviation, which the NGA has failed to address in its plan to cut-off public access to the navigation products it produces. Prior to any action by NGA to stop public distribution, the Agency should work with the Federal Aviation Administration (FAA) to develop and implement alternative methods for making this data available to pilots and the aviation community.

Until such time that the FAA is able to provide the aeronautical data to pilots, it is imperative that the NGA continue to offer its aeronautical charts for sale and allow FAA and companies that produce aeronautical chart products access to the NGA database.

### ***General Aviation Loses Important Safety of Flight Data***

After several decades of making its aeronautical data available to the public, the NGA has announced it intends to remove its Flight Information Publications (FLIPs), Digital Aeronautical Flight Information File (DAFIF), and related aeronautical navigation digital and paper copy publications from public sale and distribution on October 1, 2005.

If implemented, this action would result in substantial impact on the general aviation community, including:

- The loss of critical U.S. border data for navigation
- The loss of more than 77% of electronic navigation data currently only available from the NGA.

- The loss of all NGA chart products including enroute charts for the Caribbean and South America, the supplement of Caribbean airport information, and instrument approach charts for the Caribbean and South America.
- The loss of popular operational international navigation charts (ONC).
- The loss of all international electronic navigation data.

### ***Domestic Impacts:***

**U.S. border data is critical** -- While the primary impact on civilian aviation users will be in the international flying arena, important aeronautical information contained on domestic products will be lost, particularly along the U.S. Borders. Additionally, pilots flying domestically use international data to maintain navigational awareness when flying in close proximity to the U.S. Borders. In the current times of heightened security awareness, it is absolutely critical to ensure pilots are equipped with as much information as possible in order to prevent security breaches. The U.S. borders with Canada, Mexico and Bahamas are all areas where navigation information is critical.

### **Large majority of domestic electronic navigation data will be lost --**

Nearly a dozen vendors who produce low cost general aviation flight planning programs for flight operations in the United States will no longer be able to use the DAFIF data to produce their domestic instrument approach route segments. The only alternative that even comes close is the FAA's National Flight Database (NFD). However, it is not as robust and does not contain more than 77% of the data found in DAFIF for domestic use. The National Airspace System (NAS) consists of approximately 13,000 instrument flight procedures. The following is a list of some of these procedures, which are available to the aviation community in chart form:

- Over 1,000 Instrument Landing System (ILS) procedures
- Over 1,700 Non-Directional Beacon (NDB) procedures
- Over 2,700 VHF Omni-Directional Range (VOR) procedures
- Over 3,500 Global Positioning System (GPS)/Area Navigation (RNAV) procedures

The following procedures are also available: Localizer (LOC), Localizer Type Directional Aid (LDA), Simplified Directional Facility (SDF), Visual, Departures, and Standard Terminal Arrivals.

While the NFD incorporates RNAV instrument approach procedures and GPS overlays for conventional approaches, it does not incorporate any conventional approach procedures or route segments. Considering only 3,500 of 13,000 instrument flight procedures are RNAV or GPS, vendors rely on the DAFIF to fill the void that exists with FAA's NFD in order to ensure pilots have access to necessary approach route segments

in today's aircraft navigation systems. At least 9,500 instrument flight procedures and route segments would be lost to vendors without the availability of the DAFIF information.

The FAA is transitioning the national airspace system to an RNAV centric system that requires all users to have access to a navigation database. Therefore, a requirement exists for the government to provide all of the necessary data for users to operate seamlessly within the U.S. as well as Internationally. Many low cost vendors of electronic flight planning programs for general aviation pilots rely on the DAFIF database to produce a high quality, low cost navigation programs to U.S. pilots. The loss of the DAFIF data will have an adverse impact on pilots' ability to obtain portions of domestic and international navigation data from the government and operators will be forced to subscribe to higher cost non-federal databases.

AOPA members indicate that database costs are a major factor in their decision to delay their transition to RNAV. While database costs are not the sole reason for delayed equipage, it is a substantial deterrent to general aviation users. The result of delayed equipage means the Federal government will need to fund multiple navigation systems for a longer period of time resulting in higher end-cost to the taxpayers.

AOPA also points out that it is a remarkable contradiction that at the same time the President has ordered the military to improve the reliability and availability of the GPS navigation signal to the worldwide civilian market, the military is proposing to withdraw the information necessary to make complete use of GPS.

### ***International Impacts:***

**Loss of FLIP Products and International Navigation Charts** — The NGA produces 20 FLIP publications that cover international terminal instrument procedures, enroute, oceanic, and international supplemental planning charts. These charts are sold to general aviation pilots by the FAA's National Aeronautical Charting Office (NACO) through commercial chart vendors.

General aviation pilots will no longer be able to purchase FLIP products including all international terminal instrument procedures, enroute, and supplemental planning charts. In FY2004, the FAA sold more than 114,000 FLIP products worldwide. Of particular concern for the general aviation community, were the nearly 40,400 of the 114,000 FLIP products sold including enroute charts for the Caribbean and South America, the supplement of Caribbean airport information, and instrument approach charts for the Caribbean and South America. In addition, users have expressed significant concern with the loss of popular operational international navigation charts (ONC). The FAA reports over 39,600 ONCs were sold in FY2004. Currently there is no additional source for this

information aside from the data released through NGA. The military navigation charts are the only official government source for this critical safety of flight information. Withdrawing these from the public sale will force pilots flying outside the U.S. to buy charts from private vendors, usually at a much higher cost than the NGA charts.

**All international electronic navigation data will be lost** — Vendors will no longer be able to use this important database to produce their general aviation flight planning programs for international operations. If removed from public distribution, vendors would have to turn to more expensive alternatives for getting the information.

Currently, the DAFIF is an unclassified database of worldwide aeronautical data that is provided free of charge to the public. After many discussions with numerous vendors, AOPA has learned that DAFIF data is used extensively in electronic flight planning programs to develop the domestic and international electronic chart products used by general aviation pilots. The discontinuance of the DAFIF information widely used by Flight Planning Programs and Software vendors will have substantial impacts considering many aviation businesses use the data for their domestic and international flight planning products and will be forced to turn to more expensive alternatives. In many cases, companies will likely experience a total elimination of certain information, as alternative sources do not exist currently.

Based on discussions with the NACO, AOPA understands the FAA's desire to populate their current domestic navigation database with international data. The elimination of that international data available through DAFIF undermines the planned FAA expansion of their database products for civilian users. Since FAA's database does not incorporate international data, GPS manufacturers are forced to subscribe to higher cost non-federal databases.

### ***Economic Impacts:***

The proposal to discontinue public sales of the aeronautical products would eliminate over \$500,000 in annual revenue to the U.S. Treasury. Coupled with the maritime product sales, this would result in a net loss to the U.S. Treasury of over \$750,000 annually. While this loss to the U.S. Treasury may not be considered large, the overall loss of aviation businesses in an already suffering aviation economy is significant.

According to one vendor supplying FLIPS and aeronautical charts to civil aviation users, the elimination of the current data would create nearly a \$70,000 annual loss in income. Multiple other aeronautical information providers report the loss of the domestic DAFIF information will put their companies completely out of business.

## ***NGA Concerns and AOPA Proposed Alternatives***

According to the NGA Notice, the DOD contends that its critical navigation data, currently available to the public on the Internet, is "vulnerable," and the military wants to eliminate "unfettered access to [navigation] data by organizations and individuals intent on causing harm." Commercialization of navigation data is another reason cited by DOD as a reason to withdraw NGA products from the public. Some countries have transferred responsibility for this safety of flight information to commercial or quasi-governmental agencies. And several foreign agencies are beginning to assert intellectual property rights to the aeronautical data within their territorial limits and are refusing to provide such aeronautical data to DOD so long as the NGA makes it available to outside interests, whom these agencies view as possible competitors in the international marketplace.

**Commercialization of Navigation Data:** DOD is also concerned with the commercialization of navigation data and provides it is another reason to withdraw NGA products from the public. Some countries have transferred responsibility for this safety of flight information to commercial or quasi-governmental agencies. Several foreign agencies are beginning to assert intellectual property rights to the aeronautical data within their territorial limits and are refusing to provide such aeronautical data to DOD as long as the NGA makes it available to outside interests, whom these agencies view as possible competitors in the international marketplace.

**AOPA's Proposed Alternative:** Recognizing that there are challenges the NGA faces related to countries that assert intellectual property rights, a unilateral decision to eliminate all NGA charts and data from public sales is an inappropriate and unnecessary response. The NGA should enter into negotiations and look at alternatives to deal with concerns of countries that have commercialized or transferred responsibility for this safety of flight information.

Considering only a handful of countries have expressed a concern with the public release of their data, the DOD has failed to consider viable alternatives to complete elimination of public sales. Elimination of public sales sets an unacceptable standard for the future of aeronautical data dissemination and bi-lateral agreements. AOPA strongly cautions the NGA in their approach to handling such few concerns and recommends that they need to reevaluate and develop a more common sense approach to dealing with individual countries concerns regarding data dissemination.

**Data Security:** While not its primary mission, NGA has offered its geospatial data to the FAA and the general public for use in civilian operations for decades. However, according to the Notice, the Department of Defense (DOD) now contends that its critical navigation data, currently available to the public on the Internet, is "vulnerable," and the military says it wants to eliminate "unfettered access to [navigation] data by organizations and individuals intent on causing harm."

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**AOPA's Proposed Alternative:** While NGA has valid data security concerns; the agency can take steps to secure its data without cutting off access to the pilot community, who have legitimate need for this important safety-of-flight navigational information. In today's cyber world, data security is a constant concern. However, many other government agencies have found ways to continue providing data and a service to the customer while maintaining the integrity of their data. When faced with a similar concern, the FAA rose to the challenge and provided a mechanism for customers to continue receiving data. Customers interested in receiving data established an agreement with the FAA and in turn were able to continue receiving data via a secure link provided by the FAA. AOPA contends that the integrity of the NGA data could be maintained while continuing to allow users to access the data via a secured link.

***In Summary:***

AOPA strongly urges the NGA to consider the domestic and international ramifications from this action and reverse its decision to withdraw aeronautical data and products from public distribution. Based on the impacts mentioned, it is vital the information currently available from the NGA continues to be made accessible. By working with the FAA to develop and implement alternatives for distribution and addressing the concerns for commercialization with individual Countries, AOPA contends that the NGA can continue to provide FLIP products to the public and the DAFIF to vendors without unduly impacting the aviation community. AOPA looks forward to collaboration with the NGA and DOD to ensure all concerns are fully addressed while minimizing the impact on the civilian aviation community.

Sincerely,



Andrew V. Cebula  
Sr. Vice President  
Government & Technical Affairs

cc: Col. Scott Adams  
Chief, Aeronautical Division