GOVERNMENT/INDUSTRY AERONAUTICAL CHARTING FORUM 06-01

April 19 – 20, 2006

Recommendation Document

Subject: ICAO Location Indicators on Visual and Enroute Charts

Background/Discussion: The ICAO location indicator issue has been discussed at the Aeronautical Charting Forum (ACF) for numerous years with minimal progress. With the advancements in onboard databases this issue has become critical for the aviation community at facilities outside the contiguous United States.

ICAO has published recommendations for establishment of four letter location indicators by geographical locations. These location indicators are published in ICAO Document 7910. Historical ACF minutes reflect the ACF consensus that ICAO location indicators established outside the contiguous United States should be charted.

Location Indicators are assigned by States and are supervised by ICAO. Both State (FAA) Identifiers and ICAO location indicators, where available, are currently published in the Supplement Alaska and the Chart Supplement Pacific. The ICAO location indicators should be added to the Visual and Enroute chart series and the Airport/Facility Directory, when available, at those charted facilities outside the contiguous United States. Those facilities within the contiguous United States have a universal "K" prefix added to the FAA identifiers for use as ICAO location indicators and are not charted.

There are approximately 60 facilities in Alaska, 2 in the Virgin Islands, 14 in Puerto Rico, 20 in Hawaii, 8 in the Mariana Islands that have ICAO location indicators published in the ICAO Document 7910.

Recommendations: Recommendation is made to add the ICAO location indicator to the airport data block resulting in the charting of both the State identifier and ICAO location indicator, where available, outside of the contiguous United States. In addition, the ICAO location indicators for Puerto Rico and the Virgin Islands should be added to the Airport/Facility Directory. There are approximately 90 additional airports with ICAO location indicators currently published in the NASR that are not published in the ICAO Document 7910. These location indicators will also be charted.

Comments: This recommendation affects IACC Specifications 1 IFR Enroute Low Altitude Charts- U.S. and Alaska, IACC 2 Sectional Aeronautical Tactical Pilotage VFR Terminal Area Charts, IACC 3 World Aeronautical Charts, and IACC 5 IFR Enroute High Altitude Charts- U.S. and Alaska.

FAA Control Number 06-01-183

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Date: April 1, 2006

This issue has been discussed as part of briefings and miscellaneous issue items as early as 1998. The most recent history of this issue is as follows:

MEETING 00-02: Issue 98-01-108 Airport Names, Identifiers, and Associated Cities The IACC agree to add city and identifiers to enroute charts. However, the ICAO 4 letter identification needs to be cleaned up by ATA. In addition, there are private airport problems. Mr. Terpstra suggested that all IFR airports be corrected first followed by all public VFR public airports and finally all VFR private airports. Mr. Terpstra suggested that a FAA plan be developed for cleaning up airport 4-letter identification. NACO reported that they would chart what NFDD publishes.

MEETING 01-01: Issue 98-01-108 Airport Names, Identifiers, and Associated Cities Mr. Eric Secretan, FAA NACO, reported that the IACC has approved charting on en-route charts but that that the IACC has not addressed this issue for visual charts. Mr. Secretan reported that associated city and ident would be charted on the en-route charts when the en-route charts are reformatted. Mr. Secretan also proposed using ICAO idents in Alaska when the airport has one, when it doesn't NACO will chart the non-ICAO ident. Jeppesen supported the NACO Alaska proposal. Mr. Dick Powell, FAA ATA-100, stated that ARTS III data blocks are limited to 3 characters and that Alaska has ARTS III systems. It was also stated that there are political issues when you change an airport's identifiers. The ACF consensus was that all IFR charts should have ICAO idents.

MEETING 01-02: ICAO Airport Idents Briefing. Mr. Dick Powell reported that 2 negative replies were received from the Cartographic Change Proposal. He stated that ARTS III support (ATP) and NATCA (naming convention) were issues yet to be resolved. It was suggested that ATA, ATP, Jeppesen, NACO, NATS, will have to meet with AT to address ICAO idents. Mr. Dick Powell stated that nothing would happen until the meeting is held.

MEETING 02-01: U.S. Compatibility with ICAO Idents Briefing. Mr. Patrick Millspaw, FAA ATP-100, presented this report. He said that the FAA is working on international harmonization of its identification. He stated that a four character record length is in the NAS automation system for airports. He stated that per ICAO when a non-ICAO ident is used ZZZZ must be filed. Mr. Millspaw stated that ICAO PANS-ATM Doc #4444 covers flight plan information. He said that there is a search and rescue impact where supplemental information is kept. He said that some data is kept by the FSS, the service provider, etc. He stated that the U.S. uses alphanumeric identification for airports, however he pointed out that ATP-100 has determined that they want to be ICAO compliant.

ICAO ID PACS PAEG PAHN PAKI PAKW PAOT PAPO

The following are examples of FAA and ICAO airport identifiers in Alaska.

AIRPORT	FAA ID
Cape Sarichef	26AK
Eagle	EAA
Haines	HNS
Kipnuk	IIK
Klawock	AKW
Kotzebue	OTZ
Point Hope	PHO

Skwentna	SKW	PASW
Whittier	IFM	PAWR

Mr. Millspaw stated that U.S. fix naming is pretty good but that we have a problem with route naming and airspace classification. Mr. Bill Hammett asked if it is important to keep departure order 7100 series--now an 8260 requirement for name compliance. He pointed out that Air Traffic enforcement of .46 for naming has been lacking. Mr. Gary Powell said that he would work with Mr. Millspaw to address procedure-naming compliance.

Mr. Millspaw reported that U.S. aircraft special prefix, equipment suffixes and aircraft type designator naming criteria is not consistent with ICAO. He stated that TCAS should be fixed soon. He stated that weight class still needs to be resolved as does the use of /E, /F, etc.

Mr. Millspaw reported that there is no activity in the FAA to address ICAO NOTAM compliance.

Mr. Terpstra stated that he was encouraged with the progress on 4 letter idents. He said he has seen efforts outside of the ACF. He stated that the ARINC 424 record requires 4 letter idents to support WAAS and LAAS. There was a question about the implementation plan. It was stated that idents must first be published in the ICAO identifier book. It was reported that currently avionics and databases are adding a 'K' in front of 3 letter idents in the contiguous U.S. Mr. Brad Alberts reported that some GPS equipment will build a waypoint if 'K's are added and not at the airport. He stated that this could affect pilots moving from airframe to airframe. Mr. Millspaw stated that technically the en-route system could handle everything but 5 letter intersections (i.e. 3 and 4 letter idents). Mr. Terpstra suggested that ATP review the work that EUROCONTROL has done on fix identification (i.e. 2 letter / 3 number). Mr. Dick Powell reported that changing fix names isn't as hard as changing airport idents, which sometimes get Congressional attention.

Mr. Secretan asked if a domestic flight plan could be filed in Alaska using ICAO idents, and if so, could idents be charted where they exist. The answer was maybe. Mr. Mike Riley, NIMA, stated that NIMA would like to see 4 letter ICAO idents on FAA charts where they exist. Mr. Riley also stated that NIMA is spending a lot of money because of the U.S.'s lack of compliance with ICAO airfield ident requirements. Mr. Brad Alberts suggested that the FAA mandate that ICAO idents be required for any new airport.

The ACF determined that a new working group should be created to address this issue. The new group will begin by compiling a list of all the issues. The following individuals/organizations have expressed an interest in participating on the new working group. **ACTION:** FAA/ATA-100

ACF ICAO Identifier Working Group

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Martin Walker	ATP-120	202 267-9330	Martin.r.walker@faa.gov
Jim Terpstra	Jeppesen		
Dick Powell	ATA-100	202 267-8790	Dick.powell@faa.gov

MEETING 02-02: ACF ICAO Identifier Working Group Briefing. Mr. Patrick Millspaw provided the ACF with this update. He stated that there is some confusion for international flight plans. He pointed out that the FY03 budget has provisions for aeronautical information and flight plan enhancements to harmonize with the international community. Mr. Millspaw stated that the ICAO approved idents for the lower 48 doesn't seem to be a problem but that he is still talking to AT folks in Alaska. He stated that a working group would be formed by ATP to address the issues within the FAA. Mr. Millspaw said that problems have been uncovered in the en-route automation system for domestic fix population. He said that as a result of research 1500 navaids and airports have been uncovered with the same location ID. He pointed out that ambiguities exist with areas abutting the U.S. such as the naviad at University Park, PA (UNV) and one in Cuba (UNV). He said that the FAA is developing a plan to fix these problems. Mr. Terpstra said that the air traffic computer could take the idents. Mr. Terpstra said we need a hierarchy for implementation and suggested the following order of precedence; international IFR airports, IFR airports, VFR airports. Mr. Brad Alberts said that the ident on the chart should be the same as the database ident. Mr. Dick Powell said that ATA can change all 3-letter idents to 4 letter idents easily but this needs to be coordinated. Mr. Powell stated that philosophically we all agree that we need to go to 4 letter idents. Mr. Terpstra stated that the FAA should put out a NOTAM when the change occurs. Mr. Terpstra, Mr. Millspaw, Mr. Secretan, and Mr. Powell agreed that where there is an ICAO ident established we should begin using them. Mr. Millspaw said that DUATS strips the "K" from the identifier before it is submitted to en-route automation and therefore DUATS must be revised. Mr. Terpstra pointed out that there is a proposal to include numbers in ICAO idents. Mr. Brad Rush said that we shouldn't forget heliports. Finally, Mr. Millspaw pointed out that there are still NATCA issues to be resolved. The ACF ICAO Idents working group will remain OPEN. Editors note: this group has yet to meet. Its membership is listed in the 02-01 minutes.

MEETING 03-01: ACF ICAO Identifier Working Group Briefing. Mr. Patrick Millspaw provided the ACF with this update. He reported that ATP would be withdrawing its non-concur and now the Air Traffic non-concur issues must be resolved. He stated that once the non-concurs were resolved existing airports with ICAO idents would be taken care of first, followed by adding a "K" to those with existing three letters. Mr. Millspaw stated that the airports with non-IACO four letter idents are the problem. It was pointed out that all U.S. four letter idents (i.e. MD32) are private. Mr. Millspaw also stated that ambiguity issues between airport and navaid idents would be addressed as well. It was pointed out that the ICAO 7910 specification states letters only. John Moore stated that we need to resolve this issue soon for the enroute high rescale scheduled for December 2003. Mr. Moore also stated that adding idents to controller charts could cause a chart clutter issue. **ACTION:** FAA/ATP-100.

MEETING 03-02: Meeting canceled.

MEETING 04-01: ACF ICAO Identifier Working Group Briefing. Mr. Dick Powell, ATA-100, provided the ACF with the following update. The ICAO Identifier requirement came to the ACF in 01-02 from Jeppesen out of the ATA Charting/Database Harmonization Group, to add ICAO identifier code K in front of three-letter airport identifier. NATCA and ATP non-concur to the Cartographic Change Proposal (CCP). Mr. Powell reported that on April 24, 2003 ATP dropped

its non-concur, supporting a phased-in approach to changing all airport identifiers to four characters to be in compliance with ICAO. Mr. Powell stated that work would continue with NATCA to resolve the non-concur. Mr. Powell disseminated the revised CCP, "Proposal to Phase-in International Identifiers" for review and encouraged all groups to review and comment. Mr. Powell informed the ACF Members that feedback is critical to each phase and may alter the final recommendations. The revised CCP is attached to these minutes. Mr. Powell stated that after reviewing the responses of the initial CCP no response was received from IATA, ATA, EAA, HAI, and NBAA. Mr. Powell encouraged these groups to respond, as this may be a major impact on them. He also stated that ALPA, AOPA, Jeppesen and GTE DUATS concurred. However several groups did voice concerns about how to handle Alaska and Hawaii. There was also some concern on how the NOTAM system would be impacted by the revised identifiers. **ACTION:** ACF Members, and Aeronautical Information Services.

MEETING 04-02: ACF ICAO Identifier Working Group Briefing. Mr. Dick Powell, Aeronautical Information Services, reported that the ICAO Identifier requirement came to the ACF in 01-02 from Jeppesen out of the ATA Charting/Database Harmonization Group, to add ICAO identifier code K in front of three-letter airport identifier. NATCA and ATP non-concur to the Cartographic Change Proposal (CCP). Mr. Powell reported that on April 24, 2003 ATP dropped its non-concur, supporting a phased-in approach to changing all airport identifiers to four characters to be in compliance with ICAO. Mr. Powell stated that work would continue with NATCA to resolve the non-concur. At the 04-01 ACF Mr. Powell disseminated the CCP, "Proposal to Phase-in International Identifiers" for review and comment. Mr. Powell briefed the ACF members on the CCP responses:

<u>Jeppesen</u> concurs supporting the proposal as an important aspect of internationalization of US airports with other countries that are in compliance with ICAO Doc 7910. Jeppesen expressed concern over airport identifiers in Kansas, Kentucky, Alaska and Pacific.

<u>ICAO</u> concurs noting that ICAO Doc 7910 Location Indicators directs that letters are to be used to compose airport indicators.

NGA concurs with a phased in approach.

AOPA concurs with no comment.

<u>NAVFIG</u> concurs expressing concern over airports in Alaska and Hawaii that have four letter identifiers already.

Mr. Mark Ingram, ALPA, concurred with the CCP at the ACF. Mr. Powell addressed the CCP comments stating that airport identifiers in Kansas and Kentucky have been changed and the National Flight Data Center is continuing to change identifiers in the NAS that begin with the Mr. Powell informed the group that location identifiers are referred to as location indicators when used internationally. ICAO has published recommendations for establishment of four letter location indicators for geographical locations. These location indicators are published in ICAO Document 7910. Location indicator assignments for Alaska are PA followed by a unique pair of letters. Additional Alaska prefixes, PF, PO and PP have been assigned and grandfathered. The location indicator assignment for Hawaii is PH followed by a unique pair of letters. The Pacific Islands are assigned PB, PJ, PL, PG, PM, PT, and PW for various islands, followed by a unique pair of letters. Puerto Rico is assigned TJ and TI for the Virgin Islands, followed by a unique pair of letters. Mr. Powell stated that the FAA has filed an exemption with ICAO to use numbers for ICAO Location Indicators. Mr. Gary Bobik, NOTAMs Programs Office, provided a brief update on the impact to the NOTAM system. Mr. Bobik stated that the current NOTAM system would not handle the ICAO location indicators. The civil system will reject the use of the ICAO identifier code K in front of the three-letter airport identifier. The military

NOTAM system will accept the ICAO identifier code K. Mr. Bobik informed the group that under the Air Traffic reorganization the NOTAM system is now under Ms. Linda Schuessler. He stated that there is no funding for new programs and funding will be required for NOTAM system updates. Mr. Mike Riley, NGA, inquired if the funding problem will prevent this issue from moving forward. Mr. Powell stated that a plan is in place and that we should proceed. Mr. Powell proposed that Aeronautical Information Services continue working with Jeppesen, NGA, and NACO to provide an implementation schedule for phased-in location indicators. Mr. Powell provided the ACF with a revised CCP that addressed the issues and comments identified in the original CCP. Mr. Riley stated that DoD has implemented the new location indicators. Mr. Dick Powell thanked everyone who responded to the CCP and asked the industry for patience. **ACTION**: ACF Members, Aeronautical Information Services, and NOTAMs Programs Office.

MEETING 05-01: ACF ICAO Identifier Working Group briefing was inadvertently omitted from the agenda and will be added to the 05-02 ACF agenda.

MEETING 05-02: ACF ICAO Identifier Working Group Briefing. Mr. Dick Powell, Aeronautical Information Services, was unable to attend the ACF. This issue has been tabled until the 06-01 ACF. **ACTION:** Aeronautical Information Services.

MEETING 06-01: Mr. Eric Secretan, NACG, submitted this issue and provided the following briefing. This issue stems from other ICAO Location Indicator briefings from as early as 1998. These historical ACF minutes reflect the ACF consensus that ICAO location indicators established outside the contiguous United States should be charted. Those facilities within the contiguous United States have a universal 'K' prefix added to the FAA identifiers for use as ICAO location indicators and the 'K' is not charted. With the advancements in onboard databases this issue has become critical to the aviation community at facilities outside the contiguous United States. Recommendation is made to add the ICAO location indicator to the airport data block on the Visual and Enroute charts. This will result in the charting of both the State (FAA) identifier and ICAO location indicator, where available, outside of the contiguous United States. In addition, the ICAO location indicators for Puerto Rico and the Virgin Islands should be added to the Airport/Facility Directory. Ms. Valerie Watson, Cartographic Standards, inquired about charting both identifiers on the TPPs. Mr. Secretan responded that depicting this information would be a major resource impact on the NACG Instrument Approach Procedures Sub-Team. The initial thought was for database support; the ICAO indicators are critical in the en route environment. ACF participants reported that ICAO indicators are universally used for meteorological reports. However, the NOTAM system still uses the three letter identifier. Mr. Secretan stated charting both the location identifier and the location indicator is a compromise. The Alaska Supplement and the Pacific Chart Supplement currently chart both. Recommendation from the ACF is to also provide both the ICAO location indicator and the FAA location identifier on the TPPs. To reduce the resource impacts on the NACG the information could be phased-in. Mr. Brad Rush, NFPO, recommend that Mr. Gary Bobik, ATO-R, be notified of the issue. Ms. Watson stated that the ICAO location indicators remain an issue for the Oasis systems. Mr. Secretan commented that in the future the hope is to only chart the ICAO location indicators. He also stated that there is a small wrinkle in this process. Adding the prefix 'K' to the location identifiers in the United States does not provide an official ICAO location indicator. Only airports of entry are assigned ICAO location indicators. Mr. Ted Thompson, Jeppesen, reported that about 15 years ago Jeppesen began charting both the identifier and ICAO location indicator. To alleviate the terminology problem in the United Stated Jeppesen called these indicators 'Navigation Database Identifiers'. The group discussed the problems associated with the alphanumeric identifiers. Ms. Watson reported that the ICAO field

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in NASR is suppressed. NFDC will clean up the ICAO location indicators currently published in NASR. **ACTION:** MPOC and Cartographic Standards.

MEETING 06-02: Ms. Valerie Watson, Cartographic Standards provided the following update. RD 624 was approved by the IACC on October 11, 2006. The RD established the requirement to depict the ICAO location indicator when available on all charts and publications outside of the contiguous United States. This requirement will result in the charting of both the FAA identifier and ICAO location indicator. In addition, the ICAO location indicators for Puerto Rico and the Virgin Islands will be added to the Airport/Facility Directory. Ms. Watson reported that the NASR database cleanup has been completed. Also, the 80+ 'grandfathered' indicators in Alaska have been submitted to ICAO. **CLOSED.**