GOVERNMENT/INDUSTRY AERONAUTICAL CHARTING FORUM 06-02

October 18 – 19, 2006

Recommendation Document

Subject: Obstructions on World Aeronautical Charts

Background/Discussion:
The World Aeronautical Charts (WAC) are a series of aeronautical charts covering land areas at a size and scale convenient for navigation by moderate-speed aircraft operating at high altitudes. These charts are used for flight planning and in-flight navigation by VFR pilots on extended cross country flight. Because of their smaller scale, these charts do not show as much detailed information as appears on the Sectional and Terminal Area Charts. Because some information is not shown, WACs are not recommended for exclusive use by pilots of low speed, low altitude aircraft.

Currently obstructions greater than 200 feet AGL in height (300 feet AGL or more in built up areas) are charted on the WAC if the location is critical and space permits. Charting these low level obstructions provides limited value to the pilot during cross country flight and adds to chart clutter.

With the advancements in onboard databases the aviation community is requesting that additional information be added to the chart to support these database systems. However, congestion on the World Aeronautical Chart will need to be decreased prior to adding new information.

Recommendations:
The recommendation is to modify the prerequisite for charting low level obstructions to 500’ AGL on the World Aeronautical Charts. The Sectionals and Terminal Area Charts will continue to chart obstacles 200 feet AGL and above.

Comments: This recommendation affects IACC 3 Specifications.

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Date: August 26, 2006

MEETING 06-02: Mr. Eric Secretan, NACG, submitted the issue and provided the following briefing. The World Aeronautical Charts (WAC) are a series of aeronautical charts covering land areas at a size and scale convenient for navigation by fast to moderate speed aircraft operating at higher altitudes. These charts are used for flight planning and in-flight navigation by VFR pilots on extended cross country flight. Because of their smaller scale, these charts do not show as much detailed information as appears on the Sectional and Terminal Area Charts. Because some information is not shown, WACs are not recommended for exclusive use by pilots of low speed, low altitude aircraft. Currently, obstructions greater than 200 feet AGL in height (300 feet AGL or more in built up areas) are charted on the WAC if the location is critical and space permits. Charting these low level obstructions provides limited value to the pilot during cross country flight and greatly adds to chart clutter. With the advancements in onboard databases the aviation community is requesting that additional information be added to the chart to support these database systems. However, congestion on the World Aeronautical Chart will need to be decreased prior to adding new information. The recommendation is to modify the prerequisite for charting low level obstructions to 500' AGL on the World Aeronautical Charts. The Sectionals and Terminal Area Charts will continue to chart obstacles 200 feet AGL and above. Copies of prototype charts were made available for review. Mr. Secretan commented that the WAC is almost unmanageable; no additional information can be added to the WAC. Removing these obstacles will allow for additional information to be added, for example VFR waypoints, GPS information to include RNAV routes. Mr. Larry Wiseman, AFFSA, commented that the military currently uses the WAC for long legs of military training routes. He will take the issue back to the Air Force for comment. Mr. Richard Boll, NBAA, recommended that the current AIM guidance be expanded to include such information as obstruction heights for both the Sectional chart and WAC. Lt. Col. Monique Yates, NGA/OMSF, requested that the chart users be polled. Mr. Secretan responded that NACG is briefing this as an introduction to the issue. ACF members are encouraged to take a copy of the prototype back to their respective organizations for comment. NACG is seeking endorsement from the ACF and IACC and would initially not seek public comment. However, NACG is requesting comment from AOPA and other interested ACF participants. The recommendation was made for NACG to contact HAI and NGATS JPDO. There will be no change to the FAA's Digital Obstacle File (DOF) database.
ACTION: AOPA, Air Force, and NACG.

MEETING 07-01: Mr. John Moore, NACO, provided the following recap of the issue. The World Aeronautical Charts (WAC), because of their smaller scale, do not show as much detailed information as appears on the Sectional and Terminal Area Chart series. Because some information is not shown, WACs are not recommended for use by pilots of low speed, low altitude aircraft. Currently, obstructions greater than 200 feet AGL in height (300 feet AGL or more in built up areas) are charted on the WAC if the location is critical and space permits. Charting these low level obstructions provides limited value to the pilot during cross country flight and greatly adds to chart clutter. With the advancements in onboard databases the aviation community is requesting that additional information be added to the WAC to support these database systems. However, congestion on the World Aeronautical Chart will need to be decreased prior to adding new information. The recommendation is to increase the criteria for charting low-level obstructions to 500' AGL on the World Aeronautical Charts. The Sectionals and Terminal Area Charts will continue to chart obstacles 201 feet AGL and above.
Copies of prototype charts were made available for review at the last ACF. Chart users were polled. AOPA had no objections. At NACO seminars, 1276 pilots were polled; 1270 were in favor, 6 were against.
George Sempeles, NFDC, mentioned Part 77 and from a legal aspect how all obstacles 200 feet and higher should be reported to the Administrator. Also ICAO Annex 4 recommends charting obstructions when they are 100 meter (300 ft) or more. Mr. Moore responded that the

primary intended purpose of a chart should be considered. WACs, Sectional and TACs have different primary intended purposes. Specifications are modified based on user requirements. Removing obstacles less than 500' from the WACs is a potential solution to chart clutter because NACO still produces Sectional charts that depict obstacles greater than 200'. Mr. Moore continued that international requirements are recommendations.
Mr. John Timmerman, ATO System Ops, suggested that following ICAO is becoming more of a cultural change. Changes to the NAS require a Formalized Safety Analysis. Mr. Moore responded that the Safety Management System (SMS) states that when it comes to charting, the IACC Specs will be followed. Mr. Eric Secretan, NACO, added that the IACC process is outside of the sole control of the FAA therefore it is outside of the SMS process.
The ACF consensus was that obstacles less than 500' on WAC charts is approved and passed on to the IACC.
ACTION: Mr. Eric Secretan will provide an update at the next forum.

MEETING 07-02: Mr. John Moore, NACO, provided the following recap of the issue. Currently, obstructions greater than 200 feet AGL (300 feet AGL or more in built up areas) are charted on the WAC if the location is critical and space permits. Charting of these low level obstructions provides limited value to the pilot and adds chart clutter.
WAC charts were intended for aircraft operating at higher altitudes at moderate speeds. They were not intended for low level use.
The recommendation is to modify the requirement for charting low level obstructions on WAC charts to 500 feet AGL. U.S. Sectional and Terminal Area Charts (TAC) would continue to chart obstacles greater than 200 feet AGL.
The ACF supports the position that obstructions below 500 feet AGL be omitted from WAC charts. The recommendation was forwarded to the IACC. Requirement Document 650 was drafted as per ACF recommendation and received concurrence from all members except ATO-R. ATO-R sought and received agreement to the proposed change from both FAA domestic and international General Council (GC). GC requires notice of this change in advance, including a "not for comment" entry in the Federal Register. GC will help with the Federal Register entry. RD 650 might be signed and possibly implemented by the next ACF.
ACTION: Ms. Valerie Watson will provide an update at the next forum.

MEETING 08-02: Ms. Valerie Watson, FAA/NACO, reported that RD650 has been signed. Coordination with Visual Charting will commence. A Chart Notice will be posted on the NACO website. Federal Register input through General Counsel.
CLOSED