

GOVERNMENT/INDUSTRY AERONAUTICAL CHARTING FORUM 03-01

April 30-May 1, 2003
Recommendation Document

Subject: Charting of IFR Transition Routes

Background/Discussion: In response to a customer request, the FAA began a program to develop IFR transition routes through TRACON airspace for RNAV equipped aircraft (/E/F/G suffixes). These routes were developed for transitioning the Charlotte approach airspace and published in 2001. Due to the requirement for rulemaking action in order to publish "RNAV" routes, the IFR transition routes were described via waypoints/fixes and published in the A/FD. Jacksonville approach has developed IFR transition routes which will be published in the near future, and more facilities will eventually develop RNAV routes to expedite RNAV-equipped aircraft through complex terminal airspace.

With the publication of the FAR allowing the publication of RNAV routes, the FAA needs to address charting of the routes on appropriate charts in addition to the A/FD.

Recommendation: ACF discuss alternatives for publishing IFR transition routes.

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MEETING 03-01: Ms. Pat Fair presented this issue for Mr. Gary Powell. She stated that the request is for the FAA to develop more IFR transition routes through TRACON airspace for RNAV (/E/F/G) equipped aircraft. The proposal is to discuss alternatives for publishing the routes in the A/FD. It was also stated that AOPA strongly supports this issue. Mr. Hal Becker and Mr. Ted Thompson stated that these routes need to be uniquely identified and that this is a storage issue in databases. Mr. Thompson stated that connectivity and naming issues for databases apply to this issue as well as to preferred routes. It was stated that were area charts don't exist that these routes would show up on the IFR enroute lows and that the route depiction would add clutter to both area charts and the lows. It was stated that Jacksonville would be put in the A/FD. It was also suggested that these routes be identified by airport (e.g. KCLT1, KCLT2). **ACTION:** ATA and ATP-104.

MEETING 03-02: Meeting canceled.

MEETING 04-01: In response to customer demand, the FAA has begun a program to develop IFR Transition Routes through TRACON airspace for RNAV (E/F/G) equipped aircraft. These

transition routes were described as a series of waypoint/fixes and published in the A/FD Special Notice section in graphic format. The transition route graphic for Charlotte, NC is currently published in the SE A/FD and Cincinnati, OH will be published in the 5 Aug 04 A/FD. Ms. Heidi Williams, AOPA, stated that placing the graphic in the A/FD is not working; pilots do not fly with the A/FD. She stated that the AOPA members want the transition routes charted. The purpose of the route is to get the general aviation pilot through the area and to keep him away from the air carriers. Currently, the general aviation pilots are not using the routes because they are not charted. Ms. Williams stated that there are approximately 33 Class B areas that need charted transition routes. Mr. Dick Powell, ATA-100 proposed adding them to the area charts and where area charts don't exist create one. Mr. Eric Secretan, AVN-503, stated that the area charts do not exist in many areas, and creating new ones would result in additional paper charts. He also stated that until there is a larger number of transition routes NACO would not consider creating a new chart or product; but NACO will continue to publish transition routes in the A/FD. Mr. Secretan suggested placing the transition route graphics on the AOPA and NACO websites to increase pilot awareness. It was stated that the routes could be designated as Q routes for the low enroute structure. Ms. Pat Fair, ATA-130, proposed making them ATS routes with ATS designators. Additional proposals discussed by the obstructions under 200 feet. ORS should be available after October 2004. ACF were charting these routes on SIDs and STARs or on the enroute low charts. Charting these routes on the enroute low charts caused several concerns for ACF members. Chart clutter continues to be an issue and if they were charted, the lengths of the routes are such that they may not be seen due to the scale of the enroute low chart. Mr. Paul Ewing, ATP stated that the distance covered by the routes could exceed the Class B airspace area. Mr. Ted Thompson, Jeppesen, stated that these routes need to be identified for database purposes. Mr. Brad Rush, AVN-101, stated that all the routes originate at intersections or fixes. He proposed identifying these routes by city name, e.g., Charlotte1, Charlotte2, etc., and coding them in the database by airport identifier KCLT1, KCLT2, similar to the way the preferred routes are coded. AFS-410 informed the forum that the Administrator wants these routes to be available by the year's end. **ACTION:** AOPA and ATP.

MEETING 04-02: Mr. Paul Ewing, ATP, provided the following update. The FAA is working towards the final development phase and charting of RNAV IFR Terminal Transition Routes (RITTR). These routes through Class B and Class C airspace are designed for RNAV (E/F/G) equipped aircraft. Currently the transition route graphic and the associated text for Charlotte, NC and Cincinnati, OH are published in the Preferred IFR Routes section of the A/FD. Mr. Ewing reported that since the last ACF it has been established that the routes are technically low altitude RNAV routes and must go through similar rule-making process. The routes will be charted on the enroute low charts in blue type and will be GNSS only. They will carry T airway idents and airway numbers will be assigned from T200 to T500. The minimum enroute altitude (MEA) will be established for each segment of the RITTR. The altitudes will be flight checked, an 8260.16 will be issued, and the MEAs will be published in the Part 95 amendment. Mr. Ewing stated that RITTRs have been established to allow aircraft flying in the low altitude enroute structure to transition through a single terminal airspace. Low altitude Q routes for transitioning two or more terminal areas will be established. Both route types require rulemaking. Air Traffic would be the primary office responsible for establishing the transition routes and the number of routes per terminal area should be limited. The Jacksonville terminal area has eight routes and Charlotte terminal area has four routes. Air Traffic will designate expect altitudes for each RITTR. The expect altitudes will be published on the title panel of the enroute low chart and designated for use by GNSS aircraft only. Mr. John Moore, NACO, has created prototypes depicting the Charlotte, Cincinnati, and Jacksonville transition routes and the expect altitude tables. The Jacksonville prototype (see attachment 3) and an expect altitude table (see attachment 4) is attached to these minutes. Mr. Ewing stated that Interim Policy Guidance would

be provided by AFS for NFPO, NACO, NFDC, and other concerned offices. Mr. Ewing provided the ACF members a copy of the Draft Interim Guidance for RNAV IFR Terminal Transition Route Publication. The policy guidance is attached to these minutes (see attachment 5). Mr. Ewing stated that the goal is to have Jacksonville and Charlotte published on the enroute low charts by 17 March 05. If we are unable to meet this ambitious goal the implementation date will be moved back until 12 May 05. Once the RITTRs are published on the enroute low charts the graphic and associated text will be deleted from the A/FD. Mr. Ewing thanked NACO for providing the prototypes and commended Mr. Moore on an exceptional job. Mr. Ewing opened the issue for ACF discussion. Mr. Ray Nussear, NACO, inquired if the T routes would be published in the Digital Aeronautical Chart Supplement (DACS). Mr. Nussear stated that the DACS would need to be modified to accept the T idents. Mr. Ewing responded that the transition routes would need to be published in the DACS. Mr. Mark Steinbicker, AFS-410 stated that the T routes are for GNSS aircraft only and cannot be flown DME/DME. Mr. Steinbicker asked should the G be published after the MEA. After extensive ACF discussion on this issue Mr. Ewing stated that further discussion would be required. Mr. John Ingram, NGA, stated that NGA might have an issue with coding the transition routes. Mr. Dick Powell, Aeronautical Information Services, stated that the T routes would be added to the NASR subscriber file as part of the RNAV routes. In addition, these routes will be added to the National Flight Database (NFD). Mr. Ewing stated that the AIM would be modified to provide RITTR guidance. Mr. Eric Secretan, NACO, stated that NACO would send out a Charting Notice to its users. In addition this information would be placed on the AOPA and NACO websites. Mr. Ted Thompson, Jeppesen, requested a copy of the charting notice going out to NACO users. Mr. Hal Becker, AOPA, provided a formal written request for charting the transition routes. The request is attached to these minutes (see attachment 6). Mr. Becker thanked everyone for pulling together to get the T routes charted. **ACTION:** IACC MPOCs and FAA/NACO AVN-503.

MEETING 05-01: Mr. Paul Ewing, ATP, provided a brief update on the status of the IFR Transition Routes (RITTR). Mr. Ewing stated that the goal is to have the RITTR at Charlotte, NC published on the enroute low charts by 1 September 05. The target date for publishing Jacksonville, FL and Cincinnati, OH is December 05. The Notice of proposed rulemaking (NPRM) for Charlotte and Jacksonville will be issued shortly. Currently the transition route graphic and the expect altitudes are published in the Preferred IFR Routes section of the A/FD. The expect altitudes will not be published on the title panel of the enroute low chart as originally planned. The pilot will request an altitude on his/her flight plan. ATC will approve the altitude or assign a different altitude. The routes will be charted on the enroute low charts in blue type and will be GNSS only. They will carry a T airway designator and airway numbers will be assigned from T200 to T500. The GNSS minimum enroute altitude (MEA) will be established for each segment of the RITTR. Mr. Ewing requested AOPA and any other user group interested in Transition Routes to provide input on the next transition route location. Mr. Tom Schneider, AFS-420, stated that the interim guidance for establishing RITTRs is on the AFS-420 website: <http://av-info.faa.gov/terps/Policy%20Memo%20Folder/RITTR%20Guidance.pdf>.

ACTION: IACC MPOCs, FAA/NACO AVN-503 and ATP.
