August 28, 2014

Ms. Margaret Gilligan
Associate Administrator for Aviation Safety
Federal Aviation Administration
800 Independence Avenue
Washington, DC 20591

Dear Peggy:

The Performance-based operations Aviation Rulemaking Committee (PARC) is pleased to submit the following recommendations which address two issues that were requested by FAA and Industry. These two items are 1. Design criteria for utilization of the 'Open SID' concept, and 2. A description of how using local winds in design criteria should be approached.

The PARC Navigation Working Group was assigned these tasks, which they completed in July 2014. The WG recommendations were approved by the PARC SG at the August 21, 2014 meeting, and I have attached each recommendation to this letter.

PARC has retained a history of meetings and backup substantiation of conclusions on the PARC website. The PARC appreciates your continued support of its activities and invites you to discuss any aspects of these recommendations at your earliest convenience. The PARC respectfully requests the FAA to provide the PARC with a formal response.

Sincerely,

Mark Bradley
Chairman, PARC

Cc: R. Dunham
M. Steinbicker
B. DeCleene
M. Cramer

The PARC believes that the "Open SID" concept is viable and should be allowed as a tool for procedure design. The PARC recommendation is that design criteria for the concept should be added to Order 8260.58 in its next revision (2015), and should include the following:

1. The basic coding should be a vector to altitude (VA) off the runway, followed by a direct-to-fix (DF) at which point a leg to a manual termination will be inserted. The subsequent points on the procedure (following the manual termination segment) begin with an initial fix (IF) followed by a series of track-to-fix (TF) legs to complete the SID.
2. The manual termination leg should be either an FM or a VM with the following restrictions:
    a. An FM beginning with a fly-by (F/B) fix preferred,
    b. A VM beginning with a fly-over (F/O) would be allowed by exception
    c. Each leg type has some drawbacks:
        i. The VM causes some difficulty for non-integrated systems that cannot support a heading leg as they do not have a heading reference. In one early GA system this can result in a missing leg that alters the flight path, which could lead to undesirable operation unless the pilot intervenes. However it is limited to older generation GPS equipment for GA aircraft (Garmin).
        ii. The FM is flyable for all systems, however, to make some systems use it requires an already approved database substitution. This method does not lead to any operational (piloting) difficulties.
3. The starting fix can be either F/O or F/B with following restrictions:
    a. If used, the VM must start with a F/O
    b. An FM that results in a turn must start with a F/B
    c. An FM with no turn (less than 10 deg track change) may start with a F/O.

Recommendations for the operational conditions under which the design would be best employed will be formulated prior to publication of the criteria for design.

August 21, 2014