APPENDIX L

FLTOPSP comments to IP AN-Conf/14-WP/26 Continued Safe Operations in the Presence of Anticipated RF Interference and IP AN-Conf/14-WP/103 – 5G C-Band Interference to Radio Altimeter Operations

In reaction to FLTOPSP/11-WP/14 and in particular IP AN-Conf/14-WP/103 – 5G C-Band Interference to Radio Altimeter Operations, the FLTOPSP would like to offer the following comments:

1. The Flight Operations Panel, including Flight Operations experts, endorses the importance of the use of the radio altimeter for flight operations (both by the pilot and automated systems) and the need to protect it from harmful interference so that it will function.

2. The radio altimeter and supported systems need to fully function throughout the volume of airspace where they are used for any safety or flight critical purpose. An easy way to cover this is to protect those systems throughout the entire service volume (everywhere an altitude output is required).

3. Intended functions of the radio altimeter and supported systems include, but are not limited to:
    a. pilot use during windshear recovery manoeuvres;
    b. (H)TAWS;
    c. automation functionality (including the increased interdependency of systems in advanced modern aircraft);
    d. conducting specific procedures, especially for helicopters; and
    e. tailstrike protection

4. Pilots need to have high confidence in the radio altimeter outputs.

5. Pilots need continuity of the radio altimeter outputs.

6. It is not enough to protect the radio altimeter only for “nominal” aircraft trajectories (such as on centerline, on glidepath, on a stabilized approach). It must be protected where it is intended to function, wherever it can conceivably be used (for example, at and above the obstacle clearance surface, on a low missed approach engine-out scenario or in a near-collision scenario). If the aircraft is not on a nominal path, the pilot should also not have to consider that the radio altimeter may malfunction or provide misleading information.

7. It is critical that helicopters be considered by ITU since they generally use other areas besides runways.