

QUESTION 7: PURPOSE OF EXPERIMENT

Honeywell International Inc. (“Honeywell”) seeks a conventional experimental radio license pursuant to Section 5.54(a)(1) of the Commission’s rules. The requested license will permit Honeywell to use radar equipment as it further researches and experiments with advanced technologies that involve object detection. For example, Honeywell has developed advanced visual docking guidance systems (“AVDGS”). Such systems guide airplane pilots automatically and precisely to the correct docking location for their planes. AVDGS technology provides enhanced situational awareness in all weather conditions, and allows for recording and analysis of docking sequences. AVDGS significantly improves the efficiency of airport logistics and operations. More importantly, AVDGS greatly enhances the safety of airline passengers and crew and airport personnel by allowing for safer and more reliable navigation and docking.

Honeywell is working with representatives at the Duluth International Airport regarding its testing and experiments with AVDGS. The requested license will permit Honeywell to install two radars transmitting in the 76-77 GHz band at the Duluth International Airport. These radar devices will collect data involving the positioning, navigation and movement of airplanes and service vehicles at the Duluth airport. The Commission has previously determined that fixed radar systems at airports improve the safety of the general public and airport personnel without increasing the potential for interference to licensed users.¹

In addition to the Duluth airport location, the requested license would permit Honeywell to use two radars each at three sites controlled by Honeywell. These locations are necessary to provide Honeywell more flexibility to conduct experiments with detection technologies and additional applications thereof, as such experiments will not be constricted by the necessity to coordinate with airport operations.

The objective of these experiments is to obtain necessary data for the further development of efficient and accurate visual docking guidance systems and other advanced object-detection technologies. As such, the requested license will contribute directly to the development of useful radio technology.

Honeywell will own the devices at all times. It will procure the radar components from commercial manufacturers and insert them in its data collection systems. Honeywell will maintain responsibility for the devices during and at the conclusion of the experiment.

For the reasons set forth above, Honeywell hereby respectfully requests the expeditious grant of the attached application.

¹ See Amendment of Sections 15.35 and 15.253 of the Commission’s Rules Regarding Operation of Radar Systems in the 76-77 GHz Band, Report and Order, ET Dockets No. 11-90 and 10-28, 27 FCC Rcd 7880, 7883, para. 8 (2012).