Exhibit K – Radiation Exposure Information

This section affirms compliance with respect to controlled and uncontrolled exposure limits for MPE/SAR.

Requirements:

The rules concerning RF radiation exposure are covered in 47 CFR §1.1306, §1.1307, §1.1310, §2.1091 and §2.1093.

The RTA-41XX is licensed under 47 CFR Part 87 and therefore falls under 47 CFR §1.1306 which states:

> "(a) Except as provided in § 1.1307 (c) and (d), Commission actions not covered by §1.1307 (a) and (b) are deemed individually and cumulatively to have no significant effect on the quality of the human environment and are categorically excluded from environmental processing."

An Environmental Assessment (EA) is not required for the RTA-41XX, however a short Radiation Hazard Assessment is provided below.

Radiation Hazard Assessment:

The RTA-41XX may be evaluated against 47 CFR §1.1310 Table 1 which defines the Maximum Permissible Exposure (MPE) power density limits for the frequency range from 1500 to 100,000 MHz as follows:

(A) Occupational/Controlled Exposures	5 mW/cm^2 over 6 min
(B) General Population/Uncontrolled Exposure	1 mW/cm^2 over 30 min

The RTA-41XX radar system antenna is mounted in the nose of the aircraft. This location is highly restricted to only airport maintenance personnel and is off limits to the general population. In addition, airline maintenance and ramp operating procedures do not allow the radar system to be powered up in the airport gate area where maintenance personnel have access to the aircraft. These limited access restrictions place the RTA-41XX under the definition of Occupational/Controlled Exposures which requires a MPE power density limit of 5 mW/cm^2 averaged over a 6 minute time period. The minimum safe operating distance required to meet this limit is calculated below.

$$R = \sqrt{\frac{P_t \times DF \times 10^{\frac{G_t}{10}}}{4 \times \pi \times P_D}} = 1.568m = 5.144\,ft$$

Where:	Peak Transmit Power	P_t = 80 W
	Duty Factor	DF = 1.733%
	Antenna Gain	G_t = 30.5 dB (Worst Case RTA-4118 18" Antenna)
	Power Density Limit	P_D = 5 mW/cm^2

Compliance Statement:

The RTA-41XX does not exceed the Minimum Permissible Exposure (MPE) limits of 5 mW/cm^2 contained in FCC Section 1.1310 Table 1 when the minimum safe operating distance is observed.