

Federal Communications Commission

Application for Certification

Collins Type RTA-8XX

Weather Radar Systems

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Foreword

The following information is being submitted in compliance with Part 2 and Part 87 of Title 47, Code of Federal Regulations – Telecommunications, for certification of Rockwell Collins type RTA-8XX family of combined receiver/transmitter and antenna weather radars. This equipment is part of the Collins TWR-85X Turbulence Weather Radar System and WXR-840 Weather Radar System and is intended for use in airborne service under Part 87 of Title 47 Code of Federal Regulation – Telecommunications.

The RTA-8XX weather radar family consists of the following:

- RTA-800 – 12 inch antenna and R/T assembly
- RTA-852L – 12 inch antenna and R/T assembly
- RTA-8X2 – 12 inch antenna and R/T assembly
- RTA-8X4 – 14 inch antenna and R/T assembly
- RTA-8X8 – 18 inch antenna and R/T assembly

The five assemblies are identical except for the antenna diameter and the RTA-8X4 does not provide turbulence detection. A pedestal spacer is added to prevent the 18-inch antenna from hitting the base mounting.

The RTA-8XX weather radars are intended for quantity production by the Rockwell Collins Business and Regional Systems Division, Rockwell Collins, the sole manufacturer.

List of Exhibits

Application for Certification of Collins Type RTA-8XX Weather Radar combined antenna and receiver/transmitter assemblies. The list of exhibits follows with the equivalent FCC paragraph referenced between parentheses (Para xxx).

Tests were performed on RTA-8XX serial number XX except where noted and the results are applicable to the entire RTA-8XX family. The RF assemblies are all identical, the only difference being the antenna size.

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