

**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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