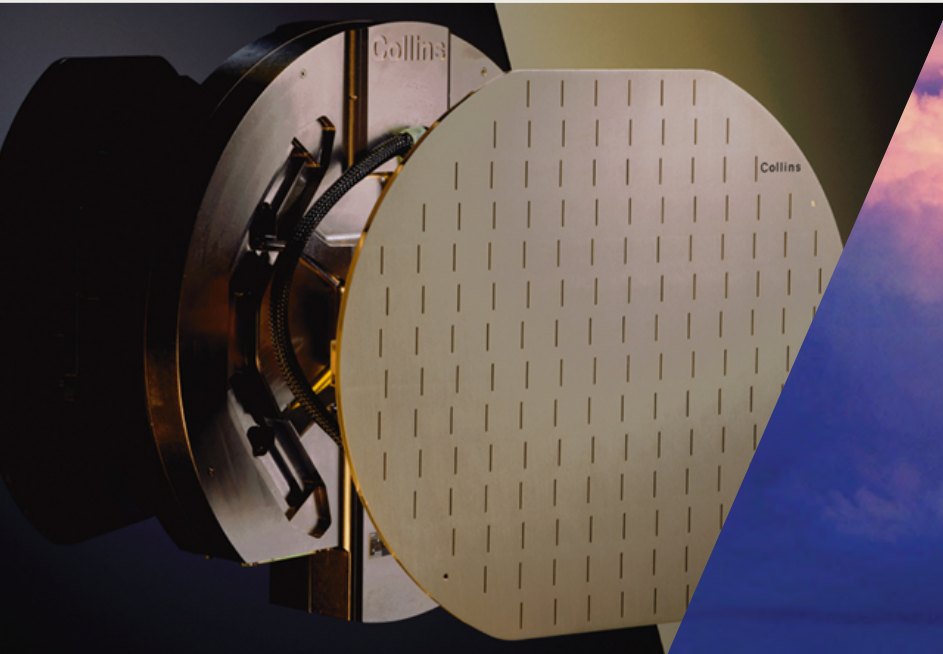


# Turbulence Weather Radar Upgrade

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*Turbulence is the leading cause of in-flight injuries. That's why Rockwell Collins is offering aircraft operators with non-turbulence weather radars a low cost solution to upgrade to TWR-850 with all its benefits*

The Rockwell Collins TWR-850 Turbulence-detection Weather Radar combines advanced technology with solid-state reliability to provide business and regional airline operators accurate and reliable weather information.

The Rockwell Collins TWR-850 is a compact, highly-efficient, lightweight radar system that provides significant improvements over conventional, magnetron-based systems in weather and turbulence detection, reliability, size, power and safety. A 30-watt transmitter, in conjunction with high sensitivity receiver and digital signal processing, is used in place of the kilowatt-class transmitters used in magnetron-based systems, increasing reliability and more than tripling the life of the radar without sacrificing performance.

In addition, path attenuation compensation alerts (PAC alerts) indicate areas of unknown rainfall rates due to normal signal attenuation caused by intervening areas of extreme precipitation.

The advanced, solid-state design eliminates the need for a magnetron and waveguide. The result is a one-piece receiver-transmitter-antenna design featuring reduced size, weight and power requirements, ensuring improved reliability and lower cost of ownership.

Rockwell Collins is proud to offer additional value to your purchase through a limited time offer of **CASP** (Corporate Aircraft Service Program) discounts for both new and existing enrollments. CASP is a premier maintenance and cost management program, which assures maximum aircraft dispatchability, minimum downtime, and reduced life cycle costs.

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Rockwell Collins has created an AML STC to upgrade existing WXR-800 and WXR-840 weather radars to TWR-850 turbulent weather detection and replace existing older WXR-840 and TWR-850 radars with current production -004 TWR-850 radars. This STC does not address replacement of pre RTA-8XX radars or any non Rockwell Collins radars. The addition of precipitation based turbulent weather radar detection provides safer smoother rides for passengers and crew. The attached table highlights the added features when upgrading your existing Rockwell Collins weather radar to turbulence weather radar:

Features	800	840	850
Wx	X	X	X
Map	X	X	X
GCS	X	X	X
Sector Scan		X	X
Target Alert		X	X
Auto Tilt		X	X
Hold		X	X
In-Flight Stab Adj		X	X
Wx Turb			X
Turb Only			X

Turbulence only mode provides the pilot with the unique opportunity to quickly study precipitation based turbulence by removing all additional weather radar targets from the display. This feature provides more information on the hazards leading to better decision making and safer more efficient routes.

#### KEY BENEFITS OF THE ROCKWELL COLLINS TWR-850

- Advanced Doppler-based weather and turbulence detection
- PAC alert warns of possible precipitation that may be attenuated due to intervening precipitation (storm behind a storm)
- Smoother, safer flight
- Improved reliability
- Reduced cost of ownership
- Sector scan provides rapid picture updates by reducing the scan angle to  $\pm 30$  degrees
- Certified to FAA TSO-C63C
- Upgrade using no charge AML STC #SA01472 WI-D for Part 23 aircraft or AML STC #ST01474 WI-D for Part 25 aircraft

#### TRADE-IN CREDIT

A trade-in credit will be issued against the purchase of a RTA-85X upon Rockwell Collins receipt of any weather radar system. Trade-ins are limited to one credit for each RTA-85X purchased. A credit will be issued to the dealer after the existing equipment is received at the Rockwell Collins Wichita Service

#### Turbulence Weather Radar Upgrade.

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Center, 2051 Airport Road, Wichita, Kansas 67209, phone number 316-677-4808. Dealer acceptance of special pricing in this bulletin obligates the dealer to pass the applicable equipment trade-in amount to the aircraft end operator.

#### CASP (CORPORATE AIRCRAFT SERVICE PROGRAM) SPECIAL INCENTIVES

Rockwell Collins is offering a CASP discount program when you take advantage of this Special Pricing Bulletin offer for remaining Rockwell Collins equipment in your aircraft.

For aircraft not currently enrolled in CASP, enroll within 30 days of placing an order for this upgrade and receive a 10% discount on current CASP prices.

Aircraft enrolled in CASP at the time of order placement will receive a 5% discount on their CASP renewal (in addition to the standard 10% renewal discount).

Key benefits of CASP include:

- > Exchange, rental and repair
- > Reliability upgrades
- > Removal and refit labor reimbursement
- > RVSM annual certification
- > FMC/MDC battery replacement
- > No charge for unused exchange returns
- > Up to five no fault founds without penalty
- > Global priority parts support

For CASP details and existing discounts that may be applicable to your aircraft, contact a CASP representative at 1.319.295.4361 or [caspp@rockwellcollins.com](mailto:caspp@rockwellcollins.com). You may also visit [CASP on Rockwell Collins.com](http://CASP.on.RockwellCollins.com). Discounts listed in this bulletin may be combined with all other standard CASP discounts.

#### TERMS AND CONDITIONS

Unless otherwise noted, the programs listed are valid for orders placed between January 1, 2015 and December 31, 2015, with delivery requested by April 1, 2016. Warranty period for the equipment within this bulletin is one year on upgraded parts and labor and/or Service Bulletin modifications, one year on exchange units and two years on factory new replacement units. Standard warranty does not apply to software.

## UPGRADES FOR RTA-800 WEATHER RADARS<sup>2,3</sup>

Aircraft	Existing RTA-800	Upgraded to RTA-85X	RTA SB	Upgraded Control Panel Required	Control Panel SB
CJ1/CJ2/CJ1+/CJ2+/CJ3/KA90	822-1050-004	622-8439-004	SB <sup>1</sup>	Yes	SB <sup>1</sup>
P180, Premier 1	822-1050-004	622-8440-004	SB <sup>1</sup>	Yes	SB <sup>1</sup>

## UPGRADES FOR RTA-84X, -003 AND -004 WEATHER RADARS<sup>2,3</sup>

The upgrade applies to all existing part numbers for the following aircraft.

Existing RTA-84X	Upgraded to RTA-85X	RTA Service bulletin	Upgraded Control Panel Required	Control Panel Service Bulletin
<b>CJ1/CJ2/CJ1+/CJ2+/CJ3</b>				
622-9301-004	622-8439-004	SB F	No	N/A
<b>Premier 1</b>				
622-9302-004	622-8440-004	SB F	No	N/A
<b>LJ60/BJ400A</b>				
622-9302-003	622-8440-003	SB F	No	N/A
622-9302-004	622-8440-004	SB F	No	N/A
<b>Astra SPX/G100, Saab 2000, CRJ 100/200/700/900</b>				
622-9302-003	622-8440-003	SB F	Yes	SB 6
622-9302-004	622-8440-004	SB F	Yes	SB 6
<b>F10/100/20/200/50, H800A/B/XP, KA90/200/300/350/B1900C/D, P180, Saab 340, Lear 55</b>				
622-9301-003	622-8439-003	SB F	Yes	SB 6
622-9302-003	622-8440-003	SB F	Yes	SB 6
622-9303-003	622-8441-003	SB F	Yes	SB 6
622-9301-004	622-8439-004	SB F	Yes	SB 6
622-9302-004	622-8440-004	SB F	Yes	SB 6
622-9303-004	622-8441-004	SB F	Yes	SB 6

## REPLACEMENT FOR RTA-84X AND 85X, -001/-002/-003/-011 WEATHER RADARS<sup>2,6</sup>

Operators with older Rockwell Collins RTA-84X/85X, -001/002/-003/-011 weather radars may upgrade to the latest -004 hardware due to potential parts obsolescence issues. The latest -004 hardware has improved reliability and support capabilities.

The upgrade applies to all existing part numbers for the following aircraft— LJ60, Astra SPX, CRJ 100/200/700/900, F10/100/20/200/50, H800A/B/XP, /BJ400A, KA90/200/300/350/B1900C/D, P180 and Saab 340/2000, Lear 55.

Existing RTA-84X/85X	Replacement RTA-85X	Upgraded Control Panel Required	Control Panel Service Bulletin
622-9301-0XX <sup>6</sup>	622-8439-004	Yes	SB 6
622-9302-0XX <sup>6</sup>	622-8440-004	Yes	SB 6
622-9303-0XX <sup>6</sup>	622-8441-004	Yes	SB 6
622-8439-0XX	622-8439-004	No	N/A
622-8440-0XX	622-8440-004	No	N/A
622-8441-0XX	622-8441-004	No	N/A

## REPLACEMENT ON ANY EXISTING WEATHER RADARS<sup>4,5,6</sup>

Existing Weather Radars	Replacement RTA-85X
Any Radar <sup>6</sup>	622-8439-004
Any Radar <sup>6</sup>	622-8440-004
Any Radar <sup>6</sup>	622-8441-004

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### NOTES

1. Contact your local Rockwell Collins Authorized Dealer for Service Bulletin upgrade information.
2. Rockwell Collins AML STC #SA01472WI-D (Part 23) and AML STC #ST01474WI-D (Part 25) are available at no charge.
3. Weather radar upgrades are available for delivered aircraft only. Aircraft model and serial number are required when placing your order.
4. Certification, displays and control of the RTA-85X weather radar is the responsibility of the installation facility.
5. Rockwell Collins AML STC's do not apply to replacement of pre RTA-8XX radars or any non Rockwell Collins radars.
6. RTA-84X weather radars, part numbers 622-9301/9302/9303-0XX may be replaced with 622-9301/9302/9303-004 at the same price as the RTA-85X weather radars that are shown on the chart on page 3.

### How can we help?

Please call Rockwell Collins Customer Support at 319.295.5000.

### Building trust every day.

Rockwell Collins delivers smart communication and aviation electronic solutions to customers worldwide. Backed by a global network of service and support, we stand committed to putting technology and practical innovation to work for you whenever and wherever you need us. In this way, working together, we build trust. Every day.

### For more information contact:

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