

## TCAS II Change 7.1 Reference – Rockwell Collins



Rockwell Collins offers some of the best support for dealers and operators to properly upgrade aircraft with TTR-920 and TTR-921 processors that are not up to the Change 7.1 software level. While Rockwell Collins does provide significant guidance and information for the 7.1 upgrade, it should be noted that the upgrade is not a

quick, plug-and-play box swap. In some cases, existing processors are changed to different models requiring additional installation changes, engineering, and check out procedures.

The following chart is a guideline for upgrade paths between models and various part numbers for the TTR-920/921 utilizing the same **6MCU** mounting tray for **Part 25** aircraft:

TTR-920 (6.04a)	TTR-920 (7.0)	TTR-921* (7.0) (AC/DC)	TTR-921* (7.1) (AC/DC)	TTR-2100 (7.1) (AC)
622-8971-320 (AC)	622-8971-322 (AC)	822-1293-320 822-1293-321 822-1293-322	822-1293-332	Not Available
622-8971-020 (AC)	622-8971-022 (AC)	822-1293-001 822-1293-002 822-1293-003	822-1293-033	822-2911-001
622-8971-120 (DC)	622-8971-122 (DC)	822-1293-001 822-1293-002 822-1293-003	822-1293-033	Not Available
622-8971-420 (DC)	622-8971-422 (DC)	822-1293-001 822-1293-002	822-1293-033	Not Available

The following chart is a guideline for upgrade paths between models and various part numbers for the TTR-920/921 upgrading to the TTR-4000 which uses a **4MCU** mounting tray for **Part 25** aircraft:

TTR-920 (6.04a)	TTR-920 (7.0)	TTR-921* (7.0) (AC/DC)	TTR-4000 (7.0) (AC/DC)	TTR-4000 (7.1) (AC/DC)
22-8971-320 (AC)	622-8971-322 (AC)	822-1293-320 822-1293-321 822-1293-322	Not Available	Not Available
622-8971-020 (AC)	622-8971-022 (AC)	822-1293-001 822-1293-002 822-1293-003	822-1294-001 822-1294-002	822-1294-032
622-8971-120 (DC)	622-8971-122 (DC)	822-1293-001 822-1293-002 822-1293-003	822-1294-001 822-1294-002	822-1294-032
622-8971-420 (DC)	622-8971-422 (DC)	822-1293-001 822-1293-002	822-1294-001 822-1294-002	822-1294-032

In the above scenario, the larger 6MCU tray is removed and replaced with the 4MCU tray therefore some additional installation is required other than simply changing processors. Since each aircraft type has different mounting situations, such an installation would need to be structurally approved by the appropriate authority. The AML STC specifically indicates that the mechanical installation and tray changes are not part of the STC and are ultimately the responsibility of the installer.

Similar scenarios exist for upgrading **Part 23** aircraft with Collins TCAS to Change 7.1

TTR-920 (6.04a)		TTR-920 (7.0)		TTR-921* (7.0)		TTR-4000 (7.0)			
622-8971-120		622-8971-122		822-1293-001 822-1293-002 822-1293-003		822-1294-001 822-1264-002			
TTR-920 (7.0)		TTR-921 (7.0)		TTR-4000 (7.0)		TTR-921* (7.1)		TTR-4000 (7.1)	
622-8971-122		822-1293-001 822-1293-002 822-1293-003		822-1294-001 822-1294-002		822-1293-033		822-1294-032	

\*TTR-921 is no longer available through Rockwell Collins.

Collins offers trade-in credit for TTR-920 and TTR-921 processors against the purchase of a New TTR-2100 or 4100 processor. However, as indicated by the charts above, the installation of the new TTR-2100/4100 is mostly not covered by the AML STCs available from Collins except for the AC installation of a TTR-2100. According to the bulletin, the TTR-2100 and TTR-4100 is being developed and approved on a platform by platform basis.

#### Other Important Notes:

- There are certain limitations when installing the TTR-2100 in place of an existing legacy unit as there certain modes and functions that the TTR-2100 does not support.
- The STC installation instructions require that power connections be checked prior to installing the Change 7.1 processor
- A post-install check of the system according to the original TCAS STC must be performed after the Change 7.1 upgrade.

If you are ready to proceed with the Change 7.1 for your aircraft in the Central Florida region, then please contact Southeast Aerospace for a detailed installation\* quotation at [pmo@seaerospace.com](mailto:pmo@seaerospace.com).

\*Southeast Aerospace does not sell these units over the counter; the modification needs to be performed by SEA, a Rockwell Collins authorized installation facility.