ATC TRANSPONDER AND MODE S INSPECTION
14 CFR PART 43, APPENDIX F

DATE:_____(1)_____ W/O #_____(2)_____ TAIL #____(3)_____ S/N _____(4)_____

Inspection(s) in Accordance With 14 CFR Part 43, Appendix F

Transponder #1	**Transponder #2**
Mfg. _____(5)_____	Mfg. _____(12)_____
Model _____(6)_____	Model _____(13)_____
P/N _____(7)_____S/N_____(8)_____	P/N _____(14)_____S/N_____(15)_____
(9)	(16)
Radio Reply Frequency 1087 to 1093 MHZ ☐	Radio Reply Frequency 1087 to 1093 MHZ ☐
Mode S 1089 to 1091 ☐	Mode S 1089 to 1091 ☐
Peak Output Power > 125 and < 500 Watts ☐	Peak Output Power > and < 500 Watts ☐
Mode S TX Power > 125 and < 500 Watts ☐	Mode S TX Power > 125 and < 500 Watts ☐
SLS 0 db ☐ 1% < Reply Rate	SLS 0 db ☐ 1% < Reply Rate
Reply Rate (-9db) ☐ 90% > Reply	Reply Rate (-9db) ☐ 90% > Reply
Receiver Sensitivity - 66 to -77 dbm Mode 3/A ☐	Receiver Sensitivity - 66 to -77 dbm Mode 3/A ☐
Receiver Sensitivity - 66 to -77 dbm Mode C ☐	Receiver Sensitivity - 66 to -77 dbm Mode C ☐
Difference ≤ 1 db ☐	Difference ≤ 1 dbm ☐
Receiver Sensitivity Mode S - 68 TO -77 dbm 90% Reply ☐	Receiver Sensitivity Mode S - 68 TO -77 dbm 90% Reply ☐
Mode S Diversity Transmission Channel Isolation [ ] > 20db (May require Antenna Isolation)	Mode S Diversity Transmission Channel Isolation [ ] > 20db (May require Antenna Isolation)
Mode S Address _____ [ ] Correct Reply	Mode S Address _____ [ ] Correct Reply
Mode S Formats UF=0 [ ] UF=16 [ ] UF=21 [ ] UF=4 [ ] UF=20 [ ] UF=24 [ ] UF=5 [ ] UF=11 [ ] DF=11[ ]	Mode S Formats UF= 0 [ ] UF=16 [ ] UF= 21 [ ] UF= 4 [ ] UF=20 [ ] UF= 24 [ ] UF= 5 [ ] UF=11 [ ] DF=11 [ ]
Mode S All Call PASS ☐ FAIL ☐	Mode S All Call PASS ☐ FAIL ☐
(10) Antennas Secure & In Good Condition ☐	(17) Antennas Secure & In Good Condition ☐
(11) *SYSTEM PASSES ☐	(18) *SYSTEM PASSES ☐

Note #1: Peak Output Power Radiated Class 1A Min 125 Watts, Class 1B Min 70 Watts
Note #2: Receiver Sensitivity Includes Additional –3dbm Allowed for Radiated Signals

THE ABOVE INSPECTION(S) PERFORMED WITH THE TRANSPONDER(S) INSTALLED IN THE AIRCRAFT.

_____(19)_____
TESTED BY

***NOTE: CHECK IN BOX INDICATES PASS, BLANK BOX TEST N/A**

Tester – ID #__(20)_____

INSTRUCTIONS FOR FORM USE; ATC TRANSPONDER AND MODE S INSPECTION 14 CFR 43 APPENDIX F

1. Enter the date the work is performed
2. Enter the Work Order on which the work is being performed
3. Enter the aircraft registration number
4. Enter the aircraft Serial Number
5. Transponder #1 enter the name of the Manufacturer of the transponder
6. Transponder #1 enter the Model of the transponder
7. Transponder #1 enter the Part Number of the transponder
8. Transponder #1 enter the Serial Number of the transponder
9. Transponder #1; place an X in the boxes for each parameter for each corresponding test
10. Transponder #1; visually inspect the antenna in accordance with manufacturer's recommendations, place an X in the box to denote satisfactory results
11. Transponder #1; place an X in the System Pass box if all tests were satisfactory
12. Transponder #2 enter the name of the Manufacturer of the transponder
13. Transponder #2 enter the Model of the transponder
14. Transponder #2 enter the Part Number of the transponder
15. Transponder #2 enter the Serial Number of the transponder
16. Transponder #2; place an X in the boxes for each parameter for each corresponding test
17. Transponder #2; visually inspect the antenna in accordance with manufacturer's recommendations, place an X in the box to denote satisfactory results
18. Enter the name of the person performing the inspections and tests
19. Enter the test and inspection equipment Identification Number

NOTE: Not all fields always require text entry. Contact your supervisor if there are questions. In cases where data is not required, DO NOT leave blank; enter N/A.