

**AIRCRAFT  
MAINTENANCE RECORDS**

**N878JM**

**AIRFRAME  
LOG BOOK**



# AIRCRAFT MAINTENANCE RECORDS

Owner **WILLIAM F. MARRISON**

Aircraft Registration **N878JM**

Manufacturer **CESSNA**

Model **177RG**

Serial No. **177RG0450**

Position \_\_\_\_\_



[www.beaconregistration.noaa.gov](http://www.beaconregistration.noaa.gov)

Exp. : 03/08/2023

**2DC89 EB758 FFBFF**

If activated, call the AFRCC at

**1-800-851-3051**

12/13/2021  
Tach: 3365.7

N878JM  
Cessna 177RG  
S/N: 177RG0450

Horizon Avionics, Inc.

2445 E. General Aviation Drive, Suite C, Alcoa, TN 37701. Tel: (865) 980-7858 Fax: (865) 980-7701

AIRFRAME LOG ENTRY

CW Annual Inspection IAW FAR 43 Appendix D & reference to Horizon inspection guide. Repacked wheel bearings. CW AD research through 2021. CW AD 2011-10-09 "seat rails" IAW Para (g) 1-10. within limits. Lubed and washed aircraft. Battery cap check good. removed and replaced L/H fuel tank sump drain, sealed L/H tank top access panel ops check leak check good. Removed and replaced trim and stab pulley under the backseat, tension and travel check good. Removed and replaced NLG downlock actuator, MLG and NLG actuator hoses, ops check leak check good. Removed and replaced vert stab and rudder top fairing, beacon and nav light ops check good. Adjusted idle rpm and mixture setting. Ground run and Ops check good.

MAINTENANCE RELEASE

In reference to the work listed above, this airframe was determined to be in an airworthy condition and is approved for return to service. Pertinent details are on file under Work Order No. M5796.

Signed: [Signature] Cert. No: 3786793 IA Date: 12/13/2021  
For Horizon Avionics, Inc. [Signature]

Date: 12/20/2021  
Tach: 3365.7

Cessna 177RG  
Reg: N878JM  
Ser. No: 177RG0450

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AIRFRAME LOG ENTRY

Removed oil cooler & modified existing Cessna oil cooler bracket. P/N 2050003-5 & 2050003-7 to move oil cooler closer to the firewall to provide clearance with the muffler, modified air duct adapter P/N 2050003-1 to accommodate the 1" wider 10599A oil cooler & install oil cooler P/N: 10599A. Filled out 337 & field approval granted from FAA. See 337 for detailed description of work accomplished.

MAINTENANCE RELEASE

I certify that this Appliance/Airframe/Powerplant has been inspected and is Approved For Return To Service as to work performed. Pertinent Details Are On File Under Work Order No. M5816.

Signed: [Signature] Cert. No: 3786793 IA Date: 12/20/2021  
For Horizon Avionics, Inc.

Date: 01/11/2022  
Hours: 3390.5  
Tach: 21.9

Cessna 177RG  
Reg. No: N878JM  
Ser. No: 177RG0450

### Horizon Avionics, Inc.

2445 E. General Aviation Drive, Suite C, Alcoa, TN 37701. Tel: (865) 980-7858 Fax: (865) 980-7701

#### AIRFRAME LOG ENTRY

Gear pump kept running and no green light in cockpit while gears are down and locked. Used magnet to unfreeze nose gear down lock sensor while aircraft on jacks, performed gear swing for 8 times with one emergency extension, ops checked good no defect noted.

#### MAINTENANCE RELEASE

I certify that this Airframe/Engine/Appliance has been repaired and is Approved For Return To Service With Respect to Work Performed. Pertinent Details Are On File Under Work Order No. M5836.

Signed: [Signature] Cert. No: 3786793 Date: 1/11/22  
For Horizon Avionics, Inc.

#### Aviation Plus Services LLC

262-656-1260

Aviationplusllc.com

06/17/2022 N878JM Tach 111.1

Replaced cabin door seals. Replaced worn roll pins in pilot's seat base. Reposition fuel strainer pull control. Replaced O-rings in shimmy damper. Replaced cabin heat crossover aeroduct. Reposition door handles to proper location. Replaced nose downlock switch.

[Signature]  
Robert Russell 3411885IA

08/25/2022  
Tach: 134.2  
Hobbs: 3513.5

N878JM  
Cessna 177RG  
S/N: 177RG0450

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#### AIRFRAME LOG ENTRY

Reinstalled spinner after repair by Aero Support Engineering International Inc.

#### MAINTENANCE RELEASE

In reference to the work listed above, this airframe was determined to be in an airworthy condition and is approved for return to service. Pertinent details are on file under Work Order No. M6019.

Signed: [Signature] Cert. No: AP2621311 Date: 8/25/2022  
For Horizon Avionics, Inc.



## Maintenance Entry

August 31, 2022 N878JM Cessna 177RG sn 177RG0450

Removed SV-EMS-220 PN 503365-000 SN 25415. Reinstalled new SV-EMS-220 PN 503365-000 SN 25339. Found all EMS checks satisfactory.

Updated IFD software to the latest software level 10.3.0.2 per Avdyne 55B 601-00182-034 Rev 15 Dated 26 Aug 2022.

The work described above has been inspected and found airworthy for return to service. Pertinent details of the repair are on file at this repair station under Work Order #012481.

4650802

Signed for Forge Flightworks Inc. Repair Station RH4R492M



## Maintenance Entry

Nov 9, 2022 N878JM Cessna 177RG sn 177RG0450

Removed and replaced engine MAP sensor P/N 503387-000. Removed and replaced #2 CHT probe P/N 503382-000. Updated Dynon system software to version 16.0.8. Avionics ground checks satisfactorily. Closed up areas opened for access. The work described above has been inspected and found airworthy for return to service. Pertinent details of the repair are on file at this repair station under Work Order #012546.

4650802

Andrew L. Pace 3616546 A/P/IA

Signed for Forge Flightworks, Inc. Repair Station RH4R492M



Maintenance Entry

Nov 21, 2022 N878JM Cessna 177RG sn 177RG0450

Removed Dynon SV-ADSB-472 P/N 503373-000 S/N 1483 and installed New SV-ADSB-472 P/N 503373-000 S/N 1915, see Dynon 8130-3# DYN3199. Avionics ground checks satisfactorily. Closed up areas opened for access. The work described above has been inspected and found airworthy for return to service. Pertinent details of the repair are on file at this repair station under Work Order #012553.

*[Handwritten Signature]*  
4650 F03  
Anche L Pace IA/AP # 3616546

Signed for Forge Flightworks, Inc. Repair Station RH4R492M

Aviation Plus LLC

262-656-1260

Aviationplusllc.com

01/02/2023 N878JM Tach 205 TTAF 3566

Removed Brackett air filter assembly. Installed Challenger air filter assembly, due cleaning annually/100hrs, replacement by 2500hrs of use. (337 filed). Removed OEM exhaust system and hangers. Installed PowerFlow exhaust system PN PFS-13706 SN 316, removal, inspection and reapplication of anti-sieze due 500hrs/annually. (337 filed). Dynamic balance done to .01 IPS adding 43 grams of weight. Installed Maple Leaf Aviation LTD. Exhaust fairing PN EP5001-001. (337 filed). Fabricated alternate air door and spring assembly. Replaced cabin heat ducts from new exhaust to fuselage and inlet hoses. Replaced missing rivets in lower cowl. Repaired left nose door cowl bracket. Fabricated nose door doubler. Replaced nose door grommet and clevis pins. Repaired lower cowl landing light support. RTV applied to cowl flap hinges for vibration anti-wear. Replaced throttle warning switch roller and smoothed cam. Replaced nose actuator up inlet fitting O-ring. Replaced nose wheel bearings and races. Replaced left brake caliper O-ring and bleeder screw. Replaced both brake flex hoses and fittings at callipers. Replaced outer washer and dust seal on left wheel. Reinstalled right gear trunnion assembly and gear leg after separation of the assemblies to facilitate replacement of the leg brake O-rings. Replaced trunnion to sector gear shaft bolt with used serviceable bolt. Fabricated duplicate brake hose plate at axle on the right side. Replaced O-rings in left gear downlock assembly. Replaced main gear actuator Heim rod end with new style rod end. Replaced both gear saddles with repaired gear saddles. Repaired duel warning box by replacing #1 NPN transistor. Cleaned stall warning switch ground. Replaced conical washers on stabilizer and tightened bolts for no play in pivots. Fabricated gusset on inboard right flap bellcrank rib to wing rib. Cleaned flap connector amphenol connection in left wing root. Redrove wing inboard skin to spar rivets on both sides. Replaced two smoking rivets on both sides in forward fuselage outside skins. Fabricated belly air scoop. Replaced battery box hover hold clips. Replaced one seat stop. Set left door inner handle overcenter tension and equalized both doors. Replaced



# HANCOCK ENTERPRISES, INC.

AIRFRAME DATA	WORK ORDER 2537 rev 1	ACCUMULATED TOTALS
MODEL: Cessna 177 S/N: 177RG		Tach Time: 3,570.0 3/18/2023 Date: 10 May 20223 Reg Number: N878JM

AD 2023-02-17 Spar Carry Through Eddy Current Inspection was PCW reference log entry 14 May 2021, Tach Time 3,361, Dated 14 May 2021,  
Date: 10 May 2023

Signature

Robert R Hancock  
A&P 2210045 IA  
Hangar 691  
Fitzhugh Blvd  
Smyrna, TN 37167

Hancock Enterprises, Inc.  
3656 Central Pike  
Hermitage, TN 37076

Work Order 2537

1



Hawk Aircraft Services  
39317 Airpark Road  
Zephyrhills, FL 33542  
(KZPH) Zephyrhills Airport  
Office: 813.623.5819

N878JM	
Color	Code
Snow White	CM0570566
Raptor Red	05964
Black	01955
Nordic Gray	00257

Aircraft has been stripped, etched, alodined, and epoxy primed. Flight controls were static balanced check and reinstalled. Installed Wilco Inc. Landing Inspection Mirror STC SA2791CE. Installed Skybolt SK203 Conversion Kit STC SA3286SO. Installed Knots2U OEM Style Wing Tips and Stabilizer Tips. Replaced Nose Tire with New Air Hawk 5.00X5 Gply Tire and Tube.

Date: 7/21/23  
 HM: 3625.6  
 ACTT: 3525.6

Reg. No: N878JM  
 Ser. No: 177RG0450



### Horizon Avionics, Inc.

2445 E. General Aviation Drive, Suite C, Alcoa, TN 37701.  
 Tel: (865) 980-7858 Fax: (865) 980-7701

ATC Transponder tested as required by FAR 91.413 IAW FAR 43, App. F and found to comply.  
 Make: Trig TT22 00745-00-03 #10805  
 Altimeter tests as required by FAR 91.411 IAW FAR 43, App. E, Para.(b) and found to comply.  
 Make: Dynon Stry D10A 503296-000 #12628, Dynon ADIIRS 50382-000 #15938, tested to 20,000 ft.  
 Automatic pressure altitude reporting system, L | X |, R | - |, has been tested as required by FAR  
 91.411 IAW FAR 43, App. E, Para.(c) and found to comply.  
 Static pressure system, L | X |, R | - |, has been tested as required by FAR 91.411 IAW FAR 43 App.  
 E, Para. (a) and found to comply.  
 Updated Avidyne IFD540 SW to Vers. 10.3.1.2 IAW Avidyne SW SB, OK.

#### MAINTENANCE RELEASE

The Airframe Or Appliance Identified Above Was Repaired And Inspected In Accordance With  
 Current Maintenance Rules Of The Federal Aviation Regulations And Is Approved For Return To  
 Service With Respect To The Work Performed. Pertinent Details Of This Repair Are On File At  
 This Repair Station Under WO. No. 8582.

Signed: 

Cert. No:

3033257

Date:

7/21/23

For Horizon Avionics, Inc. FAA CRS F30R150X



3689 Industrial Park Drive,  
 Marianna, FL, 32423  
<https://nevilleaviation.com>

09 Sep 2023 3636.3 tach.

N878JM

Installed TCW Technologies IBBS P/N IBBS-12v-3ah-CRT-V S/N 20231530-20231540  
 (STC # SA04400NY) IAW II Doc # 725.0047, R1.4. Use this document and AC 43.13 for  
 ICA. Removed Electroair Ing/starter switch P/N EA-1300 and installed Electroair  
 Ing/starter switch P/N EA-23000(H) S/N 23-101 (STC # SA04530CH) IAW IM EA-  
 23000, Rev. 1. Use this document and AC 43.13 for ICA. Installed Electroair EIS Back-  
 up battery panel P/N EA-26000 S/N 23-093 (STC # SA04586CH) IAW IM EA-26000,  
 Rev. 1. Use this document and AC 43.13 for ICA. Removed engine magneto P/N 10-  
 682555-11 S/N 831 and 8 spark plugs. Installed Electroair electronic ignition system  
 P/N EIS-41000C kit S/N 23-147-004 and P/N EIS-4100 S/N 23-159-002 and 8 E/A  
 spark plugs P/N EA-REM37HE (STC # SE04577CH) IAW IM EIS-41000, Rev 16. Use this  
 document and AC 43.13 for ICA.

Lee Munshower

AP167666230



### Maintenance Entry

Oct 17, 2023 N878JM Cessna 177RG sn 177RG0450

Updated Dynon System software to version 16.4.6. Ensured all previous configurations and settings are still present. Swapped Pilot and Co-Pilot yoke mounted PTT switches for troubleshooting. Avionics ground checks satisfactorily. Closed up areas opened for access. The work described above has been inspected and found airworthy for return to service. Pertinent details of the repair are on file at this repair station under Work Order #012785.

*[Handwritten Signature]* 4650803

Signed for Forge Flightworks, Inc. Repair Station RH4R492M

Date: 03/20/23  
Hobbs: 3868.5  
Tach: 273.6

Model 177RG  
N#: 878JM  
S/N: 177RG0450

### Horizon Avionics, Inc.

2445 E. General Aviation Drive, Suite C, Alcoa, TN 37701. Tel: (865) 980-7956 Fax: (865) 980-7701

#### AIRFRAME LOG ENTRY

C/W battery cap test 86% topped charge & reinstall. Operational check good. Installed new customer provided battery; ground run operational check and leak check good.

#### MAINTENANCE RELEASE

I certify that this Airframe has been repaired and is Approved For Return To Service With Respect to Work Performed. Pertinent Details Are On File Under Work Order No. M6259.

Signed: *[Signature]* Cert. No. ZA374676 AP Date: 11/28/23  
For Horizon Avionics, Inc.

Aviation Plus Services LLC

262-656-1260

Aviationplusllc.com

10/23/2023 N878JM  
Repaired inside door handle.

*[Signature]*  
Robert Russell 3411885IA

Aviation Plus LLC  
 262-656-1260  
 Aviationplusllc.com

02/02/2024 N878JM Tach 280 TTAF 3641

Reinstalled Challenger air filter assembly after cleaning per ICA, due annually/100hrs. Reinstalled Powerflow exhaust after cleaning, inspecting and reapplication of anti-seize compound per ICA, due annually/500hrs. Repaired pilot's door upper and lower wedges and replaced hinge pins. Installed Monarch fuel cap assemblies. Replaced fuel filler opening placards. (337 filed). Replaced battery box top with Vantage plastic part. Repaired engine air inlet plenum. Replaced throttle warning microswitch assembly. Taped flap and stab end holes for bird's nest prevention. Tightened stabilizer pivot bolts. Replace stabilizer trim tab aft Heim rod end. Replaced one bearing and race in left wheel. Replaced right wheel grease seal. Replaced nose wheel bearings and races. Replaced nose downlock arm bumper strip. Rigged nose gear. Tightened right gear saddle after replacing attach bolt. CW AD 11-10-09 seats and rails, visual and dimensional checks, due 100hrs/annually. CW AD 15-19-07 injector lines and supports, visual, due 100hrs. ELT battery date (08/27). ELT checked per FAR 91.207 (d). All routine items checked per inspection sheets. FAR43 APP D. I certify that this airframe has been inspected in accordance with an annual inspection and was determined to be in airworthy condition.

  
 Robert Russell 3412825A

Date: 07/10/2024  
 Hobbs: 3692.4  
 Tach: 339.5

Model 177RG  
 NR: 878JM  
 S/N: 177RG0450






2445 E. General Aviation Drive, Suite C, Alcoa, TN 37701. Tel: (866) 980-7858 Fax: (866) 980-7701

AIRFRAME LOG ENTRY

Cleaned area around fuel seep at access panel top inboard RH wing. R&R RH MLG tire tube with PIN 097-509-0. Repaired rear intercom jack. Removed propeller spinner and sent for repair. Installed repaired propeller spinner.

MAINTENANCE RELEASE

I certify that this Airframe has been repaired and is Approved For Return To Service With Respect to Work Performed. Pertinent Details Are On File Under Work Order No. N8338.

Signed:  Cert. No.  Date:   
 For Horizon Avionics, Inc.

Date: 08/19/2024  
Hobbs: 3747.2  
Tach: 344.5

Model: 177RG  
N#: N878JM  
S/N: 177RG0450

**Horizon Avionics, Inc.**

2445 E. General Aviation Drive, Suite C, Alcoa, TN 37701. Tel: (865) 980-7858 Fax: (865) 980-7701

AIRFRAME LOG ENTRY

Removed old sealant from RH wing fuel bay access panel. Applied new sealant and allowed to cure. Removed excess sealant from area. Filled tank with gas for leak check. No discrepancies noted.

MAINTENANCE RELEASE

I certify that this Airframe has been repaired and is Approved For Return To Service With Respect to Work Performed. Pertinent Details Are On File Under Work Order No. M6348.

Signed: *Alex Webster* Cert. No: MP446124JA Date: 08/19/2024  
For Horizon Avionics, Inc.

Date: 01/21/2025  
Hours: 3819.4  
Tach: 411.1

Cessna 177RG  
Reg. No: N878JM  
Ser. No: 177RG0450

**Horizon Avionics, Inc.**

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AIRFRAME LOG ENTRY

Removed and replaced both MLG tires with new P/N 072-449-0. Greased all bearing corresponding to the MLG wheel assembly. Removed and replaced LH MLG tube with new P/N GL-1520B. Leak check good on both tires.

MAINTENANCE RELEASE

I certify that this Airframe has been repaired and is Approved For Return To Service With Respect to Work Performed. Pertinent Details Are On File Under Work Order No. M6407.

Signed: *Lowell* Cert. No: 4579393 Date: 01/21/2025  
For Horizon Avionics, Inc.

Date: 08/19/2024  
Hobbs: 3747.2  
Tach: 344.5

Model: 177RG  
N#: N878JM  
S/N: 177RG0450

**Horizon Avionics, Inc.**

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AIRFRAME LOG ENTRY

Removed old sealant from RH wing fuel bay access panel. Applied new sealant and allowed to cure. Removed excess sealant from area. Filled tank with gas for leak check. No discrepancies noted.

MAINTENANCE RELEASE

I certify that this Airframe has been repaired and is Approved For Return To Service With Respect to Work Performed. Pertinent Details Are On File Under Work Order No. M6348.

Signed: *Alex Webster* Cert. No: MP446124JA Date: 08/19/2024  
For Horizon Avionics, Inc.

Date: 01/21/2025  
Hours: 3819.4  
Tach: 411.1

Cessna 177RG  
Reg. No: N878JM  
Ser. No: 177RG0450

**Horizon Avionics, Inc.**

2445 E. General Aviation Drive, Suite C, Alcoa, TN 37701. Tel: (865) 980-7358 Fax: (865) 980-7701

AIRFRAME LOG ENTRY

Removed and replaced both MLG tires with new P/N 072-449-0. Greased all bearing corresponding to the MLG wheel assembly. Removed and replaced LH MLG tube with new P/N GL-1520B. Leak check good on both tires.

MAINTENANCE RELEASE

I certify that this Airframe has been repaired and is Approved For Return To Service With Respect to Work Performed. Pertinent Details Are On File Under Work Order No. M6407.

Signed: *Lowell* Cert. No: 4579393 Date: 01/21/2025  
For Horizon Avionics, Inc.