



## On-Track Plant

# Engineering Conformance Certificate

This Certificate is issued in accordance with RIS-1530-PLT Issue 6

**NAME OF VEHICLE ACCEPTANCE BODY**

SNC-Lavalin Rail & Transit Verification Limited

**ACCREDITATION CODE**

21

**Vehicle Class / Description**

912/Manitou/RR AP ART 17T(H) MEWP/9A

**Vehicle Owner**

Story Plant Ltd

**Issue Date**

06 April 2021

**Expiry Date**

11 November 2023

**Vehicle Number(s)**

99709 912263-9

**First Of Class**

NS/5096/14.

**Authorised by:**

Luke Tandy

SNC-Lavalin Rail & Transit Verification Limited

**OFFICIAL STAMP**

SNC • LAVALIN

**Reason for issue and Scope of Work**

Certification of Manitou MEWP, manufactured by Rail Products (UK) Ltd.

Serial No. 0043072. Story Fleet No. MEWP16.

Originally assessed for compliance with RIS-1530-PLT Issue 5.

On this certificate: Change of owner only. No engineering change.

Expiry date conforms to the requirements of RIS-1530-PLT.

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SN0217074

Certificate Number: 21/0282/21

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## Deviations associated with this certificate

PAB List of Machines Iss 5 13th October 2016 (Issued by Network Rail) List of Notified Machines approved for certification to RIS-1530-PLT Issue 5 or Earlier as Contracted.

## Previous Certificate Number

NS/0139/16.

## Maintenance Plan Details

P301 ROAD-RAIL MEWP ART 17 T-ART 17 T(H) User Manual. Issue No: V6.3. Date: 24/06/2015.

547408 EN Manitou Instructions Manual. Issue 1. Date: 15/05/2012.

P02-031-R User Manual Instrumented Pantograph. Issue 0.4. Date: 22/06/2015.

## Limitations of Use

Limitations of Use taken from certificate: NS/0139/16.

1. Vehicle is rail-conversion of a road based 4-wheel drive, 4-wheel steer mobile elevating work platform (MEWP).
2. No load carrying capability.
3. When in use, the MEWP shall have a current certificate of approval, test and/or thorough examination.
4. The MEWP shall only be used in accordance with the manufacturer's safety and operating instructions, and the safe system of work for the possession.
5. Maximum basket payload shall NOT exceed 400kg, (maximum three personnel + hand tools + materials).
6. It shall only operate inside possessions. When travelling, vehicle is within W6a gauge as RIS- 1530-PLT.
7. When working, the MEWP can be out of gauge, dependant on the slew/height settings in use.
8. For on/off tracking, a site specific plan shall be used taking account of the applicable module of Network Rail Infrastructure Plant Manual NR/L2/RMVP/0200 and Modules P301 and P703.
9. It shall NOT on/off track, travel and work on live conductor-rail lines.
10. It may on/off track, travel and work on ISOLATED conductor-rail lines.
11. It shall NOT on/off track, travel, work or raise the instrumented pantograph under live OLE, except Limitation 12.
12. It is permitted to on/off track and travel under live OLE when used in conjunction with a safe system of work determined and authorised in accordance with the requirements of GE/RT8024; and provided the boom & instrumented pantograph are in the stowed and locked position for travel (the basket floor less than 1.4m above rail level - see Limitation 15). The key MUST be removed and given to the Machine Controller. Minimum OLE wire height 4.165m.
13. On and Off Tracking; Detailed in the ROAD-RAIL MEWP ART 17 T-ART 17 T(H) User Manual V6.3. & 547408 EN Manitou Instructions Manual.  
- A RRAP or temporary crossing must be used, maximum track cant 150mm and/or gradient 1:25.
14. Alternatively to Limitation 13, a documented risk assessed procedure that is specific to the on/off tracking point may be used that is specific to the possession.

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15. It is permitted to travel under live OLE subject to:
  - The basket and instrumented pantograph MUST be in the locked and stowed position below 1.4m, using the OLE keyswitch on Base Control; when in the On/locked position the OLE key MUST be removed and given to the Machine Controller.
  - There shall be no access onto the RRV except the basket.
  - The earth bonds on the RRV shall have been examined for security and presence, prior to the start of work.
  - The use of the RRV under live OLE shall only be after the height of the basket floor has been checked as below 1.4m ARL, and used in conjunction with a safe system of work determined and authorised in accordance with the requirements of GE/RT8024. OLE minimum wire height 4.165m.
16. In recovery, speed must be limited to 3mph (5km/h) to avoid damage to the RRV.
17. ALO working is only permitted when a Rail Products EU "Electronic Movement Limiting system" (see item 14 Supplementary Information), is fitted to this MEWP. The "ALO Limiter Selection Key switch"; to select left position or right position, MUST be selected PRIOR to commencing work (see pages 32 & 33, clause 6.2.2. "ALO Limiter Selection Key Switch" in the ROAD-RAIL MEWP ART 17 T-ART 17 T(H) User Manual V6.3., and the ALO Limiter Selection Key should be removed and handed to an ALO Responsible Manager. There should be a Safe System of Work (SSoW) in place to identify the required vehicle ALO limits for the planned work. To facilitate the machine working with the Adjacent Line Open to traffic refer to the system operating requirements in accordance with pages 32 & 33, clause 6.2.2. "Base station on turret"
  - "ALO Limiter Selection Key Switch", pages 47 & 48, clause 6.3.7., "Working with one side adjacent to open lines", in the ROAD-RAIL MEWP ART 17 T-ART 17 T(H) User Manual V6.3.
  - The MEWP shall only be permitted to work with adjacent lines open to traffic with the Rail Products EU "Electronic Slew Limiting system" (see Supplementary Information 14) slew limiter is switched ON in accordance with an accepted Safe System of Work (SSoW) incorporating a site specific survey to establish the position of the adjacent line, and to ensure the counterweight articulated boom and basket are prevented from entering the prohibited area (adjacent lines).
  - It is essential that the machine operator is trained and competent to operate, and before work takes place, carry out pre-use checks of the Rail Products EU "Electronic Slew Limiting system" in accordance with ROAD-RAIL MEWP ART 17 T-ART 17 T(H) User Manual V6.3., reference pages 32 & 33, part 6.2.2. "Base station on turret".
  - The machine shall not work with adjacent lines open to traffic where the distance between the centre line on which the vehicle is working and the centre line of the adjacent line is less than 3600mm.
18. Working Over the Side over the fixed axle end only with a turret rotation of up to 90° to the track, subject to the control applied by the ALO system, maximum reach 6.35m.  
 When in Working Over the Side Mode; the MEWP telescopic arm, the whole assembly mounted on an articulated arm structure and basket can be out of gauge, dependant on the MEWP slew settings in use (see Working Over the Side in ROAD-RAIL MEWP ART 17 T-ART 17 T(H) User Manual V6.3., page 28 Part 6 Operation, and page 45, clause 6.3.5. Working Over the Side);
  - The MEWP shall only be used in accordance with the Method Statement for the possession and the safe system of work has taken account of horizontal and vertical gauge exceedance of the articulated boom and basket and at the rear side of MEWP towards the adjacent line.
  - When Working Over the Side, the MEWP system is set to move at restricted speed, (1mph), with the telescopic arm fully retracted, the articulated boom and basket set to work at a maximum of 90° to the track, maximum reach 6.35m, the W6a gauge of 2700mm up to a height of 1000mm is exceeded by 2150mm. (see Limitation 17).
  - A site survey shall be undertaken to assess potential damage to infrastructure equipment prior to use.
19. When travelling in reverse, ground staff shall control movements.
20. Except for the MEWP basket, access to any other part of the vehicle that is more than 1.4m above rail level is prohibited when under live OLE.

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21. For access/egress, the MEWP shall only operate with the basket adjacent to a cess or a line closed to all train movements, or the safe system of work takes account of adequate clearance to adjacent lines.
22. Travelling Mode; RRV is within W6a gauge and exception as RIS-1530-PLT.
23. It will NOT activate train operated points.
24. Permitted speeds:
  - Maximum travel speed - 7.5mph (12 km/h);
  - Maximum overside working speed - 1mph (1.6 km/h);
  - Maximum towing speed - 2.5mph (4 km/h).
  - Switches, Crossings and Raised Check Rails - 2.5mph (4 km/h).
  - Maximum instrumented pantograph working speed - 2.5mph (4 km/h).
25. Travelling Mode: The RRV shall NOT travel on track that exceeds cant 200mm and/or gradient 1:25.
26. Working Mode: The RRV shall NOT work on track that exceeds cant 180mm and/or gradient 1:25. Twist 1/150 over the RRV wheelbase (40mm twist).
27. The MEWP shall NOT work on cants above 180mm.
  - From 0mm to 120mm cant, with the telescopic arm fully extended, the maximum reach limit is 8.65m.
  - From 120mm to 180mm cant, the telescopic arm is blocked, the maximum reach is limited to 6.35m.
28. The MEWP shall NOT be used for any other lifting duties.
29. The vehicle is permitted to tow or propel, through couplings fitted on both ends of the machine, Rail Products UK technically matched equipment (Rail Products UK ATR 450, alutrailer).
  - Maximum weight 520.9kg including load (trailer= 70.9kg)
  - Maximum permitted number of trailers = one.
  - Trailer must be fitted with the automatic trailer breakaway warning and marker lights, using the pin plugs connected to the machine and trailer.
30. Failure recovery of the RRV MEWP shall be undertaken in accordance with the operator's manual.
31. It shall only be operated on rail when fitted with foam-filled tyres.
32. An instrumented pantograph measuring device is now fitted to the ART 17T (H) main boom and is restricted to 0° and 180° whilst in working mode. It is essential that the machine operator is trained and competent to operate the instrumented pantograph. See P02-031-R Issue 0.4, 22- 06-2015 (User Manual - Instrumented Pantograph).

### Supplementary Information

Supplementary Information taken from certificate NS/0139/16:

1. Vehicle is rail-conversion of a road based 4-wheel drive, 4-wheel steer mobile elevating work platform (MEWP).
2. RR AP ART 17 T(H) MEWP -  
Serial No. 0043072 - Fleet No. MEWP16.  
Gross Vehicle Weight: 12,215kg.
3. The RRV is fitted with a working platform fixed on the end of a pendular arm, itself fixed to the end of a telescopic arm, the whole assembly being mounted on an articulated arm structure.
4. The lifting platform is fitted with controls in the basket. From this control station, the operator can drive and operate this machine forwards or backwards. The operator can also raise or lower the arm assembly, extend or retract the telescopic arm and turn the turret or the basket to the right or the left.

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5. The basket-arm-turret assembly can rotate, non-continuously, over an angle of 360° to the left or the right with respect to the set position.
6. Notified Body (Aboma Rail) Declaration of EC TYPE examination (supplement) - Certificate No. HHC/DRS\_2014\_18375\_IRP, Issue 4.0. Machine parameters Attached on page 2. The guidelines set out in Standards EN280:2013 have been applied herewith.
7. Notified Body (Aboma Rail) TYPE Certificate of Compliance - Certificate No. HHC/DRS\_2014\_18375\_IRP\_Issue 4. The guidelines set out in Standards EN15746-1:2010 +A1: 2011 + EN15746-2:2011 +A1:2011 have been applied herewith. - Machine based on Manitou TYPE 160AJT, Type ART 17 T(H)- dated 21-11-2014.
8. Vehicle is fitted with a Manitou Data logger.
9. Maximum allowed wind speed 45 km/h (28mph)(details from Certificates detailed in 6 & 7 above) - 12.5m/s (6 Beaufort).
10. Minimum Curve Radius - 80m.
11. Applicable Braking Curve(s) - Road/Rail Vehicles RIS-1530-PLT Clause 5.6.3.1.
12. Applicable Gauge or Portfolio Reference: W6a as RIS-1530-PLT.
13. Route Availability No: No change.
14. The vehicle is fitted with a Network Rail approved electronic slew system that has been approved by Network Rail Technical Services. The system must be configured and functioning correctly to be considered as 'reliable'.  
The slew limiting system is NOT capable of limiting movement over both sides simultaneously. The vehicle is NOT permitted to work with both sides adjacent to open lines. This MUST be accounted for in the Safe System of Work.

Authorised by:

Luke Tandy

