Sub: Innovations and system improvements in Indian Railways

CME/WCR through his PCDO for the month of October, 2013 has informed about the following innovations/system improvements carried out by WCR on the freight side:

- Development of a device for fitting CP Top for CASNUB bogie wagons (WRS/KTT).

The same is enclosed for your kind information.

(Gaurav Puri)
Deputy Director, M(N)

Encl: 3 pages

Copy to: EDS(W)/RDSO
1.18 **Workshop Portal:** WCR is regularly feeding data of POH out-turn, RSP work, over due POH, cycle time, unit cost, incentive performance, local passing and staff Strength in the workshop portal.

2. **INNOVATIONS & SYSTEM IMPROVEMENT –**

2.1 Name of the Innovation:- Development of a device for fitting CP Top for **CASNUB** bogie wagons (WRS/ KTT).
Background: Centre pivot top is fitted underneath body bolster before lowering of the wagon. As it is heavy, 4 persons are required to lift it upwards for correct fitment. During fitment each person has to apply equal force simultaneously, otherwise chances of injury are very high.

To ensure safe & proper fitment, an in-house device has been developed with scrap materials for fitment of the centre pivot top with body bolster.

Construction details: The construction is very simple and using following items.

I. Hand brake screw with nut (of a condemned wagon) - 02 Nos.
II. Hand brake gear box (of a condemned wagon) - 02 Nos.
III. Bevel gear assembly (of a condemned wagon) - 04 Nos.
IV. Connecting link (of a condemned wagon) - 02 Nos.
V. Hand trolley (Fabricated from scrap material) - 01 No.
VI. Support plate (Fabricated from scrap material) - 01 No.
VII. 32 mm pipe with inner rod (scrap material) - 02 Nos.
VIII. Guide (scrap material) - 01 No.

During the course of fitment, centre pivot top is placed on the support plate which is further supported by a cylindrical guide. This guide is so mounted that it moves vertically up and down with the rotation of hand brake screw. Hand brake screw is powered through bevel gear assembly by hand brake wheels. Two sets of this gear 2: screw combination are linked together with connecting links to operate this fixture from either side. This arrangement is mounted on a hand trolley which ensures makes very easy movement of the fixture.
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After the proper fitting of the CP top, fixture is removed.

**Benefits:** This innovation is very useful because.

(i) It helps in safe & proper fitment of the centre pivot top.
(ii) Risk of injuries reduced considerably.

**Cost:** Approximate cost is Rs 1500/-.

**Disciplining of errant Vendors – NIL**

**Line haul cost** – Necessary monitoring is being done.

**ASSISTANCE REQUIRED:**

1. A proposal for 72 Gr D post has been sent to Railway Board for sanctioning of post from Railway Board vacancy bank vide CPO/WCR’s letter no.WCR/P-HQ/1260/Po.Cr/Cadre/Elect.(G)/JBP dated 04.06.2013.

   1. Dy.CEE
   2. AWM Elect.

However Railway Board agreed for creation for only one post i.e AWM/Elect but post of WM (Elect.) was operated as junior scale does not have power to deal tender cases in works matter.

Since then the workshop have been expanded and infrastrure have been created now for out turn of 750 coaches per annum. At present we are turning out 05 AC coaches per month of all variants including RMPU coaches. Considering the present environment it is necessary to improve the gazetted supervision over CRWS complex and the colony etc spread over in 400 acre. At the time of inception of CRWS/BPL, it appears that MLR of AC coaches were not planned. Proposal for creation of a post at AWM/ Electrical has been sent to Dy. Director, Estt (Gaz Cadre) vide WCR L.No. WCR/P.HQ/Gaz/Creation/Revenue post/ Elec. Dated 19.11.2012.

Rly Board is kindly requested to communicate the sanction of creation of one junior scale post of AWM/Elect at CRWS/ BPL.