East Central Railway

S&T Technical Circular No.04/2007

Docket No.- ECR/S&T/SIG/Tech Circular/185 dated:- 21.08.07

Sub: - Soldering practice for Signalling works.

1. In the recent past it has been observed that there has been an increase in number of signal incidences due to contact missing. This has been specifically true at recently commissioned relay based signaling installation. The problem was analyzed and was found to be mostly related with imperfect soldering practices.

2. Imperfect joints are the result of any one of the following causes, which should be avoided and taken care at the time of installation.
   (a) Soldering iron not sufficiently heated.
   (b) Soldering iron held on the connection for insufficient length of time.
   (c) Unclean terminal or wire.
   (d) Use of solder of improper composition or inferior fluxing agent.

3. For proper soldering of relay contacts, instructions have been laid down in Chapter XIX of SEM Part-II, which should be followed strictly.

4. In order to improve the quality of soldering connections it has been decided that for all future Signalling works 'Temperature Controlled Soldering Iron' must be used.

This has the approval of competent authority.

Kapil 21.08.07

Kapil Khanna
Chief Signal Engineer