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Issue	I
Date	October 2000

Signalling Equipment Technical Advice Notice (SIGTAN032) Alignment of Colour Light Signals (formerly RT/E/C/I 9032)

This temporary front sheet facilitates change to the new Network Rail Standards referencing nomenclature.

The Ref above will be formally allocated to this standard when it is next changed in the meantime the contents, date and issue number of this Network Rail Standard are **UNCHANGED and with immediate effect it should be referred to as “(new ref) formerly (old ref)”.**

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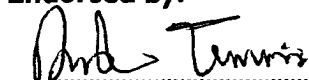


RAILTRACK LINE CODE OF PRACTICE

SIGNALLING EQUIPMENT TECHNICAL ADVICE NOTICE (SIGTAN 032) ALIGNMENT OF COLOUR LIGHT SIGNALS

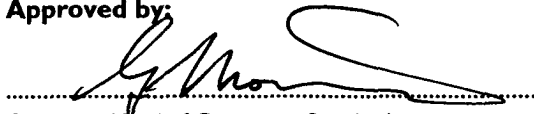
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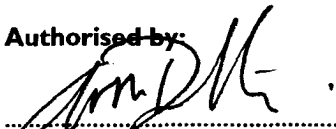
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Summary

This Code of Practice details the methods to be used for checking and adjusting the beam alignment of colour light signals, so as to achieve compliance with Railtrack Group Standard GK/RT0037 Signal Sighting, Issue 3.

Issue/Revision Record

This Code of Practice will be updated when necessary by the distribution of a complete document. Amendments will be marked by a vertical black line in the adjacent right hand-margin.

Issue	Date	Comments
I	October 2000	Original Issue

Implementation

This Code of Practice highlights issues arising from operational experience concerning the installation and maintenance of signalling equipment. Where appropriate, it gives current best practice for mitigating risk, and is for implementation from 1st November 2000. Alternative practices may be accepted by Railtrack where they can be demonstrated to be as good or better than the contents of this document. The following documents are superseded:

Superseded document reference number	Issue	Date
Nil		

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Safety

All persons are reminded that all appropriate safety precautions should be observed when

undertaking the work covered by this document.

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APPENDIX A ALIGNMENT SIGHTING TARGET

Figure A1 Face of typical target

APPENDIX B ADJUSTABLE SUPPORT FITTINGS FOR SIGNAL HEADS

Figure B1 Typical gantry-mounting base

Figure B2 Typical post-mounting base

Figure B3 Signal head with typical two jacking-screw adjustment

Figure B4 Signal head with typical four jacking-screw adjustment

I INTRODUCTION

I.1 Purpose

Railtrack Group Standard GK/RT0037 *Signal Sighting*, specifies requirements for the alignment of colour light signals. This SIGTAN supports GK/RT0037 with additional information and describes working methods.

This document defines processes for determining the alignment of a signal, and for adjusting the alignment where this is found to be necessary. Guidance on record-keeping and periodic inspection is also given.

The content of this document may also be used to assist with the setting up and initial alignment of new colour light signals.

I.2 Scope

This SIGTAN applies to long range colour light signals (colour light signals conforming to Standard Performance Category 1, as defined by GK/RT0031). The techniques that are described may be applied to signals manufactured in accordance with BRS-SE 81, *Construction Requirements for Long Range, Multi-aspect Signal Heads*. The signal heads in question may be of 1, 2, 3 or 4 aspects and may have originated from a number of different manufacturers. This document does not cater for short range signals or signals fitted with spreadlight lenses.

I.3 Definitions

Alignment Point	A point in space to which the centre of the signal light output is directed. This point is determined by the signal sighting committee and documented for each signal.
Left (left-hand side)	The left-hand side, from the perspective of a person looking at the signal aspect.
Left-hand Running Rail	The left-hand rail of the track to which a signal relates, as viewed from a train approaching the signal.
Measuring Device	A calibrated device for measuring linear distances (of the order of several metres upwards) along the length of the rails.
Right (right-hand side)	The right-hand side, from the perspective of a person looking at the signal aspect.

Special Alignment	Intentional alignment of the centre of the signal light output towards a point other than the standard Alignment Point.
Standard Alignment	Alignment of the centre of the signal light output towards a point 3 metres above the Left-hand Running Rail at a distance of 183 metres from the signal. (Note that this differs from the definition given in Signalling Maintenance Specification SG00 which will be withdrawn December 2000)
Sighting Target	A physical object placed at the Alignment Point when checking or adjusting the signal alignment.

1.4 Abbreviations

AWS	Automatic Warning System
OLE	Overhead Line Equipment
SIGTAN	Signalling Equipment Technical Advice Notice

2 SIGNAL ALIGNMENT VALUES

GK/RT0037 specifies that signal beams should be generally aligned towards a point 3 metres above the Left-Hand Running Rail at a distance of 183 metres from the signal. This setting is known as Standard Alignment. Although the majority of signals will be set-up with Standard Alignment, some signals will be deliberately set with non-standard alignment (otherwise known as Special Alignment). Typically, Special Alignment may be required in situations where the approach view of the signal is restricted or there is more than one approach route; other local circumstances may also justify special alignment.

3 SIGNAL ALIGNMENT RECORDS

In recent times the alignment of a signal has been recorded on the Signal Sighting Form. However, it is not usual practice to store a copy of this form in the vicinity of the equipment. Older styles of Sighting Forms may not contain alignment data.

It is essential that authenticated records are accessed, to determine the intended alignment, before any site work is undertaken. The reason for this is that without such information, there is no obvious way of knowing which signals should have special alignment. Where the necessary information is not readily to hand, then the matter should be referred to the Infrastructure Controller.