

Ref: 20200624

Technical Forum on Train Detection Device

- Date:** 10 July 2020 (Friday)
- Time:** 18:00 hrs. - 19:15 hrs.
- Venue:** Assembly Hall, 8/F., MTRHQs Building,
Telford Plaza, Kowloon Bay, Kowloon.
- Speaker:** Mr. PANG Kwok Wai
Chairman of IRSE(HK)

All Members and MTR staff are welcome.

Abstract:

Train Detection Device is the most basic component in any signal system that bears the most important safety responsibility. The primary function of a train detection device is to detect position of trains, reflect the idle status of the track section, and provides a basis for route setting and operate the appropriate signals. As operation demand advances, addition functions are added like: generation of virtual Insulated Rail Joints and transmission of speed codes.

There are many types of Train Detection Devices with **Track Circuits** being the most commonly known and have many designs like: DC Track Circuit, AC Track Circuit, Audio Frequency Track Circuit, High Frequency Track Circuit, Coded Track Circuit and High Voltage Impulse Track Circuit with most of them in service in MTR.

Other Train Detection Devices include: **Axle Counter, Inductive Loop, Balise, RFID, Pseudo Positioning** with the latest being Global Positioning System. However, not all of them are fail safe hardware-wise. Therefore, the author wants to broadly alert signal engineers to be well aware of the risks when maintaining such devices especially during fault finding. Hope that you can find good use of this technical forum.

Fees: Free-of-charge

No. of Participants: 80 max.



Registration:

Prior registration is required. Applications will be accepted on a first-come, first-served basis. Successful applicants will be notified by separate e-mail.

IRSE(HK) members must make registration via the IRSE(HK) website.

URL: http://irse.org.hk/new/activity_viewall.php

MTR staff are welcome. Please send applications by e-mail to **Mr. CHEUNG Pan Yeung** at e-mail: pycheung@mtr.com.hk.

Special remarks: For security reason, IRSE(HK) members who are not employees of MTRC must make registration via the IRSE(HK) website.

Closing Date of Application: 7 July 2020 (Tuesday)

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