

SOUTH
Target your success



V.I. Instruments

N70 Mining Solution



Modifications Made to N70 Total Station

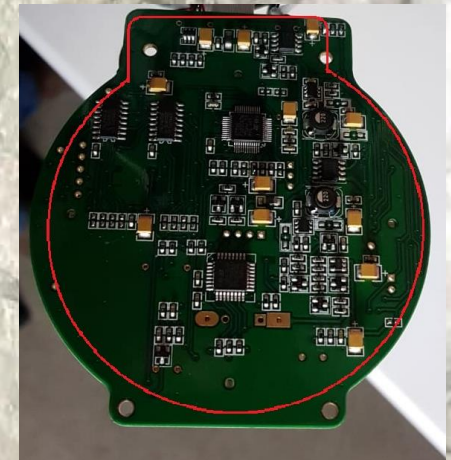
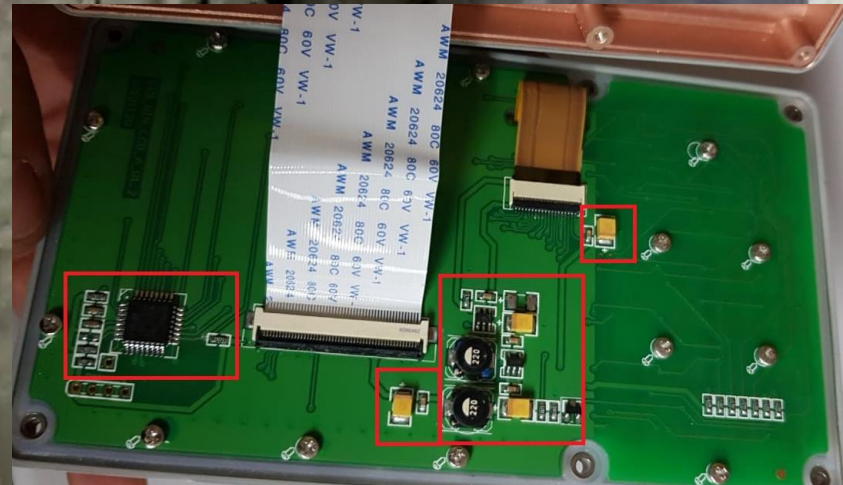
Handle with optical up plummet



Special mining and tunneling software

- Peg survey
- Easy Side Grades
- Line Peg Staking
- Offsets including Cubby Offsets
- Underground Resection with raw data
- Data Compatible with most South African Mine CAD software

Cover the internal components with potting compound to get Intrinsic safe certification





IA – CERTIFICATE

IN TERMS OF REGULATION 21.17.2 OF THE MINERALS ACT (INCORPORATION THE MINE HEALTH AND SAFETY ACT) AND REGULATION 9 (1) OF THE ELECTRICAL MACHINERY REGULATIONS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT

Ex – Type Examination

Certificate number: **MASC M/18-3275X**
Equipment: **SOUTH TOTAL STATION - N70**
(See "Conditions of Certification")
Serial No:
Applicant: **Rutherford**
Address: **Unit 3A & 3B, City Deep Industrial Park**
Saligna Park, Witfield
Boksburg

Manufacturer: **Rutherford**
Address: **Unit 3A & 3B, City Deep Industrial Park**
Saligna Park, Witfield
Boksburg

DESCRIPTION:

The unit is a South N70 Total station. It is a battery operated portable measuring device. It has a camera and laser head mounted on a horizontal axis on the top side of the unit. The entire unit is mounted on a rotating base. There are two identical consoles on the front and back ends of the unit, each with a touch screen on the left and a key-pad on the right. The unit has a yellow enclosure manufactured from a light metal material. On the side of the unit there is a battery compartment. There is one external interface that allows for connecting peripheral devices to the unit.

MARKING

The unit(s) must be identified on the approval label on the outside of the units as follows: The label must be applied in a legible, visible and indelible manner not invalidating the integrity of the enclosure of unit by any means.

Certificate Holder **Rutherford**
Type **South N70 Total station**
Ex Rating **Ex ia I Ma**
IA No **MASC M/18-3275X**
Serial Numbers **"See conditions"**

Warning:

- Do not replace battery in hazardous area.
- Always transport in a non-metallic carry case when in hazardous area.
- Do not connect any peripheral device to the unit in the hazardous area.

1. COMPLIANCE...

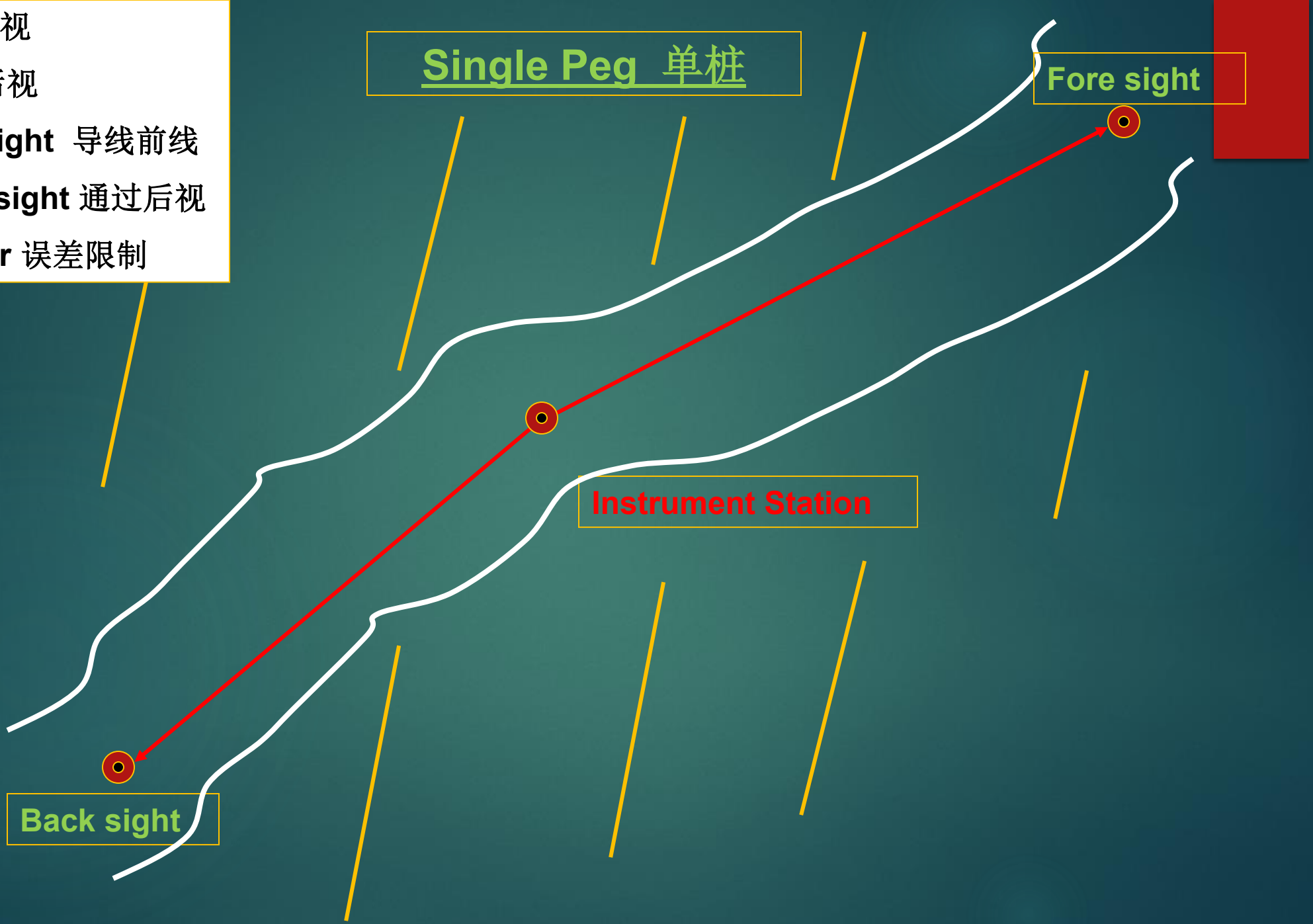
This document may only be reproduced in full.
This certificate is not transferable and remains the property of the issuing body.
This document will not be supported by MASC for certification purposes outside the borders of South Africa.



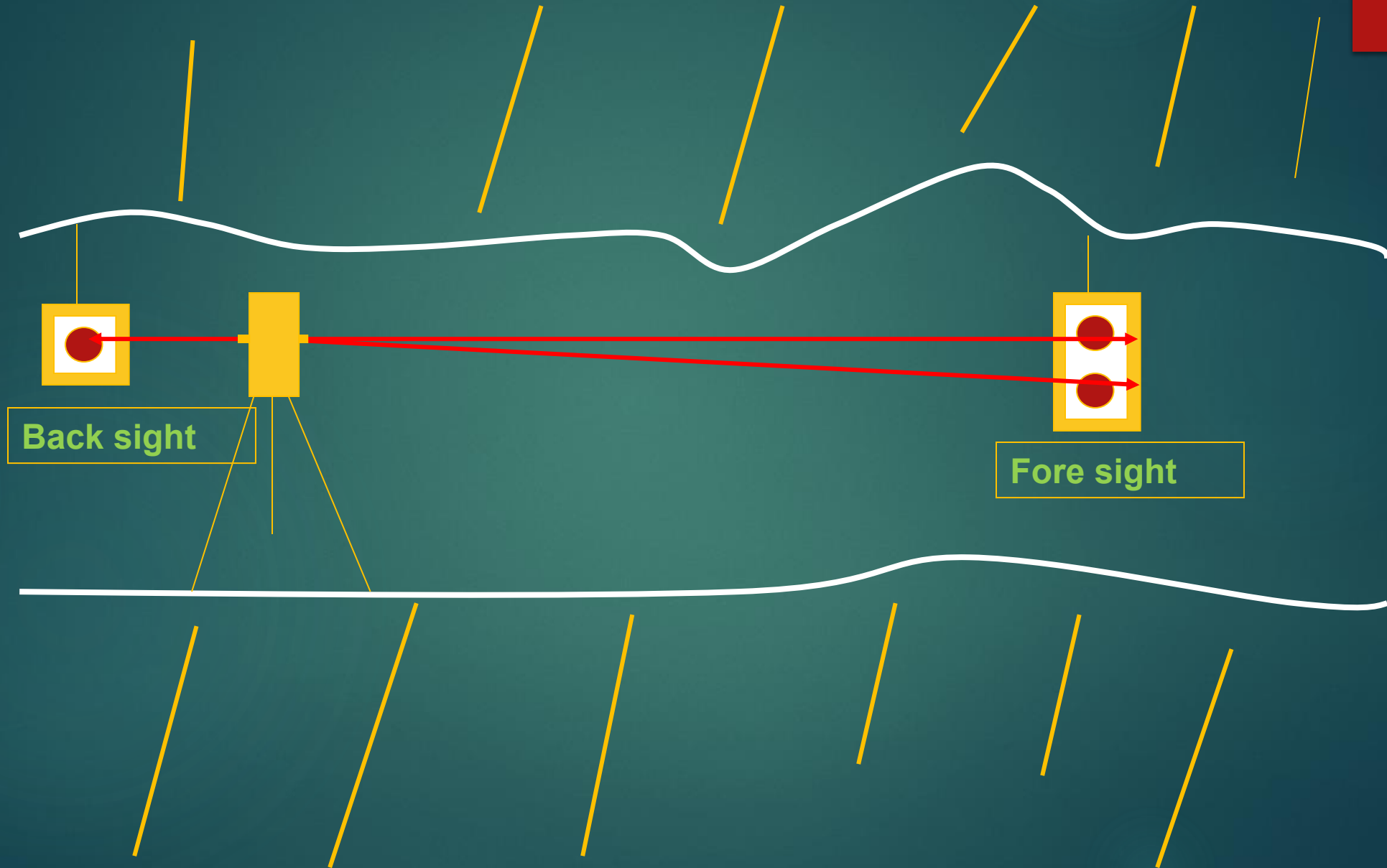
Animation on Software flow:



- **Fore sight** 前视
- **Back sight** 后视
- **Transit Foresight** 导线前线
- **Transit Back sight** 通过后视
- **Limits of error** 误差限制



Single or Double Fore sight 单点或双点前视



Multiple Pegs 多桩

Fore sight 1 前视1

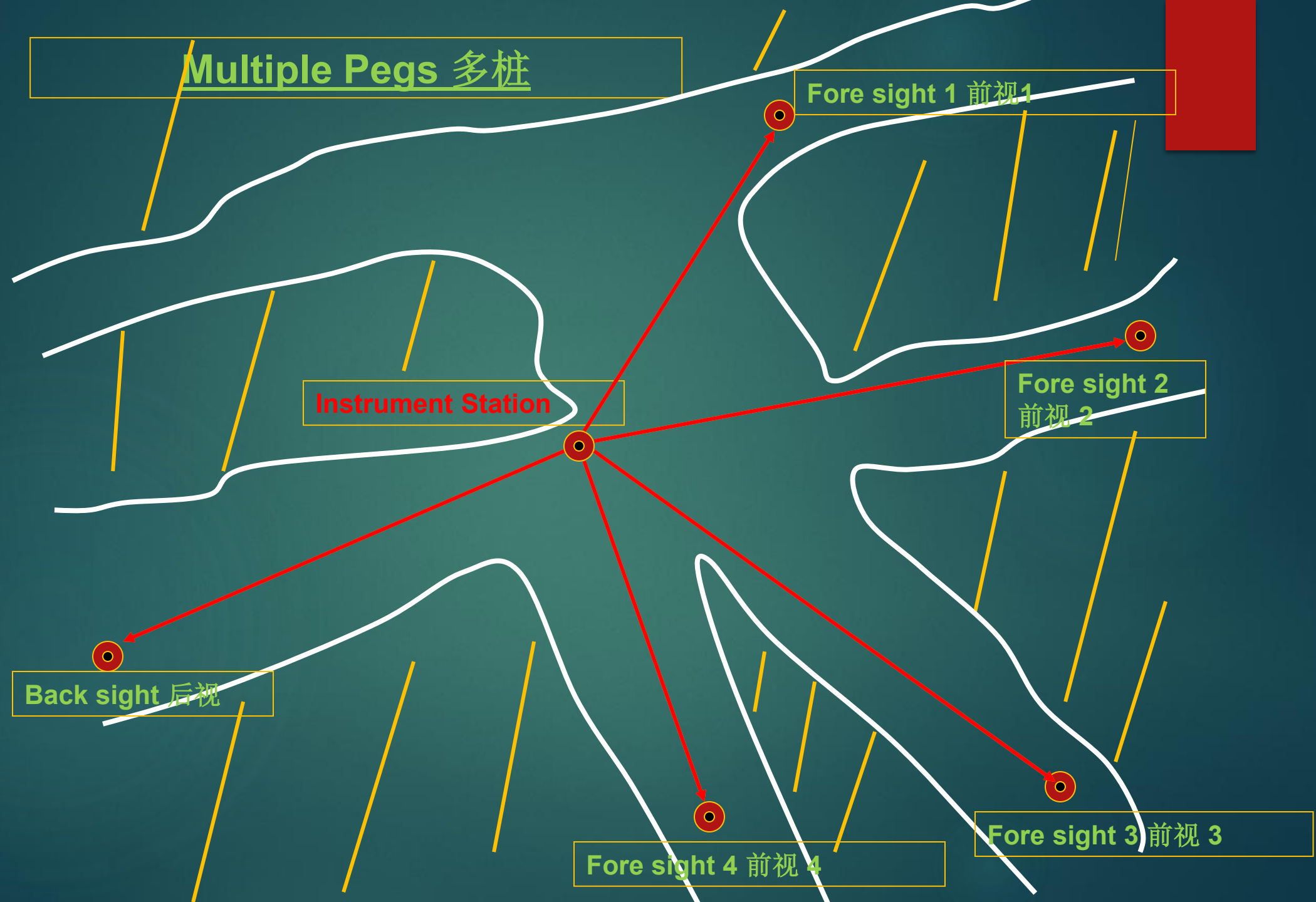
Instrument Station

Fore sight 2
前视 2

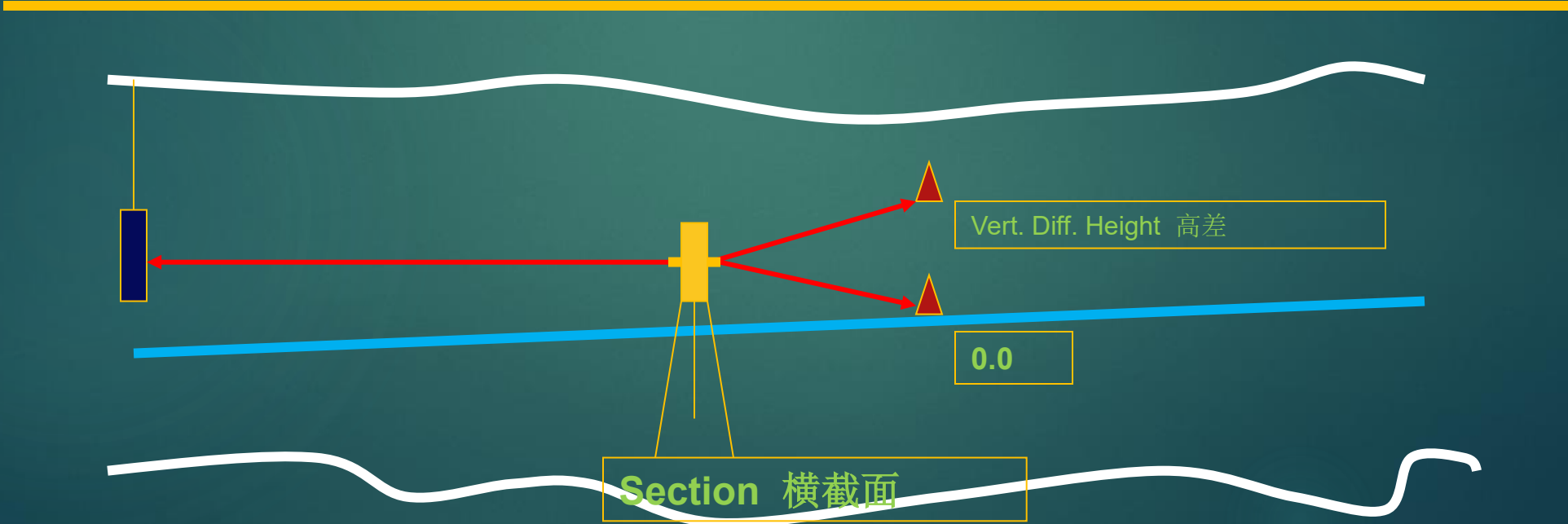
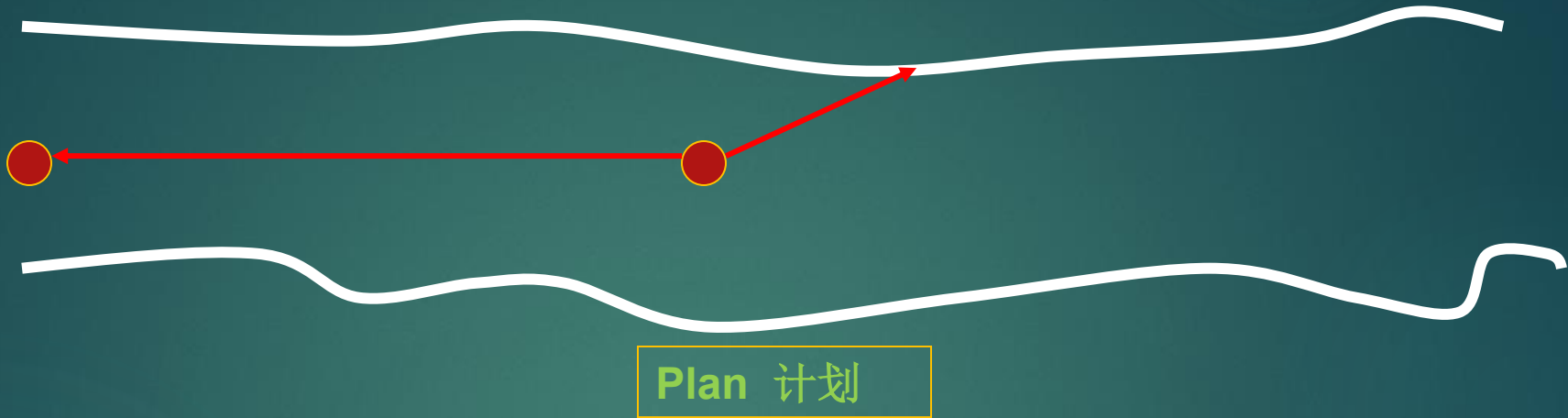
Back sight 后视

Fore sight 4 前视 4

Fore sight 3 前视 3



Easy Grades 简单等级



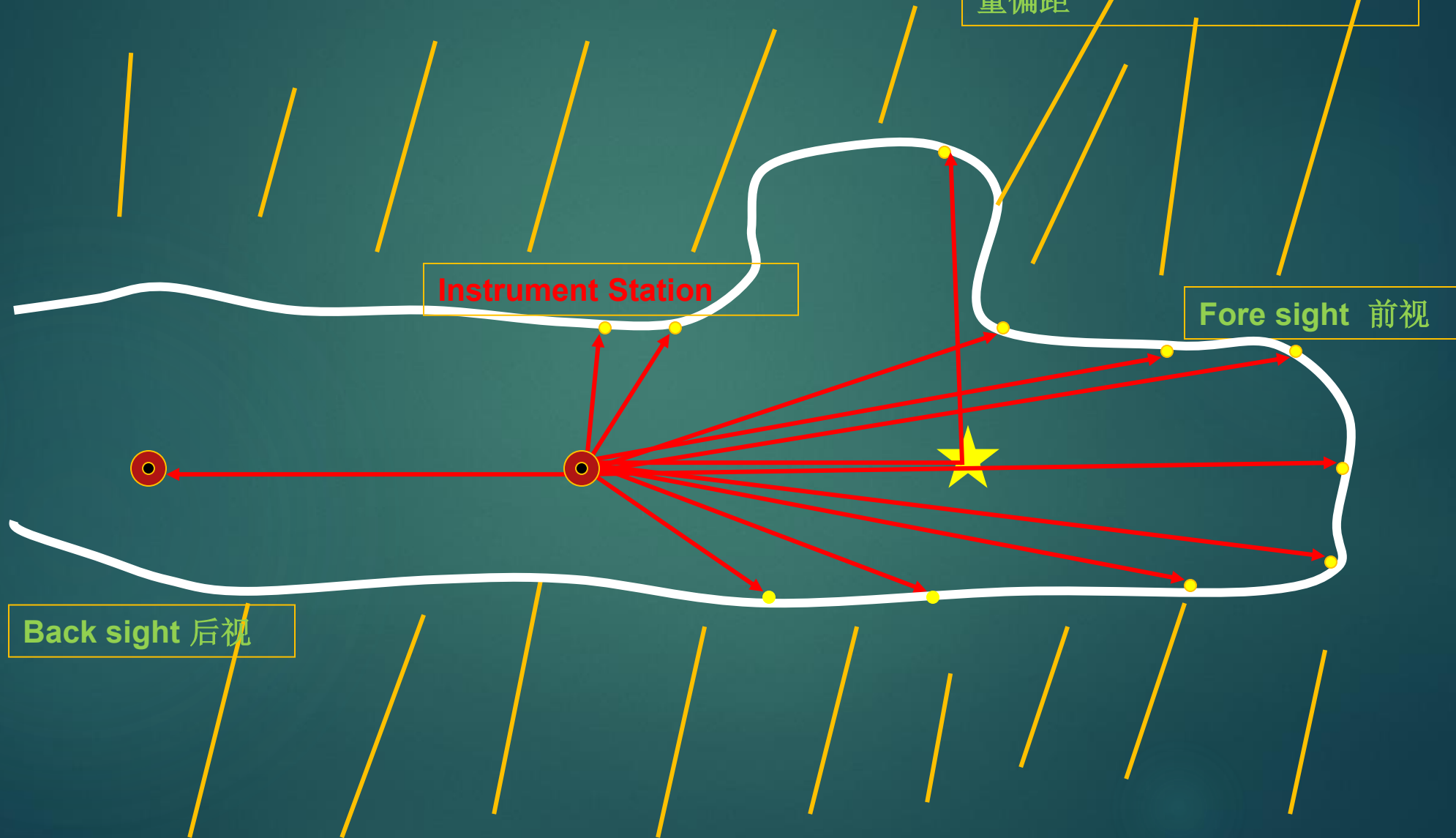
Offsets including
Cubby offsets 偏心,包括

Measure Offset Distance 测
量偏距

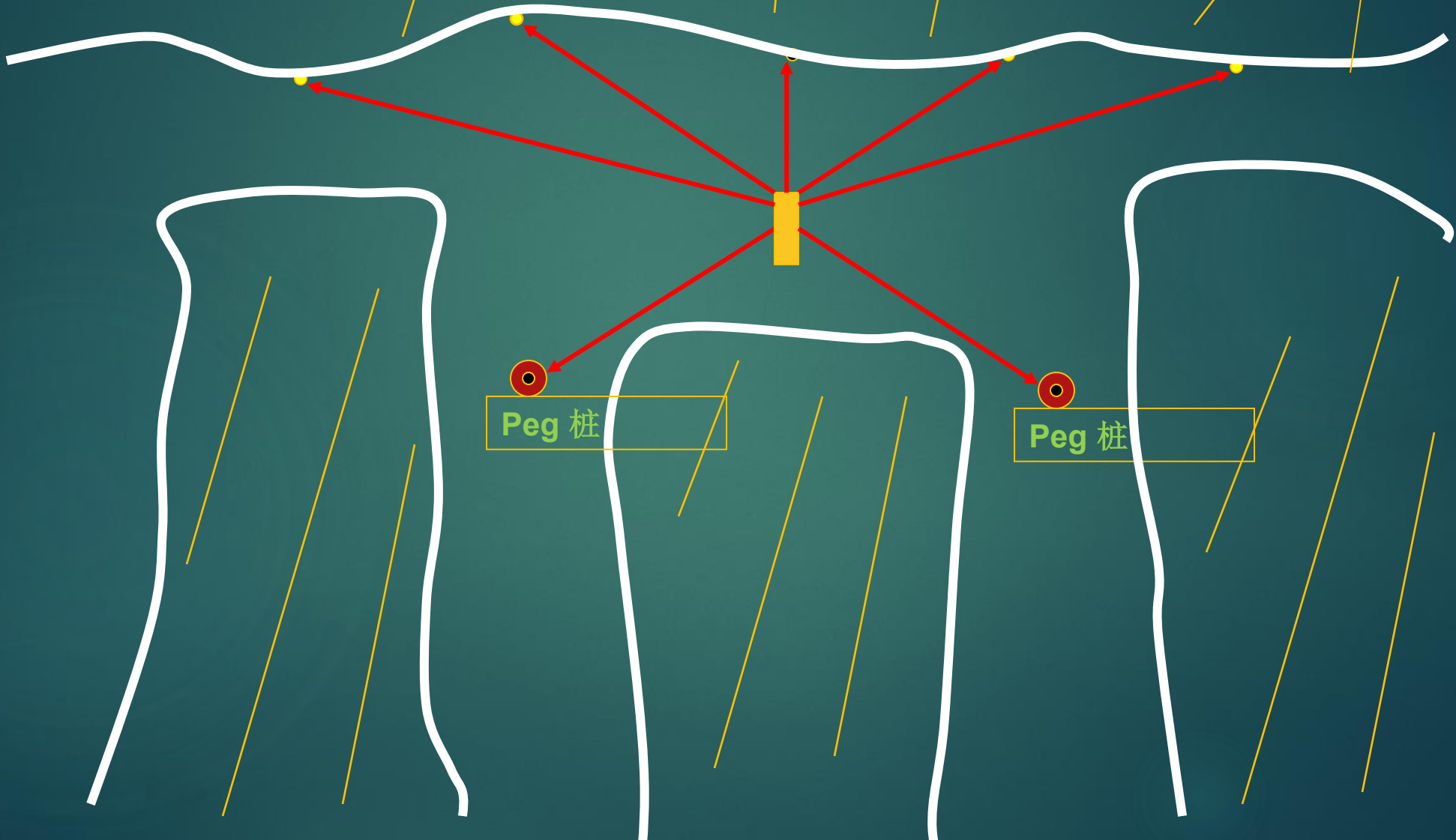
Instrument Station

Fore sight 前视

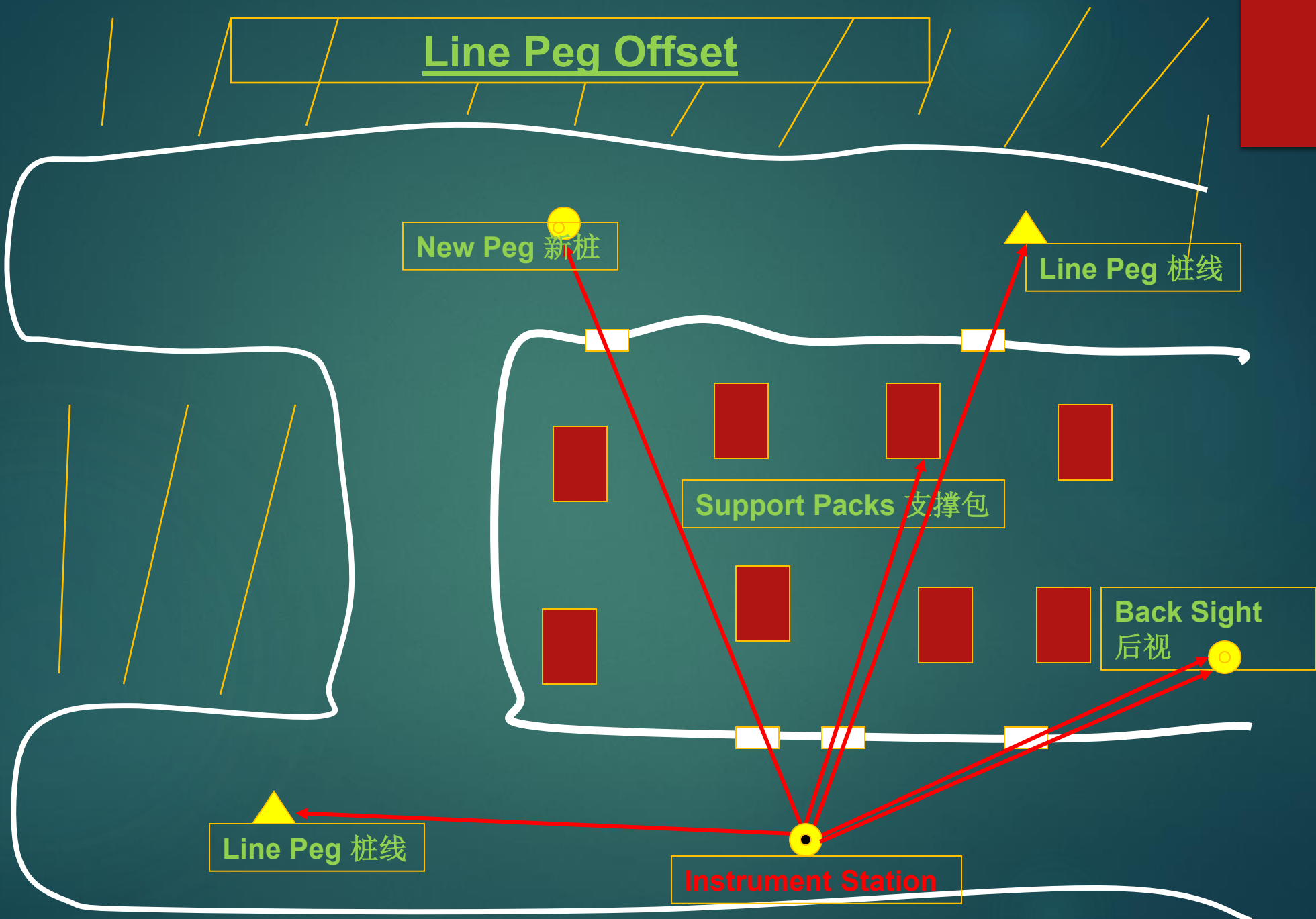
Back sight 后视



2 Point Resection 2点交会



Line Peg Offset



Thank You

