# Volume Survey for RE3/1

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## 4 methods to check the Volume "Z"

- Integration office official drawings
- Survey using laser scanner and laser tracker
- Manual measurement
- IR sensors

• 4 Periods possibly available, 2 used , 19 Dec 2016 and 10 Jan 2017



#### Laser Scanner, first time on a scissor lift



Results to come

#### CSCs are not flat. complicate understanding

Cables over edge of chamber cover

Front End covers at different heights





#### Manual measurement

Radiation dose is monitored. Not a "Controlled Zone"





### IR sensors Jan 2017



### Conclusion

- Will be getting feed back from survey team soon.
- Manual measurements will allow Elena to make accurate model of CSC and interface volume
- IR sensors installed. To be read out asap. Although the discs are not locked we should obtain an understanding of the CSC topology.
- Alignment sensors volume to be modelled.
- IR sensor will be checked for operation in "B" field, to be used in end EYETS if confirmed/calibrated and modified readout.
- Dose is kept to a minimum , ALARA policy, think before you go.