

FROM THE WISDOM TO THE CHALLENGES OF MODERN WORLD

Role of Surveyors in New Challenges.

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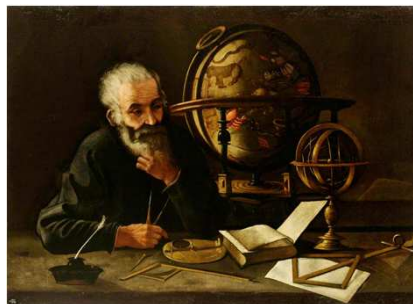
WISDOM

Definition:

*Can be term as ideas
conceived and used
rightly*

Principle of Surveying:

Whole to Part Principle



Who is a Surveyor?

- ▶ He measures the “length and breadth” of a land surface of the earth



MY DEFINITION

A Surveyor is a Geospatial Scientist/Philosopher that acquire Relative Data on Space of the Earth for Development and Monitoring of the Earth



Geospatial?

- ▶ Means, the environment, the circumstances, objects or conditions by which a surveyor is surrounded in terms of:
- ▶ Globalization
- ▶ Demographic changes
- ▶ Reducing Poverty
- ▶ Energy Supply
- ▶ Climate change

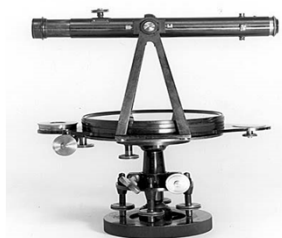


GEOS COMPLEMENTARIES

- ▶ Geology – Science that deals with the dynamic and physical history of the earth in term of material structures, processes with change over time.
- ▶ Geophysics – Study the earth using gravity, magnetic field and seismic method to find minerals such as Oil, Iron etc
- ▶ Geotechnical Engineering – term interaction of Structures and the soil

Technology

- ▶ Am I still relevant in my “Length & Breadth” measurement or the profession is becoming extinct?
- ❖ Since hours of work has reduced
- ❖ Number of labourers has almost gone
- ❖ Computer Automated Draughting (CAD) has sacked my draughtmen
- ❖ Am I “Old-schooled”
 - ❖ Venier theodolite
 - ❖ Gunter’s chain
 - ❖ Leroy pens are the best



These are not meant for me

- ▶ Remote Sensing
- ▶ Seismic Survey
- ▶ Advanced GIS:- is it applicable especially in my cadastral works?
- ▶ Hydrographic Survey
- ▶ Cartographic Software/Mobility Tools(Field-to-Finish)
- ▶ Field Technologies:- Electronic Theodolite, Digital level, Total Station (Robotic and Scan Station), GNSS/CORS technology, UAV/Drone Technology



HARDWARES

- ▶ Am I still a Surveyor without my chains and Vernier theodolite?

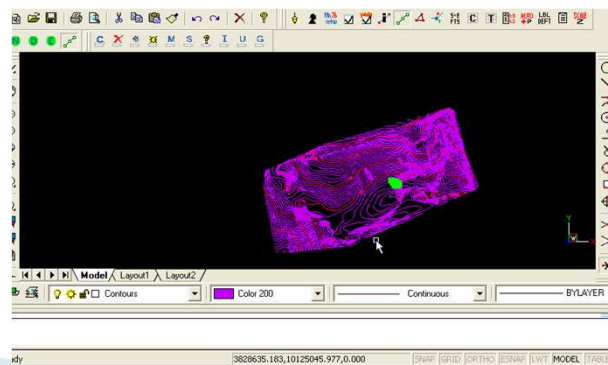
- NTS 372R
- SOUTH S86T
- LEICA SCAN STATION C10
- SCEPTER S10

Just to mention a few



SOFTWARE

- ▶ My Leroy pens are better than these
- ▶ AutoDesk Software
- ▶ Microsurvey Software
- ▶ ESRI Software



How Do I fall in line

- ▶ Rebranding: My practise through skill acquisition, training, conferences (FIG), workshop/seminars and adapting to the tools
- ▶ Rebranding My Personality: By partnership and building institution to have different experts in the new technology
- ▶ Quality Checks: The principle of whole-to-part are still practicable only my output is now quick and faster
- ▶ RUR Principle: READ, UN-READ and RE-READ

CASE STUDY: MICROSURVEY

- ▶ MicroSurvey CAD 2015
- ▶ MicroSurvey Star*Net
- ▶ MicroSurvey FieldGenius– Seismic Surveyor, Calculator
- ▶ MicroSurvey Pointcloud CAD/MicroSurvey CAD
- ▶ MicroSurvey Mapscenes/Forensic CAD

MicroSurvey CAD

- ▶ Read/write AutoCAD (R25 to 2015)
- ▶ Auto linetype, hatchfile, shapefile, fontfile compatible
- ▶ Right of way design
- ▶ Full alpha-numeric point identifier
- ▶ Coordinate Transformation (UTM and more)
- ▶ Data collector interface (All major brands)
- ▶ Traverse Co-ordinate, Closure balancing
- ▶ Active drawing technology
- ▶ 3D least square adjustment with blunder detection
- ▶ Raster Image Georeferencing
- ▶ Surface Modelling
- ▶ Field-to-finish layering, symbols placement.

Forensic Mapscene

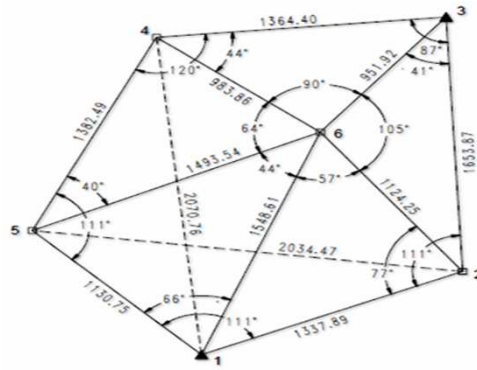
- ▶ For reconstruction of a scene of an accident or crime which helps the court and law enforcement agents to have precise, compelling and irrefutable evidence



MICROSURVEY RANGE OF PRODUCTS

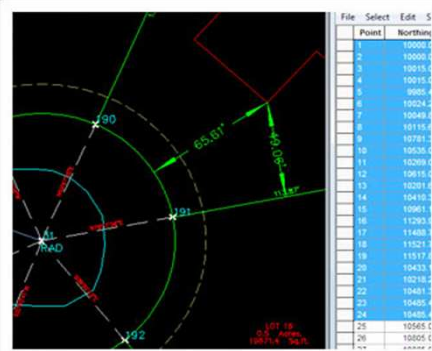
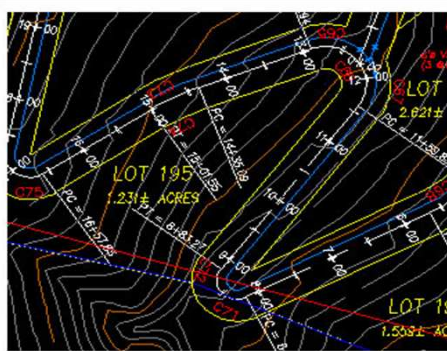


▶ SCEPTER S10

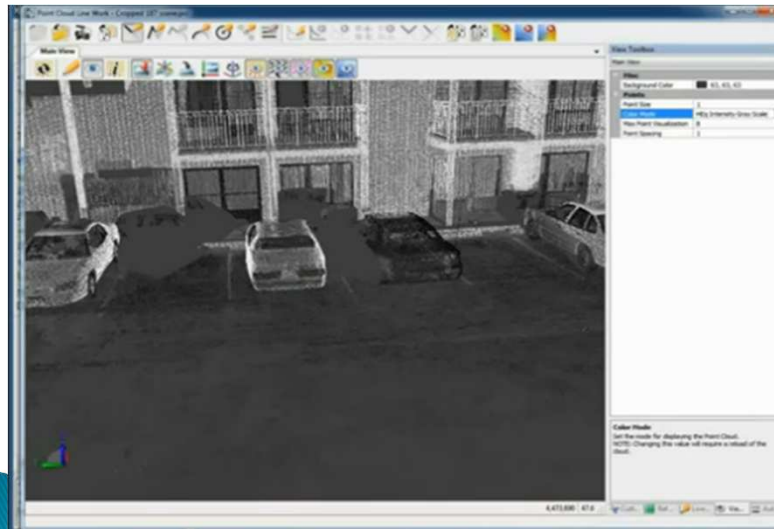


STAR NET. Helping you get the most out of Least square

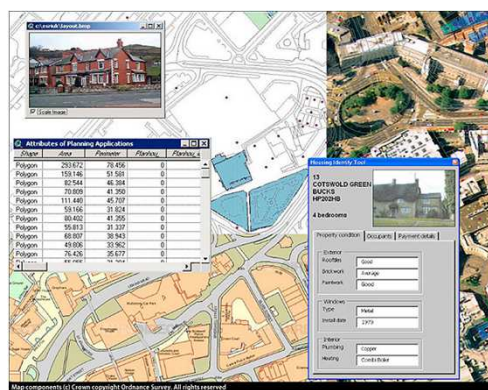
Microsurvey CAD 2015



Microsurvey Mapscene



Geospatial Technology in our present world



CONCLUSION

- ▶ RUR Principle: Read, Un-Read and Re-Read as to meet up with WISDOM and CHALLENGES of the Modern World

▶ THANK YOU