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History and Development of Surveying and Measurement in Malaysia

Sr Dr. Azhari bin MOHAMED
Sr Mohammad Zaki bin MOHD GHAZALI

Department of Survey and Mapping Malaysia

Commission: IIHSM



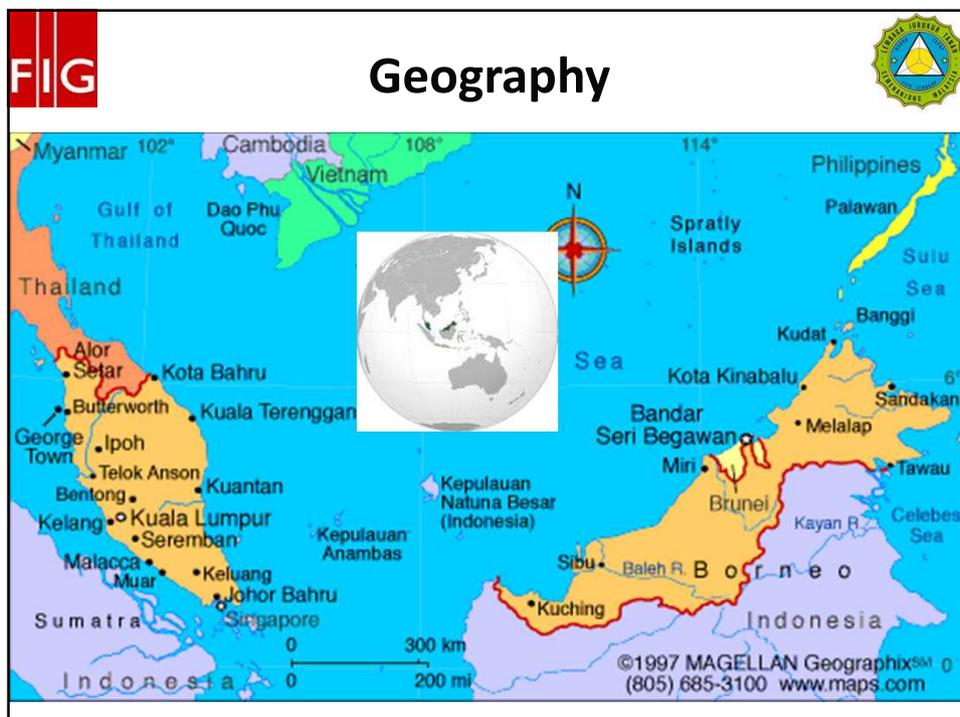
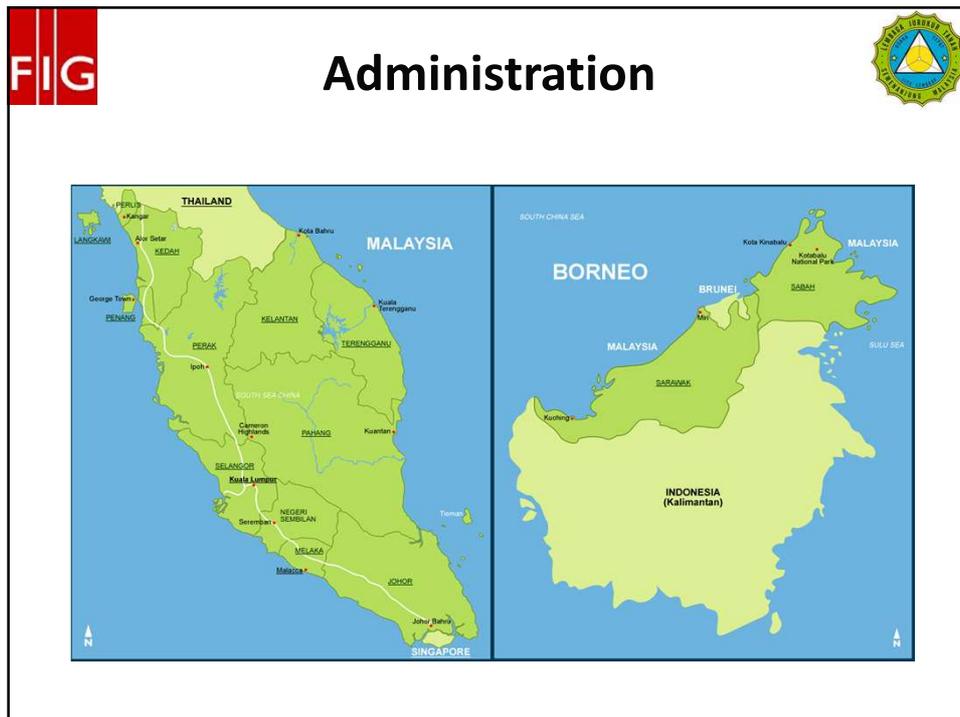
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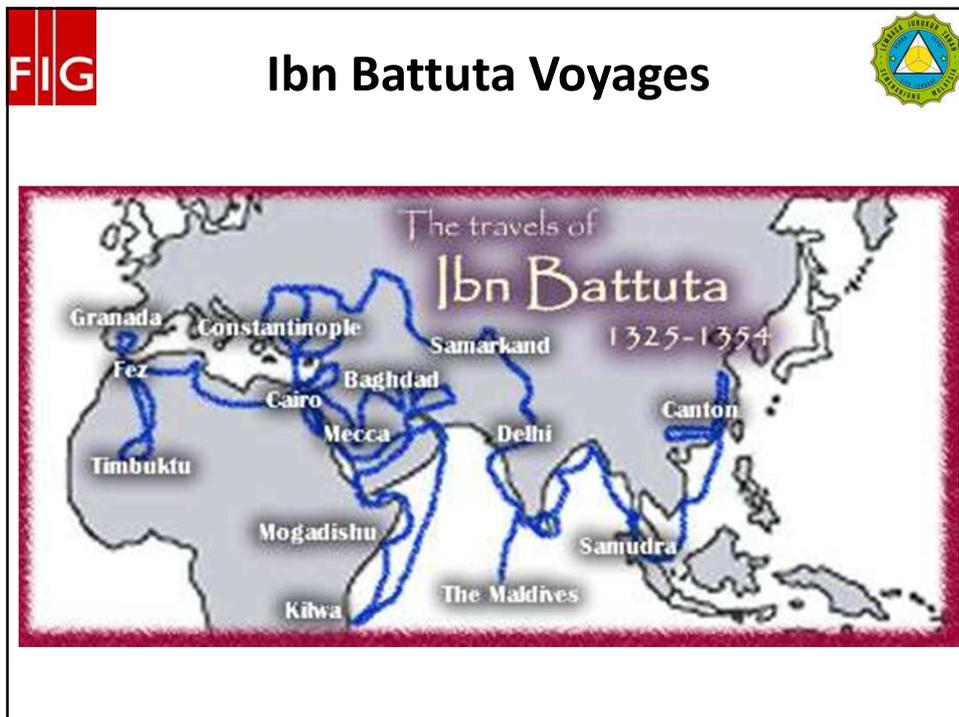
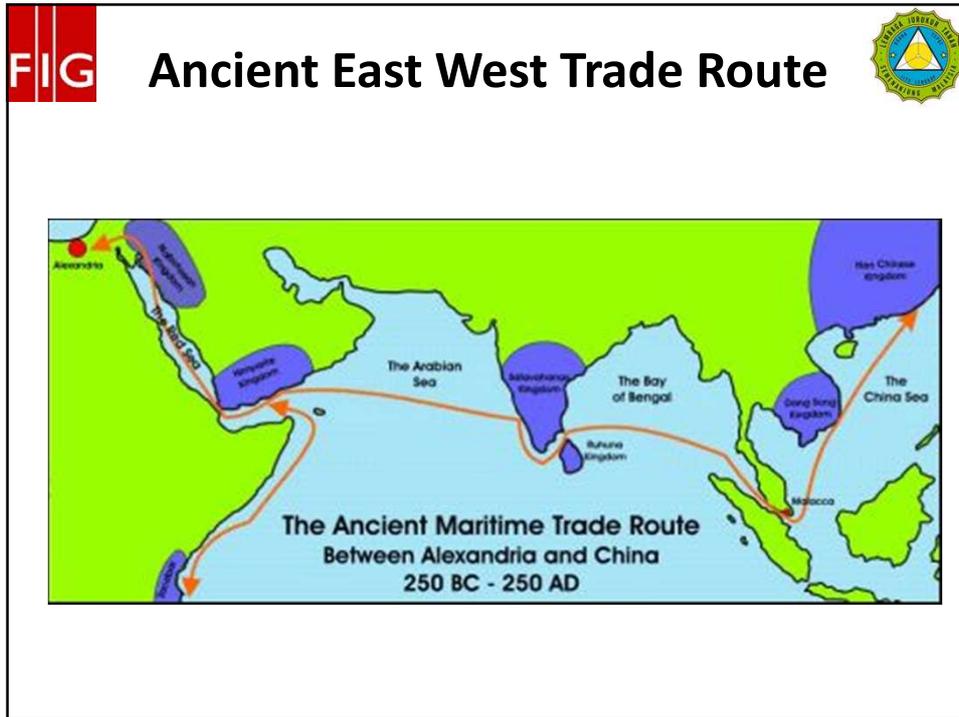
Scan Through

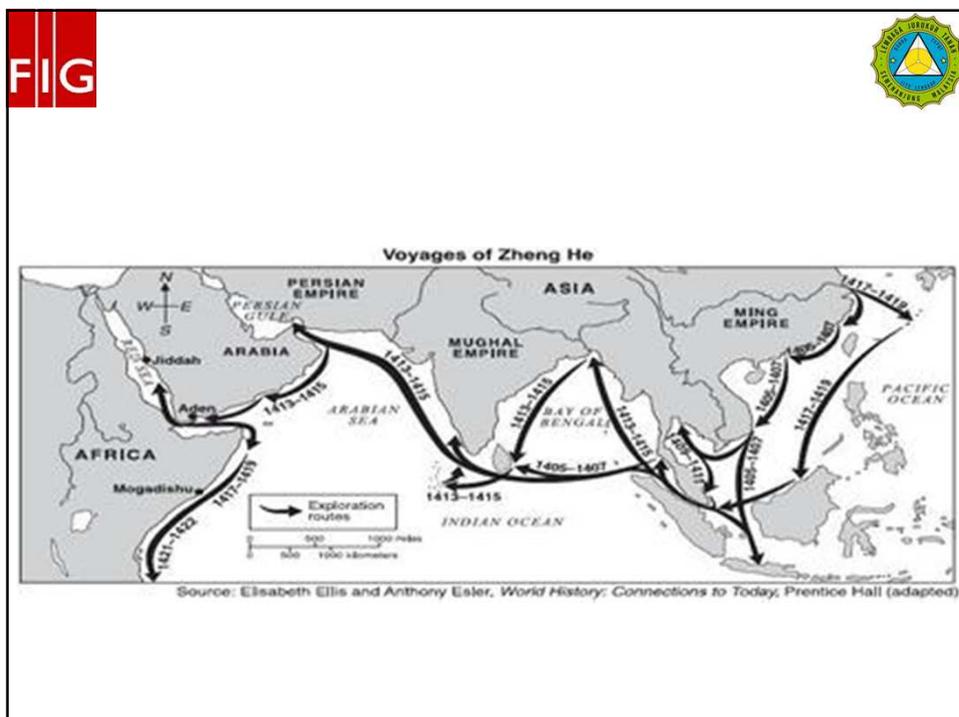
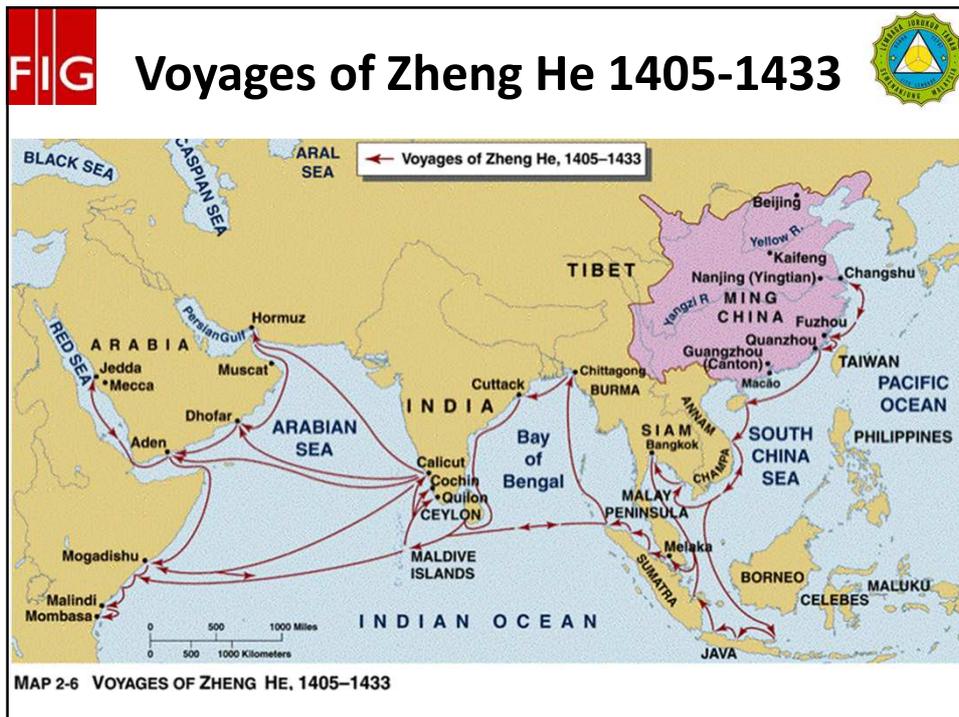


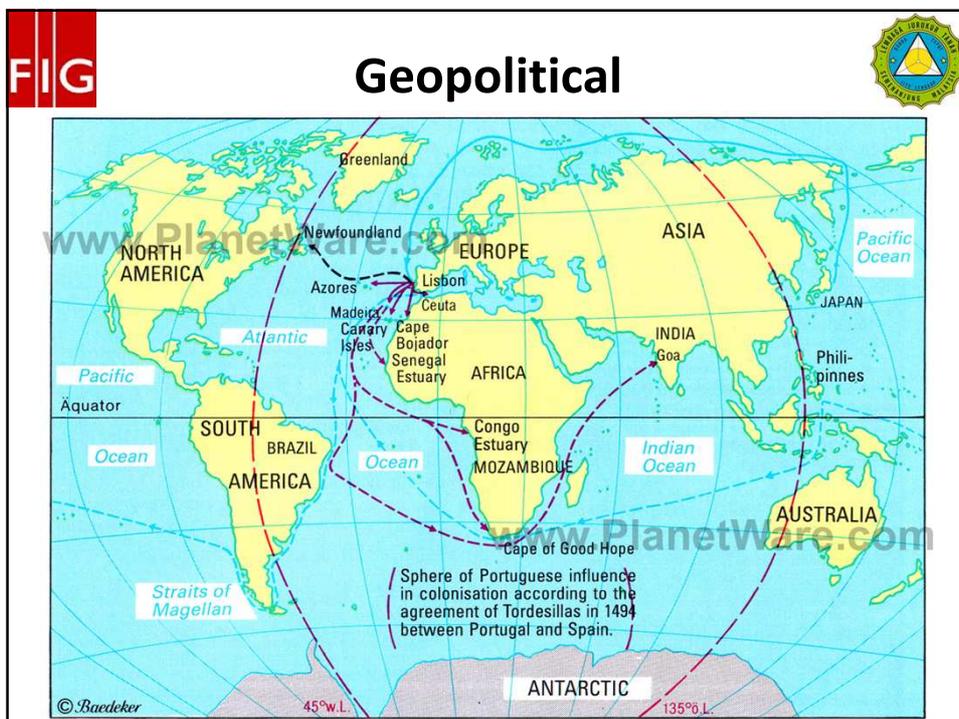
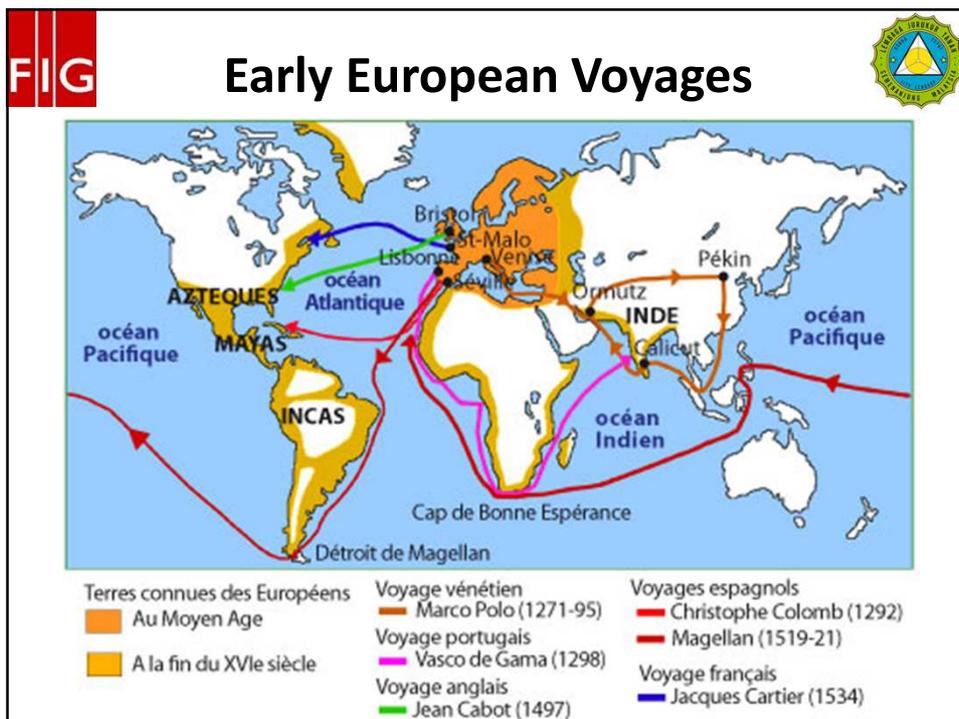
History of surveying and measurements	Highlight important events
State of the positioning framework	History of Department of Survey & Mapping Malaysia - JUPEM

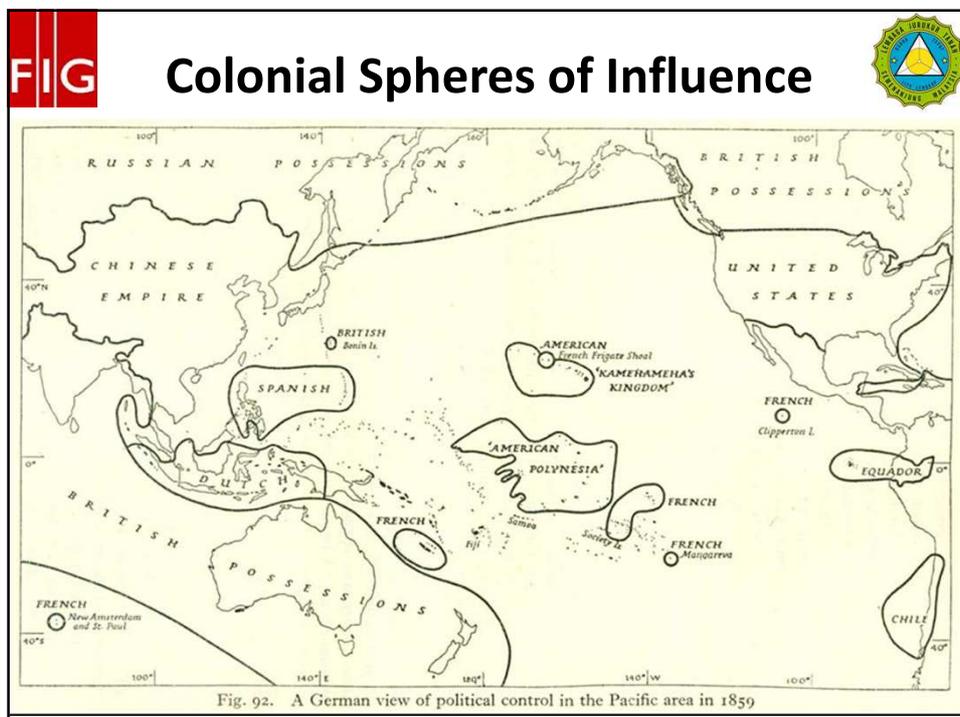
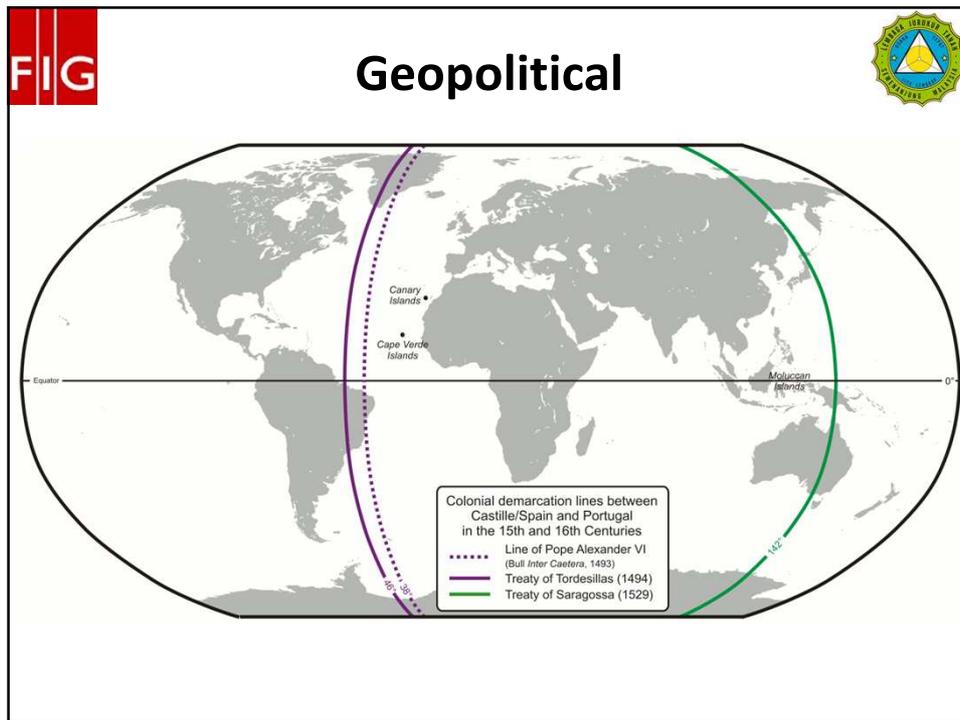


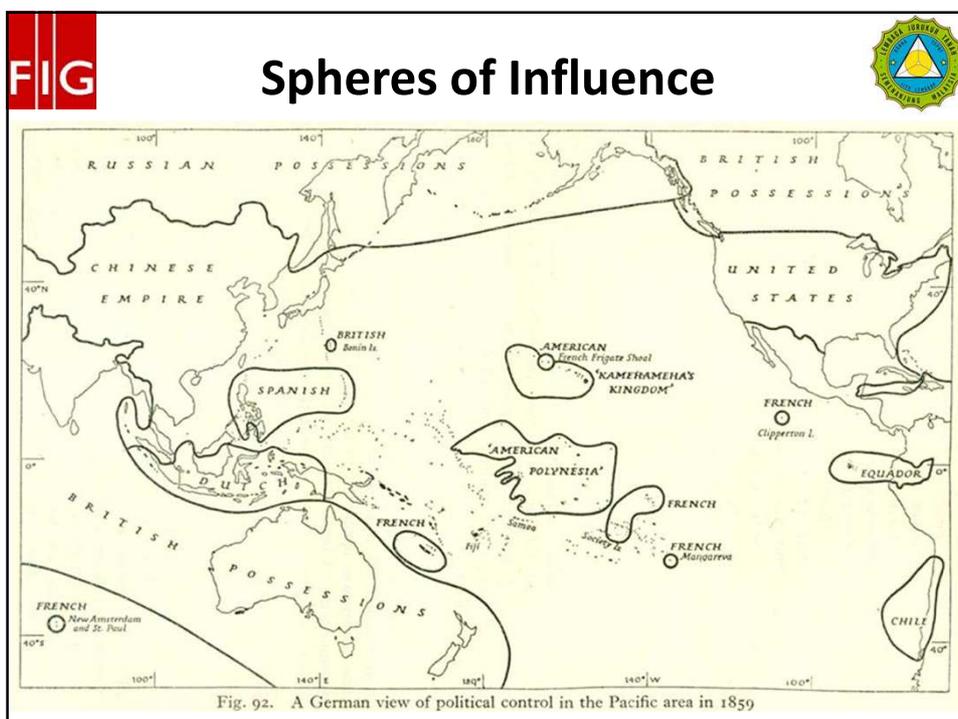
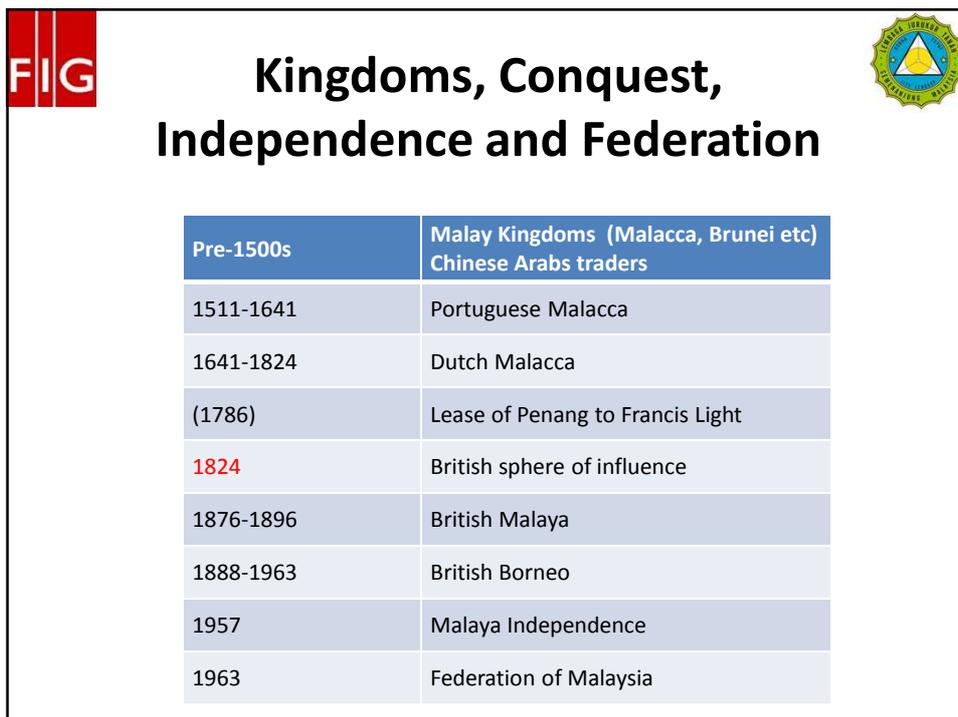


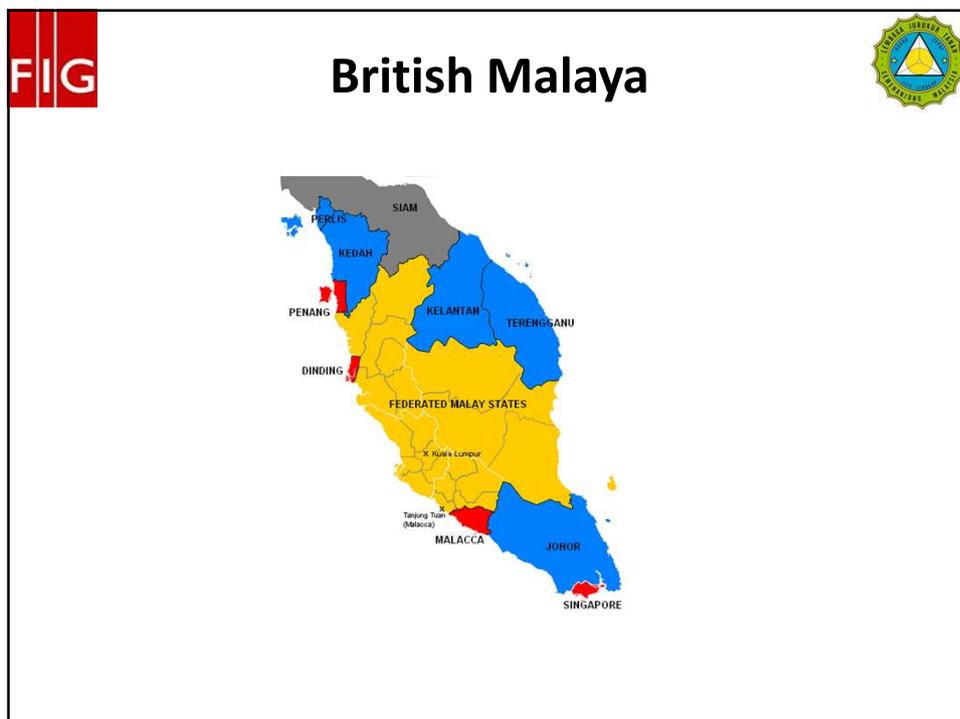
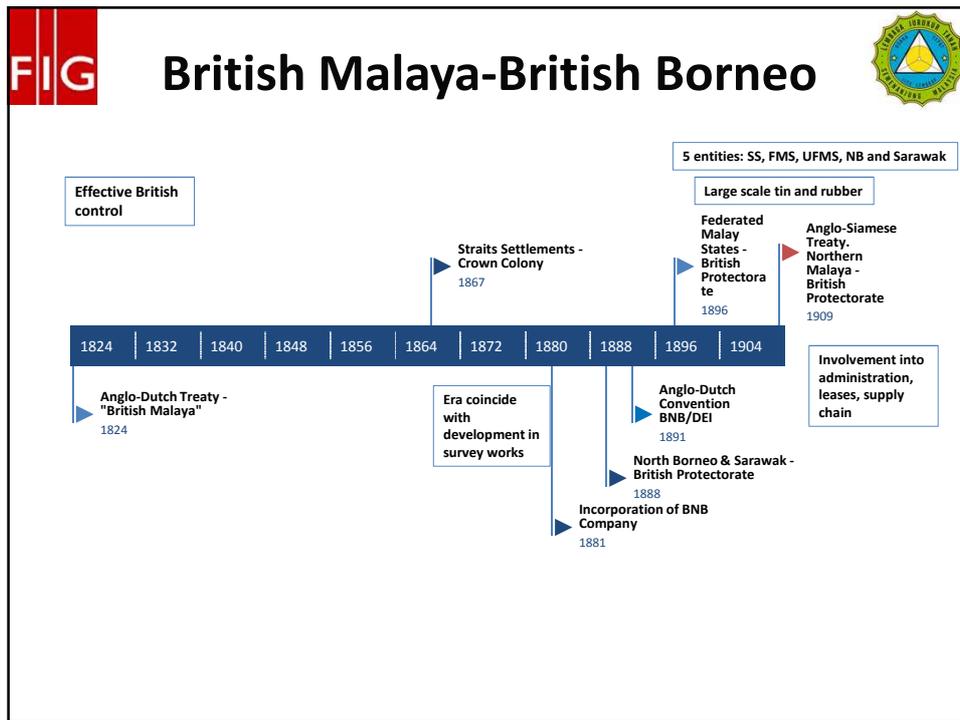










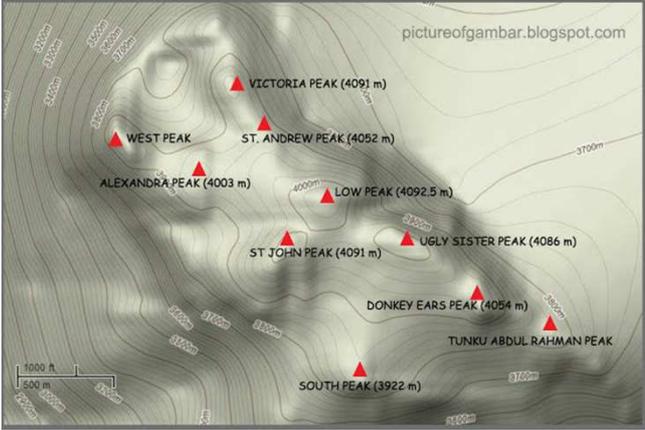


FIG

Hugh Low & Mt Kinabalu







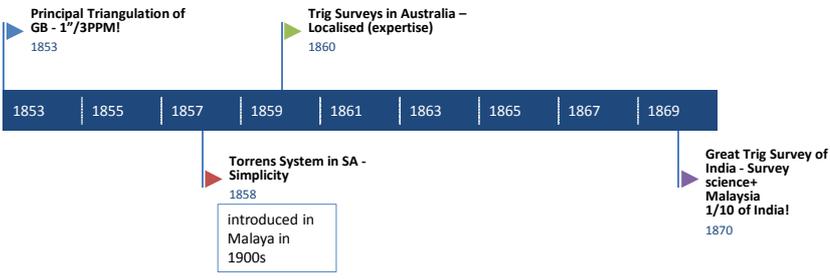




FIG

Developments Around the Region





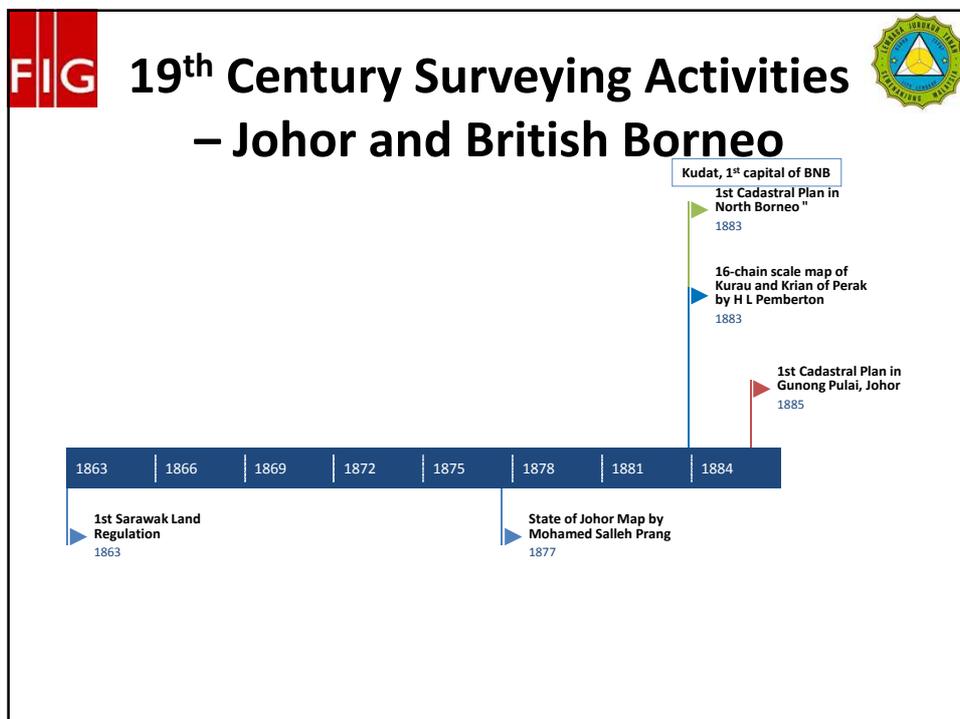
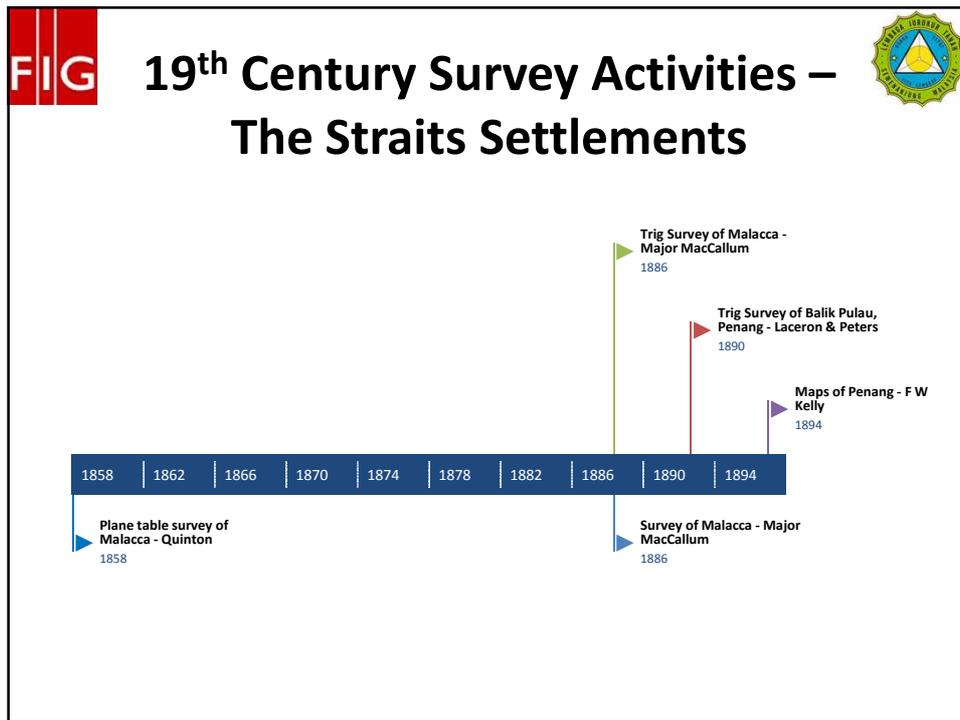
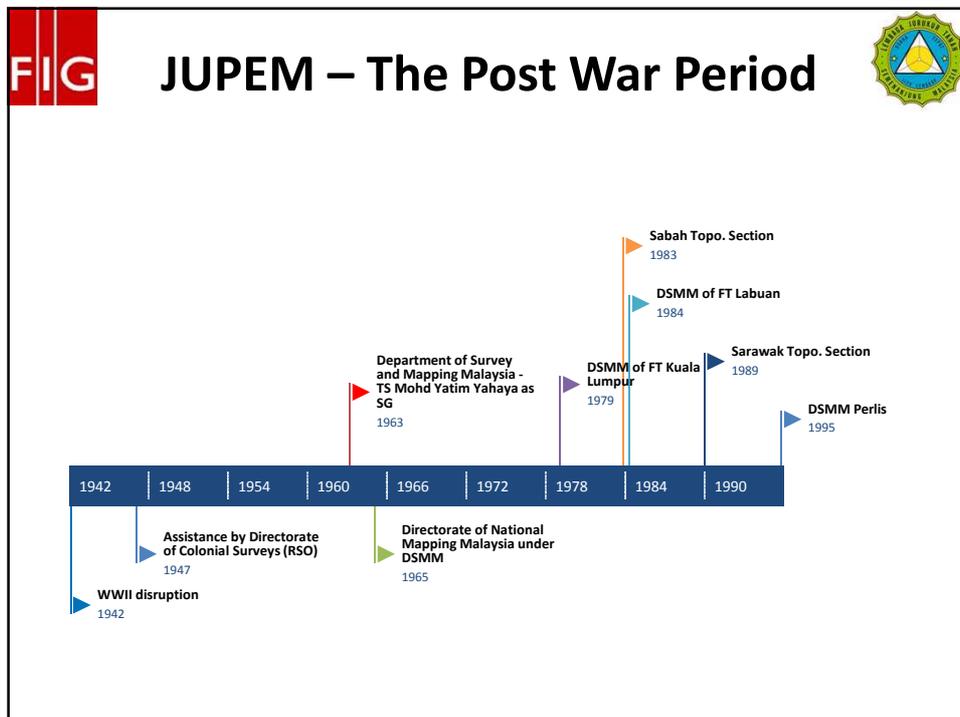
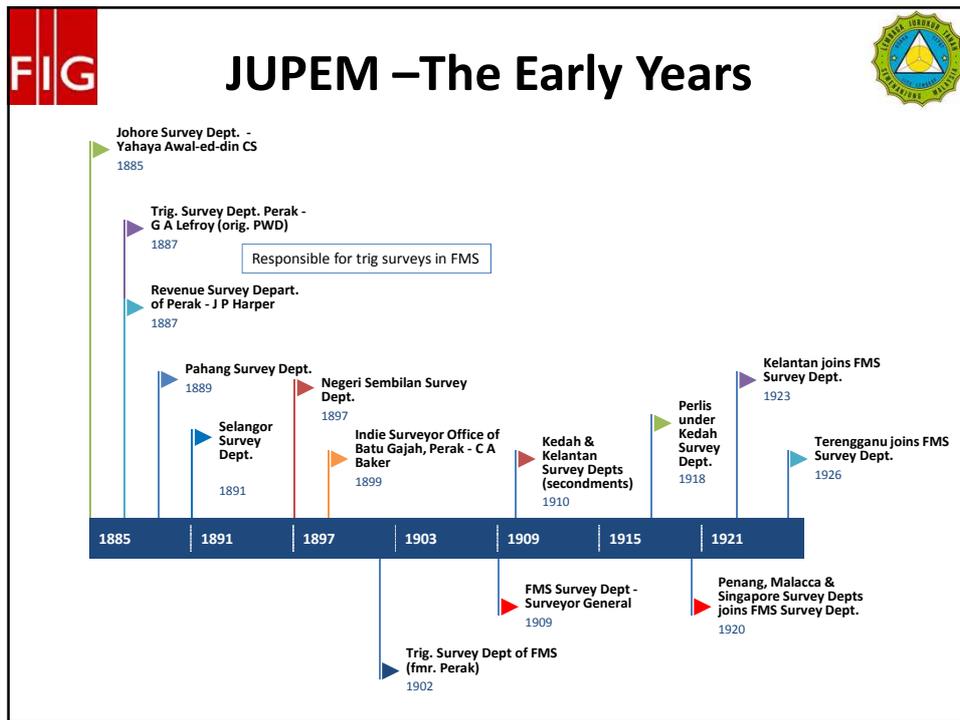


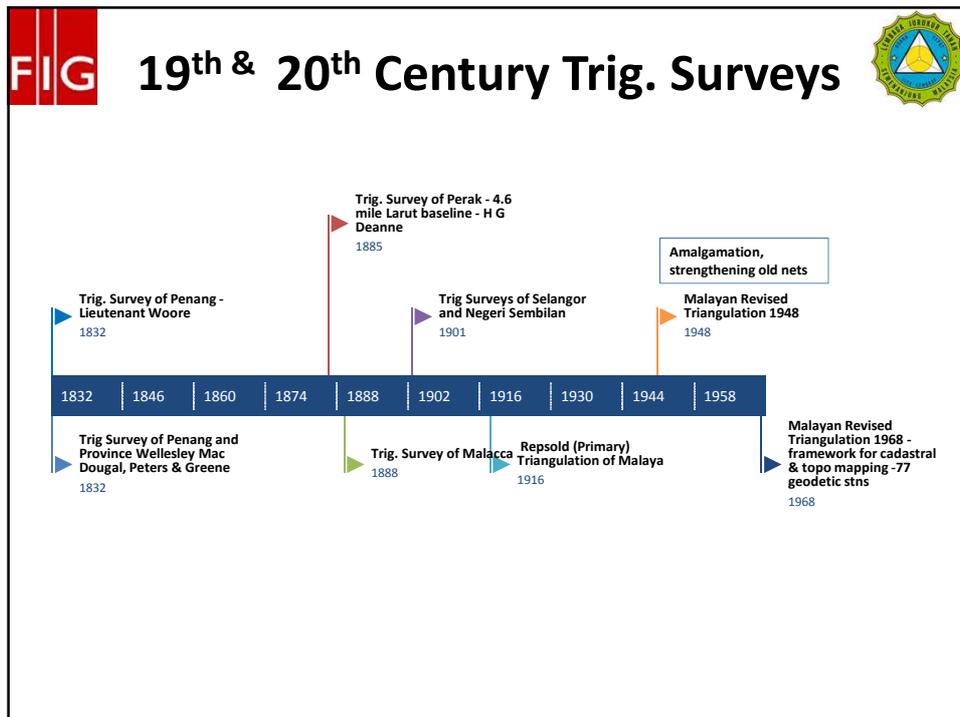
FIG First North Borneo Certified Plan
1883

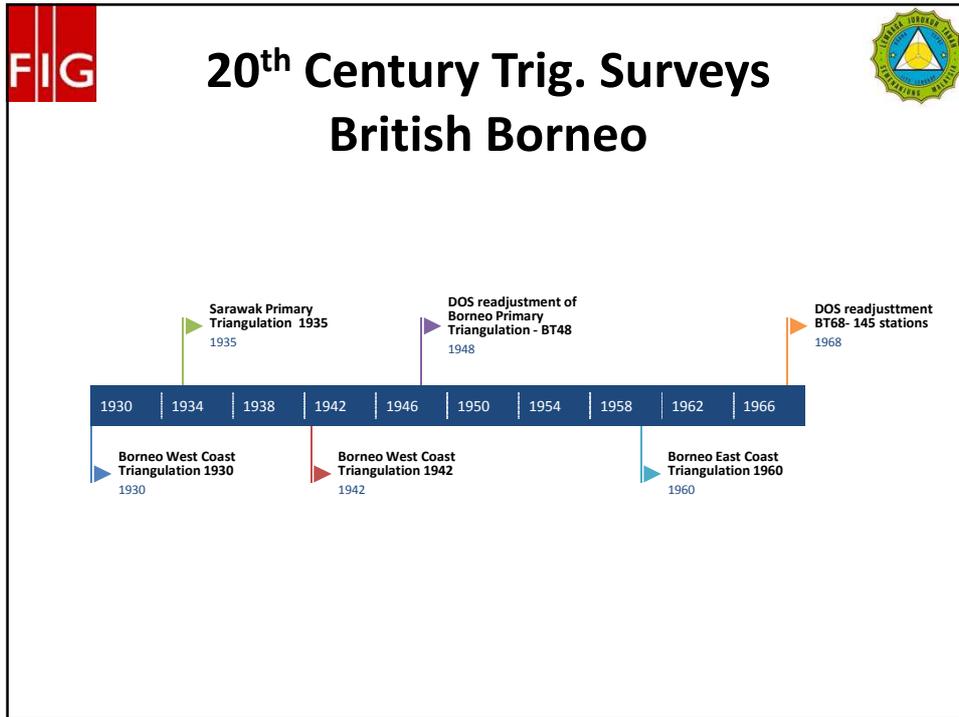
PELAN UKUR PERTAMA DI SARAH YANG DILULUSKAN
3 MAREK 1883

FIG First North Borneo Registered
Land Title 1884

GERAN TANAH PERTAMA YANG DIDAFTARKAN
PADA 2 FEBRUARI 1884







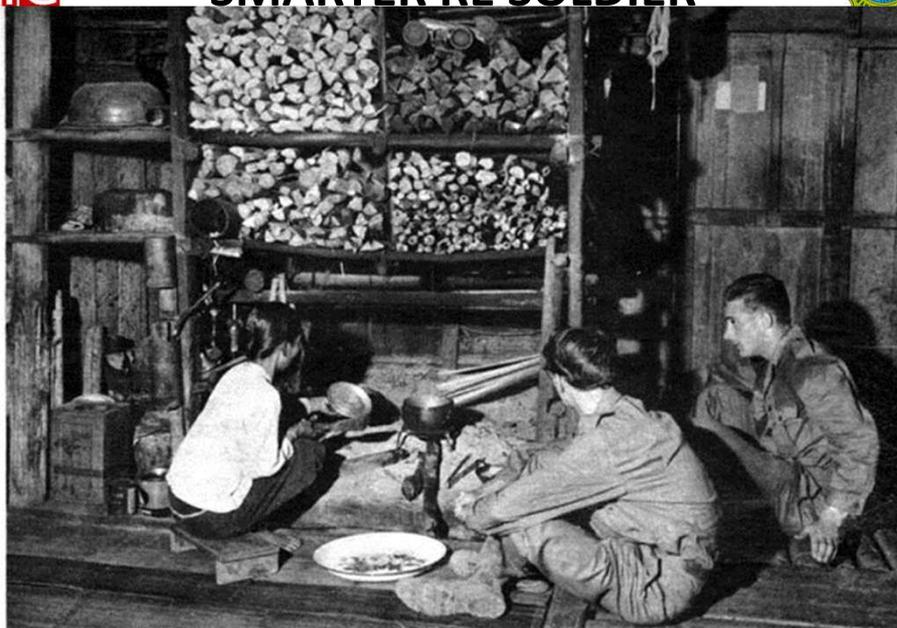
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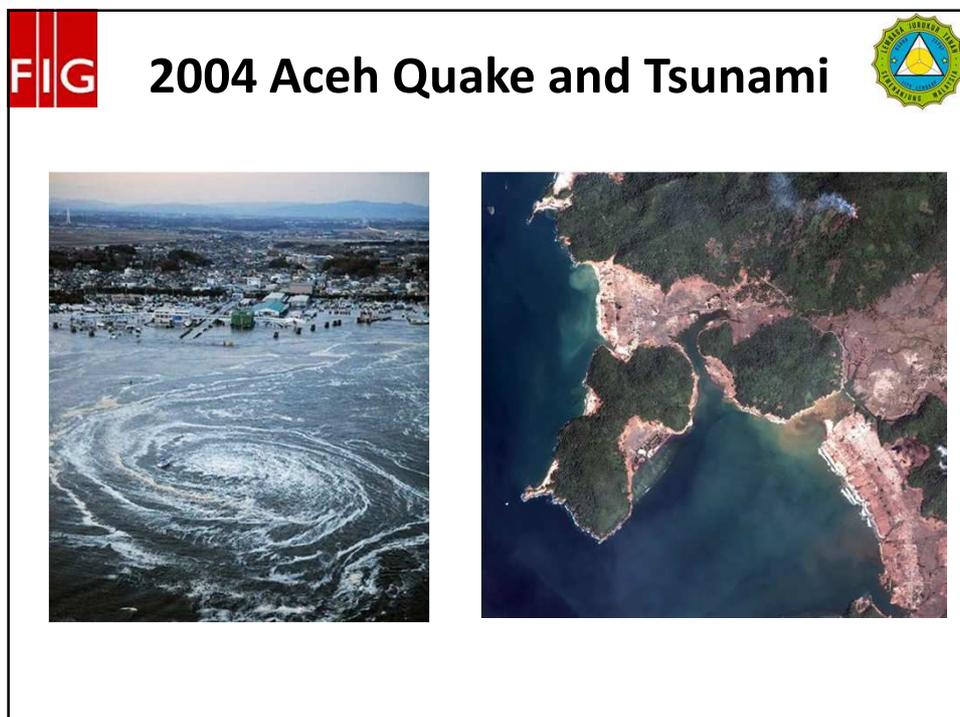
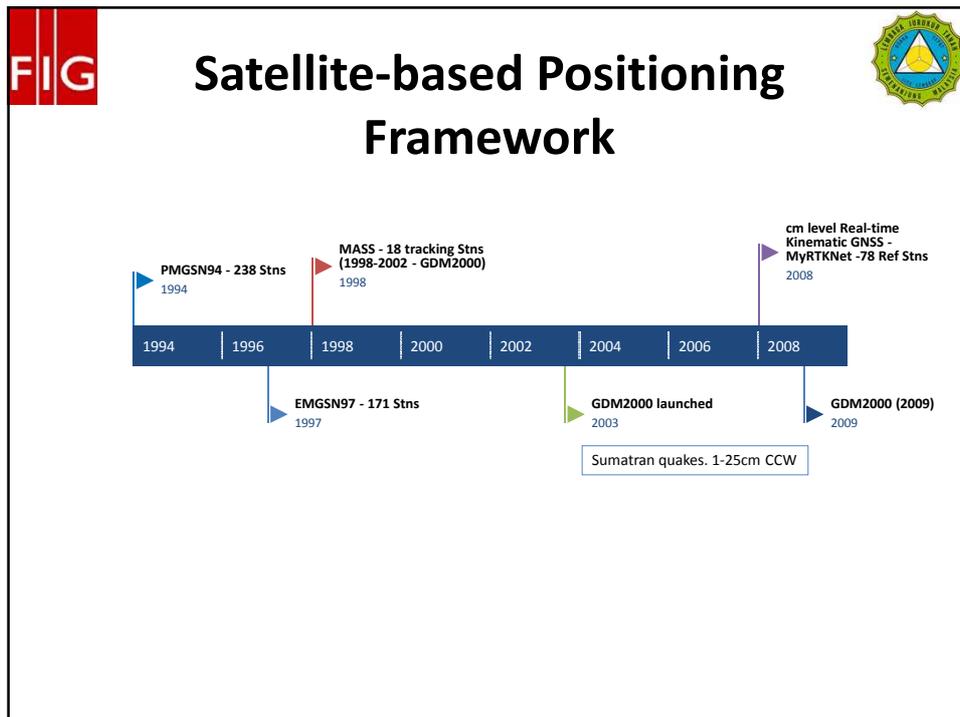
British STRE in Washington

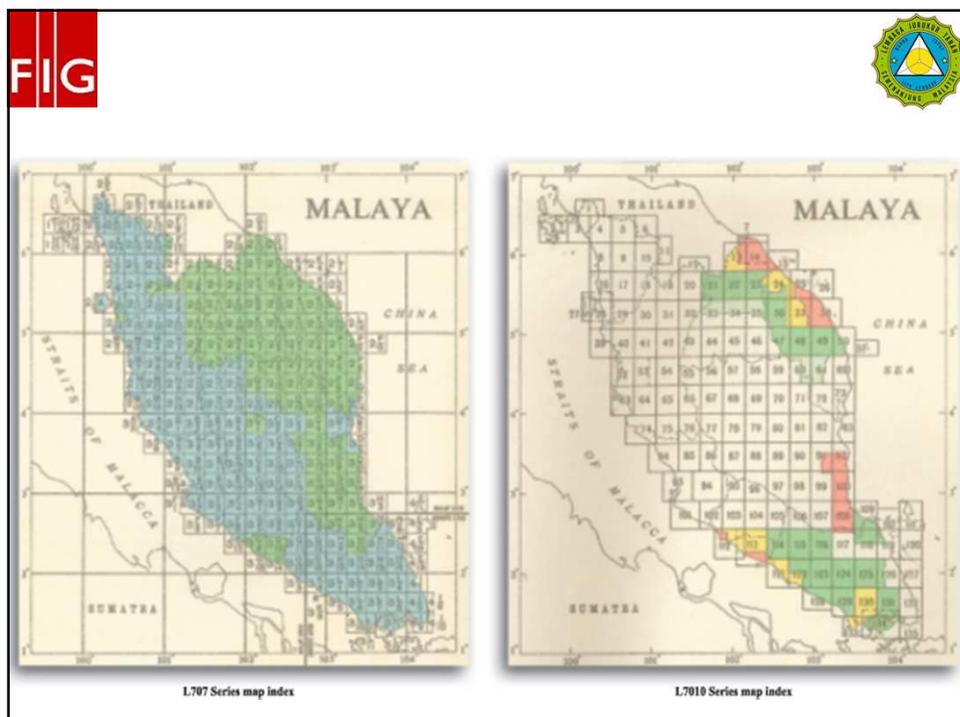
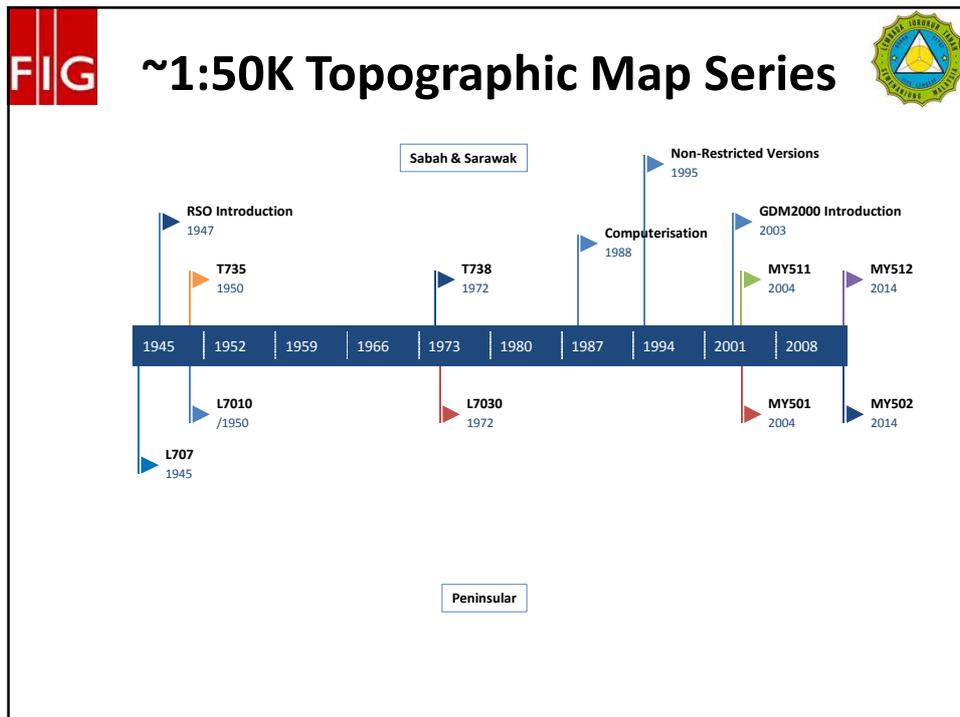


FIG

SMARTER RE SOLDIER

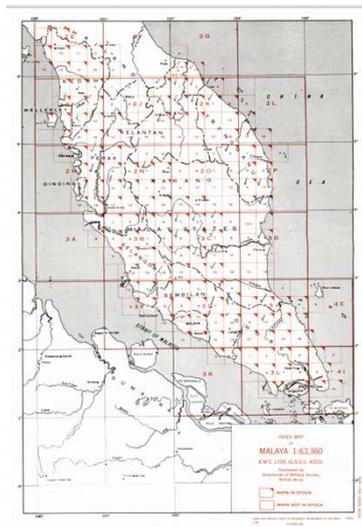






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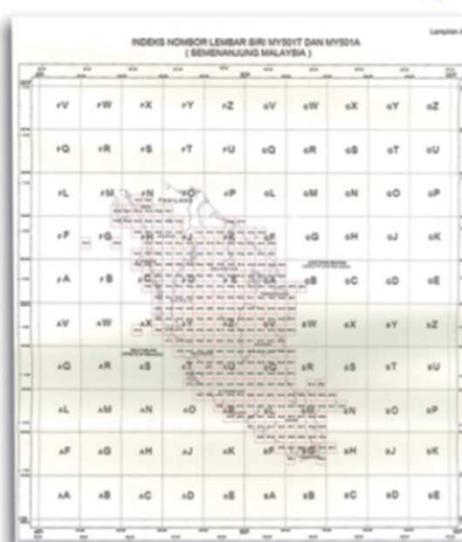
AMS Index – US Army Series



FIG



L7030 Series map index



MY501 Series map index

FIG

Sappers Geonaming Dilemma



The Sappers' task is part technical, part physical, part research. They work from a map compiled from aerial photographs showing rivers and villages. Physical details are added by working from the highest points in the area, calculating an unknown height from comparisons with two other heights previously determined. Setting up observation points involves chopping down 80ft trees to form a pyramid, and contacting the other points with a flashing light, heliograph or mirror. Sometimes, when the ground is unusually high, the key points are covered for long periods by cloud, and the surveyor may have to wait a month just to complete two hours' work.

But this is only one aspect of the task. The surveyor must also note the types of terrain, vegetation, swamps, water points, and name every village, jungle track and stream. This too has its complications as Malays and Dyaks use different place names. The district officer is accepted as the authority and the completed maps are sent to him for checking. But the whole process takes about two years and by this time a new district officer may have taken over who may have different ideas about some of the titles.

The young Sappers took a six weeks' Malayan language course before being sent into the jungle and several have augmented this by picking up the local dialects. This helps enormously in promoting good relations with the tribesmen, upon whom the Sappers depend for information and help. Much can also be learned from the porters. Each man learns his own job and gets on with it, and regular operations are

FIG

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SEGAMAT





PROVISIONAL GSGS 4203 (SURVEY OF INDIA)
Survey of India Edition, 1940-AMS 1, 1943.
Second Survey of India Edition, 1944-AMS 2, 1944.
Reproduced under the direction of the Chief of
Engineers by the Army Map Service, U.S. Army,
Washington, D. C., 1944, from pulls of Survey of
India (Hind 1035) Second Edition, 1944.

	50
LIMIT OF MALAY GRID (Yards)	
LIMIT OF JOHORE GRID (Yards)	85

JOHORE GRID

Projection Cassini
Spheroid Everest
Origin Blumut 2° 2' 33" 30 N., 103° 33' 45" 93 E.
False Co-ordinates of Origin 450,000 yards E., 300,000 yards N.

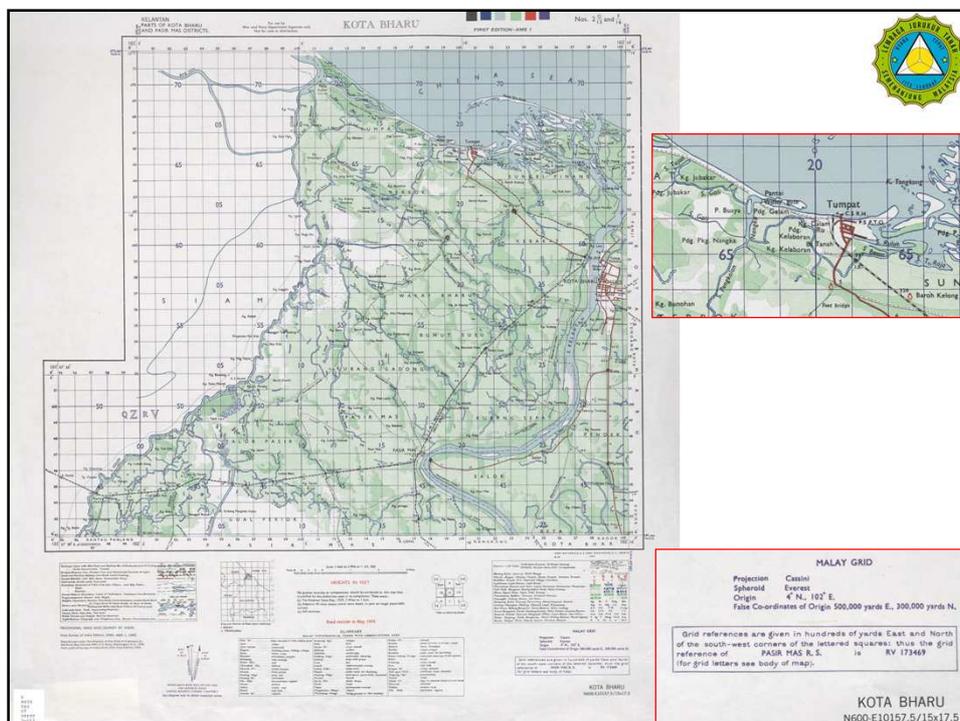
FIG

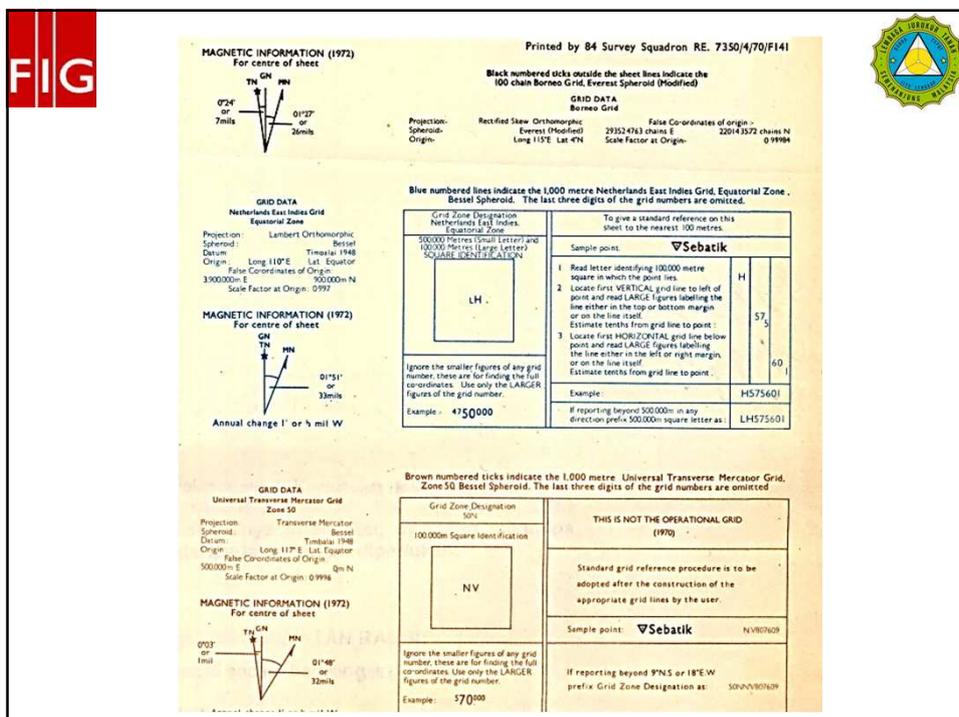
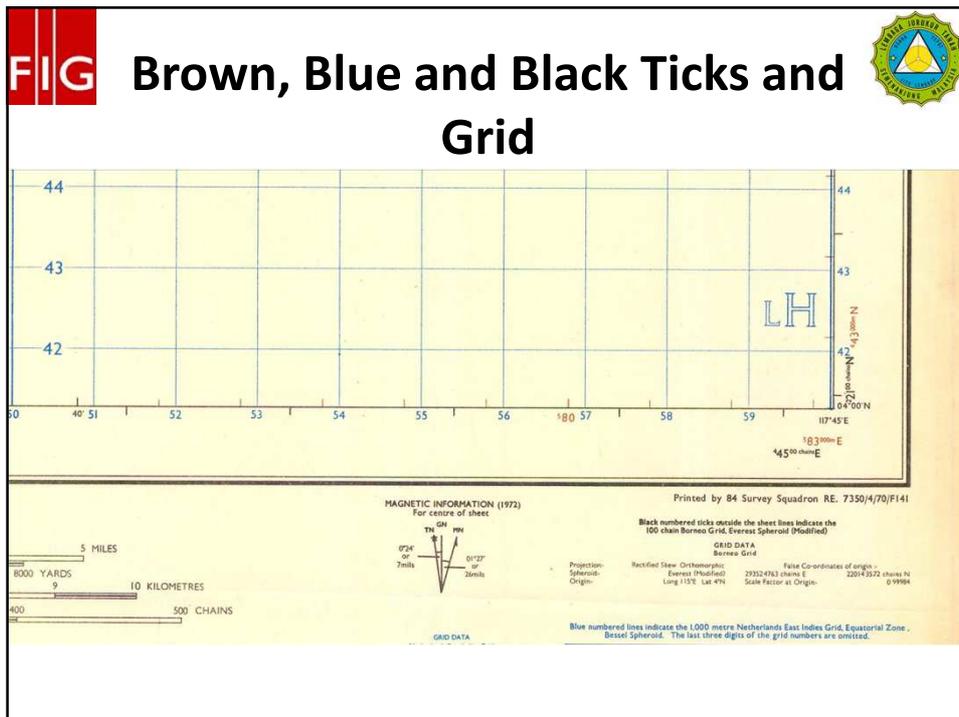


PROVISIONAL GSGS 4203 (SURVEY OF INDIA)
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JOHORE GRID

Projection Cassini
 Spheroid Everest
 Origin Blumut 2° 2' 33"·30 N., 103° 33' 45"·93 E.
 False Co-ordinates of Origin 450,000 yards E., 300,000 yards N.







Early Map Production Branch Other Prints





Share certificate

- Currency Notes
- Bonds
- Stamps
- Declaration of Independence
- Tin Stock Certificates



Conclusion



- Brief tour of history
- Colonial, post-war, and modern efforts
- Great difficulties encountered, but served the purpose, relevant
- 130 years of serving the country
 - Excellent pictorial historical compilation book
 - More emphasis of historical documentation
- State-of-the-art positioning and mapping solutions
- Integration with height component for real-time precision 3D positioning
- New products and services
- Improvement of services as we head for 2020
- “...Enhancing The Relevance”










**Thank you for your
attention and have a good
trip back home!**

Sr Dr. Azhari bin MOHAMED

azhari@jupem.gov.my

Sr Mohammad Zaki bin MOHD GHAZALI

zakighazali@jupem.gov.my

Department of Survey and Mapping Malaysia

