History of Surveying & Mapping in Malaysia

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Key words: History; Surveying, Mapping

SUMMARY

In Malaysia, records show that the earliest survey department was established in the state of Johore in 1885, but surveying works were already carried out a few years prior to that. Most of the early surveys appeared to be in scattered parcels and measurements were of boundary length without bearings. A general survey of those lands under occupation was started by J.O. Moniot in 1851 using plane table and chain but this survey was found unreliable due to its low technical specification and subsequently land administration continued in a state of confusion. The first known cadastral plan was dated 1885 and appertained to a plot of land in Gunong Pulai area. When Mohd Salleh was transferred to Muar and Batu Pahat, he prepared a map of those two districts which is still preserved. A further edition of the state map was prepared in 1907 possibly based on the first one. A copy of this map is still preserved today in the Royal Palace of the Johore Sultan. As in the case of the establishment of the early geodetic infrastructure for the basis of surveying and mapping in Peninsular Malaysia, known as the Repsold Triangulation network, JUPEM obtained the initial position of a point in Taiping in 1885 by directly observing the stars. The principle of triangulation was based on simple trigonometric procedures and basically it consisted of the measurement of the angles of a series of triangles. With the longitude, latitude, and azimuth of the initial points obtained by astronomical observation, similar data was computed for each vertex of the triangles thereby establishing triangulation stations or geodetic control stations. Nowadays, the operational use of satellite techniques in geodesy, geodynamics and surveying started. The United States Department of Defence began to develop the new NAVSTAR GPS and it was in 1987 that this new technology was introduced to JUPEM. This paper shall describe the brief history of survey and mapping in Malaysia, including current trend and some latest development.

FIG Congress 2014 Engaging the Challenges – Enhancing the Relevance Kuala Lumpur, Malaysia 16-21 June 2014 1