

UNIVERSITI TEKNOLOGI MARA

**QIBLA DIRECTION VERIFICATION
OF ARAY ROYAL OLD TOMB
USING UAV TECHNIQUE**

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of the requirements for the degree of

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(Hons) – AP 22**

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AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

The rapid development in the design, research and production of various types of Unmanned Aerial Vehicle has an influence on a wide range of application and fields. UAV offers the rapid data collection and can avoid hazardous environment without risk of human and others. This study conducted to verify the qibla direction at the Arau Royal Old Tomb, Perlis by using the UAV Technique. The aerial photographs were obtained at the surrounding old tomb area using Phantom 3 Standard camera and the both of control points and verification points were obtained from the GPS observations. All the data obtained at the tomb area including the established qibla direction from the Perlis' Mufti Department and DSMM were used to produce the orthophoto. The orthophoto then been used for qibla direction verification and old graves qibla direction checking. Each deflection then been tabulated for easier reading and the Arau Royal Old Tomb then been mapped containing two qibla direction which are the new and the old. In conclusion, this study has achieved all the proposed objectives and proves that UAV system can be used for qibla direction verification and checking for Islamic graves.

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