

**UNIVERSITI TEKNOLOGI MARA**

**DETERMINATION OF POSSIBLE ROUTE FOR  
INVADERS AT KOTA PUTRA, PADANG TERAP USING  
UAV IMAGE**

**MOHAMAD ARHAM BIN MAHASAN**

Thesis submitted in fulfillment  
of the requirements for the degree of  
**Bachelor Science of Geomatics**

**Faculty of Architecture, Planning and Surveying**

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## **CANDIDATE DECLARATION**

I declare that the work in this thesis/dissertation 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.

Name of Student : Mohamad Arham bin Mahasan  
Student I.D. No. : 2015672608  
Programme : Degree of Science Survey and Geomatics – AP220  
Faculty : Architecture, Planning & Surveying  
Thesis/Dissertation Title : Determination of Possible Route for Invanders at Kota Putra Putra, Padang Terap Using UAV Image.

Signature of Student : .....  
Date : 23 July 2018

## **ABSTRACT**

In order to uphold the sovereignty of the state, the defence system and the immunity of state borders rather than easily encroached upon by intruders must be well maintained. The Lahad Datu intrusion gave a surprise to Malaysia as it involved non-state actors from foreign countries. The question arises in questioning the fragility of the country's defence structure and the failure of the Malaysian Maritime Enforcement Agency (APMM) for delays in detecting the entry of the armed forces to enable them to capture Kampung Tandu and Felda Sahabat 17 in Sabah. Therefore, this study was established through the “Persatuan Sejarah Malaysia Cawangan Kedah Darul Aman” to discuss the direction and sovereignty of the Kedah State borders from being infringed. This study begins with looking at the history of Padang Terap area and the study on the surface of the earth in the area using mapping from the UAV in line with the purpose of this study, to study the capabilities of UAV in providing good data in conjunction with the available data from JUPEM which uses conventional photogrammetry method. Furthermore, the three objectives that have been achieved from this study have explained the capabilities and capabilities of UAV in providing data that meets the desired requirements. With this, the assessment of tracing potential routes for intruders using UAV is seen to be more economically in terms of cost and time. Smaller consumer demands and time for faster aerial photo processing cause more relevant UAVs to be used today than conventional photogrammetry methods.

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