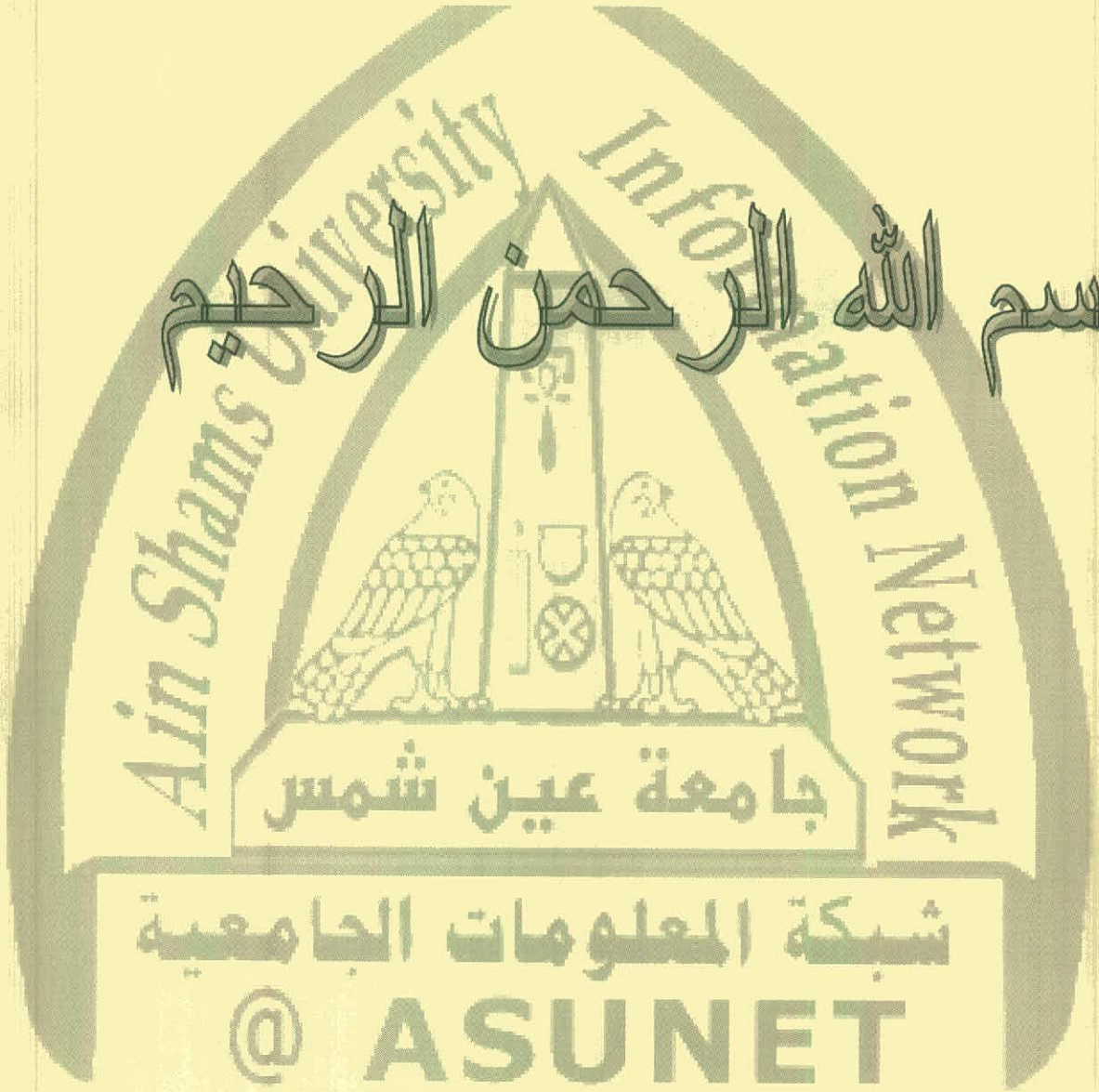

شبكة المعلومات الجامعية




# بسم الله الرحمن الرحيم


# شبكة المعلومات الجامعية

# التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

# جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

## قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد أعدت دون أية تغيرات

## يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

**To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%**

# بعض الوثائـــــــق الاصليـــــة تالفـــة

# بالرسالة صفحات لم ترد بالاصل

Ain Shams University
Faculty of Engineering
Public Works Department

# Digital Close Range Photogrammetry Using Multi-Photo Orientation Techniques



By
**Eng. Taher Fathy Abbas**
B.Sc. Civil Engineering
Ain Shams University
Egypt, 1996

**A Thesis Submitted to the Department of Public Works, Faculty of Engineering, Ain Shams University**

**For The Degree of Master of Science in Civil Engineering (Surveying)**

**SUPERVISED BY**

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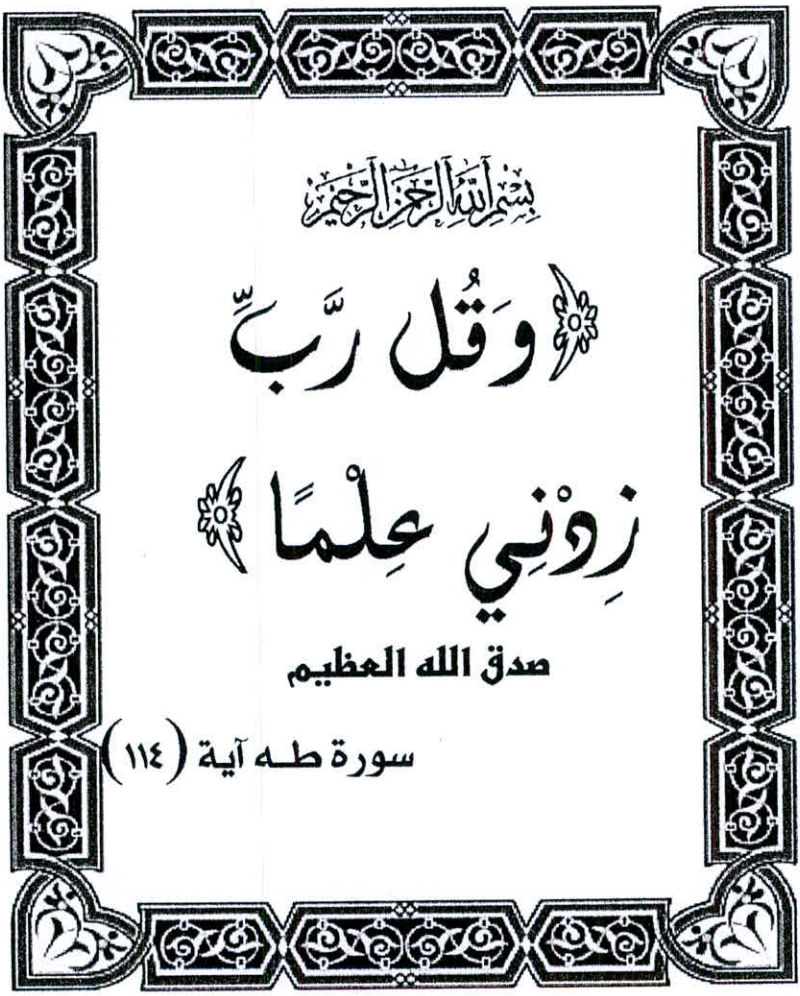
CAIRO - EGYPT

2002


بسم الله الرحمن الرحيم
وَقُل رَّبِّ
زِدْنِي عِلْمًا
صدق الله العظيم
سورة طـه آية (١١٤)

Ain Shams University
Faculty of Engineering
Department of Public Works

## APPROVAL SHEET

# DIGITAL CLOSE RANGE PHOTOGRAMMETRY USING MULTI-PHOTO ORIENTATION TECHNIQUES

By
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Examiners Committee:

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several convergent images have been captured for the main façade of the faculty of Engineering- Ain Shams University. Softcopy transformation was performed using two different categories of scanners namely; high-resolution photogrammetric scanner (HRS) and desktop publishing scanners (DTP). Then, these digital images have been assembled with different combinations and the accuracy of the formed models are evaluated be comparing the derived coordinates for the check points with their respective surveyed ground coordinates as measured by total station instrument. The methodology of investigation here involves the study of the performance of both used hardware and software commercial programs. In this context, the field-test procedure, data processing, analysis of the obtained results, and the appropriate comments and discussion were handled. Finally, the main conclusions were extracted, on the base of the obtained results, concerning the assessment of digital close range photogrammetry when applying the multi-photo approach, as used for monumental and architectural documentation, as well as future research related to the subject matter, are carefully established.

## STATMENT

This Thesis is submitted to Ain Shams University for the degree of Master of Science in Civil Engineering, Public Works Department-Surveying.

The work included in this thesis was carried out by the author in the department of Public Works, Ain Shams University, from April 1999 to April 2002.

No part of this thesis has been submitted for a degree or qualification to any other University or Institution.

Date: / /2002
Name: Taher Fathy Abbas
Signature:

## AKNOLEDGMENT

" Thanks to GOD, the master of the world, most gracious, most merciful"

I would like to express my deepest gratitude to my supervisor, Prof. Dr. Adel Ahmed Youssef Haggag Professor of Surveying and Photogrammetry, Faculty of Engineering, Ain Shams University. He has always provided me with his invaluable advice, continuous encouragement, and constructive suggestions, during all the stages of this thesis. Besides, he has spent many hours of his valuable time on the critical review of this thesis.

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I would like to dedicate this thesis to the soul of the great professor Dr. Monir Tawfik Salim whose memorial will always be kept in our hearts and minds. We will always teach the coming generations what we

had learned from him. His science and behavior will always be a model for the coming generations.

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Last but not least, I would like to dedicate this thesis, to my dear parents, and wife for their patience, encouragement, kindness, and prayers all the time.