Ain Shams University
Faculty of Engineering

DESIGN OF GEODETIC NETWORKS FOR MONITORING RECENT CRUSTAL MOVEMENTS USING THE OPTIMIZATION THEORY

رسالة

By
ENG. ASHRAF EL-KUTB MOUSA

A THESIS
Submitted in partial fulfillment of the requirement for the Degree of M. Sc.
in Civil Engineering
Puplic WorkS - Surveying

Supervised by

Prof. Dr. Mohamed M. Nassar
Prof Of Surveying And Geodesy
Faculty Of Engineering
Ain Shams University

Prof. Dr. Ali A. Tealeb
Prof Of Geophysics
NRIAG- Helwan

Cairo - 1992

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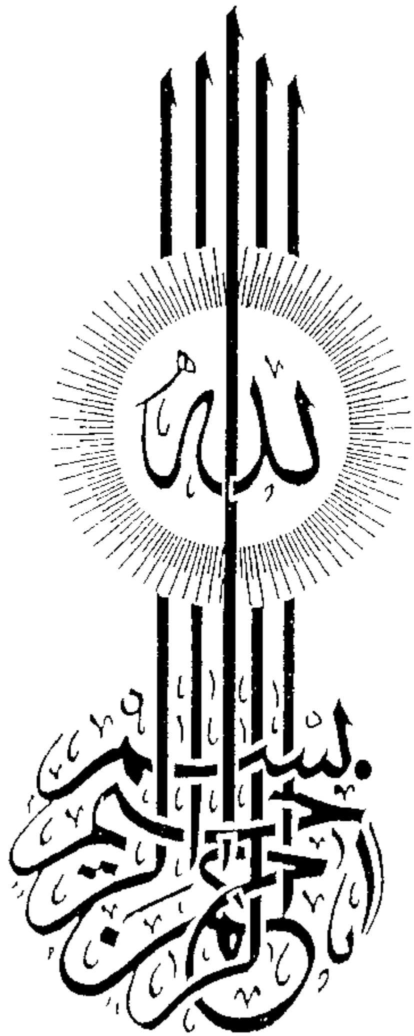
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Date : / / 1992

STATEMENT

This dissertation is submitted to Ain Shams University for the degree of M. Sc. in Civil Engineering.

The work included in this thesis was carried out by the author in the Department of Public works, Ain Shams University, from 1988 to 1992.

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

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تاريخ الميلاد : ٢٤ / ٨ / ١٩٦٤

محل الميلاد : الساحل - شبرا القاهرة

الدرجة الجامعية الأولى : بكالوريوس الهندسة التخصص : مدنى

الجهة المانحه للدرجة الجامعية الأولى : كلية الهندسة جامعة عين شمس تاريخ المنح : يونيو ١٩٨٧

الشهادات الأخرى الحاصل عليها وتواريخ الحصول عليها وجهات منحها :

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ملخص سابق الخبرة :

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الوظيفة الحالية :

مساعد باحث بالمعهد القومى للبحوث الفلكية والجيوفيزيقية

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التاريخ : ١ / ١٠ / ١٩٩٢

ACKNOWLEDGMENT

Any attempt to acknowledge all the help I have received in finishing this work from, my supervisor, Prof. Dr. M. Mohamed Nassar, Prof. of surveying and geodesy, public works department of faculty of Engineering of Ain Shams university, is indeed beyond my power of expression. Such gratitude I have towards him is profoundly felt but hardly expressible. I will never forget the much hours of his time, he spent in discussion as well as his profound interest.

I wish also to express my sincere thanks to my supervisor Prof. Dr. A. Abd EL-Azem Tealeb, Head of the department of Geomagnetism, Gravity,Geodesy and Geoelectricity, National Research Institute of Astronomy and Geophysics, Helwan, for his continuous assistance, encouragement and guidance and patient support.

I would like to extend my deep appreciation to Dr.Hassan G,EL-Ghzouly, lecturer of surveying and geodesy, faculty of Engineering of Alexandria university, for his constructive criticism during the preparation of this thesis.

Special thanks to Mr./ A. Rageb for careful production of the figures and tables in the thesis. Messrs A. Mahphoz and A. Abd EL-Moneam for their help on photocopying the thesis from the original manuscripts.

The good atmosphere of full harmonic cooperation provided by my colleges of the geodesy laboratory will never be forgotten.

I wish also to extend my gratitude to Prof. Dr.P. Vyskocil, director of the "ICRCM", Prague, Czeckoslovakia, for providing me with the computer package, which is used for analyzing and adjusting the data.

Thanks are also extended to the Chairman and Vice Chairman of the High and Aswan Dams Authority, whose sponsorship made all of this work possible.

Finally, I would like to dedicated this thesis to the memory of my father.

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