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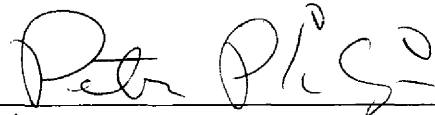
**SUPERVISORY COMMITTEE APPROVAL**

of a dissertation submitted by

Riyad Mousa

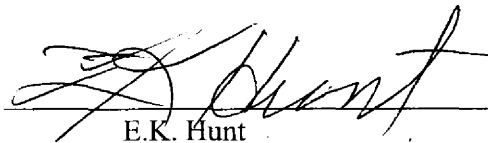
This dissertation has been read by each member of the following supervisory committee and by majority vote has been found to be satisfactory.

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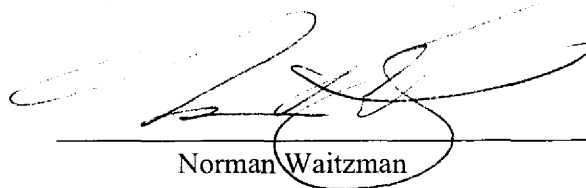
Chair: Peter Philips

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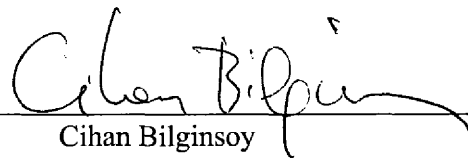
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