## Anchor Node Placement for Localization in Wireless Sensor Networks

by

#### Benjamin Tatham

A Dissertation submitted to
the Faculty of Graduate Studies and Research
in partial fulfilment of
the requirements for the degree of
Doctor of Philosophy

Ottawa-Carleton Institute for Mechanical and Aerospace Engineering

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# The undersigned recommend to the Faculty of Graduate Studies and Research acceptance of the Dissertation

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Thomas Kunz, Supervisor
Thomas Runz, Supervisor
B. Guy, Department Chair

Carleton University
2008

## Abstract

An abstract should be short and to the point.

This is the dedication...

# Acknowledgments

I would like to acknowldege  $\dots$ 

## Preface

This is the preface ....

## Table of Contents

## Nomenclature

This is the nomenclature ....

#### Units

This thesis uses English units to keep with North American aerospace industry practice. The following conversion factors are provided to convert to S.I. units:

English Unit	S.I. Conversion	
in	25.4 mm	
lbf	4.45 N	
ksi	6.89 MPa	

#### Chapter 1

#### Introduction

#### 1.1 First Section

First paragraph [?].

Second paragraph. Sample reference to Figure ??. Just some extra text to see how the text wrapping looks in a compiled pdf document.

Just some extra text to see how the text wrapping looks in a compiled pdf document. Just some extra text to see how the text wrapping looks in a compiled pdf document. Just some extra text to see how the text wrapping looks in a compiled pdf document. Just some extra text to see how the text wrapping looks in a compiled pdf document. Just some extra text to see how the text wrapping looks in a compiled pdf document.



Figure 1.1: Sample of a single image.





(a) Case I

(b) Case II

Figure 1.2: Samble side-by-side subfigures

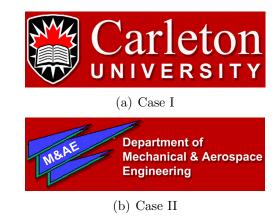


Figure 1.3: Samble above-below subfigures

Just some extra text to see how the text wrapping looks in a compiled pdf document. Just some extra text to see how the text wrapping looks in a compiled pdf document. Just some extra text to see how the text wrapping looks in a compiled pdf document. Just some extra text to see how the text wrapping looks in a compiled pdf document.

Just some extra text to see how the text wrapping looks in a compiled pdf document. Just some extra text to see how the text wrapping looks in a compiled pdf document.

#### 1.2 Section Demonstrating Tables

First paragraph. This is a sample reference to Table ??.

New paragraph.

Table 1.1: Sample table. With an extra long caption to test how captions will wrap.

Label 1	Label 2	Label 3
value 1	$x_1$	$y_1$
value 2	$x_2$	$y_2$
value 3	$x_3$	$y_3$

$$F = Ma (1.1)$$

Paragraph referencing an equation ??.

## Chapter 2

## The Beginning of the Details

## 2.1 Section Heading

Sample section text.

New paragraph.

#### 2.1.1 Sub-Section Heading

Sample text.

new paragraph.

#### **Sub-Sub-Section Heading**

Sample text.

Sorry no details available [?,?].

## Appendix A

# Derivation of Some Nasty Equation

Here is the derivation.