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FINAL YEAR PROJECT REPORT

UTILITY UNMANNED AIRCARFT SYSTEM

In fulfillment of the requirement for degree of
Bachelor's in computer engineering (BCE)

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Utility Unmanned Aircraft System.

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Abstract

Natural disasters due to global climatic change and increase in terrorism are leading to valuable life lost. Often, this loss of life takes place due to inability of provision of aid to trapped humans or surveillance flaws. To deliver different things on the doorsteps of people using Unmanned Aerial Vehicle is on the rise and is being tested in different places. There are a lot of issues that can be solved if we can achieve autonomous drones; the purpose of our project is to make an autonomous Hexacopter to which we will give a mission in the form of waypoints, and it will follow that mission and in the end land at the desired location. Autonomous, stable, and sustainable flight, using PID tuning, if equipped with image processing on Aerial bursts will provide vast usage for several practical applications ranging from emergency handling to surveillance and inspection. This project is all about modifying a Hexacopter in such a way that it can fly autonomously using the waypoints that are fed into its controller using ground control station. Waypoints can also be given to the flight controller using telemetry. The flight controller in Hexacopter controls the motor and direct it to the right location.

Table of Contents

Contents

UTILITY UNMANNED AIRCARFT SYSTEM 1
TITLE III
UTILITY UNMANNED AIRCRAFT SYSTEM III
ACKNOWLEDGMENTS VII
ABSTRACT VIII
TABLE OF CONTENTS IX
TABLE OF FIGURES XI
LIST OF ABBREVIATIONS XII
1. INTRODUCTION 1
1.1 BACKGROUND 1
1.2 PROJECT OVERVIEW 1
1.3 PROBLEM STATEMENT 1
1.4 AIMS & OBJECTIVE 2
1.5 DELIVERABLES 2
1.6 APPLICATIONS 2
1.6.1 Security: 2
1.6.2 Policing: 3
1.6.3 Inspection: 3
1.6.4 Cargo System: 3
1.6.5 Cinematography: 3
1.6.6 Agriculture: 3
1.6.7 Surveillance & Monitoring: 4
1.6.8 First Aid: 4
1.6.9 Mapping: 4
1.7 PROJECT REPORT LAYOUT: 4
2. BACKGROUND AND LITERATURE REVIEW 5
2.1 BACKGROUND 5
2.2 LITERATURE OVERVIEW 5
2.3 TYPES OF MINI UAV'S: 6
2.3.1 Fixed-Wings: 6
2.3.2 Fixed Wing Aerodynamics: 11
2.4 ROTARY: 12
2.4.1 Collective Pitch: 12
2.4.2 Single Rotary Fixed Pitch 12
2.4.3 Hexacopter: 12
2.5 CONCEPT OF RADIO CHANNEL 13
3. SYSTEM ANALYSIS 14
3.1 SYSTEM OVERVIEW 14
3.2 BLOCK DIAGRAM 14
3.3 WORK BREAKDOWN STRUCTURE 15
3.4 PROJECT MODULES: 16
3.5 REQUIREMENTS 16

3.5.1 Hardware *16*
FEATURES: 24
SPECIFICATIONS: 25
3.5.2 Software *29*
4. SYSTEM DESIGN **31**
4.1 ASSUMPTIONS 31
4.2 CONSTRAINTS 31
4.2.1 People: *31*
4.2.2 Time: *31*
4.2.3 Equipment: *32*
4.2.4 Monetary and Fiscal Policy: *32*
4.3 DEPENDENCIES 32
4.4 GANTT CHART 33
5. IMPLEMENTATION **34**
5.1 FLOW CHART 34
5.2 IMPLEMENTATION PROCEDURE: 35
5.2.1 Assembly *35*
5.2.2 Initial Testing *35*
5.2.3 Adjustments *35*
5.2.4 Simulations and Test Flights *35*
6. TESTING **36**
6.1 OVERVIEW 36
6.2 FIRST PHASE 36
6.3 SECOND PHASE (FINAL PHASE) 37
7. RESULTS AND DISCUSSION **39**
7.1 TUNING, CALIBRATION AND FLIGHT TEST 39
7.2 STABILIZATION TESTING & APM TUNING 39
7.3 APM TUNING DURING FLIGHTS 40
7.4 INITIAL TEST FLIGHT 41
7.5 WEIGHT 41
7.6 DISCUSSION 41
7.6.1 Difficulties *41*
8. CONCLUSIONS AND FUTURE WORK **42**
8.1 APPLICATIONS OF THE PROJECT 42
9. REFERENCES **43**
APPENDICES **45**