

HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

INFRARED GUIDING LANDING SYSTEM

by

KOROMIAS ODYSSEAS (E/977)

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PROJECT REPORT

Project submitted by

KOROMIAS ODYSSEAS

E. 977

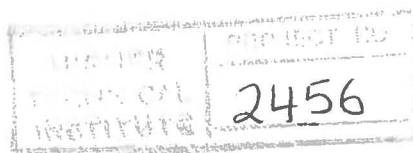
INFRARED GUIDING LANDING SYSTEM

in part satisfaction of the award of diploma
of technician engineer in electrical
engineering of the HIGHER TECHNICAL
INSTITUTE

CYPRUS

Project supervisor: Dr. C Marouchos

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I DEDICATE THIS DESIGN AND CONSTRUCTION PROJECT
TO MY PARENTS, MY BROTHER, MY NEXT DOOR NEIGHBOUR
WHO LET ME USE HIS COMPUTER AND ESPECIALLY TO MY
BEST FRIEND YIOLA, AND I EXPRESS ALL MY GRATITUDE
TO THEM FOR ALL THE ENCOURAGE AND ADVICES THEY GAVE ME.

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Koromias Odysseas
3rd year student in
electrical engineering
H.T.I

S U M M A R Y

TITLE: INFRARED GUIDING LANDING SYSTEM

AUTHOR: KOROMIAS ODYSSEAS

Infra-red radiation is widely used in every day life. The purpose of this project is to investigate the feasibility of developing the design and construction of a system which will be used as a guiding landing system of a helicopter.

C O N T E N T S

Page

CHAPTER 1

1.0 INTRODUCTION	1
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CHAPTER 2

2.0 RADIATION AND TRANSMISSION	3
2.1 INFRA-RED RADIATION	3
2.2 SENSORS-DETECTORS.....	4
2.3 RADIATION.....	4
2.4 INFRA-RED EMITTERS.....	6
2.5 PHOTODETECTION.....	8
2.6 PHOTODETECTION MATERIALS.....	8
2.7 PHOTODIODE APPLICATIONS.....	11

CHAPTER 3

3.0 ELECTRONIC CCT USED IN INFRA-RED APPLICATION... ..	13
3.1 ACTIVE FILTERS.....	13
3.2 IC TIMERS.....	15
3.3 APPLICATIONS OF 555 TIMER.....	17
3.4 COMPARATORS.....	20

CHAPTER 4

4.0 INFRA-RED CCT FOR LANDING GUIDANCE.....	21
4.1 TRANSMITTER CIRCUIT.....	21
4.2 RECEIVER CIRCUIT.....	22

CHAPTER 5

5.0 SUMMARY.....	25
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APPENDICES.....	A
APPENDIX 1: RECEIVER COMPONENTS.....	A1
APPENDIX 2: TRANSMITTER COMPONENTS.....	A2
APPENDIX 3: RECEIVER PCB.....	A3
APPENDIX 4: TRANSMITTER PCB.....	A4

1.0 INTRODUCTION

An infra-red guiding landing system is useful in a helicopter landing system for the following reason:

When a helicopter is going to land and it reaches 1 meter above the earth the pilot might have some difficulty to judge its altitude because the ground can not be seen.

An infra-red guiding landing system might eliminate this problem. The system consists of a receiver circuit and a transmitter. The transmitter transmits an infrared signal, invisible to the human eye and, is received by a receiver. During the landing, the helicopter is going to interrupt the infra-red radiation and as a result an indication is going to be given to the pilot as far as it concerns the distance between the helicopter and the level of the ground.

The main purpose of this system is to help the pilot to make the landing as easier and safer as possible. The use of this system eliminates the possibility of an accident during landing.