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SCIENCE AND TECHNOLOGY

DEPARTMENT OF
ELECTRONIC ENGINEERING

PART V PROJECT REPORT -- 2009

TITLE: HF Mesh Network For Control And Sensor Arrays

NAME OF STUDENT: ANDREW LOBB (N004 1099B)

SUPERVISOR: MRS NLEYA



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Abstract

This project seeks to explore wireless mesh networking and establish short range telemetry links in the 13.56MHz Industrial Scientific and Medical (ISM) frequency band by designing and constructing at least three transceivers to act as nodes on the network, two of which are embedded nodes. The transceiver design explores the use of Phase Locked Loops (PLLs) as both a signal source and a direct Frequency Modulation (FM) demodulator.