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Automatic Pet Feeder

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AUTOMATIC PET FEEDER

This report was written for MET 497
to fulfill Bachelor of Science
requirements in the Mechanical
Engineering Technology program
at Purdue University, Fort Wayne.

by

David A. Braun
Student

April 29, 1980

ABSTRACT

The purpose of this report is to discuss the design criteria, design analysis, and fabrication and test methods of the assembly of the APF (Automatic Pet Feeder). The design criteria includes the following: duration of owner absence, feeding times, feeding quantities, type of pet food, accessibility, compactness, safety, and cost.

The technical portion of the report details the solution for solving the design problem by providing supportive calculations and drawings. The fabrication of the APF prototype was completed to meet all design specifications. After completion of a full-scale prototype, testing was initiated and completed to insure the APF is safe to use in the presence of the pet and simple for the pet owner to operate. A final breakdown of material, material quantities, and assembly costs are provided in this report.

Although total safety of the design was primary, the affordability of the APF to the pet owner was closely considered. A target price of \$30 was considered a sound investment for the pet owner and APF manufacturer.

Final recommendations of this report suggest the APF is suitable for use with a pet cat. Evidence shows that the APF is simple for children to operate and safe for a cat during the duration of an extended, three-day weekend.

TABLE OF CONTENTS

	Page
LETTER OF TRANSMITTAL	i
ABSTRACT	iii
OBJECTIVE	1
INTRODUCTION	1
TECHNICAL PLAN	
The Design Solution	
General Description	3
Criteria	4
Technical Assurance	9
Materials	19
Fabrication	21
Test	22
Cost	24
Summary	25
WORKING BIBLIOGRAPHY	26