FY-67 June 25, 1997
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Camp Stove

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Type:	Design Project
Length:	5 weeks
Location:	Classroom/Take Home

Summary

This design project is to determine the feasibility of providing warm food to backpackers with a portable, low weight camp stove. The project requires energy calculations, material selection, considerations of size and weight, human factors and cost. Results are determined from prototype testing.

ABET Descriptors

Engrg. Sci. Content:	First Year Engineering, Heat transfer
Type:	Component
Elements:	Establish objective and criteria, synthesis, analysis, evaluation
Features:	Creativity, open-ended, feasibility, specifications, generate alternative solutions
Constraints:	Economics, weight, size, aesthetics, environmental impact
Effort:	Individual

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MEMO

April 3, 1974

TO: New Product Development Engineer

FROM: Manager of New Product Development

SUBJECT: Feasibility of a Solar Camp stove

The marketing department indicates that the market for camping gear for the back-country hiker is increasing. The ability to provide limited hot food to backpackers has been discussed by marketing. Provide a feasibility study for a portable camp stove to meet the following limitations:

Weight less than xxx lbs.
Width not to exceed body dimensions.
Easily assembled/disassembled.

Present the feasibility report on the technical design, economic analysis, and market study by COB (Close of Business) on April 28. Prepare the prototype for testing at the campus campgrounds on May 15, 1974.

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Engineering Notes

Objectives/Comments:

This design task is to determine the feasibility of providing warm food to backpackers with a portable, low weight camp stove. The project requires energy calculations, material selection, considerations of size and weight, human factors and cost. Results are determined from prototype testing.

Expected Outcomes:

Design Process. The student must follow a logical process in accomplishing their design. This design process must be reflected in the design report submitted.

Design Report. The student should develop detailed documentation of the design. The design report will reflect the steps taken in the design process used in solving the problem.

Final Product. The final product developed should reflect the work presented in the report submitted two weeks earlier. Any significant changes in the design of the product must be justified by the student.

Discussion/Follow Up: