TITLE SHEET

Introducing Current Technologies

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Abstract

The objective of the study was a continuation of the "technology push" activites that the Technology Transfer Team conducts at this time. It was my responsibility to research current technologies at Langley Research Center and find a commercial market for these technologies in the private industry. After locating a market for the technologies, a mailing package was put together which informed the companies of the benefits of NASA Langley's technologies. The mailing package included articles written about the technology, patent material, abstracts from technical papers, and one-pagers which were used at the Technology Opportunities Showcase (TOPS) exhibitions. The companies were encouraged to consult key team members for further information on the technologies.

INTRODUCTION/ BACKGROUND INFORMATION

Since the signing of the Space Act in 1958, the technologies of NASA have proven to contribute to the economic security of the United States. As a part of this legislation,, partnerships between the private sector and NASA have been strongly encouraged. NASA should no longer be solely considered a space center. It's responsibilities have branched out to the private industry, and technology transfer has become a key function at each NASA center.

> In addition to its existing partnership with the aerospace industry, NASA Langley proactively seeks non-aerospace partners for R&D collaborations where such collaborations offer significant synergy or benefits from sharing technology. Arrangements will be emphasized with industries which can benefit significantly from introduction of NASA technology for new products, improved products or increased efficiency.
> (*Agenda for Change*, p.7)

This important marketing responsibility is held by LaRC's Technology Apllications Group, part of which is the Technology Transfer Team (TTT). The Transfer Team is divided into four specialized sections: Medical/Sensors/Instrumentation/ Environment/Energy, Information/Communication, Transportation, Materials/Manufacturing. It is a primary objective of the TTT to "encourage broader utilization of NASA Langley-developed technologies in the American industrial community." (*The Technology Transfer Process*, p.1)

SUMMARY OF RESEARCH

The key purpose of my particular project was to solicit interest in the current technologies which have failed to be utilized or licensed by the private industry. Requests were made to several transfer members to submit a list of technologies which they believed would be beneficial to a commercial market. Two technologies were chosen from the list submitted based on benefits to the commercial market and the existence of a market for the technology. The technologies which were selected were the Blind-Anchor-Nut-Installation-Fixture (BANIF) and Panel Analysis and Sizing Code (PASCO) software.

DESCRIPTION OF TECHNOLOGIES

BLIND-ANCHOR-NUT-INSTALLATION-FIXTURE is "an invention which enables a user to install an anchor nut on the blind side of a component. The potential commercial uses include boat repair, maintenance and repair of transportation systems, and automotive bodywork" (TOPS one-pager, "Blind Fastening Technique")

PANEL ANALYSIS and SIZING CODE provides a graphical interface which simplifies the specification of panel geometry and reduces user input errors. The user draws the initial structural geometry, then uses a combination of graphic and text inputs to refine the structural geometry. The potential commercial use corrugated cardboard boxes. (Abstract, "User's manual for MacPASCO")

APPROACH

After the selection of the technologies, research into each technology began. The team members which specialized in each particular technology aided in my research. Publications by the researchers, one-pagers from the Technology Opportunities Showcase (TOPS) exhibitions, and abstracts from NASA technical papers were obtained through the use of the World Wide Web. Other materials were also acquired from by the Technology Transfer Team members. The reading materials were collected and organized for a mailing package so that the selected market could be informed of the benefits of NASA Langley's technology.

Following the compilation of the mailing material, a specific target market was determined. A discussion with several of the TTT members was held so that an optimal market was chosen. The particular markets were selected because they appeared to be able to receive the most benefits from the technology, would use technology the most resourcefully, and would generate the most funds. The markets which were chosen were as follows: Blind Fastener--Tool Companies, and "PASCO" software-- Corrugated Cardboard Box Companies

With the aid of the librarians at the Technical Library who searched on an extensive database, the addresses of companies which fit into each particular category were gathered. The listings included companies from around the country, examples being Snap-on Incorporated and
Black & Decker. A cover letter was included with each mailing package to the companies. They were requested to review all the materials included and contact a specific TTT member if interested in further information regarding the technology, or interested in licensing the technology. At this time responses are being awaited.