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The AMTEX Partnership™

Policy and Procedures

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The AMTEX Program Office

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Foreword

The success of the AMTEX Partnership™ is due, in part, to the formulation of policies and operating procedures that have guided partnership activities from the outset. The policies, stated in the form of a *Mission, Vision,* and *Key Principles* have remained largely unchanged since the inception of AMTEX in March of 1993. The policies define the primary roles and public accountabilities of the AMTEX participants whether in government, industry, or federal research laboratories. The organizational structure and procedures of AMTEX have evolved as better ways were found to implement and fulfill the intent of the *Mission, Vision*, and *Key Principles*.

This document describes the policies and procedures of the AMTEX Partnership™ as approved by the AMTEX Operating Committee on July 20, 1995. It supersedes all previous AMTEX policies and procedures. Section IV of the document, Policies and Procedures of the Industry Operating Board, is the responsibility of the AMTEX Industry Operating Board and may be changed solely by that body as deemed appropriate.

The AMTEX Program Office is responsible for ensuring that policies and procedures are implemented in AMTEX operations and for updating this document as needs and experience indicate would be beneficial. Questions or comments on the policies and procedures should be directed to one of the AMTEX program managers listed below:

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Acronyms and Abbreviations

AOC	AMTEX Operating Committee
APO	AMTEX Program Office
CRADA	Cooperative Research and Development Agreement
DOE	Department of Energy
DOE/DP	DOE/Defense Programs
DOE/ER	DOE/Energy Research
FTE	full-time equivalent
HQ	Headquarters
IOB	Industry Operating Board
IOBEC	Industry Operating Board Executive Committee
ITAC	Industry Technical Advisory Committee
ITT	Institute of Textile Technology
JWS	Joint Work Statement
NTC	National Textile Center
PMO	Program Management Office
R&D	Research and Development
RETT	Research, Education, and Technology Transfer
RFP	Request for Proposal
RFRP	Request for Research Partners
ROC	RETT Operating Committee
SOW	Statement of Work
TRI	Textile Research Institute
$[TC]^2$	Textile/Clothing Technology Corporation

AMTEX Policies and Procedures

Section I
AMTEX Policies

The general policies of AMTEX are expressed in statements of the AMTEX Mission, Vision, and Key Principles.

MISSION

The mission of the AMTEX Partnership™ is to enhance the competitiveness of the U.S. Textile Industry, from fibers through fabricated products and retail, by implementing technologies developed in collaborative R&D programs that link the scientific and engineering resources of government, universities, and industry.

VISION

The integrated U.S. Textile Industry will lead the world in high value products and services. The industry will be competitive in global markets in an environment of profitability, worker satisfaction, and high quality of life. Characteristics of our industry will be flexibility, innovation, total quality, and rapid responsiveness to customer needs.

The AMTEX Research and Development (R&D) agenda will be driven by the industry's strategies and priorities for improved competitiveness. The national laboratories will direct their exceptional R&D capabilities toward discovering and developing break-through technologies. Industry will implement AMTEX-developed technologies in its operations. The partners–industry, government, laboratories, and universities–will make AMTEX a model of collaboration for meeting national needs.

Key Principles of The AMTEX Partnership™

1. To best serve the nation's interests, the AMTEX Partnership must access and integrate all of the nation's research capabilities to address the needs of the fibers, textiles, fabricated products, and retail sectors of the U.S. integrated Textile Industry. The necessary R&D resources include relevant universities, federal laboratories, and industrial research institutions.

2. The proper point of interface between government and industry is through industry-integrating organizations, rather than through specific companies.

3. The Industry will ensure the results of AMTEX-sponsored R&D projects are available to benefit all industrial operations within the U.S. Integrated Textile Industry.

4. To best serve the nation's interests, the federal laboratories participating in AMTEX will work together as a collaborative team to ensure the best available resources of the federal laboratories are utilized to meet Industry's needs.

5. AMTEX R&D projects must be driven by the Industry's Technology Road Map and have the potential for making a major impact on U.S. competitiveness. AMTEX projects must focus on technical objectives that pose such high risk and technical complexity that no one company or group of companies could undertake them alone. The results of AMTEX projects will be generic manufacturing processes and systems that can be implemented by many companies to develop their individual proprietary products and services.

6. Projects must be judged by the laboratories and government as making effective use of the unique facilities and capabilities of the federal laboratory system. Furthermore, projects must have the potential to strengthen the ability of the government agencies and federal laboratories to meet their core missions.

7. To have a major impact on the Industry's competitiveness, AMTEX must demonstrate a strong bias for responsible action.

Section II
AMTEX Organizational Structure

Organizational Overview

The AMTEX governing and operating structure is a simple, but powerful, organization designed to fulfill key obligations and public trusts. The four organizational levels in AMTEX are shown in Figure 1 and described in the sections that follow.

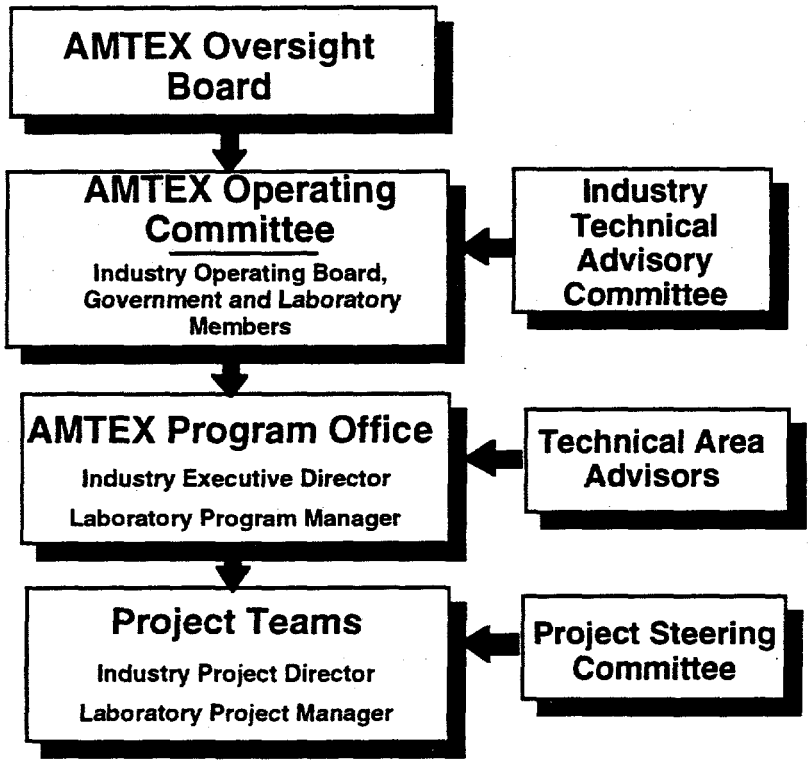

Figure 1 - AMTEX Organizational Structure

AMTEX Oversight Board

Function and Leadership

The AMTEX Oversight Board provides overall policy guidance to AMTEX and operates as a single home within the government for the cross-cutting AMTEX activities. The Oversight Board is cochaired by the U.S. Department of Energy, Director of Energy Research, and the Chairman of the Industry Operating Board. Other members include DOE

assistant secretaries from participating programs, directors of the participating DOE laboratories, and representatives from DOE program offices, participating companies, and industry research institutions. More detailed information is given in the Oversight Board Charter (Appendix A).

Roles and Responsibilities

The AMTEX Oversight Board is accountable to the Secretary of Energy for providing overall policy guidance to the AMTEX Operating Committee. The Oversight Board focuses on broad policy, organization, and performance issues essential for an effective public/private partnership. (See Appendix A for a more complete description of the Oversight Board's responsibilities.)

Key areas of oversight responsibility include:

- Long-term budget planning across DOE funding offices (based on the AMTEX Multi-Year Plan)
- Policy guidance for AMTEX
- Review of annual progress against milestones
- Approval of AMTEX organizational structure.

AMTEX Operating Committee

Function and Leadership

The AMTEX Operating Committee (AOC) is responsible for overall AMTEX operations and oversight. The AOC consists of members from industry, government, and DOE laboratories.

The industry, government, and laboratory members of the Operating Committee have specific accountabilities, roles, and responsibilities. To discharge these individual responsibilities, the industry, government, and laboratory members sometimes meet separately as subcommittees of the AOC.

The industry group has a particular need for formal policies and procedures regarding membership on the AOC, participation of companies

in projects, and licensing of technology. To fill this need, the industry members of the AOC form an Industry Operating Board (IOB). The membership structure, policies, and procedures of the IOB are included as Section IV of this document.

The AOC has the following leadership structure:

AMTEX Chair: The Chair is the overall executive officer of the AOC and is selected from among the AOC members in the Department of Energy laboratories. The AMTEX Chair also leads the functions and activities of the laboratory AOC members. The procedures for nomination and selection, and conditions on terms of service of the AMTEX Chair are described in Section III (Personnel).

AMTEX Vice-Chair: The Vice-Chair of the AOC is Chair of the Industry Operating Board. The nomination, election, and term of service of the Chair of the IOB are determined by the policies and procedures of the IOB.

Government Leadership: The function and activities of the government members of the AOC are led by the Director of the DOE/Energy Research, Laboratory Technology Applications Division. The day-to-day administration of the government activities and responsibilities in AMTEX are led by the DOE/ER AMTEX Program Manager.

Changes in the fundamental structure of the AOC are subject to approval by majority vote of the full AOC and approval of the AMTEX Oversight Board.

The Industry Technical Advisory Committee (ITAC) serves as a technical advisory body to the Operating Committee. The AMTEX Executive Director serves as chair of the ITAC. The ITAC plays a strong role in reviewing projects, establishing project priorities, setting budget recommendations, and in approving the AMTEX Technology Road Map. The ITAC also reviews projects and tasks within projects to ensure the content is consistent with the AMTEX principles and guidelines. These functions are further described in the procedures for developing new projects (Section III [Developing, Reviewing, and Authorizing AMTEX Projects]).

Membership

The AOC consists of members from the integrated textile industry (fibers, textiles, apparel and other fabricated products, and retail), government, and federal laboratories as follows.

Industry Members of the Operating Board: The industry members of the AOC are the members of the AMTEX IOB. The structure and membership of the IOB are described in Section IV of this document.

Laboratory Members of the Operating Committee: The laboratory members of the AOC consist of one representative from each DOE laboratory that is participating in at least one AMTEX project. The laboratory AOC members are appointed by their respective laboratory directors. Notices of their appointments is sent to the AOC Chair.

The AMTEX Chair leads the activities and functions of the laboratory members of the AOC. The Laboratory Program Manager assists the AMTEX Chair in this responsibility.

Any DOE laboratory that is participating in at least one AMTEX project has one membership position on the Operating Committee, conditional upon the laboratory accepting the terms and conditions of the AMTEX CRADA and Option Agreement (Appendix B). The AOC membership position is automatically available to the laboratory at the time the laboratory begins funded participation in at least one AMTEX project.

After becoming a member of the AOC, a laboratory will cease to have membership (voting status) on the AOC, if the laboratory has no funded participation in at least one AMTEX project for a period of one year. If the laboratory again receives AMTEX funding for a project, membership resumes.

Representatives from DOE or other federal laboratories are welcome as visitors to attend meetings of the AOC. Only AOC members have voting privileges.

Government Members of the Operating Committee: The government members of the AOC consist of representatives from the following federal offices or institutions:

- DOE/Energy Research, Director, Laboratory Technology Applications Division. (This individual serves as the leader of the government members of the AOC.)

- DOE/Energy Research, AMTEX Program Manager.

- DOE/Defense Programs, Director, Office of Economic Competitiveness.

- DOE/Defense Programs, AMTEX Program Manager.

- DOE/Environmental Management Program Manager.

- DOE/Environmental Management, AMTEX Program Manager.

- DOE Operations Offices. (Those that have cognizance for at least one DOE laboratory that is a member of the AOC.)

- One representative from each federal agency (other than DOE) that provides support for AMTEX projects. This support may be in the form of financial support for the participation of at least one DOE laboratory in an AMTEX project or support for other federal laboratories that have a formal role and task responsibility in at least one AMTEX project.

Roles and Responsibilities

The AOC is accountable to the public, government, and industry for the responsible discharge of its mission in a manner consistent with the Key Principles.

The AOC is responsible for:

- Ensuring that AMTEX-sponsored projects are of high technical quality and make effective and responsible use of the public and private resources devoted to the projects.

- Ensuring effective program and project management.

The industry members of the AOC have a specific responsibility for:

- Ensuring the projects are driven by, and responsive to, the needs of the fiber, textile, fabricated products, and retail industries.

- Ensuring that projects focus on development of generic processes and systems that can be widely implemented by individual companies to suit their particular needs.

- Ensuring that objectives of AMTEX projects pose such high risk and technical complexity that no company or group of companies could undertake them alone.

- Ensuring the opportunity to participate in AMTEX projects is widely publicized and available to companies in the industry. They also ensure that AMTEX-developed technologies will become widely available to the industry (after appropriate lead times for participating companies). (Specific policies on eligibility of companies to join AMTEX projects or to receive licensing rights to AMTEX developments are governed by the policies of the IOB. See Section IV of this document).

- Ensuring the availability and continuity of industry resources to the projects.

- Setting other policies or procedures that affect the industry side of the AMTEX Partnership.

The government and laboratory members of the AOC have shared responsibilities for:

- Ensuring projects utilize the unique technical capabilities and the best available resources of the federal laboratories.

- Ensuring projects are consistent with the core capabilities of the federal laboratories.

- Establishing project peer review schedules and evaluation criteria.

- Ensuring that projects have significant promise to strengthen capabilities that will enhance DOE's ability to more effectively meet its core missions.

- Participating in the selection of Laboratory Project Managers.

The activities of the government members of the AOC are coordinated by the DOE/ER AMTEX Program Manager. The government members of the AOC have specific responsibilities for:

- Ensuring effective use of the federal laboratory system and that assignment of work to the DOE or other laboratories is consistent with the DOE's or other agencies' mission requirements.

- Ensuring the continuity and coordination of government funding across all participating government offices and agencies.

- Approving Project and Task Plans.

- Approving the Annual Operating Plan.

- Approving the contractual agreements (such as CRADAs) between the laboratories and industry (DOE Operations Office members of the AOC only).

The laboratory members of the AOC have additional specific responsibilities for:

- Selecting the AOC Chair and Laboratory Program Manager.

- Participating in the selection of Laboratory Project Managers.

The Chair, Vice-Chair, and the head of the government members of the AOC report annually on these accountabilities to the AMTEX Oversight Board.

The decisions made by the full AOC include:

- Prioritizing, approving, redirecting, or terminating projects.

- Approving budget priorities for projects.
- Approving the AMTEX Multi-Year Plan.
- Approving the AMTEX Policies and Procedures manual and making any changes, as deemed appropriate.

The AMTEX Operating Committee relies heavily on the advice and direction of the ITAC on matters pertaining to project content, priorities, and budget recommendations.

AMTEX Program Office

Function and Leadership

The AMTEX Program Office (APO) administers AMTEX on a day-to-day basis on behalf of the Operating Committee. The Program Office leaders consist of the AMTEX Executive Director (from industry) and a Laboratory Program Manager (from one of the DOE laboratories). The Executive Director serves as the Chair of the ITAC.

The Executive Director and Laboratory Program Manager may select technical experts from either the industry or laboratories to serve as Technology Area Advisors to the Program Office.

Roles and Responsibilities

The Program Management Office is accountable to the AOC and is responsible for:

- Leading overall strategic and annual planning. This responsibility includes developing and updating AMTEX planning and operating documents such as: the AMTEX R&D Road Map, the AMTEX Multi-Year Plan, and the annual AMTEX Operating Plan.
- Approving, at the Program Office level, the annual project plans and federal budget recommendations.

- Overseeing projects, including monitoring progress and costs versus milestones and budgets and ensuring that periodic, effective technical peer reviews are held.

- Leading the process (as described in Section III) for developing new projects, selecting project leaders, forming project teams, and conducting R&D work in the projects.

- Coordinating issues and interactions among projects.

- Coordinating and resolving issues among the government, industry, university, and laboratory participants.

- Overseeing the consistent and effective implementation of AMTEX contractual agreements, ensuring that legal agreements are updated as necessary, and addressing other legal and contractual matters for AMTEX.

- Fostering positive publicity, managing press and media relations, and ensuring good communication to audiences within and outside of AMTEX.

- Facilitating the timely processing of contractual (CRADA) agreements among AMTEX parties and the timely assignment/release of government and industry resources to the projects.

- Preparing quarterly progress reports and other reports as appropriate.

- Providing planning and logistical support for AOC meetings.

The AMTEX Executive Director and the Laboratory Program Manager make the following decisions:

- The AMTEX Executive Director has authority and responsibility to prepare a final budget recommendation (at the project level), based on the recommendations of ITAC.

- The Laboratory Program Manager has authority and responsibility to fine tune the requests from the project leaders for federal funds (in consultation with the Laboratory Project Managers) to balance the project/task funding requests against the available federal funding and ITAC recommendations. The result is an integrated AMTEX budget that is provided to DOE by the Laboratory Program Manager via the annual AMTEX Operating Plan.

- Selecting Technology Area Advisors.

- Approving media relations activities and press releases.

- Making routine operating and administrative decisions.

Technology Area Advisors

The AMTEX Executive Director or the Laboratory Program Manager may appoint individuals from the industry, universities, or federal laboratories to serve as technical advisors to the program office. These advisors have the following roles:

- Serving as mentors to the Project Directors and Laboratory Project Managers during the development, planning, and execution of projects.

- Participating in the selection of new Laboratory Project Managers.

- Providing additional points of interface with the industry to listen to their needs, receive feedback on project issues and performance, and generally help ensure good communication among all parties.

- Serve as technical advisers in strategic planning activities.

The need for Technology Area Advisors will change as AMTEX projects mature and change. The number of Technology Area Advisors, the technology focus areas they represent, and the persons filling those roles are determined by the AMTEX Executive Director and the Laboratory Program Manager.

Project Management

Function and Leadership

Each project is led by a Project Director who is selected and supported by the industry. The Project Directors report to the AMTEX Executive Director. Procedures for selecting Project Directors are included in Section IV.

A Laboratory Project Manager from one of the participating DOE laboratories assists the Project Director in managing the project and has particular responsibility for managing the technical work performed in the DOE and other federal laboratories. The Laboratory Project Managers report to the Laboratory Program Manager. The procedures for nominating and selecting the Laboratory Project Managers are described in Section III.

Roles and Responsibilities

AMTEX projects are led by an Industry Project Director from the industry research, education, and technology transfer (RETT) organization to which the project is assigned. The Project Director is selected in accordance with the Industry Operating Procedures.

Project Directors: Project Directors are accountable to the AMTEX Executive Director and are responsible for:

- Overall leadership, direction, and progress of projects, particularly establishing industry-driven objectives and milestones and ensuring the projects adapt as necessary to remain responsive to industry needs.

- An adequate level and appropriate mix of industry resources as applied to AMTEX projects.

- Management, implementation, and commercialization of intellectual property.

- Interfacing with the Industry Research Partners, including the recruitment of new Research Partners.

- Coordination of work with Laboratory Project Manager.

The Project Directors have the authority to make the following decisions:

- Determine the overall goals, objectives, and milestones for a project.
- Assign industry resources (personnel, facilities, materials, and equipment) to the project tasks.
- Select industry task leaders.
- Schedule project Steering Committee meetings and other project meetings and reviews.
- Approve project plans and reports on behalf of the Project Team.

Laboratory Project Managers: A Laboratory Project Manager from one of the participating DOE laboratories assists the Project Director in managing each AMTEX project. The Laboratory Project Manager has particular responsibility for managing and directing the technical work done in the DOE and other federal laboratories.

The Laboratory Project Managers are accountable to the AMTEX Laboratory Program Manager and are responsible for:

- Technical leadership and management direction for the work performed in DOE and other federal laboratories.
- Project planning and budgeting.
- Ensuring the quality of technical work, progress, and costs relative to the project's approved budget, schedule, and milestones.
- Ensuring that interfaces are established with appropriate persons or groups at the DOE laboratories, so that benefits to DOE from AMTEX projects are available to and may be realized by DOE core mission programs.

The Laboratory Project Managers have the authority to make the following decisions for their respective projects:

- Selecting laboratory leaders for the project tasks.

  Note: These selections must be consistent with the Operating Procedures that allow the industry to select the technical approaches and proposals that they feel will best address the project objectives. Given that selection, the designation of task leaders from among the participating laboratories is a decision made by the Laboratory Project Manager.

- Approving project plans and reports on behalf of the Laboratory Project Team.

- Recommending the allocation of work and DOE funding (and other federal funds, if involved) among the participating DOE laboratories. This decision includes the authority to re-allocate funds among the laboratories during the course of a fiscal year, as changes in project direction and priorities may dictate.

  Note 1: It is expected that decisions on the allocation of work and funding to the laboratories will reflect the direction, priorities, and assignment of industry resources, as determined by the Project Director.

  Note 2: Laboratory Project Managers make their recommendation for allocation or re-direction of funding to the Laboratory Program Manager who coordinates such actions across all AMTEX projects. If the Laboratory Program Manager approves the requests, they are forwarded to the DOE Program Managers for final approval and action.

Project Steering Committees

Representatives of the companies who are the Research Partners on AMTEX projects constitute the Project Steering Committee for each project. The Steering Committee may consist of additional members as determined by the Research Partners. This committee provides guidance to the Project Director in terms of objectives, direction, deliverables, and allocation of resources among the various tasks within the project. The

Steering Committee is a resource to the Project Director for providing and coordinating industry participation in all phases of the project work. The Steering Committee also assists the Project Director in the commercialization process, including selection of vendors and management of intellectual property.

Section III
Procedures of the AMTEX Operating Committee

The AMTEX Operating Committee Procedures describe how the AMTEX organization will fulfill its Mission and Vision and operate according to the Key Principles.

Program Planning

AMTEX Road Map

The AMTEX Executive Director is responsible to oversee the development of a long-term Technology Road Map for AMTEX. The Road Map outlines a series of technology-based objectives that, when taken as a whole, will fundamentally and dramatically improve the global competitiveness of the U.S. integrated fiber, textile, fabricated products, and retail industry.

The Road Map is updated, as needed, with revisions approved by the industry AOC members. The ITAC reviews and approves the Road Map before it is presented to the industry AOC members.

Multi-Year Plan

The AMTEX Multi-Year Plan is driven by technology objectives set forth in the Industry Road Map. The Multi-Year Plan describes the time frames, current year budgets and projected out-year project budgets, and potential funding sources for a suite of AMTEX projects for a rolling 3 to 5 years.

The AMTEX Multi-Year Plan is a synthesis of the overall direction and priorities established by the ITAC and expressed in the Road Map, the detailed budget requests developed by the project teams, and the best estimates of available government and industrial resources.

The AMTEX Executive Director and Laboratory Program Manager are responsible for preparing and annually updating the Multi-Year Plan. It is reviewed and approved by the AOC, typically at the Spring AOC meeting. When approved, the Multi-Year Plan is delivered to the AMTEX Oversight Board to provide a basis for long-range budget planning by the DOE and other participating agencies.

Annual Operating Plan

By August 1 of each year, an annual Operating Plan for the upcoming fiscal year is prepared and delivered to the Director of the DOE/ER, Division of Laboratory Technology Applications. The Laboratory Program Manager is responsible for developing the plan. The budget recommendations of the APO form the basis for preparation of the Operating Plan.

In coordination with all government offices and agencies that are supporting AMTEX, and consistent with available government funds, the Director DOE/ER, Division of Laboratory Technology Applications, approves the Annual Operating Plan for implementation. Adjustments and revisions may be required, depending on the level of government funds ultimately available to support AMTEX projects.

The Operating Plan typically includes the following:

- Brief description of the projects to be funded, the major tasks, milestones, and deliverables.
- A breakdown of government funding by laboratory and funding source for each project and major tasks within projects.
- Benefits to the government that have accrued and are expected to accrue from the AMTEX projects.

Review, Direction, and Budgeting of Projects

The AMTEX Partnership is an industry-driven program. Therefore, the APO has delegated to the ITAC the tasks of reviewing and prioritizing current and potential AMTEX projects and of recommending a distribution of available government funding among the projects. These budget recommendations are then considered by the APO, modified as they may see fit, and then approved. The approved budget recommendations form the basis for project planning and development of an annual Operating Plan.

Technical Peer Reviews

It is the intent of AMTEX to undertake research of the highest technical quality and to ensure that government and industry resources are applied to AMTEX projects as effectively as possible.

To this end, periodic technical peer reviews are held on AMTEX projects. Additional guidance n the frequency, content, staffing, execution of peer reviews is contained in Appendix C, AMTEX Project Plan Guidance. The Peer Review Teams are independent of the project teams and are accountable to the Executive Director and Laboratory Program Manager for proper conduct and documentation of the peer review. The Project Director and Laboratory Project Manager develop, gain approval of, and execute the peer review plan.

Contractual Relationships in Projects

The formal contractual relationship among the parties in AMTEX is shown in Figure 2. The contractual agreements and the rights to intellectual property generated under AMTEX-sponsored projects are defined by these governing contractual documents.

Agreements Between Laboratories and Industry

Beginning in FY96, AMTEX will use a standard AMTEX Multi-Party CRADA. This document is signed by each participating laboratory and the lead industry RETT institution for each project. The CRADA describes the terms and conditions of the agreement, as well as the technical statement of work, including tasks, budgets, milestones, and schedules.

The AMTEX Option Agreement is also part of the CRADA agreement. It specifies the ownership and licensing agreements for any intellectual property that may result from the project work. The actual rights of each party are determined by the signed documents pertaining to each project.

The essence of the agreement is the laboratories grant the lead industry RETT an " irrevocable, exclusive, worldwide, paid-up license, with the right to sub-license, limited to the Field of Use." In a quid pro quo fashion, the lead RETT grants similar rights to the inventing laboratory, or laboratories, for all other fields of use. The Field of Use is defined in the Option Agreement as "textiles, including staple fiber and filaments, yarn, fabrics, articles made from fibers, yarns, and fabrics, textile chemicals, and textile machinery."

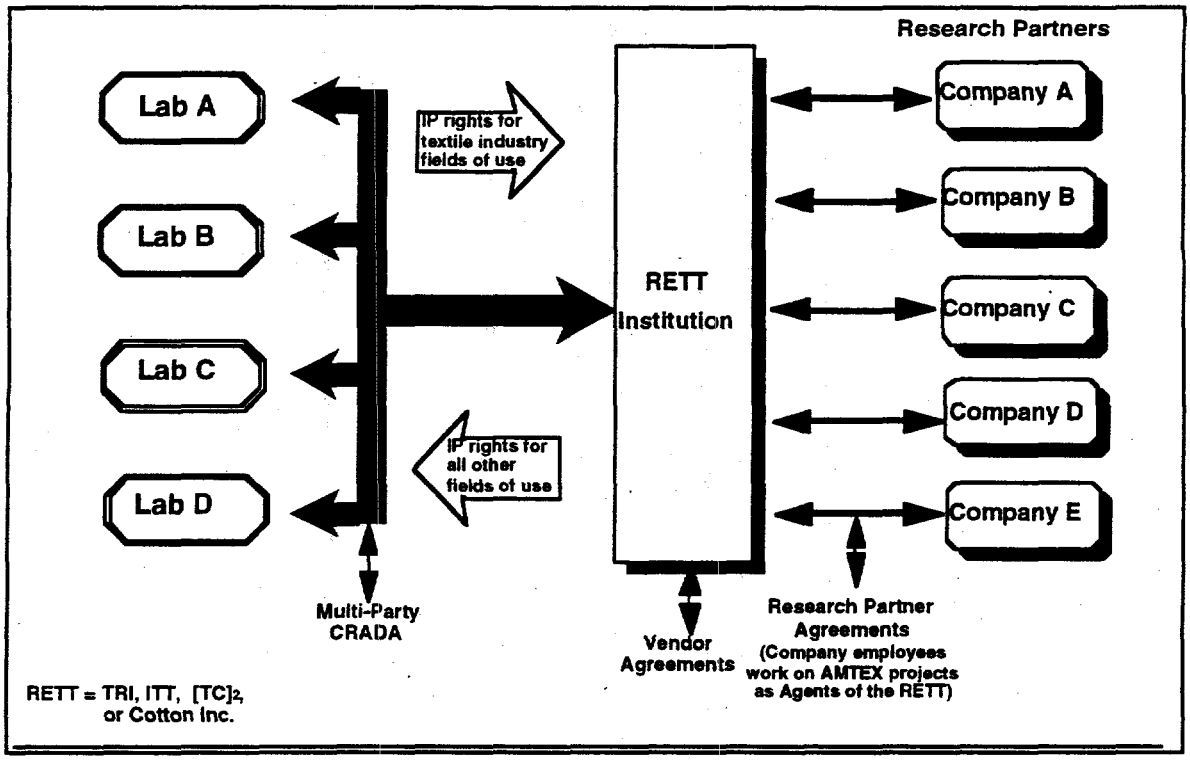

Figure 2 - AMTEX Project Contractual Structure

Agreements Between the Lead RETT and the Research Partners

The AMTEX Research Partner Agreement (Appendix D) is executed between the lead RETT for each project and all companies that participate in a project. The key feature of this agreement is it binds the Research Partners to the terms and conditions of the governing CRADA. It specifies the fee structure for the project. Another important feature is it specifies that when individuals from the Research Partner companies work on an AMTEX project, they do so as agents of the RETT institution and that rights to the intellectual property developed by those persons flow to the RETT institution.

Agreements Between the Lead RETT Institutions and Vendors or Suppliers

The AMTEX Vendor Affiliates Agreement is executed between the lead RETT for a project and companies who may receive intellectual property rights in conjunction with the commercialization of AMTEX-developed intellectual property. It is the vehicle by which rights are granted to companies to commercialize AMTEX-developed technologies.

Conduct of Business

The following procedures are used in conducting the business of the AMTEX Operating Committee:

AMTEX Operating Committee meetings are called and scheduled by the AMTEX Chair. Typically two or three meetings are held per year.

A voting quorum of the AOC is 50 percent of the voting membership.

Meeting procedures will follow Roberts' Rules of Order.

A majority vote is required for approval of routine issues, including project priorities and budget recommendations.

A two-thirds majority vote is required to modify general AMTEX organization policies or operating procedures.

Between AOC meetings, the Program Management Office has the authority to make routine decisions.

Minutes of all AOC meetings will be distributed to the entire AOC membership by the Laboratory Program Manager.

Press and Media Relations

Approval of Media Releases

The AMTEX Executive Director and the Laboratory Program Manager are responsible for all press and media relations (such as press releases) regarding AMTEX. Therefore, all press releases shall be approved by both of the Program Office managers (the Executive Director and the Laboratory Program Manager) prior to the release of AMTEX information to the press. This rule includes coverage of general AMTEX activities and project-specific activities.

The Program Management Office may elect to designate a media relations specialist to assist in the preparation and coordination of press and media materials. Laboratories desiring to prepare press releases or other media materials shall work through the AMTEX media specialist who will review the

media materials and ensure the approval of the Program Management Office managers.

Use of Logos

The name recognition and visual identity of AMTEX should be focused at the overall AMTEX program level and the project level. The AMTEX name and official AMTEX logo should be used as deemed appropriate in presentations, displays, and printed material to identify the content as being associated with the AMTEX Partnership. Project leaders may elect to develop a project logo to provide visual identity and recognition in presentations, posters, or fliers. In order not to dilute the name recognition and visual identity of projects and also to avoid potential confusion, the use of logos for tasks within projects is discouraged.

Personnel

Operating Committee Chair

Nomination: Candidates for AOC Chair are nominated by the Laboratory AOC members. Candidates are limited to the Laboratory AOC members.

Selection: If three or more candidates are nominated, the Laboratory AOC members each cast a vote for one candidate. The two candidates receiving the most votes are then put forward for a second vote. The AOC Chair shall be the candidate receiving the majority vote. In the event of a tie vote on the final balloting, the Chair of the AMTEX Oversight Board shall be given a vote to break the tie.

Term of Service: The AOC Chair serves for a period of five years. The AOC Chair may be replaced (removed from position) at any time during the term of service by a two-thirds majority vote of the Laboratory AOC members.

Operating Committee Vice-Chair

The AOC Vice-Chair is the person who serves as the Chair of the Industry Operating Board and is selected according to the procedures of that body.

Executive Director

The AMTEX Executive Director is selected by, and according to the procedures of, the Industry Operating Board.

Laboratory Program Manager

Nomination: The Laboratory AOC members may nominate individuals from their respective laboratories for this position. The Laboratory AOC members submit documentation of their nominee's qualifications to the AOC Chair who distributes a documentation package describing all candidates to the Laboratory AOC members.

Selection: The Laboratory AOC members may pursue other sources of information, such as interviews, and discussions with others who know the nominees. If three or more candidates are nominated, the Laboratory AOC members each cast a vote for one candidate. The two candidates receiving the most votes are then put forward for a second vote. The *recommended* Laboratory Program Manager shall be the candidate receiving the majority vote. In the event of a tie vote on the final balloting, the Director, DOE/ER, Division of Laboratory Technology Applications, shall be given a vote to break the tie. The *recommended* candidate for the Laboratory Program Manager is then submitted for final approval to the Director, DOE/ER, Laboratory Technology Applications.

Term of Service: The Laboratory Program Manager serves for an indefinite term. The Laboratory Program Manager may be replaced (removed from position) at any time during the term of service by a two-thirds majority vote of the Laboratory AOC members and the concurrence of the Director, DOE/ER, Laboratory Technology Applications.

Technology Area Advisors

The Executive Director or the Laboratory Program Manager may appoint Technology Area Advisors to serve in advisory roles, as described in Section II.

Laboratory Project Managers

The Laboratory Program Manager leads the following process to select Laboratory Project Managers.

Nomination: Candidates for Laboratory Project Manager are nominated by their respective Laboratory AOC members. Candidates are limited to those laboratories that will be participating in the project, as determined by the procedures described in the procedures in this section.

Selection: The nomination documentation is assembled by the Laboratory Program Manager and distributed to all Laboratory AOC members, DOE Program Managers, the AMTEX Executive Director, and Industry Project Director. The Laboratory Project Manager is selected by the majority vote of a selection panel that is chaired by the Laboratory Program Manager. Other members of the selection panel include DOE/HQ Program Managers, the cognizant Technology Area Advisor, and two or more laboratory AOC members. The AMTEX Executive Director and Project Director will generally be invited to serve as advisors to the selection panel. In the event of a tie vote in the final ballot, the Industry Project Director will be given a vote to break the tie.

Term of Service: The Laboratory Project Manager serves for an indefinite term up to the life of the project, unless he or she chooses to vacate the position or is removed from the position.

Replacement of Laboratory Project Managers: From time to time, personnel in the DOE laboratories may choose to vacate their AMTEX positions for any number of reasons. A situation may also arise where performance concerns prompt a review of a Project Manager's performance.

When it becomes necessary to identify a Laboratory Project Manager for an ongoing project, the following procedure will be followed:

1. The AOC member from the Laboratory Project Manager's laboratory will have the first rights to nominate a qualified candidate to replace the former Laboratory Project Manager. A letter of nomination (including a summary of experience and qualifications) is prepared by the AOC member and sent to the Laboratory Program Manager.

2. The Laboratory Program Manager reviews the nomination and may choose to meet the candidate in a personal interview. The Laboratory Program Manager then forwards the AOC member's nomination documentation along with a personal assessment/recommendation to the laboratory AOC members and DOE/HQ Program Managers.

3. The laboratory AOC members and DOE/HQ Program Managers review this documentation and may elect to talk with the candidate or gather other information on his/her qualifications. A vote is then taken on the nomination by the Laboratory AOC members, the Laboratory Program Managers, and one DOE/HQ Program Manager from each DOE office or program that is funding the project. The nominee will be confirmed in

the position upon receiving a 50 percent or greater vote of that body in favor of the nominee.

4. If the nominee fails to receive a 50 percent favorable vote, the nominee will be removed from consideration. The selection process for the Laboratory Project Manager will then be conducted in accordance with the procedures peviously described, with the limitation that nominations will then be opened to only those laboratories that have a current technical role in the project.

5. If the performance of a Laboratory Project Manager comes into question, at the request of the Laboratory Program Manager and at least two laboratory AOC members or at the request of at least three laboratory AOC members, the AOC chair will initiate a performance assessment of the Laboratory Project Manager in question. The AOC Chair will appoint a panel of three or more laboratory members (one serving as chair), the Laboratory Program Manager, and one DOE/HQ Program Manager to perform a review of the Laboratory Project Manager's performance. The panel will report their assessment and recommendation to all laboratory AOC members and DOE/HQ Program Managers. The Laboratory Project Manager will be removed from the position if the review panel so recommends and that recommendation is sustained by a two-thirds vote of the laboratory AOC members, the Laboratory Program Manager, and the DOE/HQ Program Managers. If the recommendation for removal is approved, the process in the previous Steps 1 through 4 will be followed to select a new Laboratory Project Manager for that project.

Task Leaders

Task leaders for projects are selected by the project leaders: that is, the Industry Project Director selects the industry task leaders and the Laboratory Project Manager selects the laboratory task leaders. Task leaders are selected from the companies or laboratories that are performing technical work on the project.

If a task leader voluntarily vacates his/her position, the project leaders may appoint a new task leader to fill that role. The project leaders determine the method that will be followed for their project to obtain task leader nominations and to review their qualifications.

Situations may arise where the project leaders determine that a task leader responsibility should be reassigned. Such a change could be driven by changes in the technical emphasis of the task or due to concerns regarding the task leader's appropriateness for the role or because of inadequate past performance.

If a laboratory task leader responsibility is to be reassigned to a person at a different laboratory, the following actions should occur before the change is made:

- The Laboratory Project Manager informs the Laboratory Program Manager of the intended change and the reasons why it is being considered.

- The Laboratory Program Manager informs the laboratory AOC member from the current task leader's laboratory of the intended change and the reasons for making the change.

- The laboratory AOC member talks with the current task leader informing him/her of the change. The laboratory AOC member also obtains the task leader's viewpoint on the situation.

- The laboratory AOC member informs to the Laboratory Program Manager the task leader has been informed of the intended change. Any viewpoints and perspectives of the task leader are also shared with the Laboratory Program Manager, as appropriate.

- The Laboratory Program Manager informs the Laboratory Project Manager of any issues or viewpoints that came from the discussions with the laboratory AOC member and the current task leader. If the change was initiated due to inadequate performance, this feedback and communication process may mitigate the need for the change. If not, the Laboratory Project Manager proceeds to appoint a new laboratory task leader.

The preceding procedure applies only for the reassignment of formal task leader responsibilities that may span the work of several laboratories. This policy does not apply to changes in principal investigators at the laboratory level. Many occasions arise during the course of a project when individual tasks at a laboratory may be re-directed or stopped for technical or project reasons. Reasons may include deciding the approach being pursued is not viable, an alternative method may have proved to be more attractive, or funding is insufficient. When a work task at a laboratory is discontinued or re-directed, such actions can be handled between the Laboratory Project

Manager, Task Leader, and the principal investigator for that work activity. Laboratory Project Managers should send notices of such changes to the Laboratory Program Manager and a copy to the AOC member from the affected laboratory.

Developing, Reviewing, and Authorizing AMTEX Projects

Overview

This section describes the process of developing, reviewing, authorizing, and funding AMTEX projects.

The major stages in the development of AMTEX projects fall into three natural phases, each containing multiple steps. The major phases are:

1. Develop Project Concept and Impact Study (Figure 3).

   In this phase, project concepts are brought forward, investigated, defined, and reviewed to determine whether the concept would make an appropriate AMTEX project.

2. Select Project Leaders, Technical Tasks, and Form Project Team (Figure 4).

   If the concept is approved by the various stakeholders and review bodies, project leaders are chosen from industry and the DOE laboratories. The objectives, scope of work, and approach are further defined. Proposals of technical ideas and approaches are solicited from the DOE laboratories and then evaluated by the industry. A project team consisting of industry and laboratory members is formed.

3. Develop Project Plan, Process CRADAs, and Start Work (Figure 5).

   A project plan is developed and approved by the stakeholders. The contractual agreements are developed and executed and then work begins.

Process Description

A more complete description of this process is diagrammed in Figures 3-5 and described in the following text. Each numbered item following cooresponds to one action or decision icon in Figures 3-5.

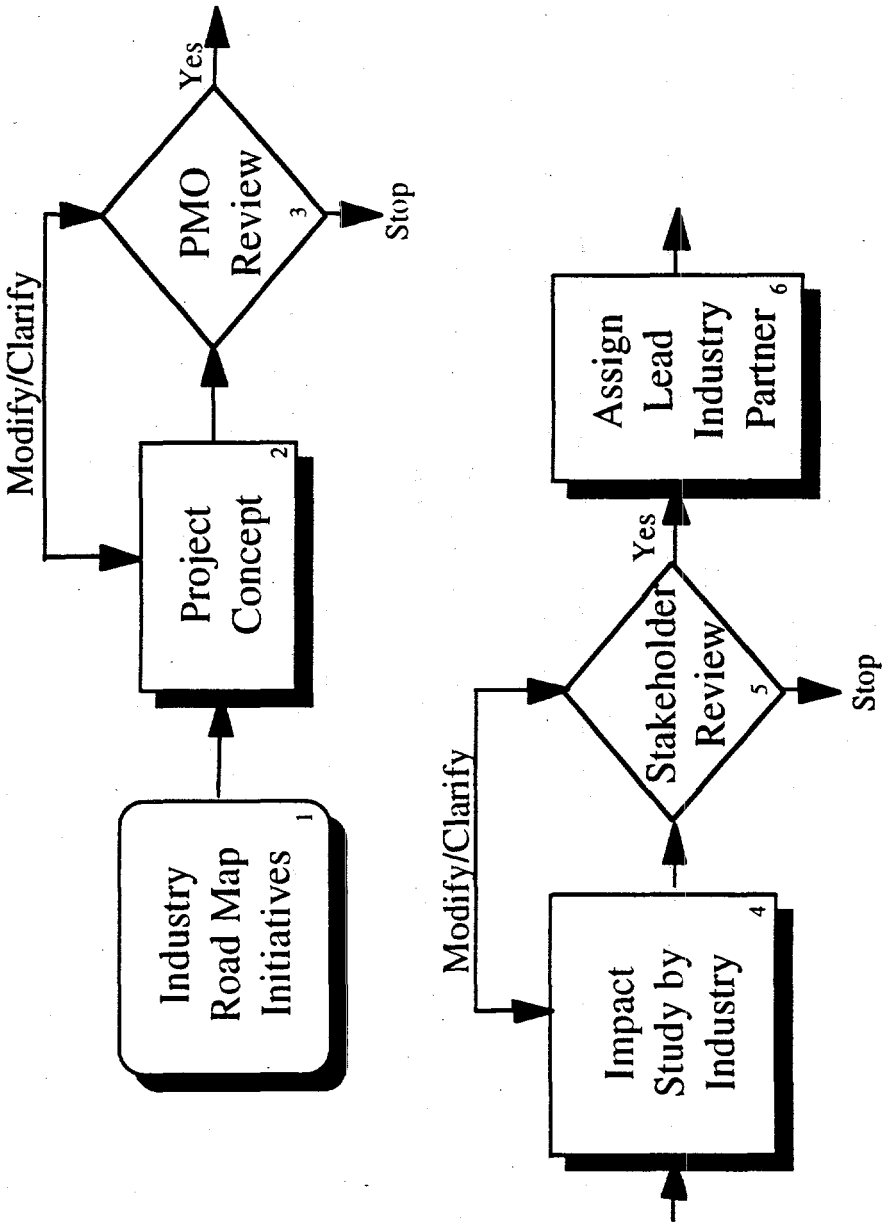

Figure 3 - Develop Project Concept and Impact Study

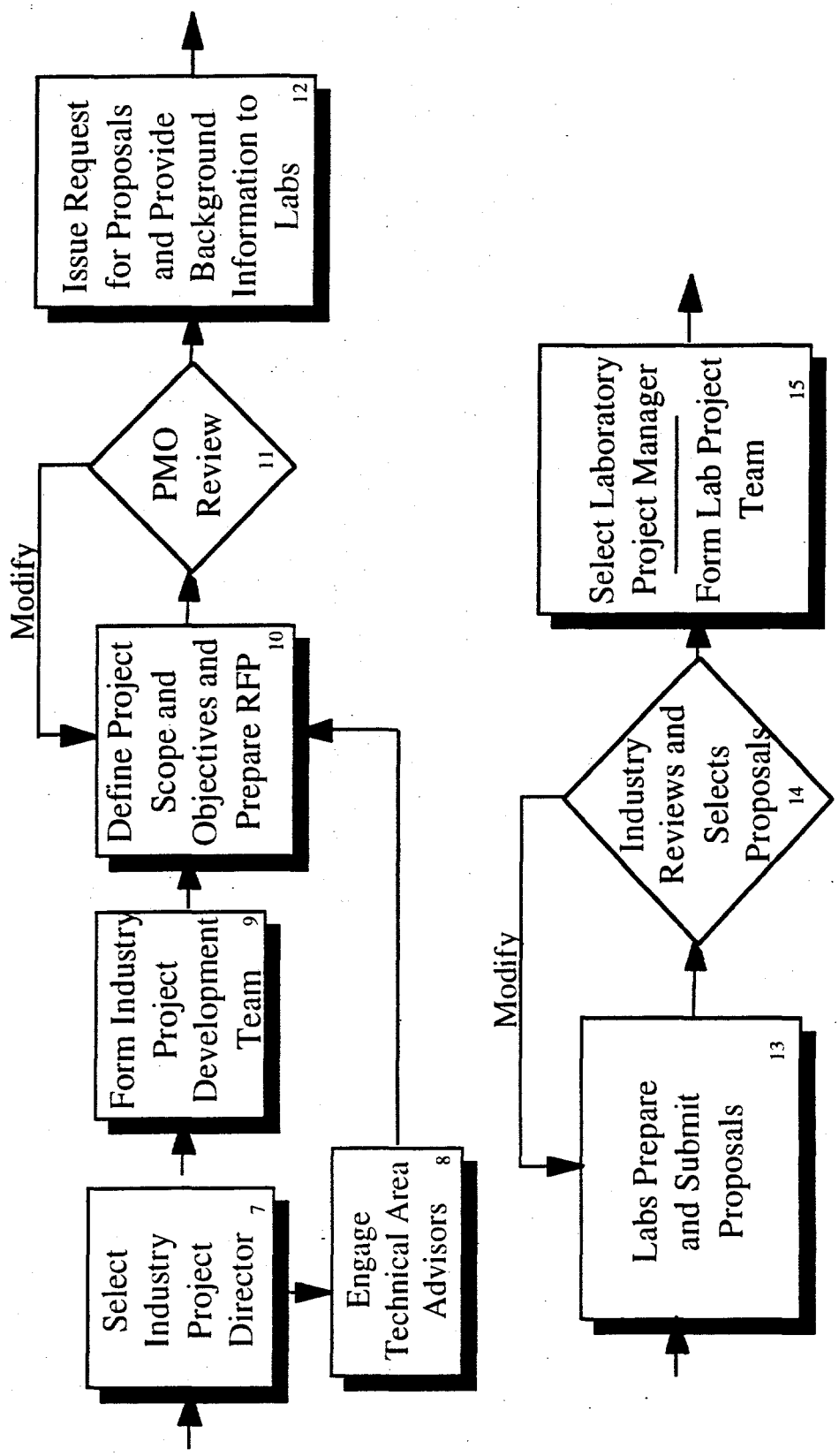

Figure 4 - Select Project Leaders, Technical Tasks, and Form Project Team

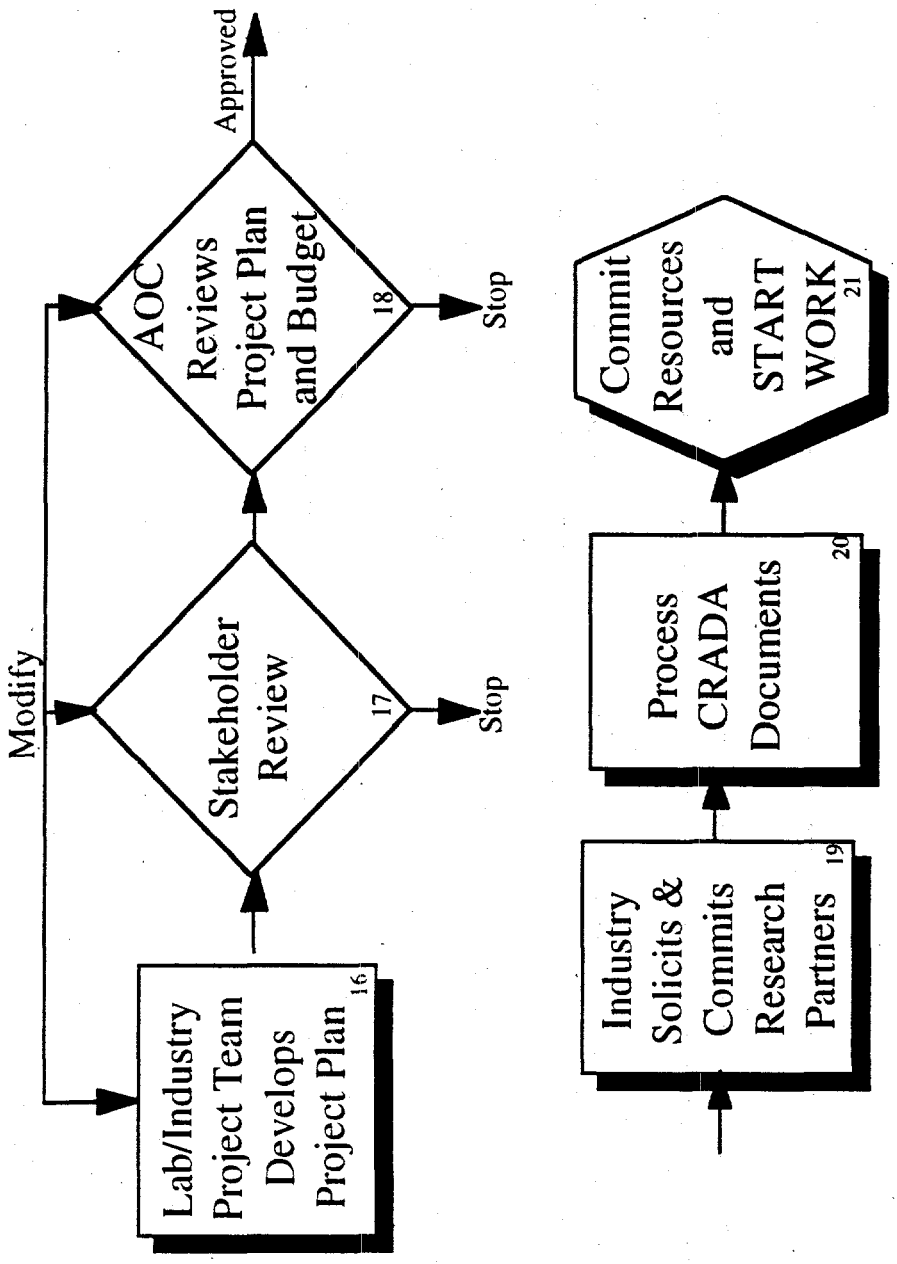

Figure 5 - Develop Project Plan, Process CRADAs, and Start Work

1. Industry Road Map Initiatives

   The Industry-developed AMTEX Technology Road Map provides the direction, focus, and general context for development of concepts for AMTEX projects.

2. Project Concept

   AMTEX projects start with an idea or concept–usually originating from an individual or a group from the industry. The idea may originate in one of the participating companies or one of the RETT organizations in a laboratory, or in a university.

   After developing and further refining the project concept, the project sponsors discuss it within the industry (companies and RETTs) to determine if industry interest would be sufficient to support an AMTEX project.

3. Program Management Office (PMO) Review

   The project sponsors next present the concept to the AMTEX Program Management Office for review. The AMTEX Executive Director and the Laboratory Program Manager conduct an initial evaluation of the project idea. They make a judgment regarding whether or not the idea and subsequent project have high probability of meeting all the project selection criteria. (These criteria are listed under ITAC Review in Step 5.) If the idea has potential for meeting the AMTEX criteria (including availability of funding), the process continues. If not, the project concept is documented and held on file in the Program Management Office.

4. Impact Study

   The project idea is next assigned to the RETT organization that is the natural home for the technology. Projects dealing with synthetic fiber manufacturing are assigned to the Textile Research Institute; textile-related projects are assigned to the Institute of Textile Technology (ITT); concepts focusing on apparel and fabricated product concepts are assigned to the Textile/Clothing Technology Corporation $[TC]^2$; and cotton-related research is

assigned to Cotton, Incorporated. Representatives from the lead RETT and representatives from interested companies, plus applicable Technical Area Advisors, form an Impact Study Team.

The Impact Study Team conducts further discussions with industry to better define industry's needs and to develop a more complete understanding of the project's scope, objectives, deliverables, and expected benefits to industry.

The Impact Study Team also evaluates which capabilities in the DOE laboratories would be essential to meeting the project objectives. This process is usually accomplished by tours and visits to the laboratories, workshops, or other forms of interaction.

At the conclusion of this step, the team will have developed a more complete definition of the project, an assessment of the key technical challenges that must be met, and an assessment of the strength and sufficiency of the technical capabilities in the DOE laboratories, the industry, and universities that would be applied to the project.

5. Stakeholder Review

The impact study is next reviewed by representatives of the AOC to ensure that a project, if approved, would meet their respective needs, criteria, and requirements. This review has four aspects.

PMO Review. The Program Management Office performs a review to determine if the Impact Study has the scope of information and level of detail that will enable the other stakeholder review bodies to perform their assessments. If so, three additional reviews take place.

ITAC Review. The Impact Study Team presents to the ITAC their assessments and recommendations regarding the potential project. The ITAC evaluates the proposed project relative to the following criteria:

> Industry-Driven Objectives: Projects are driven by, and responsive to, the needs of the fiber, textile, fabricated product, and retail industries.
>
> High Industry Impact: If successful, the project promises to make revolutionary advancements in the productivity and global competitiveness of the industry. AMTEX

projects must benefit the industry as a whole (or at least one sector of the industry such as fibers, textiles, or apparel) and not just a few companies.

Focus on Process Development: Projects focus on development of generic process technologies, not products. The generic processes can be adapted and implemented by individual companies to fit their particular needs.

High Risk and Complexity: The technical objectives of the projects pose such high risk and technical complexity that no company or group of companies could undertake the research alone.

Funding Probability: Based on the funding projections provided by the APO, future AMTEX funds would possibly be allocated to the project.

Approval of a project concept at this point is a statement of support, not a promise of funding. The ITAC reserves final approval and recommendation of funding until a detailed project plan has been developed and reviewed. In addition, enough companies must agreed to participate to provide the industry's share of the project resources.

Laboratory Review. The laboratory members of the APO review the Impact Study against the following criteria from their respective laboratory's viewpoint:

- The proposed project makes appropriate use of the unique technical capabilities of the DOE laboratories.

- Funding and conduct of this work would benefit other DOE programs and would meet other DOE programmatic requirements (such as DP dual use).

Government Review. The Impact Study is reviewed by government members of the AOC who represent offices or agencies that are potential funding partners for the project. They review the potential project against these criteria:

- The proposed project has a high probability of strengthening DOE's research capabilities and enhancing DOE's ability to meet technical challenges in its core mission areas.

- Technologies that are most likely to be developed will meet the programmatic requirements and conditions on their funding, for example, DP participation requires the technologies must have dual application in DP programs. This evaluation may indicate it is appropriate for some DOE program offices to participate, while for others it is not.

- Conduct of the proposed project is consistent with the sound management of the DOE laboratories and development of their core competencies.

If the review bodies determine that more information or clarification is needed before a project can be approved, the APO works with the Impact Study team to develop the required information. When such information is available, these reviews are repeated. If a proposed project fails to pass these reviews, it is dropped from active consideration. If a project is deemed worthy, but funding does not appear to be available in the near future, the Impact Study will be held by the APO in a pending status for future consideration.

6. Assign Lead Industry Partner

After a project successfully passes these reviews, the AMTEX Executive Director (with the advice of the ITAC) assigns the project to one of the four industry RETTs, (TRI, $[TC]^2$, ITT, or Cotton Incorporated). The designated institution (called the lead RETT) becomes the home for the project within the industry.

7. Select Industry Project Director

The lead industry institution (lead RETT) is responsible for identifying a qualified person to serve as the Project Director of the proposed project. The lead RETT makes their recommendation to the AMTEX Executive Director who makes the final approval decision.

8. Engage Technology Area Advisors

Under the direction of the APO, the appropriate Technology Area Advisors become engaged in helping the project leaders define the scope and technical approach for the project. By virtue of their broad technical expertise, these advisors play a critical role in ensuring the project is technically viable, employs the appropriate scientific and technical principles, and that technical risks and benefits are well-understood and balanced.

9. Form Industry Team

The Project Director works with the members of the Impact Study Team to identify companies that are potential Research Partners for the project. The members of the Impact Study Team typically form the nucleus of the industry partners group because they had the vision and commitment to get the project developed to this point.

Note: A company formally becomes a research partner when they signs the Research Partner Agreement with the lead RETT institution for each project. For the sake of this process description, the companies who have a strong interest in the project and are actively participating in the project/proposal development process will be referred to as industry research partners. Companies probably would not sign the Research Partner Agreement and pay the joining fees until after the AMTEX Operating Committee formally approves funding of the subject project in Step 18.

10. Industry Team Communicates Project Scope/Objectives

The Industry Project Director and the research partner companies further define, clarify, and document the scope, objectives, and deliverables for the project. They also prepare a Request for Proposal (RFP) for consideration by the laboratories.

11. PMO Review of Project Information and RFP

The AMTEX Executive Director and Laboratory Program Manager review the background information and RFP. They work with the

Project Director to make any necessary additions or clarifications needed.

12. Issue RFP and Provide Background Information to Laboratories

The Laboratory Program Manager distributes the project background information to the DOE laboratories. The laboratory members of the AOC are the points of contact in their respective laboratories for receiving and responding to this information. In addition to the dissemination of written information, the industry may choose to hold a workshop for interested laboratory staff on the scope, objectives, and key technical challenges of the project.

After the laboratories have received background material on the technical aspects of the project, the Laboratory Program Manager sends the RFP to the laboratory members of the AOC. Throughout this process, the laboratories may communicate with the industry to gain whatever insights and technical information they believe would assist them in preparing their response to the RFP.

13. Laboratory Teams Prepare Proposals

The laboratory members of the AOC work with their respective laboratories to determine whether or not their laboratory will prepare a proposal in response to the RFP. The decision by a laboratory whether or not to respond to an AMTEX RFP should include consideration of the following factors:

- the degree of match between the technologies required to meet the objectives of the RFP and the core capabilities of the laboratory and benefits that DOE would derive from the laboratory's participation in the project

- the degree to which any programmatic conditions and criteria associated with the source of funds would be satisfied (for instance, the use of DP tech transfer funding must return benefits to DP programs; similar conditions apply for other DOE offices).

At each laboratory, the AOC member is responsible for reviewing the RFP and making a bid/no-bid decision in conjunction with other laboratory management, as appropriate. If the laboratory chooses to prepare a proposal, the laboratory AOC member is responsible for reviewing the proposal to ensure the pertinent criteria would be

favorably satisfied, if their laboratory's proposal were eventually selected and funded.

Proposals prepared by the laboratories are forwarded to the Laboratory Program Office according to the timetable established for each project development activity.

14. Industry Reviews and Selects Proposals

The Laboratory Program Manager forwards the laboratory proposals to the Project Director for review and evaluation. The Project Director convenes a technical review pannel consisting of technical experts andexecutives from the prospective research partner companies. The Project Director and the AMTEX Executive Director develop the the evaluation criteria and method for ensuring that the proposals receive a thorough technical evaluation and that the recommended proposals are consistent with industry's priorities, the AMTEX R&D Road Map, and the criteria for AMTEX projects as described in Key Principles five and six. The AMTEX Laboratory Program Manager and the cognizant Technical Area Advisor participate as advisors to industry in the proposal evaluation meetings.

The result of the industry evaluation is a recommendation regarding which proposals, portions of proposals, or combination of proposals should form the technical basis of the project. The industry recommendation is a statement of which technical concepts and approaches (as described in the proposals) the industry partners would be most willing to invest with their own R&D resources as co-workers with the laboratories. The laboratories that proposed the selected concepts and proposals form the group from which the laboratory team will be composed.

The industry Project Director communicates the industry's recommendation regarding the proposals to the Laboratory Program Manager.

15. Select Laboratory Project Manager and Form Laboratory Team

The Laboratory Project Manager then works with the principal investigators of the tasks/proposals selected by the industry to develop the laboratory project team. When the task structure of the project is known, the Laboratory Project Manager designates members of the laboratory team to serve as task leaders for the project.

16. Industry/Laboratory Team Develops the Project Plan

The Industry Project Director and the Laboratory Project Manager lead the joint industry/laboratory team in developing an integrated multi-year project plan. The plan should be developed in accordance with the current guidance from the Program Management Office regarding the content and format of AMTEX project plans.

17. Stakeholders Review Project Plan

The Industry Project Director provides the project plan to the AMTEX Executive Director and Laboratory Program Manager.

If the plan meets with their approval, it is forwarded to the ITAC for review. The plan is considered by the ITAC and approved/ disapproved by a formal vote. The key issues considered by the ITAC at this point are the same as those listed previously under Step 4. It is important for the ITAC to consider the likelihood of funding based on where the project fits in the overall priorities of AMTEX projects.

The plan is next forwarded to the government and laboratory members of the AOC for review. If agencies other than DOE are also involved in funding the project, representatives of those agencies also participate in the government review.

The government team and laboratories reviewers evaluate the project plan for those issues listed under Step 5.

18. AMTEX Operating Committee Reviews Project Plan and Budget

If the reviews in Step 17 are favorable, the project plan is presented to the entire AOC for approval. Approval by the AOC sanctions the project for funding and support under AMTEX.

19. Industry Solicits and Commits Research Partners

The lead industry RETT for the project proceeds to broadly inform the industry regarding the opportunity to participate in the recently approved AMTEX project. Through a variety of mechanisms, companies are informed about the project and given the opportunity to join as formal Research Partners. The IOB Procedures describe this process in more detail. A company becomes a formal Research Partner when the company signs the Research Partner Agreement with the lead RETT and pays the requisite joining fees.

20. Laboratories Prepare and Process CRADA Documentation

This step concerns the preparation of the formal contractual agreements between the lead RETT and the participating laboratories. The contractual vehicle is a Cooperative Research and Development Agreement or CRADA.

The CRADAs are prepared and processed according to the current policies and procedures of the DOE. When more than one laboratory is involved in a project as expected, the preferred contractual mechanism is a multi-party CRADA. The Laboratory Project Manager's laboratory and Operations Office take the lead in preparing the multi-party CRADA documents in cooperation with other participating laboratories.

21. Commit Resources and Start Work

After the CRADA documents are signed, authorized government funding is released or approved for project work. Similarly, the RETT institution and the Industry Research Partners engage their resources on the project activities.

Section IV
Policies and Procedures
of
AMTEX Industry Operating Board

Definitions

Industry Operating Board

The IOB represents the fiber, textiles, fabricated products, and retail industrial sectors on the AMTEX Operating Committee. The membership of the IOB is defined in IOB Membership Structure under one Organizational Policies in this section. The IOB has specific responsibilities and accountabilities in AMTEX as defined in Section II of this document.

RETT

RETT signifies research, education, and technology transfer. The RETT organizations in AMTEX are: Cotton Incorporated, Institute of Textile Technology (ITT), National Textile Center (NTC), Textile Research Institute (TRI), and Textile/Clothing Technology Corporation, $[TC]^2$.

Lead RETT

The lead RETT on an AMTEX Project is the RETT that is designated by the IOB to provide the primary industry management, administration, and oversight for an AMTEX project. The lead RETT is a signatory to the CRADAs between the industry and the DOE laboratories. Companies that become Research Partners or Research Affiliates on a project do so by signing the appropriate agreement with the lead RETT. The AMTEX CRADA and associated Option Agreement stipulate the lead RETT has certain rights and options to the intellectual property generated on the project for a *field of use*, as defined by the Option Agreement which pertains to fibers, textiles, sewn products, and related processes and machinery.

Sponsoring RETTs

The IOB may determine that it is in the best interest of the industry, as a whole, to have RETTs in addition to the lead RETT obtain certain rights and certain obligations on an AMTEX project. With IOB approval, the lead RETT and other RETTs may enter into a written agreement regarding such

items as intellectual property rights, obligations for support, technology transfer, and commercialization. In such cases, the lead RETT and the additional RETTs joining the project, become the sponsoring RETTs for the project.

Organizational Policies

Leadership Bodies

IOB Chair and Vice-Chair: The Chairperson and Vice-Chairperson of the IOB shall be selected from among the industry representatives of the ITT and the $[TC]^2$ (one officer from each institution). The Chair and Vice-Chair are nominated by the institution they represent and are approved by the IOB.

RETT Operating Committee: The RETT Operating Committee (ROC) consists of the presidents/directors of the five RETT organizations. The Chair and Vice-Chair are selected from either ITT or $[TC]^2$ maintaining a counter relationship with the Chair and Vice-Chair of the IOB (if the IOB Chair is from a $[TC]^2$ member company, then the ROC Chair would be the President of ITT and vice versa).

Industry Operating Board Executive Committee: The IOB Executive Committee (IOBEC) consists of the IOB Chair, Vice Chair, and the RETT Operating Committee (that is the presidents/directors of the five RETTs).

Industry Technical Advisory Committee: Each company, RETT, or university representative on the IOB shall appoint one member to the ITAC. The IOB may appoint up to four additional members based on their broad industry knowledge and expertise.

AMTEX Executive Director: An AMTEX Executive Director shall be selected and approved by the IOB. The Executive Director serves as head of the AMTEX Industry Program Office and Chair of the ITAC. The role and responsibilities of the Executive Director are described in Sections II and III of this document.

IOB Membership Structure

The structure of the IOB shall consist of general members and at-large members as described in Tables 1 and 2.

Research, Education, and Technology Transfer (RETT) Organization	**Number of Representatives**	**Description/Comment**
Textile Research Institute (TRI)	1	Director of TRI *
	2	Industry Representatives
Cotton Incorporated	1	Senior Vice President of Cotton Incorporated*
	2	Industry Representatives
Institute of Textile Technology (ITT)	1	President of ITT*
	4	Industry Representatives
Textile/Clothing Technology Corp. $[TC]^2$	1	President of $[TC]^{2*}$
	4	Industry Representatives
	1	Retail Representative
National Textile Center (NTC)	1	Operating Committee Chair*
	1	University Operating Comm.
	2	Industry Oversight Comm.
Total	21	

* Indicates member of RETT Operating Committee

Table 1 - General Members of the Industry Operating Board

Organization	Number of Representatives	Description/Comments
NTC	1	Department of Commerce
	1	Director of NTC
TRI	1	Executive Committee, Chair
Cotton Inc.	1	Executive Committee, Chair
ITT	1	Executive Committee, Chair
$[TC]^2$	1	Executive Committee, Chair
Other	0-5	At-Large Company Representatives
	0-5	Special knowledge or expertise individuals
Subtotal	6-16	
RETT Representatves	21	
IOB TOTAL	27-37	

Table 2 - At-Large Members of the Industry Operating Board

IOB Membership Policies

1. Each of the five RETTs will nominate its industry/university representatives for IOB membership in accordance with the structure defined in Tables 1 and 2. The nominated industry/university representatives must be approved by the Board of Directors of each respective RETT and then approved by the IOB.

2. The industry/university representative's company or university must be a member of their sponsoring RETT institution. The representatives to the IOB must be a full-time employee of their company or university.

3. The at-large companies and special knowledge/expertise IOB members will be elected by the IOB for a 1-year term.

4. The IOB members and officers elected initially (excluding "At-Large" members) will serve three year terms. A rotational plan will be adopted at the end of the first three years.

5. An Executive Secretary of the IOB will be appointed by the IOB Chair.

IOB General Policies

1. A voting quorum of the IOB is 50 percent of the membership, excluding at-large members.

2. Normally, both IOB members and ITAC members attend IOB and AOC meetings.

3. Business of the IOB meetings will be conducted via Roberts' Rules of Order.

4. A majority vote is required to approve routine motions and actions.

5. A two-thirds vote is required to modify organizational policies or operating procedures.

6. The IOBEC has authority to make routine operating decisions between IOB meetings.

7. Minutes of all IOB meetings will be distributed to the entire IOB membership.

8. To become a research partner in an AMTEX project, a manufacturing company must have substantial U.S. manufacturing capacity. All Research Partners must be approved by the IOB.

9. Participation in AMTEX projects as a research partner is open to the entire U.S. textile complex, per the processng General Policy 8. Companies join a project either as a RETT-Member Company or as a Non-RETT Member Company.

   All companies that are members of TRI, ITT, or $[TC]^2$ are considered RETT-Member Companies.

   For purposes of participation in AMTEX projects, RETT-Member Companies of Cotton Incorporated includes only those members of Cotton Incorporated that are independent business operations whose primary business is to produce cotton fiber and cotton seed and their wholly owned subsidiary businesses, such as gins. These companies join Cotton Incorporated by their financial contributions based on the volume of their fiber production.

All other companies, including suppliers, vendors and consultants are considered to be Non-RETT Member Companies.

10. The ROC is responsible for the oversight of the Industry Program Office. The AMTEX Executive Director reports to the ROC.

11. Trade and technical organizations participate in AMTEX through their involvement in the development of projects. The RETT organizations are responsible for communicating and interacting with specific trade and technical organizations regarding AMTEX activities and issues.

Operating Procedures

1. All RETT sponsor(s) of AMTEX projects are responsible for obtaining approval from their respective Executive Committees for conduct of the project. The lead RETT is also responsible for organizing the Industry Research Partners and Research Affiliates and for providing management and administrations of projects they lead.

2. The following policies and procedures govern participation by Research Partners:

   a) An industry company becomes a Research Partner on a project by signing the specific Research Partner Agreement for that project and by paying the requisite fees.

   b) Currently, the number of RETT-Member or Non-RETT Member Companies that may become Research Partners on AMTEX projects has no limit.

   c) The fees required for a Non-RETT-Member Company to become a Research Partner shall be three times that of a RETT-Member Company.

   d) A Research Partner's fee structure will be in effect for the period specified in the Master Research Partner Agreement signed by the company (Research Partner) and the lead RETT for that project. In the event of a company's change in status (that is, joining or leaving a RETT institution), the fee structure will remain in effect for the period of the Research Partner

Agreement, unless the signatory RETT and the Research Partner renegotiate a different agreement and the modified agreement is approved by the IOB.

e) A company joining an AMTEX project after the official start date is subject to pay, at minimum, the project joining fees retroactive to the start date, unless the lead RETT institution proposes a modification to this policy and that modification is approved by the IOB.

f) Companies seeking to become Research Partners on a project must first be approved by the IOB. The lead RETT institution is responsible for obtaining IOB approval before signing a Research Partner Agreement with a company.

3. Request for Research Partners

The lead RETT institution for a project is responsible for preparing a RFRP document and informing companies of the opportunity to participate in the proposed AMTEX project.

a) The RFRP will contain:

1) Project Scope (objectives and resources required).

2) Minimum number of companies required for participation; in most cases, no limit on the number of companies is anticipated.

3) Commitments and resources required from Research Partners, including:

- Number of people (full-time equivalent) to be assigned to the project and the duration of their involvement
- Specific expertise of the participants required
- Project schedule, including specific objectives, deliverables, and schedule
- Fees and any other financial commitments
- Equipment and facilities requirements

- Commitment to track and report the resources applied to the project.

4) Outline of sharing of costs (if appropriate)

5) Incentives (such as lead times) for Research Partner companies (if applicable).

6) A Research Partner Agreement and corresponding Confidentiality Agreement required for each Research Partner (defining the specific responsibilities of each partner) to participate.

b) If appropriate, responses to the RFRP by interested companies will include:

1) Level of interest

2) Commitment to meet the requirements set forth in the RFRP

3) Statement of anticipated company contributions.

4. Research Partner Participation, Technology Transfer, and Administrative Guidelines.

a) To qualify as a Research Partner, a company responding to the RFRP must agree to meet the resource requirements stated in the RFRP.

b) From qualified respondents, the Research Partners will be selected based upon an analysis of their stated resources and level of commitment to the project. Whenever practical, the number of participants will not be limited.

c) The Research Partners will share proportionately the administration and management costs required to support the research project over the project lifetime.

d) The Master Research Partner Agreement and the corresponding Acceptance Agreement outline the responsibilities and commitments of the Research Partners and the sponsoring RETT(s) including:

- Addition of new Research Partners
- Terms of lead time where applicable

- Confidentiality
- Proprietary technology and information
- License agreements.

e) Upon completion of the AMTEX project, the technology will be transferred to the sponsoring RETT(s) and the AMTEX project administration costs will cease.

f) Transfer of technology to the Research Partners and the industry in general is the responsibility of the sponsoring RETT(s) and the steering committee of the project Research Partners. In addition;

- The maximum lead time for any project is three years. Lead times may be shortened by the Research Partners with the approval of the IOBEC. Lead times cannot be lengthened beyond those specified in the original Master Research Partner Agreement for a specific project.

- After expiration of the applicable lead times, the Sponsoring RETT(s) will license the technology broadly to the industry, as appropriate.

5. Research Affiliates Participation Guidelines

a) Vendors, suppliers and consultants may be required to join AMTEX projects as Research Affiliates.

b) The lead RETT and Research Partners for a project will provide *fairness of opportunity* for companies to be considered as Research Affiliates. This policy will be supported through broad public notice to the industry through such means as publication in the *Commerce Business Daily* or appropriate trade magazines. The Research Partners will select companies to become Research Affiliates using a well-documented evaluation process. Participation of companies as Research Affiliates is not an entitlement and is at the discretion of the lead RETT and Research Partners for each project.

c) Potential Research Affiliates will respond to the solicitation and present the Research Partners with a written statement of their resources, expertise, and commitments and explain how these factors

will contribute to the successful commercialization of the AMTEX-developed technology.

d) A Master Research Affiliates Agreement and corresponding Acceptance Agreement, specifying the duties, responsibilities, and rights of each Research Affiliate shall be executed by the lead RETT and the Research Affiliates. This agreement shall define the applicable lead times granted to Research Partners and specify the rights of the Research Affiliates to AMTEX-developed intellectual property.

e) The participation/joining fee required from a Research Affiliate may be a combination of direct and *in-kind* contributions, as required by specific projects.

f) The IOB must approve each Research Affiliate and their proposed direct and in-kind participation commitments to the project.

6. Communication

The progress, developments, and issues on a project will be communicated to the Research Partners by the sponsoring RETT(s). Communications, consistent with all legal agreements, are coordinated by the Industry Project Director who is typically an employee of, or contractor to, the lead RETT.

Appendix A
Charter of the AMTEX Oversight Board

Introduction – The AMTEX Partnership is a path-finding research and development collaboration among the U.S. Department of Energy, the contract operators of its national laboratories, and research, education, technology transfer (RETT) consortia representing the integrated textile industry. The goal of AMTEX is to strengthen the competitiveness of the U.S. textile industry. The complex nature of the collaboration requires consistent and reliable policy direction. The partners, therefore, established this board to provide senior level management oversight of the partnership.

The Oversight Board exists to promote and safeguard the interests of each of the partners through a team-based management approach. The deliberations of this committee may require the disclosure of proprietary information. This board is not an Advisory Committee, as defined by the Federal Advisory Committee Act.

Membership – The Oversight Board will be composed of executive representation from the three segments of the AMTEX Partnership: the DOE, the integrated textile industry, and national laboratories. Board members include:

- Chair - Director of Energy Research, DOE
- Co-Chair - Industry Operating Board Chair
- Assistant Secretary for Defense Programs, DOE
- Assistant Secretary for Energy Efficiency and Renewable Energy, DOE
- Director, DOE/ER, Division of Laboratory Technology Applications
- Director, DOE/DP, Office of Economic Competitiveness
- Industry Operating Board - Vice Chair
- Chair, AMTEX Operating Committee
- Laboratory Directors - Major participating laboratories only
- Presidents, Institute of Textile Technology (ITT) and Textile/Clothing Technology Corporation $[TC]^2$
- AMTEX Executive Director.

Responsibilities – The Oversight Board will provide senior level management/leadership and policy/guidance for the AMTEX Partnership. The board will focus on broad policy/ organizational/performance long-range funding and resource planning issues essential for an effective and successful endeavor.

Key areas of responsibility by the Oversght Board include the following.

- Review and approval of the AMTEX organizational structure and leadership
- Review and approval of AMTEX policies and operating procedures
- Review of annual progress against milestones and accomplishments.

Appendix B
AMTEX CRADA and Option Agreement

STEVENSON-WYDLER (15 USC 3710)
COOPERATIVE RESEARCH AND DEVELOPMENT
AGREEMENT (hereinafter "CRADA") NO._____

BETWEEN

_____

under its U.S. Department of Energy Contract

No. _____ (hereinafter "Contractor")

AND

_____(hereinafter "Participant")
both being hereinafter jointly referred to as the "Parties"

ARTICLE I: DEFINITIONS

A. "Government" means the United States of America and agencies thereof.

B. "DOE" means the Department of Energy, an agency of the United States of America.

C. "Contracting Officer" means the DOE employee administering the Contractor's DOE contract.

D. "Generated Information" means information produced in the performance of this CRADA.

E. "Proprietary Information" means information which embodies trade secrets developed at private expense outside of this Agreement and commercial or financial information which is privileged or confidential under the Freedom of Information Act (5 USC 552 (b)(4)) and which is marked as Proprietary Information.

F. "Protected CRADA Information" means Generated Information which is marked as being Protected CRADA Information by a Party to this Agreement and which would have been Proprietary Information had it been obtained from a non-federal entity.

G. "Subject Invention" means any invention of the Contractor or Participant or the Participant's agent conceived or first actually reduced to practice as defined under the United States patent laws in the performance of work under this CRADA.

H. "Background Intellectual Property" means the Intellectual Property rights in the items identified by the Parties in Appendix D, Background Intellectual Property, which were in existence prior to or are first produced outside of this CRADA, except that in the case of inventions in those identified items, the inventions must have been conceived outside of this CRADA and not first actually reduced to practice under this CRADA to qualify as Background Intellectual Property. Licensing of Background Intellectual Property, if agreed to by the Parties, shall be the subject of separate licensing agreements between the Parties. Background Intellectual Properties are not Subject Inventions.

I. "Intellectual Property" means patents, trademarks, copyrights, mask works, and other forms of comparable property rights protected by Federal law and other foreign counterparts.

J. "Trademark" means a distinctive mark, symbol or emblem used in commerce by a producer or manufacturer to identify and distinguish their goods or services from those of others.

K. "Mask Work" means a series of related images, however fixed or encoded, having or representing the predetermined, three-dimensional pattern of metallic, insulating or semiconductor material present or removed from the layers of a semiconductor chip product; and in which series the relation of the images to one another is that each image has the pattern of the surface of one form of the semiconductor chip product. (17 USC 901(a)(2))

ARTICLE II. STATEMENT OF WORK, EFFECTIVE DATE AND PERIOD OF PERFORMANCE

Appendix A, Statement of Work, is hereby incorporated into this CRADA by reference.

The effective date of this CRADA shall be the later date of (1) the date on which it is signed by the last of the parties hereto or (2) the date on which it is approved by DOE. The work to be performed under this CRADA shall be completed within _____ months/years from the effective date.

ARTICLE III. FUNDING & COSTS

A. The Participant's estimated contribution is $_____. The Government's estimated contribution, which is provided through the Contractor's contract with DOE, is $_____, subject to available funding.

B. Neither Party shall have an obligation to continue or complete performance of its work at a cost in excess of its estimated cost as contained in Article III A above, including any subsequent amendment.

C. Each Party agrees to provide at least ___days' notice to the other Party of termination if it elects to terminate pursuant to Article III B hereof because its actual cost to complete performance will exceed its estimated cost, or, by mutual agreement, may revise estimated cost.

D. [For CRADAs which include (non-Federal) funding on a funds-in basis, an advance payment provision will be negotiated consistent with current DOE policy.]

ARTICLE IV: PROPERTY

All tangible personal property produced under this CRADA shall become the property of the Participant or the Government depending upon whose funds were used to obtain it.

Such property is identified in Appendix A, Statement of Work. Personal Property shall be disposed of as directed by the owner at the owner's expense. All jointly funded property shall be owned by the Government.

ARTICLE V: DISCLAIMER:

THE GOVERNMENT, THE PARTICIPANT, AND THE CONTRACTOR MAKE NO EXPRESS OR IMPLIED WARRANTY AS TO THE CONDITIONS OF THE RESEARCH OR ANY INTELLECTUAL PROPERTY OR PRODUCT MADE, OR DEVELOPED UNDER THIS CRADA, OR THE OWNERSHIP, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE RESEARCH OR RESULTING PRODUCT. NEITHER THE GOVERNMENT, THE PARTICIPANT, NOR THE CONTRACTOR SHALL BE LIABLE FOR SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES.

ARTICLE VI: PRODUCT LIABILITY

A. Except for any liability resulting from any negligent or intentional acts or omissions of Contractor, Participant indemnifies the Government and the Contractor for all damages, costs and expenses, including attorney's fees, arising from personal injury or property damage occurring as a result of the making, using or selling of a product, process or service by or on behalf of the Participant, its assignees or licensees, which was derived from the work performed under this CRADA. In respect to this Article, neither the Government nor the Contractor shall be considered assignees or licensees of the Participant, as a result of reserved Government and Contractor rights. The indemnity set forth in this paragraph shall apply only if Participant shall have been informed as soon and as completely as practical by the Contractor and/or the Government of the action alleging such claim and shall have been given an opportunity, to the maximum extent afforded by applicable laws, rules, or regulations, to participate in and control its defense, and the Contractor and/or Government shall have provided all reasonably available information and reasonable assistance requested by Participant. No settlement for which Participant would be responsible shall be made without Participant's consent unless required by final decree of a court of competent jurisdiction.

B. For licenses granted by Contractor to any third party in Intellectual Property generated under this contract, such licenses shall include the requirement that the third party shall indemnify the Government, Contractor, and Participant for all damages, costs and expenses, including attorney's fees, arising from personal injury or property damage occurring as a result of the making, using or selling of a product, process or service by or on behalf of such third party, its assignees or licensees, provided, however, such third parties shall not be required to indemnify the Participant for any negligent or intentional acts or omissions of the Participant.

ARTICLE VII: OBLIGATIONS AS TO PROPRIETARY INFORMATION

A. Proprietary Information may be disclosed orally, electronically, visually or in a written or other tangible form. To the extent that any Generated Information divulges, duplicates or substantially duplicates Proprietary Information, such Generated Information shall be marked and treated as Proprietary Information. If disclosed to a Party in tangible form, Proprietary Information shall be marked as such. If Proprietary Information is disclosed to a Party other than in tangible form, it shall be identified as such at the time of disclosure and confirmed in a written summary thereof within ___ days as being Proprietary Information.

B. Each Party agrees not to use Proprietary Information provided by another Party for any purpose other than as set forth in this CRADA or disclose such Proprietary Information provided by another Party to anyone other than the CRADA Participant

and Contractor without written approval of the providing Party, except to Government employees who are subject to 18 USC 1905. Disclosures of Proprietary Information to DOE employees shall occur only onsite at the Contractor's facilities unless mutually agreed upon by the Parties. Contractor and DOE shall limit their respective internal disclosure of Proprietary Information to those employees or agents having a need to know such information. The Department of Energy agrees that all Participant Proprietary Information and any notes, extracts, analyses or materials which are prepared by the DOE employees at the site of the Contractor's facilities that would disclose Participant Proprietary Information shall not be removed by DOE from the Contractor's facilities. Neither Contractor nor Participant shall physically transfer Proprietary Information of the other Party to the DOE without the express written authorization of such other Party, and subject to terms and conditions approved by such other Party. Contractor and Participant will each promptly advise the owner of the Proprietary Information in writing of any unauthorized disclosure or use of Proprietary Information by any person.

C. All Proprietary Information shall be returned to the provider thereof at the conclusion of this CRADA at the provider's expense.

D. All Proprietary Information shall be protected, unless and until such Proprietary Information shall become publicly known without the fault of the recipient, shall come into recipient's possession without breach of any of the obligations set forth herein by the recipient, or shall be independently developed by recipient's employees who did not have access to such Proprietary Information.

E. In no case shall the Contractor provide Proprietary Information of Participant to any person or entity for commercial purposes, unless otherwise agreed to in writing by each Party.

ARTICLE VIII: OBLIGATIONS AS TO PROTECTED CRADA INFORMATION

A. Each Party may designate as Protected CRADA Information, as defined in Article I, any Generated Information produced by its employees, and with the agreement of the other Party, mark any Generated Information produced by the other Party's employees. All such designated Protected CRADA Information shall be appropriately marked.

B. For a period of _____ [not to exceed five years] from the date Protected CRADA Information is produced, Parties agree not to further disclose such Information except:

(1) as necessary to perform this CRADA;

(2) other than as provided in Article XI, as requested by the DOE Contracting Officer to be provided to other DOE facilities for use only at those DOE facilities with the same protection in place; or

(3) as mutually agreed by the Parties in advance.

C. The obligations of (B) above shall end sooner for any Protected CRADA Information which shall become publicly known without fault of either Party, shall come into a Party's possession without breach by that Party of the obligations of (B) above, or shall be independently developed by a Party's employees who did not have access to the Protected CRADA Information.

ARTICLE IX: RIGHTS IN GENERATED INFORMATION

The Parties understand that the Government shall have unlimited rights in all Generated Information or information provided to the Parties under this CRADA which is not marked as being copyrighted (subject to Article XIII) or as Protected CRADA Information (subject to Article VIII B) or Proprietary Information (subject to Article VII B).

ARTICLE X: EXPORT CONTROL

THE PARTIES UNDERSTAND THAT MATERIALS AND INFORMATION RESULTING FROM THE PERFORMANCE OF THIS CRADA MAY BE SUBJECT TO EXPORT CONTROL LAWS AND THAT EACH PARTY IS RESPONSIBLE FOR ITS OWN COMPLIANCE WITH SUCH LAWS.

ARTICLE XI: REPORTS AND ABSTRACTS

A. The Parties agree to provide the following deliverables to DOE:

(1) initial, nonproprietary abstracts suitable for public release;

(2) other, nonproprietary abstracts (final when work is complete, and others as substantial changes in scope and dollars occur);

(3) a final report with suitable markings identifying protected information; and

(4) other topical/periodic reports where the nature of research and magnitude or dollars justify.

B. The Parties acknowledge that DOE has the right to require delivery of reports and abstracts produced under this CRADA, subject to Article IX.

ARTICLE XII: PRE-PUBLICATION REVIEW

A. Each Party ("Submitter") shall submit to the other Party ("Recipient"), in advance, proposed written publications and oral public presentations on work performed under this CRADA. Proposed oral presentations shall be submitted to Recipient in the form of a written presentation synopsis and a written abstract.

B. Recipient shall provide a written response to the Submitter within thirty (30) days, either objecting or not objecting to the proposed publication. Submitter shall consider all objections of Recipient and shall not unreasonably refuse to incorporate the suggestions and meet the objections of Recipient. The proposed publication shall be deemed not objectionable, unless the proposed publication contains Proprietary Information, Protected CRADA Information, or material that would create potential statutory bars to filing the United States or corresponding foreign patent applications, in which case express written permission shall be required for publication.

C. The Parties agree that neither will use the name of the other Party or its employees in any promotional activity, such as advertisements, with reference to any product or service resulting from this CRADA, without prior written approval of the other Party.

ARTICLE XIII: COPYRIGHTS

A. The Parties may assert copyright in any of their Generated Information.

B. [Allocation of rights to Copyrights in Generated Information will be negotiated by the Parties.]

C. For Generated Information, the Parties acknowledge that the Government has for itself and others acting on its behalf, a royalty-free, nonexclusive, irrevocable worldwide copyright license to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government, all copyrightable works produced in the performance of this CRADA, subject to the protection provided under this CRADA for Proprietary Information and Protected CRADA Information.

D. For all copyrighted computer software produced in the performance of this CRADA, the Party owning the copyright will provide the source code, an expanded abstract as

described in Appendix B, and the object code and the minimum support documentation needed by a competent user to understand and use the software to DOE's Energy Science and Technology Software Center. The expanded abstract will be treated in the same manner as Generated Information in subparagraph C of this Article.

E. The Contractor and the Participant agree that, with respect to any copyrighted computer software produced in the performance of this CRADA, DOE has the right, at the end of the period set forth in paragraph B of Article VIII hereof and at the end of each two-year interval thereafter, to request the Contractor and the Participant and any assignee or exclusive licensee of the copyrighted software to grant a nonexclusive, partially exclusive, or exclusive license to a responsible applicant upon terms that are reasonable under the circumstances, provided such grant does not cause a termination of any licensee's right to use the copyrighted computer software. If the Contractor or the Participant or any assignee or exclusive licensee refuses such request, the Contractor and the Participant agree that DOE has the right to grant the license if DOE determines that the Contractor, the Participant, assignee, or licensee has not made a satisfactory demonstration that it is actively pursuing commercialization of the copyrighted computer software.

Before requiring licensing under this paragraph E, DOE shall furnish the Contractor/Participant written notice of its intentions to require the Contractor/Participant to grant the stated license, and the Contractor/Participant shall be allowed 30 days (or such longer period as may be authorized by the cognizant DOE Contracting Officer for good cause shown in writing by the Contractor/Participant) after such notice to show cause why the license should not be required to be granted.

The Contractor/Participant shall have the right to appeal the decision by the DOE to the grant of the stated license to the Invention Licensing Appeal Board as set forth in paragraphs (b)-(g) of 10 CFR 781.65, "Appeals".

F. The Parties agree to place Copyright and other notices, as appropriate for the protection of Copyright, in human readable form onto all physical media, and in digitally encoded form in the header of machine readable information recorded on such media such that the notice will appear in human readable form when the digital data are off loaded or the data are accessed for display or printout.

ARTICLE XIV: REPORTING INVENTIONS

A. The Parties agree to disclose to each other each and every Subject Invention, which may be patentable or otherwise protectable under the Patent Act. The Parties

acknowledge that the Contractor will disclose Subject Inventions to the DOE within two (2) months after the inventor first discloses the invention in writing to the person(s) responsible for patent matters of the disclosing Party.

B. These disclosures should be in such detail as to be capable of enabling one skilled in the art to make and use the invention under 35 USC 112. The disclosure shall also identify any statutory bars, i.e., printed publications describing the invention or the public use or on sale of the invention in this country. The Parties further agree to disclose to each other any subsequent statutory bar that occurs for an invention disclosed but for which a patent application has not been filed. All invention disclosures shall be marked as confidential under 35 USC 205.

ARTICLE XV: TITLE TO INVENTIONS

A. Each party shall own the title to any Intellectual Property including Subject Inventions made solely by its employees or agents. Title to jointly made Intellectual Property shall be jointly owned. If either party elects not to retain its interest in the title to certain Intellectual Property, the other party shall have the first option to acquire that party's interest in such Intellectual Property. Additional rights of the Parties with respect to Intellectual Property are addressed in a separate option agreement executed by the Parties concurrently herewith and attached in Appendix C.

B. The Parties acknowledge that the DOE may obtain title to each Subject Invention reported under Article XIV for which a patent application or applications are not filed and for which any issued patents are not maintained by any Party to this CRADA.

C. The Parties acknowledge that the Government retains a non-exclusive, non-transferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the United States every Subject Invention under this CRADA throughout the world.

ARTICLE XVI: FILING PATENT APPLICATIONS

A. The Parties agree that the Party initially indicated as having an ownership interest in any Subject Inventions shall have the first opportunity to file U.S. and foreign patent applications; but if such Party does not file such applications within six months after disclosure, then the other Party to this CRADA may file patent applications on such inventions. The Parties shall agree among themselves as to who will file patent applications on any joint invention. If a patent application is filed by the other Party ("Filing Party"), the Inventing Party shall reasonably cooperate and assist the Filing Party, at the Filing Party's expense, in executing a written assignment of the Subject

Invention to the Filing Party and in otherwise perfecting the patent application, and the Filing Party shall have the right to control the prosecution of the patent application.

B. The Parties agree that if neither Party desires to file a patent application for any Subject Invention, notification of such negative intent shall be made in writing to the DOE Contracting Officer within nine (9) months after the initial disclosure of such invention or not later than 60 days prior to the time when any statutory bar might foreclose filing of a U.S. patent application.

C. A Party electing title or filing a patent application in the United States or in any foreign country shall advise the other Party and the DOE if it no longer desires to continue prosecution or retain title in the United States or any foreign country. The other Party and then the DOE will be afforded the opportunity to take title and retain the patent rights in any such foreign country.

D. Each Party agrees to provide the other Party with a copy of each patent application it files on any Subject Invention.

E. Every three months from the date of the CRADA, each Party shall deliver to the other Party interim reports listing the Subject Inventions, if any, it has produced during the preceding three-month period. If a Party has produced no Subject Invention for any three-month period, the Party's interim report for that period will explicitly state so.

ARTICLE XVII: TRADEMARKS

The Parties may seek to obtain trademark/servicemark protection on products or services generated under this agreement in the United States or foreign countries. [The ownership and other rights relating to this trademark shall be as mutually agreed to in writing by the Parties.] The Parties hereby acknowledge that the Government shall have the right to indicate on any similar goods or services it produces, that such goods or services were derived from and are a DOE version of the goods or services protected by such trademark/service mark with the trademark and the owner thereof being specifically identified.

ARTICLE XVIII: MASK WORKS

The Parties may seek to obtain legal protection for mask works fixed in semiconductor products generated under this agreement as provided by Chapter 9 of Title 17 of the United States Code. [The rights to any mask work covered by this provision shall be as mutually agreed to in writing by the Parties.] The Parties acknowledge that the Government or others

acting on its behalf shall retain a nonexclusive, paid-up, worldwide, irrevocable, nontransferable license to reproduce, import, or distribute the covered semiconductor product by or on behalf of the Government.

ARTICLE XIX: COST OF INTELLECTUAL PROPERTY PROTECTION

Each Party shall be responsible for payment of all costs relating to copyright, trademark and mask work filing, U.S. and foreign patent application filing and prosecution, and all costs relating to maintenance fees for U.S. and foreign patents hereunder which are owned by that Party.

ARTICLE XX: REPORTS OF INVENTION USE

The Parties agree to submit, upon request of DOE, reports no more frequently than annually on the efforts to obtain utilization of any Subject Invention.

ARTICLE XXI: DOE MARCH-IN RIGHTS

The Parties acknowledge that the DOE has certain march-in rights to any Subject Inventions in accordance with 48 CFR 27.304-1(g).

ARTICLE XXII: U.S. COMPETITIVENESS

A. The Parties agree that any products, processes, or services for use or sale in the United States under any United States Patent resulting from a Subject Invention shall be manufactured, practiced or provided substantially in the United States.

A.1. For purposes of this CRADA, "Substantial manufacture" shall be understood to be 80% of the value added to a product.

B. The Parties also agree that any products, processes, or services using Intellectual Property arising from the performance of this CRADA shall be manufactured or provided substantially in the United States.

C. In addition, the parties agree that the manufacture of machinery or use of manufacturing processes and systems (including software) produced through the use of Intellectual Property developed under this CRADA shall be limited to the United States for a period of five years. In the case of machinery where the manufacturers cannot supply the reasonable requirements of the other

AMTEX participants, such machinery may be manufactured by a non-U.S. company, preferably in the United States, but if absolutely necessary outside the United States, provided that such necessity has been demonstrated in advance to the Department of Energy and their approval for such manufacture has been secured.

D. It is understood that fibers, textiles, and fabricated products using Intellectual Property resulting from this CRADA shall be manufactured substantially within the United States, but may be sold outside of the United States.

ARTICLE XXIII: ASSIGNMENT OF PERSONNEL

A. It is contemplated that each Party may assign personnel to the other Party's facility as part of this CRADA. Such personnel assigned by the assigning Party, to participate in or observe the research to be performed under this CRADA, shall not during the period of such assignments be considered employees of the receiving Party for any purposes.

B. The receiving Party shall have the right to exercise routine administrative and technical supervisory control of the occupational activities of such personnel during the assignment period and shall have the right to approve the assignment of such personnel and/or to later request their removal by the assigning Party.

C. The assigning Party shall bear any and all costs and expenses with regard to its personnel assigned to the receiving Party's facilities under this CRADA. The receiving Party shall bear facility costs of such assignments.

ARTICLE XXIV: FORCE MAJEURE

No failure or omission by Contractor or Participant in the performance of any obligation under this CRADA shall be deemed a breach of this CRADA or create any liability if the same shall arise from any cause or causes beyond the control of Contractor or Participant, including but not limited to the following, which, for the purpose of this CRADA, shall be regarded as beyond the control of the Party in question: Acts of God, acts or omissions of any government or agency thereof, compliance with requirements, rules, regulations, or orders of any governmental authority or any office, department, agency, or instrumentality thereof, fire, storm, flood, earthquake, accident, acts of the public enemy, war, rebellion, insurrection, riot, sabotage, invasion, quarantine, restriction, transportation embargoes, or failures or delays in transportation.

ARTICLE XXV: ADMINISTRATION OF THE CRADA

It is understood and agreed that this CRADA is entered into by the Contractor under the authority of its prime Contract with DOE. The Contractor is authorized to and will administer this CRADA in all respects unless otherwise specifically provided for herein. Administration of this CRADA may be transferred from the Contractor to DOE or its designee with notice of such transfer to the Participant, and the Contractor shall have no further responsibilities except for the confidentiality, use and/or non-disclosure obligations of this CRADA.

ARTICLE XXVI: RECORDS AND ACCOUNTING SYSTEM

The Participant shall maintain records of receipts, expenditures, and the disposition of all Government property in its custody, related to the CRADA.

ARTICLE XXVII: NOTICES

A. Any communications required by this CRADA, if given by postage prepaid first class U.S. Mail addressed to the Party to receive the communication, shall be deemed made as of the day of receipt of such communication by the addressee, or on the date given if by verified facsimile. Address changes shall be given in accordance with this Article and shall be effective thereafter. All such communications, to be considered effective, shall include the number of this CRADA.

B. The addresses, telephone numbers and facsimile numbers for the Parties are as follows:

ARTICLE XXVIII: DISPUTES

The Parties shall attempt to jointly resolve all disputes arising from this CRADA. If the Parties are unable to jointly resolve a dispute within a reasonable period of time, they agree to [Process to be negotiated by the Parties]. To the extent that there is no applicable U.S. Federal law, this CRADA and performance thereunder shall be governed by the law of the State of _____.

ARTICLE XXIX: ENTIRE CRADA AND MODIFICATIONS

A. It is expressly understood and agreed that this CRADA with its Appendices contains the entire agreement between the Parties with respect to the subject matter hereof and that all prior representations or agreements relating hereto have been merged into this document and are thus superseded in totality by this CRADA.

B. Any agreement to change any terms or conditions of this CRADA or the Appendices shall be valid only if the change is made in writing, executed by the Parties hereto, and approved by DOE.

ARTICLE XXX: TERMINATION

This CRADA may be terminated by either Party upon ___ days written notice to the other Party. This CRADA may also be terminated by the Contractor in the event of failure by the Participant to provide the necessary advance funding, as agreed in Article III.

In the event of termination by either Party, each Party shall be responsible for its share of the costs incurred through the effective date of termination, as well as its share of the costs incurred after the effective date of termination, and which are related to the termination. The confidentiality, use, and/or non-disclosure obligations of this CRADA shall survive any termination of this CRADA.

FOR CONTRACTOR:	**FOR PARTICIPANT:**
BY_____	**BY**_____
TITLE_____	**TITLE**_____
DATE_____	**DATE**_____

APPENDIX A
(OF THE MASTER CRADA)

STATEMENT OF WORK

APPENDIX B
(OF THE MASTER CRADA)

DESCRIPTION OF EXPANDED ABSTRACT OF COPYRIGHTED COMPUTER SOFTWARE

APPENDIX C
(OF THE MASTER CRADA)

OPTION AGREEMENT

This is an agreement dated this _____ day of _____, 199_, between _____ (hereinafter "Contractor"), and _____ (hereinafter "Participant"), both hereafter referred to as the "Parties".

Whereas the Parties have entered into a Cooperative Research and Development Agreement (CRADA) No. _____ (hereafter "the CRADA"); and

Whereas ownership of title to Intellectual Property is addressed in the CRADA and the Parties wish to hereby document their agreement as to certain other rights between the Parties to such Intellectual Property; and

Whereas Participant recognizes that Contractor is obligated by contract and statute to conduct its technology transfer efforts in a manner that achieves maximum enhancement of U.S. industrial competitiveness.

Now, therefore, the Parties agree as follows:

For the purposes of this Option Agreement, the term "Intellectual Property" shall have the meaning set forth in Article I of the CRADA Agreement to which this Option Agreement is attached;

The term "Field of Use" shall mean textiles, including staple fibers and filaments, yarns, fabrics and articles made from fibers, yarns and fabrics, textile chemicals and textile machinery;

The options granted to Participant and to Contractor herein shall be effective for a period of six (6) months after the conclusion of work under such CRADA, as defined by the Statement of Work;

This Option Agreement and any subsequent License Agreements or sub-license agreements entered into hereunder shall be subject to the provisions of the CRADA, including the U.S. Government's retained license and march-in rights.

A. INTELLECTUAL PROPERTY OWNED SOLELY BY CONTRACTOR

License to Participant

Contractor hereby grants to Participant an option to enter into a License Agreement which shall contain provisions granting to Participant and its member entities an exclusive, worldwide, paid-up license to practice, including the right to sub-license, in the Field of Use, Intellectual Property owned solely by Contractor which is developed during the course of work performed under a CRADA executed by Participant and Contractor. Participant shall have no right to use Intellectual Property owned solely by Contractor that is developed outside of the course of work under the CRADA. This exclusion applies whether said Intellectual Property was developed before, during or after work under the CRADA. Contractor shall have the option, but not the obligation, to furnish said Intellectual Property to Participant for use only in the CRADA.

Participant agrees that any royalties accruing from royalty-bearing licenses or sub-licenses granted by Participant hereunder which are in excess of Participant's costs to acquire, maintain and protect such Intellectual Property, shall be shared with Contractor under a royalty sharing plan to be agreed upon by the Parties and incorporated into the License Agreement.

Upon execution of the License Agreement, Participant agrees to provide to the AMTEX Operating Committee its plan for making the Intellectual Property solely owned by Contractor and licensed hereunder available to the U.S. textile industry in order to achieve the U.S. competitiveness goals set forth in the CRADA. The AMTEX Operating Committee shall be responsible for ensuring such plan is effected. The License Agreement shall provide that the AMTEX Operating Committee's determination of Participant's failure to make licensed Intellectual Property reasonably available to the U.S. textile industry in the manner set forth in the plan shall result in conversion of Participant's exclusive license into a non-exclusive license. Thereafter, Contractor shall have the right to license such Intellectual Property to third parties.

B. INTELLECTUAL PROPERTY OWNED SOLELY BY PARTICIPANT

License to Contractor

Participant and its member entities hereby grant to Contractor an option to enter into a License Agreement which shall contain provisions granting to Contractor an exclusive, worldwide, paid-up license to practice and have practiced, including the right to sub-license, Intellectual Property owned solely by Participant which is developed during the course of work performed under a CRADA executed by Participant and Contractor. Such license shall include all fields of use outside the Field of Use.

Contractor shall have no right to use Intellectual Property owned solely by Participant that is developed outside of the course of work under the CRADA. This exclusion applies whether said Intellectual Property was developed before, during or after work under the CRADA. Participant shall have the option, but not the obligation, to furnish said Intellectual Property to Contractor for use only in the CRADA.

Contractor agrees that any royalties accruing from royalty-bearing licenses or sub-licenses granted by Contractor hereunder which are in excess of Contractor's costs to acquire, maintain and protect such Intellectual Property, shall be shared with Participant under a royalty sharing plan to be agreed upon by the Parties and incorporated into the License Agreement.

Upon execution of the License Agreement, Contractor agrees to provide to the AMTEX Operating Committee its plan for making the Intellectual Property solely owned by Participant and licensed hereunder available to U.S. industry in fields of use outside the Field of Use, in order to achieve the U.S. competitiveness goals set forth in the CRADA. In accordance with Contractor's M&O contract with the DOE, DOE shall be responsible for ensuring such plan is effected. The License Agreement shall provide that if DOE determines that Contractor has failed to make licensed Intellectual Property reasonably available to U.S. industry in the manner set forth in the plan, Contractor's exclusive license shall revert to a non-exclusive license. Thereafter, Participant shall have the right to license such Intellectual Property to third parties.

C. INTELLECTUAL PROPERTY JOINTLY OWNED BY THE PARTIES

Reciprocal Licenses

Each of the Parties hereby agrees to grant to the other Party an option to enter into a License Agreement which shall contain the following provisions relating to Intellectual Property jointly owned by the Parties:

(a) a grant to Participant and its member entities of an exclusive, worldwide, paid-up license to practice in the Field of Use, including the right to sub-license, jointly owned Intellectual Property which is developed during the course of work performed under a CRADA executed by Participant and Contractor;

(b) a grant to Contractor of an exclusive, worldwide, paid-up license to practice and have practiced, jointly owned Intellectual Property which is developed during the course of work performed under a CRADA executed by Participant and Contractor. Such license shall be limited to fields of use outside the Field of Use;

(c) a provision for royalty sharing and a plan for making the jointly owned Intellectual Property available to U.S. industry, as set forth in Paragraphs A and B above.

D. INTELLECTUAL PROPERTY COSTS

Participant agrees to reimburse Contractor for any expenditures incurred in prosecuting and maintaining Intellectual Property, to which Participant receives an exclusive license for the Field of Use. Participant shall have the right to participate in the prosecution of any such Intellectual Property.

Participant may, at its option, terminate its obligation of reimbursement and maintenance of such Intellectual Property, in any jurisdiction, by providing sixty (60) days prior written notice to Contractor, and Participant's rights to an exclusive license in such jurisdiction shall likewise terminate. Contractor agrees to reimburse Participant for any expenditures incurred in prosecuting and maintaining Intellectual Property, to which Contractor receives an exclusive license for the fields of use outside the Field of Use. Contractor shall have the right to participate in the prosecution of any such Intellectual Property.

Contractor may, at its option, terminate its obligation of reimbursement and maintenance of such Intellectual Property, in any jurisdiction, by providing sixty (60) days prior written notice to Participant, and Contractor's rights to an exclusive license in such jurisdiction shall likewise terminate.

E. AUTHORITY

Each party warrants that the signatory to this Agreement has the authority to enter into this Agreement for the respective Party.

CONTRACTOR:

By:_____ Date:_____

Title:_____

PARTICIPANT:

By:_____ Date:_____

Title:_____

APPENDIX D
(OF THE MASTER CRADA)

BACKGROUND INTELLECTUAL PROPERTY

Appendix C
AMTEX Project Plan Guidance

The outline and guidance for preparation of Project Plans and Statements of Work (SOW) is included here for convenient reference by the project teams. This guidance is not part of the AMTEX Policies and Procedures and may be revised from time to time without requiring the approval of the AMTEX Operating Committee.

NOTE: This outline applies to Project Plans (AMTEX-level) and to SOW (laboratory-level) documents. The Project Plans and Statements of Work should follow each point of this outline, unless specifically noted otherwise.

Executive Summary (Project Plans only)

Provide a summary of the major points of the document.

1. Introduction

   Include those items in the introduction that will set the stage appropriately in the particular situation.

   For SOWs: indicate this laboratory SOW is a part of the overall project plan for the named project. Describe the general area of contribution of the XYZ lab and their industrial partners on the project under the AMTEX program.

2. Industry Needs, Project Requirements, and Benefits to Industry

   This section deals with the WHY of the project, i.e., the industry driving forces. Provide a summary of the industry needs this project is addressing. General needs, such as increased competitiveness, should be translated into technological needs that relate to the scope and approach of this project. Any specific requirements for deliverables should be stated and quantified to the extent possible. Describe the benefits that will accrue to industry if this project is successful.

3. Goals and Objectives

   This section deals with the END RESULTS of the project. Describe the overall goal(s) of the project and the objectives that must be obtained to reach those goals. This section should describe what the project is really trying to accomplish.

   For laboratory SOWs: describe the specific goals and objectives of activity your laboratory is working on.

4. Strategic Approach

This section describes the APPROACH that will be taken in meeting the goals and objectives. It should provide a framework, road map, and philosophy for the task descriptions to follow. The approach should lay out the technical strategy and phases of the project. Key decision points in design approaches or Go-No Go decision points should be described. This section should address how the tasks interact and integrate to meet the objectives and goals.

Describe how the project will be structured and managed to deal with evaluation of progress, internal reviews, and re-direction of tasks to accommodate new technologies, discoveries, and information gained through project progress.

5. Technical Approach and Task Descriptions

This section describes WHAT will be done to achieve the goals and objectives.

Technical Approach: Describe the technical approach that will be used, i.e, what technologies will be brought to bear on the problem. Describe how it will be done through combinations of hardware development, software development, simulation, analysis, process development, and applied research. Include any relevant background information. The technical approach should include enough information on candidate technologies and techniques to demonstrate the laboratory or the industry partner has a good knowledge of the technical area being addressed in the project. Reference any prior DOE-funded programmatic activities that are applicable.

Task Descriptions: Organize the remainder of the section around the tasks for the project or task. For each task, describe in some detail what will be done, how it will be accomplished, and a description of which (laboratory or industry or both) will be performing the work. This description of resources must clearly answer the questions "What will the Laboratory be doing?," "What will the Industry partner be doing?," and "How are they related?." Each task must be described.

Remember: These plans are not just laboratory project plans–they are JOINT lab-industry project plans. It is imperative the plan describe the role and activities of industry just as much as it does the laboratories'.

One successful approach to provide a strong task description has been to separate the task description into two parts: Laboratory Activities and Industry Activities.

Where such separation can be achieved, it is strongly recommended for both the project plans and SOWs.

For the SOWs: The individual laboratory SOW should flow from and be consistent with the project plan. Describe any requirements that you have for deliverables from other laboratories, such as, development of requirements, designs, or software, upon which your tasks are dependent.

Ensuring Benefits to DOE: The task description section shall include a task that describes what strategies and actions the project team will pursue to help ensure the benefits, as described in the "Benefits to DOE" section, will accrue to DOE.

6.0 Technical Peer Reviews (Project Plans only)

Frequency of Technical Peer Reviews: A technical peer review shall be held toward the end of the first year of each AMTEX project. Technical Peer Reviews shall be held nominally every two years thereafter. Where the schedule for completion of the project or major deliverables would indicate that a variance from this schedule would be more appropriate, a variance from this schedule may be proposed in the Project Plan. Approval of the Project Plan by the Program Office and DOE will be the mechanism for approving the schedule of peer reviews.

For a project currently underway, the Program Office will work with the project managers to determine an appropriate point in the project when a peer review would be of most value. A schedule of peer reviews for current projects will then be developed and distributed by the Program Office.

Approval of the Project Peer Review Plan: Four months prior to the peer review, the project leaders submit to the Program Office their requests for all university reviewers and any laboratory reviewers the project team could not identify. The Program Office will work to identify qualified and available reviewers and provide those names to the project leaders three months prior to the review.

Two months prior to the scheduled peer review, the project leaders will submit a Peer Review Plan (letter) to the Program Office describing their plan for the peer review. The letter should describe:

- How the review will be conducted to ensure the five elements listed in the next section (Scope and Documentation of the Peer Review) are covered.

- The proposed list of peer reviewers (including the person to serve as chair), how their areas of technical expertise correspond to the project work to be reviewed,

and an assessment of how well the reviewers fulfill the qualifications described under Criteria for an Independent Technical Peer Review Team.

The Executive Director, Laboratory Program Manager, and DOE Program Managers will then review the Peer Review Plan and request modifications as they deem advisable. When the Peer Review Plan has met with Program Office and DOE/HQ approval, the project leaders proceed to form the peer review team.

Scope and Documentation of the Peer Review

The Technical Peer Review team should address and document their assessment of the following points:

Technical Approach: Evaluate whether the technical approach being taken and the methods being applied are technically sound, appropriate to the industry objectives and constraints on cost/benefit, and that potentially beneficial technologies are not being overlooked.

Technical Integration: Determine the project is structured and integrated in such a way that all critical elements for success on major deliverables are being addressed. This requires adequate attention to the systems engineering aspects of the project. The review should ensure proper linkage and flow from the highest level project goals and deliverables to the intermediate objectives and, finally, to the technical tasks and work being performed.

Quality of Technical Work: Evaluate the quality of the technical work in such dimensions as competence of staff, accuracy, and completeness of the work, and use of sound scientific and engineering principles, coupled with innovative and leading-edge technologies.

Performance Assessment: Assess the project's progress on milestones and deliverables, costs and time elapsed relative to the completion of those milestones, and deliverables according to the approved schedule and budget. This process should include an assessment of the appropriateness of the funding level for completing the project goals and deliverables.

Risk Management: Determine whether or not the areas of highest risk have been identified and that strategies for dealing with those risks have been developed.

The Peer Review plan should identify one member of the peer review team who will serve as the Peer Review Team Leader. It is the responsibility of the this Team Leader to issue a report of the Peer Review within 30 days of the review. The Review Report should address the five elements of review prevously described. Copies of the Peer Review Report (25) should be sent to the Laboratory Program Manager who will distribute them to the appropriate parties.

Criteria for an Independent Technical Peer Review Team: In order for the technical peer review to meet its objectives, the reviewers must have a measure of independence from the project participants. Such independence must be achieved without compromising the protection of CRADA Protected Data.

As many of the following criteria as possible should be met for each member of the Peer Review Team:

- Is a true technical peer of the project technical team (not a program or line manager)
- Has no major conflicts of interest with the project
- Has not worked on the project
- Has not had close interactions with the project personnel
- Has not been a recent applicant for AMTEX funds (that is, an unsuccessful bidder).

The size of the Peer Review Team will vary with the scope and breadth of the project. The smaller projects are expected to have teams of three or four members. Larger projects may have teams as large as six members. The balance between university and laboratory members will be determined by the Project Director and Laboratory Project Manager and proposed in their Peer Review Plan. If two or more members of the Review Team are from DOE laboratories (the normal case), they should be drawn from at least two different laboratories. Where possible and practical, the reviewers should be from a different laboratory than the persons whose work they are reviewing.

Obtaining Peer Review Team Members: To obtain qualified peer reviewers, the Laboratory Project Managers and Industry Project Directors should use whatever avenues and resources are available. One method of identifying peer reviewers would be to use the project team members who could identify individuals in their respective laboratories or from the Research Partners Companies who would meet the qualification criteria. If this avenue does not provide an adequate field of potential reviewers, the Laboratory Project Manager should inform the Laboratory Program Manager what types of technical backgrounds are needed. The Laboratory Program Manager will then work through the Laboratory members of the AOC to help in identifying qualified individuals at the DOE laboratories. However, the lab reviewers must be drawn from among the DOE laboratories that have signed CRADAs on the project, unless a supplementary nondisclosure agreement is made with that reviewers' laboratory for the specific purpose of the technical review.

For obtaining peer reviewers from universities, the following guidelines should be followed:

Use university faculty, particularly from the universities in the National Textile Center (NTC), or other qualified university personnel.

In order to provide maximum effectiveness from the NTC staff and to avoid potential problems, the following mechanism for obtaining NTC reviewers must be followed.

- The Laboratory Project Manager informs the AMTEX Laboratory Program Manager of the areas of expertise needed by the reviewers or names of specific NTC staff or staff from other universities whom the project manager knows to be knowledgeable in the relevant technical areas. The number of university peer reviewers required is at the discretion of the project manager and will vary with the breadth of the project and technologies to be reviewed.

- The AMTEX Program Manager will discuss the project's request with the NTC Executive Director who will work with the NTC faculty and staff from other universities, as deemed advisable, to obtain reviewers with the required technical backgrounds.

- The NTC Executive Director will inform the Laboratory Program Manager of the names of the potential reviewers.

- The Laboratory Program Manager will pass the reviewers' names to the project manager who will contact the recommended university faculty and make arrangements for their participation in the review.

Note: Before faculty from any university can participate in an AMTEX project review, each potential university reviewer must sign a nondisclosure agreement with the lead industry RETT for that project. The Industry Project Director should take the lead in working with the university staff to secure the nondisclosure agreement.

Funding the Technical Peer Review: The costs to plan, conduct, and document the technical peer review are borne by the project. The costs of travel and labor for reviewers from DOE laboratories, other federal laboratories, or universities should be factored into the laboratory project budgets. The number of reviewers and expected costs for supporting the reviewers should be stated in the project plan.

7.0 Benefits to DOE

This section should describe the expected benefits to DOE when the AMTEX technologies are implemented or adapted by other DOE projects, such as, cost savings, time savings, improved health and safety, improved environmental factors, or other ways in which DOE's effectiveness at meeting its core missions would be enhanced. Be as quantitative as possible.

In preparing this section of the Project Plan, Project Managers should take cognizance of the different programmatic requirements and types of benefits that must be realized depending on the DOE program office(s) supporting the project. The use of DP funds, for example, must result in a direct benefit to the DOE's mission in national defense, specifically to the nuclear weapons program.

Although the potential benefits to DOE are considered before AMTEX starts a project, this should be reevaluated and appraised to provide confidence that current AMTEX projects have the potential to benefit DOE. It must be recognized, however, that benefits to DOE will not accrue automatically. The project team should make a conscious effort to assist in transferring those benefits to other DOE programs.

8.0 Schedule, Milestones, and Deliverables

Milestones and Deliverables: Describe the milestones and major deliverables and their completion dates for this project. Explain how completion of the deliverables will ensure that objectives will be met. The discussion in the Strategic Approach (4)

subsection may have already addressed this point and can be referenced to clarify this issue.

Schedule: This section must include a time-task bar chart (Gantt chart) showing the key activities by task versus time. For the fiscal year covered by the plan/SOW, the activities associated with major tasks should be shown. A multi-year plan should also be shown (including only the higher level tasks), unless one was provided in the Strategic Approach section.

The Project Plan should provide the schedule for the overall project and show the major activities at the task level.

The schedule of tasks in SOWs should flow from and be consistent with the Project Plan. The task descriptions in the SOWs will generally provide greater detail than the Project Plan. The use of a project management software tool (such as Microsoft Project) is strongly recommended for preparing the project schedule. If you do not have access to such a tool, contact the Laboratory Program Office, assistance with the preparation.

9.0 Budgets and Resources

The budget projections in the project plan should be drawn from the approved AMTEX Operating Plan for the upcoming fiscal year (or whatever time period is covered by the plan, if not a fiscal year period).

Project Plans and SOW should include Tables C.1, C.2, and C.3 as follows.

The resource breakdown must show the amount and allocation of industry resources. Human resources should be shown first as FTEs (full-time equivalent scientists or engineers) for both the laboratory and industry participants. Then convert the labor into dollars using $250K/FTE/year. For the DOE/Laboratory resources, this conversion factor includes ALL costs, for instance, it includes the average cost of labor, travel, materials, and administrative support for a typical scientist or engineer working on the project. Show non-labor costs and contributions separately, using Table C.1.

Task Name	DOE Resources	Industry Resources
Task 1	xx.x FTE	xx.x FTE
Task 2	xx.x FTE	xx.x FTE
Task n	xx.x FTE	xx.x FTE
Total Labor FTEs	yy.y FTE	yy.y FTE
Labor Value	$ z,zzz,zzz	$z,zzz,zzz
Industry Research Partner Fees		$ xxx,xxx
Other Industry Contributions (material, facilities, etc.)		$ xxx,xxx
Total Contribution	$ x,xxx,xxx	$x,xxx,xxx

Table C.1 FY 1996 Task Budgets

In the project plans and SOWs, include the following description and table:

"For AMTEX projects, the matching contributions from the DOE and industry are accumulated and evaluated at the project level–not the task or laboratory level. For the sake of determining the industry matching contribution at the laboratory/CRADA level, the total industry contributions are prorated among the laboratories based on the laboratory budgets. For this project, the allocation of DOE and Industry contributions among the laboratories is the following:

Task Name	DOE Contribution	Industry Contr.
Lab A	xxxx	yyyy
Lab B	bbbb	bbbb
Lab N	nnnn	nnnn
Total	ttttt	ttttt

Table C.2 FY 1996 Allocation by Laboratory of DOE Funding and Industry Matching Funding

Include a table showing the breakdown of funding to the participating laboratories by task element.

	Lab 1	Lab 2	Lab 3	....	Lab N	Total
Task 1	show budgets for each lab by task.					
Task 2						
Task 3						
Task N						
Lab Total						

Table C.3 Allocation of DOE Funds by Laboratory and Task

A description of major deliverables, tasks, and associated budget projections should be provided for 3 to 5 years (or the project duration, if less) beyond the coming year. This section should give the reader some idea of what major deliverables and tasks will be completed, what new work will be started, and how these efforts fit into the overall life cycle of the project.

It must be clearly stated in the project plans and Joint Work Statement (JWSs) that future year data are for planning purposes only and that actual funding is subject to annual DOE approval and availability of funds.

Appendix D
AMTEX Research Partner Agreement

MASTER RESEARCH PARTNER AGREEMENT

between

_____
(hereinafter "RETT")

and

_____
(hereinafter the "Research Partner")

both being hereinafter referred to as the "Parties."

W I T N E S S E T H:

WHEREAS, RETT intends to enter into one or more Cooperative Research and Development Agreements relating to [insert subject of CRADA] (hereinafter, "CRADA(s)") with [insert names of Contractors] (hereinafter, collectively, "Contractors"); and

WHEREAS, Research Partner desires to participate in the research and development to be conducted under the CRADA(s) on the terms and conditions set forth herein;

NOW, THEREFORE, in consideration of the premises and of the mutual promises, obligations and agreements contained herein, the Parties hereto, intending to be legally bound, do hereby agree as follows:

Section 1. Definitions.

1.1 "Affiliate" means any person or persons who directly or indirectly through one or more intermediaries, control, are controlled by or are under common control with the person in question. The term "control" as used in the preceding sentence means, with respect to a person that is a corporation, the right to exercise, directly or indirectly, more than fifty percent (50%) of the voting rights attributable to the shares of the capital

stock of such corporation, and with respect to a person that is not a corporation, the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such person.

1.2 "Agreement" means this Master Research Partner Agreement, as amended from time to time. Words such as "herein," "hereinafter," "hereof," "hereto," and "hereunder" shall refer to this Agreement as a whole, unless the context otherwise requires.

1.3 "AMTEX Organizations" means Cotton Incorporated, Institute of Textile Technology, National Textile Center, Textile/ Clothing Technology Corporation and Textile Research Institute.

1.4 "Background Intellectual Property" means the Intellectual Property rights in the items identified by RETT on behalf of the Research Partners in the CRADA, which were in existence prior to or are first produced outside of the CRADA Agreements, except that in the case of inventions in those identified items, the inventions must have been conceived outside of the CRADA Agreements and not first actually reduced to practice under the CRADA Agreements to qualify as Background Intellectual Property. Licensing of Background Intellectual Property, if agreed to by the CRADA Parties, shall be the subject of separate licensing agreements among the CRADA Parties.

1.5 "Commencement Date" shall have the meaning set forth in Section 6.1 hereof.

1.6 "CRADA Agreements" means this Agreement, the CRADA(s), the Option Agreement(s) and all Master Research Partner Agreements, substantially in the form of this Agreement, entered into between RETT and other entities in connection with the CRADA(s).

1.7 "CRADA Parties" means Research Partners and RETT.

1.8 "DOE" means the Department of Energy, an agency of the United States of America.

1.9 "DOE Contracting Officer" means the DOE employee administering the Contractors' DOE Contract.

1.10 "Effective Date" shall have the meaning set forth in Section 2.2 hereof.

1.11 "Field of Use" means textiles, including staple fibers and filaments, yarns, fabrics and articles made from fibers, yarns and fabrics, textile chemicals and textile machinery.

1.12 "Filing Party" shall have the meaning set forth in Section 15.1 hereof.

1.13 "Foreign Research Partner" shall have the meaning set forth in Section 11.2 hereof.

1.14 "Generated Information" means information produced in the performance of the CRADA Agreements.

1.15 "Generated Intellectual Property" means all Intellectual Property developed pursuant to the CRADA Agreements.

1.16 "Government" means the United States of America and agencies thereof.

1.17 "Improvements" means each and every modification of Intellectual Property (i) that provides an additional, enhanced, or different functional capability or use, or higher degree of efficiency or cost effectiveness of any product or any manufacturing process and (ii) that is developed pursuant to the CRADA Agreements. "Improvements" shall not include any modification developed (i) subsequent to the termination of the CRADA Agreements or (ii) by a Research Partner or RETT during the term of the CRADA Agreements at private expense outside of the CRADA Agreements.

1.18 "Industry Operating Board" means the AMTEX Partnership Industry Operating Board.

1.19 "Industry Program Office" means the Industry Program Office of The American Textile Partnership ("AMTEX").

1.20 "Intellectual Property" means patents, Trademarks, copyrights, Mask Works, Improvements and other forms of comparable property rights protected by Federal law or foreign counterparts.

1.21 "Lead Contractor" shall mean that Contractor designated as such by the DOE from time to time during the term of the CRADA Agreements.

1.22 "Mask Work" means a series of related images, however fixed or encoded, having or representing the predetermined, three-dimensional pattern of metallic, insulating or semiconductor material present or removed from the layers of a semiconductor chip product; and in which series the relation of the images to one another is that each image has the pattern of the surface of one form of the semiconductor chip product. (17 USC 901(a)(2)).

1.23 "Option Agreement(s)" means one or more Option Agreements between Contractors and RETT executed in connection with the CRADA(s).

1.24 "Patent Act" means the Patent Act of 1984 (35 USC §§100-104).

1.25 "Proprietary Information" means information which embodies trade secrets developed at private expense outside of the CRADA Agreements and commercial or financial information which is privileged or confidential under the Freedom of Information Act (5 USC 552 (b)(4)) and which is marked as Proprietary Information in accordance with Section 9 hereof.

1.26 "Protected CRADA Information" means Generated Information which is marked as being Protected CRADA Information by a party to any CRADA Agreement in accordance with Section 10 hereof and which would have been Proprietary Information had it been obtained from a non-Federal entity.

1.27 "Recipients" shall have the meaning set forth in Section 12.1 hereof.

1.28 "Research Partners" means Research Partner and all other entities that have entered into Master Research Partner Agreements, in substantially the form of this Agreement, with RETT in connection with the CRADA(s).

1.29 "Subject Invention" means any invention of the Contractors, RETT or Research Partners conceived or first actually reduced to practice as defined under the United States patent laws in the performance of work under the CRADA Agreements; provided, however, that Subject Inventions shall not include Background Intellectual Property.

1.30 "Submitter" shall have the meaning set forth in Section 12.1 hereof.

1.31 "Trademark" means a distinctive mark, symbol or emblem used in commerce by a producer or manufacturer to identify and distinguish its goods or services from those of others.

Section 2. CRADA Obligations; Term of Agreement.

2.1 CRADA Obligations. Research Partner agrees to undertake the obligations as set forth in the CRADA(s) and otherwise to be bound by the CRADA(s), as supplemented by this Agreement, as though the CRADA(s) had been signed individually by Research Partner.

2.2 Effective Date. The effective date ("Effective Date") of this Agreement shall be the date on which the CRADA(s) is (are) approved by the DOE.

2.3 Duration of Commitment. The funding and performance obligations of the CRADA Parties pursuant to the CRADA Agreements shall remain in effect for three (3) years after the Effective Date unless extended by mutual agreement of the CRADA Parties or earlier terminated in accordance with Section 25 hereof.

2.4 Right to Revoke Agreement. Research Partner is entering into this Agreement on the condition that (i) the provisions of the CRADA(s) shall be identical in all material respects to the provisions set forth in the Master CRADA attached hereto as Exhibit A, and (ii) the provisions of each other Master Research Partner Agreement entered into by RETT in connection with the CRADA(s) shall be identical in all material respects to the provisions set forth in the Master Research Partner Agreement approved by the Industry Operating Board on _____, 1993; provided, however, that Research Partner acknowledges that variations in the contributions to be made by various Research Partners as set forth on Appendix A of the CRADA(s) and Exhibit B of each of the Research Partner Agreements shall not be considered a material variation. If such condition is not met, Research Partner shall have the right to revoke this Agreement and shall have no further obligation or liability hereunder. Research Partner's right to revoke this Agreement shall expire thirty (30) days after receipt by Research Partner of written notice from RETT of any such materially different provisions.

Section 3. Contributions and Costs.

3.1 Research Partner Contributions.

(a) In connection with its participation hereunder, Research Partner shall make the in-kind contributions set forth on Exhibit B attached hereto.

(b) In addition to its in-kind contribution, Research Partner shall pay to RETT an annual administrative fee. For Research Partners that are members of one of the AMTEX Organizations the annual administrative fee shall be the estimated, reasonable out-of-pocket costs of RETT in administering the CRADA Agreements (including salaries of RETT personnel assigned to the CRADA(s)). The administrative fee for such Research Partners for the first year, payable upon execution of the CRADA(s), shall be $_____ per Research Partner. For Research Partners that are not members of one of the AMTEX Organizations the annual administrative fee shall be three times the fee paid by Research Partners

that are members of one of the AMTEX Organizations, in order that such non-member Research Partners will participate in funding the overhead costs incurred by RETT in administering the CRADA Agreements. The administrative fee for such Research Partners for the first year, payable upon execution of the CRADA(s), shall be $_____ per Research Partner. RETT shall establish the administrative fees for subsequent years in accordance with the guidelines in this paragraph. Administrative fees for subsequent years shall be payable within thirty (30) days after receipt by Research Partner of notice from RETT.

3.2 Limitation on Costs. In the event the cost to Research Partner to continue or complete performance of its work hereunder exceeds the contribution amounts set forth in Section 3.1 hereof, Research Partner may terminate this Agreement in accordance with Section 25 hereof. Subject to the terms hereof, Research Partner shall not have an obligation to continue or complete performance of its work hereunder at a cost in excess of the contribution amounts set forth in Section 3.1 hereof and Exhibit A hereto.

3.3 Additional Contributions. In the event the costs to continue or complete performance of the work under the CRADA Agreements exceed the contribution amounts set forth in the CRADA Agreements, Research Partners may provide additional contributions to continue or complete performance of the work under the CRADA Agreements in such form and amount as may be agreed upon by Research Partners and approved by the Industry Operating Board. In the event Research Partner does not agree to provide additional contributions to continue or complete such performance, this Agreement shall be terminated and Research Partner shall be subject to the provisions set forth in Section 25.2 hereof.

Section 4. Ownership of Tangible Personal Property.

All tangible personal property obtained or produced under the CRADA Agreements shall become the property of a Research Partner or RETT or the Government depending upon whose funds were used to obtain or produce it. All jointly funded tangible property shall be owned by the Government. Tangible personal property shall be disposed of as directed by the owner of such property at the owner's expense.

Section 5. Ownership and Assignment of Generated Intellectual Property.

Research Partner acknowledges and agrees that RETT shall own all right, title and interest in and to any and all Generated Intellectual Property and Generated Information developed by any

of the Research Partners or RETT. Accordingly, Research Partner hereby assigns, grants, sells, conveys and transfers to RETT all right, title and interest that Research Partner has or may acquire in and to all Generated Intellectual Property and Generated Information. Research Partner hereby agrees, at RETT's reasonable request or the reasonable request of any of the Research Partners, to execute and deliver, at Research Partner's expense, such conveyance documents, and to take such further action, as may be necessary or desirable to effect or evidence more fully such assignment. RETT shall not elect to relinquish title to any Generated Intellectual Property pursuant to the CRADA without the consent of Research Partner if Research Partner is still participating in the funding of costs relating to such Generated Intellectual Property pursuant to Sections 17.1 or 17.2 hereof.

Section 6. Licenses.

6.1 Exclusive License in Generated Intellectual Property Owned Solely by RETT. Subject to the terms and conditions set forth herein and in the CRADA(s), including, without limitation, Section 6.5 hereof, RETT hereby grants to Research Partner an exclusive (except for other Research Partners), worldwide license limited to the Field of Use, with right to sublicense solely to Affiliates, in and to any and all Generated Intellectual Property owned solely by RETT. Such license shall commence on the date ("Commencement Date") any particular Generated Intellectual Property is reduced to practice under the CRADA Agreements as determined by RETT and terminate with respect to such Generated Intellectual Property _____ years after the Commencement Date. The license granted hereunder shall be a fully paid-up license, provided, however, that Research Partners shall be responsible for the costs of protecting the Generated Intellectual Property as provided in Section 17.1.

6.2 Non-Exclusive License in Generated Intellectual Property Owned Solely by RETT. Upon expiration of the license granted in Section 6.1 hereof with respect to any particular Generated Intellectual Property, RETT hereby grants Research Partner a perpetual, non-exclusive, worldwide license limited to the Field of Use, with right to sublicense solely to Affiliates, in and to such Generated Intellectual Property owned solely by RETT. Such license shall be a fully paid-up license subject to the costs, if any, for which Research Partner may be responsible as provided in Section 17.2 in connection with the protection of the Generated Intellectual Property licensed pursuant to this Section 6.2.

6.3 Exclusive License in Generated Intellectual Property Not Owned Solely by RETT. Subject to the terms and conditions set forth herein and in the CRADA(s) and the Option Agreement(s), and provided RETT exercises its option to license Generated

Intellectual Property owned solely by Contractors or Generated Intellectual Property jointly owned by RETT and Contractors, RETT hereby grants Research Partner an exclusive (except for other Research Partners), worldwide license limited to the Field of Use, with right to sublicense solely to Affiliates, in and to any such Generated Intellectual Property. The license granted under this Section 6.3 with respect to any Generated Intellectual Property shall commence on the date the RETT's option to license such Generated Intellectual Property under the Option Agreement(s) is exercised, and terminate with respect to such Generated Intellectual Property _____ years after such date. Research Partner agrees that any royalties accruing from royalty-bearing licenses or sublicenses granted by Research Partner hereunder which are in excess of Research Partner's costs of protecting such Generated Intellectual Property as provided in Section 17.1, shall be shared with Contractors on the same terms as RETT shares with Contractors under the provisions set forth in the Option Agreement(s).

6.4 Non-Exclusive License in Generated Intellectual Property Not Owned Solely by RETT. Upon expiration of the license granted in Section 6.3 hereof with respect to any particular Generated Intellectual Property either owned solely by Contractors or jointly owned by Contractors and RETT, RETT hereby grants Research Partner a perpetual, non-exclusive, worldwide license limited to the Field of Use, with right to sublicense solely to Affiliates, in and to such Generated Intellectual Property. Research Partner agrees that any royalties accruing from royalty-bearing licenses or sublicenses granted by Research Partner hereunder which are in excess of the Research Partner's costs of protecting such Generated Intellectual Property as provided in Section 17.2, shall be shared with Contractors on the same terms as RETT shares with Contractors under the provisions set forth in the Option Agreement(s).

6.5 Early Conversion to Non-Exclusive License.

(a) In the event that RETT's or Contractors' rights in any particular Generated Intellectual Property may be jeopardized by Research Partners' failure to commercialize any invention within the time period specified by the laws of any country, RETT may, by written notice to Research Partners and at RETT's sole discretion, convert the exclusive license granted to Research Partners in the affected country to a non-exclusive license with respect to such Generated Intellectual Property.

(b) In the event that seventy-five percent (75%) or more of the Research Partners so direct RETT in writing with respect to any particular Generated Intellectual Property and

such direction is approved in writing by the Industry Operating Board, RETT shall convert the exclusive license granted to Research Partners to a non-exclusive license with respect to such Generated Intellectual Property.

6.6 Exercise of Option to License. Upon request by any of the Research Partners within the option period set forth in the Option Agreement(s), RETT shall exercise its options under the Option Agreement(s) to license Generated Intellectual Property owned solely by Contractors or jointly owned by Contractors and RETT.

6.7 RETT's Termination Option. RETT shall not exercise its option to terminate the exclusive licenses in any jurisdiction under the Option Agreement(s) without the consent of Research Partner if Research Partner is still participating in the funding of costs in such jurisdiction pursuant to Sections 17.1 and 17.2.

Section 7. Disclaimer.

NEITHER RETT NOR ANY OF THE RESEARCH PARTNERS MAKES ANY EXPRESS OR IMPLIED WARRANTY AS TO THE RESEARCH, INTELLECTUAL PROPERTY, GENERATED INTELLECTUAL PROPERTY OR PRODUCT MADE, DESIGNED OR DEVELOPED UNDER THE CRADA AGREEMENTS, OR THE OWNERSHIP, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE RESEARCH, INTELLECTUAL PROPERTY, GENERATED INTELLECTUAL PROPERTY OR RESULTING PRODUCT. NEITHER RETT NOR ANY RESEARCH PARTNER SHALL BE LIABLE FOR SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES.

Section 8. Product Liability.

Except for any liability resulting from any negligent or intentional acts or omissions of RETT or any of the other Research Partners or such other Research Partners' or RETT's officers, directors, employees or agents, Research Partner and RETT, respectively, shall indemnify the CRADA Parties for all damages, costs and expenses, including attorney's fees, arising from personal injury or property damage occurring as a result of the making, using or selling of a product, process or service by or on behalf of Research Partner or RETT, respectively, its assignees or licensees, which was derived from the work performed under the CRADA Agreements. For purposes of this Section, neither RETT nor any of the Research Partners shall be considered an assignee, licensee or agent of any of the Research Partners or RETT, as a result of assigned rights. The indemnity set forth in this Section shall apply only if the indemnifying Party shall have been informed as soon and as completely as practical by the indemnified CRADA Party of the action alleging such claim and shall have been

given an opportunity, to the maximum extent afforded by applicable laws, rules, or regulations, to participate in and control its defense and the indemnified CRADA Party shall have provided all reasonably available information and reasonable assistance requested by the indemnifying Party. No settlement for which the indemnifying Party would be responsible shall be made without the indemnifying Party's consent unless required by final decree of a court of competent jurisdiction.

Section 9. Obligations as to Proprietary Information.

9.1 Designation of Proprietary Information. Subject to the provisions set forth in this Section 9, Proprietary Information may be disclosed by CRADA Parties or Contractors to CRADA Parties or Contractors orally, electronically, visually or in a written or other tangible form. To the extent that any Generated Information divulges, duplicates or substantially duplicates Proprietary Information, such Generated Information shall be marked by the CRADA Party generating such information and treated by all CRADA Parties as Proprietary Information. If disclosed to CRADA Parties or Contractors in tangible form, Proprietary Information shall be marked as such. If Proprietary Information is disclosed to CRADA Parties or Contractors other than in tangible form, it shall be identified as such at the time of disclosure and confirmed in a written summary thereof within the period specified in the CRADA as being Proprietary Information. If Proprietary Information is disclosed by Research Partner directly to any Contractor, Research Partner shall identify such information as Proprietary Information as agent for RETT.

9.2 Protection of Proprietary Information. RETT and Research Partner agree not to use any Proprietary Information provided by any CRADA Party or Contractor for any purpose other than as set forth in the CRADA Agreements or as instructed by the providing CRADA Party or Contractor or disclose such Proprietary Information to anyone, including without limitation, Contractors and CRADA Parties if disclosure to such entities is prohibited by the disclosing CRADA Party at the time of disclosure, without written approval of the providing CRADA Party or Contractor, as the case may be. RETT and Research Partner shall each limit its internal disclosure of Proprietary Information to those employees, contractors or agents having a need to know such Proprietary Information in the performance of the CRADA Agreements. RETT and Research Partner will promptly advise the CRADA Party or Contractor owning the Proprietary Information in writing of any unauthorized disclosure or use of any Proprietary Information by any person.

9.3 Disposition of Information. All Proprietary Information shall be destroyed by shredding or, in the case of Proprietary

Information stored on electronic media, by permanent erasure upon termination or conclusion of the CRADA(s) or this Agreement at the provider's expense.

9.4 Termination of Nondisclosure. All Proprietary Information shall be protected, unless and until such Proprietary Information shall become publicly known without the fault of the recipient, shall come into recipient's possession from a third party without breach of any of the obligations set forth herein by the recipient, or shall be independently developed by recipient's employees who did not have access to such Proprietary Information.

9.5 Employee Agreements. Each employee, contractor, agent or other person that Research Partner or RETT allows to work on or have access to Proprietary Information or Protected CRADA Information will sign or has already signed an individual agreement commensurate in scope with the Assignment and Confidentiality Agreement attached hereto as Exhibit C.

Section 10. Obligations as to Protected CRADA Information.

10.1 Designation of Protected CRADA Information. RETT and any of the Research Partners, as agent of RETT, may designate as Protected CRADA Information any Generated Information produced by its employees, contractors or agents, and with the agreement of the producing CRADA Party or Contractor, mark any Generated Information produced by the employees of such CRADA Party or Contractor. All such designated Protected CRADA Information shall be appropriately marked.

10.2 Protection of Protected CRADA Information. For the period specified in the CRADA, the Parties agree not to further disclose such Information except:

(a) as necessary to perform the CRADA Agreements;

(b) as requested by the DOE Contracting Officer to be provided to other DOE facilities for use only at those DOE facilities with the same protection in place; or

(c) as mutually agreed by the CRADA Parties and the Contractor in advance.

10.3 Termination of Nondisclosure. The obligations of Section 10.2 above shall end sooner for any Protected CRADA Information which shall become publicly known without fault of any CRADA Party or Contractor, shall come into possession of any CRADA Party or Contractor from a third party without breach by the entity obtaining such information of the obligations of Section 10.2 above, or shall be independently developed by

employees of any CRADA Party or Contractor who did not have access to the Protected CRADA Information.

Section 11. Export Control; Foreign Research Partners.

11.1 Export Control. THE PARTIES UNDERSTAND THAT MATERIALS AND INFORMATION RESULTING FROM THE PERFORMANCE OF THE CRADA AGREEMENTS MAY BE SUBJECT TO EXPORT CONTROL LAWS AND THAT EACH PARTY IS RESPONSIBLE FOR ITS OWN COMPLIANCE WITH SUCH LAWS.

11.2 Foreign Research Partners. In the event any Research Partner is (i) an entity, the majority ownership interest of which is beneficially owned by a foreign individual, entity or governmental agency, (ii) controlled by a foreign individual, entity or governmental agency, or (iii) an entity, the majority of the manufacturing capacity of which is located outside the United States, such Research Partner (a "Foreign Research Partner") shall, in addition to the terms and conditions contained herein, be subject to the terms and conditions set forth on Exhibit D hereto. For purposes of this Section 11.2, the term "control" shall have the meaning set forth in Section 1.1 hereof.

Section 12. Pre-Publication Review.

12.1 Submission of Information. Research Partner or RETT ("Submitter") shall submit to RETT and to the Industry Program Office (collectively, the "Recipients"), in advance, proposed written publications and oral public presentations on work performed under the CRADA Agreements. Proposed oral presentations shall be submitted to the Recipients in the form of a written presentation synopsis and a written abstract.

12.2 Response to Submission. The Recipients shall provide a written response to the Submitter within thirty (30) days, either objecting or not objecting to the proposed publication. Submitter shall consider all objections of the Recipients and shall not unreasonably refuse to incorporate the suggestions and meet the objections of the Recipients.

12.3 Approval of Each CRADA Party Required for Reference by Parties. The Parties agree that they will not use the name of the other CRADA Parties or Contractors or their employees, contractors or agents in any promotional activity, such as advertisements, with reference to any product or service resulting from the CRADA Agreements, without prior written approval of such CRADA Party or Contractor.

Section 13. Copyrights.

13.1 Copyrightable Material. RETT may assert copyright in any Generated Information or Generated Intellectual Property produced by Research Partner. Such Generated Information or Generated Intellectual Property shall be considered "works-for-hire" produced by Research Partner as agent of RETT.

13.2 Software Back-up Information Required. For all copyrighted computer software produced by Research Partner in the performance of the CRADA Agreements, Research Partner will provide the source code, an expanded abstract as described in the CRADA(s), the object code and the minimum support documentation needed by a competent user to understand and use the software, to RETT for delivery to DOE's Energy Science and Technology Software Center pursuant to the CRADA(s).

13.3 Copyright Notices. The Parties agree to place copyright and other notices, as appropriate for the protection of copyright, in human readable form onto all physical media, and in digitally encoded form in the header of machine readable information recorded on such media such that the notice will appear in human readable form when the digital data are off loaded or the data are accessed for display or printout.

Section 14. Reporting Inventions.

14.1 Disclosure of Inventions. Research Partner agrees to disclose to RETT and to the Industry Program Office each and every Subject Invention, which may be patentable or otherwise protectable under the Patent Act.

14.2 Invention Back-up Information Required. Disclosures made pursuant to Section 14.1 shall be in such detail as to be capable of enabling one skilled in the art to make and use the invention under 35 USC 112. Such disclosures shall also identify any statutory bars, i.e., printed publications describing the invention or the public use or on sale of the invention in the United States. Research Partner further agrees to disclose to RETT and to the Industry Program Office any subsequent statutory bar that occurs for an invention disclosed but for which a patent application has not been filed. All invention disclosures shall be marked as confidential under 35 USC 205.

Section 15. Filing Patent Applications.

15.1 Right to File Applications. Research Partner acknowledges and agrees that RETT and Contractors shall have the first right to file U.S. and foreign patent applications on Subject Inventions pursuant to the CRADA; provided, however, that

if RETT does not file applications that it is entitled to file pursuant to the CRADA within five months after disclosure under Section 14, then, if Research Partner is still participating in the funding of costs relating to such Subject Inventions pursuant to Sections 17.1 and 17.2, Research Partner may require RETT to file patent applications on such inventions. If a patent application is filed by RETT or Contractors ("Filing Party") on any invention of Research Partner, Research Partner shall reasonably cooperate and assist the Filing Party, at Research Partner's expense, in executing a written assignment of the Subject Invention to the Filing Party and in otherwise perfecting the patent application, and the Filing Party shall have the right to control the prosecution of the patent application.

15.2 Cessation of Prosecution. RETT shall advise each of the Research Partners if it no longer intends to continue prosecution of any patent or retain title in a Subject Invention in the United States or any foreign country. Any of the Research Partners still participating in the funding of costs relating to such Subject Invention in the relevant country pursuant to Sections 17.1 or 17.2 hereof may require RETT to continue prosecution or to retain the patent rights in the United States or in any foreign country.

15.3 Copies of Patent Application. RETT agrees to provide the Research Partners with a copy of each patent application it or Contractors file on any Subject Invention.

15.4 Reports on Subject Inventions. Every three months from the effective date of the CRADA(s), Research Partner and RETT shall deliver to RETT and to the Industry Program Office interim reports listing the Subject Inventions, if any, it has produced during the preceding three-month period. If a Party has produced no Subject Invention for any three-month period, the Party's interim report for that period will explicitly state so.

Section 16. Trademarks.

Nothing in this Agreement shall be deemed to constitute an agreement concerning Trademarks.

Section 17. Cost of Intellectual Property Protection.

17.1 Costs During Exclusive License Period. During the term of the exclusive licenses granted pursuant to Sections 6.1 and 6.3 hereof, all Research Partners shall be responsible for payment of all costs relating to Intellectual Property (excluding Trademark) filings and prosecutions, and all costs relating to maintenance fees for patents to which exclusive licenses are granted thereunder. Such costs shall be borne equally by the Research

Partners. Any of the Research Partners may elect not to continue funding such costs with respect to any particular Generated Intellectual Property upon sixty (60) days written notice to RETT and the other Research Partners. Upon such notice all licenses granted to the non-fundings Research Partners with respect to such Generated Intellectual Property shall terminate.

17.2 Costs During Non-Exclusive License Period. During the term of the non-exclusive licenses granted pursuant to Sections 6.2 and 6.4 hereof, all costs relating to Intellectual Property (excluding Trademark) filings and prosecutions, and all costs relating to maintenance fees for patents to which non-exclusive licenses are granted thereunder shall be borne as determined in accordance with guidelines established by the Industry Operating Board applied on a case-by-case basis by the Industry Operating Board. The objective of the Industry Operating Board in allocating such costs shall be to transfer such costs insofar as is equitable to the third parties, including members of RETT who are not Research Partners hereunder, to which such Generated Intellectual Property is licensed. In the event any particular Generated Intellectual Property is not licensed to third parties, such costs shall be borne equally by all Research Partners to which such Generated Intellectual Property is licensed. Any of the Research Partners may elect not to fund or continue to fund such costs upon sixty (60) days written notice to RETT and the other Research Partners to which such Generated Intellectual Property is licensed. Upon such notice all licenses granted to the non-funding Research Partners with respect to such Generated Intellectual Property shall terminate.

Section 18. Suits Concerning Intellectual Property Rights.

18.1 Notice of Infringement. If, during the term of the exclusive or non-exclusive licenses granted pursuant to Sections 6.1, 6.2, 6.3 or 6.4 hereof, a Party becomes aware of or has knowledge of any actual or suspected infringement of the Generated Intellectual Property, such Party shall promptly notify each other CRADA Party of such infringement.

18.2 Right to Enforce. If, during the term of the exclusive licenses granted pursuant to Sections 6.1 and 6.3 hereof, misuse or infringement of any of the Generated Intellectual Property occurs, each of the Research Partners to which such Generated Intellectual Property is licensed and RETT shall have the right, but not the obligation, to institute any action, suit or proceeding in the name of RETT to terminate such misuse or infringement. The CRADA Parties instituting such action, suit or proceeding shall bear the costs of such action, suit or proceeding as agreed among such CRADA Parties. The CRADA Parties bringing such action, suit or proceeding shall have full authority to

settle such action, suit or proceeding. In any such action, suit or proceeding, the Parties shall cooperate with the CRADA Party bringing such action, suit or proceeding in all respects and shall, upon reasonable notice, use their best efforts to have any of their employees, contractors and agents testify when requested by such CRADA Party, and, on reasonable notice, shall use their best efforts to make available to such CRADA Party all relevant records, papers, information, samples, specimens and the like. In the event that the CRADA Parties bringing such action, suit or proceeding are unable to agree an any aspect of such proceeding, the Industry Operating Board shall decide how to proceed.

18.3 Damages. If damages are awarded in such action, suit or proceeding, the CRADA Parties that brought the action, suit or proceeding shall be entitled to all of the damages recovered pursuant to such action, suit or proceeding, which shall be allocated in the same proportion as such CRADA Parties bear expenses.

18.4 Suits Against Research Partners or RETTs. Any of the Research Partners or RETT against whom a suit, action or proceeding is brought alleging misuse or infringement arising out of its use of Generated Intellectual Property shall bear all damages, costs and expenses, including attorneys fees incurred in connection with such suit, action or proceeding.

Section 19. Assignment of Personnel.

19.1 Assigned Personnel. It is contemplated that each of the Research Partners and RETT may assign personnel to the facilities of Contractors, RETT or other Research Partners in connection with the CRADA Agreements. Such personnel assigned by the assigning CRADA Party to participate in or observe the research to be performed under the CRADA Agreements shall not during the period of such assignments be considered employees of the receiving entity for any purposes.

19.2 Control of Assigned Personnel. RETT shall have the right to exercise technical supervision of the occupational activities of such personnel during the assignment period and shall have the right to approve the assignment of such personnel and/or to later request their removal by the assigning CRADA Party.

19.3 Costs of Assigned Personnel. The assigning CRADA Party shall bear any and all costs and expenses with regard to its personnel assigned to the receiving entity's facilities under the CRADA Agreements. The receiving entity shall bear facility costs of such assignments. Without limiting the generality of the foregoing, Research Partner shall be responsible for providing any

insurance coverage, pension, profit sharing, paid vacation, sick leave, disability or any other benefit normally provided to its employees. All taxes required to be withheld and/or paid with respect to all services provided by its employees under the CRADA Agreements shall be timely paid by Research Partner to the appropriate government agency. Research Partner shall indemnify and hold harmless RETT and each of the other Research Partners from any liability resulting from acts of omissions of its employees or from its failure to pay any taxes or benefits.

19.4 Research Performed by Research Partner's Employees. Research Partner acknowledges that certain research under the CRADA Agreements will be performed by Research Partner's employees or at Research Partner's facilities or the facilities of Research Partner's contractors or agents as set forth in the CRADA Agreements. Research Partner agrees that all such work shall be performed by Research Partner as agent for RETT. Any Generated Intellectual Property arising from such work shall be treated as if it were created by RETT.

Section 20. Force Majeure.

No failure or omission by any CRADA Party in the performance of any obligation under the CRADA Agreements shall be deemed a breach of the CRADA Agreements or create any liability if the same shall arise from any cause or causes beyond the control of the CRADA Party, including but not limited to the following, which, for the purpose of the CRADA Agreements, shall be regarded as beyond the control of the CRADA Party in question: Acts of God, acts or omissions of any government or agency thereof, compliance with requirements, rules, regulations, or orders of any governmental authority or any office, department, agency, or instrumentality thereof, fire, storm, flood, earthquake, accident, acts of the public enemy, war, rebellion, insurrection, riot, sabotage, invasion, quarantine, restriction, transportation embargoes, or failure or delays in transportation.

Section 21. Records and Accounting System.

RETT and Research Partner shall maintain records of receipts, expenditures, and the disposition of all Government property in its custody, related to the CRADA Agreements.

Section 22. Notices.

22.1 Form of Notice. Any communications required by this Agreement, if given by postage prepaid first class U.S. Mail addressed to the Party to receive the communication, shall be deemed made as of the day of receipt of such communication by the addressee, or on the date given if by verified facsimile. Address

changes shall be given in accordance with this Article and shall be effective thereafter. All such communications, to be considered effective, shall include the number(s) of the CRADA(s).

22.2 Addresses, Etc. The addresses, telephone numbers and facsimile numbers for the Parties are as follows, which such addresses, telephone numbers and facsimile numbers may be changed from time to time by written notice to the other Party:

_____
_____
_____
_____

_____
_____
_____
_____

Section 23. Administration; Disputes; Governing Law.

23.1 Administration. RETT shall, among other things:

(a) Coordinate the administration of the CRADA Agreements with the Lead Contractor;

(b) Administer and coordinate Research Partners' contributions, including cash contributions;

(c) Arrange all meetings, plant and lab visits and consultations among the CRADA Parties;

(d) Give preference to Research Partners in selecting sites for Beta development work under the CRADA Agreements, unless seventy-five percent (75%) or more of the Research Partners otherwise direct; and

(e) [other duties of RETT to be inserted].

23.2 Dispute Resolution. The CRADA Parties shall attempt to jointly resolve all disputes arising from the CRADA Agreements. If the CRADA Parties are unable to jointly resolve a dispute within a reasonable period of time, they agree to arbitration as set forth in this Section 23.

23.3 Arbitration Agreement. Any and all disputes arising out of or in connection with the negotiation, execution, interpretation, performance and nonperformance of the CRADA Agreements shall be solely and finally settled by a board of three

(3) arbitrators in accordance with the patent rules of the American Arbitration Association (the "AAA Rules").

23.4 Governing Law. To the extent that there is no applicable U.S. Federal law, this Agreement and performance hereunder shall be governed by the laws of the State specified in the CRADA(s).

Section 24. Entire Agreement and Modifications.

It is expressly understood and agreed that the CRADA Agreements with their Appendices and Exhibits contain the entire agreement between the Parties with respect to the subject matter hereof and that all prior representations or agreements relating hereto have been merged into this document and are thus superseded in totality by the CRADA Agreements. Each CRADA Party is an intended third party beneficiary of this Agreement and of each other Master Research Partner Agreement executed in connection with the CRADA(s), and a breach by any CRADA Party of any of the CRADA Agreements, shall be deemed to be a breach of this Agreement. Any agreement to change any terms or conditions of this Agreement, its appendices and exhibits shall be valid only if the change is made in writing, executed by the Parties hereto.

Section 25. Termination.

25.1 Termination. This Agreement may be terminated:

(a) by either Party on any anniversary of the Effective Date of this Agreement upon written notice given to the other Party at least one (1) year prior to such anniversary date;

(b) by the Industry Operating Board with respect to either Party upon such Party's breach of any of the terms and conditions contained herein, including, without limitation, the obligations of Research Partner pursuant to Sections 3 and 17 hereof, if such breach is not cured within sixty (60) days after written notice from Research Partner or RETT;

(c) upon an agreement, in writing, of both Parties; or

(d) upon termination of the CRADA.

25.2 Effect of Termination. In the event of termination of this Agreement with respect to either Party, such terminated Party shall be responsible for its share of the costs incurred through the effective date of termination, as well as its share of the costs incurred after the effective date of termination which are related to the termination. Except as specifically provided herein, all rights accruing to either terminated Party hereunder shall be terminated as of the effective date of such termination, including, without limitation, the licenses granted to the terminated Party pursuant to Section 6 hereof. The confidentiality, use and/or non-disclosure obligations of this Agreement shall survive any termination of this Agreement.

Section 26. Miscellaneous.

26.1 No Trademark Usage Rights. Except as otherwise specifically provided herein, this Agreement shall not be construed to confer any right to use in advertising, publicity or other marketing activities, or for any other reason, any name, trade name, Trademark or other designation of any Party hereto, including any contraction, abbreviation or simulation of the foregoing.

26.2 Assignment. Except for such rights to sublicense Generated Intellectual Property to Affiliates as are set forth in Section 6 hereof, no Party shall assign this Agreement or any of its rights or obligations hereunder without the prior written consent of the other Party, except that (i) no such consent shall be required for a transfer by operation of law in connection with a merger or consolidation of such Party and (ii) in the event RETT is unable or unwilling to perform its obligations hereunder, its rights and obligations may be assigned to any other AMTEX Organization that is selected by the AMTEX Organizations and approved by the Industry Operating Board. Any attempted assignment of this Agreement in violation of this Section 26.2 shall be void and of no effect. This Agreement shall be binding upon, inure to the benefit of and be enforceable by the Parties hereto and their respective successors and permitted assigns.

26.3 Third-Party Beneficiaries. Except as set forth in Section 24, this Agreement is for the sole benefit of the Parties and their permitted assigns and nothing herein expressed or implied shall give or be construed to give any person, other than the Parties and such assigns, any legal or equitable rights hereunder.

26.4 Waiver. The waiver by any Party of any instance of the other Party's noncompliance with any obligations or responsibility herein shall not be deemed a waiver of other instances or of either Party's remedies for such noncompliance.

26.5 Severability. If any provisions of this Agreement shall be held to be illegal, invalid or unenforceable, such provision shall be enforced to the maximum extent permissible so as to effect the intent of Parties, and the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby. If necessary to effect the intent of the Parties, the Parties will negotiate in good faith to amend this Agreement to replace the unenforceable language with enforceable language which as closely as possible reflects such intent.

26.6 Headings. The headings of the Sections and other subdivisions of this Agreement are for the convenience of reference only and shall not modify, define or limit any of the terms or provisions of this Agreement.

26.7 Further Assurance. Upon reasonable request from time to time, the Parties shall execute and deliver all documents and instruments and do all other acts that may be reasonably necessary or desirable to give effect to the exercise by the other Party of its rights hereunder.

26.8 Construction. This Agreement has been negotiated by the Parties and their respective counsel and shall be fairly interpreted in accordance with its terms and without any strict construction in favor of or against any Party.

FOR RETT:

_____

By: _____

Name: _____

Title: _____

FOR RESEARCH PARTNER:

_____

By: _____

Name: _____

Title: _____

EXHIBIT A

MASTER CRADA

(SEE APPENDIX B OF THE
AMTEX POLICIES AND PROCEDURES DOCUMENT)

EXHIBIT B

RESEARCH PARTNER CONTRIBUTIONS

EXHIBIT C

ASSIGNMENT AND
CONFIDENTIALITY AGREEMENT

THIS ASSIGNMENT AND CONFIDENTIALITY AGREEMENT ("Agreement") is made and entered into as of this _____ day of _____, 19___, by and between **[insert name of individual]** ("Employee") and **[insert name of Research Partner]** ("Employer").

W I T N E S S E T H:

WHEREAS, Employer is a party to that certain Master Research Partner Agreement ("Research Partner Agreement"), dated as of _____, 19___, by and among Employer and **[insert name of** RETT] ("RETT");

WHEREAS, pursuant to the terms of the Research Partner Agreement, Employer is obligated to perform various services ("Services") for and on behalf of RETT;

WHEREAS, Employee is currently employed by Employer and desires to continue to be employed by Employer;

WHEREAS, Employer desires to utilize Employee in performing certain of the Services under the Research Partner Agreement, and Employee desires to perform such Services; and

WHEREAS, pursuant to the terms of the Research Partner Agreement, Employee must enter into this Agreement prior to providing such Services;

NOW, THEREFORE, in consideration of Employee's employment and continued employment with Employer, the premises, mutual promises, obligations and agreements contained herein, and for other good and valuable consideration, the receipt and adequacy of which is acknowledged by the parties hereto, the parties hereto, intending to be legally bound, do hereby agree as follows:

1. The Services Employee will perform in connection with the Research Partner Agreement may include the invention of new methods, processes, apparatuses and products and the development or improvement of existing methods, processes, apparatus and products.

2. During Employee's employment by Employer, Employee shall promptly disclose to Employer any and all inventions, discoveries,

improvements, and other intellectual property, whether patentable or unpatentable, conceived or made by Employee either in whole or in part during the performance of Services in connection with the Research Partner Agreement. Employee hereby grants and assigns to Employer or its nominees, successors and assigns, all right, title and interest in and to such inventions, discoveries, improvements and other intellectual property.

3. Employee shall, upon request by Employer and upon payment to Employee of Employee's reasonable and necessary out-of-pocket expenses, promptly execute and deliver such applications, assignments, descriptions and other instruments as may be necessary or deemed proper in the opinion of Employer, to vest title to any such inventions, discoveries or improvements and patents or reissues thereof in Employer or its nominees, successors or assigns and to enable Employer or its nominees, successors and assigns to obtain, maintain and enforce the exclusive right, title and interest thereto throughout the world.

4. Employee shall keep such proper records as Employer may direct. All documents and materials, including without limitation, records, reports, drawings, memoranda, specimens, models, letters and notebooks that relate to any activity of Employee in connection with the Research Partner Agreement shall remain the sole property of Employer. Employee shall not remove any such documents or materials from the established buildings of Employer, or make copies thereof, except as required in the course of performing Services for Employer in connection with the Research Partner Agreement, or except with the written permission of an officer of Employer.

5. During the time Employee is performing Services in connection with the Research Partner Agreement and for a period of five years thereafter, Employee shall not, without the express written consent of an authorized officer of Employer, disclose to anyone other than Employer any invention, discovery, improvement or other intellectual property subject to the terms of this Agreement. Employee shall not at any time, without the express written consent of an authorized officer of Employer, disclose to any person any information imparted to Employee in the course of Employee's rendering Services on behalf of Employer under the Research Partner Agreement, and known to Employee to be a trade secret or to be considered by Employer to be confidential and restricted.

6. This Agreement shall inure to the benefit of Employer, its successors and assigns and each of the parties to the Research Partner Agreement or to any other Master Research Partner Agreement executed in connection with the Cooperative Research and Development Agreement(s) to which the Research Partner Agreement relates.

FOR EMPLOYER:

By: _____

Name: _____

Title: _____

_____

EMPLOYEE

EXHIBIT D

ADDITIONAL PROVISIONS
APPLICABLE TO FOREIGN RESEARCH PARTNERS

In addition to the terms and provisions set forth in the Agreement, if Research Partner is a Foreign Research Partner, Research Partner hereby agrees to the following terms and conditions:

1. Generated Intellectual Property shall be made available only (a) to its U.S. Affiliates and (b) for use at its manufacturing sites in the United States. As used herein, "U.S. Affiliates" shall mean affiliates domiciled and formed under the laws of one of the States of the United States.

2. Generated Intellectual Property shall be maintained in confidence and shall not be disclosed, transferred or communicated outside the boundaries of the United States, or to any third parties. In particular, and without limiting the foregoing, Generated Intellectual Property shall not be disclosed to any of its employees or agents who are primarily assigned to manufacturing sites outside the boundaries of the United States.

3. Any license of Generated Intellectual Property granted to the Foreign Research Partner shall apply only to its U.S. Affiliates and manufacturing sites in the United States.

4. The obligation of nondisclosure set forth in Paragraph 2 above shall apply until such time as (a) RETT provides written consent to disclosure, or (b) the information is demonstrated to be in the public domain or in the Foreign Research Partner's rightful or independent possession with no legal obligation of confidentiality.

ACCEPTANCE OF RESEARCH PARTNER AGREEMENT

WHEREAS, _____ [insert name of RETT] (hereinafter, "RETT") intends to enter into one or more Cooperative Research and Development Agreements relating to the subject matter identified on the Addendum hereto (hereinafter "CRADA(s)");

WHEREAS, _____ [insert name of Research Partner] (hereinafter, "Research Partner") desires to participate in the research and development to be conducted under the CRADA(s) on the terms and conditions set forth herein; and

WHEREAS, the Industry Operating Board of the AMTEX Partnership on _____, 1993, approved a Master Research Partner Agreement (the "Research Partner Agreement") to govern the relationships between RETT and other entities participating in Cooperative Research and Development Agreements;

NOW, THEREFORE, in consideration of the premises and of the mutual promises, obligations and agreements contained herein, the parties hereto, intending to be legally bound, do hereby agree as follows:

1. Research Partner hereby agrees to participate in the research and development to be conducted under the CRADA(s) on the terms and conditions set forth in the Research Partner Agreement, which is hereby incorporated by reference in this agreement as if set forth herein in its entirety. Research Partner's signature on this Agreement shall be deemed to be its signature on the Research Partner Agreement as if such Agreement had been originally executed by Research Partner.

2. The supplemental information set forth on the Addendum hereto is hereby incorporated into the referenced sections of the Research Partner Agreement.

[RESEARCH PARTNER]

By: _____

Name: _____

Title: _____

[RETT]

By: _____

Name: _____

Title: _____

ADDENDUM FOR ACCEPTANCE OF RESEARCH PARTNER AGREEMENT

1. Name of RETT (cover page and heading):

2. Name of Research Partner (cover page and heading):

3. Subject matter of CRADA(s) (Whereas clause):

4. Names of Contractors (Whereas clause):

5. Contributions of Research Partner (Exhibit A):

6. Length of exclusive license (§§ 6.1 and 6.3):

7. Addresses, telephone numbers and facsimile numbers of the Parties (§ 22.2):

8. Additional duties of RETT (§ 23.1):

9. Amount of administrative fee for first year for each Research Partner that is a member of an AMTEX Organization (§ 23.1):

10. Amount of administrative fee for first year for each Research Partner that is not a member of an AMTEX Organization (§ 23.1):

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