

LA CREACION DE UN INSTITUTO EMPRESARIAL DOMINICANO: UN ANTEPROYECTO
DE PROPUESTA

Preparado por:

Dr. Jaime Viñas Román, Presidente

Ing. Roberto Berges, Vice Presidente

UNIVERSIDAD NACIONAL PEDRO HENRIQUEZ UREÑA
Santo Domingo, República Dominicana

En colaboración con:

Dr. Joseph E. McCann, Director of The Management Center

Dr. Luis R. Gomez-Mejia, Director of Interamerican
Business Research and Development

UNIVERSITY OF FLORIDA
Gainesville, Florida, U.S.A.

LA CREACION DE UN INSTITUTO EMPRESARIAL DOMINICANO: UN ANTEPROYECTO
DE PROPUESTA

Preparado por:

Dr. Jaime Viñas Román, Presidente

Ing. Roberto Berges, Vice Presidente

UNIVERSIDAD NACIONAL PEDRO HENRIQUEZ UREÑA
Santo Domingo, República Dominicana

En colaboración con:

Dr. Joseph E. McCann, Director of The Management Center

Dr. Luis R. Gomez-Mejia, Director of Interamerican
Business Research and Development

UNIVERSITY OF FLORIDA
Gainesville, Florida, U.S.A.

RESUMEN

Este anteproyecto propone la creación de un Instituto Empresarial Dominicano, diseñado como una organización del sector privado, encargado de articular las políticas de soporte del desarrollo del sector y de proveer la asistencia técnica y la tecnología requerida por los sectores de empresa y empresarios en la República Dominicana. El Instituto propuesto tendrá un Centro de Recursos dedicado exclusivamente a satisfacer las necesidades de las pequeñas empresas del país. Películas, materiales, banco de datos computarizados, libros y otras herramientas serán usadas por el Instituto para cumplir con estos objetivos. Como parte de su función en el desarrollo y creación de habilidades empresariales, el Instituto ofrecerá una serie de conferencias, foros de determinación de políticas empresariales, programas de entrenamiento, y otros proyectos de interés al sector privado.

INDICE

	<u>Página</u>
I. INTRODUCCION Y DELINEAMIENTOS	1
II. OBJETIVOS DEL PROYECTO	5
A. Promoción de una Orientación Empresarial	5
B. Desarrollo de una Red de Comunicación	5
C. Desarrollo de Capacidades	6
III. PROMOTORES PRINCIPALES Y RECURSOS	8
IV. ACTIVIDADES Y ORGANIZACION DEL INSTITUTO	12
A. Gobierno y Administración	16
B. Conferencias, Programas y Estudios	17
1. Conferencias Especiales	17
2. Programas Permanentes	19
3. Estudios y Reportes de Investigación	21
C. Centro de Recursos Empresariales	22
1. Centro de Datos	22
2. Asistencia Técnica	25
3. Centro de Multi-medios	26
D. Resumen de la Organización y Actividades del Instituto	27
V. PLAN DE IMPLEMENTACION	28
A. Tareas de los Responsables del Preproyecto	28
B. Formalización del Gobierno y Manejo del Instituto ...	29
C. Orientación y Manejo del Instituto	30
D. Organización de las Actividades de Conferencias, Programas y Estudios	31
1. Conferencias Iniciales	32
2. Programa Inicial	32
3. Estudios Iniciales	35

E.	Organización del Centro de Recursos Empresariales (CRE)	36
	1. Centro de Banco de Datos	36
	2. Servicio de Asistencia Técnica	37
	3. Centro de Multi-medios	38
VI.	PLAN DE EVALUACION	41
	A. Descripción General	41
	B. Proceso de Evaluación Cualitativa	42
	C. Proceso de Evaluación Cuantitativa	43
	D. Metodología a Ser Usada	45
VII.	PASOS A SEGUIR	47
	A. Personal	47
	B. Infraestructura	48
	C. Necesidades Financieras - Presupuesto por Capitales	48
	D. Flujo de Ingresos Pro-forma	48
	E. Formalización de Acuerdos	49
	F. Establecimiento de Prioridades, Fechas para los Planes de Acción y la Terminación de los Proyectos	49

CUADROS

	<u>Página</u>
CUADRO 1. Recursos, Servicios, Actividades y Productos del Instituto para las Empresas Dominicanas	11
CUADRO 2. Muestra-Cuestionario para Asesorar al Potencial Empresario Dominicano	13
CUADRO 3. Estructura Organizacional del Instituto Empresarial Dominicano	15

APENDICES

APENDICE 1. Lista de Organizaciones e Individuos Entrevistados en el Proceso de Desarrollo de la Propuesta	50
APENDICE 2. Cartas de Acuerdos de Colaboración entre la Universidad Nacional Pedro Henriquez Ureña y la Universidad de la Florida	52
APENDICE 3. Carta de Apoyo al Proyecto del Presidente de la Universidad de la Florida, Dr. Robert Marston	56
APENDICE 4. Carta de Apoyo del Dr. George Kozmetzky, del Instituto Empresarial de la Universidad de Texas en Austin	58
APENDICE 5. Carta de Apoyo del Estado de la Florida	60
APENDICE 6. Descripción de los Foros del Instituto Tecnológico de Massachusetts (MIT)	62
APENDICE 7. Folleto de la Conferencia de Desarrollo Empresarial de la Universidad de Florida	66
APENDICE 8. Descripción General del Centro de Aplicaciones Tecnológicas del Estado (STAC), y Muestra de las Especificaciones del Banco de Datos - Universidad de la Florida	84
APENDICE 9. Lista de Libros y Materiales del Centro de Recursos Empresariales (CRE)	123

CREACION DEL INSTITUTO EMPRESARIAL DOMINICANO
ANTEPROYECTO DE PROPUESTA

I. INTRODUCCION Y DELINEAMIENTOS

El presente anteproyecto propone la creación de un Instituto, en la República Dominicana (R.D.), que promueva y apoye la formación de nuevas empresas, y ayude al desarrollo del sector privado en general. El sector privado de República Dominicana ha ido emergiendo como una importante fuerza económica, especialmente desde el derrocamiento del dictador Trujillo en 1961, quien mantenía un control absoluto sobre las más importantes actividades económicas de la nación. El país experimentó un período de rápido crecimiento entre 1966 y 1976, con una tasa del 10% anual. Aunque a partir de 1976 se presentó un desaceleramiento de la economía en forma sustancial, el país ha mantenido una importante tasa de desarrollo, dentro de los niveles latinoamericanos (R.D. en el rango de 5.0% al 5.5% anual). A pesar de este desaceleramiento económico, dado en gran parte por factores externos al país, el crecimiento a largo plazo del sector manufacturero ha creado miles de nuevas compañías con demanda de nuevas habilidades en todos los niveles. La actividad económica, gradualmente, ha ido cambiando de curso: del sector primario (agricultura y minería) hacia actividades del sector secundario o terciario, con énfasis en manufactura para sustitución de importaciones, procesamiento de alimentos, textiles, comercio y servicios.

Con algunas importantes excepciones, el sector privado de la República Dominicana está integrado principalmente por pequeños negocios familiares. Estas firmas son críticas para el país por el impacto que tienen en la economía nacional. Por ejemplo, entre los años 1978 y 1983, un promedio de 954 nuevos negocios se registraron y legalizaron cada año. La gran

mayoría de estas firmas son "micro-empresas" que emplean un pequeño número de trabajadores. Se ha estimado que en el sector privado, no agrícola, un mínimo del 85% de todos los trabajadores del sector (aproximadamente 250,000 dominicanos) están empleados por estas firmas.

Aunque un negocio particular o "micro-empresa" puede consistir de 10 o menos trabajadores, tal vez produciendo muebles en un pequeño pueblo, su gerencia es parte de un gran contingente de personas con los mismos problemas, necesidades y metas. Estas empresas representan una fuerza importante para el continuo crecimiento económico del sector no tradicional de la República Dominicana. Exceptuando el sector gubernamental, estos negocios generan el mayor crecimiento de empleo en el país. Las pequeñas entidades proveen el tan necesario impulso dentro del sector privado para un más amplio desarrollo económico. Representan, además, la mayor esperanza de la nación para reducir la dependencia en las exportaciones tradicionales (ej., azúcar), a través del desarrollo de mercados externos para productos no-tradicionales, tales como enlatados. En un sentido general, estas firmas privadas son un importante instrumento en la construcción de unas sólidas bases dentro de la sociedad dominicana, pues no solamente absorben el desempleo sino que también desarrollan una mentalidad empresarial y crean una ascendiente clase media.

Desafortunadamente, la República Dominicana carece de un marco institucional integrado para la articulación de políticas y la asistencia directa a estas empresas. Asimismo, existen pocos mecanismos disponibles para nutrir y fomentar un espíritu de creación y desarrollo de empresa. Después de entrevistar recientemente a varios líderes empresariales y oficiales del gobierno, la falta de apoyo técnico y de asistencia a empresarios emergentes fueron definidos como los más serios obstáculos para el desarrollo socio-económico de la República Dominicana. Muchos de estos empresarios emergentes no han tenido un alto nivel de educación formal, y solamente algunos

pocos han recibido entrenamiento académico en administración de negocios. Programas de entrenamiento gerencial son normalmente ofrecidos a través de organizaciones tales como ONAP, INFOTEP, CEDOPEX, y dentro de un programa de Maestría en Administración de Negocios, de la Universidad Católica Madre y Maestra. Pero, con excepción de la Corporación de Fomento, una agencia gubernamental, existen pocos mecanismos para dar apoyo técnico a las actividades y esfuerzos del sector empresarial privado. En República Dominicana existe una gran demanda por un instituto dentro del sector privado, sin fines de lucro, diseñado para promover un espíritu de desarrollo empresarial dentro del país y para ayudar a los pequeños negocios en el crecimiento de sus operaciones, tanto domésticas como internacionales.

El presente anteproyecto propone la creación del mencionado instituto para las empresas dominicanas. El instituto, diseñado como una entidad del sector privado, articularía las políticas de apoyo al desarrollo del sector privado y proveería la asistencia técnica y "know how" a los proyectos empresariales que nazcan en República Dominicana. El instituto propuesto tendrá un centro de recursos, exclusivamente dedicado a satisfacer las necesidades típicas de los pequeños negocios. Películas, materiales, banco de datos computarizados, libros y otros instrumentos serán usados por el instituto en cumplimiento de esa función. El instituto será un centro de desarrollo empresarial, a través de conferencias, foros sobre políticas, programas y estudios de interés al sector privado.

El instituto estará situado dentro de los predios de la Universidad Nacional Pedro Henríquez Ureña (UNPHU), una prestigiosa entidad privada de educación superior de la República Dominicana. La Universidad de la Florida, la universidad insignia del Estado de la Florida, colaborará dentro del proyecto a través de su facultad de Administración de Negocios. Asociaciones

empresariales dominicanas jugarán un importante papel en la creación y desarrollo del instituto.

El diseño del proyecto está basado en el concepto de que un desarrollo institucional efectivo puede ser sustancialmente alcanzado si se unen los esfuerzos de UNPHU, de las asociaciones de empresas dominicanas y de la Universidad de la Florida (U.F.). Esta última posee una extensa experiencia en proyectos en América Latina, incluida la República Dominicana, además de una importante experiencia en el diseño de programas, con profesorado y recursos de gran utilidad para el instituto. Una estrecha colaboración y mutua confianza son esenciales para el desarrollo exitoso del instituto. La Universidad de la Florida y UNPHU han mantenido estrechas relaciones, y UNPHU, además, ha estado muy vinculada a las Asociaciones Empresariales en la República Dominicana.

II. OBJETIVOS DEL PROYECTO

El propuesto instituto para el desarrollo de la empresa dominicana será una organización del sector privado, situado dentro del predio universitario, diseñada para fortificar y promover el crecimiento y desarrollo del sector privado en la República Dominicana. Dentro de esta meta general, el instituto tendrá cuatro objetivos principales.

A. Promoción de una Orientación Empresarial

El instituto servirá como un medio de promover, inculcar, y apoyar un espíritu de desarrollo empresarial dentro de la República Dominicana. Por ejemplo, El instituto proveerá, como un servicio, una medición y guía de proyectos empresariales a través de ayuda técnica en la evaluación de los planes de los negocios

B. Desarrollo de una Red de Comunicación

Adicional a la asistencia técnica a los gestores de empresa, el instituto servirá como centro para promover el diálogo a nivel de políticas de empresa. Este diálogo será establecido sobre asuntos relacionados al sector privado y a través de un permanente punto de referencia institucional. El instituto, de esta manera, mantendrá un foro para facilitar el intercambio de ideas y de información, como también un aprendizaje interorganizacional e intergrupar de los diferentes sectores económicos y de los variados modelos del sector privado. El instituto también actuará como un colaborador que facilite la comunicación entre las compañías extranjeras deseosas de invertir en la República Dominicana y potenciales socios comerciales dominicanos.

C. Desarrollo de Capacidades

Aunque la educación en el sentido tradicional no será el principal objetivo del instituto, éste servirá como un mecanismo para elevar el nivel de habilidades de los empresarios dominicanos. Aún aquellos individuos educados dentro del sistema tradicional universitario podrán obtener una información aplicable y una asistencia empresarial práctica por parte del Centro de Recursos del Instituto. Las actividades de desarrollo del instituto, a través de sus conferencias, foros de políticas empresariales y programas servirán para elevar el nivel de interés y atención dados a las actividades empresariales en la República Dominicana. Un gran desarrollo personal puede presentarse a través de la interacción con otras personas del sector privado quienes están luchando para salir adelante y los cuales desearían aprender de los éxitos o fracasos de otros empresarios. La función de desarrollo de capacidades del instituto, a diferencia del esfuerzo educativo tradicional, producirá resultados de aplicabilidad y uso directo para los empresarios.

D. Desarrollo de un Medio de Identificación y Promoción de Oportunidades de Exportaciones del Sector Privado

Un interés importante en la República Dominicana es la creación de oportunidades de negocios que ayuden en la reducción de los problemas de la balanza de pagos, y la dependencia del país en las importaciones. En los últimos años, el déficit de comercio exterior ha sobrepasado los \$200 millones de dólares. Muchas firmas, tanto nuevas como ya bien establecidas, que se encuentran afianzadas en sus actividades comerciales dentro del país, desconocen donde empezar cuando se trata de negociar con otros países. Es también fácil, por la misma falta de experiencia, sobreestimar los problemas relacionados con el comercio exterior, o caer en

dificultades que son fácilmente evitables si se tuviera la práctica, consejería e información indicada.

El instituto será un importante medio, dentro de la República Dominicana, para ayudar a identificar comercios y explotar oportunidades de negocios en el exterior. Se espera que el instituto sea conocido como un excelente lugar donde los hombres de negocios dominicanos, interesados en la exportación de sus productos, inicien el proceso. Se ofrecerá un amplio canal de información y apoyo que facilitará a los empresarios la identificación de mercados exteriores y de estrategias de exportación. El instituto complementará, sin suplantar, las actividades del Centro para Promoción de Exportaciones (CEDOPEX), una agencia del gobierno.

III. PROMOTORES PRINCIPALES Y RECURSOS

Como ha sido indicado en la introducción, varias organizaciones participarán como miembros del instituto. Este tendrá sus propias instalaciones en la Universidad Nacional Pedro Henríquez Ureña en Santo Domingo. Esta Universidad, fundada en 1966, mantiene el segundo lugar en número de estudiantes en el país, después de la Universidad Autónoma de Santo Domingo. Hasta ahora, ha contribuido con más de seis mil graduados a la sociedad dominicana. UNPHU tiene una excelente reputación como una Universidad seria, y de alto nivel académico, no solo dentro del país sino también en el Caribe. La Universidad, institución sin ánimo de lucro, ha sido líder tanto en el campo de la enseñanza como en el de la investigación. Actualmente, UNPHU ofrece 74 programas diferentes de profesiones a niveles de maestría, licenciatura y carreras técnicas. Su propia imprenta ha publicado más de 90 libros, lo cual constituye una marca sobresaliente dentro de la República Dominicana. UNPHU está patrocinada por la Fundación Universitaria Dominicana, la cual está compuesta de importantes personalidades del sector industrial, comercial, bancario y de empresa privada. De acuerdo a los estatutos orgánicos de UNPHU, la Universidad debe ser una institución privada, sin ánimo de lucro y sin identidad religiosa ni partidista.

UNPHU contribuirá con un terreno dentro de sus predios donde se construirá el edificio del Instituto, además de su contribución académica y administrativa.

La Universidad de la Florida es la institución de educación superior más importante en el Estado de la Florida. Esta colaborará con UNPHU en administración, materiales, desarrollo de programas y apoyo técnico para el Instituto. El Centro de Gerencia de la Facultad de Administración de

Negocios representará a la Universidad de la Florida ante el Instituto.

El Centro de Gerencia es el representante externo de la Facultad de Negocios y tiene a su disposición una gran cantidad de expertos y otros recursos disponibles en la Universidad de la Florida. En caso de necesidad, el Centro de Gerencia puede asegurar cualquier servicio requerido existente en otras instituciones.

Algunos de los recursos claves situados en la Universidad de la Florida y que pueden ser de gran utilidad al esfuerzo del Instituto son enumerados a continuación: (1) Una biblioteca con más de tres millones de volúmenes; (2) El mejor Centro en Estudios Latinoamericanos en Estados Unidos, con 85 miembros de la facultad investigando en ese campo académico; (3) Un Programa de Desarrollo e Investigación en Negocios Interamericanos, actualmente dirigido por el dominicano Dr. Luis R. Gómez-Mejía y financiado por el Gobierno Federal de los Estados Unidos; (4) Centro de Desarrollo de Pequeños Negocios; apoyado por agencias estatales y federales; (5) Centro de Aplicación Tecnológica Estatal (STAC), fundado por el Estado de la Florida y la NASA. STAC cuenta con la más completa red de banco de datos de EE.UU.; y (6) más de 125 miembros de la Facultad de Administración, reconocida como una de las más importantes en los Estados Unidos.

La Universidad de la Florida contribuirá con el Instituto por medio de servicios de información computarizada, servicios de biblioteca, desarrollo de materiales, apoyo académico y administrativo, además de una asistencia experta y coordinada. Se anexa carta del Presidente de la Universidad de la Florida, Dr. Robert Marston, en apoyo a este proyecto (Apendice 3). Además de UNPHU y de la Universidad de la Florida, asociaciones empresariales y de comercio serán invitadas a participar como miembros de la junta directiva del Instituto. El papel de estas y otras asociaciones interesadas será el de proveer asistencia en tiempo y esfuerzo al Instituto,

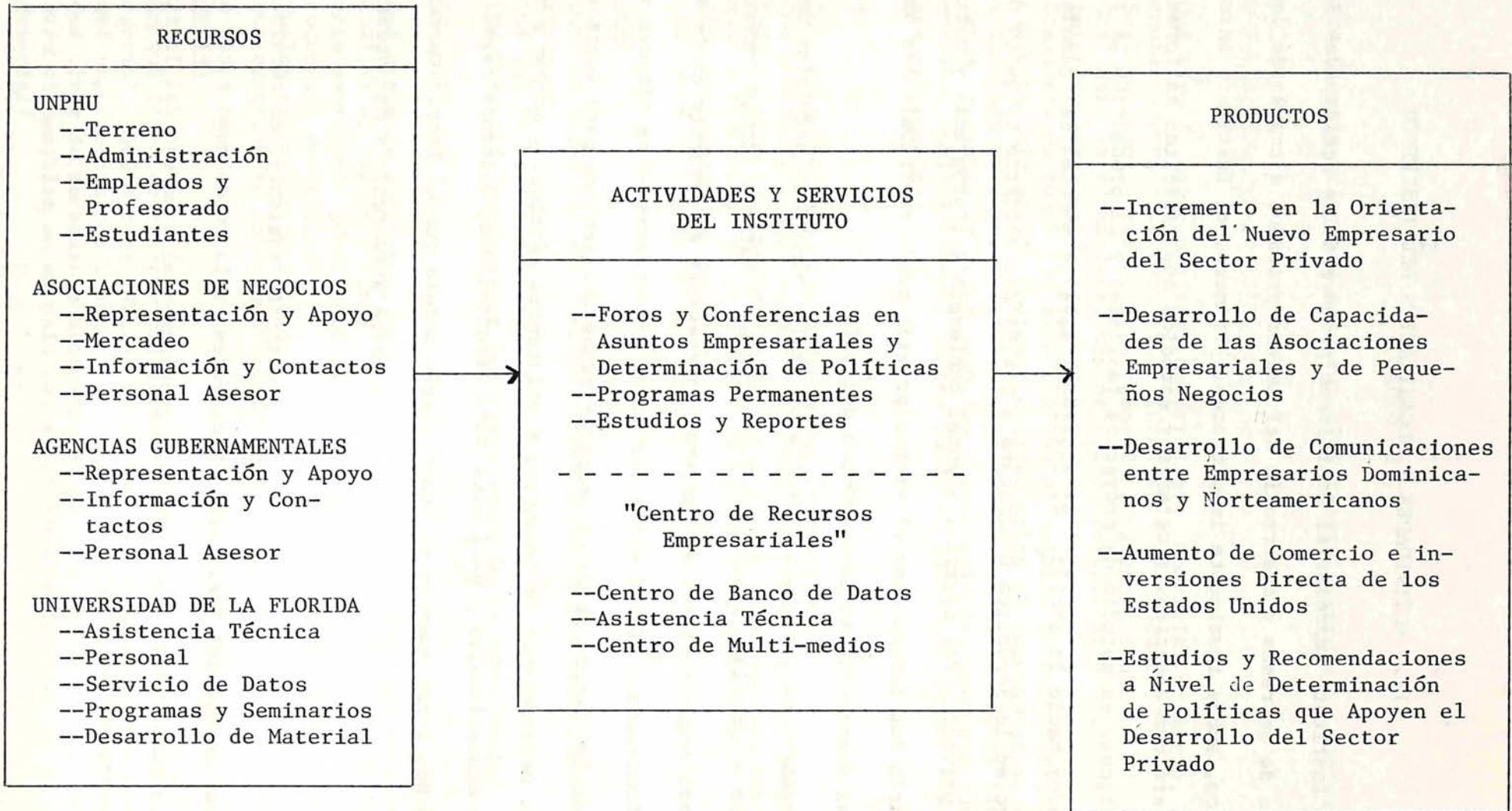
junto con el de llevar los servicios del Instituto a los grupos identificados como receptores potenciales del sector privado y el de ayudar a encontrar recursos financieros adicionales.

Agencias del gobierno serán también invitadas a tomar parte en el Instituto como miembros de un consejo asesor. Es importante el que exista esta comunicación de los sectores públicos y privados para reducir duplicación de actividades y facilitar el diálogo a nivel de formulación de políticas. Algunas de las agencias que estarían participando en este consejo serían: CEDOPEX, Corporación de Fomento y La Fundación de Desarrollo.

El Cuadro I nos muestra un resumen de recursos, actividades y productos del Instituto.

CUADRO NO. 1

RECURSOS, SERVICIOS, ACTIVIDADES Y PRODUCTOS DEL INSTITUTO PARA LAS EMPRESAS DOMINICANAS



IV. ACTIVIDADES Y ORGANIZACION DEL INSTITUTO

El Instituto Empresarial Dominicano promoverá las actividades de creación de empresas y desarrollo del sector privado, a través de dos esfuerzos, ambos igualmente importantes. Primero, el Instituto iniciará y ofrecerá conferencias, programas y estudios que capaciten en formulación de políticas, en estudio de proyectos tangibles y la producción de reportes orientados hacia la acción. El Instituto será un gestor del cambio constructivo en la República Dominicana a través del esfuerzo conjunto del sector privado. Por ejemplo, algunas conferencias, programas y estudios explorarán las formas como el sector privado puede contribuir más ampliamente al desarrollo socio-económico del país.

Segundo, el Instituto ofrecerá un amplio número de servicios de valor práctico e inmediato tanto para las actuales y futuras firmas domésticas, como para organizaciones extranjeras interesadas en invertir en la República Dominicana. Entre estos servicios encontramos el de ofrecer acceso a más de 100 bancos de datos computarizados utilizables para asuntos comerciales, mejoramiento de productos y asistencia técnica, y acceso a materiales educacionales y películas para desarrollo de pequeños negocios. El Cuadro No. 2 nos muestra un cuestionario modelo que el Instituto estará capacitado para usar y responder cuando esté asesorando a un potencial empresario dominicano.

Cada uno de estos esfuerzos está descrito adelante, en términos de su lugar dentro del Instituto. Para entender la forma como estos esfuerzos serán administrados, la estructura gubernamental y manejo del Instituto serán presentados primero.

CUADRO 2

Muestra-Cuestionario para Asesorar al Potencial Empresario Dominicano

General

1. ¿Qué tipo de negocio piensa desarrollar: Comercial, primario, agrícola, manufacturero, o de servicio? ¿Cuál será el producto?
2. ¿Será un negocio nuevo? ¿Una compra? ¿Una expansión?
3. ¿Cuál será la forma legal del negocio? ¿Propietario único, sociedad limitada, corporación por acciones?
4. ¿Considerando todos los aspectos, es el negocio propuesto rentable?
5. ¿Qué otra información podremos conocer sobre el negocio si se utilizan varias fuentes (Bancos de datos, proveedores, instituciones financieras, personal de otros negocios y asociaciones, agencias gubernamentales, publicaciones)? ¿Cómo puede el Instituto ayudar a encontrar esta información?

Mercados

1. ¿Cuál es su mercado, tanto doméstico como externo?
2. ¿Qué tan difícil será atraer y mantener su porcentaje del mercado?
3. ¿Cuál ha sido la experiencia de otras firmas similares que tuvieron éxito o fracasaron en el proceso de entrar a este mercado?
4. ¿Cómo satisfará su mercado?
5. ¿Cuál será el precio de su producto?

Competencia

1. ¿Quiénes serán sus más fuertes competidores, tanto domésticos como externos?
2. ¿Qué tal le ha ido a la competencia?
3. ¿Qué puede Ud. aprender de las operaciones de la competencia?

Infraestructura

1. ¿Qué clase de edificios, maquinaria y otras inversiones necesitará? ¿Cuál es el tamaño y forma de la planta de producción para el producto esperado? ¿Cuál será el costo por unidad en cuanto a nivel de producción se refiere?
2. ¿Cuáles serán sus necesidades locativas?
3. ¿Qué recursos se consiguen localmente, ¿cuáles deben ser importados?

Labor General

1. ¿En qué forma su experiencia personal y en negocios puede ayudar al negocio? ¿Qué partes débiles se presentan y cómo se pueden compensar? ¿Qué experiencias de trabajo ha tenido que pueden ser de utilidad?
2. ¿Qué clase de personas conformarán el grupo gerencial? ¿Quiénes están disponibles en el país con el interés de trabajar en su grupo gerencial?

3. ¿Cuáles deberían ser las funciones de cada miembro del grupo administrativo? Están claramente definidos? ¿Cómo?
4. ¿Qué otros recursos están disponibles para ayudar en el éxito de su negocio?

Personal

1. ¿Cuáles son las necesidades de personal cuando inicie su negocio?
2. ¿Cuáles serán sus necesidades en tres años?
3. ¿Se pueden encontrar trabajadores calificados en la República Dominicana en ese renglón?
4. ¿Cuánto deberá pagar en salarios y prestaciones para mantener una fuerza de trabajo calificada?
5. ¿Cuáles son sus planes de entrenamiento de personal de operaciones y administrativo?

Requerimientos Financieros

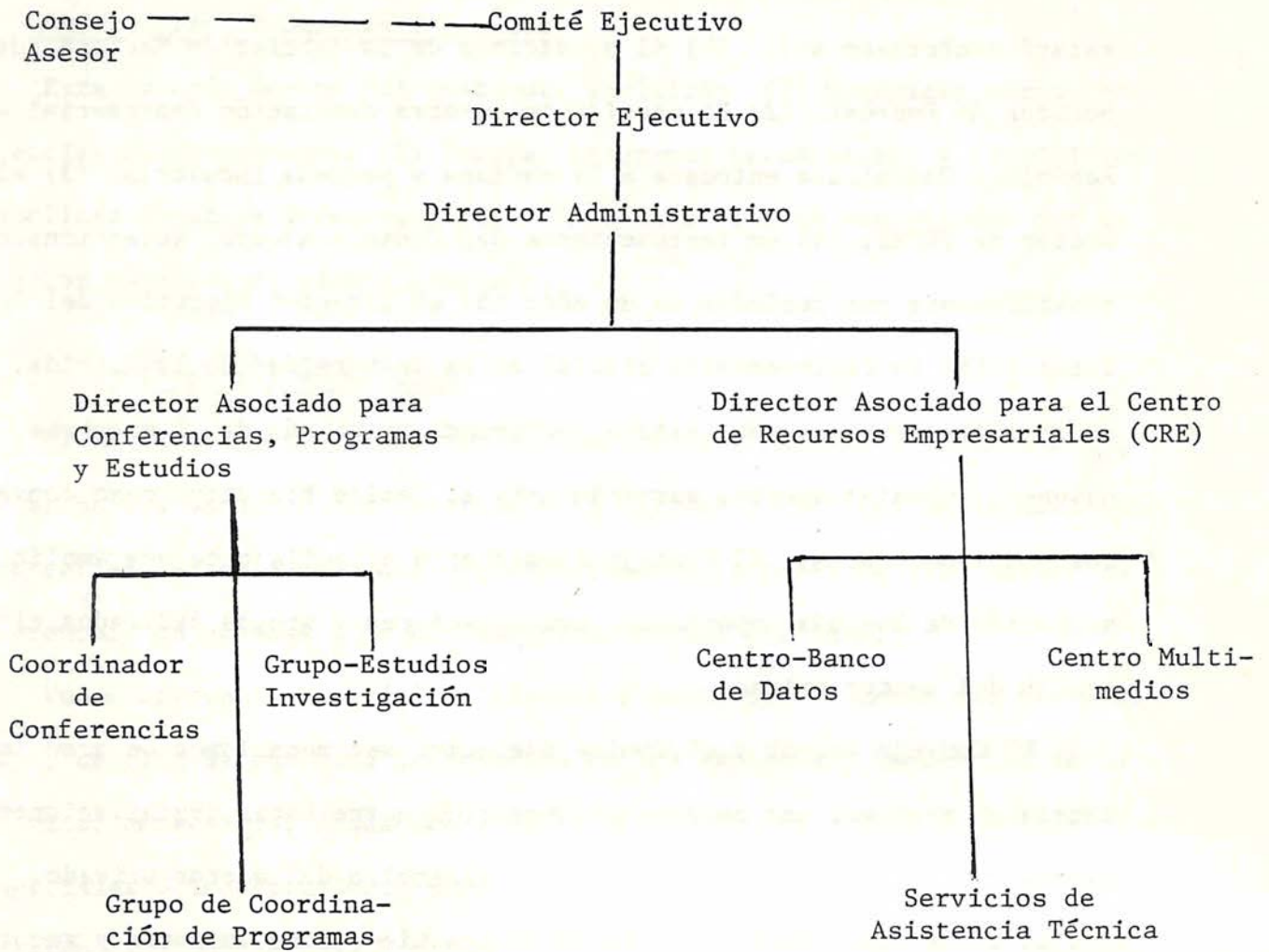
1. ¿Cuál será la lista de recursos de capital?
2. ¿Cuál es su balance proyectado?
3. ¿Cuál es su análisis de punto de equilibrio, proyectado?
4. ¿Cuál es su análisis del flujo de caja e ingreso pro-forma?
5. ¿Cómo puede Ud. desarrollar un análisis de desviaciones?
6. ¿Puede Ud. obtener reportes financieros históricos de negocios existentes en el area?
7. ¿Cómo puede conseguir fondos, según sus necesidades para iniciar?

Aspectos Legales

1. ¿Cuáles son las regulaciones existentes, tanto en la República Dominicana como en otros países, que puedan afectar su negocio directa o indirectamente?
2. ¿Puede Ud. conseguir alguna ayuda del gobierno?

CUADRO 3

Estructura Organizacional del Instituto
Empresarial Dominicano



A. Gobierno y Administración del Instituto

El Cuadro No. 3 ilustra la estructura organizacional del Instituto Empresarial Dominicano. Tal como se presenta, un comité ejecutivo trabajando en estrecha colaboración con el Consejo Asesor, es el encargado del gobierno del Instituto. El Comité Ejecutivo estará conformado por 6 miembros quienes serán responsables de establecer las políticas y metas del Instituto y el de asegurar el éxito general. El Comité Ejecutivo estará conformado así: (1) El presidente de la Asociación Nacional de Hombres de Empresa; (2) El presidente de otra asociación empresarial en la República Dominicana enfocada a la mediana y pequeña industria; (3) el Rector de UNPHU; (4) un representante del Consejo Asesor, seleccionado rotativamente por períodos de un año; (5) el director Ejecutivo del Instituto; y (6) un representante oficial de la Universidad de la Florida. El Consejo Asesor, a su vez, estará conformado por no más de 15 miembros quienes, voluntariamente, servirán ante el Comité Ejecutivo como consejeros y colaboradores. El Consejo Asesor será el reflejo de una amplia representación de las más importantes organizaciones y grupos dedicados al desarrollo del sector privado.

El Consejo Asesor y el Comité Ejecutivo son mecanismos de gran importancia en promover una cercana colaboración entre estas organizaciones claves y los grupos interesados en el desarrollo del sector privado. Cada una de estas organizaciones y estos grupos tiene conocimientos y recursos que unidos e integrados, les ayudarán a enfrentar en forma más fácil los aspectos del desarrollo, que si los enfrentan independientemente.

Un Director Ejecutivo de tiempo completo será nombrado por el Comité Ejecutivo. El Director será el encargado de representar el Instituto en todas las funciones y contactos externos con otras organizaciones y grupos.

Un Director Administrativo también será nombrado para dirigir las operaciones diarias y el personal del Instituto. Además, esta persona manejará las finanzas y el presupuesto de la institución. El Director Administrativo puede ser un oficial vinculado con UNPHU la cual proveerá el personal requerido y el apoyo administrativo necesario para que el Director pueda manejar y controlar los recursos del Instituto.

B. Conferencias, Programas y Estudios

Esta función dentro del Instituto incluirá: (1) Organizar cortas conferencias periódicamente; (2) Proveer programas permanentes; y (3) Iniciar y publicar estudios investigativos. Esta función será supervisada por un Director Asociado de tiempo completo.

1. Conferencias especiales

El Instituto patrocinará varias conferencias cada año, todas exploratorias de los aspectos que determinen la calidad y cantidad de la actividad empresarial, el desempeño del sector privado y el papel de este sector en la economía en general y en el desarrollo social del país.

Una conferencia especial se llevará a cabo, por lo menos una vez cada año, y en ella se enfocará la atención en los aspectos y tendencias de la actividad empresarial doméstica y en la iniciación de nuevos proyectos comerciales e industriales. Empresarios líderes, oficiales y expertos explorarán cada año un tema o tópico diferente. Las conferencias permitirán la discusión y la presentación de recomendaciones de acción a nivel de determinación de políticas para aquellos que participen. Las conferencias fortificarán las redes de comunicaciones establecidas, construirá algunas nuevas, y creará relaciones con empresarios, oficiales y expertos tanto dominicanos como extranjeros interesados en invertir en la República Dominicana.

Las conferencias pro-desarrollo empresarial serán organizadas siguiendo el patrón del diseño exitoso de las iniciadas por El Instituto Empresarial de la Universidad de Texas en Austin. La Facultad de Administración de Negocios de la Universidad de la Florida, también coordina, anualmente, una conferencia de idéntico diseño, con la colaboración del Instituto de la Universidad de Texas. Ambas conferencias, la de Austin en la primavera y la de Gainesville en el otoño están muy relacionadas en cuanto a objetivos, apoyo financiero, y administración. Una copia del folleto de la Conferencia del otoño de 1983, manejada por la Facultad de Negocios de la Universidad de la Florida, aparece en el Apéndice 7.

La Universidad de la Florida y el Instituto Empresarial de la Universidad de Texas, trabajarán conjuntamente con UNPHU para identificar los participantes, tanto locales como extranjeros, que asistirán a las conferencias del Instituto Empresarial Dominicano en Santo Domingo. La participación, a su vez, de empresarios dominicanos en las mencionadas conferencias que toman lugar anualmente en Gainesville y Austin será no solo posible sino deseable. Ronya y George Kozmetzky, fundadores de la Fundación RGK, que ha ayudado con el patrocinio de ambas conferencias, y con administración del Instituto Empresarial de Texas han expresado su activo interés en este programa. Sus cartas de apoyo aparecen en el Apéndice 4. La segunda clase de Conferencias Especiales serán las de "foros de formulación de políticas" las cuales integrarán organizaciones y grupos claves interesados en algún aspecto importante para el desarrollo o desempeño del sector privado en la República Dominicana. Trabajos con posiciones determinadas serán presentados, discutidos y se buscará la llegada a unas conclusiones y recomendaciones fruto del trabajo compartido del grupo. El objetivo será, por lo tanto, el de identificar campos comunes para llegar a una más amplia acción concertada. El tópicó de cada uno de estos foros

dependerá de aquellos aspectos y eventos corrientes en el momento y según las necesidades detectadas en el empresariado y mercado nacional.

2. Programas permanentes

Como complemento a las conferencias periódicas, existirán programas de interés permanente para el Instituto. Hasta el momento, tres clases de estos programas han sido identificados. Cada programa será coordinado por un equipo compuesto por la facultad del UNPHU, hombres de negocios y/o profesionales en el área del programa.

El primer tipo es el reflejo de una creencia fundamental del Instituto de que un responsable sector privado debe expresar un claro y significativo compromiso con el desarrollo social del país y su calidad de vida. Un programa de responsabilidad social será creado para buscar el apoyo financiero y dirigir proyectos de visible beneficio para los segmentos de menores ventajas dentro de la sociedad.

El segundo tipo de programas reflejarán otra creencia igualmente firme, en el sentido de que los empresarios emergentes deben ser ayudados, lo más temprano posible, por expertos en el mundo de los negocios para aumentar la cota de éxitos de nuevos proyectos y consecuentemente el desarrollo económico del país. Foros de "Nuevos proyectos" serán llevados a cabo cada tres meses para que nuevos empresarios puedan presentar sus planes de negocios ante un grupo de expertos seleccionados por el Instituto y profesores de la Facultad de Administración del UNPHU. Críticas constructivas en áreas como Mercadeo, Producción y Administración financiera les serán ofrecidas para que se produzcan planes de negocios factibles y más productivos. Presentaciones de estos planes ante el "foro de nuevos negocios" será una oportunidad única para los empresarios emergentes de medir sus ideas antes de que se cometan errores que conllevarían a una posible pérdida de la motivación. El concepto de "Foro de nuevos proyectos" está diseñado

siguiendo los lineamientos del exitoso diseño presentado en el Instituto Tecnológico de Massachussetts (MIT). Una descripción del diseño de MIT se incluye en el Apéndice 6.

La tercera clase de programas acepta el papel crítico del comercio internacional en el crecimiento futuro del país. Una unidad de Promoción de Inversiones y Exportaciones se creará dentro del Instituto con el fin de ofrecer seminarios en tópicos relacionados con el desarrollo de inversiones y exportaciones, establecer contactos entre negocios domésticos y extranjeros, y resumir a los inversionistas extranjeros los pasos necesarios y los recursos disponibles para invertir en el país. Mientras que algunas de estas actividades están siendo ejecutadas por otras entidades (ej.: CEDOPEX), el Instituto estará en capacidad de complementar y coordinar servicios existentes, facilitar personal, sistemas de comunicación y materiales que pueden o ser escasos o menos integrados a los necesitados para una campaña coherente y efectiva. Mas específicamente, los servicios que el Instituto ofrecerá en esta área se relacionan a continuación:

Asistencia en Mercadeo - Identificación de mercados externos potenciales de los productos y servicios de firmas dominicanas. Esta información puede provenir de bancos de datos computarizados a través de STAC y de otras fuentes existentes o publicaciones disponibles en el Centro de Recursos del Instituto, o de investigaciones originales desarrolladas por personal del Instituto en ciertas áreas claves, ej.: negocios-agrícolas, muebles, turismo, textiles. Esta ayuda incluye la divulgación de las tendencias apropiadas del comercio exterior.

Desarrollo de Mercados - Ayuda en la explotación de mercados externos, incluyendo análisis de alternativas de distribución, y asesoría en transporte, empaque, aduanas y leyes extranjeras, etc.

Entrenamiento en Exportaciones - Ayuda en el análisis del potencial de exportaciones y orientar al negocio en las técnicas y estrategias de exportación. Esta colaboración puede darse en forma de seminarios a grupos, sesiones de consejería individual, programas coordinados para entrenamiento en exportaciones por países o industrias y/o eventos específicos sobre programas con orientación de inversiones. Estos esfuerzos están diseñados para apoyar a los empresarios dominicanos en sus esfuerzos de mercadeo fuera de sus fronteras. El Instituto también diseñará y preparará material educativo (literatura, folletos, cintas de video, películas, etc.) para el uso en sus actividades de entrenamiento de exportaciones.

Misiones Comerciales - En cuanto sea posible, el Instituto organizará viajes al exterior para proveer a los hombres de negocios dominicanos un mayor aprendizaje en prácticas de negocios en el exterior, en industrias particulares y para conseguir clientes potenciales fuera del país.

3. Estudios y reportes de investigación

La tercera de las actividades importantes desarrollada por parte del Instituto estará enfocada a identificar y patrocinar estudios y reportes de investigación de interés al sector privado. Por ejemplo, hay limitada investigación en creación empresarial y sobre nuevos proyectos que se están iniciando en este momento. Los programas y conferencias de la institución generarán algunas preguntas que solo se podrán responder a través de investigación adicional.

Equipos como los encargados de coordinar los programas del Instituto, serán utilizados para supervisar la efectiva elaboración de los estudios y de la publicación de los resultados a través de una serie de monografías publicadas bajo el nombre del Instituto. Los estudios serán conducidos por académicos, asesores y grupos de profesionales. Asistencia en el

diseño, conducción y evaluación de los estudios puede ser dado, en caso necesario, por profesionales identificados y supervisados por la Facultad de Negocios de la Universidad de la Florida.

En cada caso, se pondrá especial énfasis en la elaboración de estudios de clara utilización. Es decir que los resultados de los estudios deben ser entendibles e implementables. Es importante, sin embargo, señalar que el Instituto no es un centro de investigación. Los estudios que patrocine deben ser relativamente cortos y limitados a tópicos de directo interés para el Instituto. Sus actividades de investigación serán hechas para asegurar la exactitud y relevancia de su trabajo a nivel de definición de políticas para el provecho del sector privado.

C. Centro de Recursos Empresariales

Las conferencias, los programas y estudios serán, de por sí, de gran utilización en el desarrollo del sector privado. Sin embargo, el Instituto Empresarial Dominicano ofrecerá, además, varios servicios de inmediato y valor potencial tanto para los nuevos como para los ya establecidos negocios. Se creará un Centro de Recursos Empresariales (CRE) encargado de ofrecer estos servicios. El CRE será manejado por un Director Asociado de tiempo completo quien vigilará las tres principales ramas del Centro: (1) un centro de datos, (2) un servicio de asistencia técnica, y (3) un centro de medios encargado de proveer material educativo y audiovisual sobre el desarrollo y manejo de pequeños negocios.

1. Centro de datos

El Instituto trabajará muy de cerca con el Centro Estatal de Aplicaciones Tecnológicas (STAC) de la Florida, el cual tiene su oficina principal en la Universidad de Florida. En el Apéndice 8 se describen las actividades y servicios del STAC. El Instituto firmará un acuerdo para

suscribirse a los servicios del STAC, incluyendo el de enviar personal del Instituto a Gainesville, Florida, para un entrenamiento profundo en el diseño y uso de la tecnología de base de datos computarizados.

El CRE a través de su centro de datos podrá utilizar más de 100 bancos de datos manejados por el STAC. Estos bancos de datos tienen aplicación directa en el mejoramiento de la calidad y el rango de los productos domésticos y, a través del Banco de Datos de Comercio Internacional, en la consecución de clientes para sus productos. Los más importantes bancos de datos, disponibles a través del STAC, se describen en el Apéndice 8. La experiencia con STAC en Estados Unidos ha demostrado que las búsquedas de datos, utilizando medios computarizados, reducen los costos y el tiempo requerido para su obtención. En el caso de la República Dominicana, la mayoría de la información técnica y de comercio exterior que se encuentra en estos bancos de datos de STAC, o no está disponible o se encuentra dispersa en varias fuentes.

El personal del CRE será entrenado para asesorar los negocios en la búsqueda de información a través de los servicios del STAC. Tal como se indicará en la sección correspondiente a la financiación del Instituto, habrá un cargo por estos servicios. La tarifa se establece de acuerdo a una escala, según el tamaño y recursos del negocio, y solo cubrirá los costos directos de obtener la información. Durante los tres primeros años de servicios, el Instituto subsidiará los costos de utilización de los servicios del STAC con el objeto de fomentar el uso de esta fuente de información.

Para iniciar, el Centro de Banco de Datos contará con dos empleados de tiempo completo encargados de trabajar con las empresas en el proceso de búsqueda de información. En el caso de aumento de la demanda por estos servicios, la planta de personal podrá aumentarse a 4 empleados de tiempo completo. El equipo necesario para conectar los servicios del STAC es relativamente sencillo. Tres micro-computadores con capacidad de

comunicación asincrónica, unidas a los computadores del STAC vía telefónica. Información obtenida de los bancos de datos puede ser guardada en los microcomputadores del CRE para posterior uso por parte del personal del Centro de Recursos Empresariales. El costo de servicio telefónico puede ser minimizado por el uso de este proceso. Adicional a los bancos de datos manejados por el STAC, el Instituto podrá suscribir al uso de otros bancos de datos como los del "Caribbean Basin Information Network" (CBIN), operado por el Caribbean Central American Action (C/CAA). Actualmente, la Cámara de Comercio Americana en Santo Domingo tiene un acuerdo con el (C/CAA) para usar los datos del CBIN, y por lo tanto el Instituto es un lógico y económico lugar para este banco de datos. El Centro de Gerencia de la Universidad de la Florida quien también está suscrito a CBIN, está en el proceso de crear un banco de datos de artículos y publicaciones relacionadas con asuntos de negocios en el área del Caribe, usando como fuente principal la colección del Centro de Estudios Latinoamericanos de la Universidad de la Florida el cual cuenta con 175,000 volúmenes. Este banco de datos será adicionado al Banco de datos del CBIN. Este proyecto de creación de este Banco de datos es parte de una ayuda del Departamento de Educación de EE.UU. recibida por los Drs. Joseph E. McCann y Luis Gómez-Mejía, en 1983.

El personal del STAC, periódicamente, debe viajar al Instituto para ofrecer seminarios a los usuarios, y actualizar al personal del CRE. Igualmente, estarán disponibles, cuando se requieran, para resolver problemas en el lugar y para ayudar a implementar nuevos sistemas. Dada la futura expansión de las operaciones del STAC dentro de los Estados Unidos, la poderosa red de información disponible será de gran ayuda para abrir y expandir los negocios domésticos.

2. Asistencia técnica

El CRE, además, servirá como punto central para que profesionales, profesores del UNPHU y estudiantes graduados interesados en ayudar a nuevos y existentes negocios, solucionen aquellos problemas que puedan estar limitando sus operaciones. Esta asistencia técnica no solo es positiva para las empresas sino también para los asesores quienes podrán adquirir habilidades e incrementar las oportunidades en el campo de la consultoría empresarial. Estas son de especial interés para académicos y estudiantes que deseen suplementar su entrenamiento formal y quieran fomentar un interés en la administración de pequeñas empresas y en la iniciación de nuevos negocios.

La función de asistencia técnica será coordinada, inicialmente, por los miembros de la Facultad de Administración del UNPHU. El Instituto enviará dos profesores a los EE.UU. para un entrenamiento en métodos y conceptos utilizables en la elaboración de nuevos proyectos empresariales y en la puesta en marcha de los mismos. La Universidad de la Florida colocará a estos profesores en cursos y programas en instituciones académicas norteamericanas especializadas en asesoría a pequeñas empresas. Por ejemplo, uno de los profesores podrá inscribirse en alguno de los "Centros de Desarrollo de la Pequeña Industria," incluyendo el que existe en la misma Universidad de la Florida. Si así es deseado, el trabajo que se realice durante este período de entrenamiento, puede ser parte de un programa de grado formal en una escuela con una orientación empresarial aún más fuerte. Estos profesores, una vez entrenados, deberán regresar al Instituto para manejar la importante función de la asistencia técnica. Si es necesario, la Universidad de la Florida enviará uno o dos profesionales al CRE para coordinar la función de asistencia técnica por el tiempo que dure el entrenamiento de los profesores del UNPHU.

Existirá una escala para el cobro de los servicios de asistencia técnica, aunque también el Instituto subsidiará esta función durante los tres primeros años. En ningún caso, la cuenta de cobro por los servicios será superior al costo directamente imputable a la prestación de la asistencia técnica.

3. Centro de multi-medios

Libros, publicaciones y películas relacionados con la iniciación de nuevos proyectos y pequeñas empresas son relativamente escasos en el país. El Instituto compilará la más completa colección en el país de libros, publicaciones y películas relacionadas con este tópico, para uso de estudiantes, profesionales y compañías. Se pondrá especial énfasis en materiales que apoyen el desarrollo de habilidades y el entrenamiento de empresarios emergentes o directos de pequeñas empresas.

En términos de desarrollo de habilidades, se pondrá especial cuidado en libros, publicaciones y películas que presenten formas de mejorar los métodos administrativos. Así, libros que ilustran formas de desarrollar planes comerciales, mercadear productos en el mercado internacional, y como utilizar nuevas técnicas de producción, serán encontrados en el Centro de Multi-Medios. En el Apéndice 9 se incluye una lista parcial de los libros y publicaciones que normalmente serán encontrados en el Centro. Ninguno de estos materiales están duplicados en la biblioteca de Administración de Empresas de la Universidad Madre y Maestra.

Es importante indicar que se hará una cuidadosa escogencia del material para asegurar su relevancia en los asuntos domésticos. Mientras sea posible, material en español será localizado y comprado. Algun material de especial valor y no conseguido en español será traducido. Tras este fin, servicios de traducción serán contratados, en cada caso. Si así se

considera, una unidad de traducciones podrá ser creada. Materiales traducidos pueden ser una fuente de ingresos para el Instituto, no solo en la República Dominicana, sino también en otros países hispanos. Materiales en Inglés que no puedan ser traducidos por ser muy voluminosos todavía serán útiles para el Instituto ya que servirán como referencia para el personal técnico.

Las películas disponibles en el Centro podrán ser para el uso de los programas del Instituto, o para ser prestadas para uso de las compañías. Personal del Centro que ayudará en las presentaciones, estará compuesto por un empleado de tiempo completo y otro de medio tiempo.

D. Resumen de la Organización y Actividades del Instituto

El Instituto Empresarial Dominicano será un reflejo de la amplia gama de organizaciones y grupos dedicados al desarrollo del sector privado dentro del país. Su estructura es gerencial, sólida y eficiente. Sus mayores actividades estarán al nivel de determinación de políticas y de servicios directos, con el objeto de promover, significativamente, la actividad de desarrollo empresarial y el desempeño del sector privado en forma socialmente responsable. Cuando sea fundado, el Instituto promete ser una institución valiosa y viable, capaz de contribuir en el desarrollo social y económico del país.

V. PLAN DE IMPLEMENTACION

La creación de una viable y legítima institución, dentro de un complejo sistema socioeconómico, necesariamente toma varios años. Un período formativo de cinco años para el proyecto asegura la atención administrativa y financiera requerida durante las primeras etapas del Instituto Empresarial Dominicano. Es realístico esperar que la mayoría de las actividades del Instituto podrán ser ofrecidas dentro de los dos primeros años del proyecto, aunque el afianzamiento pleno del Instituto tomará un plazo más largo. Cada una de las secciones encontradas adelante esboza las acciones específicas que deben presentarse para asegurar un temprano y exitoso comienzo durante los primeros cinco años del proyecto.

A. Tareas de los Responsables del Pre-Proyecto

UNPHU ha trabajado intensamente con las organizaciones y grupos claves para el proyecto, por más de un año. Una carta de acuerdo formal se suscribió, entre la UNPHU y la Universidad de la Florida, en julio de 1983 (Apéndice 2). Este acuerdo de colaboración presenta las bases iniciadas del trabajo esperado por las partes en este proyecto. A este acuerdo siguió un intercambio de visitas entre los representantes de las entidades. En Octubre de 1983, durante una visita de una semana de los doctores Joseph A. McCann y Luís Gómez-Mejía, ambos de la Universidad de la Florida, se llevaron a cabo varias discusiones entre líderes de asociaciones de negocios, agencias gubernamentales, UNPHU y los mencionados representantes de la Universidad de la Florida. Una lista de los individuos y grupos contactados durante la visita de octubre se anexa en el Apéndice 1. Como resultado de estas discusiones y contactos se produjo un documento conceptual, en el cual se describen la misión y las actividades del Instituto.

Nuevamente, sobre este documento se llevaron a cabo nuevas discusiones entre los grupos e individuos claves. Como resultado directo de esta interacción, encontramos un amplio interés y apoyo por el para la implementación del proyecto del Instituto.

La Universidad de la Florida también ha sido muy activa, dentro de EE.UU., en la formulación de compromisos con relación al proyecto. La mayoría de las relaciones de trabajo con individuos y organizaciones requeridas, dentro de los Estados Unidos, han sido establecidas; recursos y personal específicos han sido identificados; y, aspectos operacionales del Instituto, relacionados con la Universidad de la Florida, han sido explorados. En forma muy clara ha sido percibido por todos los participantes en el proyecto, la necesidad por una rápida y efectiva iniciación de labores, dada las apremiantes necesidades del país y el área.

B. Formalización del Gobierno y Manejo del Instituto

Como primer paso, deberán ser discutidos, clarificados y formalizados las obligaciones y responsabilidades del Comité Ejecutivo, del Consejo Asesor, del Director Ejecutivo y del Director Administrativo. Aunque ya existe un esquema para seleccionar los miembros potenciales de los dos comités, una definición de los detalles de sus responsabilidades aun se hace necesaria. Sesiones de trabajo serán sostenidas con los miembros del Comité Ejecutivo para asegurar el efectivo funcionamiento de este cuerpo. Las funciones y responsabilidades de cada miembro del Comité Asesor serán entonces clarificadas y formalizadas. Un documento escrito será producido para resumir estas obligaciones, funciones y responsabilidades.

Una tarea importante del Comité Ejecutivo, en consulta con el Consejo Asesor, será el de seleccionar un Director Ejecutivo. Una amplia búsqueda se hará dentro del país de candidatos calificados. Esta búsqueda se

producirá según las condiciones y responsabilidades del cargo tal como se hayan definido y formalizado. La selección del candidato deberá hacerse dentro de los dos primeros meses de la fundación del proyecto.

Durante este mismo período de tiempo, se deberá producir la selección del Director Administrativo, y de los dos Directores Asociados. Una o más de estas posiciones será ocupada por profesores o personal del UNPHU, por lo menos durante los primeros seis meses de las operaciones del Instituto. El tiempo requerido para conseguir este personal, como también el Director Ejecutivo, es muy plausible puesto que ya existen varios candidatos identificados.

UNPHU, por ser el administrador de los fondos del proyecto y por su puesto en el Comité Ejecutivo, jugará un papel principalmente importante durante este período de transición. Apoyo y personal administrativo será provisto a través del UNPHU hasta cuando personal adicional sea contratado. Asistencia en personal también estará disponible de las otras organizaciones y grupos del Comité Ejecutivo. La Universidad de la Florida está dispuesta para enviar su representante a Santo Domingo, para trabajar con la UNPHU y el Comité Ejecutivo durante este período de tiempo. En caso de necesidad, personal adicional de la Universidad de la Florida estaría disponible.

C. Orientación y Manejo del Instituto

Una vez se hayan formalizado las funciones y responsabilidades del grupo ejecutivo, y esté totalmente identificado, se iniciará un proceso de orientación de tres meses. La información será dada a todos los miembros, por medio de cortas sesiones con el objeto de familiarizarlos con centros e institutos similares tanto en la región como en EE.UU.

Un evento principal durante este proceso será un viaje a los Estados Unidos, para examinar directamente, las operaciones de organizaciones

similares, y para conocer los representantes de las organizaciones norteamericanas que más tarde estarán conectadas con las actividades del Instituto. Para evitar dificultades de logística, el Comité Ejecutivo y el Consejo Asesor podrá ser dividido en dos grupos de viaje. El Director Ejecutivo, por lo menos, podrá participar en ambos grupos. Personal de la Universidad de la Florida coordinará todo lo relacionado con estos viajes, acompañando a ambos grupos. Personal del AID será consultado y participará en la planeación de los viajes.

La dirección del Instituto visitará organizaciones en Nueva York tal como "the Conference Board" y otros centros en Washington D.C. para examinar la forma como estas entidades interactúan con las agencias y comités gubernamentales para promover las iniciativas del sector privado y las relaciones comerciales dentro de la región. Sesiones de trabajo también serán llevadas a cabo en la Florida, con agencias estatales que posteriormente jugarán un papel importante en las actividades del Instituto. Por el momento, se incluirán "la Oficina de Desarrollo Industrial", y la "Oficina de Comercio Internacional y Desarrollo" del Estado de Florida. El último paso en estos viajes será en la Universidad de la Florida, donde se harán sesiones de trabajo con unidades claves, tales como el STAC, el Centro para Estudios Latinoamericanos y el Centro de Desarrollo de Pequeños Negocios.

D. Organización de las Actividades de Conferencias, Programas y Estudios

La falta de personal profesional especialista en pequeñas empresas y de ciertas facilidades serán un obstáculo durante el primer año del Instituto. Sin embargo, varias conferencias, programas y estudios podrán ser planeados e iniciados. Un Director Asociado guiará la planeación y vigilará los esfuerzos en cada una de estas áreas.

1. Conferencias iniciales

Dos conferencias principales serán planeadas durante el primer año. Estas son "La Conferencia de Desarrollo Empresarial" y "La Conferencia del Estado del Sector Privado". En la primera participarán tanto dominicanos como extranjeros, mientras que la segunda solo contará con participación dominicana. La Conferencia de Desarrollo Empresarial será patrocinada, conjuntamente, por el Instituto Empresarial Dominicano, la Facultad de Administración de Negocios de la Universidad de la Florida y El Instituto Empresarial de la Universidad de Texas en Austin. Se enfocará la conferencia en los factores que determinen la cantidad y calidad de la actividad empresarial dentro del país. El Instituto iniciará un estudio para recolectar y resumir datos sobre la actividad empresarial del país, para ser usado en esta conferencia. El grupo planeador de la Conferencia participará en las "Conferencias de desarrollo Empresarial" de las Universidades de la Florida y Texas, para recibir una ayuda en la planeación de la conferencia del Instituto en la República Dominicana.

La "Conferencia sobre el Estado del Sector Privado" utilizará presentadores de los grupos y organizaciones del sector privado y público, con el objeto de explorar las condiciones presentes y futuras del desarrollo del sector privado. La planeación de ambas conferencias será elaborada simultáneamente, aunque la Conferencia de Desarrollo Empresarial será ejecutada primero. La segunda conferencia será dictada tres o cuatro meses más tarde. Los grupos planeadores serán compuestos de miembros del consejo asesor, del consejo ejecutivo y personal del Instituto. En ambos casos, el sitio de reunión será en algún lugar cercano al Distrito Nacional. Eventualmente, hasta cuatro conferencias especiales serán llevadas a cabo, anualmente, por el Instituto.

2. Programa inicial

Tal como se establece en la Sección IV de esta propuesta, tres programas

permanentes en el Instituto se han planeado: El Programa Social, Programa de Promoción de Inversiones y Exportaciones, y el Programa del "Foro" Empresarial. Cada uno se describe a continuación en relación al esfuerzo del Instituto para iniciar acciones en cada una de estas áreas.

Los pasos a seguir en la implementación del programa social incluyen el de la organización de un subcomité de miembros del Consejo Asesor, interesados en esta área de estudio; el de nombrar un coordinador del programa; y, el de la iniciación de un estudio para medir el impacto actual que el sector privado tiene en el desarrollo social y económico del país. Este estudio no pretende ser exhaustivo ni a largo plazo, sino que será basado en investigación existente y sus conclusiones serán el fruto del análisis de la información disponible. Su duración no deberá ser de más de cuatro meses, y en cuanto se termine se podrán identificar algunos proyectos, y se localizarán los recursos dentro del sector privado, para lograr el apoyo en por lo menos uno de dichos proyectos, durante el primer año de operaciones del Instituto.

El Programa de Promoción de Inversiones y Exportaciones, igualmente, iniciará operaciones con el nombramiento de un comité y un coordinador. Este comité estará integrado por representantes de las agencias y organizaciones vinculadas con la promoción de inversiones y exportaciones, para asegurar una efectiva coordinación de los recursos y actividades existentes. El comité trabajará directamente con la Universidad de la Florida, la cual estará encargada de vincular al programa dos agencias del Estado de la Florida que trabajan en esta área.

La Oficina de Desarrollo Industrial del Estado de la Florida ha manifestado su interés en trabajar con el Instituto en dos áreas (ver Apéndice 5). Primero, el personal de la Oficina ofrecerá entrenamiento tanto al personal del Instituto y representantes de otras entidades públicas dominicanas

(tales como CEPODEX), en métodos para atraer inversión directa de los EE.UU. Segundo, la Oficina explorará en compañía de estos mismos representantes, las formas en que el programa de "plantas complementarias" (twin plants) del Estado de la Florida puede ser coordinado con esfuerzos del sector privado en la República Dominicana. Este programa de "plantas complementarias" está basado en el concepto de la eficiencia económica que proviene como resultado de la integración vertical de dos plantas, cada una localizada en un país diferente, con el objetivo de maximizar la utilización de recursos disponibles (ej.: mano de obra, tecnología) en cada uno de los países. Este modelo ha sido exitoso con Haití a través del Estado de la Florida y con México a través del de Texas. El Instituto puede asesorar a firmas extranjeras, interesadas en el concepto de "plantas complementarias", en la evaluación de proyectos posibles dentro de este concepto.

Esfuerzos de promoción de exportaciones serán intensificados con la asistencia técnica de la Oficina de Comercio Internacional y Desarrollo de la Florida. El personal de esta oficina ofrecerá entrenamiento, tanto en la República Dominicana como en Miami, al personal del Instituto y a compañías dominicanas. Los objetivos serán aumentar el potencial de exportaciones de los productos existentes en la República Dominicana, identificar nuevas oportunidades de exportaciones y familiarizar a los empresarios dominicanos con las prácticas de negocios en los Estados Unidos. La carta de apoyo de esta oficina aparece en el Apéndice 5.

Otras oportunidades de entrenamiento serán ofrecidas por el Comité de Programas del Instituto. Por lo menos seis seminarios importantes de entrenamiento a empresarios se darán en el primer año. Dependiendo de la empresa, el costo de los seminarios será subsidiado por el Instituto para asegurar la participación de firmas con escasos recursos.

El programa de "Foro de Empresas" empezará tal como los otros, aunque

la organización del Comité tomará más tiempo debido al entrenamiento y cuidado requerido en la selección de los miembros. El Comité de este programa estará compuesto por empresarios y profesionales empresariales tales como banqueros quienes podrán evaluar en forma experta los planes presentados a ellos por los empresarios nacientes. Un proceso de selección cuidadoso deberá ser establecido para ayudar a los usuarios a preparar sus planes de negocios y así asegurar que al éstos ser presentados ante el Foro sean debidamente diseñados. La Universidad de la Florida ya tiene localizadas varias personas entrenadas en este campo para que ayuden al Comité del Programa en su organización y en el desarrollo de procedimientos apropiados.

El Programa de Foro de Empresas será una experiencia de gran valor para dominicanos con potencial para llegar a ser empresarios o para aquellos que encabezan nuevos negocios. La selección de proyectos llevada a cabo por el Comité del Programa se espera sea vista como una ayuda activa para los nacientes empresarios, en cuanto se asegura el apoyo financiero y la existencia de mercados. De ahí la importancia de que este programa se inicie con todo el éxito. El primer año solo se ofrecerán dos Foros para asegurar la calidad y efectividad de los mismos. Eventualmente, el número de foros será de cuatro al año, con la posibilidad de aumentarlos a seis en caso si así lo requiera la demanda.

3. Estudios iniciales

Al ser fundado, el Instituto empezará la elaboración de dos estudios. Uno apoyará la Conferencia de Desarrollo Empresarial, dando la información sobre las actividades empresariales dentro del país en el momento. El segundo estudio apoyará el Programa Social, por medio de la información sobre el impacto del sector privado en el desarrollo social y económico del país. Profesores de UNPHU, o grupos de profesionales, o consultores del

país serán contratados para conducir estos estudios con supervisión del coordinador de la conferencia y del Comité del Programa Social.

También será de interés un esfuerzo por identificar los factores específicos que promuevan y los que estorban el éxito empresarial en los sectores más importantes de la economía. Otros tópicos serán considerados como directa consecuencia de los programas y conferencias del Instituto.

E. Organización del Centro de Recursos Empresariales (CRE)

El funcionamiento efectivo del Centro depende principalmente de la disponibilidad de facilidades, equipos, recursos y personal entrenado. Mientras se construyen las facilidades, y en caso de necesidad, algún personal será provisto por la Universidad de la Florida. El primer año será dedicado a la organización y al entrenamiento interno del CRE. A continuación se describe los esfuerzos que cada unidad del CRE debe desarrollar.

1. El Centro de Banco de Datos

Uno de los más importantes y sofisticados servicios del Instituto es el Centro de Banco de Datos, dentro de CRE. Este centro ofrecerá efectivo y eficiente acceso a más de 400 bancos de datos por el STAC en la Universidad de la Florida, el cual está financiado por la NASA y reconocido como el más completo en Estados Unidos. La variedad de estos bancos de datos y las habilidades requeridas para su utilización, a un mínimo costo y máximo efecto, requerirá un personal profesional entrenado. Este personal debe ser capaz de procesar solicitudes de compañías dominicanas de manera que la información requerida pueda ser ofrecida con eficiencia y rapidez.

Personal del STAC viajará a la República Dominicana para prestar asistencia técnica en la selección del personal, determinación de necesidades de equipo, diseño de distribución de las oficinas, establecimiento de los procedimientos de acceso y como procesar los datos disponibles. En adición,

el personal del CRE, una vez seleccionado, será entrenado en la Universidad de la Florida por un período de 6 semanas en todos los aspectos de las operaciones en el manejo de un banco de datos. Este entrenamiento incluye estudio de otros servicios de manejo de banco de datos, en el Estado de la Florida, incluyendo visitas a las oficinas del STAC para observar la forma de atención a los usuarios. Las oficinas del STAC tienen personal de habla hispana para proveer el entrenamiento en Español y, si fuese necesario, traducir todo el material relevante necesitado para la operación del CRE. Sin embargo, es altamente deseable que el personal del CRE pueda por lo menos leer en inglés. Se estima que de dos a cuatro empleados del CRE más su director serán entrenados por el STAC durante este período.

Una vez entrenado el personal y probadas las operaciones, el personal del CRE, en unión con el personal del STAC, desarrollará y dictará una serie de seis seminarios a empresas que hayan mostrado interés en los servicios del Centro. Este servicio será mercadeado a través de asociaciones empresariales dominicanas. Los seminarios darán la información sobre los servicios disponibles y de su uso a través de demostraciones.

La aceptación por el usuario de la información presentada por medio del computador será una de las mayores preocupaciones durante este período, y por lo tanto se hará una cuidadosa observación del uso. Una vez el Centro opere sin contratiempos, semanal o quincenalmente se publicará un resumen de las tendencias comerciales y económicas. Esta publicación será distribuida para impulsar el uso de estos servicios.

2. Servicio de asistencia técnica

Una de las metas del proyecto es el de desarrollar un grupo de expertos dentro del Instituto que se especialicen en administración de pequeños negocios. Este personal técnico servirá como recurso para las empresas que requieran

calificada asistencia técnica a bajo costos. Vale la pena anotar que el grupo técnico estará principalmente integrado por hombres con experiencia en negocios y por estudiantes graduados de los últimos años, y no solo por consultores profesionales. El CRE jugará un papel líder en el desarrollo de este grupo y en su conexión con los negocios que requieran su asistencia.

El CRE mantendrá sus tarifas a muy bajo costo para pequeños negocios de manera que estos puedan cubrir los gastos incurridos por el uso de los servicios técnicos de este grupo de asesores. El CRE vigilará toda la asistencia técnica ofrecida para asegurar su efectividad y evaluar su impacto.

3. El Centro de Multi-medios

El Centro de Multi-medios producirá y manejará una voluminosa colección de libros, revistas, documentos y otras publicaciones dedicadas exclusivamente al manejo de pequeñas empresas, desarrollo empresarial e iniciación de nuevos proyectos. En adición a recursos escritos, este Centro tendrá y manejará una colección de películas y videocintas dedicadas al mismo tópico. La bibliografía inicial de libros y revistas para el centro se incluye en el Apéndice 9.

En cuanto sea posible todo el material escrito y de películas disponibles en español serán adquiridos por el Instituto, a través del Centro de Multi-medios. Algún material relevante ya ha sido identificado, tales como los publicados y producidos por El Consejo Latinoamericano de Escuelas de Administración (CLADEA), por "the American Management Association" (AMA), y la biblioteca de Harvard, en Ciudad de México. Cuando material esencial solo se encuentre en inglés, el personal del Centro de Multi-medios hará las traducciones, pero solo cuando se trata de publicaciones pequeñas como los panfletos producidos por "the U.S. Small Business

Administration" (SBA). (Ver Apéndice 9 para la lista de publicaciones del SBA). Para cubrir los costos de las traducciones, éstas se ofrecerán a otras instituciones dentro y fuera del país.

Aquellos materiales de referencia que por su tamaño haga difícil su traducción al español, serán usados por el personal del Instituto, como referencia y soporte en su función de asesoría. Uno de los requisitos exigidos en la selección del personal del Centro de Multi-medios es el del conocimiento del idioma inglés, por lo menos al nivel de comprensión de lectura.

Durante el primer año de vida del Centro, los esfuerzos estarán encaminados a la selección y entrenamiento de su personal, a la consecución del material y al diseño de procedimientos que maximicen el uso de este material, manteniendo un control sobre los mismos. Asistencia técnica y entrenamiento del personal será ofrecida por la Universidad de la Florida, durante este período.

Los materiales, tanto publicaciones como películas del Centro, estarán disponibles para ser prestado o comprados por parte de instituciones educativas, asociaciones empresariales y negocios particulares.

Un programa regular de presentación de películas será iniciado dentro del Instituto (ver Apéndice 9 para la lista de películas relevantes que existen en español y que serán adquiridas por el Centro).

El Centro de Multi-medios será totalmente funcional cuando se termine la construcción de las instalaciones del Instituto. Sin embargo, algunos servicios, tales como la presentación de películas y la circulación de algún material impreso, será posible en fecha anterior.

Una vez terminada la construcción e implementado el Centro en su totalidad, se ofrecerán los siguientes servicios, en forma permanente:

- Traducir, publicar y poner en circulación una serie de publicaciones cortas del SBA (Administración de Pequeñas Empresas). Estas publicaciones son de dominio público en Estados Unidos y por lo tanto libres de restricciones legales para su copia. Se espera que la demanda por este material, dentro de la República Dominicana y la región, cubra los costos de traducción, producción y distribución.

- Apoyo en relaciones públicas. El Centro de Multi-medios estará encargado de dar a conocer el Instituto en la comunidad, para aumentar su demanda. Para esta función, el Centro dispondrá de todos los medios de comunicación masiva (T.V., radio y prensa).

- Creación y producción de material de apoyo. El Centro desarrollará paquetes de materiales que sirvan de apoyo a las actividades del Instituto. Además, producirá material que permita mostrar una imagen altamente profesional del Instituto.

- Coordinar y desarrollar planes para la promoción y mercadeo de todos los programas y actividades del Instituto. Esto incluye la creación de una lista de correo de los directores industriales y miembros de asociaciones del país y del exterior.

- Manejar la logística de consecución, archivo, distribución, préstamo y renta del material disponible en el Instituto.

VI. PLAN DE EVALUACION

A. Descripción General

El Instituto Empresarial Dominicano establecerá los procedimientos de evaluación para medir el cumplimiento de sus objetivos. Este proceso de evaluación, aunque tomará lugar continuamente, será formalizado en un informe anual.

Los seis criterios operacionales, usados para determinar el grado de cumplimiento de los objetivos (indicados en la Sección II de este anteproyecto) serán:

1. Intensidad de uso: Este criterio mide el nivel de utilización de los servicios del Instituto por parte del sector privado dominicano.
2. Desempeño de los clientes: Este criterio mide hasta que punto la asesoría técnica del Instituto ha sido efectiva en la solución de problemas del sector privado presentados ante el Instituto.
3. Reacción del usuario: Este es un indicador del nivel de satisfacción de los usuarios de las actividades del Instituto, tanto en la asistencia técnica como en información, entrenamiento y otros servicios.
4. Impacto social: Aquí, se mide el nivel de reconocimiento social del Instituto, como una organización prestigiosa y altamente calificada. Además mide el impacto que haya tenido el Instituto en el desarrollo socioeconómico del país, a través de las iniciativas del sector privado.
5. Desempeño institucional: Con este criterio se hace una evaluación general de las actividades del Instituto por parte de las entidades

vigilantes del mismo. Se medirá tanto la eficiencia de sus servicios como el de la capacidad de satisfacer las necesidades para las cuales fue creado. Entre las entidades vigilantes se encuentran el Consejo Asesor, la UNPHU, la Universidad de la Florida y la Agencia Internacional de Desarrollo (AID).

6. Calidad de las investigaciones y publicaciones: Información impresa y otros materiales producidos o traducidos por el Instituto será sometida a una revisión, por expertos independientes, quienes evaluarán su calidad y uso, y que tan apropiado es el material.

B. Proceso de Evaluación Cualitativa

El desempeño del Instituto será revisado formalmente cada año, usando información cualitativa. Para ello se establecerá el siguiente procedimiento.

1. Formación de la Junta de Revisión: Una junta de siete personas será seleccionada del Consejo Asesor para evaluar los niveles de cumplimiento de objetivos durante el año anterior. Este comité será escogido de varias asociaciones empresariales y funcionará como una junta de revisión independiente e imparcial. El comité deberá enviar un reporte escrito, en donde se detallarán las observaciones, las conclusiones y las recomendaciones. Para asegurar su independencia, los miembros del Comité Ejecutivo no podrán participar como miembros de la Junta de Revisión.

2. Seguimiento longitudinal de clientes: Las firmas comerciales, y los nuevos empresarios que hayan recibido asistencia técnica por parte del Instituto, serán contactados trimestralmente para determinar los resultados eventuales de los problemas considerados con la intervención del Instituto. La participación en esta evaluación es voluntaria y la información individual será mantenida confidencial. Análisis estadístico de frecuencias será calculado, según los tipos de problema, los resultados finales, métodos

de solución usados exitosos o no, e incidencia de problemas por clase de empresa.

3. Reacción de los usuarios: Se diseñarán cuestionarios de automecisión para evaluar la satisfacción de los usuarios con los servicios del Instituto. Los datos de los auto-reportes serán tabulados y analizados para mostrar el nivel en que el Instituto está cumpliendo con las expectativas de sus usuarios.

4. Evaluación anual del personal: Una medición de rendimiento será producida anualmente, para cada uno de los empleados del Instituto. Un formulario de medición será diseñado para este propósito y será completado para cada empleado a través de las líneas de mando del Instituto.

C. Proceso de Evaluación Cuantitativa

La clase de información recolectada y analizada como parte del programa de evaluación también incluirá información cuantitativa y observable. Algunos ejemplos se muestran a continuación para cada criterio.

1. Intensidad de uso

- Número de participantes en seminarios, mesas redondas, conferencias y otras reuniones ofrecidas por el Instituto.
- Número de personas que han solicitado los servicios del Instituto, divididos por organizaciones, grupos demográficos y clases de solicitudes.
- Medio de contacto o frecuencia de las formas en las cuales el servicio ha sido utilizado (Banco de datos, asistencia personal, asesoría telefónica, etc.).
- Análisis comparativo de los usos reales de servicios contra el número estimado de usuarios.

2. Desempeño de los clientes

- Crecimiento en el número de empleados por firma.
- Desempeño financiero por cliente.
- Volumen de ventas en mercados externos por cliente exportador.
- Número de compañías extranjeras capaces de conseguir socios dominicanos para sus planes de inversión.

3. Reacción de los usuarios

- Número de individuos que han utilizado los servicios del Instituto en más de una ocasión.
- Número de personas que recurren al Instituto por recomendación de un cliente previo.

4. Impacto social

- Número de apariciones en prensa de asuntos relacionados con el Instituto.
- Número de nuevos empleos como fruto del éxito de las empresas asesoradas por el Instituto.
- Volumen de comercio internacional generado por firmas asesoradas por el Instituto.

5. Desempeño institucional

- Análisis comparativo de los gastos reales contra los proyectados para el Instituto durante el año.
- Ingresos generados por el Instituto en servicios prestados a usuarios.
- Ingresos generados por el Instituto de otras fuentes, ej.: ayuda de fundaciones norteamericanas.
- Terminación de edificios, operaciones y adquisición de equipos, de acuerdo a los presupuestos establecidos y las fechas determinadas.

6. Investigación y publicaciones

- Número de publicaciones y otros materiales generado por el Instituto durante el año.
- Número de publicaciones y otros materiales distribuidos por el Instituto durante el año.
- Número de ocasiones en que las publicaciones y materiales generados por el Instituto han sido puestos como referencia en otras fuentes.

D. Metodología a Ser Usada

La metodología para analizar los datos e informes recolectados, como parte de la función de evaluación, incluye:

1. Perfiles de cada una de las actividades del Instituto serán definidos en términos de número de clientes según forma de contacto, razón del contacto, fuente del contacto, realizaciones, etc.
2. Computarización y presentación de estadísticas descriptivas obtenidas de las diferentes medidas de satisfacción de los usuarios. Estas serán calculadas por tipo de programa, clase de servicio, dimensiones de la evaluación, características de las compañías, etc. Cuando se requiera, se aplicarán tests de significancia estadística para determinar si los resultados son reales o una función de las variaciones por azar.
3. Otros datos serán resumidos a través de estadísticas descriptivas para mostrar el nivel de cumplimiento de los objetivos del Instituto, ej., número de participantes por seminario, número de organizaciones que han solicitado asesoría, número de compañías asesoradas que se hayan establecido durante el año.

4. Adicional a una evaluación narrativa, la Junta Revisora asignará un puntaje de calificación en cada uno de los objetivos especificados en la Sección II, de esta propuesta, segun el nivel de cumplimiento durante el año.

5. Los supervisores evaluarán el nivel del rendimiento con relación a los requerimientos de cada cargo.

VII. PASOS A SEGUIR

Este anteproyecto ha presentado un delineamiento general de los requerimientos, actividades, responsabilidades, resultados deseados y criterios de evaluación del propuesto Instituto Empresarial Dominicano. Este documento ha sido diseñado como un reporte preliminar sobre el cual deben producirse discusiones adicionales entre aquellas personas y entidades que en una u otra forma estarán envueltas en las actividades del Instituto. Varios puntos aún requieren una elaboración más detallada. Las áreas específicas que están, actualmente, en el proceso de ser definidas y delineadas para la copia final de este documento son:

A. Personal

1. División de responsabilidades entre la UNPHU, la Universidad de la Florida, las Asociaciones de Empresas Dominicanas y otros (ej.: la Agencia para el Desarrollo Internacional) en la consecución del personal del Instituto.

2. Descripción de funciones de las posiciones claves dentro del Instituto, tales como las del Director Ejecutivo, Director Administrativo y personal de soporte técnico.

3. Identificación y localización del personal ya sea en la República Dominicana o en otro país, si es necesario, que esté calificado para asumir los diferentes cargos en el Instituto.

4. Análisis de las necesidades de entrenamiento, para determinar si se requiere, y hasta que punto, entrenamiento adicional para desarrollar al personal a su máxima funcionalidad.

B. Infraestructura

1. Oficinas del "staff"
2. Oficinas administrativas
3. Facilidades para conferencias
4. Centro de Multi-medios
5. Biblioteca
6. Facilidades para las micro-computadoras o periféricos
7. Equipos y elementos
8. Cafetería
9. Otros - sala de recepciones, etc.

C. Necesidades Financieras - Presupuesto por Capitales

1. Edificios
2. Equipos y elementos
3. Personal y entrenamiento
4. Material de biblioteca
5. Viajes
6. Banco de datos computarizados
7. Asistencia técnica - corto y largo plazo
8. Administración
9. Otros - ej.: mantenimiento

D. Flujo de Ingresos Pro-Forma - Fuentes Potenciales

1. Internos
 - a. Escala de tarifas por servicios de consultoría
 - b. Cargos por asistencia del computador
 - c. Tarifas de las conferencias y programas
 - d. Esfuerzos de consecución de fondos entre la empresa privada
 - e. Venta de materiales
 - f. Contribuciones

2. Gobierno
3. Externas
 - a. Agencia para el Desarrollo Internacional (AID)
 - b. Otras fundaciones extranjeras

E. Formalización de Acuerdos

1. En el país - UNPHU y Asociaciones Empresariales Dominicanas
 - a. Extensión del compromiso
 - b. Selección del Consejo Asesor
 - c. Selección del Comité Ejecutivo
 - d. Relaciones funcionales entre las partes
 - e. Entidad legal del Instituto
2. Fuera del país
 - a. Universidad de la Florida
 - b. Universidad de Texas, en Austin
 - c. Estado de la Florida
3. Agencia financiadora
 - a. Agencia para el Desarrollo Internacional
 - b. Otras

F. Establecimiento de Prioridades, Fechas para los Planes de Acción y la Terminación de los Proyectos

APENDICE 1

Appendix 1

LIST OF INDIVIDUALS CONSULTED REGARDING PROPOSED PROJECT

<u>NAME</u>	<u>POSITION</u>
RAYMUNDO AMARO.	Director ONAP and Director of Business Administration at UNPHU.
PABLO NADAL	Adviser to Asociación de Hombres de Empresa.
HERIBERTO DE CASTRO	President of Conderación Obrero Patronal.
AUGUSTO GINEBRA	Past President of Asociación de Hombres de Empresa.
DARIO MELENDEZ	Adviser to the President of Dominican Republic and Past President of Corporación de Fomento Industrial.
DARIO CASTILLO LUGO	Gerente Administrativo, Corporación Dominicana de Empresas Estatales.
FRANCISCO JOSE CASTILLO	Gerente General, Consejo Nacional de Hombres de Empresa.
ANGEL JOSE FABIAN	President of Apicultura Industrial Dominicana.
PEDRO HERNANDEZ FERNANDEZ	President of Union Nacional de la Mediana y Pequeña Empresa de Comercio y Producción.
JOSE MA. JACOME MARTINEZ	Director de Proyecto de Desarrollo Comercial, OIT.
FEDERICO SILFA CASSO	Asesor para Asuntos Financieros e Internacionales, Corporación de Fomento Industrial.
MIGUEL PUENTES HERNANDEZ	Vicepresident of Federación de Comerciantes.
AARON L. BENJAMIN	Jefe Division de Desarrollo, Agency for International Development.
OSCAR RIVERA	Chief of Health Division, Agency for International Development.
THOMAS NICASTRO	Chief of Education Division, Agency for International Development.

APENDICE 2

MEMORANDUM OF AGREEMENT

BETWEEN

UNIVERSIDAD NACIONAL PEDRO HENRIQUEZ UREÑA,

SANTO DOMINGO, DOMINICAN REPUBLIC

AND

THE UNIVERSITY OF FLORIDA,

GAINESVILLE, FLORIDA, U.S.A

FOR

The establishment of cooperative relations between the College of Business at the University of Florida and Universidad Nacional Pedro Henriquez Ureña (UNPHU), with special emphasis on executive development programs offered through the Management Center in the fields of Accounting, Computer Science, Economics, Finance, Management, Marketing, Public Administration, Quantitative Business Methods, and Healthcare Management.

Specific cooperative training projects will be proposed jointly by Universidad Nacional Pedro Henriquez Ureña and the College of Business of the University of Florida. The areas of cooperation will include, but not limited to, short seminars or workshops and nondegree management training programs of longer duration. Staff of the Management Center will provide technical and logistical support to UNPHU in designing and implementing programs of the type described above.

Cooperation may also be in the form of building degree programs in business administration at the undergraduate and graduate levels, including program design and implementation support for an Executive MBA program at UNPHU.

The cooperative executive development programs through the Management Center at the College of Business, University of Florida, may be offered in

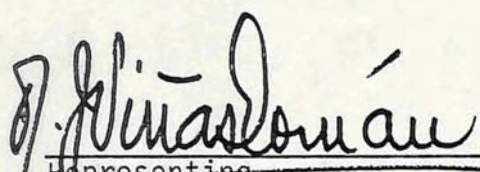
Santo Domingo on the campus of Universidad Nacional Pedro Henriquez Ureña or regional extensions. Programs will be given in English, Spanish, or through simultaneous translation depending on the foreign language skills of participants and faculty members involved. The Center for Latin American Studies at the University of Florida will actively support and collaborate in these efforts. The Management Center will coordinate all activities in the University pertaining to administrative/management training programs.

Specific programs/projects proposed by either (or both) institutions will have to be agreed to at least six months prior to initiation of activities. All programs/projects will require approval from both campus administrations and are, of course, subject to adequate funding from sources to be determined for each proposal.


The College of Business Administration, University of Florida, and Universidad Nacional Pedro Henriquez Ureña, shall each name a liaison person to be responsible for coordinating all cooperative efforts.

This memorandum of understanding shall be in effect from JULY 1983, and shall continue for no more than five years at which time both parties will review it and notify each other of any desired changes or modifications. During this five year period changes or modifications may be made upon mutual agreement, provided the one party notifies the other of any desired changes or modifications no less than ninety days before these would be expected to be incorporated. Each party reserves the right to terminate the agreement for good cause at any time provided the other party is given six months' notice of such intent.

This agreement is entered into on this the 29th day of July, 1983, by and between the University of Florida and Universidad Nacional Pedro Henriquez Ureña.



Representing
Universidad Nacional Pedro Henriquez
Ureña



Representing
University of Florida

Rector _____
(Title)

President _____
(Title)

APENDICE 3



UNIVERSITY OF FLORIDA

ROBERT Q. MARSTON
PRESIDENT

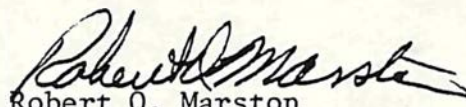
January 19, 1984

Private Sector Office
Agency for International Development
Santo Domingo, Dominican Republic

Gentlemen:

The University of Florida is interested in collaborating with Universidad Nacional Pedro Henriquez Ureña (UNPHU) in Santo Domingo for the establishment of an Institute for Dominican Enterprises. The University of Florida supports fully the establishment of this Institute and current efforts to obtain AID funding for it. We look forward to working closely with UNPHU and the Dominican business associations in making the proposed project a successful endeavor and to an increasingly active role in the development of solutions to problems being faced in the Caribbean region.

Cordially yours,


Robert Q. Marston
President

cc: Professor Joseph McCann
Professor Luis Gomez
Mrs. P.B. Rambo

APENDICE 4

LETTER FORTHCOMING

APENDICE 5

LETTER FORTHCOMING

APENDICE 6



COMPANIES ON THE SPOT

The MIT Enterprise Forum poses painful questions to the managers of new or troubled companies.

By Craig R. Waters

Colin Barton seemed to be enjoying himself. The president of Ikier Technology Inc., of Burlington, Mass., stood in front of an audience of more than 100 people, enthusiastically describing the company he and his partner, Hans Ikier, had recently set up to

Forum panelists Parthé (left) and Hagan (right) listen to Colin Barton's plans.

manufacture computer graphics equipment.

It was the sort of situation any entrepreneur about to launch a new business would relish: a chance to talk with a group of people who knew the field and to have them comment on his plans for the company. But Barton's excitement was going to be short-lived; seven men were about to shatter his illusions.

The setting was a meeting room in the Student Center of the Massachusetts Institute of Technology, and the event was a session of the MIT Enterprise Forum. The Forum taps the expertise of MIT alumni and faculty, as well as outside sources, to provide advice and exposure to small businesspeople.

At the moment, Barton was enjoying the spotlight. For 20 minutes he set forth his goals for his company. Barton, formerly of Tektronix, and Ikier, an engineer who had founded another computer graphics firm, Lexidata, wanted to produce a microcomputer for the professional market. Barton discussed the business plan, made a pitch for investments, and extolled the technological virtues of his product.

Finally, like a salesman winding up his pitch, Barton posed questions to the seven panelists, who he thought had bought his line: "How do we best attract dollars from a situation like this? What do we do to get the talent in? Where does the panel see the biggest risk?"

The first panelist's response seemed promising: "Basically, I like the idea," said Tom Hagan, the president and co-founder of Camex Inc., a small computer systems firm. "I think the best of all possible sources of money is some sympathetic, interested, and intelligent customer."

Barton smiled, and jotted down a note about the suggestion. But then the atmosphere suddenly changed. "The business plan is very interesting fictional reading," Art Parthé, a Forum veteran and the head of a Nashua, N.H.-based high-tech development and management consulting firm, noted drily. "Fictional in that it's rather idealistic; everybody lives happily ever after, and quite wealthy at that.

"Your organization is somewhat top-heavy with technical types," Parthé continued. "I really have the feeling that it's technology-driven at this point. There's one thing that's completely missing from your business plan, and that's an analysis of the down side, the risks. There are all kinds of risks—technical risks, business risks."

Parthé, the past chairman of the Forum, went on with his analysis of Ikier Technology's shortcomings, reading from his notes as from a formal charge: "I went through a listing of so-called graphics terminals and I stopped counting at 50. If there are 50 names floating



Barton: "It was an uncomfortable evening. Their approach was too aggressive. I mean, we're just starting out, and there are bound to be problems in a start-up company no matter what you do."

around out there, and now 51 when Ikier comes along, how are you ever going to differentiate yourself in the marketplace?"

Parthé questioned every aspect of Barton's plan, from the need for the product itself to the feasibility of using a third-party field service.

Douglas T. Ross, chairman of the board of SofTech Inc., a Waltham, Mass., software company, was hardly more encouraging. "Yes, I found the plan and the presentation interesting, but also . . ." he hesitated, "a bit naive in spots." Ikier Technology had no clearly defined head, was weak in the area of software, and faced strong competition it hadn't identified, Ross said. "In any case, good luck to you." Barton nodded his head as if he'd just been read the last rites.

The rest of the panel, an MIT professor and the heads of three other high-tech companies, were equally hard on Ikier. They noted that the product was not unique, that even if it was successful it could be easily copied, and that it cost more than some of its competitors. They faulted the company's business plan, projections, and lack of leadership.

Barton quietly thanked the group for its comments before he fled to the Harvard Bookstore Café, where he settled down with a salad, a glass of wine, and a book on Raphael. For the next few hours he tried not to think about computers.

But though Barton was upset, many of the members of the Forum had decided that Ikier Technology was a winner. "I think that, if they listen carefully to

what we have to say, they're going to be very successful," one panelist remarked to his neighbor.

"The principal benefit," says Parthé of the Forum, "is objectivity—light being shed on a situation by people who know their industry. A lot of it can come across sounding rather negative, but it's not meant that way. It's meant to be straight from the shoulder: This is how it is, and this is how we see it."

The Forum, which is sponsored by MIT's Alumni Association, grew out of a series of special workshops that were conducted in Cambridge and New York in 1971 for alumni who were setting up or already in business. The prototype for the Forum in New York was called the MIT Venture Clinic.

In 1978, a group of MIT alumni in the Boston area realized that a similar operation could be invaluable to local companies, particularly the high-tech firms concentrated on Route 128, a beltway around the city. MIT could provide the technical expertise, and management and financial advice could come from alumni operating their own companies and from Boston's banking and investment community.

In April 1978, the MIT Enterprise Forum held its first session, taking a close look at a firm that produced minicomputers and at a ski manufacturer. Each of the programs, which are now held 10 times a year, features one or two companies, generally ones that are starting out or are facing a serious problem such as the need to recapitalize. There are twice as many applicants as openings, so the Forum's executive committee decides which could benefit from the Forum's services and which ones are appropriate to the expertise of the Forum.

The companies selected to appear before a Forum panel pay \$200 to cover the costs and are required to submit a business plan at least four weeks before the presentation. The company's chief executive officer also meets with a member of the committee beforehand to discuss the firm's needs and goals. The executive committee of the Forum then selects a panel that will best be able to advise the company. It draws a list of over 500 people, including MIT faculty and alumni, and others. Sometimes it finds it necessary to recruit specialists. When the Forum reviewed a firm that manufactured contact lenses, for example, it asked a doctor from Harvard Medical School and an expert on the contact lens market from Arthur D. Little to serve on the panel.

Panelists serve without compensation. They like the Forum because they can assist entrepreneurs in fields related to their own, because it's a source of contacts and investment opportunities, and, perhaps most important, because it's a lot of fun. "Some people like golf," says

Barry Unger, a co-founder and vice-chairman of the Forum, "others like to help a new business get going."

Panelists sometimes wind up personally involved with the companies they review: They tour plants and make suggestions on production setup, or are invited to serve on boards of directors. In one case, a panelist at the New York clinic was so impressed by a business that he invested in it, then took over the company. That, however, is not the normal course of events.

Forum presentations are open to the public and attract 100 to 150 people to each session. Like the panel members, spectators come to see what's happening in their fields, to size up promising companies, and, in some instances, to do business. Each presentation is taped so the chief executive will have a record of the panel's observations and advice. The audience also fills in a questionnaire, evaluating the comments of both company and panel. The completed questionnaires are presented to the chief executive.

For the first 20 minutes of the program, the presenter describes his company in detail, and sets forth the problems it's facing. Then each panelist, who has had about two weeks to review the business plan, has an opportunity to ask questions and offer his analysis.

Veteran panelists say they see a number of recurring problems that plague small businesses. Barry Unger notes, for example, that many high-tech companies "are technology-driven rather than market-driven—they're obsessed with the excellence of the product rather than its marketing needs."

Other companies have difficulty deciding what they want to do. "One company that came to us had \$1 million in sales, but it was manufacturing 23 different products," Unger explains. "We wound up saying, 'Focus. Focus. Focus.'"

Parthé, who conducted a study of the Forum's findings, says that eight problems occur most frequently: organizational weakness due to understaffing of the management team; poorly defined strategy, objectives, and goals; inadequate marketing techniques and channels of distribution; fragmented product and/or service offerings; inadequate knowledge of the needs and requirements of the market; under-financing and inadequate financial management; failure on the part of the chief executive to delegate authority and responsibility; and lack of an objective and qualified board of directors.

Companies that make presentations to the Forum are enthusiastic about the quality of the advice they receive, though some, like Colin Barton, find the way it's delivered can be quite unsettling. "If you talk to them right afterwards," says Parthé, "they're still some-



Ross: "Yes, I found the plan and the presentation interesting, but also...a bit naive in spots...In any case, good luck to you."

times in a state of shock or depression—their feet are still in the fire." But after a while, they all seem to be able to sift out valuable advice.

"Six months after we started up," says Ronald Matlin, president of TriSolarCorp of Bedford, Mass., "we were beginning to have to face up to some questions of financing and sales. We wanted to know how to get involved in overseas marketing. The Forum suggested various ways to sell, and directed us on a strategic course. Now we have equipment in 20 developing countries in Africa and Asia." TriSolarCorp, which manufactures solar-powered systems for use in remote areas, had sales of \$1.1 million last year.

Matlin found that the audience reaction was in some ways more important than the panel's advice. One member of the audience is now on the company's board. "There were also several bankers there," Matlin says, "and we got appointments right afterwards with three different banks. It was a very positive experience and I'm very happy we went."

Even when the Forum experience is a negative one, participants are often enthusiastic about it. Neil Herring, the former treasurer of Path Medical Systems Inc. of Portsmouth, N.H., is even grateful for the Forum advice that caused Path to decide to go out of business. Path had planned to market software for clinical laboratories, Herring explains: "We raised \$880,000 from a variety of sources and began to develop the software, but after eight or nine months we

began to run out of money and it was clear the product was never going to be developed. We went to the Forum to get ideas on what we were doing wrong and to see if any venture capitalists were interested. The panel said that the company didn't have a chance. We realized that there was no way in hell that we could get the software developed in any kind of cost-effective manner. So we closed the company down, two weeks after the Forum.

"If a company is just getting off the ground," Herring adds, "the Forum is great, because it brings to the table marketing and financial people with a lot of sophistication and a lot of resources. I can't think of anything else in the country like it."

There are, however, other things like it now. The Forum and its prototype, now called the MIT Enterprise Forum of New York, have proven so successful that alumni groups in other sections of the country are now following their lead. In October 1981, a group of Washington, D.C., alumni and business and government leaders staged the first program of the MIT Enterprise Forum of Washington and Baltimore. A somewhat less structured program is offered by the New Enterprise Forum, co-sponsored by the MIT Club of Northern California and the Peninsula Chapter of the Stanford Business School alumni organization. Located in the heart of Silicon Valley, the group has reviewed both high-tech companies and a few firms more obviously Californian in spirit, such as a firm that manufactures shoes with water-cushioned soles.

Two weeks after he bared his soul and his business plan before the Forum, Colin Barton was still reeling. "It was an uncomfortable evening," he admitted. "It was a very negative atmosphere. Their approach was too aggressive. I mean, we're just starting out, and there are bound to be problems in a start-up company no matter what you do."

But Barton conceded that many of the panel's suggestions were excellent, and were going to be implemented, including advice on cash independence and the need to have one company president, rather than two.

In short, the Forum had addressed the questions Barton had raised, and provided him with some of the answers he needed. Unfortunately, it was a painful process.

"If I had it to do over again," Barton concluded, "I don't know if I would or not." But if Barton is anything like the others who have survived, and benefited from, the Forum's baptism of fire, he may think better of it in time. □

Craig R. Waters is a senior writer at INC.

APENDICE 7

IN SUPPORT OF THE ENTREPRENEURIAL SPIRIT

October 28-29, 1983

A Program Sponsored By

Graduate School of Business
University of Florida
Gainesville

Public Policy Research Center
University of Florida

Graduate School of Business
University of Texas
Austin

The RGK Foundation

TABLE OF CONTENTS

WELCOME:	ROBERT LANZILOTTI, Dean, Graduate School of Business University of Florida	2
PROGRAM PURPOSE:	"Education At Its Best" George Kozmetsky	3
PROGRAM THEME, PANELS, AND ISSUES		
	The Role of Capital & Financial Markets	4
	The Role of Government	5
	The Role of Education	5
AGENDA		6-8
PRESENTORS & MODERATORS		9-14
PROGRAM STAFF AND SPONSOR ACKNOWLEDGEMENTS		15-16

In Support
of the
Entrepreneurial
Spirit

WELCOME

I am pleased to welcome students, business and government officials and university faculty and administrators to this conference. The conference is a joint effort of the Graduate Schools of Business at the Universities of Florida and Texas, and we are proud to serve as the host institution.

Dean George Kozmetsky explains in the following statement the underlying purpose and objectives of these conferences. We share the recognition of the growing importance of the States of Florida and Texas in the national agenda, and the innovative educational roles and responsibilities our respective institutions have in this process.

Robert Lanzilotti

EDUCATION AT ITS BEST

The themes for the conference series on "Small Business and the Entrepreneurial Spirit" are particularly timely and farsighted. Timely in the sense that the viability and vibrancy of small business in America have become critical issues. Farsighted in that the themes place the emphasis appropriately on the dynamism of the entrepreneurial spirit.

There are three major objectives to this conference series. First, the conference themes link two real worlds — the academic and the business worlds. One view reinforces the other, and both are essential. One is necessary to understand the more academic key elements that are vital to each small business development, and the other is necessary to show how they are adapted to successful practice in the real world of business.

The second objective is educational. Part of the responsibility of all our universities is to provide timely and effective information to our students for career choices and to strengthen our curricula.

The third objective focuses on the public policy formation process. It is necessary to arrange interactive forums among business, government and academia to identify the critical issues for resolution. This forum identifies action-oriented policies for consideration at both state and federal levels.

The sponsorship of this conference represents a special consortium of student and academic talent and of actual business and government participants. The cooperation of the University of Florida at Gainesville and the University of Texas at Austin, in conjunction with the RGK Foundation, also acknowledges the growing importance of both Texas and Florida on the national agenda.

Something else makes this conference series unique — namely, each of the participants. The type and calibre of people who have been brought together is impressive — students, entrepreneurs, academics and public officials. And what do we all have in common? — An intense interest in and concern about the status, direction and potential, of small business and entrepreneurship in America and in our respective states.

We are firmly convinced that this learning experience will have a significant positive impact on all participants. This is what education at its very best ought to do — relate the academic and real worlds, tie theory to practice, be dynamic and interactive and allow for a diversity of individual ideas committed to the development of a stronger small business and entrepreneurial community in America.

George Kozmetsky

PROGRAM THEME

Personal dedication and appropriate skills are essential ingredients for successful entrepreneurship. However, dedication and skills are not sufficient in themselves. The entrepreneur's success also depends upon the larger economic, social, and political context in which initiatives are made.

This conference will explore three specific aspects: the capital and financial market, the educational system, and government, and the respective roles of each in promoting successful entrepreneurship.

Besides recognizing the issues present, we hope that several policy-level recommendations will emerge from this conference. Presentors and attendees are encouraged to interact and collaborate in defining and developing these recommendations.

PANELS

Consistent with the conference theme, each panel will focus upon a specific aspect. The three panels and discussion issues associated with each are:

The Role of Capital & Financial Markets

- Are the capital and financial markets responsive to the needs of the entrepreneur — ie, is sufficient capital available in a timely way?
- Are there biases in these markets about the type of entrepreneurial initiatives supported and with what consequences?
- What is the condition of the capital and financial markets in Florida?
- From the perspective of the entrepreneur, what does it take to obtain needed funds and support?
- From the perspective of the venture capitalist, what are the threshold conditions the entrepreneur must satisfy to gain support for a venture?
- Are there serious constraints on these markets at present?

The Role of Government

- Is there a role for government?
- Government: help or hindrance?
- What is the function, if any, of regulation?
- What incentives can and should the government provide?
- What is the role of government as entrepreneur?
- What is the ability of state and local government to support entrepreneurial activity?

The Role of Education

- Is formal education important for success as an entrepreneur — ie, can you “teach” entrepreneurship?
- Is the educational system the appropriate vehicle for providing training?
- What services and resources can the educational system provide other than formal education?
- What alternatives to formal education are there for the entrepreneur?
- Who is the educational system actually training — the entrepreneur or the managers building upon the venture?

AGENDA

October 28 (Friday)

- 1:30- 2:30 p.m. Registration
- 2:45- 3:00 p.m. KEYNOTE WELCOME: **Dean Robert Lanzlotti**, College and Graduate School of Business, University of Florida
- 3:00- 3:45 p.m. KEYNOTE ADDRESS: **Jack Albertine**, President, American Business Conference
- 4:00- 5:30 p.m. **PANEL A: THE ROLE OF CAPITAL AND FINANCIAL MARKETS**
- **Donald Burton**, President, South Atlantic Capital Corporation (Moderator)
 - **Daniel Copp**, Vice President, Federal Express, Inc.
 - **G. Arthur Herbert**, Electro-Science Management Corporation
 - **Robert E. Mittelstaedt**, Director, Wharton Innovation Center, University of Pennsylvania
- 5:30- 5:45 p.m. Break
- 5:45- 7:30 p.m. Discussion Groups
- 7:30- 8:00 p.m. Travel to Dinner
- 8:00- 9:30 p.m. Dinner at Gainesville Golf & Country Club
- 9:30- 9:45 p.m. After Dinner Remarks
- 10:00 p.m. Travel to Hotel

In Support
of the
Entrepreneurial
Spirit

October 29 (Saturday)

8:15- 9:00 a.m. Breakfast

9:00-10:30 a.m. **PANEL B: THE ROLE OF GOVERNMENT**

- **Ray Smilor**, Institute for Constructive Capitalism, University of Texas (Moderator)
- **Maury Hagerman**, Economic Analysis Supervisor, Fla. Dept. of Commerce Division of Economic Development
- **Don Fuqua**, Congressman, 2nd Congressional District and Chairman, House Committee on Science and Technology
- **Neil B. Mahrer**, Senior Vice President Public Broadcasting Service, Washington, D.C.

10:30-10:45 a.m. Break

10:45-11:45 a.m. Discussion Groups

11:45-12:45 p.m. Lunch

12:45- 2:15 p.m.

PANEL C: THE ROLE OF EDUCATION

- **Joseph McCann**, Director,
The Management Center, University of Florida
(Moderator)
- **Barbara Newell**, Chancellor, Florida
Board of Regents
- **Joe B. Cordell**, President and Chief
Executive Officer, Jim Walter Corporation
- **Ronald Thornton**, Director, State
Technology Application Center,
University of Florida

2:15- 2:30 p.m.

Break

2:30- 3:30 p.m.

Discussion Groups

3:30- 4:00 p.m.

Summary Remarks: **George Kozmetsky**

4:00- 5:00 p.m.

Travel to Dinner

5:00 p.m.

Bar-B-Que Dinner: Mr. and Mrs. Alec P.
Courtelis, Lasma Arabians

In Support
of the
Entrepreneurial
Spirit

PROGRAM PRESENTORS & MODERATORS

John M. Albertine

John M. Albertine is the President of the American Business Conference. The American Business Conference is composed of 100 CEO's of the fastest growing firms in the U.S. Fortune magazine has called the American Business Conference one of the strongest emerging advocates for entrepreneurial activity in the country. He is a member of the Board and the Executive Committee of the American Council for Capital Formation, the Carlton Group, the Business Advisory Board of the Bureau of Labor Statistics, the Executive Committee of the Budget Action Group, the Executive Committee of the Clean Air Act Forum, the Steering Committee of the Tax Action Group, and founder of the Stock Option Action Group. Albertine was previously the executive director of the Joint Economic Committee of Congress where he was instrumental in helping the Committee produce the first annual report in 20 years signed by every member. The report expressed the support of all members of the committee (both Republican and Democrat) for supply-side economic policies to stimulate the economy. Albertine was cited by The Wall Street Journal along with Senators Lloyd Bentsen and Sam Nunn as instrumental in making supply-side economics a bipartisan issue. Albertine has also served as a legislative aide to Senator Lloyd Bentsen of Texas. He holds a Ph.D. in economics from the University of Virginia.

Donald Burton

Donald Burton is currently President of South Atlantic Capital Corporation of Tampa. He is founder and president of The Florida Association of Venture Capitalists. He served as Director of Corporate Development for TECO Energy, Inc., Vice President of FMR Corporation (a holding company), Vice President of Fidelity Venture Associates, and as General Partner with Fidelity Ventures, Ltd. Don has also served as Administrative Manager, Portfolio Manager and Securities Analyst for Fidelity Management and Research Co. He holds an M.B.A. from the Harvard Graduate School of Business and B.A. from Yale.

Daniel Copp

Daniel Copp is currently Vice President of Corporate Communications of the Federal Express Corporation. He holds a B.A. from Yale, a Masters degree in Law from Queen's College at Cambridge University, and a Masters degree in Economics from Memphis State. Before joining Federal Express in 1978, Dan worked in the banking and securities industry.

Joe B. Cordell

Joe B. Cordell has been Chief Executive Officer of Jim Walter Corporation since August 1983 and President and Chief Operating Officer since June 1974.

A graduate (BSBA) of the University of Florida in 1949, he joined Price Waterhouse and Co. in New York City as a staff accountant. He was transferred to the firm's Atlanta office in 1950 and became audit manager before joining Jim Walter as a vice president in 1958. He was elected to the board of directors in 1966 and named senior vice president and treasurer in 1970.

A Navy veteran, Cordell is a member of Florida Blue Key, Greater Tampa Chamber of Commerce and the Committee of 100. He serves on the Business Advisory Council to the University of Florida, Gainesville, and is a member and past president of the board of trustees of the University of Florida Foundation. He is also a director of Florida Steel Corporation and General Instrument Corporation of New York.

Don Fuqua

Congressman Don Fuqua represents the Second District of Florida and Chairs the House Committee on Science and Technology. He is also a member of the House Committee on Government Operations. Don is a member of seventeen scientific groups and organizations and more than twenty other professional and social organizations. Along with several honorary degrees, his education includes a B.S. in Agricultural Economics from the University of Florida. He continues to be a strong advocate for scientific and energy-related policy.

In Support
of the
Entrepreneurial
Spirit

Maury Hagerman

Maury Hagerman is an economic analysis supervisor with the Florida Department of Commerce in the Division of Economic Development. In addition to performance of analyses, Mr. Hagerman acts as a liaison in relation to issues affecting economic development. He is the Florida state government representative to work with the Small Business High Technology Institute. He serves as the Department of Commerce representative on the interagency high technology committee and is the chief spokesman for the Department of Commerce in regard to the development and improvement of the entrepreneurial climate in the state of Florida.

Prior to his work with the Department of Commerce which began in 1976, Mr. Hagerman worked in the management consulting field specializing in the area of training. Mr. Hagerman is a 1955 graduate of Cornell University.

G. Arthur Herbert

G. Arthur Herbert is Vice President of Electro-Science Management Corporation, an Orlando venture capital firm. He served as Secretary to the Board of Managing Trustees for Denius Cattle Company. Art has been Director of Epicom, Inc., Electronic Systems Products, Inc., Retail Sciences, Inc. as well as Medical Development Corporation and other corporations. He has held several high level managerial positions with Radiation, Inc. He holds an M.B.A. from Harvard and a B.S.E. from the U.S. Naval Academy. Art is a member of the Institute of Electronics and Electrical Engineers and is Senior member of The Instrument Society of America.

George Kozmetsky

Dr. George Kozmetsky is Director of the Institute for Constructive Capitalism of the University of Texas at Austin. He holds the academic rank of professor in the Management and Computer Sciences Departments. He also holds the J. Marion West Chair for Constructive Capitalism.

Dr. Kozmetsky served from 1966-1982 as dean of the College and Graduate School of Business at UT-Austin. He came to the University from Teldyne, Inc. of which he was co-founder and vice-president. He serves on the board of several corporations. In 1980 he was appointed to the Southern Regional Education Board.

Dr. Kozmetsky holds degrees from the University of Washington and Harvard University.

Robert F. Lanzilotti

Dr. Robert F. Lanzilotti is Professor of Economics and Dean of the Graduate School of Business and School of Accounting of the University of Florida in Gainesville. He is also a member of the Economic Advisory Board to the U.S. Secretary of Commerce.

Dr. Lanzilotti is the author of six books and numerous articles.

Dr. Lanzilotti attended Dartmouth College, American University and the University of California at Berkeley. He has worked as a consultant to various national corporations, banks and law firms and has given testimony before various committees of the U.S. Senate and House of Representatives.

Neil B. Mahrer

Neil B. Mahrer is Senior Vice President for Marketing, Engineering and Operations, and Personnel for the Public Broadcasting Service (PBS). His responsibilities include activities and staff involved in Marketing, Development Support Services, the Station Independence Program (SIP), and several programs and projects exploring new telecommunications technologies. His education includes a B.A. from Ohio University and graduate work at Purdue University.

Joseph E. McCann

Joseph E. McCann is Director, The Management Center and Assistant Professor of Management, College of Business, University of Florida. He has worked within and consulted for several rapidly growing organizations and served as an Intern on the U.S. Senate Budget Committee. He received a B.A. and M.B.A. from the University of Washington and an M.A. and Ph.D. from The Wharton School, University of Pennsylvania.

Robert E. Mittelstaedt

Robert E. Mittelstaedt currently serves as Director of the Wharton Innovation Center and Senior Lecturer in Management at the Wharton School, University of Pennsylvania. He was instrumental in the formation of The Seed Company, one of Philadelphia's first venture capital firms.

Prior to founding the Wharton Innovation Center, Mr. Mittelstaedt served as Director, Wharton Applied Research Center. He served for six years in various capacities, including Associate Director and Acting Director, with the Leonard Davis Institute of Health Economics and National Health Care Management Center of the University of Pennsylvania.

He received his B.S. (Mechanical Engineering) from Tulane University in 1965 and an M.B.A. (Operations Management) from the Wharton School in 1971.

Barbara Newell

Dr. Barbara Newell is Chancellor, State University System of Florida. She has held this position since 1981. Prior to 1981 she served as U.S. Ambassador and Permanent Delegate to UNESCO and President and Professor of Economics at Wellesley College. She has served and currently serves on several boards, including the Committee for Economic Development. Her education includes an A.B. from Vassar and M.A. and Ph.D. degrees from the University of Wisconsin.

Raymond W. Smilor

Dr. Ray Smilor is Assistant Director of the Institute for Constructive Capitalism at the University of Texas at Austin and a member of UT's management faculty.

Dr. Smilor has served as a Research Fellow of the National Science Foundation for an international exchange program on computers and management between the United States and the Soviet Union. He has edited three books and is currently working on a book entitled Managing for Productivity. He has also worked with the Texas 2000 Commission to complete a study of research and development activities in the state of Texas.

Dr. Smilor has published in the areas of the transfer of technology, environmental analysis and the enterprise system. He earned his doctorate from the University of Texas.

J. Ronald Thornton

Ron Thornton has been director of the NASA-Florida State Technology Applications Center (STAC) since 1979. Before that he had fifteen years experience in high technology R&D, technology transfer and marketing. Thornton has a B.S. degree in physics from Berry College and a M.A. degree in physics from Wake Forest University with additional graduate work in both physics and business.

He specialized in laser and electro-optic applications with Martin Marietta Corporation in Orlando, Florida. In 1976, Thornton was named Deputy Director of NASA's Technology Transfer office in Washington, D.C. He has authored numerous papers and articles in the fields of lasers and electro-optics and technology transfer.

In Support
of the
Entrepreneurial
Spirit

PROGRAM SPONSORS

RGK Foundation

The RGK Foundation was established in 1966 to provide support for medical and educational research. Major emphasis has been placed on the research of connective tissue diseases, particularly scleroderma. The Foundation also supports workshops and conferences at educational institutions through which the role of business in American society is examined. Such conferences have been co-sponsored with the Institute of Constructive Capitalism at the University of Texas at Austin and the Keystone Center for Continuing Education in Colorado.

The RGK Foundation Building, which opened in October, 1981, has a research library and provides research space for scholars in residence. In the past year, the building's extensive conference facilities have been used for national and international conferences including the International Conference on Scleroderma and the Symposium on Current American Economic Policy. Conferences at the RGK Foundation are designed not only to enhance information exchange on particular topics but also to maintain an interlinkage among business, academia, community and government.

Public Policy Research Center

The Public Policy Research Center (PPRC) was established in 1975 to support faculty and graduate student research on government involvement in the private sector of the market. A broad continuing research effort studies the economic causes, nature and effects of policy development on the future of the market system in the U.S.

PPRC has focused its attention on alternative ways policymakers might approach economic problems that are on the horizon and on searching for solutions that recognize the fundamentals of decision-making with respect to economic structure at both micro- and macroeconomic levels.

PROGRAM SUPPORT STAFF

College Faculty & Staff

John Kraft, Associate Dean, Graduate School of Business,
University of Florida

Joseph E. McCann, Director, The Management Center, College of
Business Administration, University of Florida

Linda Hinkin and **Sue Springsteen**, The Management Center

Mary Flarn and **Willa Howard**, Office of the Dean

MBA Coordinating Committee

David David, Interests in marketing management and strategic
planning; B.S., Penn State

Jan Healy, Interests in brand management and promotion;
B.S., University of Florida

Haydee Polo, Interests in international trade and investment;
B.S. University of Florida

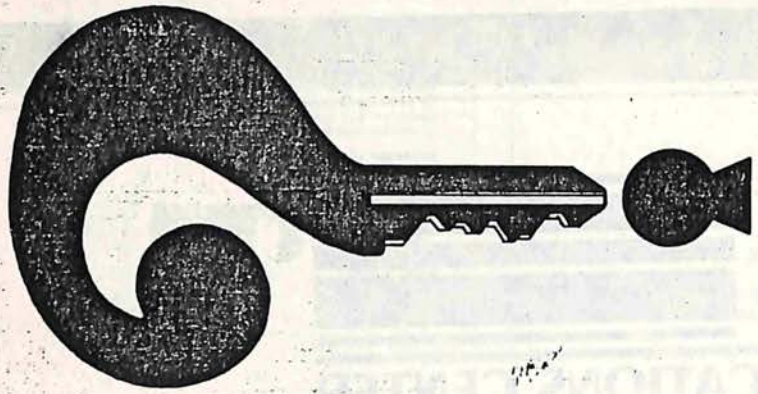
Mark Reed, Interests in banking, financial planning and tax-
sheltered investments; B.S., University of Alabama

Robert Shevlin, Interests in real estate syndication and venture
capital financing; B.B.A., University of Texas

Augusto Vidaurreta, Interest in management; M.B.A.
Association President

Elizabeth Williams, Interests in marketing and financial planning;
B.S., University of Florida

APENDICE 8



A Key TO Decision Making

NASA-FLORIDA



STATE TECHNOLOGY APPLICATIONS CENTER

307 WEIL HALL/UNIVERSITY OF FLORIDA/GAINESVILLE 32611

This public document was printed at a cost of \$494.00, or 10 cents per copy, to inform the public of STAC services. 1004/83

NASA-FLORIDA

STAC 

STATE TECHNOLOGY APPLICATIONS CENTER

Sound Decision Making Begins With All The Facts...

STAC, a state-of-the-art information retrieval system, assists Florida's business decision makers in locating the facts needed to make complex management and technical decisions.

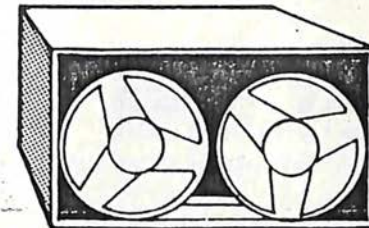
Created as an outgrowth of NASA's enormous investment in research and development, STAC puts to practical use these technological benefits.

Operated by the Florida State University System, STAC accesses hundreds of computer databases worldwide to pinpoint the most current information pertinent to specific client needs. STAC has served leading Florida decision makers in business, engineering, the professions and manufacturing since January 1977.

Here's how STAC can work for you...



Worldwide Databases



STAC links the world's information to your needs.

NASA-FLORIDA
STAC

INFORMATION
RETRIEVAL
SYSTEM



YOU the Client



STAC Representative

GEORF (Geological Reference File)
METEOROLOGICAL & GEOASTROPHYSICAL
ABSTRACTS
NTIS
PASCAL

HEALTH CARE AND MEDICINE

CANCERNET
CHILD ABUSE AND NEGLECT
CIS-ILO
EXCERPTA MEDICA
HEALTH PLANNING & ADMINISTRATION
INSURANCE ABSTRACTS
*PA (International Pharmaceutical Abstracts)

MEDLINE
MENTAL HEALTH ABSTRACTS
NIMH (National Institute of Mental Health)
PHARMACEUTICAL NEWS INDEX
PHYCINFO
RINGDOC
VETDOC

HUMANITIES

AMERICA: HISTORY & LIFE
ART MODERN
FRANCIS
HISTORICAL ABSTRACTS
LANGUAGE & LANGUAGE BEHAVIOR
ABSTRACTS
MLA BIBLIOGRAPHY (Modern Language
Association)

PHILOSOPHER'S INDEX
RILM ABSTRACTS (Repertoire International
de Litteratur Musicale)

INTERDISCIPLINARY FILES

BIBLIOGRAPHY MASTER INDEX
BOOK REVIEW INDEX
BOOKS IN PRINT
CDA (Comprehensive Dissertation Abstracts)
CONFERENCE PAPERS INDEX
ENCYCLOPEDIA OF ASSOCIATIONS
GPO MONTHLY CATALOG
(Government Printing Office)

NTIS (National Technical Information Service)
N.Y. TIMES INFORMATION BANK

SCISEARCH
SOCIAL SCISEARCH
SPORT (Sport & Recreation Index)

LAW AND GOVERNMENT

ASI (American Statistics Index)
CHEMICAL REGULATIONS & GUIDELINES
SYSTEMS
CHEMLAW
CIS INDEX (Congressional Information
Service Index)
COMMERCE BUSINESS DAILY
CONGRESSIONAL RECORD
CRECORD
CRIMINAL JUSTICE PERIODICAL INDEX
FEDERAL REGISTER
GPO MONTHLY CATALOG
(Government Printing Office)

GPO PUBLICATIONS REFERENCE

LABORLAW
LEGAL RESOURCES INDEX
LEX
LIBCON (Library of Congress Literature)
LOGOS
NCJRS (National Criminal Justice
Reference Service)
PATLAW
PTS FEDERAL INDEX
QUESTA
USGCA (U.S. Government Contracts Awards)
VOTES

MARINE SCIENCE

AQUACULTURE
AQUALINE
ASF A (Aquatic Science and Fisheries Abstracts)
IRIS (Instructional Resources Information System)
MARNA
OCEANIC ABSTRACTS
SHIPDES
WATERLIT
WATERNET
WATER RESOURCES ABSTRACTS

METALLURGY

ALUMINUM
BNF METALS
EUCAS
METADEX (Metals Abstracts/Alloys Index)
NON-FERROUS METAL ABSTRACTS
WELDASEARCH
WORLD ALUMINUM ABSTRACTS
ZLC (Zinc, Lead, Cadmium)

PATENTS

APIPAT (American Petroleum Institute Patents)
CLAIMS/CHEM (Chemically Related Patents)
CLAIMS/CITATION
CLAIMS/CLASS (Patent Classification Code)
CLAIMS/U.S. PATENTS; PATENTS ABSTRACTS;
PATENTS ABSTRACTS WEEKLY
CLAIMS/UNITERM
EUROPEAN PATENTS ABSTRACTS
INPADOC (International Patent Documentation)
INPI
PATCLASS
PATLAW
PATSEARCH
USPA (U.S. Patent)
WORLD PATENTS INDEX

PETROLEUM, OIL, AND GAS

APILIT (American Petroleum Institute Literature)
APIPAT (American Petroleum Institute Patents)
P/E NEWS (Petroleum/Energy News)
TULSA (University of Tulsa;
Oil and Gas Literature and Patents)

PHYSICS

INSPEC (Physics Abstracts/Electrical Abstracts/
Computer & Control Abstracts)
PASCAL
SPIN (Searchable Physics Information Notices)

PUBLIC AFFAIRS

BOOK REVIEW INDEX
COMMERCE BUSINESS DAILY
GPO MONTHLY CATALOG
(Government Printing Office)
MAGAZINE INDEX
MONITOR
NATIONAL NEWSPAPER INDEX
NEWSEARCH
NEWSPAPER INDEX
N.Y. TIMES INFORMATION BANK
PAIS INTERNATIONAL (Public Affairs
Information Service)
WORLD AFFAIRS REPORT
SCIENCE AND TECHNOLOGY
AMERICAN MEN & WOMEN IN SCIENCE
CNRS LAB
COLD (Cold Regions Science & Technology &
Antarctic Bibliography)
EABS (Euroabstracts)
ELECUMPS
ENERGY GIRAP
IFP-THERMODYNAMICS
INSPEC (Physics Abstracts/Electrical Abstracts/
Computer & Control Abstracts)
IRRD (International Road Research Documentation)
ISMEC (Information Service in Mechanical
Engineering)
MASS SPECTROMETRY BULLETIN
MATHFILE
NASA
NTIS (National Technical Information Service)
PASCAL
REDOSI
SPACE COMPS
TELEGEN
TRIS/MRIS ABSTRACTS (Transportation Research
Information Service/Maritime Research
Information Service)
WORLD TRANSINDEX

SOCIAL SCIENCE

ACOMPLINE
ASI (American Statistics Index)
FRANCIS
HSE LINE
LABORDOC
MEETING AGENDA
PSYCINFO
SOCIAL SCISEARCH
SOCIOLOGICAL ABSTRACTS
U.S. POLITICAL SCIENCE DOCUMENTS

STANDARDS AND SPECIFICATIONS

ELESPECS
NORIANE
STANDARDS & SPECIFICATIONS
TECH-NET

This document was printed at a cost of \$129.10, or 13 cents per copy to inform Florida business and industry about the services of STAC.

NASA-FLORIDA

STAC

STATE TECHNOLOGY APPLICATIONS CENTER

DATABASE SUBJECT INDEX

NASA-FLORIDA
STAC
STATE TECHNOLOGY APPLICATIONS CENTER

500 West Hall/University of Florida
Gainesville, Florida 32611

Gainesville: (904) 292-6760
Panama City: (904) 476-9500
Ft. Walton: (904) 882-5409
Panama City: (904) 769-1551
Jacksonville: (904) 646-2478
Orlando: (305) 275-2706
Tampa: (813) 974-2499
Boca Raton: (305) 393-3968
Ft. Lauderdale: (305) 776-6645

This public document is published bimonthly by the State Technology Applications Center (STAC) and printed at a cost of \$541.50, or 18 cents per newsletter to inform readers of recent developments in high technology.

FILE NAME**AGRICULTURE, NUTRITION, AND FOODS**

AGLINE
 AGREP (Agriculture Research in Progress-European)
 AGRICOLA
 AGRIS (UN Agriculture Index)
 CAB ABSTRACTS (Commonwealth Agricultural
 Bureau)
 COFFEELINE
 CRIS (Current Research Information Service)
 FAIREC (Fruits Ag-Industrial Regions)
 FOODS ADLIBRA
 FSTA (Food Sciences & Technology Abstracts)
 IALINE
 PASCAL
 TROPAG (Abstracts on Tropical Agriculture)

APPLIED SCIENCE AND TECHNOLOGY

ALUMINUM
 FLUIDEX (British Hydromechanics
 Research Association)
 FOREST (Forest Products Abstracts)
 IFP-THERMODYNAMICS
 MASS SPECTROMETRY BULLETIN
 METADEX (Metals Abstracts/Alloys Index)
 NASA
 PIRA (Paper Industry Research Association)
 RAPRA ABSTRACTS (Rubber & Plastics
 Research Association)
 SAFETY SCIENCE ABSTRACTS
 SURFACE COATINGS ABSTRACTS
 TEXTILE TECHNOLOGY DIGEST
 TITUS (Textile Information Treatment
 User's Service)
 WELDSEARCH
 WORLD TEXTILES

BIOSCIENCES

BIOSIS PREVIEWS
 EUCAS
 IRL LIFE SCIENCES (Information Retrieval Ltd.)
 PASCAL
 ZOOLOGICAL RECORD

BOOKS AND MONOGRAPHS

BOOKS IN PRINT
 BOOK REVIEW INDEX
 LIBCON
 REMARC (Retrospective Machine
 Readable Cataloging)

BUSINESS AND ECONOMICS

ABI/INFORM (Abstracted Business Information)
 ACCOUNTANTS INDEX
 ACOMPLINE
 ADTRACK
 ARTHUR D. LITTLE
 BANKER
 BEBR
 BI/DATA TIME SERIES
 BLS CONSUMER PRICE INDEX

BLS EMPLOYMENT, HOURS

BLS LABOR FORCE
 BLS PRODUCER PRICE INDEX
 CAREER PLACEMENT REGISTRY
 CATFAX
 CHEMICAL INDUSTRY NOTES
 CIS-ILO
 COMMAR8
 COMMENCE BUSINESS DAILY
 DEFOTEL
 DISCLOSURE
 DUN & BRADSTREET BUSINESS INFORMATION
 DUN'S MARKET IDENTIFIERS
 DUNIS
 ECONOMIC ABSTRACTS INTERNATIONAL
 ECONOMIC LITERATURE INDEX
 EIS INDUSTRIAL PLANTS
 EIS NON-MANUFACTURING ESTABLISHMENTS
 ELECTRONIC YELLOW PAGES
 ESSOR
 FAIREC
 FIND/SVP
 FOREIGN TRADERS INDEX
 HARFAX INDUSTRY DATA SOURCES
 HARVARD BUSINESS REVIEW
 INSURANCE ABSTRACTS
 MANAGEMENT CONTENTS
 MEETING AGENDA
 MILLION DOLLAR DIRECTORY
 OECD INDICATORS OF INDUSTRIAL ACTIVITY
 PRICE DATA
 PRINCIPAL INTERNATIONAL BUSINESS
 PTS F & S INDEXES (Funk & Scott)
 PTS INTERNATIONAL FORECASTS
 PTS INTERNATIONAL TIME SERIES
 PTS PROMT (Predicasts Overview of Markets
 and Technology)
 PTS U.S. FORECASTS
 PTS U.S. TIME SERIES
 RAMPI (Raw Materials Price Index)
 SELECVL
 STANDARD AND POORS NEWS
 STANDARD AND POORS NEWS DAILY
 TEXTLINE
 TRADE AND INDUSTRY INDEX
 TRADE OPPORTUNITIES
 TRADE OPPORTUNITIES WEEKLY
 U.S. EXPORTS

CHEMISTRY

CA SEARCH (Chemical Abstracts)
 CANOM
 CHEMICAL ENGINEERING ABSTRACTS
 CHEMICAL INDUSTRY NOTES
 CHEMICAL REGULATIONS & GUIDELINES
 SYSTEM
 CHEMLAW
 CHEMNAME
 CHEMSEARCH

CHEMSIS (Chemically Singly Indexed Substances)

CHEMZERO
 CLAIMS/CHEM/UNITERM
 CLAIMS COMPOUND REGISTRY
 EUCAS
 EURECAS
 FINE CHEMICALS DIRECTORY
 IFP-THERMODYNAMICS
 MASS SPECTROMETRY BULLETIN
 PAPERCHEM (Paper Chemistry)
 PASCAL
 TSCA CHEMICAL SUBSTANCES INVENTORY
 (Toxic Substances Control Act)
COMPUTER SCIENCE
 BSI
 COSMIC
 ELCOM (Electronics and Communications
 Abstracts Journal)
 INSPEC (Physics Abstract/Electrical & Electronic
 Abstracts/Computer & Control Abstracts)
 INTERNATIONAL SOFTWARE DIRECTORY
 LISA (Library and Information Sciences Abstracts)
 MATHFILE
 MICROCOMPUTER INDEX
 REDOSI
 TELED0C

DEMOGRAPHY

AMERICAN PROFILE
 CACI
 COUNTY PROFILES
 NATIONAL DECISIONS
 POPULATION BIBLIOGRAPHY
 SITE II; SITE POTENTIAL
 U.S. CENSUS

EDUCATION

AIM/ARM (Abstracts of Instructional and
 Research Materials)
 ERIC (Educational Resources Information Center)
 ECER (Exceptional Child Education Resources)
 NICSEM/NIMIS (National Information Center
 for Special Education Materials/National
 Instructional Materials System)
 NIMH (National Institute of Mental Health)
 SPECIAL EDUCATIONAL MATERIALS
 U.S. PUBLIC SCHOOLS DIRECTORY

ENERGY

DOE (Energy)
 DOE/RECON
 EABS (Euroabstracts)
 EBIB (Energy Bibliography and Index)
 EDF-DOC
 ELECTRIC POWER DATA BASE
 ENERGY GIRAP
 ENERGY LINE
 ENERGYNET
 EPIA (Electric Power Industry Abstracts)
 INIS (International Nuclear Information System)
 PASCAL

POWER (DOE Library Books)

TULSA

ENGINEERING

CECILE
 CHEMICAL ENGINEERING ABSTRACTS
 CIM
 COMPENDEX (Engineering Index)
 DELFT-HYDRO
 EDF-DOC
 EI ENGINEERING MEETINGS
 ELECTRONIC YELLOW PAGES
 ELESPECS
 FLUIDEX (British Hydromechanics Research
 Association)
 INSPEC (Physics Abstracts/Electrical Abstracts/
 Computer and Control Abstracts)
 INTERCIM
 ISMEC (Information Service in Mechanical
 Engineering)
 NASA
 NORIANE
 NTIS (National Technical Information Service)
 PASCAL
 SAE ABSTRACTS (Society of Automotive Engineer-
 ing)
 SPACECOMPS
 STANDARDS & SPECIFICATIONS
 TECH-NET
 TRIS/MRIS ABSTRACTS (Transportation Research
 Information Service/Maritime Research
 Information Service)

ENVIRONMENTAL AND POLLUTION

APTIC
 COLD (Cold Regions Science & Technology &
 Antarctic Bibliography)
 EDF-DOC
 ENDOC
 ENREP
 ENVIROLINE
 EPB (Environmental Periodicals Bibliography)
 EPIA (Electric Power Industry Abstracts)
 IRIS (Instructional Resources Information System)
 PIE (Pacific Islands Ecosystems)
 POLLUTION ABSTRACTS
 SWRA (Selected Water Resources Abstracts)
 URBAMET
 WATER RESOURCES ABSTRACTS
 WATERLIT
 WATERNET

FOUNDATIONS AND GRANTS

FOUNDATION DIRECTORY
 FOUNDATION GRANTS
 GRANTS
 NATIONAL FOUNDATIONS

GEOSCIENCE

COMPENDEX
 GEOARCHIVE
 GEODE
 GEOMECHANICS ABSTRACTS

FLORIDA SPOTLIGHT ON TECHNOLOGY

EDITOR: Janice Cavallaro

January/February, 1983

Florida's Global Trade: Tilting the Balance . . .

"Florida is on the verge of becoming the most important state in the Union." So said **John Naisbitt**, a noted Washington consultant and economic forecaster. Florida's advances in information and high-tech industries strategically located in relation to the ripening markets of Latin America strongly influenced Naisbitt's prediction.

Whether Florida remains on the verge or actually reaches this pinnacle of importance will depend on how well the business sector capitalizes on its coveted international connection.

International trade is the fastest growing sector of Florida's economy. According to the Florida Department of Commerce, the value of goods exported from the state's air and seaports reached \$12 billion in 1982, with \$4 billion worth of these products originating in Florida. Seventy percent of these exports are outbound for neighboring Latin America.

With global demand for high-tech products — electronic equipment, communications systems, computers and the like — continuing to spiral upward, Florida appears to be sitting on a gold mine.

Not so, say many experts who have begun to question whether this prosperity can continue in the face of



overwhelming odds. U. S. exporting as a whole has suffered a staggering combination punch delivered by a tough economic foe. Recessionary economic conditions in a majority of the Latin American countries have severely cramped U. S. sales abroad. The strength of the U.S. dollar and a trend toward protectionist sentiment have had a dismally negative impact on the U.S. trade deficit.

In light of these drawbacks and the invaluable importance of foreign trade to Florida's economic well-being, worldwide leadership in high-tech markets must be firmly established. The state's private

and public sectors have made a renewed commitment to offsetting trade deficits through promotion and utilization of technological innovation.

Here are but a few examples:

Private Enterprise

- A key to Florida's success in international trade is the existence of a sophisticated banking network skilled in the intricacies of global high finance. More than 100 banks operating in Florida maintain an international finance department. Global transactions have become increasingly dependent on use of sophisticated telecommunications systems. Several of the larger financial institutions belong to the Society for Worldwide Interbank Financial Telecommunications which makes possible rapid electronic transfer of funds. Access to automated credit information has significantly reduced the risk involved in international dealings.

- Export management companies often prove useful for firms limited in size or exporting expertise. These companies handle most export services including market research, financing arrangements, shipping, and documentation for a fee or percentage of sale. Many of

(Continued on page 2)

Tilting the Balance . . .

(Continued from page 1)

these enterprises operate sophisticated systems which simplify the complicated job of representing a variety of clients and products.

• COMMARS (Computer Marketing Systems) represents a new breed of high-tech export service firms. This innovative marketing system unites the international buyer and seller through a central clearinghouse.

BUY/SELL/BARTER, a trade opportunities database, lists potential trading partners, which can then be contacted by agents in the area. Access to this database, on a 24-hour basis, can be obtained on-line through the client's own computer terminal or can be purchased through a data vendor. In addition, COMMARS operates a debt collecting service, an electronic mail center, a translation service, and a marketplace for used electronic equipment.

• Dvorkovitz & Associates is another example of a firm which markets export services. These services include maintenance of a database sorting technology for license and organization of an annual TechEx trade fair.

Government Services

• The U.S Department of Commerce pioneered in offering U.S. firms a full panoply of export assistance. Making the overseas trading process simpler and less costly, the DOC Bureau of Export Development computerizes trade leads for current, rapid dissemination; compiles credit ratings on foreign firms; conducts trade fairs and missions; and markets products abroad using advanced video displays.

• Taking the lead in state efforts, the Florida Department of Commerce quadrupled its expenditures on overseas trade promotions between 1976 and 1980. This agency has followed



NASA-FLORIDA



STATE TECHNOLOGY APPLICATIONS CENTER

Symbols of Florida's public and private commitment to international trade.

the national example by developing its own trade leads database updated weekly from three foreign marketing sections. This database carries, during an average week, some 300 to 400 trade leads from 60 foreign companies.

These services foster increased

high-tech export activity by dispelling common fears associated with international trade. Yet, Florida's ultimate future in international trade rests with the state's business executives.

Preventing a slump in foreign trade volume will require

(Continued on page 4)

ON-LINE

Looking for pertinent information on international trade opportunities . . .

STAC can connect clients with a large number of databases devoted to every facet of international trade imaginable. The most prominent and widely used include:

- BI-DATA
- COMMARS
- ECONOMIC ABSTRACTS
- INTERNATIONAL FOREIGN TRADERS INDEX
- PREDICASTS
- INTERNATIONAL FORECASTS
- PREDICASTS
- INTERNATIONAL TIME SERIES
- TRADE AND INDUSTRY INDEX
- TRADE OPPORTUNITIES
- U. S. EXPORTS
- WORLD BANK OF LICENSABLE TECHNOLOGY

Access to Euronet has enabled STAC to tap into several European-based files, such as

- PRICEDATA (TIME SERIES)
- OECD MAIN ECONOMIC INDICATORS
- ESSOR (FRENCH COMPANIES)
- SHIPDES (INFORMATION ON SHIPS)

These represent only a portion of STAC's capability in the world trade area.

For further information, call STAC

- Gainesville: (904) 392-6760
- Pensacola: (904) 476-9500
- Ft. Walton: (904) 882-5409
- Panama City: (904) 769-1551
- Jacksonville: (904) 646-2478
- Orlando: (305) 275-2706
- Tampa: (813) 974-2499
- Boca Raton: (305) 393-3968
- Ft. Lauderdale: (305) 776-6645

Dialing for Data . . .

The 1982 Governor's Survey of Florida Manufacturers brought some interesting statistics to light. Of 257 respondents, 163 reported some export activity. Out of these 163 manufacturers, 103 expressed interest in some form of assistance. Sixteen of the nonexporters showed an interest in entering the international marketplace.

Many current and potential exporters are unaware of existing state and federal assistance programs mentioned in the previous article. The list below pinpoints some important information sources.

COMMARS (Computer Marketing Systems), 1405 South Orange Avenue, Orlando, Florida 32806. (305) 422-7916

Dr. Dvorkovitz & Associates, P. O. Box 1748, Ormond Beach, Florida 32074. (904) 677-7033

U. S. Department of Commerce:

Home Office: Miami District Office, Miami, Florida 33130. (305) 350-5267

Duty Stations: Jacksonville, (904) 791-2796, John R. Marshall, III
Clearwater, (813) 461-0011, George Martinez
Tallahassee, (904) 488-6469, Lee G. Wyatt

Florida Department of Commerce:

Export Facts (Toll Free), 1-800-342-0771

Bureau of International Trade and Development, Collins Building, 107 West Gaines Street, Tallahassee, Florida 32301. (904) 488-5280

U. S. Small Business Administration:

Jacksonville District Office: P. O. Box 35067, 400 West Bay Street, Jacksonville, Florida 32202. (904) 791-3782, Fred Bethea

Miami District Office: 2222 Ponce DeLeon Boulevard, Fifth Floor, Coral Gables, Florida 33134. (305) 350-5833, Jack Geis

State Technology Applications Center:

Home Office: 500 Weil Hall, University of Florida, Gainesville, Florida 32611 (904) 392-6760, Ron Thornton

(For the office in your area, see page 2.)



The State Technology Applications Center (STAC) answers questions on technology, business management, marketing, new product development, government regulation, etc. By searching worldwide databases, STAC links expert opinion and research results directly to the client.

**AVOID
DUPLICATION!
SAVE MONEY!
SAVE TIME!**

LET STAC HELP!!

DATABASE HIGHLIGHTS

Database	Content	Source	File
FOREIGN TRADERS INDEX	Foreign business contact firms that either import goods from the U.S. or state an interest in representing U.S. exporters. Includes manufacturers, service organizations, agent representatives, retailers, wholesalers, and cooperatives.	Supplied by U.S. Foreign Service. Collected by U.S. DOC.	Inclusive dates: Latest four years, updated three times yearly; File size: 101,000 records as of March 1980.
TRADE OPPORTUNITIES WEEKLY	Live purchase requests by the international market for U.S. goods and services. Includes description of the specific product or service desired, the company or buyer name and country of origin, and date of information.	Supplied by U.S. Foreign Service Officers at 200 U.S. embassies and consular posts world-wide. Collected by U.S. DOC.	Inclusive dates: January 1977 to present, updated weekly; File size: 67,000 records as of June 1980.

STAC offers automated access to these and many other databases consisting of current literature on a variety of topics. FOREIGN TRADERS INDEX and TRADE OPPORTUNITIES WEEKLY are just two examples. For further information, contact the nearest STAC representative.

STAC In Action . .

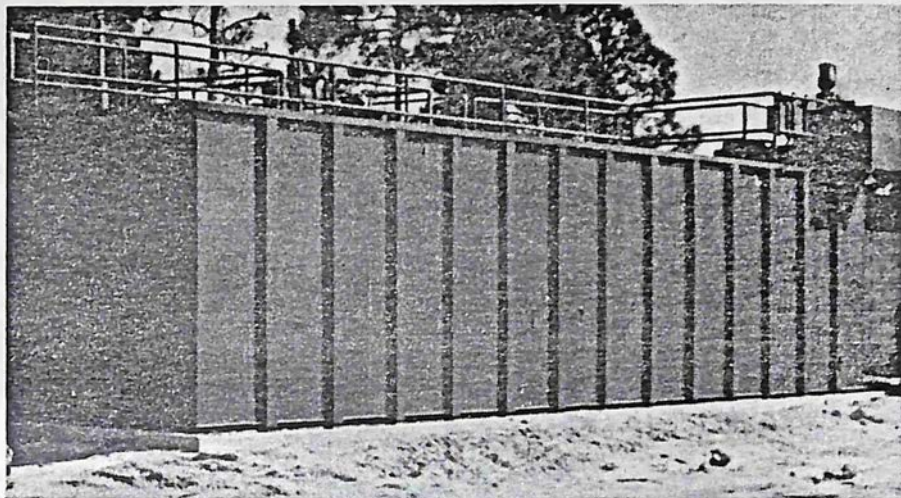
Utility Management Company, Inc. began manufacturing packaged sewage treatment systems in 1957. These compact units solved complicated waste disposal problems associated with large-scale housing developments.

Utility Management prospered but company President Kris Kshetry saw a huge, untapped market waiting to be developed. "I watched the international scene very carefully, taking note of the unique housing situation in many foreign countries," Kshetry said. "Acute housing shortages forced swift construction of many large-scale projects. This created a need for self-contained sewage systems."

Through a personal contact, an exporter in Miami, Kshetry finalized two sales agreements with customers in the Caribbean. But, taking advantage of similar potential in other markets proved difficult.

"We knew that other opportunities existed, but we had no way of identifying potential buyers and locating contacts overseas," Kshetry said.

While reading the FLORIDA SPECIFIER, a technical industrial trade journal, Kshetry read an article outlining STAC



Packaged sewage treatment plant manufactured by Utility Management Company, Inc.

and its many services. He contacted Ramesh Krishnaiyer, Southeast Florida's STAC representative, and explained his dilemma.

A STAC search of the FOREIGN TRADERS INDEX database revealed 225 contact firms interested in purchasing packaged treatment systems like those manufactured by Utility Management. These contacts represented markets in the Caribbean, South and Central America, the Middle East, South Central and Southeast Asia, and Africa.

Pleased with the STAC search results, Kshetry sent personal introductory letters and promotional material to all 225 potential clients. Of the many replies received, 26 respondents had purchased similar sewage treatment systems from the U.S. within the past year. According to

Kshetry, final sales negotiations with two of the contacts are close to completion.

In praising STAC's services, he said, "Using STAC, I was able to make contact with more than 200 overseas firms. More importantly, these firms had already expressed an interest in my product, so the sales potential is high. For a reasonable price, I acquired a select pool of potential clients and, if negotiations continue successfully, two sales which will total close to \$150,000."

This satisfaction with STAC has led Kshetry to use Krishnaiyer's services again, this time for a technical search on distillery waste water treatment.

For further information on STAC's services, contact a STAC representative.

(Continued from page 2)

innovative strategic planning, a sharpened competitive advantage, adequate capitalization, diversification in existing markets, and further expansion into Europe, the Middle East and the Orient. But, most importantly, technology bearing the "Made in Florida" label must earn a worldwide reputation for quality and dependability.

A global tempest is brewing. Florida traders must batten down the hatches; but using foresight and the resources already in place, the economy's most successful vessel will weather the storm.



500 Weil Hall/University of Florida
Gainesville, Florida 32611

Gainesville: (904) 392-6760
Pensacola: (904) 476-9500
Ft. Walton: (904) 882-5409
Panama City: (904) 769-1551
Jacksonville: (904) 646-2478
Orlando: (305) 275-2706
Tampa: (813) 974-2499
Boca Raton: (305) 393-3968
Ft. Lauderdale: (305) 776-6645

This public document is published bimonthly by the State Technology Applications Center (STAC) and printed at a cost of \$541.50, or 18 cents per newsletter to inform readers of recent developments in high technology.

BULK RATE
Non-Profit
Organization
U. S. Postage
Paid
Gainesville, Florida
Permit No. 94

FLORIDA SPOTLIGHT ON TECHNOLOGY

EDITOR: Janice Cavallaro

May/June, 1983

Small Business Act Sparks R&D Opportunities

"Small business is a tonic for what ails this country. By passing and signing this Act, we're showing our resolve to unleash this most innovative sector."

President Ronald Reagan

"This program will help to forge a stronger link between basic science and applied technology in our own country."

Milton D. Stewart, *Editor-At-Large, INC. Magazine*

"A basic purpose of the Act is to strengthen the role of small innovative companies in federally-funded research and development. The Act also provides incentives to convert the research results from small science and high-technology firms into commercial applications."

James C. Sanders, *SBA Administrator*

These favorable comments refer to passage of the Small Business Innovation Development Act of 1982. Attempting to more fairly balance competition for Federal research and development funds, the Act requires qualifying Federal agencies to set aside a given percentage of these funds for small firms (under 500 employees) (see page 2).

According to budget size, the departments of Agriculture, Defense, Energy, Health & Human Services, Interior, Transportation, the Environmental Protection Agency, NASA, National Science Foundation, and Nuclear Regulatory Commission all qualify.

This legislation is expected to impact small firms to the tune of \$45 million in 1983, escalating to \$450 million by 1987.

Unlike typical special interest legislation aimed at appeasing a powerful lobby, the Small

Business Innovation Development Act benefits the small business, the Federal government and the American taxpayer. Far from coddling the entrepreneur, the special consideration this Act affords is well deserved.

When it comes to innovation, the small business sector has earned respect for both quality and economy. More than one-half of the U.S.'s major innovation is generated by small firms, with only a minuscule portion of Federal R&D funds.

According to recent studies, small firms produce two and one-half times as many innovations as large firms relative to number of employees. By the same token, small firms bring innovations to commercialization more quickly, in an average of 2.22 years compared to the large firm's 3.05 year average.

Given these facts and the inbred entrepreneurial spirit of the

small business person, the Act's favoritism seems well justified.

To insure effective and just allocation of earmarked funds, the legislation mandates creation of Small Business Innovation Research programs for each of the nine agencies involved. Under general guidelines developed by the SBA and individual agency provisions, SBIR programs establish a framework for allocation of funds (see page 2).

Generally, each Federal agency covered by the Act will solicit proposals of ideas which will lead to new commercial products. *Commerce Business Daily* publishes these solicitations on a regular basis.

The content and format of the proposal itself is critical. Although a personal interview usually comprises the last stage before final acceptance, the initial screening of proposals severely limits the number of interviews conducted.

(continued)

(continued from page 1)

On The Record . . .

For example, of more than 3000 proposals received by the National Science Foundation, 400 were selected for initial funding totaling \$20 million. Three of these proposals originated in Florida (see page 3).

This confidential evaluation of proposals is conducted by agency personnel and often includes academic and industry experts in the respective field. Selection criteria emphasizes the technical feasibility as well as the business management skill. Agency spokespersons suggest a great deal of background research in the technical area prior to proposal submission.

This advance footwork should include a search of all pertinent existing technology and registered patents (see STAC ad). Forerunners in the field and patent holders can offer a critique of proposal ideas in a consulting capacity.

Once accepted, a proposal receives funding in three phases. Dollar amounts vary according to agency, proposal and phase. During Phase I, the Federal agency supplies an average of \$30,000 - \$50,000 for determining feasibility of the proposed idea.

Evaluation of Phase I results leads to discontinuation of Federal funding of a Phase II award. Since the SBIR Program requires that actual commercialization be financed by private sector capital, Phase II approval hinges on existence of this advance commitment, usually in the form of a letter of intent.

Phase II funding bears the cost of transforming the concept or product from the planning board to a pre-production prototype. As stated above, all Phase III funds must come from private investors. This three phase approach financially secures the entrepreneur through conceptualization to commercialization.

The Small Business Innovation Development Act of 1982 represents a clear victory for U.S. research and development efforts in general, small business in particular.

The Legislative Jargon . . .

Excerpts from PUBLIC LAW 97-219 — July 22, 1982, 97th Congress. . .

AN ACT

"To amend the Small Business Act to strengthen the role of the small innovative firms in federally funded research and development, and to utilize Federal research as a base for technological innovation to meet agency needs and to contribute to the growth and strength of the Nation's economy."

(Sec. 4.) "(e) For the purpose of this section —

"(4) the term 'Small Business Innovation Research Program' or 'SBIR' means a program under which a portion of a Federal agency's research or research and development effort is reserved for award to small business concerns through a uniform process having —

"(A) a first phase for determining, insofar as possible, the scientific and technical merit and feasibility of ideas submitted pursuant to SBIR program solicitations;

"(B) a second phase to further develop the proposed ideas to meet the particular program needs, the awarding of which shall take into consideration the scientific and technical merit and feasibility evidenced by the first phase and, where two or more proposals are evaluated as being of approximately equal scientific and technical merit and feasibility, special consideration shall be given to those proposals that have demonstrated third phase, non-Federal capital commitments; and

"(C) where appropriate, a third phase in which non-Federal capital pursues commercial applications of the research and development and which may also involve follow-on non-SBIR funded production contracts with a Federal agency for products or processes intended for use by the United States Government.

"(fx1) Each Federal agency which has an extramural budget for research or research and development in excess of \$100,000,000 for fiscal year 1982, or any fiscal year thereafter, shall expend not less than 0.2 per centum of its extramural budget in fiscal year 1983 or in such subsequent fiscal year as the agency has such budget, not less than 0.6 per centum of such budget in the second fiscal year thereafter, not less than 1 per centum of such budget in the third fiscal year thereafter, and not less than 1.25 per centum of such budget in all subsequent fiscal years with small business concerns

specifically in connection with a small business innovation research program which meets the requirements of the Small Business Innovation Development Act of 1982 and regulations issued thereunder. . ."

The Administrative Jargon . . .

Excerpts from NASA SBIR Program Solicitation (Closing Date: June 13, 1983)

"3.0 Technical Topics — Proposals for the following topics, detailed in Appendix D, will be considered:

01. Aviation Safety Technology
02. Air-Breathing Propulsion Technology
03. Aircraft Acoustics and Noise Reduction Technology
04. Aerodynamics
05. Aircraft Controls and Simulation Technology. . ."

(Continues through 26 technical areas of interest. The above serves as an abbreviated example.)

"4.0 Phase I Proposal Preparation Instructions and Requirements

"4.1 Proposal Requirements — The purpose of a proposal under the SBIR Program is to provide sufficient information to persuade NASA that the proposed work represents a sound approach to the investigation of an important scientific or engineering question of interest to NASA and is worthy of support under the stated criteria.

A proposal should be self-contained and written with the care and thoroughness accorded papers for publication. Each proposal should be reviewed carefully by the proposer to insure inclusion of data essential for evaluation. The proposed research or R&D must be responsive to NASA program objectives, but it can also serve as the basis for technological innovation, new commercial products, processes, or services which benefit the public. . . ."

"5.0 Method of Selection and Evaluation Criteria

"5.1 Introduction — Phase I proposals will be judged on a competitive basis in several steps. All will be screened to ensure that they meet stated solicitation requirements. Proposals will be initially reviewed to determine whether they respond to the subtopic chosen by the proposer. Those found to be responsive will be evaluated by scientists or engineers knowledgeable in the topic area, using the criteria listed in Section 5.2. . ."

"5.2 Evaluation Criteria — Phase I — NASA plans to select for award

(continued)

(continued from page 2)

those proposals offering the best value to the Government, giving approximately equal consideration to each of the following criteria except for the first, which will receive twice the value of any other item:

1. The scientific/technical quality of the Phase I research proposal and its relevance to the proposal's stated objectives, with special emphasis on its innovation and originality.
2. Qualifications of the principal investor, other key staff, and consultants, if any, and the adequacy of available or obtainable instrumentation and facilities.
3. Anticipated benefits, technical and/or economic, including potential for commercial applications. . . .
4. Adequacy of the proposed work plan to show progress toward meeting the objectives of the Phase I effort."

(The above guidelines of NASA's SBIR Program Solicitation are similar to those of the other eight Federal agencies covered by the Small Business Innovation Development Act of 1982. Technical topic areas of interest vary according to the goals of each agency. For further information on NASA's program, contact **Mitzi Peterson**, Program Spokesperson, NASA SBIR Program Office, Washington, D.C. 20546, (202) 755-2450.)

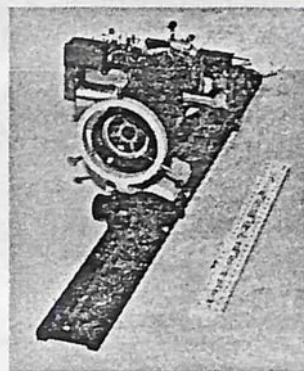
Kazuko Authors Award-Winning Proposal

When the National Science Foundation initiated its SBIR program in 1981, one Florida firm paid special attention to the solicitation for proposals extended. **Kazuko Enterprises, Inc.**, an Orlando-based developer of modular laser rangefinders, recognized the value of developing an award-winning proposal.

After careful study of NSF's areas of interest outlined in the solicitation, KEI identified a common ground on which to build. The resulting proposal combined use of high tech's most celebrated components, the robot and the laser. Using these in combination, KEI proposed an evaluation technique providing precise measurement for use in robotic systems.

From approximately 1100 proposals, NSF selected KEI for Phase I funding of \$30,000. With these funds, KEI technicians assessed feasibility comparing various techniques currently used for distance measurement. Sound, light, magnetic induction and similar factors were tested.

The emerging system detects the shift in phase from the output pulse of a laser to that of the return reflected energy from a distant target. KEI produced a "brass board" to demonstrate feasibility.



A proposal for continuing funding, Phase II, developed from this Phase I experimentation. NSF has agreed to a Phase II contract award in the second quarter of 1983.

KEI President **A. M. Johnson** attributes this go-ahead decision to a strong financial commitment from another firm to support Phase III, if Phase II goals are achieved.

Johnson cites another important ingredient in proposal preparation — use of STAC information retrieval services to compile a bibliography and summary of existing technology.

As one of only three NSF SBIR winners in Florida, KEI is enjoying the advantages of the program, while the high-tech industry as a whole reaps lasting benefits.

DATABASE HIGHLIGHTS

Database	Content	Source	File
METADEX	Comprehensive coverage of international metals literature. Access to over 500,000 records through commercial, numerical, and compositional alloy designations, specific metallic systems and intermetallic compounds found with these systems.	American Society for metals (ASM) and The Metals Society (London).	Inclusive dates: vary per publication included, updated monthly.
FLUIDEX	Fluid mechanics; fluid engineering, behavior and applications. Also includes tribology, rheology, oceanography, coastal and inland fluid engineering works, offshore technology, computational fluid mechanics and mathematical modeling.	British Hydromechanics Research Association (United Kingdom).	Inclusive dates: 1974 to present, updated quarterly.

STAC In Action . .

Carl Rader has helped put marine navigators on course and keep them there. As president of World Navigation Electronics, Inc., Rader oversees development and manufacture of marine electronic instruments including the NAV-AID.

Short for navigational aid, NAV-AID steers a vessel along any predetermined course. By interfacing with the long-range navigation system (LORAN) and an autopilot, NAV-AID converts position readings into command signals. Steering is corrected automatically, compensating for wind, current and foreign obstacles.

When Rader got an innovative idea, what promises "a perfect marriage of high-tech and the boating industries," he knew where to go for assistance. In developing and refining NAV-AID, STAC services were utilized in technical areas, such as microprocessing and advanced engineering, as well as in the marketing area.



The State Technology Applications Center (STAC) answers questions on technology, business management, marketing, new product development, government regulation, etc. By searching worldwide databases, STAC links expert opinion and research results directly to the client.

**AVOID
DUPLICATION!
SAVE MONEY!
SAVE TIME!**

LET STAC HELP!!



Pleasure craft equipped with NAV-AID.

Rader's newest pet project, dubbed "Robotic Control Navigation System," if operational, will contribute a greater margin of safety and significant fuel savings to the pleasure, commercial and military marine industries. This sizable contribution toward improving effectiveness seemed to mesh perfectly with the goals of the Small Business Innovation Development Act of 1982.

At least this was the opinion of Ramesh Krishnaiyer, Florida Atlantic University STAC director, when Rader approached STAC for a preliminary search of existing marine technology.

Krishnaiyer encouraged Rader to attend an April 5 conference on Small Business Innovation Research programs being inaugurated by nine federal agencies. Sponsored by the Florida Department of Commerce and the Florida Economic Development Center, the meeting acquainted small businesses with the various SBIR program qualifications and areas of interest.

Rader not only travelled to Tampa for the conference, but once there, encountered positive interest in his idea from five Federal agency representatives. Heartened by this show of enthusiasm, he submitted proposals to all five interested parties. Awaiting approval, Rader feels optimistic that Phase I funding will make the Robotic Control Navigation System a concrete reality.

He praised STAC for the data provided, on which the proposal's premises were based, in addition to the sound advice Krishnaiyer offered.

"We expect to use STAC information in every phase of our operation — from research and development to marketing," he said. "With the help of this high quality, state-of-the-art information delivery system, World Navigation Electronics hopes to continue improving the area of navigational electronics."

Looks like smooth sailing ahead.



500 Well Hall/University of Florida
Gainesville, Florida 32611

Gainesville: (904) 392-6760
Pensacola: (904) 476-9500
Ft. Walton: (904) 882-5409
Panama City: (904) 769-1551
Jacksonville: (904) 646-2478
Orlando: (305) 275-2706
Tampa: (813) 974-2499
Boca Raton: (305) 393-3968
Ft. Lauderdale: (305) 776-6645

This public document is published bimonthly by the State Technology Applications Center (STAC) and printed at a cost of \$543.30, or 18 cents per newsletter, to inform readers of recent developments in high technology.

BULK RATE
Non-Profit
Organization
U. S. Postage
Paid
Gainesville, Florida
Permit No. 94

FLORIDA SPOTLIGHT ON TECHNOLOGY

EDITOR: Janice Cavallaro

November/December, 1982

From Disneyworld to Data Systems . . .

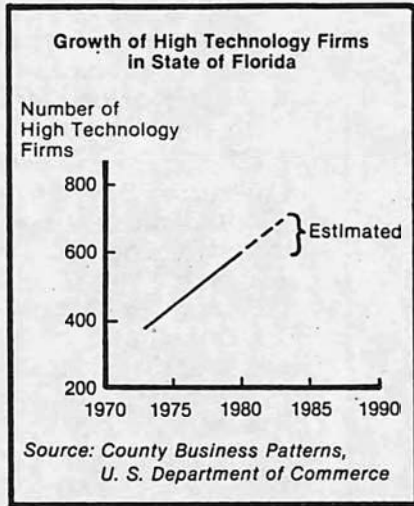
For countless years, the Florida powers-that-be strived to promote the Sunshine State as the Vacation Land of the South. After all, tourism paid the bills. The campaign succeeded beyond their wildest hopes and dreams.

Florida became, in the minds of millions, a giant amusement park. Escaping this crippling stereotype and establishing the state as a serious contender for not only tourists but top-notch manufacturers has been an uphill battle.

Thanks to the arrival of a few progressive manufacturers which inspired a persistent government recruiting effort, Florida has become nationally recognized as a viable option for relocation, especially among the most promising industry sector — high technology.

Several recent surveys evaluating business and industrial climate have ranked Florida among their top ten choices. Favorable factors include the old standbys commonly associated with the state: affordable housing, plentiful land, low-cost energy, efficient transportation services, quality of life, and, of course, the absence of a state personal income tax.

Less well known but equally important to potential industrial residents are low



state and local government welfare expenditures, low unemployment compensation payments per worker covered, low union membership among non-agricultural workers, and a high enrollment in local vocational schools.

Apart from the above, high-tech firms consider additional criteria when selecting a relocation site. Highly technical manufacturing procedures require not only skilled engineers but high-level technicians. This necessitates an advanced educational system to supply this labor force.

In addition, high-tech firms demand easily accessible capital, tax incentives, a positive legislative climate, and management support services.

The Governor's Office, State Legislature, and Florida Department of Commerce have all pulled together to correct any shortcomings and strengthen the existing framework. Expanding and upgrading the state's already impressive network of universities, community colleges and vocational schools has begun in earnest. (See page 2.)

Legislatively, bills protecting the confidentiality and ownership of research findings and exempting R&D costs from taxation help clear the way for firms heavily involved in research activity. In response to the capital crunch, the Florida DOC has proposed a state venture capital association to address this issue.

Florida already has an extensive statewide network developed to aid businesses in the management area, primarily the Small Business Development Center Program. These services are being tailored to the engineer and scientist well-versed in a particular technical field but lacking administrative skills. The State Technology Applications Center (STAC) offers these entrepreneurs assistance in the technological area, conducting electronic

(continued on page 2)

From Amusement Park to Research Park . . .

Florida's high-technology future relies heavily on the State University System and its ability to adapt to the unique needs of these industries. Efforts to upgrade the existing infrastructure have produced great strides, and in turn, stimulated an ever increasing influx of high-technology firms.

These efforts can be condensed to three common goals shared by all college-level institutions within the state system: expansion to accommodate increased enrollment, faculty upgrade both in quality and quantity, and updating of research

(Continued from page 1)

searches of thousands of data files for the most current information available.

The success of these efforts to date has been rewarding. (See graph.)

A whole community of high-tech firms stretches along the "Interstate 4 Corridor" including Daytona Beach, Cape Canaveral, Tampa-St. Petersburg, Orlando and Melbourne.

Specialization has developed in electronics, communications, aerospace systems, and aircraft engines and their parts. With this expertise has come a flurry of defense contracts. Total defense spending was up 31 percent in 1981 over 1980 figures and, according to the Pentagon, this added \$6.7 billion to Florida's economy. If predictions hold true, defense spending in the next few years may top the \$12 billion mark.

The future looks bright. A continued migration of high-tech industries to Florida will create increased employment opportunities and an expanded tax base.

The word is out. The vacation capital has gotten serious about industrial development.

equipment, instrumentation and computer facilities to state-of-the-art status.

Without fuel, in the form of much needed dollars, from state government, reaching these goals would have been virtually impossible. In the face of a national trend to slash educational allocations from a bloated budget, the Florida Legislature bestowed some \$15.6 million in quality improvement monies to the state's engineering schools over the past two years.

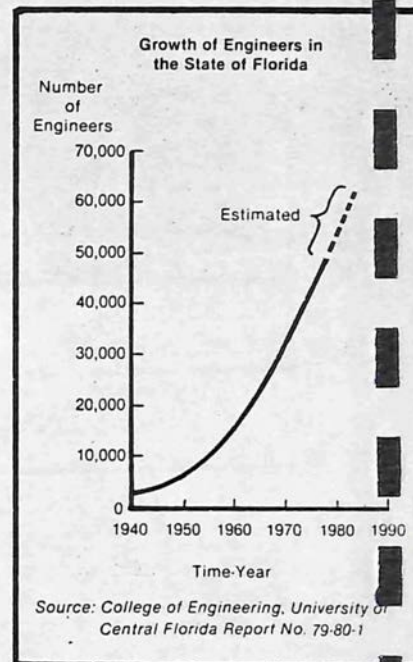
From this base, a wealth of positive indicators has arisen.

During the 1980-81 academic year, the University of Florida's College of Engineering spent \$13.5 million on research, more than any other engineering school in the Southeast.

The University of Central Florida has undertaken a massive expansion program, and with 2,300 students currently enrolled, has earned a spot among the top one-third of the nation's universities offering both graduate and undergraduate programs. A recent survey of high-tech industry needs conducted by UCF resulted in the development of a doctoral program in computer science, the only one of its kind in the state, and one of only three in the Southeast.

In addition to curriculum changes, most state universities now make available continuing education for high-tech employees both on-campus and off at actual work sites.

The value of research and development parks to the state's recruiting effort has resulted in the charting of four parks statewide. Aside from exercising a powerful incentive for high-tech firms by offering cooperative use of university resources, the parks also expand research opportunities for university faculty and students.



University of Central Florida broke ground on its own R&D park in June 1981. The privately-financed project will eventually cover 1440 acres directly adjacent to the University campus. The first tenant, the American Electroplater's Society, will house its world headquarters on the site. High-tech growth has spread outside the park gates, with Martin Marietta and Westinghouse planning neighboring operations with completion scheduled for 1985.

Gainesville also has planning underway for an R&D park to enhance its already extensive research program, recognized by the Carnegie Commission as one of the nation's leading 50 research universities. Construction on the University of Florida's Research and Technology Campus is slated for next year, with 3-acre to 20-acre lots available for sale or lease.

The above examples offer mere glimpse of the impact created through a concerted state-university venture. Short-term gains can already be seen, but long-term rewards will prove even more promising.



The State Technology Applications Center (STAC) answers questions on technology, business management, marketing, new product development, government regulation, etc. By searching worldwide databases, STAC links expert opinion and research results directly to the client.

**AVOID
DUPLICATION!
SAVE MONEY!
SAVE TIME!**

LET STAC HELP!!

ON-LINE

Having trouble tracking regulations which affect business or industry?

FEDERAL INDEX... Current legislative developments. Sources such as *Congressional Record*, *Federal Register*, *Weekly Compilation of Presidential Documents*, *Washington Post*. Includes testimony before Congress and new regulations as they relate to business issues.

Need to contact potential suppliers in other cities? Shopping for professional services near a remote branch office?

Let your fingers do the walking... ELECTRONIC YELLOW PAGES... Includes telephone directories of over 4,800 cities. Present online access to yellow page listings for financial institutions and services, professional directories, wholesalers, retail stores. Additional categories in the works.

Wondering how the competition measures up? Searching for merger possibilities?

DISCLOSURE II... Business and financial information from annual and periodic reports filed with SEC. Approximately 8,500 publicly-owned companies on file. Includes 10-K and 20-F financial reports, 10-Q quarterly income statements, 8-K unscheduled material event summaries, proxy and registration statements. Continuous update. Full text available on paper or microfiche.

For further information, call
STAC

Gainesville: (904) 392-6760
Pensacola: (904) 476-9500
Ft. Walton: (904) 882-5409
Panama City: (904) 769-1551
Jacksonville: (904) 646-2478
Orlando: (305) 275-2706
Tampa: (813) 974-2499
Boca Raton: (305) 393-3968
Ft. Lauderdale: (305) 776-6645

DATABASE HIGHLIGHTS

Database	Content	Source	File
NTIS	Government-sponsored research, development and engineering reports including U.S. Government inventions available for licensing, and analyses prepared by over 300 federal government agencies, their contractors and grantees	National Technical Information Service (NTIS) of the U.S. DOC, the central source for public sale and dissemination of U.S. Government-sponsored research	Inclusive dates: 1964 to present, updated biweekly; File size: 825,000 records as of June 1981
ISMEC	Coverage of world-wide literature in the fields of mechanical engineering and engineering management including production/manufacturing, transport and handling, thermodynamics, and industrial engineering	Information Service in Mechanical Engineering covers over 250 technical journals and articles from industry and trade publications	Inclusive dates: 1973 to present, updated monthly; File size: 120,000 records as of June 1981

*STAC offers automated access to these and many other databases consisting of current literature on a variety of topics. NTIS and ISMEC are just two examples. For further information, contact the nearest STAC representative.

STAC In Action . . .

International Laser Systems, Inc. manufactures laser systems for military applications. In this highly specialized and technical process, where high laser output energy with low divergence and very small package size are required, laser rod efficiency receives top priority.

Despite strict quality control standards, approximately 20 percent of the laser rods do not provide the required high performance and are unusable for military application.

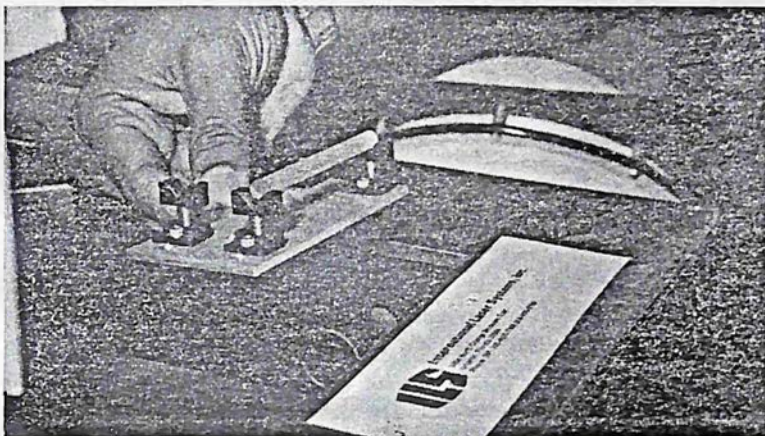
With each laser rod costing approximately \$2,000, International Laser Systems began actively seeking a method to reduce the number of unusable rods.

Especially crucial to laser rod efficiency is the lasing medium, generally Neodymium doped Yttrium Aluminum Garnet (Nd:YAG). **Dr. M. A. Acharekar**, principal engineer in the company's Advanced Development Division, developed a unique spectrophotometric method of analyzing Nd:YAG concentration.

Through this technique, Acharekar discovered that not only did high concentrations of Nd affect rod efficiency, but also that impurities in the medium played an important role. The data collected during analysis was prepared as part of a technical paper for publication.

In the course of this development program, a study of past accomplishments in the field proved necessary. The State Technology Applications Center (STAC) immediately came to mind.

Dr. Al Pozefsky, STAC area director at the University of Central Florida, designed a strategy for computerized search of existing literature containing relevant technology and research. STAC's search was completed with a speed and thoroughness that could not have been duplicated by



Insertion of the Nd:YAG laser rod in test chamber of spectrophotometer.

weeks of manual searching in local technical libraries.

Many of the papers located through the search provided pertinent background information and reference sources. The final article by Dr. Acharekar entitled, "Spectrophotometric Analysis of Neodymium doped Yttrium Aluminum Garnet Laser Rods" has been accepted for publication in *LASER FOCUS*, Vol. 18, No. 11.

The most important conclusion derived from the search is the possibility of impurity removal from YAG, primarily OH radical removal. Using the database, SPIN, several references on OH removal techniques were discovered. Although these citations involved fused silica, it is believed that a method can be extended for OH removal from YAG. This finding could

greatly improve Nd:YAG laser rod efficiency.

International Laser Systems considers STAC's services a highly cost effective way of conducting research. Carrying the 20 percent of laser rod production which cannot meet military power output standards in the company's inventory represents a significant cost factor. The inventory in unusable rods currently accounts for approximately \$200,000.

The costs of STAC's literature search will be easily recovered several times over in savings if only one rod rejection can be avoided. In addition, Dr. Acharekar saved valuable time by letting the computer do his searching.

For further information on STAC services, call your area STAC representative listed below.



500 Weil Hall/University of Florida
Gainesville, Florida 32611

Gainesville: (904) 342-6760
Pensacola: (904) 476-9500
Ft. Walton: (904) 882-5409
Panama City: (904) 769-1551
Jacksonville: (904) 646-2478
Orlando: (305) 275-2706
Tampa: (813) 974-2499
Boca Raton: (305) 393-3968
Ft. Lauderdale: (305) 776-6645

This public document is published bi-monthly by the State Technology Applications Center (STAC) and printed at a cost of \$541.05, or 18 cents per newsletter to inform readers of recent developments in high technology.

BULK RATE
Non-Profit
Organization
U. S. Postage
Paid
Gainesville, Florida
Permit No. 94

FLORIDA SPOTLIGHT ON TECHNOLOGY

EDITOR: Janice Cavallaro

JULY / AUGUST, 1982

STAC Introduces "First Edition" . . .

Dear Reader:

Most of us have heard the expression, "Knowledge is Power." Never has this quote been more appropriate than in this decade of the "information explosion." Today's decision maker must sift through a barrage of information, originating from many diverse sources, before selecting that final alternative. By ignoring existing information resources, the decision maker often exhibits limited foresight due to unfamiliarity with existing options.

Yet, manual retrieval of pertinent data within a reasonable time period can prove overwhelming for the reserves of all but the largest operation. Modern science, forced to deal with this dilemma, developed an automated system for indexing and collecting information at a touch. From this beginning sprung thousands of data banks housing scores of databases containing millions of citations.

Creation of the Florida SPOTLIGHT ON TECHNOLOGY underscores an ongoing effort to inform business decision makers about the availability and capabilities of automated information retrieval to aid in their problem solving. Published by the State Technology Applications



J. Ronald Thornton

Center (STAC), the SPOTLIGHT ON TECHNOLOGY will be distributed statewide at bimonthly intervals to keep readers abreast of exciting and useful developments in information retrieval and technological areas.

STAC joined the National Aeronautics and Space Administration (NASA) information dissemination network in 1977 in partnership with the State University System of Florida. With offices in Gainesville, Jacksonville, Orlando, Tampa, and Fort Lauderdale, this service offers access to over 75 million citations in wide ranging fields

of interest. These include management, science and technology, engineering, and many others.

Feature stories in the SPOTLIGHT ON TECHNOLOGY will explore topics such as: Florida's future in high technology, manufacturing, small business, research and development, and international trade. More specific examples of how STAC can aid business owners through patent searches, new product ideas, standards and specifications listings, and site location studies also will be featured.

Special interest groups such as engineers, entrepreneurs, manufacturers, consultants, and attorneys will be targeted in editions devoted to unique uses for information retrieval in those areas.

I hope you will enjoy this first edition and look forward to the next. Additions to the mailing list for regular receipt of SPOTLIGHT ON TECHNOLOGY can be made in writing or by telephone to STAC, 500 Weil Hall, University of Florida, Gainesville, Florida 32611, (904) 392-6760.

Your comments and suggestions will be appreciated.

Sincerely,

J. Ronald Thornton
J. Ronald Thornton
STAC director

AUTOMATED SEARCHES OFFER

Automation of information retrieval sprang from a direct need expressed by decision makers for quick access to accurate, thorough and timely information. In any research project, knowing what has already been discovered and implemented saves both time and duplicative effort. Keeping abreast of key management innovations provides administrators with background on improved methods and their effects. Solutions to complex technical questions, sluggish manufacturing, and personnel problems, to name a few, can be found among the experiences of others.

Finding these answers has become increasingly more complicated as the volume of new information generated reaches gargantuan proportions. Manual searches require serious contributions of valuable time by highly-trained personnel. In this great paper-chase, tracking all pertinent information within a current time frame frustrates the efforts of the most diligent researcher. In fact, the Department of Defense estimates a lag time of five to 10 years before the average engineer becomes aware of commercially applicable

developments in his or her field. Basic scientific applications often go unnoticed for over 20 years.

In this age of computerization, online, interactive access to databases stored in terminal memory circuits has become not only feasible but commonplace. Industry revenues reached \$1 billion last year. Over 450 data banks marketed by some 65 information service vendors are in existence, with additions coming online every day.

Despite this abundance, U.S. decision makers remain hesitant over use of such an unconventional resource. This conservatism primarily results from misconception of cost, commonly perceived as astronomical. In actuality, the cost of automated retrieval compares very favorably with manual search expenses or the price of operating without access to available information.

A recent NASA study weighed the costs of manual vs. automated research and found the latter to be surprisingly more cost effective, with a ratio of 2.9 to 1. The study concluded that such retrieval proved more timely and comprehensive.

After removing this mental barrier to use, the benefits of automated retrieval become obvious. Covering innumerable fields of interest, data can be collected in full or summary form from one central location using the computer terminal. Access to NASA/RECON, DOE/RECON, and Lockheed's DIALOG system alone accounts for 75 million citations. Displayed statistically, bibliographically or computationally, search strategies can be tailored to fill a user's particular needs.

Timeliness ranks as perhaps the greatest advantage of automated retrieval. Decisions based on outdated information often prove counterproductive. Print materials available to manual researchers usually lag two years behind the current date. Database updates take place at weekly, monthly or quarterly intervals keeping information current within several months of search date.

Search time is also reduced from approximately two weeks for manual searches to two days maximum with automation. In many cases, searches can be completed in less than one hour's time and that time includes the print out of source data or citations.

DATABASE HIGHLIGHTS

Database	Content	Source	File
NASA/RECON	NASA-sponsored/funded/contracted research including computer science, aeronautics, chemistry, mathematics, etc.	Scientific and Technological Aerospace Reports (STAR) and International Aerospace Abstracts (IAA)	Inclusive dates: 1962 to present, updated monthly; File size: 9,500,000 records as of May 1981, approximately 5,000 added per month
COMPENDEX	Engineering and technology including civil, environmental, electrical, and mechanical engineering, etc.	Journals, trade publications, conference and symposia works, technical reports, monographs, etc.	Inclusive dates: 1970 to present, updated monthly; File size: 1,025,000 records as of June 1981, approximately 8,500 added per month

DECISION MAKING ALTERNATIVES



Maureen Corcoran, STAC librarian, conducts daily searches from Gainesville office.

Unproductive searches can be redone electronically with a minimum loss of time and expense. The market researcher has time freed for analysis rather than routine collection.

Databases, filled with literature extracted from journals, professional and trade organizations, media, conferences, technical reports, studies, etc., can be used by representatives of any business or industry.

Examples of applications include:

- New ideas for product diversification
- Patent and trademark information
- Trends in scientific research
- Market and product information

Access to these data files can be accomplished by non-intelligent computer terminal, personal microcomputer or word processor. With in-house equipment, a user merely buys access to preferred databases through a supplier or telecommunications network such as TYMNET or TELENET.

Research can then be conducted from this remote location via telephone hookup.

Frequent users often opt for this arrangement, yet operation of this system requires staff support and familiarity with specific search strategies. Constant additions of

databases and major differences in indexing between systems require continual concentration on the industry.

Circumventing this through purchase of searches on an individual basis can often prove more cost effective for relatively infrequent users. Computer service firms can provide professional researchers, all necessary

equipment, and the information requested in a variety of forms. STAC retails searches on an individual or subscription basis, for a nominal fee depending on connect time, citation charges and document quantity.

The advantage of automated information retrieval cannot be ignored by forward looking business and industry decision makers. The foremost user to date of this technological wonder is the Japanese industrialist. Realizing the potential of such a system has helped push Japan closer to the lead in world trade and innovative discoveries. The sooner American decision makers take advantage of past experience, the fewer costly mistakes will be repeated and duplicative efforts initiated. Available and cost effective, computerized information can supplement the research efforts of large and small firms alike.

Sample Expenditures for 50 Searches Conducted In-House:

\$3,000 — equipment including terminal, modem, printer, telephone
 \$500-\$2,000 — user search aids, industry newsletters (cost dependent on subject diversity)
 \$5,000 — staff time including one day per week search time and industry briefing plus one day per month for workshops
 \$2,000-\$10,000 — searching (cost dependent on databases accessed)
TOTAL — \$4,000 initial investment
 \$2,000 - \$15,000 ongoing costs

Sample Expenditures for STAC Retrieval Services:

(Prices include all major cost elements such as equipment, etc.)

NASA/RECON — \$50	ABI/INFORM — \$75
COMPENDEX — \$100	DOE/RECON — \$50
FOREIGN TRADERS INDEX — \$50	

\$.20 — citation charges
 \$5 - \$50 — document charges including cost of document plus 15% surcharge
TOTAL — \$200 - \$300 average charge to client

STAC In Action. . .

The benefits of using automated information retrieval can be repeated again and again, but one testimonial from a satisfied customer often makes the strongest point.

Stanton Halpert faced an important decision. As president of Troy Precious Metal Reclaiming Systems in Hialeah, Halpert constantly watches the market for added opportunities in the metal reclaiming industry.

Catalytic converters discarded from U.S. and foreign automobiles offered just such a possibility. Reclamation of precious metal content from auto converters presented a seemingly profitable venture, but Halpert's limited experience with these particular substances fostered a need for further research.

Several questions plagued Halpert. What average amount of precious metals in what variety could be expected from a single catalytic converter? Did this amount vary from one automobile make to another? Industry-wide, what total volume of precious metals was already available from converters for processing and could the amount be expected to increase, decline, or hold steady?

In answering these questions, Halpert considered his options. An initial manual search into the topic area revealed only a limited amount of information. Unwilling to make such a major investment without access to all available facts, Halpert called his local STAC representative.

Ramesh Krishnaiyer, STAC's area director based in Fort Lauderdale at Florida Atlantic University, offered answers to Halpert's questions. A search was made using four databases (COMPENDEX, SAE Abstracts, PROMT, and PTS US Forecasts) noted for their coverage of such topics. In ad-

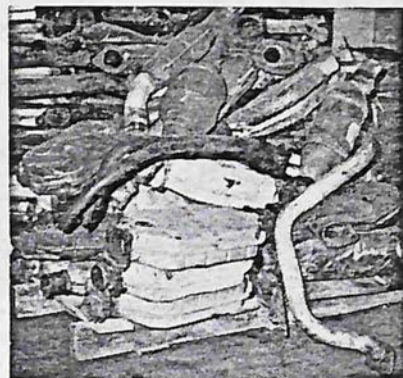
dition to the results obtained from these searches, Krishnaiyer uncovered supplemental information manually from a variety of sources.

A final report submitted to Halpert revealed:

- the precious metal content of several types of catalytic converters
- a reliable forecast of metals volume obtainable from projected inventory
- data on total volume of precious metals available from catalytic converters both present and estimated future.

Based on this information collected through STAC's automated and manual information retrieval service, Halpert made his decision. A concrete plan for purchase of catalytic converters was formulated and preliminary procedures for the reclamation process begun.

Of STAC, Halpert said, "Information concerning catalytic converters was not only scarce but in some cases contradictory. The market data supplied by STAC reinforced the information we already possessed facilitating increased confidence in our decision-making



From this...



To this...

process. The automated search provided an inexpensive, timely substitute for an otherwise overwhelming major market research project.

"I was extremely pleased with STAC's efforts and have used them again on two additional projects. I must say they have come through each time, saving the company a considerable amount of money and staff effort."



500 Weil Hall/University of Florida
Gainesville, Florida 32611
(904) 392-6760

Pensacola: (904) 476-9500
Ft. Walton: (904) 882-5409
Panama City: (904) 769-1551
Jacksonville: (904) 646-2478
Orlando: (305) 275-2706
Tampa: (813) 974-2499
Boca Raton: (305) 393-3968
Ft. Lauderdale: (305) 776-6645

This public document is published bi-monthly by the State Technology Applications Center (STAC) and printed at a cost of \$394.05, or 20 cents per newsletter to inform readers of recent developments in high technology.

BULK RATE
Non-Profit
Organization
U. S. Postage
Paid
Gainesville, Florida
Permit No. 94

NASA-FLORIDA



STATE TECHNOLOGY APPLICATIONS CENTER

COMMARS

Supplier: Computer Marketing Services, Inc. (COMMARS)

Description:

COMMARS is a worldwide, computer controlled marketing service which uses an extensive database and electronic communications to promote international trade. The COMMARS database emphasizes buy, sell, and barter of products and services, but it also includes trade opportunity notices, real estate opportunities, debt collection, electronic mail box, system schedules, translation/interpreter service, World job market, NASA-Florida STAC Information Service, Leasametric Customer Sale Price List, and SIC code help facility.

Subject Coverage:

COMMARS covers all aspects of international trade from generation of trade leads to shipping, billing, debt collection, etc. The Buy/Sell/Barter database includes all products and services.

Major Sources:

The information for this file is collected from the U.S. Department of Commerce and many private sources worldwide.

File Data:

Inclusive Dates: January 1979 to present

Update Frequency: Monthly

File Size: Approximately 10,000



STATE TECHNOLOGY APPLICATIONS CENTER

FEDERAL REGISTER ABSTRACTS

Supplier: Dialog, File 136

Description:

FEDERAL REGISTER ABSTRACTS provides comprehensive coverage of federal administrative and regulatory actions, including the following: new rules; proposed regulations; notices; meetings; hearings; presidential proclamations, executive orders, and presidential determinations; public law notices; and notices or rulings taking effect.

The database corresponds to the printed publication Federal Register Abstracts and is produced by Capitol Services, Inc.

Subject Coverage:

- Agriculture
- Arts and Humanities
- Business
- Communications
- Human Rights
- Consumer Affairs
- Contracts (Government)
- Defense
- Economy
- Education
- Energy
- Environment
- Finance
- Foreign Affairs
- Health
- Housing
- Labor
- Law Enforcement
- Parks and Recreation
- Political Affairs
- Resources
- Social Services
- Taxation
- Technology
- Trade
- Transportation

Major Sources:

The database provides comprehensive indexing of the Federal Register, the daily official government publication for agency pronouncements.

File Data:

Inclusive Dates: 1977 to the present
Update Frequency: Weekly (approximately 700 records per week)
File Size: 110,600 records as of March 1981

STAC



STATE TECHNOLOGY APPLICATIONS CENTER

FOODS ADLIBRA

Supplier: Dialog, File 79

Description:

FOODS ADLIBRA is produced by K & M Publications. It contains information references to food industry developments, including:

- All new food products introduced since early 1974.
- Information on every level of food marketing: agribusiness, meat packing, millers, dairies, retailers, foodservice operators, gourmet food importers, processors, brokers, and equipment suppliers.
- Major, significant research and technological advances, processing methods, packaging, and patents.

Subject Coverage:

- | | |
|--|--|
| ◦ New Products | ◦ Nutritional Information and Technology |
| ◦ New Ingredient Developments | ◦ Research and Technology |
| ◦ Management and Marketing News | ◦ Processing and Engineering Methods |
| ◦ World Food Economics and International Marketing | ◦ Patents |
| ◦ Commodities | ◦ Packaging Developments |
| ◦ Marketing Statistics and Market Research | ◦ Governmental Information |
| | ◦ Company and Association News Announcements |

Major Sources:

Over 250 periodicals represent the main body of information for FOODS ADLIBRA. Additionally, over 500 highly technical research journals are perused for important references. Government publications, the Federal Register, the U.S. Patent Office Official Gazette, and company, university, and association news releases are also scanned for relevant references.

File Data:

Inclusive Dates: January 1974 to the present
 Update Frequency: Monthly (about 600 records per month)
 File Size: 50,000 Records, July, 1981

NASA-FLORIDA



STATE TECHNOLOGY APPLICATIONS CENTER

THE INFORMATION BANK

Supplier: The New York Times Information Service Company

Description:

A database system that contains abstracts of all news and editorial matter from the final Late City Edition of The New York Times and selected material from approximately 10 other newspapers and 49 magazines published in the U.S., Canada, and Europe.

The Information Bank provides detailed, informative abstracts of newspaper and magazine articles. The inquirer can specify the topics to be covered: broad or narrow, a single name or a combination of subjects. Each abstract retrieved is displayed on a computer terminal along with a complete bibliographic citation for the original article. Because of the amount of detail contained in the abstracts, however, many questions can be answered without resorting to the full text. Items covered include general news articles, forecasts, analyses, surveys, biographies, features, columns, editorials, maps, charts, and diagrams.

Subject Coverage:

Multidisciplinary News Subjects

Major Sources:

The New York Times Late City Edition

<u>General Circulation Newspapers:</u>	<u>Business Publications (cont'd)</u>	<u>Science Publications</u>
Atlanta Constitution	Editor and Publisher	Astronautics
Chicago Tribune	Financial Times (Canada)	Aviation Week and
Christian Science Monitor	Financial Times (London)	Space Technology
Houston Chronicle	Forbes	Bulletin of Atomic
Los Angeles Times	Fortune	Scientists
Miami Herald	Harvard Business Review	Industrial Research
New York Times	Journal of Commerce	Science
San Francisco Chronicle	Wall Street Journal	Scientific American
The Seattle Times	Women's Wear Daily	
Washington Post		
	<u>International Affairs</u>	<u>Other Periodicals</u>
<u>Business Publications:</u>	Atlas	Atlantic
Advertising Age	Economist of London	California Journal
American Banker	Far Eastern Economic Review	Consumer Reports
Automotive News	Foreign Affairs	Current Biography
Barron's	Foreign Policy	National Journal
Business Week	Latin American Weekly	National Review
Dun's Review	Manchester Guardian	New York
	Middle East	New Yorker
	Times of London	Newsweek
		Saturday Review

Other Periodicals: (con't)

Sports Illustrated
 Time
 US News and World Report
 Variety
 Washington Monthly

File Data:

Inclusive Dates: International. New York Times, 1969 to date; other publications, 1972 to date.
 Update Frequency: Daily; 20,000 records added per month
 File Size: Over 2,000,000 total records

Sample Question: (420034)

Provide client with articles written about Burt Reynolds.

Search Strategy:Concept I:

Burt Reynolds

Sample Search Results:

Burt Reynolds, who stars in Jerry Belson film The End, int
 NEW YORK TIMES JUNE 10, 1977
 SECTION: 3 PAGE: 8 COLUMN: 3 FICHE: 161-77-30

rev by L Van Gelder of Mort Engelberg film Smokey and the
 Bandit; performances by Burt Reynolds and Sally Fields
 appraised
 NEW YORK TIMES MAY 20, 1977
 SECTION: 3 PAGE: 8 COLUMN: 5 FICHE: 140-77-85

Village Voice columnist explains Jan 3 '77 page 1 headline,
 'Burt Reynolds Slain by Killer Bees,' as tribute to publisher
 Rupert Murdoch, who was at that moment 'advancing on' Village
 Voice (M)
 ADVERTISING AGE JANUARY 17, 1977
 PAGE: 66 COLUMN: 1

rev by R Eder of Peter Bogdanovich film Nickelodeon;
 performances by Ryan O'Neal, Burt Reynolds and Tatum O'Neal
 appraised
 NEW YORK TIMES DECEMBER 22, 1976
 PAGE: 34 COLUMN: 4 FICHE: 356-76-61

NASA-FLORIDA



STATE TECHNOLOGY APPLICATIONS CENTER

FOREIGN TRADERS INDEXSupplier: Dialog, File 105Description:

FOREIGN TRADERS INDEX (FTI) is designed to provide foreign business contacts with lists of firms that either import goods from the United States or state an interest in representing U.S. exporters. Included are manufacturers, service organizations, agent representatives, retailers, wholesalers/distributors, and cooperatives. There is no printed equivalent to FOREIGN TRADERS INDEX.

Subject Coverage:

FTI includes data on firms in 130 countries classed by product codes based on the Standard Industrial Classification (SIC). In addition, each firm is coded to designate the nature of business activity (manufacturer of, retailer of, etc.) relative to the various products it handles. Executive officers, relative size of the firm, number of employees, and date of establishment are also included.

Major Sources:

The information in the file is collected and supplied to the Department of Commerce by the U.S. Foreign Service. Such information comes to the attention of the Foreign Service through direct contacts with representatives of the firms.

File Data:

Inclusive Dates:	Latest four years
Update Frequency:	Three times yearly (revision-reload)
File Size:	101,000 records as of March 1980

Sample Question: (230190)

Provide clients with marketing contacts in Latin America for a sophisticated and specialized electronics communications system. Client wanted importers, distributors, and users, and agent handling for this communications system. Restrict clients to those that are classified as "medium", "large" and/or "very large" sized firms.

Search Strategy:

1. Translate communications system into appropriate Product Codes from the Census of Manufacturers Industrial Classification.
2. Correlate selected Product Codes with appropriate Business codes (or business Names).
3. Selected appropriate Geographic Codes to cover countries being searched.

Search Strategy: (Con't)

4. Limit search to the size firms being sought.
5. Combine all previous steps to yield desired results.

Sample Search Results

Search produced 119 citations similar to the samples below. Resulted in full format to provide client with additional marketing information about those firms that were identified.

120661

CORVENEL, S.A. 7705
 AVDA GUAICAIPURO, NUM 70, EL ROSAL
 CARACAS, VENEZUELA
 EXECUTIVE: JOSE SPIGNOLS PRESIDENT
 PHONE: 331319

RELATIVE SIZE: MEDIUM EMPLOYEES: 35 ESTABLISHED: 1974

(36620) RADIO & TV COMMUNICATION EQUIPMENT : (1) RETAILER OF ; (2) AGENT HANDLING ; (3) SOLE IMPORTING DISTRIBUTOR OF ; (5) IMPORTER OF

(36600) COMMUNICATION EQUIPMENT : (1) RETAILER OF ; (2) AGENT HANDLING ; (3) SOLE IMPORTING DISTRIBUTOR OF ; (5) IMPORTER OF

(36621) COMMERCIAL, INDUST & MILITARY COMMUNICATION EQUIPT : (1) RETAILER OF ; (2) AGENT HANDLING ; (3) SOLE IMPORTING DISTRIBUTOR OF ; (5) IMPORTER OF

118886

REPRESENTACIONES CAPITAL S.A. 7908
 APARTADO AEREO 31215; CARRERA 13 NO.27-00, OF. 817
 BOGOTA COLOMBIA
 EXECUTIVE: HORACIO FRANCISCO VILLAMIL PINZON MANAGER
 PHONE: 282-8539 CABLE: NA TELEX: 44982 CTXB

RELATIVE SIZE: MEDIUM EMPLOYEES: 100 ESTABLISHED: 1974

(35310) CONSTRUCTION MACHINERY : (1) RETAILER OF ; (3) SOLE IMPORTING DISTRIBUTOR OF ; (5) IMPORTER OF

(35793) DUPLICATING MACHINES : (1) RETAILER OF ; (3) SOLE IMPORTING DISTRIBUTOR OF ; (5) IMPORTER OF

(35720) TYPEWRITERS, CODED MEDIA, PARTS & ATTACHMENTS : (1) RETAILER OF ; (3) SOLE IMPORTING DISTRIBUTOR OF ; (5) IMPORTER OF

(36621) COMMERCIAL, INDUST & MILITARY COMMUNICATION EQUIPT : (1) RETAILER OF ; (3) SOLE IMPORTING DISTRIBUTOR OF ; (5) IMPORTER OF

(36625) ELECTRONIC SEARCH & DETECTION APPARA, RADAR, INFRARED

NASA-FLORIDA
STAC
STATE TECHNOLOGY APPLICATIONS CENTER

MANAGEMENT CONTENTS

Supplier: Dialog, File 75

Description:

MANAGEMENT CONTENTS provides current and retrospective information on a variety of business and management related topics to aid decision making and forecasting. The database was created for individuals in business, consulting firms, educational institutions, government agencies, and libraries. Indexing is done from a controlled list of keywords selected to reflect the subject matter covered in current business literature. ALL MANAGEMENT CONTENTS records, which are drawn from the printed version of the same name, include online abstracts.

Subject Coverage:

- Accounting
- Decision Science
- Economics
- Finance
- Government & Public Administration
- Industrial Relations
- Management
- Managerial Economics
- Marketing
- Operations Research
- Personnel
- Production

Major Sources:

MANAGEMENT CONTENTS provides access to approximately 300 U.S. and non-U.S. English-language journals, proceedings, and transactions. All articles from these publications, excepting book reviews and letters to the editor, are indexed and abstracted for inclusion in the file. Beginning in mid-1980, MANAGEMENT CONTENTS will also include books.

File Data:

Inclusive Dates: September 1974 to the present
 Update Frequency: Monthly (approximately ,4000 records per update)
 File Size: 85,000 Records, June, 1981

Sample Question: (421112)

Provide client with data and information that relates organizational size to cost efficiency, also known as complexity or diseconomies of scale.

Search Strategy:

Concept I

- Complexity of Scale
- Complexity of Size
- Diseconomy of Scale
- Diseconomy of Size
- Management of Complexity

Sample Search Results:

A REEXAMINATION OF THE RELATIONS BETWEEN SIZE AND VARIOUS COMPONENTS ORGANIZATIONAL COMPLEXITY.

BEYER, J.M.; HARRISON, T.M.

ADMINISTRATIVE SCIENCE QUARTERLY, VOL.24, NO.1, MARCH 1979, P. 48-64
BIBLIOG. 36

THE AUTHORS STUDY GOVERNMENT ORGANIZATIONS IN ORDER TO EXAMINE RECENT FINDINGS DEALING WITH RELATIONS BETWEEN SIZE AND VARIOUS COMPONENTS OF ORGANIZATIONAL COMPLEXITY. SIZE AND TECHNOLOGY FACTORS ARE ASSUMED TO BE POSSIBLE REASONS FOR DIFFERENCES IN THE FINDINGS OF THE TWO STUDIES. CAUSE OF ORGANIZATIONAL STRUCTURE DIFFERENCES ARE ANALYZED..

Descriptors: BUREAUCRACY; FEDERAL GOVERNMENT; GOVERNMENT AGENCY MANAGEMENT; ORGANIZATION STRUCTURE; ORGANIZATIONAL BEHAVIOR; SPECIALIZATION; TECHNOLOGY; 0099; 0785; 0976; 0605; 0453; 0933; 0291; 0433

13/5/6

129567 IJP7770188

PDM COMMUNICATIONS: THE DISECONOMIES OF LARGE SCALE DISTRIBUTION.

CHRISTOPHER, M.

INTERNATIONAL JOURNAL OF PHYSICAL DISTRIBUTION, VOL.7, NO.3, 1977, P. 188-192. BIBLIOG. 3

DUE TO HIGH DISTRIBUTION COSTS, THE RATIO OF THESE COSTS TO MANUFACTURING COSTS HAS SHIFTED DRASTICALLY. THEREFORE, THE TENDENCY FOR COMPANIES TO DECENTRALIZE IS INCREASING SINCE THE SAVINGS OF MASS PRODUCTION ARE NOT GREAT ENOUGH..

Descriptors: COST SAVING; DECENTRALIZATION; MARKETING; MANAGEMENT DISTRIBUTION CHANNELS; DISTRIBUTION; MASS PRODUCTION; PRODUCTION; SHIPPING SCALE ECONOMIES; 0615; 0492; 0601; 0605; 0737; 0680; 0600; 0463; 0634; 084

13/5/7

122181 MAC76M0005

ECONOMIES OF SCALE: A PRIMER.

LLOYD, B.

MERGERS AND ACQUISITIONS, VOL.10, NO.4, WINTER 1976, P. 5-14. BIBLIOG. 50
DISECONOMIES OF SCALE MAY OUTWEIGH THE ECONOMIES IN MERGERS. BOTH ARE DISCUSSED. GENERAL TOPICS-ECONOMIES OF LARGE DIMENSIONS, THE LAW OF MULTIPLES, MASSED RESERVES, SPECIALIZATION, MANAGEMENT ECONOMIES, MARKET ECONOMIES, FINANCIAL ECONOMIES..

Descriptors: SCALE ECONOMIES; MERGER; MANAGEMENT; 0845; 0605

173894 JFIS0F0769

ECONOMIES OF SCALE IN CREDIT UNIONS: FURTHER EVIDENCE.

WOLKEN, J.D.; NAVRATIL, F.J.

JOURNAL OF FINANCE, VOL.35, NO.3, JUNE 1980, P. 769-777, BIBLIOG. 10, JOURNAL.

CONTRARY TO MOST FINANCIAL INSTITUTIONS, CREDIT UNIONS UNDERGO DISECONOMIES OF SCALE ACCORDING TO PROFESSORS KOOT AND FLANNERY. THIS THEORY IS PROVEN TO BE INCORRECT. NEW STATISTICS ARE EMPLOYED TO TEST A REVISED THEORY WHICH REVEALS ECONOMIES OF SCALE IN CREDIT UNIONS..

Descriptors: CREDIT UNION; ECONOMIC THEORY; ECONOMICS; 0812; 0306; 0677

STAC



STATE TECHNOLOGY APPLICATIONS CENTER

NTIS

Supplier: Dialog, File 6

Description:

NTIS is produced by the National Technical Information Service (NTIS) of the U.S. Department of Commerce, the central source for the public sale and dissemination of U.S. government-sponsored research. The database consists of government-sponsored research, development, and engineering reports as well as other analyses prepared by government agencies, their contractors, or grantees. Included in this coverage are federally generated machine-readable data files and software, U.S. Government inventions available for licensing, federally generated translations, and reports prepared by non U.S. governments and exchanged with federal agencies. The NTIS database corresponds to several printed publications including Government Reports Announcements & Index (GRA&I) and twenty-six abstract newsletters such as Government Inventions for Licensing.

Subject Coverage:

- Administration & Management
- Aeronautics & Aerodynamics
- Agriculture and Food
- Astronomy and Astrophysics
- Atmospheric Sciences
- Behavior and Society
- Biomedical Technology & Engineering
- Building Industry Technology
- Business and Economics
- Chemistry
- Civil Engineering
- Communication
- Computers, Control, & Information Theory
- Electrotechnology
- Energy
- Environmental Pollution & Control
- Health Planning
- Industrial & Mechanical Engineering
- Library & Information Sciences
- Materials Sciences
- Mathematical Sciences
- Medicine and Biology
- Military Sciences
- Natural Resources & Earth Sciences
- Navigation, Guidance, and Control
- Nuclear Science and Technology
- Ocean Technology and Engineering
- Physics
- Space Technology
- Transportation
- Urban and Regional Technology

Major Sources:

The NTIS database represents the reports of over 300 federal government agencies.

File Data:

Inclusive Dates: 1964 to the present
 Update Frequency: Biweekly (approximately 5,000 records per month)
 File Size: 825,000 Records, June, 1981

Sample Question: (220141)

Provide the client with information on formaldehyde and it's relationship to wall board, press board, particle board, and paper board together with the toxicity effects of formaldehyde.

Search Strategy:Concept I

Formaldehyde

Concept II

Fiber Board
Particle Board
Paper Board

Concept III

Toxic Diseases
Toxicity
Toxic Tolerances
Toxicology

Sample Search Results:

Irritant Effects of Industrial Chemicals: Formaldehyde

Pacific Environmental Services, Inc., Santa Monica, Calif. • Southern California Research Inst., Los Angeles. • National Inst. for Occupational Safety and Health, Cincinnati, Ohio. Div. of Biomedical and Behavioral Science.

Final rept.

AUTHOR: Wayne, Lowell G.; Bryan, Robert J.; Ziedman, Kenneth
EO324J2 Fld: 6J, 6T, 57U, 57Y, 94D, 68G GRAI7804
Jul 75 140p

Contract: PHS-CDC-99-74-21

Monitor: DHEW/PUB/NIOSH-77/117

Preparation in cooperation with Southern California Research Inst., Los Angeles.

Abstract: Eighteen plants were visited to ascertain the extent of formaldehyde exposure; three were selected for in-depth industrial hygiene workups. Formaldehyde levels in the garment apparel plant ranged between 0.2 and 0.8 ppm, while average levels in two wood products plants ranged between 0.6 and 0.9 ppm. Workers in a large wood products plant underwent ophthalmologic examinations; medical histories were obtained, and eye irritation symptoms were ascertained. No relationships of eye disorders or symptoms to chronic formaldehyde exposure or work history were found. No acute effects of formaldehyde on performances on tests of visual acuity, depth perception, peripheral vision, accommodation, fixation, and color vision were found at formaldehyde levels which averaged 0.4 ppm.

Descriptors: *Formaldehyde, *Industrial hygiene, *Hazardous materials, Exposure, Toxicology, Industrial atmospheres, Concentration(Composition), Medical examination, Visual perception, Eye(Anatomy), Visual acuity, Tables(Data), Vapors, Standards, Environmental surveys, Ophthalmology

Identifiers: Environmental health, Irritant compounds, Air sampling, Air pollution effects(Humans), *Occupational safety and health, Woodworking industry, Toxic substances, Threshold limit values, Maximum permissible exposure level, Air quality, Garment industry, NIOSH

PB-274 187/45T NTIS Prices: PC A07/MF A01

STAC

 STATE TECHNOLOGY APPLICATIONS CENTER

PTS F&S INDEXES

Supplier: Dialog, Files 18, 98

Description:

The PTS F&S INDEXES, the central database in the Predicasts, Inc., series of files, include brief descriptive annotations covering a wide range of company, product, and industry information. File 18 includes records from 1976 to the present; File 98 is the backfile of F&S records from 1972 to 1975. The files cover domestic (U.S.), European, and other international materials and are equivalent to the following printed publications: Predicasts F&S of Corporate Change (corresponding to the FSD-F&S Domestic - subfile online), Predicasts F&S Index International (corresponding to the FSI - F&S International - subfile online, and Predicasts F&S Index Europe (corresponding to the FSE - F&S Europe - subfile online). Until early 1979 European coverage was included within the FSI subfile.

In addition, File 18 contains the Source Directory subfile, a listing of more than 4,500 publications which have been cited in the Predicasts series of databases.

Subject Coverage:

The F&S INDEXES databases contain information on corporate acquisitions and mergers, new products, technological developments, and sociopolitical factors. They report on factors influencing future sales and earnings, such as price changes, government antitrust actions, sales and licensing agreements, and joint venture agreements. F&S also reports on new capacity additions by company, and factors affecting future product demand, end uses, and production. Also covered are trends in business and finance, corporate management, and labor relations. General economic factors such as population, wages, consumer spending, business investment, and construction outlays are also included. Every country and industry is covered in detail - agriculture, mining, manufacturing, construction, transportation, utilities, trade, and service, as well as government, business, labor, and finance.

Major Sources:

Over 2,500 newspapers, trade journals, government documents, bank letters, prospectuses, and reports from around the world are surveyed regularly for business-related articles. In addition, information from news releases is added to the file.

File Data:

	<u>File 98</u>	<u>File 18</u>
Inclusive Dates:	1972-1975	1976 to the present
Update Frequency:	Closed File	Monthly (approx. 30,000 records per/month)
File Size:	561,921 records	1,200,000 Records, June, 1981

Sample Question: (420238)

Provide client with marketing and industrial statistics on the production and sale of fresh and frozen shrimp and fish in the United States.

Search Strategy:Concept I

Choose appropriate product code
Fresh and Frozen Packaged Fish, PC=2092
(Includes Shellfish)

Concept II

Shrimp
Fish

Sample Search Results:

1698083 #Qk Froz Fd 79/12/00 P 14 SRCE:004724 ABSTRACT:
525086 (1usa)
\$4bil worth of frozen fish & seafood shipped to institutions
in 1978; regional data included

1usa United States 2092300 Frozen Pkg Fish 631 Shipments

1692785 #Qk Froz Fd 79/07/00 P 53 SRCE:004724 (1usa)
Frozen fish mkt expects banner year with retail & restaurant
sales

1usa United States 5400000 Food Stores 654 Retail Sales
2092300

1692784 #Qk Froz Fd 79/07/00 P 53 SRCE:004724 (1usa)
Frozen fish mkt expects banner year with retail & restaurant
sales

1usa United States 2092300 Frozen Pkg Fish 650 Sales &
Consumption 5200000

1668069 #Super News 79/05/07 P 60 SRCE:008111 (1usa)
Seafood seen gaining in sales; cites beef prices, diet
concerns, consumer awareness

1usa United States 2092000 Fresh & Frozen Packaged Fish
650 Sales & Consumption 0912000

1667867 Qk Froz Fd 79/07/00 P 10 SRCE:004724 (1usa)
Seafood consumption rises 17% since 1970 to 13.4 lb/person
in 1978

1usa United States 2092000 Fresh & Frozen Packaged Fish
656 Consumption

NASA-FLORIDA



STATE TECHNOLOGY APPLICATIONS CENTER

PTS PROMT

Supplier: Dialog, File 16Description:

Contains citations and abstracts of the worldwide business literature on new products, acquisitions, capacities, end uses, market data, technology, production, environment, foreign trade, and regulations for major industries. Includes sales and income by product line or division from annual reports of the Fortune 1000 industrial companies and the Fortune 300 non-industrial companies. Industry concentration ratios from the U.S. Census Bureau are also included. Corresponds to the printed PROMT (PRedicasts Overview of Markets and Technology) and includes information from the following Predicasts newsletters: Technical Survey, Financial Ideas, and Marketing Ideas.

Subject Coverage:

The PTS PROMT database provides information affecting markets for products. Topics covered include new technology, acquisitions and mergers, capacities, market data, new products and processes and production. Products and services covered include:

- Agriculture, Forestry, Fisheries
- Apparel & Related Products
- Chemicals and Allied Products
- Communications
- Construction
- Electric/Electronic Machinery and Equipment
- Financial Services
- Food and Kindred Products
- Furniture
- Governments
- Instruments and Related Products
- Leather and Products
- Medical and Health Services
- Membership Organizations
- Metals & Fabricated Metal Products
- Mining and Extractive Industries
- Ordnance
- Other Kinds of Manufacturing
- Paper & Allied Products
- Petroleum and Energy Products
- Printing and Publishing
- Regional Trade & International Groups
- Rubber and Allied Products
- Sciences
- Service Industries
- Stone, Clay and Glass Products
- Textile Mill Products
- Tobacco Products
- Transportation
- Transport Equipment
- Wholesale and Retail Trade
- Wood and Wood Products

Major Sources:

Approximately 800 journals, studies, and prospectuses are indexed from worldwide sources.

File Data:

Inclusive Dates: 1972 to the present
 Update Frequency: Monthly (approximately 3,000 records per month)
 File Size: 350,000 Records, June, 1981

Sample Question: (520433)

Provide client with Marketing and Sales Information on the Quartz Crystal Devices Market in the United States

Search Strategy:Concept I

Product Codes
 36797 - Crystal Filters
 329852 - Quartz Crystals
 366215 - Mobile Radio Systems
 366216 - Mobile Transceivers

Concept II

Event Codes
 6 - Market Information
 65 - Sales and Consumption

Sample Search Results:

541809 Elec Busns 80/01 P51
 US crystals, filters & networks purchases (\$ mil)

	1978	1979	1980
Commerical	25	31	34
Consumer	32	33	32
Industrial	61	73	80
Military & space	117	131	145
Total	235	268	291

*1USA *United States *3679700 *Crystals, Filters & Related Devices *652 *sales

541808 Elec Busns 80/01 P51
 US crystals, filters & network purchases (\$ mil)

Type	1978	1979	1980
Active filters	11	14	16
Lumped cnst & crystal	88	97	103
EMI filters	63	75	85
Quartz:cystals & assem	61	68	72
Delay lines	12	14	15
Total	235	268	291

*1USA *United States *3679700 *Crystals, Filters & Related Devices *652 *sales

534372 Jrl Elec I 79/12 P68
 Japanese crystal oscillator demand totaled 138 mil units in 1979 worth Y31.179 bil (\$155.9 mil), vs 131.8 mil units worth Y32.959 bil in 1977. Producers have been suffering from dropping average prices triggered by competition on the home market; material costs have also been rising.

*9JPN *Japan *3679710 *Crystal Devices *651 *total demand

506967 Fin Times 79/09/18 PI
 World telecommunications market (\$ bil)

Type	1977	1982	1987
Switching	10.2	14.8	21.4
Trnsmisn & local dstbutn	10.9	16.1	23.4
Terminals	3.1	4.3	5.9
Mobile radios	2.3	3.4	5.0
Private systems	2.7	4.6	7.1
Other	1.2	1.9	2.5
Total	30.4	45.1	65.3

Source: Laurie, Millbank & Co



STANDARD & POOR'S NEWS

Supplier: Dialog, File 132

Description:

STANDARD & POOR'S NEWS provides extensive coverage, including financial reports, on the more than 9,000 companies in which there is any degree of public financial interest. The database is the equivalent of the printed Standard & Poor's Corporation Records Daily News and Cumulative News.

The abstracts found in STANDARD & POOR'S NEWS records vary in length and may be either textual or tabular in form.

Subject Coverage:

- Acquisition and Merger Activities
- Changes in Dividend Payments
- Sales of Securities (Public or Private, with Details of the Issue)
- Estimates of Sales, Capital and Research Expenditures
- Contract Awards
- Plants and Additions
- Lease Arrangements
- Joint Ventures
- Price Increases
- Disposition of Assets
- New Products
- Changes in Domicile
- Exchange Offers
- Standard & Poor's Ratings
- Financial Statements (including Annual Reports, Estimated Annual Earnings, Current Position, Interim Earnings, and Pro-Forma Reports)

Major Sources:

Sources of information include leading newspapers; the Dow Jones, Reuters, Business Wire, and PR Newswire ticker services; releases issued by the company itself or its public relations house; all reports issued to stockholders and the regulatory body to which the company reports (SEC, ICC, CAB, FCC, FERC, etc.); and releases from stock exchanges and regulatory bodies.

File Data:

Inclusive Dates:	September 1979 to the present
Update Frequency:	Weekly (approximately 1,700 records per update)
File Size:	Approximately 150,000 Records, July, 1981

NASA-FLORIDA



STATE TECHNOLOGY APPLICATIONS CENTER

TRADE OPPORTUNITIESSupplier: Dialog, Files 106, 107Description:

TRADE OPPORTUNITIES WEEKLY (File 107) contains live purchase requests by the international market for U.S. goods and services. This time-critical information is updated weekly and describes the specific products or services which foreign governments or companies want to purchase or represent. TRADE OPPORTUNITIES (File 106) contains the historical information taken quarterly from File 107 which can be effectively used for market analyses, indirect sales leads, and company information. The database corresponds to the printed publication TOP Bulletin.

Subject Coverage:

TRADE OPPORTUNITIES includes data on direct sales leads, overseas representation opportunities, and foreign government calls for tenders from more than 120 countries. Each record includes the type of opportunity, company or buyer, country of origin, date of information, description of opportunity (Specifications, quantities), and product codes based on the Standard Industrial Classification (SIC).

Major Sources:

The information in this file is collected and supplied to the U.S. Department of Commerce by U.S. Foreign Service officers at 200 U.S. embassies and consular posts around the world. Such information comes to the attention of the Foreign Service through direct contact with local business communities.

File Data:

Inclusive Dates: January 1977 to the present
 Update Frequency: Weekly for File 107; Quarterly for File 106
 File Size: 67,000 records as of June 1980

Sample Question:

Provide client with a list of foreign companies that import commercial fishing boats. Restrict area to portions of Central and South America.

Search Strategy:

Concept I - Choose Product Name, Shipbuilding and Repair. Product Code, PC = 3731

Concept II - Choose Business Name, Importer Business Code, BC - I

Concept III - Choose Geographic locations
 Mexico Honduras
 Guatemala Nicaragua
 British Honduras South America
 El Salvador

Sample Search Results:

118345 DATE: 790507 SURINAM DIRECT SALE TO END-USER
SHRIMP TRAWLERS. FIRM WANTS CIF PRICE QUOTATIONS, CATALOG &
TECHNICAL LITERATURE. CO. REF. - DE HAKRIN BANK NV DR SOPHIE
REDMONSTRAAT 13-15 PARAMARIBO. ..

WRITE TO --

DRS. R. PAHLADSING
PAHLADSING & ZONEN, N.V.
SARAMACCADOORSTEEK 8
PARAMARIBO, SURINAME
PLEASE SEND COPY YOUR RESPONSE TO -
EMBASSY OF THE UNITED STATES
PARAMARIBO, SURINAM
DEPT. OF STATE
WASHINGTON, D.C. 20521

PRODUCTS (SIC): 3731181 (\$3,000,000)
BUSINESS CODES : I (BN=IMPORTER);D (BN=DISTRIBUTOR);M
(BN=MANUFACTURER);
COUNTRY CODE : 315
TYPE OF OPPORTUNITY CODE : 101
NOTICE NUMBER : 070342

140337 DATE: 780322 ECUADOR OVERSEAS REPRESENTATION
COMMERCIAL FISHING BOATS. FIRM IS AT PRESENT INVOLVED IN
CULTIVATION OF SHRIMP, A PROJECT FINANCED BY INTER-AMERICAN
DEVELOPMENT BANK. HAS GOOD CONTACTS BOTH IN PRIVATE BUSINESS &
GOVT. WOULD LIKE TO EXPAND ITS AREA OF ENDEAVOR TO INCL.
REPRESENTING U.S. FIRMS IN SALE OF ALL KINDS OF MECHANICAL
EQUIP. FOR COMMERCIAL FISHING BOATS & FOR FISHING BOATS
THEMSELVES. CO. REF. RIGGS NATIONAL BANK, 1503 PENNSYLVANIA
AVE., N.W. WASHINGTON, D.C. 20005.

REPLY TO--

CONTRALMIRANTE EFRAIN PAREDES C. CRESPO
(RET), OWNER, XMAR
CASILLA 5619
GUAYAQUIL, ECUADOR
PLEASE SEND COPY YOUR RESPONSE TO--
EMBASSY OF THE UNITED STATES
QUITO, ECUADOR
COMMERCIAL SECTION
DEPARTMENT OF STATE
WASHINGTON, D.C. 20521

PRODUCTS (SIC): 3731327 (\$50,000)
BUSINESS CODES : I (BN=IMPORTER);A (BN=AGENT);D
(BN=DISTRIBUTOR);
COUNTRY CODE : 331
TYPE OF OPPORTUNITY CODE : 110
NOTICE NUMBER : 037360

APENDICE 9

Books and Materials

I. Small Business Management Series (Available from U.S. Small Business Administration)

1. An Employee Suggestion System for Small Companies
2. Cost Accounting for Small Manufacturing
3. Handbook of Small Business Finance
4. Ratio Analysis for Small Businesses
5. Practical Business Use of Government Statistics
6. Guides for Profit Planning
7. Profitable Community Relations for Small Businesses
8. Small Business and Government Research and Development
9. Management Audit for Small Manufacturers
10. Insurance and Risk Management for Small Businesses
11. Management Audit for Small Retailers
12. Financial Recordkeeping for Small Stores
13. Small Store Planning for Growth
14. Selecting Advertising Media - A Guide for Small Businesses
15. Franchise Index - Profile
16. Training Salesmen to Serve Industrial Markets
17. Financial control by Time-Absorption Analysis
18. Management Audit for Small Service Firms
19. Decision Points in Developing New Products
20. Management Audit for Small Construction Firms
21. Starting and Managing a Small Business of Your Own
22. Starting and Managing a Small Retail Music Store
23. Export Marketing for Smaller Firms
24. Managing for Profits
25. Buying and Selling a Small Business
26. Strengthening Small Business Management
27. Small Business Goes to College
28. Starting and Managing a Small Retail Music Store

II. Management Aids (Available from U.S. Small Business Administration)

A. Financial Management and Analysis:

1. The ABC's of Borrowing
2. What is the Best Selling Price?
3. Keep Pointed Toward Profit
4. Basic Budgets for Profit Planning
5. Pricing for Small Manufacturers
6. Cash Flow in a Small Plant
7. Credit and Collecting
8. Attacking Business Decision Problems with Breakeven Analysis
9. A venture Capital Primer for Small Businesses
10. Accounting Services for Small Service Firms
11. Analyze Your Records to Reduce Costs
12. Profit by Your Wholesalers' Services
13. Steps in Meeting Your Financial Obligations
14. Getting the Facts for Financial Reporting

15. Budgeting in a Small Business Firm
16. Sound Cash Management and Borrowing
17. Keeping Records in Small Businesses
18. Check List for Profit Watching
19. Simple Breakeven Analysis for Small Stores
20. Profit Pricing and Costing for Services

B. Planning

1. Locating or Relocating Your Business
2. Problems in Managing a Family Owned Business
3. The Equipment Replacement Decision
4. Finding a New Product for Your Company
5. Business Plan for Small Manufacturers
6. Business Plan for Small Construction Firms
7. Business Life Insurance
8. Planning and Goal Setting for Small Businesses
9. Fixing Production Mistakes
10. Setting Up a Quality Control System
11. Can You Make Money With Your Idea or Invention?
12. Can You Lease or Buy Equipment?
13. Can You Use a Minicomputer?
14. Check List for Going Into Business
15. Factors in Considering for Small Businesses
16. Insurance Checklist for Small Businesses
17. Business Plan for Retailers
18. Business Plan for Small Service Firms
19. Using a Traffic Study to Select a Retail Site
20. Store Location "Little Things" Mean A Lot
21. Thinking About Going Into Business?

C. General Management/Administration

1. Delegating Work and Responsibility
2. Management Checklist for a Family Business
3. Preventing Retail Theft
4. Stock Control for Small Stores
5. Reducing Shoplifting Losses
6. Preventing Burglary and Robbery Loss
7. Outwitting Bad-Check Passers
8. Preventing Embezzlement
9. ABC Method of Inventory Control
10. Are You Ready for Material Requirements Planning System?
11. Counting Inventory ROI
12. Evaluation of Inventory Management
13. Forecasting and Inventory Control for Small Manufacturers
14. Give Yourself an Inventory Checkup
15. Inventory Carrying Cost
16. Inventory Costs Flow Analysis
17. Practical Steps to Inventory Control
18. Profit-Oriented Techniques for Managing Independent Demand Inventories
19. Reduce Inventory Without Crippling Delivery

20. The Trouble With Stock Turns
21. Up Your Inventory Control
22. We Thought We were too Small for a Computer

D. Marketing

1. Measuring Sales Force Performance
2. Is the Independent Sales Agent for You?
3. Selling Products on Contingent
4. Tips on Getting More for Your Marketing Dollar
5. Developing New Accounts
6. Marketing Checklist for Small Retailers
7. A Pricing Checklist for Small Retailers
8. Improving Personal Selling in Small Retail Stores
9. Advertising Guidelines for Small Retail Firms
10. Signs in you Business
11. Plan Your Advertising Budget
12. Learning About Your Market
13. Do You Know the Results of Your Advertising?

E. Organization and Personnel

1. Checklist for Developing a Training Program
2. Pointers on Using Temporary-Help Services
3. Preventing Employee Thiefferage
4. Setting Up a Pay System
5. Staffing Your Store
6. Managing Employee Benefits

F. Legal and Government Affairs

1. Incorporating a Small Business
2. Selecting the Legal Structure for Your Business
3. Introduction to Patents

III. Small Business Techniques (Available from U.S. Small Business Administration)

1. Handcrafts
2. Home Business
3. Selling by Mail Order
4. Marketing Resource Procedures
5. Retailing
6. National Directory for Use in Marketing
7. Recordkeeping Systems - Small Store and Service Trade
8. Basic Library Reference Sources
9. Advertising - Retail Store
10. Retail Credit and Collection
11. Buying for Retail Stores
12. Personnel Management
13. Inventory Management
14. Purchasing for Owners of Small Plants
15. Training for Small Businesses
16. Financial Management

17. Manufacturing Management
18. Marketing for Small Business
19. New Product Development
20. Ideas into Dollars
21. Effective Business Communication

IV. Starting Out Series (Available from U.S. Small Business Administration)

1. Building Service Contracting
2. Radio-Television Repair Shop
3. Retail Florist
4. Franchised Businesses
5. Hardware Store or Home Centers
6. Sporting Goods Store
7. Drycleaning
8. Cosmetology
9. Pest Control
10. Marine Retailers
11. Retail Grocery Stores
12. Apparel Store
13. Pharmacies
14. Office Products
15. Interior Design Services
16. Fish Farming
17. Bicycles
18. Printing
19. The Bookstore
20. Home Furnishings
21. Ice Cream
22. Sewing Centers
23. Personnel Reference Services
24. Solar Energy
25. Breakeven Point for Independent Truckers

V. Systems for Use in Specific Retail and Service Trades

A. Appliance Dealers (Available from National Appliance & Radio TV Dealers Assn., 2 North Riverside Plaza, Chicago, Ill. 60606)

1. NARDA Simplified Bookkeeping System Instructions for Dealer Participants.
2. Dollartrak Systems for Appliance Dealers
3. Marcoin Business Services for Appliance Dealers
4. McBee Systems for Appliance Dealers
5. Safeguard Business Systems, Inc. For Appliance Dealers

B. Automobile Dealers (Available from U.S. Small Business Administration)

1. Dollartrak Systems for Automobile Dealers
2. McBee Systems for Automobile Dealers

C. Barber Shops (Available from U.S. Small Business Administration)

1. Binex Automated Business Systems for Barber Shops.
2. Columbia Bookkeeping System, Red Book for Barber Shops
3. Dollartrak Systems for Barber Shops
4. Dome Simplified Weekly Bookkeeping Record
5. Dome Simplified Monthly Bookkeeping Record
6. Ideal System: Barber Shop Bookkeeping and Tax Record
7. Johnson Systems for Barber Shops
8. Marcoin Systems and Business Services for Barber Shops
9. McBee Systems for Barber Shops

D. Bar and Restaurants (Available from Hampton Management Inc., P.O. Box 224, Greenville, L.I., N.Y. 11548)

1. Easy Bookkeeping Tax System: Bars and Restaurants. Eric J. Engelhardt.
2. Columbia Bookkeeping System, Blue Book or Red Book for Restaurants and Bars
3. Dollartrak Systems for Bars and Restaurants
4. Simplified Weekly Bookkeeping Record
5. Simplified Monthly Bookkeeping Record
6. Ideal Systems Tavern & Cafe Bookkeeping and Tax Record
7. Johnson Systems for Restaurants and Taverns
8. Marcoin Business Services for Bars and Restaurants
9. McBee Systems for Bars and Restaurants
10. Safeguard Business Systems, Inc. for Bars and Restaurants

E. Beauty Salons (Available from: Dome Publishing Company, Inc., The Dome Bldg., Providence R.I. 02903. Designed for National Hairdressers and Cosmetologists Assoc., Inc., 3510 Olive Street, St. Louis, Mo. 63103)

1. Columbia Bookkeeping System, Red Book for Beauty Salons
2. Dollartrak Systems for Beauty Salons
3. Dome Simplified Weekly Bookkeeping Record
4. Dome Simplified Monthly Bookkeeping Record
5. Easy Bookkeeping Tax System for Beauty Salons
6. Ideal System: Beauty Shops
7. Johnson Systems for Beauty Shops
8. Marcoin Systems and Business Services for Beauty Salons
9. McBee Systems for Beauty Salons
10. NHCA Simplified Weekly Business Record.
11. Safeguard Business Systems, Inc. for Beauty Salons
12. Simplified Master System - Beauty Shop. Simplified Business Services, Inc.

F. Building Contractors (Available from: Frank R. Walker Co., 5030 North Harlem Ave., Chicago, Ill. 60656)

1. Binex Automated Business System for Building Contractors
2. Blackburn Systems for Contractors' Job Analysis
3. Columbia Bookkeeping System, Blue Book for Building Contractors

- 9
4. Dollartrak System for Building Contractors
 5. Marcoin System and Business Services for Building Contractors
 6. McBee Systems for Building Contractors
 7. Safeguard Business Systems, Inc. for Building Contractors
 8. Simplified Master System - Simplified Business Services, Inc.
 9. Practical Bookkeeping and Accounting Systems for Contractors.

G. Dairy Farm (various sources)

1. Dollartrak Systems for Dairy Farms
2. Johnson Systems for Dairy Farmers
3. McBee Systems for Dairy Farms
4. Safeguard Business Systems, Inc. for Dairy Farms
5. Simplified Master System for Dairy Farms. Simplified Business Services, Inc.

H. Drug Stores (various sources)

1. Blackburn Systems for Drug Stores
2. Columbia Bookkeeping System, Blue Book for Drug Stores
3. Dollartrak Systems for Drug Stores
4. Easy Bookkeeping Tax System for Drug Stores
5. Marcoin Business Services for Drug Stores
6. McBee Systems for Drug Stores
7. Safeguard Business Systems, Inc. for Drug Stores

I. Dry Cleaner, Tailor and Dyers (various sources)

1. Dollartrak Systems
2. Easy Bookkeeping Tax System: Cleaners and Dyers
3. General Master System: Dry Cleaner or Tailor
4. Marcoin Business Services for Dry Cleaners, Tailors and Dyers
5. McBee Systems for Dry Cleaners, Tailors and Dyers
6. Simplified Master System for Dry Cleaner or Tailor. Simplified Business Services, Inc.

J. Farm Ranch (various sources)

1. Blackburn Systems for Farmers and Ranchers
2. Columbia Bookkeeping System, Blue Book and Red Book for Farms
3. Dollartrak Systems for Farm and Ranch
4. Easy Bookkeeping Tax System: Farm and Ranch
5. Johnson Systems for Farm and Ranch
6. McBee Systems for Farm and Ranch
7. Safeguard Business Systems, Inc. for Farm and Ranch

K. Funeral Director (various sources)

1. Columbia Bookkeeping System, Blue and Red Books for Funeral Homes
2. Dollartrak Systems for Funeral Director
3. Marcoin Business Services for Funeral Directors
4. McBee Systems for Funeral Director
5. Safeguard Business Systems, Inc. for Funeral Director

6. Simplified Master Systems: Funeral Director. Simplified Business Services, Inc.
- L. Furniture Stores (Available from National Home Furnishings Association, 405 Merchandise Mart, Chicago, Ill. 60654)
1. Dollartrak Systems for Furniture Stores
 2. NRFA Uniform Accounting System.
 3. Marcoin Business Services for Furniture Stores
 4. McBee Systems for Furniture Stores
 5. Safeguard Business Systems, Inc. for Furniture Stores
- M. Garage or Auto Repair (various sources)
1. Columbia Bookkeeping System, Blue Book and Red Book for Garages
 2. Dollartrak Systems for Garage or Auto Repair
 3. Dome Simplified Weekly Bookkeeping Record. Dome Simplified Monthly Bookkeeping Record
 4. Marcoin Business Services for Garage and Auto Repairs
 5. McBee Systems for Garage and Auto Repair
 6. Safeguard Business Systems, Inc. for Garage or Auto Repair
 7. Simplified Master Systems: Garage or Auto Repair. Simplified Business Services
- N. Gift Shops (various sources)
1. Dollartrak Systems for Gift Shops
 2. Marcoin Business Services for Gift Shops
 3. McBee Systems for Gift Shops
 4. Safeguard Business Systems, Inc. for Gift Shops
- O. Grocery and Meat Stores (various sources)
1. Blackburn Systems for Grocery and Market Bkkpg.
 2. Dollartrak Systems for Grocery and Meat Stores
 3. Johnson Systems, Modern Merchant Bookkeeping for Grocers
 4. Marcoin Business Services for Grocery Stores
 5. McBee Systems for Grocery and Meat Stores
 6. Safeguard Business Systems, Inc. for Grocery and Meat Stores
- P. Hardware Stores (Available from: National Retail Hardware Association, 964 North Pennsylvania Street, Indianapolis, Indiana 46204)
1. Blackburn Systems for Hardlines Bkkpg.
 2. Dollartrak Systems for Hardware Stores
 3. Marcoin Business Services for Hardware Stores
 4. McBee Systems for Hardware Stores
 5. How to Keep Books without Being a Bookkeeper, and instruction manual covering recommended accounting system retail hardware stores.
 6. How to Keep Books Departmentally, instruction manual on departmental system.
 7. Safeguard Business Systems, Inc. for Hardware Stores

Q. Hotels (Available from: Hotel Association of New York City, Inc., 141 West 51st Street, New York, N.Y. 10019. 1977.)

- 1. Blackbourn Systems for Hotel Guest Register
- 2. Marcoin Business Services for Hotels
- 3. McBee Systems for Hotels
- 4. Simplified Master Systems for Hotels. Simplified Business Services, Inc.
- 5. Uniform System of Accounts for Hotels.

R. Jewelers and Watchmakers (various sources)

- 1. Dollartrak Systems for Jewelers and Watchmakers
- 2. Marcoin Business Services for Jewelers and Watchmakers
- 3. McBee Systems for Jewelers and Watchmakers
- 4. Modern Merchant Simplified Bookkeeping for Jewelers and Watchmakers
- 5. Safeguard Business Systems, Inc. for Jewelers and Watchmakers

S. Laundries (various sources)

- 1. Dollartrak Systems for Laundries
- 2. Easy Bookkeeping Tax System for Dry Cleaning and Coin-Op Laundries
- 3. Marcoin Business Services for Laundries
- 4. McBee Systems for Laundries
- 5. Safeguard Business Systems, Inc. for Laundries

T. Liquor Package Stores (various sources)

- 1. Blackbourn Bookkeeping Systems for Liquor Stores
- 2. Dollartrak Systems for Liquor Package Stores
- 3. Marcoin Business Services for Liquor Package Stores
- 4. McBee Systems for Liquor Package Stores
- 5. Safeguard Business Systems, Inc. for Liquor Package Stores
- 6. Simplified Master Systems. Simplified Business Services, Inc.

U. Men's Clothing and Furnishing Stores (Available from: National Clothier Corp., 1727 W. Devon, Chicago, Ill. 60660. 1977.)

- 1. Dollartrak Systems for Men's Clothing and Furnishing Stores
- 2. Inventory Systems: Store Supply Catalog.
- 3. McBee Systems for Men's Clothing and Furnishing Stores
- 4. Safeguard Business Systems, Inc. for Men's Clothing and Furnishing Stores

V. Motels and Motor Hotels (various sources)

- 1. An Account Book for Small Tourist and Resort Business. No. R-604. Robert W. McIntosh. 1953. Michigan State University, Tourist and Resort Service.
- 2. Blackbourn Motel & Resort Bookkeeping
- 3. Columbia Bookkeeping Systems, Blue Book and Red Book for Motels

4. Dollartrak Systems for Motels and Motor Hotels
5. Johnson Systems, Income Property Bookkeeping System for Motels
6. Marcoin Business Services for Motels
7. McBee Systems for Motels and Motor Hotels
8. Safeguard Business Systems, Inc. for Motels and Motor Hotels
9. Simplified Master Systems - Motels. Simplified Business Services, Inc.

W. Music Stores (Available from NAIM Standard Accounting Manual for Music Stores. National Association of Music Merchants, Inc., 35 East Wacker Dr., Chicago, Ill. 60601)

1. Dollartrak Systems for Music Stores
2. Marcoin Business Services for Music Stores
3. McBee Systems for Music Stores
4. Safeguard Business Systems, Inc. for Music Stores

X. Nursing Homes (various sources)

1. Blackburn Nursing Homes & Hospitals Book
2. Dollartrak Systems for Nursing Homes
3. Marcoin Business Services for Nursing Homes
4. McBee Systems for Nursing Homes
5. Safeguard Business Systems, Inc. for Nursing Homes
6. Simplified Master Systems - Nursing Homes. Simplified Business Services, Inc.

Y. Office Supply and Stationery Stores (various sources)

1. Dollartrak Systems for Office Supply and Stationery Stores
2. Marcoin Business Services for Office Supply and Stationery Stores
3. McBee Systems for Office Supply and Stationery Stores
4. Safeguard Business Systems, Inc. for Office Supply and Stationery Stores

Z₁. Pest Control (Available from: National Pest Control Association, 8150 Leesburg Pike, Vienna, VA 22180. 316)

1. Basic Bookkeeping System for Pest Control.
2. Dollartrak Systems for Pest Control
3. McBee Systems for Pest Control
4. Safeguard Business Systems, Inc. for Pest Control Association, 8150 Leesburg Pike, Vienna, VA 22180

Z₂. Photographers (various sources)

1. McBee Systems for Photographers
2. Marcoin Business Services for Photographers

- Z₃. Real Estate Business (Available from Record Dymo Visual Systems, Inc., P.O. Box 1568, Augusta, GA 30903)
1. Binex Automated Business System
 2. Blackburn Real Estate Bookkeeping
 3. Dollartrak Systems for Real Estate Business
 4. Ideal System: Real Estate Business Bookkeeping and Tax
 5. Johnson Systems for Income Property
 6. Marcoin Business Services for Real Estate Business
 7. McBee Systems for Real Estate Business
 8. Safeguard Business Systems, Inc. for Real Estate Business
- Z₄. Resorts and Tourist Business (various sources)
1. Account Book for Small Tourist and Resort Business
 2. Blackburn Hotel and Resort Bookkeeping
 3. Dollartrak Systems for Resorts and Tourist Business
 4. Johnson Systems for Resorts
 5. McBee Systems for Resorts and Tourist Business
 6. Safeguard Business Systems, Inc. for Resorts and Tourist Business
- Z₅. Shoe Repair Shops (Available from: Shoe Service Institute of America, 222 West Adams Street, Chicago, Ill. 60606.)
1. General Business Systems for Shoe Repair Shops
 2. Shoe Service Shop Bookkeeping System.
 3. Marcoin Business Services for Shoe Repair Shops
 4. McBee Systems for Shoe Shops
 5. Safeguard Business Systems, Inc. for Shoe Repair Shops.
- Z₆. Smaller Stores (Available from National Retail Merchants Association, 100 West 31st Street, New York, N.Y. 10001)
1. Merchandise Control and Budgeting.
 2. Retail Accounting - Revised.
 3. Retail Inventory Method Made Practical. 10001.
 4. Blackburn Smaller Varied Business Bookkeeping
 5. Dollartrak Systems for Smaller Stores
 6. McBee Systems for Smaller Stores
 7. Safeguard Business Systems, Inc. for Smaller Stores
- Z₇. Sporting Goods Dealers (various sources)
1. Dollartrak Systems for Sporting Goods Dealers
 2. Marcoin Business Services for Sporting Goods Dealers
 3. McBee Systems for Sporting Goods Dealers
 5. Safeguard Business Systems, Inc. for Sporting Goods Dealers
- Z₈. Television and Radio Sales and Service (various sources)
1. Dollartrak Systems for Television and Radio
 2. Johnson Systems for Television and Radio Sales and Services
 3. Marcoin Business Services for TV and Radio

4. McBee Systems for Television and Radio
5. Safeguard Business Systems, Inc. for Television and Radio Sales and Service
6. Safeguard Business Systems, Inc. for Television and Radio

Z₉. Truckers and Motor Carriers (various sources)

1. Blackburn Truckers' Bookkeeping
2. Marcoin Business Services for Truckers and Motor Carriers
3. McBee Systems for Truckers and Motor Carriers
4. Safeguard Business Systems, Inc. for Truckers and Motor Carriers
5. Simplified Master Systems - Trucking. Simplified Business Services, Inc.

VI. Inventory Management (Book publishers and authors are as indicated).

1. Allyn and Bacon, Inc., College Division, Rockleigh, NJ 07647
 - a. Basic Inventory Systems: Concepts and Analysis. R. Stansbury Stockton. 1965.
2. American Management Associations, 135 West 50th Street, New York, NY 10020
 - a. Inventory and Profit. John P. D'Anna. 1966.
3. American Production and Inventory Control Society, 2600 Virginia Avenue NW, Washington, DC 20037
 - a. Case Studies in Materials Requirements Planning. Edward W. Davis. 1978.
 - b. Master Production Scheduling: Principles and Practice. W. L. Berry, T. E. Vollman and D. C. Whybark. 1979.
4. Cahners Publishing Company, 89 Franklin Street, Boston, MA 02116
 - a. Physical Distribution Case Studies. Jack W. Farrell, 1973.
 - b. Production and Inventory Management in the Computer Age. Oliver W. Wright. 1974.
 - c. Successful Stock Control by Manual Systems. Peter Baily. 1973.
5. Chandler Publishing Company, Oak Street and Pawnee Avenue, Scranton, PA 18512
 - a. Inventory Management: Installation, Operations, and Control. Norbett L. Enrick. 1979.
6. Gordon and Breach Science Publishers, Inc., 440 Park Avenue South, New York, NY 10016
 - a. Industrial Inventory Control. Arnold Resiman, Burton V. Dean, Michael S. Salvador, and Oral Muhittin. 1972.
7. Holden-Day, Inc., 500 Sansome Street, San Francisco, CA 94111
 - a. Production Operations, Planning, and Control: Text and Cases. J. L. Colley, Jr., R. D. Landel and R. R. Fair. 1977.
8. Holt, Rinehart and Winston, Inc., 383 Madison Avenue, New York, NY 10017
 - a. Decision Rules for Inventory Management. Robert G. Brown. 1967.

- 13
9. Houghton Mifflin, 2 Park Street, Boston, MA 02107
 - a. Operations Management: A Systems Concept. Richard A. Johnson, William T. Newell and Roger C. Virgin. 1972.
 10. Richard D. Irwin, Inc., 1818 Ridge Road, Homewood, IL 60430
 - a. Modern Retailing Management. D. D. Duncan, C. F. Phillips and S. C. Hollander. 1972.
 - b. Production and Operations Management: A Life Cycle Approach. Richard B. Chase and Niccolas J. Aquilano. 1973.
 - c. Production-Inventory Systems: Planning and Control. E. S. Buffa and I. G. Miller. 1979. 3rd Edition.
 11. MacMillan Company, 866 Third Avenue, New York, NY 10022
 - a. Logistical Management. Donald J. Bowersox. 1974.
 - b. Retailing: Concepts, Institutions, and Management. R. J. Markin, Jr. 1971.
 12. McGraw-Hill Company, Inc., 1221 Avenue of the Americas, New York, NY 10036.
 - a. Materials Requirements Management. Joseph Orlicky. 1975.
 - b. Physical Distribution Systems. John F. Magee. 1967.
 - c. Production/Operations Management: Contemporary Policy for Managing Operations Systems. Richard I. Lavin, et al. 1972.
 - d. Production Planning and Inventory Control. John F. Magee and David M. Boodman. 1967.
 13. National Council of Physical Distribution Management, 2803 Butterfield Road, Oak Brook, IL 60521
 - a. The Development of an Inventory Costing Methodology. Douglas M. Lambert. 1976.
 14. National Retail Merchants Association, 100 West 31st Street, New York, NY 10001
 - a. Retailer's Guide to Merchandise Classification Control. Albert I. Schott and Herbert A. Turesky. 1969.
 15. Prentice-Hall, Inc., Englewood Cliffs, NJ 07632
 - a. Business Logistics Management. Ronald H. Ballou. 1973.
 - b. Efficient Inventory Control and Management with EDP. Jack Horn, editor. 1970.
 - c. How to Control and Reduce Inventory. B. Lipman. 1972.
 - d. Manufacturing Control: The Last Frontier for Profits. George W. Plossl. 1973.
 - e. Operations Management. Martin K. Starr. 1978.
 - f. Production and Operations Management: Concepts, Models, and Behavior. E. E. Adams and R. S. Ebert. 1978.
 - g. Retail Strategy and Structure: A Management Approach. David J. Rachman. 1969.
 16. Reston Publishing Company, 11484 Sunset Hills Road, Reston, VA 22090
 17. The Role of Top Management in the Control of Inventory. George W. Plossl and E. V. Welch. 1979.
 - a. Ronald Press Company, 79 Madison Avenue, New York, NY 10016
 - b. Business Logistics: Physical Distribution and Materials Management. James L. Heskett, Nicholas A. Laskowsky and Robert M. Ivie. 1973.

18. Southwestern Publishing Company, 5101 Madison Road, Cincinnati, OH 45227
 - a. Small Business Management. A. N. Broom and Justin G. Logenecker. 1971.
19. Wadsworth Publishing Company, 10 Davis Drive, Belmont, CA 92103
 - a. Production: Management and Manufacturing Systems. Thomas R. Hoffman. 1971.
20. John Wiley and Sons, Inc., 605 Third Avenue, New York, NY 10016
 - a. Decision Systems for Inventory Management and Production Planning. Rein Peterson and E. A. Silver. 1979.

VII. Manufacturing Management: Texts and References

A. General Texts and References

1. Irwin, Richard D., Inc., 1818 Ridge Road, Homewood, IL 60430
 - a. Operations Management: Text and Cases. Marshall, P., et al. 1975.
 - b. Production and Operations Management. Chase, R. B. and N. J. Aquilano. 1977. Revised edition. A general text.
2. McGraw-Hill Book Company, 1221 Avenue of the Americas, New York, NY 10020
 - a. Handbook of Modern Manufacturing Management. Maynard, H. B. 1970. General reference handbook.
3. Western Reserve Press, 3530 Warrenville Center Road, Cleveland, OH 44122
 - a. Handbook for Manufacturing Entrepreneurs. Morrison, R. S. 1973.
4. Wiley, John & Sons, Inc., 605 Third Avenue, New York, NY 10016
 - a. Manufacturing in Corporate Strategy. Skinner, Wickhan. 1978.
 - b. Modern Production Management. Buffa, E. S. 1977.
 - c. Production Handbook. Carson, G. B. 1972.

B. Cost Control

1. Irwin, Richard D., Inc., 1818 Ridge Road, Homewood, IL 60430
 - a. Cost Accounting and Financial Control Systems. Dearden, John. 1973.
 - b. Management Control Systems. Anthony, R. and John Dearden. 1976.
 - c. Operations Cost Control. Anthony, R. N. and J. S. Hekimian. 1967.

C. Facilities and Equipment

1. Beekman Publishers, Inc., 38 Hicks Street, Brooklyn Heights, NY 11201
 - a. Control of Investment in New Manufacturing Facilities. Stallworthy, E. A. 1973. A review of investment analysis and project control techniques for new facilities
2. MacMillan Publishing Company, Inc., 866 Third Avenue, New York, NY 10022

- a. Facilities and Plant Engineering Handbook. Lewis, B. T. and J. P. Marron. 1974.
3. McGraw-Hill Book Company, Inc., 1221 Avenue of the Americas, New York, NY 10016
 - a. Techniques of Value Analysis and Engineering. Miles, L. D. 1972. Principles of design and value analysis.
4. Wiley, John & sons, Inc., 605 Third Avenue, New York, NY 10016
 - a. Principles of Engineering Economy. Grant, E. L. and W. G. Ireson. 1976. Chapters on judging the value of proposed capital investments.

D. Planning and Control

1. Cahners Books, 90 Franklin Street, Boston, MA 02110
 - a. Production and Inventory Management in the Computer Age. Wight, O. W. 1974.
2. Irwin, Richard D., Inc., 1818 Ridge Road, Homewood, IL 60430
 - a. Materials Management. Ammer, D. S. 1974.
 - b. Production Inventory Systems: Planning and Control. Buffa, E. and J. Miller. 3rd edition. 1979.
3. McGraw-Hill Book Company, Inc., 1221 Avenue of the Americas, New York, NY 10036
 - a. Material Requirements Planning. Orlicky, J. 1975.
4. Reston Publishing Company, Inc., Post Office Box 547, Reston, VA 22090
 - a. Manufacturing Control: The Last Frontier for Profits. Plossl, G. W. 1973.

E. Labor and Staffing

1. Irwin, Richard D., Inc., 1818 Ridge Road, Homewood, IL 60430
 - a. Economics of Labor Relations. Bloom, G. F. and H. R. Northrup. 7th ed. 1973.
 - b. Motion and Time Study. Neibel, B. W. 6th ed. 1977.
 - c. Work Design: A Systems Concept. Nadler, G. Rev. ed. 1970.
2. McGraw-Hill Book Company, Inc., 1221 Avenue of the Americas, New York, NY 10020
 - a. Labor-Management Relations. Mills, D. Quinn.

F. Quality Control

1. McGraw-Hill Book Company, Inc., 1221 Avenue of the Americas, New York, NY 10020
 - a. Quality Control Handbook. Juran, J. M. 1974.
2. Wiley, John & Sons, Inc., 605 Third Avenue, New York, NY 10016
 - a. Quality Control for Managers and Engineers. Kirkpatrick, E. G. 1970.

G. Organization and Management

1. Addison-Wesley Publishing Company, Inc., Jacob Way, Reading, MA 01867

- a. Developing Organizations: Diagnosis and Action. Lawrence, Paul and Jay Lorsch. 1980.
- b. Organization Design. Galbraith, Jay. 1977.
- c. Business Publications, Inc., 4347 South Hampton Road, Dallas, TX 75224
- d. Successful Small Business Management. Tate, C. E., Jr. et al. 1978.
2. Harper & Row Publishers, Inc., 10 East 53rd Street, New York, NY 10022
 - a. Management: Tasks, Responsibilities, Practices. Drucker, P. F. 1974.
3. Irwin, Richard D., Inc., 1818 Ridge Road, Homewood, IL 60430
 - a. Management of Industrial Enterprises. Owens, R. N. 1969.
 - b. Managing the Small Business. Steinmetz, L. L., et al. 1968.
4. McGraw-Hill Book Company, Inc., 1221 Avenue of the Americas, New York, NY 10036
 - a. Small Business Management: Concepts and Techniques for Improving Decisions. Petrof, V., et al. 1972.
 - b. Small Business Management Fundamentals. Steinhoff, D. 1978.
5. Prentice Hall, Inc., Englewood Cliffs, NJ 07632
 - a. Manufacturing Organization and Management. Amrine, H. T., et al. 1975.
 - b. The Operating Manager. Henderson, R. I. and W. W. Soujanen. 1974.
 - c. Personnel: The Human Problems of Management. Strauss, G. and L. R. Sayles, 1982.
6. Reprint Department, Harvard Business Review, Boston, Massachusetts 02163
 - a. Developing an Effective Organization Series: Number 21072
 - b. Small Business Series: Part 1, Number 21185
 - c. Small Business Series: Part 11, Number 21186
 - d. Small Business Series: Part 111, Number 21187
 - e. Motivation Series: Number 21137
 - f. Performance Appraisal Series: Number 21143
 - g. Personnel Management Series: Part 1, Number 21145
 - h. Personnel Management Series: Part 11, Number 21146
 - i. Personnel Management Series: Part 111, Number 21147
 - j. Renewing the Will to Work: Number 21168
 - k. Inventory Policy Series: Number 21100
 - l. Production Management Series: Part 1, Number 21165
 - m. Production Management Series: Part 11, Number 21166
 - n. Production Management Series: Part 111, Number 21164

VIII. Financial Management: Publications and References

1. Addison-Wesley Publishing Company, Reading, Massachusetts 01867
 - a. Finance and Accounting for Non-Financial Managers. Droms, William G. 1979.
2. Allyn and Bacon, Inc., 470 Atlantic Avenue, Boston, Massachusetts 02210
 - a. Financial Management: A Capital Market Approach. Clark, John J., Margaret T. Clark and Peter T. Elgers. 1976.

3. Business Publications, Inc., 13773 North Central Expressway, Dallas, Texas 75231
 - a. Business Financial Management. Engler, George N.
4. Goodyear Publishing Company, P.O. Box 2113, Santa Monica, California 90401
 - a. An Introduction to Financial Management. Solomon, Ezra and John J. Pringle. 1977.
5. GRID Publishing, 4666 Indianola Avenue, Columbus, Ohio 43214
 - a. Financial Management: Self-Correcting Problems. Osteryoung, Jerome S.
 - b. Financial Management: Analytical Techniques. Wright, Leonard. 1974.
 - c. Capital Budgeting: Long Term Asset Selection. Osteryoung, Jerome S. 1979.
6. Harper and Row Publishers, 10 East 53rd Street, New York, New York 10022
 - a. Finance: Environment and Decision. Christy, George and Peyton F. Roden. 1976.
 - b. Principles of Managerial Finance. Gitman, Lawrence J. 1979.
7. Holt, Rinehart and Winston, The Dryden Press, 383 Madison Avenue, New York, New York 10017
 - a. Essentials of Managerial Finance. Weston, J. Fred and Eugene F. Brigham. 5th ed. 1979.
 - b. Financial Administration. Kreps, Jr., Clifton H. and Richard F. Wacht. 1975.
 - c. Managerial Finance. Weston, J. Fred and Eugene F. Brigham. 6th ed. 1978.
 - d. Readings in Essentials of Managerial Finance. Brigham, Eugene F. 2nd ed. 1971.
8. Richard D. Irwin, 1818 Ridge Road, Homewood, Illinois 60430
 - a. Financial Statement Analysis: Theory, Application and Interpretation. Berstein, Leopold A. Revised ed. 1978.
 - b. Techniques of Financial Analysis. Helfert, Erich A. 1977
 - c. Foundations of Financial Management. Block, Stanley B. and Geoffrey A. Hirt. 1980.
 - d. Financing Business Firms. Wert, James E. and Glenn V. Henderson. 6th ed. 1979.
9. McGraw-Hill Book Company, 1221 Avenue of the Americas, New York, New York 10020
 - a. The Theory of Financial Decisions. Haley, Charles W. and Lawrence D. Schall. 1979.
10. Southwestern Publishing Company, 5101 Madison Road, Cincinnati, Ohio 45227
 - a. Frontiers of Financial Management. Serraino, William J., Surendra S. Singhvi, and Robert M. Soldofsky. 2nd ed. 1976.
11. West Publishing Company, 50 W. Kellogg Boulevard, P.O. Box 3526, St. Paul Minnesota
 - a. Managing New Enterprises. Buskirk, Richard H. and Percy J. Vaughn. 1976.

IX. Marketing for Small Business

A. General Marketing Books

1. Goodyear Publishing Company, 15115 Sunset Boulevard, Pacific Palisades, CA 90272
 - a. Marketing Principles. 2nd Ed. 1974. Enis, Ben M.
2. Houghton Mifflin Company, One Beacon Street, Boston, MA 02107
 - a. Marketing: Basic Concepts and Decisions. 1977. Pride, William M. and O. C. Ferrell.
3. Irwin, Richard D., 1818 Ridge Road, Homewood, IL 60430
 - a. Basic Marketing: A Managerial Approach. 5th ed. 1975. McCarthy, E. Jerome.
4. Prentice Hall, Inc., Englewood Cliffs, NJ 07602
 - a. Marketing Management: Analysis Planning and Control. Kitler Philip. 1980.

B. Small Business Books

1. Business Publications, Inc., 4347 So. Hampton Rd., Suite 210, Dallas, TX 75224
 - a. Successful Small Business Management. 1975. Tate, Curtis E., L. C. Megginson, C. R. Scott, and L. R. Trueblood
2. Houghton Mifflin Company, One Beacon Street, Boston, MA 02107
 - a. Small Business Management: A Guide to Entrepreneurship. 1977. Siropolis, Nicholas C.
3. McGraw-Hill Book Company, 1221 Avenue of the Americas, New York, NY 10036
 - a. Small Business Management Fundamentals. 2nd ed. 1978. Steinhoff, Dan.
4. Wadsworth Publishing Company, 10 Davis Drive, Belmont, CA 94002
 - a. Small Business Management: Essentials of Entrepreneurship. 1973. Klatt, Lawrence A.

C. Magazines and Journals

1. Advertising Age. Weekly. Crain Communications, 740 Rush St., Chicago, IL 60611. Weekly news of advertising agencies.
2. Business Week. Weekly. McGraw-Hill, 1221 Avenue of the Americas, New York, NY 10020
3. Industrial Marketing. Monthly. Crain Communications, 740 Rush St., Chicago, IL 60611
4. Journal of Retailing. Quarterly. New York University, 202 Tisch Hall, Washington Square, New York, NY 10003
5. Modern Packaging. Monthly. McGraw-Hill, 1221 Avenue of the Americas, New York, NY 10020
6. Progressive Grocer. Monthly. The Butterick Division, American Can Company, 708 Third Avenue, New York, NY 10017.
7. Sales and Marketing Management. Semimonthly. Sales and Marketing Management, Inc. 633 Third Ave., New York, NY 10017

X. Training for Small Business

A. General Training References

1. Addison-Wesley Publishing Company, Jacob Way, Reading, MA 01867
 - a. Approaches to Training and Development. Laird, Dugan. 1978.
 - b. Human Resource Development: The New Trainer's Guide. Donaldson, Les and Edward Scannell. 1978.
 - c. Management of Training, The: A Handbook for Training and Development Personnel. Otto, Calvin P. and Rollin O. Glaser. 1970.
 - d. Training for Results. Warren Malcolm. 1979.
2. American Management Associations (AMACOM), 135 West 50th Street, New York, NY 10020
 - a. Coaching, Learning and Action. Lovin, Bill C. and Emery R. Casstevens. 1971.
 - b. Managing, Training and Development Systems. Tracy, William R. 1974.
3. Brooks-Cole Publishing Company, 555 Abrego Street, Monterey, CA 93940
 - a. Training in Industry: The Management of Learning. Bass, Bernard M. and James A. Vaugh. 1966.
4. Bureau of National Affairs Press, 1231 25th Street, NW, Washington, DC 20037
 - a. Helping Employees Develop Job Skills: A Casebook of Training Approaches. Gardner, James. 1976.
5. Educational Technology Publications, 140 Sylvan Avenue, Englewood Cliffs, NJ 07632
 - a. Establishing a Training Function: A Guide for Management. Denova, Charles C. 1971
6. Fearon Pitman Publishers, 6 Davis Drive, Belmont, CA 94002
 - a. Analyzing Performance Problems or "You Really Oughta Wanna". Mager, Robert F. with Peter Pipe. 1976.
7. Gulf Publishing Company, P.O. Box 2608, Houston, TX 77001
 - a. The Adult Learner: A Neglected Species. Knowles, Malcolm. 2nd ed. 1978.
8. Learning Concepts, 2501 No. Lamar, Austin, TX 78705
 - a. Developing Human Resources. Nadler, Leonard. 2nd ed. 1979.
9. McGraw-Hill Book Company, 1221 Avenue of the Americas, New York, NY 10020
 - a. Training and Development Handbook. Craid, Robert L., editor. 2nd ed. 1976.
 - b. Assessment Supplement to Training and Development Handbook, 1978.
10. Van Nostrand Reinhold Company, 450 West 33rd Street, New York, NY 10001
 - a. Coaching for Improved Performance, Fournies, Ferdinand F. 1978.
11. Wiley, John and Sons, 605 Third Avenue, New York, NY 10016
 - a. Training in Business and Industry. McGehee, William and Paul W. Thayer. 1961.

B. Managing and Motivating Employees

1. American Management Associations (AMACOM), 135 West 50th Street, New York, NY 10020
 - a. Motivation and Productivity. Gellerman, Saul W. 1963.
2. Crowell, Thomas Y. Company, 521 Fifth Avenue, New York, NY 10003
 - a. Work and the Nature of Man. Herzberg, Frederick. 1966.
 - b. MBO II: A System of Managerial Leadership for the 80's. Odiorne, George S. 1979.
3. Gulf Publishing Company, P.O. Box 2609, Houston, TX 77001
 - a. The New Managerial Grid. Blake, Robert R. and Jane S. Mouton. 1978.
4. Harper and Row Publishers, 10 East 53rd Street, New York, NY 10022
 - a. Motivation and Personality. Maslow, Abraham H. 2d ed. 1970
5. Irvington Publications, 551 Fifth Avenue, New York, NY 10017
 - a. The Achievement Motive. McClelland, David C. and J. W. Atkinson. 1953. Reprint. 1976.
6. McGraw-Hill Book Company, 1221 Avenue of the Americas, New York, NY 10020
 - a. New Patterns of Management. Likert, Rensis. 1961.
 - b. The Human Side of Enterprise. McGregor, Douglas. 1960.
7. The Conference Board, 845 Third Avenue, New York, NY 10022
 - a. Behavioral Science: Concepts and Management Applications. Rush, Harold, M. T. Studies in Personnel Policy No. 216. 1969

C. Supervisory and Management Training Guides

1. Addison-Wesley Publishing Company, Reading, MA 01867
 - a. A Practical Guide for Supervisory Training and Development. Kirkpatrick, Donald L. 1971.
 - b. Dynamic Management Education. Zoll, Allen A. 2nd ed. 1969.
 - c. The Supervisor and On-The-Job Training. Broadwell, Martin M. 2nd ed. 1975
 - d. The Supervisor as an Instructor: A Guide for Classroom Training. Broadwell, Martin M. 3rd ed. 1978
2. American Management Associations (AMACOM), 135 West 50th Street, New York, NY 10020
 - a. Total Job Training: A Manual for the Working Manager. Stokes, Paul M. 1966.
 - b. Training: A Handbook for Line Managers. Proctor, John H. and William M. Thornton. 1961.
3. American Society for Training and Development, P.O. Box 5307, Madison WI 53705
 - a. Supervisory Training and Approaches and Methods. Compiled by Bradford B. Boyd. 1976.
4. Macmillan Publishing Company, 866 Third Avenue, New York, NY 10022
 - a. Training by Objectives: An Economic Approach to Management Training. Odiorne, George S. 1970.

5. McGraw-Hill Book Company, 1221 Avenue of the Americas, New York, NY 10020
 - a. What Every Supervisor Should Know. Bittel, Lester R. 3rd ed. 1974

D. Managing People in Smaller Organizations

1. American Management Associations (AMACOM), 135 West 50th Street, New York, NY 10020
 - a. Personnel Management for the Smaller Company: A Hands-On Manual. Roxe, Linda. 1979.
2. American Society for Training and Development, P.O. Box 5307, Madison, WI 53705
 - a. Management Training: Starting Up Training and Development Programs in Medium-Sized Corporations. Park, Colin. 1977
3. Thomas, Charles C. Publishers, 301-27 East Lawrence Avenue, Springfield, IL 62717
 - a. Training in the Small Department. Auten, James. 1973.
4. New York State School of Industrial and Labor Relations, Publications Division, 241 Research Bldg., Cornell University, Ithaca, NY 14853
 - a. Employee Training in Small Business Organizations. Button, William H. and William J. Wasmuth. 1964
5. Wiley, John and Sons, 605 Third Avenue, New York, NY 10016
 - a. People Management for Small Business. Seigel, William L. 1978

E. Special Subjects

1. American Management Associations (AMACOM), 135 West 50th Street, New York, NY 10020
 - a. Practical Interviewing. Bassett, Glenn A. 1965.
 - b. Write What You Mean. Weiss, Allen. 1977.
2. Devlin House, Medfield, MA 02155
 - a. Desk Guide to Communication. Anastasi, Thomas E. Rev. ed. 1976
3. Fearon Pitman Publishers, 6 Davis Drive, Belmont, CA 94002
 - a. Preparing Instructional Objectives. Mager, Robert F. 2nd ed. 1975
4. Gulf Publishing Company, P.O. Box 2608, Houston, TX 77001
 - a. The Small Meeting Planner. This, Leslie. 2nd ed. 1979.

XI. Retailing

A. General Retailing References

1. Dryden Press, 901 North Elm Street, Hinsdale, IL 61257
 - a. Retail Management. Marquardt, Raymond A. 1975.
2. Goodyear Publishing Company, 15115 Sunset Blvd., Pacific Palisades, CA 90272
 - a. Learning Experiences in Retailing: Text and Cases. Borgen, C. Winston. 1976.
3. Harcourt, Brace, Jovanovich, 757 3rd Avenue, New York, NY 10017

- a. Retailing Today. James, Don L., Bruce J. Walker and Michael J. Etzel. 1975.
- 4. Irwin, Richard D., Inc., 1818 Ridge Road, Homewood, IL 60430
 - a. Modern Retailing Management, Basic Concepts and Practices. Duncan, Delbert J., and Stanley C. Hollander. 9th ed. 1977.
 - b. Retail Management Problems. McGregor, C. H. and Paul C. Chakonas. 4th ed. 1970.
- 5. McGraw-Hill Book Company, Inc., 1221 Avenue of the Americas, New York, NY 10036
 - a. Retailing Management: A Planning Approach. Redinbaugh, Larry D. 1976.
- 6. Michigan State University, Bureau of Business and Economic Research, East Lansing, MI 48823
 - a. Restraints Upon Retail Competition. Hollander, Standley C. 1965.
- 7. National Retail Merchants Association, 100 West 31st St., New York, NY 10001
 - a. Retailing: Job Analysis and Job Evaluation. Laking, Jon. 1975.
- 8. New York Free Press, 866 3rd Avenue, New York, NY 10022
 - a. Retail Management Cases. Thompson, Donald L. 1969.
- 9. New York Free Press, 866 3rd Avenue, New York, NY 10022
 - a. Retail Management Cases. Thompson, Donald L. 1969.
- 10. Prentice Hall, Inc., Englewood Cliffs, NJ 07602
 - a. How to Organize and Operate a Small Business. Kelly, Pearce C., Kenneth Lawyer, and Clifford M. Baumbach. 4th ed. 1968.
 - b. Problems in Retail Merchandising. Wingate, John W., Elmer O. Schaller, and Robert W. Bell. 6th ed. 1973.
 - c. Retail Merchandise Management. Wingate, John W., Elmer O. Schaller, and F. Leonard Miller. 1972.
 - d. Retail Strategy and Structure. Rachman, David J. 1975.
 - e. The Franchise Boom. Kursh, Harry. Rev. ed. 1968
- 11. National Council for Small Business Management Development, University of Wisconsin Extension, 929 North 6th Street, Milwaukee, WI 53203
 - a. Small Business Information Sources (An Annotated Bibliography).
- 12. Wadsworth Publishing Company, Inc., 10 David Drive, Belmont, CA 94002
 - a. New Dimensions in Retailing. Ryans, John K., James H. Donnelly, Jr., and John M. Ivancevich, eds. 1970.
- 13. Wiley, John & Sons, Inc., One Wiley Drive, Somerset, NJ 73
 - a. Basic Retailing Text and Cases. Gist, Ronald R. 197.

B. Accounting and Control

- 1. Chain Store Age Books, 426 Park Avenue, New York, NY 10022
 - a. Security Control: External Theft. Curtis, Bob. 1971.
- 2. Irwin, Richard D., Inc., 1818 Ridge Road, Homewood, IL 60430
 - a. Accounting: A Programmed Text. Edwards, J. D., R. H. Hermanson, and R. F. Salmonson. 1974.
- 3. National Cash Register Company, South Main and K Streets, Dayton, OH 45409

- a. Expenses in Retail Business
- 4. National Retail Merchants Association, 100 West 31st St., New York, NY 10001
 - a. Retail Accounting Manual. 1962.
 - b. Retail Inventory Method Made Practical. 1971.
- 5. Prentice-Hall, Inc., Englewood Cliffs, NJ 07602
 - a. Portfolio of Accounting Systems for Small and Medium-sized Business, Revised by NSPA. 1977.
 - b. Problems in Retail Merchandising. 5th ed. 1961.
- 6. Van Nostrand-Reinhold, 450 West 33rd Street, New York, NY 10001
 - a. Loss Control: A Safety Guidebook for Trades and Services. Matwes, George J. and Helen. 1973.

C. Advertising, Sales Promotion, Display, and Public Relations

- 1. Association of Better Business Bureaus, 405 Lexington Avenue, New York, NY 10017
 - a. A Guide for Retail Advertising and Selling.
- 2. Fairchild Publications, Inc., 7 East 12th Street, New York, NY 10003
 - a. Advertising for Modern Retailers. Milton, Shirley T. 1974.
 - b. Fairchild's Book of Window Display. Joel, Shirley. 1973.
- 3. Irwin, Richard D., Inc., 1818 Ridge Road, Homewood, IL 60430
 - a. Advertising: Theory and Practice. Sandage, D. H. and Vernon Fryburger. 9th ed. 1975.
 - b. Public Relations: Principles, Cases, and Problems. Canfield, B. H. 6th ed. 1973.
- 4. National Retail Merchants Association, 100 West 31st Street, New York, NY 10001
 - a. Creative Display (S628). 1965.
 - b. Retail Advertising Copy: The How, The What, The Why. Ocko, J. Young. 1971.
 - c. The Secret of Good Retail Ads: A Handbook for Buyers and Their Bosses. Rosenbloom, M. A. and Judy Y. Ocko. 1974.
- 5. Prentice-Hall, Inc., Englewood Cliff, NJ 07602
 - a. Promotion, Advertising, Publicity, Personal Selling, Sales Promotion. Stanley, Richard E. 1977.
- 6. Scott Foresman, 1900 East Lake Avenue, Glenview, IL 60025
 - a. Advertising and Promotion for Retailing. Jacobs, Laurence. 1972.

D. Buying and Merchandising

- 1. MacMillan Company, 866 Third Avenue, New York, NY 10022
 - a. A Robinson-Patman Primer. Kitner, E. W. 1970.
- 2. National Cash Register Company, South Main and K Streets, Dayton, OH 45490
 - a. Merchandising and Open-to-Buy.
- 3. National Retail Merchants Associations, 100 West 31st Streets, New York, NY 10001
 - a. The Buyer's Manual. 1970.
 - b. Merchandising the Small Store.

- c. Principles of Profitable Importing. Zanetti, Giacomo. 1971.
- 4. Prentice-Hall, Inc., Englewood Cliffs, NJ 07602
 - a. Retail Merchandising Management. Wingate, J. W., Elmer O. Schaller, and F. Leonard Miller. 1972.
 - b. The Management of Retail Buying. Wingate, J. W. and J. S. Friedlander, 1963
- 5. Ronald Press Company, 79 Madison Avenue, New York, NY 10016
 - a. Mathematics of Retail Merchandising. Corbman, Bernard P. and Murray F. Krieger. 2nd ed. 1972.
 - b. Retailing Management. Davidson, Doody. 4th ed. 1975.
- 6. Wiley, John & Sons, Inc., One Wiley Drive, Somerset, NJ 08873
 - a. Inside the Fashion Business. Jeanette A. and Beatrice Judelle. 2nd ed. 1974.

E. Consumer Behavior

- 1. Holt, Rinehart, and Winston, Inc., 383 Madison Avenue, New York, Ny 10017
 - a. Consumer Behavior. Engel, James F., et al. 1973.
- 2. Irwin, Richard D., Inc., 1818 Ridge Road, Homewood, IL 60430
 - a. Consumer Behavior: An Integrated Framework. Walters, Charles Glen and Gordon W. Paul. 1970.
 - b. Theory in Marketing. 2nd ed. Cos, Reavis, Wroe Alderson, and S. J. Shapiro. 1964.
- 3. McGraw-Hill Book Company, Inc., 1221 Avenue of the Americas, New York, NY 10036
 - a. Handbook of Consumer Motivations. Ditcher, Ernest. 1964.
- 4. Prentice-Hall, Inc., Englewood Cliffs, NJ 07602
 - a. Marketing Management Analysis, Planning and Control. Kotler, Philip. 2nd ed. 1972.
 - b. Consumer Decision Processes. Nicosia, Francesco M. 1966.
- 5. Wiley, John & Sons, Inc., One Wiley Drive, Somerset, NJ 08873
 - a. The Theory of Buyer Behavior. Howard, John A. and Jagdish N. Sheth. 1969.

F. Credit Management

- 1. Irwin, Richard D., Inc., 1818 Ridge Road, Homewood, IL 60430
 - a. Consumer and Commercial Credit Management. Cole, R. H. 3rd ed. 1972.
 - b. Credit Management Handbook. Credit Research Foundation, ed. 1965.
- 2. Association of Credit Management, 475 Park Avenue South, New York, NY 10022
 - a. Credit Manual of Commercial Laws. Kholik, George. 1975.
 - b. How to Build Goodwill Through Credit Correspondence. Brock, Luther A. 1976.
- 3. National Retail Merchants Association, 100 West 31st Street, New York, NY 10001
 - a. Credit Management Yearbook (published annually).
 - b. Installment Credit and Credit Legislation.
 - c. Credit in the Branch Store.

G. Laws and Regulations

1. American Marketing Association, 222 South Riverside Plaza, Chicago, IL 60606
 - a. Buyers Liability Under the Robinson-Patmen Act: A Current Appraisal. Lawrence S. Tarpey, Sr., Journal of Marketing, January, 1972. pp. 38-42.
2. MacMillan Company, 866 Third Avenue, New York, NY 10022
 - a. A Primer on the Law of Deceptive Practices. Kinter, Earl W. 1971.
 - b. The Legal Environment of Business. Corley, Robert N. and Robert L. Black. 3rd ed. 1973.

H. Personnel Management

1. American Management Association, 135 West 50th Street, New York, NY 10020
 - a. Managers Must Lead. Killian, Ray. A. 1976.
2. Irwin, Richard D., Inc., 1818 Ridge Road, Homewood, IL 60430
 - a. Personnel Management. Jucius, Michael J. 7th ed. 1981.
3. McGraw-Hill Book Company, Inc., 1221 Avenue of the Americas, New York, NY 10036
 - a. Managing the New Generation in Business. Stroh, Thomas F. 1981.
4. Menswear Retailers of America, 529 14th Street, N.W., Washington, DC 20004
 - a. Extra Incentives for Retail Salespeople. Moses, Louis. 1972.
5. National Retail Merchants Association, 100 West 31st Street, New York, NY 10001
 - a. Optimizing Selling Floor Coverage. Daggett, R. V. 1973.
 - b. Retailer's Manual on Union Organizing.

I. Professional Salesmanship and Sales Management

1. Fairchild Publications, Inc., 7 East 12th Street, New York, NY 10003
 - a. Customers Don't Bite: Selling With Confidence. Steinberg, Jules. 1970.
2. Glencoe Press, Beverly Hills, CA 92000
 - a. Creative Salesmanship: Understanding Essentials. Hass, K. B. and John Ernest. 1969.
3. Holt, Reinhart, and Winston, Inc., 383 Madison Avenue, New York, NY 10017
 - a. Management of the Personal Selling Function. Goodman, Charles S. 1971.
4. McGraw-Hill Book Company, Inc., 1221 Avenue of the Americas, New York, NY 10036
 - a. Handbook of Consumer Motivation. Ditcher, Ernest. 1964.
 - b. Textbook of Salesmanship. Russell, Beach, Buskirk. 9th ed. 1974.
5. National Retail Merchants Association, 100 West 31st Street, New York, NY 10001
 - a. The Name of the Game is Sell. Gore. Bud. 1969.

6. Prentice-Hall, Inc., Englewood Cliffs, NJ 07602
 - a. Management By Objectives. Odiorne, G. S. 1969.
 - b. Secret of Closing Sales. Roth, Charles B. 1970.

J. Store Location

1. Addison-Wesley Publications, Inc., Reading, MA 01867
 - a. Guide to Store Location Research with Emphasis on Super Markets
2. National Retail Merchants Association 100 West 31st Street, New York, NY 10001
 - a. People, Profits, Places. Hoyt, Homer. 1969.
 - b. The Independent Retailer and the Shopping Center
3. Retail Hardware Research Foundation, 964 North Pennsylvania Street, Indianapolis, IN 46204
 - a. How to Evaluate Hardware Store Locations.
4. Van Nostrand-Reinhold, 450 West 33rd Street, New York, NY 10001
 - a. Geography, Marketing, and Urban Growth

XII. New Product Development (Articles appearing in journals as indicated)

A. Innovation and Creativity: Generating New Ideas

1. Gee, Sherman. The Role of Technology Transfer in Innovation, Research Management, Vol. 17 (November, 1974), pp. 31-36.
2. Gordon, Theodore J. Changing Technology and the Future of Marketing, The Conference Board, (December 1974), pp. 22-26.
3. Hardin, D. K. Late 1970's Will See the Death of Innovation, Advertising Age, Vol. 46 (July 21, 1975), pp. 1.
4. Hawkins, Del I. and Gerald G. Udell. Corporate Caution and Unsolicited New Product Ideas: A Survey of Corporate Waiver Requirements, Journal of the Patent Office Society, Vol. 88, No. 6 (June, 1976), pp. 375-388.
5. Holt, Knut. Generating Creativity, Ideas and Inventions - Information and Needs Analysis in Idea Generation, Research Management, Vol. 18 (May, 1975), pp. 24-27.
6. Hopkins, David S. The Roles of Project Teams and Venture Groups in New Product Development, Research Management, (January, 1975), pp. 7-12.
7. Myers, James H. Benefit Structure Analysis: A New Tool for Product Planning, Journal of Marketing, Vol. 40, No. 4 (October, 1976), pp. 23-32.
8. Shocker, Allan D. and V. Srinivasan. A Consumer-Based Methodology for the Identification of New Product Ideas, Management Science, Vol. 20(b) (February, 1974), pp. 921-937.
9. Udell, Gerald G., Kenneth O. Baker and Gerald S. Albaln. Creativity: Necessary but not Sufficient, Journal of Creative Behavior, Vol. 10, No. 2 (2nd quarter, 1976), pp. 92-103.
10. Udell, Gerald G. and Michael F. O'Neill, Technology Transfer: Encouraging the Non Corporate Inventor, Business Horizons, Vol. 20, No. 4 (August, 1977), pp. 40-45.

B. New Product Strategies

1. Assmus, Gert. NEWPROD: The Design and Implementation of a New Product Model, *Journal of Marketing*, Vol. 39, No. 1 (January, 1975), pp. 16-23.
2. Bennett, Keith W. Product Development - Mystery Vitamin for Growth, *Iron Age*, Vol. 214 (October 21, 1974). pp. 29-31.
3. Bogaty, Herman. Development of New Consumer Products - Ways to Improve Your Chances of success, *Research Management*, Vol. XVII (July, 1974), pp. 26-30.
4. Business Week Staff. The Squeeze on Product Mix, *Business Week*, (January 5, 1974), pp. 50-55.
5. Feinstein, William. Manufacturing the New Product: Methods and Control, *Drug and Cosmetic Industry*, Vol. 116 (May, 1975), pp. 38-41.
6. Gluck, Federick W. and Richard M. Foster. Managing Technological Change: A Box of Cigars for Brad, *Harvard Business Review*, Vol. 53 (September-October 1975), pp. 139-150.
7. Johnson, Michael L. Expanding Product Lines: A Winning Strategy, *Industry Week*, (February 4, 1974), pp. 38-42.
8. Mathey, C. J. New Approaches to the Management of Product Planning, *Research Management*, Vol. XIX, No. 6 (November 1976), pp. 13-18.
9. Tauber, Edward M. Discovering New Product Opportunities with Problem Inventory Analysis, *Journal of Marketing*, (January, 1975), pp. 67-70.
10. VonHipple, Eric A. Has A Customer Already Developed Your Next Product, *Sloan Management Review*, Vol. 18, No. 2 (Winter, 1977), pp. 63-74.

C. Market Assessment

1. Feldman, Laurence P. and Gary M. Armstrong. Identifying Buyers of a Major Automotive Innovation, *Journal of Marketing*, Vol. 39 (January, 1975). pp. 47-53.
2. McCarthy, Jack. How a Product Finds its Place, *Industrial Management*, vol. 4, (September, 1974), pp. 20-22.
3. Miles, Virginia. Avoid thos Errors in New Product Research, *Advertising Age*, (July 15, 1974), pp. 26, 54, 57, 60-61.
4. Montgomery, David B. New Product Distribution: an analysis of Supermarket Buyer Decisions, *Journal of Marketing Research*, Vol. 12 (August, 1975), pp. 255-64.
5. Tauber, Edward M. How Market Research Discourages Major Innovation, *Business Horizons*, (June, 1974), pp. 22-26.
6. Tauber, James M. Forecasting Sales Prior to Test Market, *Journal of Marketing*, Vol. 41, No. 1 (January, 1977), pp. 80-84.
7. Taylor, James W., John J. Houlahan, and Alan C. Gabriel. The Purchase Intention Question in New Product Development: A Field Test, *Journal of Marketing*, Vol. 39 (January, 1975), pp. 90-92.
8. Villani, Katheryn E. A. and Donald G. Morrison. A Method for Analyzing New Formulation Decisions, *Journal of Marketing Research*, Vol. XIII, No. 3 (August, 1976), pp. 283-288.

9. Yuspeh, Sonia. Diagnosis - The Handmaiden of Prediction, *Journal of Marketing*, Vol. 39 (January, 1975), pp. 87-89.

D. Product Liability

1. Goebel, John W. The Legal Implications of Strict Liability for Marketing - A Mini Course, in *Increasing Marketing Productivity and Conceptual and Methodological Foundations of Marketing*, Thomas V. Greer, ed. Chicago: American Marketing Association, (December 1973), pp. 435-436.
2. Kuhn, James P. How to Manage Product Safety, *Industry Week*, (April 22, 1974), pp. 53-59.
3. Kytte, Rayford P., Jr. Evaluation for Product Safety Prior to Marketing, in *Marketing's Contribution to the Firm and Society*, Ronald C. Curham, ed. Chicago: American Marketing Association Combined Proceedings, (1974), pp. 361-364.
4. Loudenback, Lynn J. and John W. Goebel. Marketing in the Age of Strict Liability, *Journal of Marketing*, Vol. 38 (January, 1974), pp. 62-66.
5. Loudenback, Lynn J. Marketing Involvement in Consumer Product Safety Programs, in *New Marketing for Social and Economic Progress and Marketing's Contributions to the Firm and to the Society*, Ronald C. Curham, ed. Chicago: American Marketing Association, (December, 1974), pp. 365-367.
6. Moss, Frank E. The Manufacturer's Role in Product Safety, *The Conference Board*, (April, 1974), pp. 30-32.
7. Schneider, Lawrence R. Product Safety Legislation, Old and New, *The Conference Board*, (April, 1974), pp. 32-37.
8. Sorensen, Howard C. Product Liability: The Consumer's Revolt, *Bests Review*, (property/liability ed.) Vol. 75 (September, 1974), pp. 38-48.
9. Varble, Dale L. Social and Environmental Consideration in New Product Development, *Journal of Marketing*, Vol. 36 (October, 1974), pp. 11-15.
10. Weinstein, Alfred, et al. *Product Liability*, Wiley-Interscience, 605 Third Ave., New York, NY 10016, 1978, \$19.50.

E. Small Business and the Independent Inventor

1. Crawford, C. Merle. Unsolicited Product Ideas - Handle With Care, *Research Management*, (January, 1975), pp. 19-24.
2. Hawkins, Del I. and Gerald G. Udell. Corporate Caution and Unsolicited New Product Ideas: A survey of Corporate Waiver Requirements, *Journal of the Patent Office Society*, (June, 1976), pp. 375-388.
3. Hlavacek, James, Brian H. Covey and John J. Biondo. The Small Business Technology to Marketing Power, *Harvard Business Review*, Vol. 55, No. 1 (January/February, 1977), pp. 106-116.
4. Schartz, Jules J. and Joel D. Goldhar. Some Ideas about 1-R 100 Winners as People and Some Thoughts about the Behavior of Innovators, *Industrial Research*, Vol. 17 (June, 1975), pp. 67-71.

5. Udell, Gerald G. The Essential Nature of the Idea Brokerage Function, *Journal of the Patent Office Society*, Vol. 57, No. 10 (October, 1975), pp. 642-658.

F. Patents

1. Murtha, William E. Inventive Spirit is alive and Well in U.S. Despite Calls for Caution, *Commerce Today*, Vol. 5 (July, 1975), pp. 9-11.
2. U.S. Department of Commerce, Patent and Trademarks Office, *Patents and Inventions: An Informal Aid for Inventors*, GPO, 1977, \$1.30, Stock Number 0304-00511.
3. U.S. Small Business Administration. *Ideas into Dollars: A Resource Guide for Inventors and Innovative Small Businesses*, Small Business Bibliography No. 91, 1981.

XIII. Handcrafts

A. The Handcraft Business

1. *Career Opportunities in Crafts*. Somer, Elyse. 1977. (Crown)
2. *Catalog Sources for Creative People*. Boyd, Margaret. 1980. (Barrington Press)
3. *Contemporary Crafts Market Place*. 1977. (American Crafts Council)
4. *The Crafts Business Encyclopedia*. Scott, Michael. 1977. (Harcourt Brace Jovanovich)
5. *1981 Craftworker's Market*. Edited by Lapin, Lynn. 1980. (Writer's Digest)
6. *Creative Cash - How to Sell Your Crafts, Needlework, Designs & Know-How*. Brabec, Barbara. (Barrington Press)
7. *The Handcrafts Business*. 1980. (Bank of America)
8. *How to Start and Run a Profitable Craft Business*. Ossin, Archie and Myrna. (Ossi Publication)
9. *How to Start Your Own Craft Business*. Genfan and Taetzch. 1974. (Watson-Guptill)
10. *Selling Your Crafts*. Nelson, Norbert N. 1967. (Van Nostrand Reinhold)
11. *Small Business Management*. Hailes, William and Hubbard, Raymond T. 1977. (Van Nostrand Reinhold)
12. *Teaching Needlecraft*. Cornelius, Rosemary; Doffek, Peg and Hardy, Sue. 1979. (Van Nostrand Reinhold)

B. Basketry

1. *Basketry of the Appalachian Mountains*. Stephenson, Sue H. 1977. (Watson-Guptill)
2. *Basketry Today*. Meilach, Dona Z. 1979. (Crown)
3. *Baskets & Beyond*. Coutts. 1977. (Watson-Guptill)
4. *Baskets as Textile Art*. Rossbach, Edward. 1973. (Van Nostrand Reinhold)
5. *Contemporary Basketry*. Robinson, Sharon. (Davis)
6. *Natural Basketry*. Hart. 1976. (Watson-Guptill)
7. *The Techniques of Basketry*. Harvey, Virginia. 1974 (Van Nostrand Reinhold)

8. Willow Spokes and Wickerwork. Stephens, Cleo M. 1975. (Stackpole)

C. Batik

1. The ABCs of Batik. Hersk, Bernadette. (Chilton)
2. Batik: Material, Techniques, Design. Nea, Sara. 1971. (Van Nostrand Reinhold)
3. Batik: New Look at an Ancient Art. Shaw, Jennifer and Robin. (Doubleday)
4. Batik Unlimited. Gibbs 1974. (Watson-Guptill)
5. Contemporary Batik and Tie-Dye. Meilach, Dona Z. 1973. (Crown)
6. Designing in Batik and Tie-Dye. Belfer, Nancy. 1972. (Davis)
7. The Dyer's Art: Ikat, Plangi, and Batik. Larsen, Solyom, Bronwen and Garrett. 1976. (Van Nostrand Reinhold)
8. Introducing Batik. Samuel. 1968. (Watson-Guptill)

D. Ceramics

1. The Art of Painting On Porcelain. Miserez-Schira, Georges. (Chilton)
2. Ceramic Formulas: The Complete Compendium. Conrad, John W. 1973. (Macmillan)
3. Ceramic Formulas: Book Two. Conrad, John W. 1980. (Macmillan)
4. Ceramics by Coil and Slab. Priolo, Joan and Anthony. (Sterling)
5. Clay: Hand Building. Sapiro, Maurice. 1979. (Davis)
6. Claywork: Form & Idea in Ceramic Design. Nigrosh, Leon. 1975. (Davis)
7. How to Make Pottery. Sanders. 1974. (Watson-Guptill)
8. Introduction to Handbuilt Pottery. Jolly 1974. (Watson-Guptill)
9. Kilns: Design, Construction and Operation. Rhodes, Daniel. (Chilton)
10. Low Fire: Other Ways to Work in Clay. Nigrosh, Leon. 1980. (Davis)
11. Making Pottery Without a Wheel. Ball, Carlton f. and Lovoos, Janice. 1965. (Van Nostrand Reinhold)
12. Porcelain: The Elite of Ceramics. Serfass, Ronald. 1980. (Crown)
13. A Potter's Book. Leach, Bernard. 1976. (Transatlantic Arts).
14. The Potter's Challenge. Leach, Bernard. 1975. (Dutton)
15. The Potter's Companion: The Complete Guide to Pottery Making. Birks, Tony. 1977. (Dutton)
16. A Potter's Guide to Raw Glazing and Oil Firing. Parks, Dennis. 1980. (Scribner's)
17. The Potter's Primer. Chroman, Eleanor. 1977. (Hawthorne)
18. Pottery: Creating With Clay. Zorza, Rosemary. (Doubleday)
19. Pottery Decorating. Shafer and Thomas. 1976. (Watson-Guptill).

- 20. Starting With Ceramics. Lessaman, Elizabeth. (Sterling)
- 21. Stoneware and Porcelain: The Art of High-Fired Pottery. Rhodes, Daniel. (Chilton)
- 22. Studio Porcelain. Lane, Peter. 1980. (Chilton)
- 23. Studio Potter Book. Williams, Gerry; Sabin, Peter and Bodine, Sarah. 1979. (Van Nostrand Reinhold)

E. Decorating Painting

- 1. Art of Painting on Glass. Elskus, Albinas. 1980. (Scribner's)
- 2. Decorative Tole Painting. Fraser, Kay. 1972. (Crown)
- 3. Decorating Techniques. Slayton, Mariette Paine. 1978. (Macmillan)
- 4. Ideas for Decoupage and Decoration. Larrimar, Betty. 1975. (Van Nostrand Reinhold)
- 5. Japanese Cut and Use Stencils. Menten, Ted. 1980. (Dover)
- 6. New Tole & Folk Art Designs: Painting Techniques & Patterns. Howard, Joyce. (Chilton)
- 7. Painting China & Porcelain. Southwell, Sheila. (Sterling)
- 8. Priscilla Hauser Book of Tole and Decorative Painting. Hauser, Priscilla. 1977. (Van Nostrand Reinhold)
- 9. Stenciling. Parry, Megan. 1977. (Van Nostrand Reinhold)

F. Design

- 1. An Art Nouveau Album. Torrence, Kathy. 1981. (Dutton)
- 2. Basic Principles of Design. Maier, Manfred. 1977. (Van Nostrand Reinhold)
- 3. Benedictus' Art Deco Designs in Color. Benedictus, Edouard. 1980. (Dover)
- 4. The Costumer's Handbook. Ingham, Rosemary and Covery, Elizabeth. 1980. (Prentice-Hall)
- 5. Design on Fabrics. Johnston, Meda Parker and Kaufman, Glen. 1967. (Van Nostrand Reinhold)
- 6. Design Sources for the Fiber Artist. Waller, Irene. 1978. (Davis)
- 7. Full-Collar Designs From Chinese Opera Costumes. Northeast Drama Institute, People's Republic of China. 1980. (Dover)
- 8. How to Create Your Own Designs: An Introduction to Color, Form, Composition. Meilach, Dona Z. and Hinz, Jay and Bill. (Doubleday)
- 9. The Nature and Aesthetics of Design. Pye, David. 1978. (Van Nostrand Reinhold)
- 10. George Nelson on Design. Nelson, George. 1979. (Watson-Guptill)
- 11. Ready-To-Use Floral Designs. Sibbett, Ed. 1980. (Dover)

G. Dollhouses and Miniatures

- 1. The Barbie Doll House. Spectre, Peter H. 1979. (Van Nostrand Reinhold)
- 2. The Book of Miniatures: Furniture and Accessories. Ruthberg, Helen. (Chilton)

3. Building Masterpiece Miniatures. Daniele, Joseph. 1980. (Stackpole)
4. Building Miniature Houses and Furniture. Krusz, Dorie. 1980. (Arco)
5. Furniture for Doll Houses & Miniature Rooms. Midkiff, Pat. (Sterling)
6. The Complete Book of Making Miniatures. Newman, Thelma and Merrill, Virginia. 1975. (Crown)
7. Contemporary Miniature Room Settings. Ruthberg, Helen. 1980. (Chilton)
8. Creating Ceramic Miniatures. Kenny, John and Carla. 1979. (Crown)
9. Dollhouse Construction and Restoration. Joyner, Nina Glenn. (Chilton)
10. Dollhouse Dolls. McCracken, Joann. 1980. (Chilton)
11. The Dollhouse Idea Book. Flick, Pauline and Jackson, Valerie. 1976. (Hawthorne)
12. Dollhouses & Dioramas. Schlicker, Robert. 1980. (Chilton)
13. Family Dolls' Houses. Greene, Vivian. 1973. (C. Branford)
14. Furnishing Dolls' Houses. Johnson, Audrey. 1975. (C. Branford)
15. How to Make Dolls' Houses. Johnson, Audrey. 1977. (C. Branford)
16. Make and Furnish Your Own Miniature Rooms. O'Brien, Mariane Maeve. 1976. (Hawthorne)
17. Make Your Own Dollhouses and Dollhouse Miniatures. O'Brien, Mariane Maeve. 1976. (Hawthorne)
18. Make Your Own Dolls' House. Cole, Christopher. 1976. (Van Nostrand Reinhold)
19. Miniature Needlepoint and Sewing Projects for Dollhouses. Falk, Kathryn. 1977. (Hawthorne)
20. Miniatures/Dollhouses - Reproducing Furniture in Miniature. Pipe, Ann Kimball. 1979. (Contemporary)
21. Miniature Room Settings. Ruthberg, Helen. (Chilton)
22. Needlepoint in Miniature. Kurten, Nancy. 1979. (Scribner's)
23. Ready-To-Use Victorian Dollhouse Wallpaper. Hendler, Muncie. 1980. (Dover)
24. "Remember When" Doll House. Jellison, Phyllis. 1978. (Van Nostrand Reinhold)

H. Dolls and Toys

1. The Art of Making Wooden Toys. Stevenson, Peter. (Chilton)
2. The Art of Making Cloth Toys. Roth, Charlene D. (Chilton)
3. The How-To Book of International Dolls. Holz, Loretta. (Crown)
4. Magic of Puppetry. Jenkins, Peggy Davison. 1980. (Prentice-Hall)
5. Making Original Dolls of Composition, Bisque and Porcelain. Roth, Charlene. 1980. (Crown)
6. Toys You Can Build. Maginley, C. J. 1977. (Hawthorne)
7. Trains and Toys and Planes and ...: Custom Building Wooden Toys. Maginley, C. J. 1980. (Hawthorne)

I. Dyeing and Spinning

1. Art & Technique of Handspinning. Fannin, Allen A. 1970. (Van Nostrand Reinhold)
2. Carding, Spinning and Dyeing. Hopee, Elizabeth and Edberg, Ragnar. 1975. (Van Nostrand Reinhold)
3. Dyes From Natural Sources. Dyer, Anne. 1975. (C. Branford)
4. Handspinning. Leadbeater, Elize. 1975. (C. Branford)
5. Hand Wool Combing and Spinning. Teal, Peter. (Sterling)
6. Vegetable Dyeing. Lesch. 1970. (Sterling)

J. Embroidery and Stitchery

1. Crewelwork. Landon, Mary Taylor and Swan, Susan B. 1976. (Macmillan)
2. An Anchor Manual of Needlework. 1975. (C. Branford)
3. Arco Encyclopedia of Embroidery Stitches. Butler, Anne. 1980. (Arco)
4. Art of Embroidery. Gostelow, Mary. 1979. (Dutton)
5. Crewel Embroidery. Francini, Audrey. 1979. (Van Nostrand Reinhold)
6. Embroidery. Harding, Mary. 1978. (Van Nostrand Reinhold)
7. Embroidery for the Church. Beese, Pat. 1974. (C. Branford)
8. Faces and Figures in Embroidery. Harding, Valerie. 1979. (C. Branford)
9. Mary Gostelow's Embroidery Book. Gostelow, Mary. 1979. (Dutton)
10. One Stitch Stitchery. Appell, Madeline. (Sterling)
11. Scrap Saver's Stitchery Book. Foose, Sandy. (Doubleday)
12. Scribner Book of Embroidery Designs. Baker, Muriel. 1979. (Scribner's)
13. Smocking: Technique, Projects and Designs. Durand, Diane. 1979. (Dover)
14. The Stitches of Creative Embroidery. Enthoven, Jacqueline. 1964. (Van Nostrand Reinhold)
15. Erica Wilson's Embroidery Book. Wilson, Erica. 1973. (Scribner's)

K. Furniture Making and Refinishing

1. Building Early American Furniture. Daniele, Joseph. (Stackpole)
2. Colonial Furniture Making for Every body. Shea, John G. 1964. (Van Nostrand Reinhold)
3. Creating Modern Furniture. Meilach, Dona Z. 1975. (Crown)
4. Encyclopedia of Furniture Making. Joyce, Ernest. (Sterling)
5. Furniture Designed by Architects. 1980. (Watson-Guptill)
6. Furniture Maker's Handbook. Family Handyman Magazine Editors. 1977. (Scribner's)
7. Furniture Refinishing at Home. Rev. ed. Joyner, Nina Glenn. (Chilton)
8. Guide to Furniture Refinishing and Antiquing. Editors of McGraw-Hill. 1980. (McGraw-Hill)
9. How to Make Colonial Furniture. Gottshall, Franklin H. 1980. (Macmillan)

10. Instant Furniture. Stamberg, Peter S. 1976. (Van Nostrand Reinhold)
11. Mission Furniture: How to Make It. Popular Mechanics Co. 1980. (Dover)
12. Professional Furniture Refinishing for the Amateur. Savage, Jessie D. 1980. (Arco)
13. Rattan Furniture: A Home Craftsman's guide. Alth, Max. 1975. (Hawthorne)
14. Reproducing Antique Furniture. Gottshall, Franklin. 1971. (Crown)
15. Woodworking & Furniture Making. Drotning, Jayne and Masotto, Rosemarie. 1979. (Contemporary)
16. Staining & Finishing Unfinished Furniture and Other Naked Woods. Grotz, George. (Doubleday)

L. Jewelry and Enameling

1. Beginning Jewelry. Warwick, James. 1979. (Scribner's)
2. Cast Pewter Jewelry. Kain, Jay. 1975. (Davis)
3. Cloisonne - The Art of Cloisonne Enameling and Jewelry Making. Liban, Felicia and Mitchell, Louise. 1980. (Chilton)
4. Crafting Turquoise Jewelry. Power, Bob and Barash, Marc. 1978. (Stackpole)
5. Creating Silver Jewelry With Beads. Seitz, Marianne. (Sterling)
6. Creative Gold and Silversmithing. Choate, Sharr. 1970. (Crown)
7. Creative Jewelry Making: Techniques for Craftsmen. Hemard, Larry. (Doubleday)
8. Designing Jewelry. Warwick, James. 1980. (Scribner's)
9. Jewelry as an Art Form. Brynner, Irena. 1979. (Van Nostrand Reinhold)
10. Jewelry - Basic Techniques and Design. Sprintzen, Alice. 1980. (Chilton)
11. Jewelry Making by the Lost Wax Process. Rev. ed. Pack, Greta. 1975. (Van Nostrand Reinhold)
12. Metal Jewelry Techniques. Dawson. 1976. (Watson-Guption)
13. Metalworking for Jewelry. McCreight, Tim. 1979. (Van Nostrand Reinhold)
14. Painting With Cold Enamel. Fromonteau, Albert J. (Sterling)
15. The Techniques of Enameling. Rev. ed. Clarke Geoffrey; Feher, Francis and IDA. 1977. (Van Nostrand Reinhold)

M. Glass

1. Art and Stained Glass: Assembly and Design. Lips, Claude. (Doubleday)
2. Artistry in Stained Glass: Assembly and Design. Lips, Claude. (Doubleday)
3. Creative Stained Glass. Rothenberg, Polly. 1973. (Crown)
4. Design for Stained Glass. French, Jennie. 1979. (Van Nostrand Reinhold)
5. Easy-To-Make Stained Glass Lampshades With Full-Size Templates. Sibbett, Ed. 1980. (Dover)

6. Glassblowing. Kulasiewicz. 1974. (Watson-Guptill)
7. Glass Craft: Designing Forming, Decorating. Kinney, Kay. (Chilton)
8. Glassforming: Glassmaking for the Craftsman. Schuler, Frederic and Lilli. (Chilton)
9. Glassworks. French, Jennie. 1974. (Van Nostrand Reinhold)
10. How to Work in Stained Glass. Isenberg, Anita and Seymour. (Chilton)
11. Leaded Glass. Alastair. 1976. (Watson-Guptill)
12. Stained Glass: Advanced Techniques & Projects. Isenberg, Anita and Seymour. (Chilton)
13. Stained Glass Crafting. Wood, Paul. (Sterling)
14. Stained Glass Lamps: Construction and Design. Isenberg, Anita and Seymour. (Chilton)
15. Stained Glass Painting. Isenberg, Anita and Seymour; and Millard, Richard. (Chilton)
16. Starting With Stained Glass. Wood, Paul. (Sterling)

N. Graphic Arts

1. The Complete Book of Calligraphy. Butterworth, Emma Macalik. 1980. (Harper and Row)
2. Graphic Arts Fundamentals. Walker, John. 1980. (Goodheart)
3. Graphic Design Manual. Hofmann, Armin. 1978. (Van Nostrand Reinhold)
4. Graphic Idea Notebook. White. 1980. (Watson-Guptill)
5. Learning Calligraphy: A Book of Lettering, Design and History. Shepherd, Margaret. 1978. (Macmillan)
6. Lettering. Cataldo, John. (Davis)
7. Manual of Graphic Techniques. Porter, Tom and Greenstreet, Robert. 1980. (Scribner's)
8. Pen Calligraphy. Cataldo, John. 1978. (Davis)
9. Photo Art Processes. Koekler-Howell, Nancy. 1980. (Davis)
10. Photo-Offset Lithography. Prust, Zeke. 1977. (Goodheart)
11. Studio Tips for Artists & Graphic Designers. Gray, Bill. (Van Nostrand Reinhold)

O. Leather

1. The Art of Working With Leather. Edwards, Steven M. (Chilton)
2. Leather as Art and Craft. Newman, Thelma. 1973. (Crown)
3. Latigo Leather. Genfan and Taetzch. 1976. (Watson-Guptill)
4. Leathercraft. Zimmerman, Fred. 1978. (Goodheart)
5. Leatherwork, Head. Hamilton, Ian. (Sterling)

P. Macrame

1. Do Your Own Thing With Macrame. LaBarge. 1973. (Watson-Guptill)
2. Far Beyond the Fringe. Andes, Eugene. 1973. (Van Nostrand Reinhold)
3. Fiber Expressions: Knotting and Looping. Rainey, Sarita. 1979. (Davis)

4. Macrame: The Art of Creative Knotting. Harvey, Virginia. 1967. (Van Nostrand Reinhold)
5. Macrame - The Craft of Knotting. Short, Jacqueline. (Sterling)
6. Macrame (Creative Knowting). Pesch, Imelda Manalo. (Sterling)
7. Macrame Gnomes and Puppets. Meilach, Dona Z. 1980. (Crown)
8. Magnificent Macrame. Solvit, Marie-Jeanine, (Sterling)
9. Practical Macrame. Andes, Eugene. 1971. (Van Nostrand Reinhold)

Q. Miscellaneous Handcrafts

1. Art From Many Hands. Schuman, Jo Miles. 1981. (Prentice-Hall)
2. Art of Collage. Brommer, Gerald. 1978. (Davis)
3. Beautiful Crafts Book. Editors of Sterling. (Sterling)
4. Cake Decorating for Any Occasion. Burbidge, Cite Bellefleur. (Chilton)
5. Cardcraft. Holtje, Adrienne and Bert. (Chilton)
6. Collecting American Craft Antiques. Ketchum, William C., Jr. 1980. (Dutton)
7. Crafts, Illustrated Designs and Techniques. Kicklighter, Clois, and Baird, Ronald. 1980. (Goodheart)
8. Creating an Interior. Levenson, Helene. 1980. (Prentice-Hall)
9. Creative Crafts. Jeffs, Angela. (Sterling)
10. Dough Creations: Food to Folk Art. Gardner, Pat and Gleason, Kay. (Chilton)
11. Easy-To-Make Candles. Buy, Gary Y. 1980. (Dover)
12. Fabric Collage. Ballarian, Anna. 1976. (Davis)
13. Giant Book of Crafts. Editors of Sterling. (Sterling)
14. How to Clothbind a Paperback Book. Kafka, Francis J. 1980. (Dover)
15. Knifecraft. Latham, Sid. 1978. (Stackpole)
16. Modern Welding. Althouse, Andrew; Turnquist, Carl and Bowditch, William. 1980. (Goodheart)
17. Outdoor Gear You Can Make Yourself. Lamoreaux, Bob and Marcia. (Stackpole)
18. Plastics. Cope, Dwight. 1978. (Goodheart)
19. Plastics as an Art Form. Rev. ed. Newman, Thelma R. (Chilton)
20. Reupholstering at Home. Nesovitch, Peter. 1979. (Crown)
21. Scrimshaw. Linsley, Leslie. 1976. (Hawthorne)
22. String Art: Atep-By-Step. Sharpton, Robert E. (Chilton)
23. Wire Art. Hann, Scott and Smith, Davis. (Chilton)

R. Nature Crafts

1. Beautiful Nature Craft Book. Editors of Sterling. (Sterling)
2. Crafting With Nature's Materials. Alkema, Chester Jay. (Sterling)
3. Designing With Natural Materials. Miles, Bebe. 1975. (Van Nostrand Reinhold)
4. Design in Nature. Varney, Vivian, 1970. (Davis)

5. Flower Pressing. Bauzen, Peter and Susanne. (Sterling)
6. Nature Crafts. Eple, Anne Orth. (Chilton)
7. Shellcraft. Stephens, Cleo M. (Chilton)
8. Wildcrafts. Linsley, Leslie. (Doubleday)

S. Needlecrafts

1. The Basic Book of Machine Knitting. Holbourne, David. 1979. (Van Nostrand Reinhold)
2. Bobbin Lacemaking for Beginners. Dawson, Amy. (Sterling)
3. Book of Knitting & Crochet. Schachenmayr, Ed. 1973.
4. Creating From Remnants. Beitler, Ethel Jane. (Sterling)
5. Creative Crochet. Edson and Stimmel. 1973. (Watson-Guption)
6. Creative Machine Knitting. Mendelsen, Linda and Dittrick, Mark. 1979. (Hawthorne)
7. Crocheting Afghans. Weiss, Rita. 1979. (Dover)
8. Design Crochet. Dittrick, Mark. 1972. (Hawthorne)
9. Designing in Stitching and Applique. Belfer, Nancy. 1972. (Davis)
10. Exotic Needlework. Meilach, Dona Z. and Menagh, Dee. 1978. (Crown)
11. Hard Crochet. Dittrick, Mark. 1978. (Hawthorne)
12. Knit and Crochet Your Own Designs. Parkinson, Francesca. 1979. (Arco)
13. The Needlecraft Manual. Lopo, Ava. (Sterling)
14. One Piece Knits That Fit. Hubert, Margaret. 1979. (Van Nostrand Reinhold)
15. Pineapple Crochet Designs. Weiss, Rita. 1980. (Dover)
16. Treasure of Knitting Patterns. Walker, Barbara. 1968. (Scribner's)
17. Weekend Knitting Projects. Hubert, Margaret and Gusick, Dorothy Dean. 1979. (Van Nostrand Reinhold)

T. Needlepoint

1. Carolyn Ambuter's Complete Book of Needlepoint. Ambuter, Carolyn. 1972. (Harper and Row)
2. Bargello. Williams, Elsa S. 1974. (Van Nostrand Reinhold)
3. Fast and Easy Needlepoint. Hodgson, Mary Ann and Paine, Josephine Ruth. (Doubleday)
4. Handbook of Needlepoint Stitches. Waltzer, Mary. 1971. (Van Nostrand Reinhold)
5. Left-Handed Needlepoint. Hurlburt, Regina. 1972. (Van Nostrand Reinhold)
6. Needlepoint. Rev. ed. Hanley, Hope. 1975. (Scribner's)
7. The Needlepoint Book. Christensen, Jo Ippolito. 1975. (Prentice-Hall)
8. Needlepoint for Everyone. Picken, Mary Brooks and White, Doris. 1970. (Harper and Row)
9. Needlepoint Made Easy. Picken, Mary Brooks and White, Doris. 1970. (Harper and Row)
10. Needlepoint Simplified. Christensen, Jo Ippolito. (Sterling)
11. Needlepoint: The Third Dimension. Christensen, Jo Ippolito. 1979. (Prentice-Hall)

12. A New Look at Needlepoint. Rome, Carol. 1972. (Crown)
13. Star of David Needlepoint Book. Borssuck, B. 1978. (Arco)
14. Teach Yourself Needlepoint. Christensen, Jo Ippolito. 1978. (Prentice-Hall)
15. Tribal Designs for Needlepoint. Rogers, Gay Ann. (Doubleday)
16. Favorite Pets in Charted Designs. Johansson, Barbara. 1980. (Dover)

U. Printing and Silk Screening

1. The Art of Print Making. Rhein, Erich. 1976. (Van Nostrand Reinhold)
2. Block Printing on Textiles. Erickson. 1979. (Watson-Guptill)
3. Collagraph Printmaking. Stoltenberg, Donald. 1975. (Davis)
4. The Complete New Techniques in Printmaking. Ross, John and Romano, Clare. 1974. (Macmillan)
5. The Complete Printmaker. Ross, John and Romano, Clare. 1972. (Macmillan)
6. Design and Print Your Own Poster. Biegeleisen. 1975. (Watson-Guptill)
7. Printmaking. Peterdi, Gabor. 1980. (Macmillan)
8. Screen Printing. Biegeleisen. 1971. (Watson-Guptill)
9. Silk Screen as a Fine Art. Chieffo. 1979. (Van Nostrand Reinhold)
10. Silkscreening. Termini, Maria. 1978. (Prentice-Hall)

V. Quilting and Applique

1. Art of Cutwork & Applique. 1978. (C. Branford)
2. Applique and Reverse Applique. Christensen, Jo Ippolito. (Sterling)
3. Big Book of Applique. Avery, Virginia. 1978. (Scribner's)
4. Classic American Patchwork Quilt Patterns. Malone, Maggie. (Sterling)
5. Crib Quilts. Woodard, Thomas K. and Greenstein, Blanche. 1981. (Dutton)
6. Early American Patchwork Patterns. Grafton, Carol Belanger. 1980. (Dover)
7. Illustrated Guide to Traditional American Quilt Patterns. Mills, Susan Winter. 1980. (Arco)
8. Innovative Machine Quilting. Risinger, Hettie. (Sterling)
9. Old Patchwork Quilts. Finley, Ruth. 1979. (C. Branford)
10. Once Upon a Quilt. Mahler, Celine. 1973. (Van Nostrand Reinhold)
11. Patchwork. 1979. (C. Branford)
12. Patchwork for Beginners. Green. 1972. (Watson-Guptill)
13. Patterns for Patchwork Quilts & Cushions. Ives, Suzy, 1977. (C. Branford)
14. The Quilter's Coloring Book. Echols, Margit. 1979. (Harper and Row)
15. A Quilter's Companion. Hinson, Dolores. 1979. (Arco)
16. Quilting Manual. Hinson, Dolores A. 1980. (Dover)
17. Quilting, Patchwork, Applique and Trapunto. Newman, Thelma. 1974. (Crown)

18. Quilts and Coverlets. Laury, Jean Ray. 1970. (Van Nostrand Reinhold)
19. The 7-Day Quilt. Rogers, Josephine. 1979. (Van Nostrand Reinhold)

W. Rugmaking

1. Flat-Woven Rugs of the World. Justin, Valerie. 1980.
2. The Hook Book. Beatty, Alice and Sargent, Mary. 1977. (Stackpole)
3. The Rug Book. Quirke, Lillian Mary. 1980. (Prentice-Hall)
4. Rug Making. Allard, Mary. (Chilton)

X. Sculpture

1. Contemporary Art With Wood. Meilach, Dona Z. 1968. (Crown)
2. Ceramic Sculpture. Kenny, John B. (Chilton)
3. Lost Wax Bronze Casting. Jackson, Harry. 1979. (Van Nostrand Reinhold)
4. Masters of Wood Sculpture. Roukes. 1980. (Watson-Guptill)
5. Plastics as Sculpture. Newman, Thelma R. (Chilton)
6. Sculpture in Plastics. Roukes. 1978. (Watson-Guptill)
7. Super Sculpture. Chichura, Diane B. and Stevens, Thelma K. 1974. (Van Nostrand Reinhold)
8. Wire Sculpture. Brommer, Gerald. 1968. (Davis)

Y. Sewing and Clothing

1. Basic Patternmaking - An Individual Approach. Littman, Connie. 1977. (Delmar)
2. Cloth Hats, Bags' N Baggage. Frager, Dorothy. (Chilton)
3. Curtain Maker's Handbook. Morehead, F. A. 1979. (Dutton)
4. Dictionary of Sewing Terminology. Carbonne, Linda. 1977. (Arco)
5. Footwear. Katz, Ruth. 1979. (Van Nostrand Reinhold)
6. The Hat Book. Geldman, Annette. 1978. (Van Nostrand Reinhold)
7. The Home Decorating Sewing Book. Musheno, Elizabeth, J. 1978. (Macmillan)
8. How to Design Your Own Clothes and Make Your Own Patterns. Ein, Claudia. (Doubleday)
9. How to Make Men's Clothes. Rinehard, Jane and Shewbart, B. J. (Doubleday)
10. How to Make Pants and Jeans That Really Fit. Corbin, Barbara. (Doubleday)
11. How to Make Your Own Wedding Gown. Ein, Claudia. (Doubleday)
12. Pattern Making Design - Skirts & Pants. Littman, Connie. 1977. (Delmar)
13. Pattern Making Design - Sleeved & Tailored Garments. Littman, Connie. 1977.
14. Sew for Snow. Schulz, Renee C. 1980. (Stackpole)
15. Sewing Hints for Men. Abrams, Jay A. and Albert, Sondra R. 1980. (Van Nostrand Reinhold)
16. The Sewing Machine Craft Book. Hall, Carolyn. 1980. (Van Nostrand Reinhold)

17. Sewing Machine Embroidery and Stitchery. Newman, Thelma, Lee and Jay. (Crown)
18. Sewing Short Cuts from A to Z. Musheno, Elizabeth J. 1978. (Van Nostrand Reinhold)

Z. Weaving

1. The Art of Weaving. Regensteiner, Else. 1970. (Van Nostrand Reinhold)
2. Backstrap Weaving. Taber and Anderson. 1975. (Watson-Guptill)
3. Caring for Textiles. Beecroft. 1976. (Watson-Guptill)
4. Elements of Weaving. Thorpe, Azalea Stuart and Larsen, Jack Lenor. (Doubleday)
5. Finishing Touches for the Handweaver. West, Virginia. 1979. (C. Branford)
6. Frame Loom Weaving. Redman, Jane. 1976. (Van Nostrand Reinhold)
7. Key to Weaving. Black, Mary. 1980. (Macmillan)
8. Manual of Swedish Handweaving. Cyrus-Zetterstroem, Ulla. 1977. (C. Branford)
9. Professional Handweaving on the Fly-Shuttle Loom. Brostoff, Laya. (Van Nostrand Reinhold)
10. Technique of Woven Tapestry. Beutlich. 1967. (Watson-Guptill)
11. The Weaver's Book. Tidball, Harriet. 1976. (Macmillan)
12. Weaving: Design & Expression. Belfer, Nancy. 1975. (Davis)
13. Weaving Off Loom. Meilach, Dona Z. 1978. (Contemporary)
14. Weaving Without a Loom. Rainey, Sarita. 1966. (Davis)

Z₁. Woodworking and Woodcarving

1. Building Colonial Furnishings, Miniatures and Folk Art. Daniele, Joseph. (Stackpole)
2. Building Your First Wooden Boat. Barnes, George W. 1979. (Van Nostrand Reinhold)
3. Building the Timber Frame House. Benson, Tedd. 1980. (Scribner's)
4. Cabinet Making for Beginners. Hayward, Charles H. (Sterling)
5. Carving Faces and Figures in Wood. Tanagerman, E. J. (Sterling)
6. Carving Wooden Animals. Tanagerman, E. J. (Sterling)
7. Classic Guitar Construction. Sloane, Irving. 1966. (Dutton)
8. The Fine Art of Cabinetmaking. Krenov, James. 1977. (Van Nostrand Reinhold)
9. 500 Do-It-Yourself Wood Moulding Projects. 1980. (Arco)
10. Guide to Carpentry. Editors of McGraw-Hill. (McGraw-Hill)
11. How to Carve Folk Figures and a Cigar-Store Indian. Enlow, Harold L. 1979. (Dover)
12. Making Musical Instruments. sloane, Irving. 1978. (Dutton)
13. Modern Woodworking. Wagner, Willis. 1978. (Goodheart)
14. Old Houses: A Rebuilder's Manual. Nash, George. 1980. (Prentice-Hall)
15. Pyrography. Havez, Bernard and Varlet, Jean-Claude. (Van Nostrand Reinhold)

16. Steelstring Guitar Construction. Sloane, Irving. (Dutton)
17. Step-By-Step Guide to Woodworking. De Cristoforo. 1977. (Prentice-Hall)
18. Woodcarving. Sack. 1973. (Van Nostrand Reinhold)
19. Woodcraft: Basic Concepts and Skills. Newman, Thelma R. (Chilton)
20. Wood Turning. Hogbin, Stephen. (Van Nostrand Reinhold)

Z₂. Periodicals

1. American Craft. Bimonthly. American Craft Council, P.O. Box 561, Martinsville, NJ 08836
2. Ceramics Monthly. Monthly. P.O. Box 12448, Columbus, OH 43212.
3. The Crafts Report. Monthly. 700 Orange Street, Wilmington, DE 19801.
4. Fiberarts. Bimonthly. 50 College Street, Asheville, NC 28801.
5. Fineworking Magazine. Bimonthly. 52 Churchill Rd., Box 355, Newtown, CT 06470
6. Glass Workshop. Quarterly. Stained Glass Club, P.O. Box 244, Norwood, NJ 07648
7. Goodfellow Review Of Crafts. P.O. Box 4520, Berkeley, CA 94704
8. Handwoven. Semi-annually. Interweave Press, 306 N. Washington, Loveland, CO 80537
9. Interweave. Quarterly. 306 N. Washington, Loveland, CO 80537.
10. Nutshell News. Monthly. Clifton House, Clifton, VA 22024
11. Quality Crafts Market. 10 times yearly. 15 West 44th Street, New York, NY 10036
12. Quilter's Newsletter. Monthly. Leman Publications, Inc., Box 394, Wheatridge, CO 80033
13. The Rug Hooker News & Views. Bimonthly. Kennebunkport, ME 04046
14. Shuttle, Spindle & Dyepot. Quarterly. Handweaver's Guild of America, 65 LaSalle Rd., P.O. Box 7-374, West Hartford, CT 06107
15. Spinoff. Annually. Interweave Press, 306 N. Washington, Loveland, CO 80537

XIV. Basic Library Reference Sources:

A. Business Operating Guides and Handbooks

- a. Apollo Handbook of Practical Public Relations. Adams, Alexander B. 1970.
- b. Credit Management Handbook. Credit Research Foundation. 2nd ed., 1965.
- c. Marketing Handbook. Frey, A. W., Editor. 2nd ed., 1965.
- d. Office Management Handbook. Wylie, Harry L., Editor. 2nd ed., 1972.
- e. Production Handbook. Carson, Gordon B., Editor. 1972.
- f. Purchasing Handbook. Aljian, George W., Editor. 1973.

B. Directories

- a. Guide to American Directories. 10th ed. 1978. B. Klein Publications, Inc., P.O. Box 8503 Coral Springs, Fl. 33065
 - b. Federal Government. Rev. ed. 1974. U.S. Library of Congress, Washington, D.C., GPO
 - c. Encyclopedia of Governmental Advisory Organizations. 2nd ed. 1975.
 - d. The Directory of Directories. 1st edition.
1. Associations
 - a. Encyclopedia of Associations, Vol. I, National Organizations of the United States. Biennial. 14th ed. 1978.
 - b. National Trade and Professional Associations of the United States & Canada and Labor Unions. Annual. 1978.
 2. Financial
 - a. Business Organizations and Agencies Directory. 1st ed. Anthony T. Kruzas and Robert C. Thomas, editors.
 - b. Dun & Bradstreet Reference Book
 - c. Moody's Banks and Finance.
 3. Government
 - a. Municipal Year Book. Annual. 1978.
 - b. Book of the States. Biennial. 1978. Council of State Governments, P.O. Box 11910, Iron Works Pike, Lexington
 - c. United States Government Organization Manual
 4. Individuals
 - a. Current Biography. Monthly. H. W. Wilson Company, 950 University Avenue, New York, N.Y. 10452
 - b. Standard & Poor's Register of Corporations, Directors and Executives. Annual. 3 vols. Standard & Poor's Corporation, 345 Hudson Street, New York, N. Y. 10014
 - c. Who's Who in America Biennial. 2 vols. Marquis - Who's Who, Inc., 200 East Ohio Street, Chicago, Ill. 60611
 - d. World's Who's Who in Finance and Industry. Marquis - Who's Who, Inc., 200 East Ohio Street, Chicago, Ill. 60611. Biographical.
 5. Manufacturers
 - a. Kelly's Manufacturers and Merchants Directory. Kelly's Directory's Ltd., Neville House, Eden Street, Kingston upon Thomas Kt 1 1 BY Surrey, England.
 - b. MacRae's Blue Book. Annual. 5 vols.
 - c. Thomas' Register of American Manufacturers. Annual. 11 vols.

6. Trade Names

- a. Trade Names Dictionary. Ellen Crowley, ed. 2nd ed. 1979. 2 Vols.

C. Economic and Marketing Information

1. Books/Booklets

- a. Bibliography of 1977 Publications of University Bureaus of Business and Economic Research. Annual.
- b. Business Information Sources. Lorna M. Danielss, 1976.
- c. Directory of Business and Financial Services. 7th ed., 1976.
- d. Editor & Publisher Market Guide. Annual. 1978.
- e. McGraw-Hill Dictionary of Modern Economics. 1973. 2nd ed.
- f. Rand McNally Commercial Atlas and Marketing Guide. Annual.
- g. Research Centers Directory. 1979.
- h. S&MM's Survey of Buying Power. 1978. Part I; Part II.
- i. Statistics Sources. 5th ed. Edited by Paul Wasserman. Gale Research Company, Book Tower, Detroit, MI 48226.

2. Periodicals - U.S. Government

- a. Construction Review. U.S. Department of Commerce. Monthly.
- b. Current Industrial Reports. Bureau of the Census, U.S. Department of Commerce.
- c. Current Business Reports. Bureau of Census, U.S. Department of Commerce. Includes a series of four reports: Weekly Retail Sales Report; Advance Monthly Retail Sales Report; Monthly Retail Trade; and Retail Annual Report. GPO.
- d. Economic Indicators. Prepared for the Joint Economic Committee by the Council of Economic Advisers.
- e. Survey of Current Business. U.S. Department of Commerce. Monthly.

D. General Reference Sources

1. Almanacs

- a. Information Please Almanac: Atlas & Yearbook, Charts, Index. 1978.
- b. World Almanac and Book of Facts. 1978. Doubleday & Co., 245 Park Ave., New York, NY 10017

2. Encyclopedias

- a. Encyclopedia Americana, Encyclopedia Britannica
- b. Encyclopedia of Associations. 14th ed. Nancy Yakes and Denise Akey eds.

- c. Encyclopedia of Business Information Sources. 3rd ed. 1976.
- d. Encyclopedia of Information Systems and Services. 3rd ed. Anthony T. Kruzas editor. 1978.

3. Specialized Encyclopedias

- a. Encyclopedic Dictionary of Business Finance.

FILMS AVAILABLE IN SPANISH

(Distributor: Thompson-Mitchell and Associates,
Peachtree Road N.E., Atlanta, Georgia 30326)

AMERICAN MEDIA:

Order of the Silver
Platter Can You Help Me?

BNA:

The Manager and the Organization
How to Manage the Boss
How to Work with Your Fellow Managers
Helping People Perform, What Managers
are Paid For
Planning and Goal Setting, Time-Wast
Management Tool
How to Take the Right Risks, The
Manager as Decision Maker
The Effective Executive
Managing Time
What Can I Contribute?
Focus on Tomorrow
Effective Decisions
Staffing for Strength
Managerial Grid
The Managerial Grid in Action
The Grid Approach to Conflict Solving
Effective Organization
Assessing Management Potential
Management by Participation
Pay for Performance
Making Human Resources Productive
Team Building
Confronting Conflict
Motivation and Productivity
Strategy for Productive Behavior
Motivation Through Job Enrichment
The Self-Motivated Achiever
Understanding Motivation
Theory X and Theory Y: Part 1, Description
Theory X and Theory Y: Part 2, Application
Human Nature and Organizational Realities
The Management of Human Assets
Motivation in Perspective
Motivation to Work
The Modern Meaning of Efficiency
KITA, or, What Have You Done for Me, Lately?
Building a Climate for Individual Growth
The ABC Man: The Manager in Mid-Career
Management By Objectives
Defining the Managers Job

Performance and Potential Review
Controlling Absenteeism
Modern Management Program
The Challenge of Leadership
The Trouble with Archie
Instructions or Obstructions
The Case of the Missing Magnets
Listen, Please
The New Truck Dilemma
Are You Earning the Right to
Manager Others
The Heritage of the Uncommon Man
The Real Security
You, Yourself, Incorporated
Avoiding Communication Breakdown
Meanings Are In People
Communication Feedback
Changing Attitudes Through Communication
Communicating Management's Point of View
Unaccustomed As They Are
The Eye of the Beholder
Visual Aids
CD2: Formula for Success in Selling

BOSUSTOW:

The Cave
The Giving Tree
Is it Always Right to be Right?
I Told 'Em Exactly How To Do It
MBO PTS. 1, 2, 3

CALLY CURTIS:

Habit of Winning
Twelve Like You
Time of Your Life
Time is Money
Team of Two Perfectly Normal Day
This Thing Called Change
When I Say No, I Feel Guilty
Applause, Applause
Defense, Defense

CREATIVE MEDIA:

Keep Reaching
Power-Packed Selling
Nuts and Bolts of Performance Appraisal

I Understand, Your Understand
ABC's of Decision Making

CRM:

Effective Uses of Power and Authority
Managing Stress
Power of Listening
Career Development
Power of Positive Reinforcement
Performance Appraisal
Leadership: Style or Circumstance
Productivity
Transactional Analysis
Women in Management
Business, Behaviorism, and the Bottom Line

DARTNELL:

Fair Winning
Manage Your Time to Build Your Territory
The Professional Salesman
Second Effort
Sell Like an Ace...
Take Command
Think Win
When You're Turned Down, Turn On
Your Price is Right is Right, Sell It

NEM:

All Films

ROUNDTABLE:

If You Want It Done Right
Welcome Aboard
The Bob Knowlton Story
Breaking The Delegation Barrier
Conflict: Causes & Resolutions
Pattern for Instruction
Tell Me About Yourself
A Measure of Understanding
Meeting In Progress
Rewards of Rewarding
Correct Way of Correcting
Overcoming Resistance to Change
Something to Work For
The Making of A Decision
You're Coming Along Fine
How Good Is a Good Guy?
Judging People
I'll Buy That
Sam's Secret

The Hidden Side of Selling
Customer on Line 3

VANTAGE:

The Big Push
The Bolero
Challenge Over the Atlantic