DOCUMENT RESUME

ED 062 525

VT 015 049

TITLE

Annual Summary. Training and Technology
Experimentation, Demonstration, and Utilization
Program Activities (January 1-December 31, 1971).
Oak Ridge Associated Universities, Tenn.; Tennessee
Univ., Knoxville.; Union Carbide Corp., Oak Ridge,

INSTITUTION

Tenn. Nuclear Div.
Manpower Administration (DOL), Washington, D.C.

SPONS AGENCY REPORT NO

AEC-40-157-68

PUB DATE

Jan 72

NOTE

Jan 72 55p.

EDRS PRICE DESCRIPTORS

MF-\$0.65 HC-\$3.29

*Adult Vocational Education; Annual Reports;

*Culturally Disadvantaged; Demonstration Programs; Demonstration Projects; Educational Experiments; *Federal Programs; Interagency Cooperation; Manpower Development; Manpower Utilization; Research Projects;

Research Utilization; *Unemployed

IDENTIFIERS

TAT; Training and Technology

ABSTRACT

Directed primarily toward increasing utilization of industrial resources for training and development of disadvantaged persons, Training and Technology (TAT) activities for 1971 included: (1) development and implementation of experimental approaches to program development and operation, (2) technical support for university-conducted related research, (3) assistance to industry in utilization of TAT findings and concepts, (4) work with government contractors to develop employee training programs, and (5) analysis, assessment, and documentation of accomplishments and dissemination of this information to concerned manpower development organizations. Second priority projects are concerned with innovative approaches to regional manpower development, training for manpower personnel, and assistance in application of industrial manpower development concepts. (Author/BH)



Annual Summary

TAT EXPERIMENTATION AND DEMONSTRATION PROGRAM ACTIVITIES

JANUARY I — DECEMBER 31, 1971

OAK RIDGE ASSOCIATED UNIVERSITIES, OAK RIDGE, TENNESSEE

Contract Number: 82-45-69-09 Interagency Agreement Number: AEC-40-157-68



TRAINING AND TECHNOLOGY

Operated by Ook Ridge Associated Universities and the Nuclear Division, Union Carbide Corporation, in cooperation with the University of Tennessee at the U.S. Atomic Energy Commission's Y-12 Plant, Oak Ridge, Tennessee.



ABBREVIATIONS CODE

AEC	U. S. Atomic Energy Commission
ANL	Argonne National Laboratory
ARC	Appalachian Regional Commission
ASPA	American Society for Public Administration
CAMPS	Cooperative Area Manpower Planning System
CEP	Concentrated Employment Program
DHEW	U. S. Department of Health, Education, and Welfare
DOL	U. S. Department of Labor
EDU	Experimentation, Demonstration, and Utilization
ES	Employment Service
ETDD	East Tennessee Development District
FIT	Functional Industrial Training Program
GED	General Education Development, (high school equ_valency)
JEVS	Jewish Employment and Vocational Service
JOBS	Job Opportunities in the Business Sector
MDTA	Manpower Development and Training Act
NAB	National Alliance of Businessmen
NAL	National Accelerator Laboratory
ND, UCC	Nuclear Division, Union Carbide Corporation
OEÓ	U. S. Office of Economic Opportunity
OIC	Opportunities Industrialization Center
OJT	On-The-Job Training
ORAU	Oak Ridge Associated Universities
ORNL	Oak Ridge National Laboratory
TAT	Training and Technology Project
TDES	Tennessee Department of Employment Security
TVA	Tennessee Valley Authority
UT	University of Tennessee
WIN	Work Incentive Program



Oak Ridge Associated Universities

Training and Technology

ANNUAL SUMMARY

Experimentation, Demonstration, and Utilization Program Activities

January 1-December 31, 1971

1-72-1

U.S. OEPARTMENT OF HEALTH.
EOUCATION & WELFARE
OFFICE OF EOUCATION
THIS OOCUMENT HAS BEEN REPROOUCEO EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATEO OO NOT NECESSARILY
REPRESENT OFFICIAL OFFICE OF EOUCATION POSITION OR POLICY

January 1972

This report on a special manpower project was prepared under an agreement with the Office of Research and Development, Manpower Administration, U. S. Department of Labor, under the authority of the Manpower Development and Training Act. Organizations undertaking such projects under Government sponsorship are encouraged to express their own judgment freely. Therefore, points of view or opinions stated in this document do not necessarily represent the official position or policy of the Department of Labor.



INTRODUCTION

This <u>Annual Summary Report</u> describes Training and Technology Experimentation, Demonstration, and Utilization program activities and accomplishments during the period January-December 1971. The report follows major activities outlined in the TAT proposal <u>Manpower Experimentation and Utilization</u> dated November 1970.

Quite frequently, EDU activities are continued from year to year, with new projects growing from established contacts and previous cooperative efforts. Therefore, appropriate headings identify various EDU activities as new or continuing. The 1970 Annual Report and Summary Report (EDU activities, January-June 1971) may be referred to for background on continuing activities.

The activities of TAT EDU staff are directed primarily toward achieving increased utilization of available industrial resources for training and development of disadvantaged persons. These activities include design, development and execution of experimental approaches to program development and operation; technical support for university conducted related research; transfer of EDU findings to industry and assistance to industry in specific utilization of TAT manpower training development concepts; work with government contractors to develop programs to train their employees in the industrial training center; analysis, assessment, and documentation of accomplishments and dissemination of this information to concerned manpower development organizations.

Second priority projects are concerned with development of innovative approaches to problems of regional manpower development; education and training of manpower personnel; and assistance in application of industrial manpower development concepts.

The integrated operation of TAT Worker Training program and EDU unit, plus the utilization of industrial, educational, and governmental resources in Oak Ridge, provide an opportunity to make significant progress toward the improvement of manpower development and training practices.



TABLE OF CONTENTS

	Ī	Page
Worker Training Assessment, Experimentation, and Related Research	•	1
Worker Training Profile	•	1
Upgrading for Industrial Employees	•	2
Upgrading in an Industrial Setting	•	4
University Experimentation and Related Research	•	5
University Symposium	•	5
Dissertations and Master's Theses	•	6
Studies in Progress	•	7
Internal Assessment and Improvement	•	7
Work Sample	•	7
TAT Data Bank	•	8
Supportive Services	•	9
Milieu Case Staffings	•	9
Use of Volunteers	•	11
Group Counseling	•	12
Documentation and Dissemination	•	14
Staff Publications	•	14
Regular Project Reports	•	15
Proposals	•	16
University Research Reports	•	16
Dissemination of Information	•	16
Meetings, Visitors, and Visits	•	18
Work with Government Contractors	•	26
Manpower Development for Industry-Industrial Training Center	•	26
Transfer of Findings to Industry	•	29
Standard Oil/State of Illinois Project	•	29
Exploration of West Virginia Project Potential	•	32



TABLE OF CONTENTS (Continued)

					Page
Honeywell Discussions	•	•	•	•	32
Human Interaction Research Institute	•	•	•	•	33
Regional Manpower Development	•	•	•	•	34
TAT-ARC Regional Manpower Training	•	•	•	•	34
Multi-State Experiment—Second Year	•	•	•	•	34
ARC Sponsorship of Tennessee Trainees	•	•	•	•	34
West Virginia Program Development	•	•	•	•	35
West Virginia Work Incentive Program	•	•	•	•	35
ARC Followup Proposal—To Extend Services	•	•	•	•	36
Other Regional Organization Contacts	•	•	•	•	37
Cooperative Area Manpower Planning System	•	•	•	•	38
Rural School to Work Transition	•	•	•	•	39
Field Experience Training for Manpower Development Personnel	•	•	•	•	40
Residents in Training	•	•	•	•	40
Standard Oil Residencies	•	•	•	•	40
West Virginia WIN Residency	•	•	•	•	41
Training of Manpower Agency Personnel	•	•	•	•	42
Internships	•	•	•	•	45
New Areas	•	•	•	•	47
Building Allied Health Manpower Programs—TAT-MED	•	•	•	•	47



Area

FIRST PRIORITY PROJECTS

WORKER TRAINING ASSESSMENT, EXPERIMENTATION, AND RELATED RESEARCH (CONTINUING)

•Objectives

The Worker Training Program serves as a manpower laboratory for both university experimentation and continuing assessment and analysis by TAT professional staff. The objectives of Worker Training experimentation and assessment are (1) to improve the existing Worker Training program, (2) to expand knowledge in the field of human resource development, and (3) to influence improvement in other training programs.

Means to accomplish these objectives are (1) identification of training elements essential to success for a variety of trainee populations, (2) facilitating use of the Worker Training program as an experimentation laboratory for industrial, educational, and other manpower agencies, (3) critical analysis of recruitment and selection, trade-related instruction, skilled and technical training, counseling and supportive services, placement and followup.

WORKER TRAINING PROFILE

The 1970-71 Worker Training year, completed in October 1971, graduated 271 trainees of whom 95.3 percent were placed in jobs with wages averaging \$3.15 per hour.

During the year, new sponsors were Nashville CEP, West Virginia and Tennessee WIN's, and Standard Oil/State of Illanois, which were in addition to AEC and ARC-sponsored trainees.

The 1971-72 Worker Training year began October 1971 with an enrollment of 208 and marked the beginning of the AEC Industrial Training Center.

CONTINUING)

Activity

Area

FIRST PRIORITY PROJECTS

Trainees were sponsored by Argonne National Laboratory, National Accelerator Laboratory, Goodyear Atomic Corporation, Nuclear Division, Union Carbide Corporation, and an auxiliary training unit at Paducah, Kentucky operated by Nuclear Division, Union Carbide Corporation.

> Upgrading For Industrial Employees (New)

•Objectives

Pilot upgrading activities were implemented in 1971 as a part of the Worker Training program: (1) to test and evaluate voluntary upgrading programs for UCC employees in low-level dead-end jobs, (2) to aid in career identification and exploration, (3) to overcome obstacles to continuing education, (4) to develop trade-related courses of study utilizing the learning lab concept, and (5) to make college credit skill and technical training courses available to employees.

•Accomplishments

A series of programs were developed and started during the year which provide a sequence or ladder of increasingly advanced-level educational and training opportunities to employees seeking better jobs and personal enrichment.

GED. A survey indicated that many employees lack a high school diploma and are at a fourth to eighth grade level in reading and math, which is inadequate for effective skill or technical training. UCC agreed to support a GED course for 30 employees, including 12 blacks and several women, beginning in April 1971. At the same time a contract was made with the professional staff of the Department of Continuing Education of UT for their assistance in establishing a programmed learning lab to CONTINUING)

Activity Area

FIRST PRIORITY PROJECTS

serve as a base for various upgrading courses in English, math, science and remedial reading. Employees were scheduled to attend classes two hours per week on company time plus a minimum of two hours per week on their own time. A reading instructor and a specialist in operation of learning labs were hired to conduct the course and also teach the TAT trainees who were in need of a GED or special help in reading or math.

By July, attendance had proven excellent and retention was 100 percent; therefore 15 additional employees were enrolled, including several higher code hourly and supervisory employees. In December, 13 of the 45 had received their diplomas and an equal number showed promise of continued in 1972.

Post GED. Beginning in November, 20 employees from the lower hourly roll codes with a GED or a high school diploma were enrolled in a course to further improve their trade related math, science and reading skills (two hours per week) in the learning lab and explore shop skill or technical training of their choice in drafting, electronics, machining, welding, or mechanics (two hours per week). As with the GED course, two hours are on company time and two hours on their own time. The intent is to increase employees' confidence and interest in studying and give them an opportunity to try an alternate career choice. If they make satisfactory progress, they are counseled to try other opportunities in various adult evening school programs or the next step at TAT.

UT and Roane State. These courses offer college credit in skill, technical and academic courses leading to associate science, BS, or master's degrees. Over 75 employees are enrolled. The Roane State

Community College is offering their electronics program to day students

Activity Area

FIRST PRIORITY PROJECTS

and employees after hours in the TAT facility. This operates under Intergovernmental Cooperation Act of 1968 with agreement between AEC and State of Tennessee. The University of Tennessee Industrial Education curriculum offers training in drafting, machining, welding, general metals, and physical testing, and is a continuation of a program in operation since 1966. The convenience of these courses at TAT immediately after work at regular college rates, with UCC reimbursing half of employee's cost, contribute to program success. These courses represent continuing education relevant to specific job needs over a period of several years. Instructor Aides. Four salaried non-exempt technicians are assigned full time at TAT on company time to upgrade their technical knowledge and test their supervisory abilities and interests in a structured assistanceship to TAT instructors, working with groups of TAT trainees, and continuing their college education after hours. During January-July 1971, certification courses were Short Courses. conducted and 80 UCC personnel were trained, examined, and certified in ultrasonics. A machining course was also conducted under sponsorship of Society for Manufacturing Engineers.

.Work to be done

An analysis and followup of these upgrading ladders as to effectiveness and potential in interest, job status, pay and promotional readiness.

UPGRADING IN AN INDUSTRIAL SETTING

•Objectives

Research and related demonstration activity was initiated for the Oak Ridge industrial complex.

A proposal was submitted to DOL in April to begin assessment of existing



Area

Activity

FIRST PRIORITY PROJECTS

upgrading practices in three AEC Oak Ridge industrial plants and to design and test alternative methods of upgrading. The proposed work is divided into two phases. Phase I provides for assessment of current practices, analysis and design of upgrading methods, and experimentation with new upgrading methods. Phase II will provide for the application of proven upgrading methods and the extension of these activities to other AEC industrial plants across the nation.

A project administrator was employed in December and efforts are currently being directed at obtaining upgrading variables from the Corporation's computer data bank. The work force sample, which will include both hourly and salaried personnel, will extend from December 1963 through December 1971.

University Experimentation and Related Research (Continuing)

'Objectives

To involve educational institutions in the "real-world" environment of training of disadvantaged:

- (1) to expand knowledge in human resource development;
- (2) to give students and faculty practicum experience in manpower training experimentation and research;
- (3) to obtain studies related to effectiveness and improvement of manpower programs.

UNIVERSITY SYMPOSIUM

A university symposium was held on April 15-16, 1971. University Participation in Manpower Research, which reports on the symposium, includes a catalog on the TAT data bank. A program is being developed for dissemination of the report to Southeastern universities to increase interest of faculty and student personnel in manpower activities.



WORKER TRAINING ASSESSMENT, EXPERIMENTATION AND RELATED RESEARCH (CONTINUING)

Activity Area

тгаст	PRIORITY	PROJECTS
ונטחויו	LUTOUTII	TIMOPPOID

DISSERTATIONS AND MASTER'S THESES

An Investigation of the Utility and Effectiveness of Simulation Techniques in the Evaluation of Disadyantaged Persons for Supervisory Potential (August 1971). The purpose of this study was to investigate the use of simulation techniques in evaluating supervisory competence among a disadvantaged population.

Three simulation exercises were administered to 150 TAT trainees, plus 54 university students and 60 first-line supervisors. Results indicated that while the disadvantaged performed significantly poorer than the advantaged samples, many demonstrated considerable competence. Black and white disadvantaged performed equally on simulation exercises, but not on paper and pensil cognitive ability tests. The possibility of simulation techniques for diagnostic and training purposes as well as for selection for a disadvantaged population was suggested. Results were published in Training and Development Journal, January 1972.

An Application of Porter and Lawler's Attitude-Performance Model to a Population of Disadvantaged Trainees (July 1971). The purpose of this study was to test a modified version of Porter and Lawler's attitude-performance model with TAT trainees. The results found that trainees who saw high performance as leading to the attainment of desired rewards did exert more effort in training and also had higher ratings on overall performance.

Comparison and Evaluation of Mathematical Performance by Blacks and Whites as Measured by the California Achievement Test (August 1971). This study compared and evaluated the performance of black and white trainees in mathematics classes taught as part of the TAT program. The California Achievement Test was used to determine the levels and measure progress. The study showed

Area

FIRST PRIORITY PROJECTS

that at a certain level of the program, the minority trainees progressed very little while the non-minority continued to progress in math. A major restructuring of math classes resulted from this data and the next study.

A Study of the Development of Competence in Mathematics as a Function of Training Received at a Manpower Development Project (August 1971). Five administrations of the California Achievement Test were conducted at the TAT Statistical tests for equivalency of means, variances, and intercorrelation coefficients were performed to determine if the four forms of the CAT were parallel.

The results indicated that the four forms of the test were equivalent, the final level of mathematical competence could be predicted from the initial test scores and the greatest amount of learning occurred during the first six weeks of training.

STUDIES IN PROGRESS

Attitude of Employed and Unemployed on Employment Readiness Scale. master's thesis.

An Investigation of Methods of Obtaining Variance in Overall Job Performance Accounted for by a Set of Job Elements. A master's thesis.

Personality Changes in TAT Trainees.

Internal Assessment and Improvement (Continuing)

WORK SAMPLE (NEW)

•Objective

To develop and test the work sample approach for future applicability in selecting applicants for TAT training and possibly for other manpower programs training disadvantaged for skilled jobs.

Area

FIRST PRIORITY PROJECTS

Description

The "work sample" includes a toolbox, a laboratory box, and a time-punch clock. Trainees perform several operations with these materials, including precision measurement with a steel rule and a micrometer, working with laboratory equipment, and electrical and mechanical operations on the clock.

Accomplishments

All experimental research on the project was completed and results were incorporated into a report entitled Selection Research: Lesson in the Development of a Work Sample. Although useful information was obtained as a result of the developmental experience, feasibility of the work sample to meet its initial objectives was determined to be minimal. Findings reported, however, should be beneficial to other manpower programs as background information on a starting point for future development work.

TAT DATA BANK (CONTINUING)

*Objective

To organize and select data on TAT trainees for (1) use by researchers and program analysts in conducting their respective studies; (2) experimental use by Worker Training project administration for current operations informa tion and reporting.

•Description

TAT trainee data bank format is divided into five main parts: (1) enrollment, (2) personal history, (3) guidance, (4) placement, and (5) followup. There are over 140 individual items of data for each of the five parts.

*Accomplishments

Four local computer facilities were considered. Input-output operations and equipment were analyzed. Cost estimates were compared. In March 1971,

WORKER TRAINING ASSESSMENT, EXPERIMENTATION AND RELATED RESEARCH (CONTINUING)

Activity

Area

FIRST PRIORITY PROJECTS

actual work began with ORAU Data Processing. During March, April, May, and June, the encoding format was developed. Encoders were trained in June and July. Actual encoding began July 1971. As of December 31, the first four main parts were encoded and keypunched for the October 1970-October 1971 trainee group (388 trainees). A form for individual trainee input (as opposed to staff encoding of information) was developed in September.

The entering October trainee group (214 as of December 1) recorded the items of information, which almost completed two-enrollment and personal history-of the five main parts of encoding. Keypunching on these forms began in late December.

*Work to be Done

Programming for checking data fields and accuracy, for tape loading, and for information retrieval will continue. Two user's manuals will be developed:

- (1) User's Manual for Researchers and Program Analysts
- (2) User's Manual for Programmers

Encoding and keypunching will proceed on (1) seventeen basic items of information for all TAT trainees (September 1966-December 1971), (2) the remainder of the five main parts of the TAT trainee data bank for the October 1971-October 1972 group, and (3) accumulated trainee followup data from returned questionnaires.

TAT trainee data bank usage will be encouraged.

Supportive Services (Continuing)

MILIEU CASE STAFFINGS (NEW)

•Objectives

To facilitate staff communication within the trainee's total milieu,

Area

FIRST PRIORITY PROJECTS

focusing on the cases of trainees who are experiencing problems which are interferring with their training progress, with the goals of (1) early diagnosis of the trainee problem, (2) reciprocal diagnosis of ways the environment might hinder or help the trainee, (3) intervention in the designated case, with a staff supportive approach.

Anticipated effects of the milieu case staffing approach include: (1) a decrease of the trainee dropout rate, and (2) an overall improvement of staff capacity to deal with problem situations in a more efficient manner.

Accomplishments

Pre-operational description of milieu model by counseling coordinator; in-service training sessions for counseling staff and for staff participating in the case staffings; scheduling of one case staffing per week in each training area; consultation with University of Tennessee industrial psychology and educational psychology staff to preview model; initiation of case staffings in May 1971, results of case staffings to date in terms of dropout rate are as follows:

	Number		Involuntary	
	\mathtt{of}	Individuals	(Unsuccessful)	
	Staffings	<u>Staffed</u>	<u>Terminations</u>	Retained
TOTALS	1),8	125	25	100

Of the 100 retained, 47 were noted to have been in urgent need of the supportive approach, with 53 in need of minimal degrees of support. The 47 were evaluated as being in danger of "unsuccessful termination" without benefit of the milieu process.

"Unsuccessful terminations" from January 1971-November 1971 reveals a decreasing dropout rate of cases staffed.

.Work to be Done

Selection and utilization of trainee pre- and post-testing to assist in

Activity
Area FIRST PRIORITY PROJECTS

predictive and diagnostic case staffing, as well as to assist in evaluation of results of staffing work with trainees; refinement of self-rating scales by (1) trainee, (2) supervisor, (3) counselor to determine discrepancy factors for use in predictive and evaluation efforts. Development of the use of selected consultants in varying types of cases selected for staffing, so that in-service effects for staff might be considerably strengthened.

USE OF VOLUNTEERS (CONTINUING)

*Objectives

Volunteers from the Oak Ridge community are enlisted to assist professional staff in trainee supportive services and build linkages with community resources.

In the milieu counseling model, services rendered by volunteers enables (1) professional staff to be freed of some routine duties in order to concentrate on high-priority problems, (2) increases the quality and quantity of supportive services directly to the trainee, and (3) encourages creative solutions to problems trainees might be experiencing in the Oak Ridge community.

•Accomplishments

Completion of one cycle of volunteer services (April-September); evaluation of program by participants through questionnaire analysis with basically positive results; evaluation by professional staff of first cycle experience and completion of a publication recording the TAT volunteer experiment results; increase in services directly to trainee; successful experiences in creative development of community resources; development of a volunteer steering committee to recruit and orient new volunteers; new cycle (October-March) orientation completed and assignments initiated.

WORKER TRAINING ASSESSMENT, EXPERIMENTATION
AND RELATED RESEARCH

Activity		FIRST PRIORITY PROJECTS	
	•Work to be Done		

Refinement of new cycle (October-March) assignments beginning in January 1972; continuing evaluation of process; planning for additional volunteer inservice training; planning for release of followup data on evaluation of volunteer program at conclusion of third cycle (April-September 1972).

GROUP COUNSELING (CONTINUING)

*Objectives

The objectives of the milieu model of supportive services utilizing group counseling are:

- (1) to establish a climate of supportive concern for the trainee through intensive group attention;
- (2) to enable the trainee to clarify his adjustment problems and begin working toward reasonable solutions with group assistance and encouragement;
- (3) to enable the staff to identify and deal with trainee problems in a more efficient manner;
- (4) to enable the staff to counsel effectively with largest number of trainees through smallest number of staff personnel and at a greater saving of staff time;
- (5) to allow for a true experimental situation for evaluation and analysis of results.

•Accomplishments

The 1971 experiment was placed in a continuing category after the following steps had been accomplished:

- (1) Completion of initial description statements, with approval of statement of objectives.
 - (2) Completion of critical path schedule.

Activity Area	FIRST PRIORITY PROJECTS
	(3) Completion of pre-operational consultation with UT Departments of
	Curriculum Instruction and Educational Psychology and Industrial Psychology.
	(4) Completion of research design.
	(5) Selection of experimental and control groups.
	(6) Pretesting (Tennessee Self-Concept Test).
z	(7) Organization of groupings.
ATIO	*Work to be Done
EXPERIMENTATION ARCH	In-service planning for total project staff; repeat of steps (listed
	under "accomplishments") with new training cycle; followup on in-operational
	and post-operational measurements to determine statistical significance of
ASSESSMENT RELATED RE (CONTINUING	first cycle groupings; longitudinal study on second, third, and fourth cycles,
SESS LATE NTIN	with further refinement of operational model and verification of statistical
G AS (CO)	significance of results of control and experimental groups, with additional
IN AN	followup evaluation from cycle graduates located in the industrial job
TRA	setting; documentation of the experiment.
WORKER TRAINING ASSESSMENT, AND RELATED RESI (CONTINUING)	
MO	

FIRST PRIORITY PROJECTS Area DOCUMENTATION AND DISSEMINATION •Objectives Production of reports, research studies, articles, and news releases useful to Worker Training and other manpower programs generally. Dissemination of manpower information to professionals and the public by mail, conduction of institutes and workshops, tours, and staff presentations elsewhere at conferences. STAFF PUBLICATIONS The following staff publications were issued to document project experi-DOCUMENTATION AND DISSEMENATION ence for dissemination and utilization of project findings: TAT Manpower Development Services (revised February 1971) details man-(CONTINUING) power development services available from TAT to AEC contractors and others who may be interested in establishing a program. Preparing Rural Appalachians for Skilled and Technical Jobs: A Regional Approach covers ARC participation in training and program development from October 1969 through September 1970.

University Resources and Industrial Manpower Development investigates the manner in which resources of various educational institutions (particularly the University of Tennessee) have been utilized at TAT.

Training and Technology General Catalog 1971-72 includes brief course outlines, basic texts, regulations, and procedures that apply to trainees.

TAT Today is comprised of a series of five feature articles on the TAT Worker Training program, with editorial comment, which appeared in The Oak Ridger, July 12-16, 1971.

Remedial Reading in a Manpower Training Program describes the role, including the benefits derived, of remedial reading instruction provided to TAT trainees.

Activity Area

FIRST PRIORITY PROJECTS

Selection Research: Lesson in the Development of a Work Sample describes the development of a work sample, the utilization of that sample, and some results derived from experience with the project.

Mechanical and Process Operations Curriculum presents a 26-week curriculum designed to prepare trainees for apprenticeships as millwrights, pipefitters, sheet metal workers, process operators, and mechanics.

Resource Material from Planning Manpower Strategies Conference includes a brochure and information packet which describes the conference and contains material and instructions on how to plan a similar conference, respectively.

Organized Labor and Manpower Training describes the role labor unions at the local, state, and international levels have played in the development of the TAT Worker Training program.

The Role of Placement in a Manpower Development Program analyzes procedures involved in placement, the functional status of the component in the overall program and the general success of the placement effort.

Use of Volunteers in a Manpower Training Program describes the program begun in the April cycle which utilized volunteers from the community in tutoring, team coenseling, clerical assistance, and supportive services.

Followup Study of 487 TAT Graduates at Union Carbide's Nuclear Division utilizes computer assistance from Union Carbide to compare TAT graduates with Carbide new hires to investigate trends in retention, attendance, and job advancement.

REGULAR PROJECT REPORTS

TAT 1970 Annual Report and Statistical Supplement (March 1971).

Summary Report (July 1971) - TAT Experimentation and Demonstration program activities, January 1-June 30, 1971.

(CONTINUING)

Activity Area

FIRST	PRIORITY	PROJECTS

Quarterly Reports (April and October 1971) to DOL covering first and third quarters of 1971.

Project Highlight Reports (monthly) to USAEC and DOL.

PROPOSALS

Manpower Development for Industry (funded October 1971).

Upgrading in an Industrial Setting (first draft, April 1971), (final draft, September 1971).

Building Allied Health Mampower Programs - TAT-MED (first draft, June 1970), (revised, June 1971).

Manpower Experimentation Program: Plan of Work, January 1, 1972-March 31, 1973 (final draft, November 1971).

TAT -Extending Appalachia's Manpower Services (TEAMS) (final draft, August 1971).

UNIVERSITY RESEARCH REPORTS

An Analysis of Trainees at the Training and Technology Project Who Transferred to a Second Training Area (January 1971).

Differential Rates of Success of Trainees With and Without Criminal Records in the Training and Technology Project (June 1971).

An Investigation of the Utility and Effectiveness of Simulation Techniques in Evaluation of Disadvantaged Persons for Supervisory Potential.

Dissemination of Information

Through publications, workshops, conferences, meetings, visits, and tours information on TAT was disseminated to government, industry, educational institutions, and other local, state, and manpower agencies. Names of more than 250 industries, training, educational and governmental agencies are included on the regular mailing list, and numerous requests are received



(CONTINUING)

Activity Area

FIRST PRIORITY PROJECTS

and answered for information on program activities.

During the 1971 EDU year, approximately 7,000 copies of project publications were distributed to manpower agencies and some 600 persons visited Worker Training and consulted with program staff. Visits to Worker Training constitute a major dissemination activity, since the typical visitor to TAT receives a tour of all training areas and talks with training supervisors, instructors, counselors, and trainees. Generally, a TAT staff member spends from one-half to one full day with visitors, and many short consultations are conducted with TAT staff in accordance with visitors' special interests. Meetings, conferences, workshops, and visits also contribute to the dissemination process. A summary of meetings attended by TAT staff, visits made by staff, and visitors to TAT is presented on pages 18-25.

ctivity Area		FIRST PRIORITY PROJECTS		
	MEETINGS	VISITORS	VISITS	
DOCUMENTATION AND DISSEMINATION (CONTINUING)	TAT Project Advisory Committee met on January 18 for workshop discussions on experimentation studies, vocational education, TAT Community Council, and demonstration and utilization activities. TAT staff met with Standard Oil and Illinois ES on arrangements for training 12 Chicago area residents as chemical laboratory technicians. A meeting with director of Tennessee Appalachia Educational Cooperative focused on development of proposal to assist transition of rural youth from school to world of work.	Rockefeller Foundation personnel visited TAT and ORAU Medical and Special Training Divi- sions on Foundation's interest in proposed TAT-MED program. Charles Brooks, director of Mercer County Voca- tional-Technical Center and Dean Kenny, director of Center for Economic Action, Concord College, joined officials of West Virginia's ES in touring TAT, discussing program with West Virginia trainees and reviewing trainee progress.	and Center for Economic Action, Concord College, to discuss possible participation in TAT-MED as well as TAT WT. TAT staff member visited	ONLYONALL
	TAT staff met in Nash- ville with TDES Tennessee Office of Urban and Federal Affairs, Tennes- see Office of Industrial Development, and East Tennessee and Upper Cumberland Development Districts to plan re- cruitment and enrollment in April of 40 ARC- sponsored trainees. An orientation to TAT was conducted in Illinois for Standard Oil Research Center management and Illinois MDTA officials.	Community Action Agency, Cleveland, Tennessee visited to discuss sponsorship of training positions. Knoxville WIN representatives visited TAT for orientation for five WIN women trainees. AFL-CIO Appalachian Regional Council representative consulted with staff on possible	At Tennessee Rural Development Group meet- ing, TAT staff dis- cussed training needs and employment opportu-	

Activity Area	F	IRST PRIORITY PROJECTS		
ATGA	meetings	VISITORS	VISITS	
DISSEMINATION ING)	Meeting on recruitment and financial arrange-ments in West Virginia concerning West Virginia WIN trainees. Funding arrangements and the sequence of events for sending trainees to the proposed AEC Industrial Training Center were discussed in Washington with DOL and DHEW officials.		At a Nashville meeting with Assistant Commissioner of Vocational Technical Education, areas of additional cooperative efforts between vocational-technical education and TAT were discussed. TAT staff member attended 1970 Census Data Application Conference at UT in preparation for possible revision of survey of Resources for Southern Manpower Development.	FEBRUARY (Continued)
DOCUMENTATION AND DISSER (CONTINUING)	State CAMPS conference on Planning Manpower Strategies held at ORAU March 18-19. TAT staff contributed group leaders and technical assistants to this workshop exercise and also planned and staffed the conference in cooperation with the Education and Manpower Training Office of TVA. Recruitment and job development meetings were held at ORAU for representatives from East Tennessee, First Tennessee, and Upper Cumberland Development Districts and the coordinating ES offices in the districts. Planning for April meetings (1) Symposium: University Participation in Experimentation and Manpower Training, and (2) meeting of industrialists to assist in job development for Appalachian	TDES officials toured the WT program in preparation for their sponsorship of 15 disadvantaged Nashville residents. Director of the Vocational-Technical Education Project of the Northwest Regional Education Laboratory visited TAT to gather materials for a "data bank" of training information. A representative from the Tennessee Appalachia Educational Cooperative consulted with TAT staff to assist in building contacts with guidance counselors from rural counties. As a result of this meeting, a tour and orientation session was planned for such guidance counselors.	School Board in connection with developing curriculum for the proposed Lake City-Norris High School.	MARCH

Activity Area	F	PIRST PRIORITY PROJECTS		
	MEETINGS	VISITORS	VISITS	· •
N	trainees required considerable staff effort.	More than 70 manpower representatives from state, local, and national agencies visited TAT during CAMPS conference. Faculty from UT and Knoxville College consulted with TAT on adult education procedures and the possibility of utilizing practice teachers in Worker Training.		MARCH (Continued)
DOCUMENTATION AND DISSEMINATION (CONTINUING)	Participation in Experimentation and Manpower Training, held in Oak Ridge and at UT, was attended by representatives from 10 different	director for medical and natural sciences, Rocke- feller Foundation, visited TAT and Medical and Special Training Divisions in connection with possible funding of the proposal to train disadvantaged as certified laboratory assistants. Personnel from Litton Industries visited WT in connection with the TAT- Tuskegee Institute proposal to train disadvantaged for ship-building skills with Litton in Pascagoula.	experience of trainees at TAT, future partici- pation of these labora- tories in 1971, and their interest in upgrading programs. TAT director attended the ASPA conference in Denver, where TAT information was disseminated and contacts were made with manpower officials.	APRIL



Activity Area		FIRST PRIORITY PROJECTS		
. <u>ni ca</u>	MEETINGS	VISITORS	VISITS	APRIL (Conti
	10 Tennessee firms.			APRIL Continued)
DOCUMENTATION AND DISSEMINATION (CONTINUING)	on AEC contractor compliance, where several areas of mutual interest were discussed. A meeting in Washington with DOL officials focused on dissemination, utilization, and upgrading activities.	mentation and demonstration corporation, visited TAT to exchange information on items of mutual interest in manpower experimentation. Staff from Standard Oil of Indiana visited TAT to consult with staff and the 12 trainees who will be employed with that firm on counseling, trainee conduct, and remedial and community services. Delbert Prickett, training director for Goodyear Atomic Corporation visited TAT in connection with Goodyear's decision to sponsor ten 12-month training slots. Officials from State of Tennessee's Veterans Office visited TAT to complete procedures necessary for approval of all TAT training areas for veterans benefits.	gram in Paducah, Kentucky, to help explore resources to meet sponsorship needs. Staff visited West Virginia offices in connection with trainees being sponsored by that state's WIN program to assist in initial development of an eightweek pilot prevocational program utilizing available West Virginia resources.	MAY
	TAT program director participated as a group leader in Regional Vocational Education Conference, called by the Secretary of DHEW, in Atlanta on June 2 and 3, 1971.	West Virginia WIN officials visited TAT to review progress of that agency's trainees and to discuss ways to improve their particular program.	Staff visited Chatta- nooga CEP office in con- nection with plans to enroll 10 new trainees in July.	JUNE
· ——	TAT staff assisted in development of a manual for guidance of NAB and	Four executives from Standard Oil's Naper-ville facility visited TAT June 28-30 to review		

Activity Area	F	TRST PRIORITY PROJECTS		
	MEETINGS	VISITORS	VISITS	
DOGUMENTATION AND DISSEMINATION (CONTINUING)	DOL staff in manpower project development and training operations and in the establishment of a "regional technical assistance task force" for NAB/JOBS contractors at a Human Interaction Research Institute Conference in Los Angeles. TAT program director attended 29th North American Conference on Labor Statistics in San Juan, Puerto Rico. TAT staff met with officials from Roane State Community College to explore using TAT facilities to train students enrolled in the new college's electronics program. TAT staff met with the Tennessee Appalachia Educational Cooperative to discuss ways to aid entry of rural youth in-	New York, visited TAT to review potential for replication of TAT in Union Carbide's com- mercial, non-government plants. Mary Robinson, OEO, Washington, visited TAT to consult with staff on remedial reading, trade- related curriculum, data sources, and work sample to assess skilled and technical training potential of disadvan- taged adults.		JUNE (Continued)
	Staff attended a meeting of the Southeastern Manpower Advisory Committee in Atlanta, July 7-8, and heard a report on the training of professional personnel for manpower administration positions. TAT Advisory Committee met on July 19 and received reports on TAT volunteers, Worker Training program, Oak Ridge area graduates, GED upgrading program, and 1971-72 training program for AEC contractors,	Minneapolis Honeywell personnel visited TAT to study the TAT model for replication in their setting. Roane State Community College officials met with AEC and TAT staff concerning a proposed cooperative electronics program. Standard Oil of Illinois officials visited TAT in connection with 12	Appalachia Educational Laboratory and participated in identifying critical education and training needs for the next five years in states served by the laboratory TAT staff presented a historical description of TAT to Guidance Counselor-Business Education Teacher Career Institute at Concord	XTOP

Activity Area	1	FIRST PRIORITY PROJECTS		
	MEETINGS	VISITORS	VISITS	-
	veterans, and "add-on" sponsors.	training program. State Department of Education and Veterans Administration officials visited TAT in regard to veterans benefits.	Staff visited West Vir- ginia to confer with Employment Security per- sonnel concerning the transplant of TAT in Union Carbide's West Virginia plant. Visits were made to Argonne National Labora- tory, duPont/Savannah River, and Bendix/Kansas City to solicit the participation of these	JULY (Continued)
DISSEMINATION IING)			AEC contractors in the 1971-72 Worker Training program.	
DOCUMENTATION AND DISSEN (CONTINUING)	tour of TAT for ES personnel.	Research, U. S. Department of Labor visited TAT to discuss EDU plans for 1972. Standard Oil of Illinois officials visited TAT in connection with trainees sponsored by that company in the TAT program. West Virginia Employment Security officials visited TAT in connection with replication of TAT in Union Carbide's West Virginia Plant.	AEC contractors in 1971-72 Worker Training program.	
	A meeting of the TAT program board members was held September 17 to discuss costs and administration for 1972.	officials visited TAT in connection with sponsored trainees. Roane State Community College officials visited TAT in connection with college courses to be taught at the TAT facility. Chattanooga CEP person-	TAT staff visited Good- year Atomic Corporation, National Acceleratory Laboratory, Brookhaven National Laboratory, Westinghouse Electric Company, and General Electric Corporation to solicit participation in the 1971-72 Worker Training program.	SEPTEMBER
C		Inel visited TAT to		<u> </u>

Activity Area	1	FIRST PRIORITY PROJECTS		
_	MEETINGS	VISITORS	VISITS	Sj
DOCUMENTATION AND DISSEMINATION (CONTINUING)		discuss sponsorship of trainees in the 1971-72 Worker Training program. Vandell B. Swann, Office of the Vice President, Washington, D.C., toured and conferred with TAT staff to gain general information on the program. Ingalls Shipbuilding Division of Litton Industries visited TAT in connection with hiring TAT graduates.		SEPTEMBER (Continued)
	ment of 1970-71 trainees, Experimentation, Demon- stration, and Utilization plans for 1972-73, and	Dr. Louis Levine, U. S. Department of Labor, visited TAT to conduct a followup study on TAT graduates. Personnel from various organizations, including Grinnel Industries, Rust Engineering Company, National Accelerator Laboratory, and Xerox Company, visited TAT to	ference in Denver, Colorado, October 4-7. TAT staff attended a one- day session with the University of Tennessee Graduate School for Social Work to discuss field work activities of UT interns at TAT.	OCTOBER



To conduct followup activities on the Standard Oil trainees graduated during the previous cycle (TAT staff met with Standard Oil Research Center officials in Maperville, Illinois, November 1-2. TAT staff met with U. S. Department of Labor officials in Washington, D. C., November 10-11, togdiscuss EDU activities for the 1972-73 year. Experimentation Committee met December 13 and discussed ways to revise the include new directions to be undertaken by TAT Experimentation program. Newport News Shipbuildmap Program at that staff on ways local schools could ITAT to confice to an Ocharles Phillips, Department of Labor officials in massed that to compare the compact of School Administrators, visited TAT to confice to acquire new mployers for TAT staff visited North trainees. Dr. Crant Venn, director American Association of School Administrators, visited TAT to confice to acquire new mployers for TAT to discuss upcoming EDU activities.	Activity Area	1	FIRST PRIORITY PROJECTS		r
TAT staff met with Standard 011 Research Center officials in Naperville, Illinois, November 1-2. TAT staff met with U. S. Department of Labor officials in Washington, D. C., November 10-11, to discuss EDU activities for the 1972-73 year. Experimentation Committee met December 13 and discussed ways to revise the scope of the committee to include new directions to be undertaken by TAT Experimentation program. Dr. Grant Venn, director, American Association of School Administrators, visited TAT to confer with TAT staff visited Newport News Shipbuild- ing & Dry Dock personnel visited TAT to recruit trainees. Dr. Grant Venn, director, American Association of School Administrators, visited TAT to confer with TAT staff visited North ing & Dry Dock personnel visited TAT to confer with TAT staff on ways local schools could link together in some type of joint program. Joseph Seiler and Charles Phillips, Department of Labor officials, visited TAT to discuss upcoming EDU		MEETINGS	VISITORS	VISITS	
Dr. Grant Venn, director American Association of School Administrators, visited TAT to confer with TAT staff on ways local schools could link together in some type of joint program. Joseph Seiler and Charles Phillips, Department of Labor officials, visited TAT to discuss upcoming EDU	DOCUMENTATION AND DISSEMINATION (CONTINUING)	vities on the Standard Oil trainees graduated during the previous cycle. TAT staff met with Standard Oil Research Center officials in Naperville, Illinois, November 1-2. TAT staff met with U. S. Department of Labor officials in Washington, D. C., November 10-11, to discuss EDU activities	of National Programs Institutional Training, U. S. Department of Labor, visited TAT, November 10 for a tour of the project, in- cluding briefings from staff members. Five members of the Tennessee General Assem- bly charged with investi- gating the adequacy of vocational training in Tennessee visited the		
		met December 13 and discussed ways to revise the scope of the committee to include new directions to be undertaken by TAT	CEP visited TAT in connection with trainees sponsored in the Worker Training program. Newport News Shipbuilding & Dry Dock personnel visited TAT to recruit trainees. Dr. Grant Venn, director American Association of School Administrators, visited TAT to confer with TAT staff on ways local schools could link together in some type of joint program. Joseph Seiler and Charles Phillips, Department of Labor officials, visited TAT to discuss upcoming EDU	Paducah to become better acquainted with UCC-ND's training program at that site. Staff visited North Carolina Industries and Employment Security offices to acquire new employers for TAT graduates. TAT staff visited Huntsville, Alabama to participate in DOL-Region IV task force in Southeastern Regional Manpower Planning	

ERIC

Area

FIRST PRIORITY PROJECTS

WORK WITH GOVERNMENT CONTRACTORS (CONTINUING)

Manpower Development for Industry-Industrial Training Center (Continuing)

Objectives

The proposal Manpower Development for Industry (April 1971) outlines objectives of the training center to begin operation in October 1971 as follows:

- (1) to train disadvantaged for AEC contractor jobs;
- (2) to provide skilled and technical training for veterans;
- (3) to upgrade industrial employees.
- •Description

TRAINING DISADVANTAGED FOR AEC CONTRACTOR JOBS - The present TAT Worker Training program is being operated as an AEC Industrial Training Center and is presently serving four AEC contractors in the Eastern United States. AEC's Oak Ridge Y-12 Plant is providing facilities and equipment (\$3,000,000 value) at no capital cost to the program. First year (1971-72) Center operational costs for instruction (\$612,000) and administration of trainee services (\$180,000) is being funded as a national program by DOL and DHEW. Subsistence support and services for 100 twelve-month slots over the year, estimated total \$386,000 for salary, subsistence, and trainee services, is being paid by AEC contractors. Skilled and technical aides are receiving preparation for a wide range of entry-level industrial career jobs in machining and inspection; electronics, physical testing, chemistry, drafting, and mechanical trades trainees in combination welding, mechanical and process operations.

SKILLED AND TECHNICAL TRAINING FOR VETERANS - In accordance with urgent national priorities, 100 twelve-month training slots are provided this first year for 200 veterans. Training costs are provided through a combination of of national MDTA funds and GI benefits.

Activity Area

FIRST PRIORITY PROJECTS

·Accomplishments

January - Changes incorporated into proposal regarding operation of program under national institutional procedures and recommendations regarding division of funds among AEC, DOL and DHEW.

February - Series of meetings and discussions preparatory to final revision of proposal, which would feature a training program based on Oak Ridge Operation's and other Eastern Contractors' participation.

March - Proposal rewritten in final form, information collected on upgrading; meetings with ANL, NAL, Mound Laboratory, AEC-Washington and Oak Ridge Operations. Initiation of approval process of TAT as veterans' training facility.

April - Transmittal of final proposal by AEC to DOL and DHEW in mid-April.

May - Discussions with Washington DOL and DHEW officials to review proposal and resolve questions; discussions with ANL regarding participation in 1971-72 program; visit from Goodyear Atomic Corporation, Portsmouth, Ohio, to review training and supportive services for 10 twelve-month slots to be sponsored by this AEC contractor beginning in October 1971; FIT program at Paducah, Kentucky, received technical and supportive services from TAT; discussions with AEC headquarters regarding participation of Eastern Contractors in Training Center; review of facilities by veterans education officials and completion of application procedures and Training Catalog required for veterans approval.

June - TAT Training Catalog published in final form; approval received for GI benefits to trainees; Goodyear Atomic Corporation was assisted in recruitment plans; plans made to visit AEC contractors with potential for TAT training.



Area

FIRST PRIORITY PROJECTS

July - Visited Argonnne National Laboratory, Chicago Illinois; Bendix Corporation, Kansas City, Missouri; and National Accelerator Laboratory, Batavia, Illinois, to request participation in TAT.

August - Visited Mound Laboratory, Miamisburg, Ohio; Brookhaven National Laboratory, Upton, New York, to request participation in TAT. Goodyear Atomic Laboratory to coordinate recruitment plans.

September - Visited Westinghouse Electric Corporation (BAPL), Pittsburgh, Pennsylvania and General Electric Corporation (KAPL), Schenectady, New York, to request participation in TAT. Assisted with orientation of trainees from Goodyear and NAL.

October - Followup on interagency agreements with AEC sponsors.

November - Discussions with AEC headquarters and AEC Oak Ridge Operations regarding increased participation by AEC East Coast contractors.

December - Continued efforts toward obtaining additional participation on part of AEC contractors and field visits to participating government contractors.

.Work to Be Done

Maintain contact with participating AEC East Coast contractors to encourage continued support of TAT. Maintain contact with government contractors not involved in TAT, and encourage their participation when economic conditions improve.

Develop leads that may involve the participation of private industry. Develop plans for preliminary visits to West Coast contractors.

X

Activity

Area

FIRST PRIORITY PROJECTS

TRANSFER OF FINDINGS TO INDUSTRY (CONTINUING)

•Objectives

To apply TAT findings to private industry operations; to promote closer working relationships between industry and education, manpower, and community agencies, in order to develop greater effectiveness in manpower services and a wider range of employment opportunities for disadvantaged and underemployed.

Standard Oil/State of Illinois Project (Continuing)

•Objectives

To assist Standard Oil Company, its Naperville research center, and Illinois state agencies in assessing their training resources and needs for possible development of industrial manpower training programs in Chicago area.

Accomplishments

First phase was joint planning and operation of an experimental program at TAT to train chemical technicians for employment by Standard Oil research and product units; initial commitments and basic contractual details were completed in January-February meetings between representatives of TAT, Standard Oil, Illinois Department of Employment Security, and Illinois Board of Vocational Education.

No precedent existed for TAT training of trainees partially sponsored by a private corporation; framework was AEC-DOL interagency agreement, through formal request of Illinois to federal agencies and ORAU.

A unique three-way sharing of costs and sponsorship of 12 technician trainees was arranged: Standard Oil assumed payment of basic training stipends, using Illinois MDTA allowance rates as the standard; trainee transportation costs; and staffing and costs of two weeks! trainee residence (one week

TRANSFER OF FINDINGS TO INDUSTRY (CONTINUING)

Activity

<u>Area</u>

FIRST PRIORITY PROJECTS

pre-training orientation, one week in mid-cycle for company-supervised on-thejob training) at Naperville. Illinois Vocational Education reimbursed TAT for institutional training, while Illinois ES paid weekly subsistence and dependents' allowances to trainees.

TAT conducted orientation of Standard Oil and Illinois ES staff and drew up basic screening and selection criteria. The Aurora, Illinois ES office was designated to coordinate outreach and recruitment in low-income sections of Chicago suburban communities. Pre-screened individuals were referred to Standard Oil's employee relations department in Naperville, for final screening, selection, and preliminary industrial orientation.

In February, TAT and Standard Oil designed an entirely new curriculum plan for disadvantaged minority trainees with functional education achievement of high school level or less, to combine training for both chemical laboratory analysis and chemical process operations oriented to testing, fabrication, and production activities.

An experimental training unit was set up, utilizing a variety of resources in the Oak Ridge complex-CRAU's Special Training Division (laboratory, classrooms, and technical advisory personnel), TAT Worker Training (mechanical/ process operations, electronics, and physical testing, plus trade-related instruction, counseling, and supportive services), and supervisory chemical technologists from USAEC Y-12 Plant laboratory operations. Training commenced in April and graduation took place in September 1971—11 of the original 12 Chicago area residents completed the training and were hired by Standard Oil companies in Naperville.

Looking toward future program development, direct corporate support was built into the project's operation in several ways:

Area

FIRST PRIORITY PROJECTS

- (1) Standard Oil employee relations supervisors, and sometimes Chicago OIC staff, regularly visited TAT in trainee supportive services activities.
- (2) Standard Oil scientific, technical, and management personnel participated in five "manpower residencies" in TAT training systems, employee development and evaluation, and trade-related instruction.
- (3) Senior managers of Standard Oil companies operating the Naperville research center conducted full-scale review of the program in June.
- (4) TAT training supervisors, instructors, and program development staff made several visits to Naperville and Chicago for analysis and development of the project, review of the Research Center's resources, and participation in interagency discussions.

In addition, Standard Oil called upon the Chicago OIC and NAL, an AEC contractor which had previously sponsored trainees in TAT, for assistance in orientation of the Research Center's laboratory and shop technicians. Naperville scientists conducted the trainees OJT in the July mid-cycle; following the trainees' graduation, the scientists became their supervisors in regular employment.

· Work to be Done

Final assessment of project development and training experiment; assistance to Standard Oil in developing a new program, with a probable shortened institutional training period and tighter curriculum; closer consultation with regional federal officials and Illinois state manpower agencies to utilize TAT-Standard Oil experience in development of industrial training programs.

Area

FIRST PRIORITY PROJECTS

Exploration of West Virginia Project Potential

· Objective

To investigate feasibility of establishing a multi-occupational manpower training program to combine private industry, education, and government resources in Charleston/Kanawha Valley, West Virginia.

• Accomplishments

Contacts were developed with Union Carbide and West Virginia state officials. In June, a UCC Headquarters official visited TAT for consultation, and West Virginia's Employment Security Commissioner approved preliminary planning efforts.

A position paper was developed to define the essential elements of a TAT-type "industry-education" hybrid. Basic project design was further adapted to circumstances in West Virginia.

During August Oak Ridge meeting between Union Carbide, West Virginia, and TAT, preliminary planning arrangements were confirmed. TAT's continued technical assistance in setting up the project was endorsed and the need, once the program is initiated, to assign professional TAT staff was considered.

· Work to be Done

Continue negotiations with interested parties with current focus on developments within the UCC national and regional organizations and develop and execute a memorandum of understanding outlining responsibilities of participants.

Honeywell Discussions

Contact was developed with Honeywell Corporation operations in Boston and Minneapolis. In July, Honeywell's EEO and training staff toured TAT. Computer operator and maintenance systems training for disadvantaged and to upgrade



TRANSFER OF FINDINGS TO INDUSTRY (CONTINUING)

Activity

Area

FIRST PRIORITY PROJECTS

low-level Honeywell work force was considered principally for vacancies in Honeywell companies.

Human Interaction Research Institute

Institute staff visited TAT to view operations and attend University Symposium (April).

In June, TAT participated in Institute's DOL-NAB Los Angeles Conference, to develop (1) a manual for guidance of NAB and DOL staff in manpower project development and training operations, and (2) a "regional technical assistance task force" for NAB/JOBS contractors. Several major industries and manpower organizations focused attention on TAT experience as a manpower training model for more effective "program mix" and management of resources.

Area

SECOND PRIORITY PROJECTS

REGIONAL MANPOWER DEVELOPMENT (CONTINUING)

TAT-ARC Regional Manpower Training (Continuing)

. Objectives

Designed as a two-year (1969-71) demonstration project to find out (1) what kinds of manpower services would be necessary to prepare disadvantaged rural Appalachians for skilled and technical jobs in industry, and (2) whether industrial and educational resources could be combined into workable vocational training approach, involving a variety of federal and state agencies operating within framework of the MDTA system.

MULTI-STATE EXPERIMENT — SECOND YEAR (CONTINUING)

The second group of Kentucky, Virginia, and West Virginia trainees were enrolled and trained in the first cycle of 1970-71 year.* Difficulties in recruitment of suitable trainees, primarily in Kentucky and West Virginia, led to retention problems. An experiment in more effective use of interstate individual referral slots was undertaken, with the result that blocks of partial training time remaining in each state's projects were combined to create new training slots.

Beginning in February, with leads developed in meetings with Kentucky and West Virginia state officials, job development visits in behalf of non-Tennessee ARC trainees were made to ES offices and industries in the Appalachian corridor of northeastern Kentucky and the Huntington, West Virginia area. ARC SPONSORSHIP OF TENNESSEE TRAINEES (CONTINUING)

- A joint decision by TAT, ARC, and Tennessee agencies resulted in:
- (1) creation of cooperative area task forces in East Tennessee, First

^{*}A report on the first year's findings, Preparing Rural Appalachians for Skilled and Technical Jobs: A Regional Approach, was published in April 1971.

SECOND PRIORITY PROJECTS

Tennessee, and Upper Cumberland Development Districts to conduct recruitment of hO Tennesseans for April training class;

- (2) priority for recruitment of veterans, for a minimum of 50 percent of the Tennessee ARC training slots (out of 40 recruited, 22 were veterans);
- (3) conduct of three regional workshops. In March orientation and planning took place with area task forces; in April industry executives and manpower planning officials from target districts toured TAT and participated in discussions with project staff, UCC executives, and TDES. A followup questionnaire was sent out to explore further industrial interest.

WEST VIRGINIA PROGRAM DEVELOPMENT

The state of West Virginia increased participation in TAT regional manpower training by:

- (1) sponsoring on its own approximately 35 Appalachian manpower trainees, utilizing TAT's interagency structure and interstate referral systems of the state's MDTA and WIN programs;
- (2) assigning an ES/WIN counselor to work in one-week residency each month with TAT supportive services staff;
- (3) developing plans for pilot prevocational program in remedial education, counseling, training orientation, and trade-related instruction; program is intended to prepare WIN and MDTA low achievers for TAT and other manpower training opportunities.

WEST VIRGINIA WORK INCENTIVE PROGRAM

The recruitment, selection, and training of welfare recipients from West Virginia have provided TAT experience with trainees having significantly less than a sixth grade functional level and have resulted in several findings:

(1) The low-achieving welfare client needs intensive remedial and prevocational training.

Area

SECOND PRIORITY PROJECTS

- (2) Special supportive services are necessary for this population.
- (3) Such participants might benefit from entry as a group into one single "base" training area, such as mechanical/process operations, with the goal of lower-level jobs at graduation than the average TAT trainee.
- (4) Counseling interviews with the potential trainee and his family prior to selection for referral to training might mitigate the problems at home that tend to pull trainees from the program.
- (5) A brief but concentrated orientation period at TAT, followed by a return home for further consultation with the WIN administrators prior to enrollment, is a possible selection method.

The WIN program experience has been assessed and documented for further utilization.

ARC FOLLOWUP PROPOSAL-TO EXTEND SERVICES

A proposal to follow up on the Appalachian Regional Commission's twoyear manpower training project was prepared and distributed to AEC and Appalachian states involved in TAT — Tennessee, Kentucky, Virginia, and West Virginia. The proposal, titled TAT—Extending Appalachia's Manpower Services (TEAMS), provides for ARC support of a TAT professional staff member to coordinate program exploration and technical assistance with participating state and regional agencies. Primary efforts will be to identify key industrial training resources; develop arrangements for cooperative programs between industry, vocational education institutions, and manpower agencies; and assist regional development and community action programs in expanding their manpower services.

Area

SECOND PRIORITY PROJECTS

Other Regional Organization Contacts

TAT joined in the following two projects with the East Tennessee Development District's youth leadership program:

- (1) Three Appalachian trainees in TAT became the first manpower trainees to be awarded work/study Appalachian Fellowships in community services. TAT is exploring further involvement as a means of developing youth leaders for Appalachian communities out of the industrial work force, in contrast to the usual focus on college youth.
- (2) ETDD and TAT assisted a national community relations organization in planning a regional workshop intended to bring together 60-100 youth and adult leaders from East Tennessee, Western North Carolina, Southeastern Kentucky, and West Virginia to discuss differences and similarities between rural and urban Appalachian problems of community development.

Closer working relationships have been established with several Appalachian Tennessee Community Action agencies, two of which developed preliminary proposals to combine their available manpower funds for sponsorship of trainees in TAT at a future date.

AFL-CIO Appalachian Council and TAT discussed a program which would couple short-term TAT technician training (funded by the Council) with OJT placements in area industry. The Council also participated in planning and orientation for the Tennessee ARC recruitment and job development task forces.

TAT staff attended the Fifth Annual Membership Meeting of the Appalachia Educational Laboratory in Charleston, West Virginia during July, and participated in identifying critical education and training needs for the next five years in the Appalachian states the Laboratory serves. The primary goal of AEL is to develop flexible community school systems which can adjust to

Area

SECOND PRIORITY PROJECTS

changing needs in society, accomplish educational personnel development, and better promote and achieve career education.

TAT program director participated as group leader in Regional Vocational Education Conference (June), an official planning meeting called in Atlanta by the Secretary of HEW and the Regional U. S. Commissioner of Education.

> Cooperative Area Manpower Planning System (Continuing)

In support of national manpower development goals for a more effective CAMPS, TAT

- (1) maintained active representation on both East Tennessee and Knoxville/ Knox County CAMPS committees;
- (2) continued to support Steering Committee efforts to achieve more coordination between the two area committees, on basis of overall need within the 16-county ETDD;
- (3) participated in strategy discussions with Southeastern (Region IV) Manpower Advisory Committee and Tennessee State CAMPS office;
- (4) co-sponsored a working conference and training session for key state and regional manpower personnel, as host to March meeting of Tennessee State Manpower Coordinating Committee;
- (5) participated as member of DOL-Region IV task force in the Southeastern Regional Manpower Planning Conference (Huntsville) and in development of proposed new regional CAMPS guidelines for Fiscal Year 1973 planning.

REGIONAL MANPOWER DEVELOPMENT (CONTINUING)

Activity

Area

SECOND PRIORITY PROJECTS

RURAL SCHOOL TO WORK TRANSITION (CONTINUING)

•Objective

To build programs in cooperation with educational cooperatives to facilitate entry of rural youth into employment compatible with their potential.

•Accomplishments

Discussions in January and June with Tennessee Appalachia Educational Cooperative focused on mutual activities to facilitate entry of rural youth into the world of work.

A group of 10 local rural guidance counselors and school officials, organized by a Tennessee Appalachia Educational Cooperative staff member, toured Worker Training program and engaged in a question-and-answer session on application and selection procedures. The counselors, who were principally interested in TAT to be able to inform their students about training possibilities, also were introduced to TAT's team guidance and counseling and supportive services approach.

*Work to be Done

Continuation of contacts to work toward rural school-to-work transition objective.

Activity Area SE

SECOND PRIORITY PROJECTS

FIELD EXPERIENCE TRAINING FOR MANPOWER DEVELOPMENT PERSONNEL (CONTINUING)

Residents in Training (New)

•Objective

To plan and present for testing and development purposes in-service training experiences for practitioners in industry and manpower agencies on the total employment process, based on actual field work with a manpower training program for disadvantaged.

STANDARD OIL RESIDENCIES (NEW)

•Objective

To expand Standard Oil staff capabilities for an eventual Standard Oil/ State of Illinois training center.

- •Accomplishments
- (1) Three-day residency for management on counseling, trainee conduct, remedial and community services.
- (2) Two-day residency for technicians who conducted the trainees' mid-cycle OJT and are now their industrial shop and laboratory supervisors.
- (3) Three-day residency for management on evaluations of trainees and assignments.
- (4) Three-day residency for senior scientist-educator in chemical technician laboratory/shop training, trade-related instruction, and curriculum review.
- (5) Three-day residency for employee relations representative in industrial behavior, career development, trainee evaluation, and supportive services.

DEVELOPMENT PERSONNEL

Activity

Area

SECOND PRIORITY PROJECTS

WEST VIRGINIA WIN RESIDENCY

· Objective

To provide experience in industry-based institutional training program to WIN administrative staff and special home office support in order to contribute to resolution of welfare trainees! severe problems in training.

Accomplishments

Beginning in April, state WIN headquarters counselor served a one-week residency in supportive services each month during the training cycle. He conducted periodic reviews with TAT staff of trainees problems and provided liaison to WIN field offices. Residency fell short of objective to significantly contribute to refinement of training program for low-achieving welfare clients.

. Work to be Done

Assessment and refinement of short-term "manpower residency" concept for manpower practitioners, to create alternative systems to maximize use of time and to meet different needs.

DEVELOPMENT PERSONNEL CONTINUING

Activity Area

SECOMD.	PRTARTTY	PROJECTS

Training of Manpower Agency Personnel (NEW)

Objectives

To train manpower officials in (1) strategic planning to determine manpower needs, resources, and priorities; and (2) development of plans to utilize available resources, through cooperative and innovative programs.

Description

Seventy-five East Tennessee, state, regional, and national manpower administrators assembled in a March workshop entitled Planning Manpower Strategies. Co-sponsors were the Tennessee State CAMPS Committee, TAT, and TVA.

•Accomplishments

(1) Training exercises of "planning games" focused on ETDD as a hypothetical pilot target area for an experiment in bloc-grant federal funding of comprehensive manpower programs.

PLANNING MANPOWER STRATEGIES - Training Exercises

- required participants to identify all Exercise I available resources for ETDD manpower needs and to agree upon a set of community development priorities.
- allocated resources among recruitment, Exercise II training, and technology alternatives yet met all priority manpower needs.
- Exercise III developed recommendations for a planning organization to prepare the state and the development district for human resource development under a decategorized, revenue-sharing program.
- (2) Participants assumed the identity and responsibilities of a develop-

FIELD EXPERIENCE TRAINING FOR MANPOWER DEVELOF-GENT PERSONNEL (CONTINUING)

Activity

Area

SECOND PRIORITY PROJECTS

ment district's board—as mayors, county judges, attorneys, community action directors, and industrial development managers — in order to view the total area need.

- (3) In development and administration of the workshop,
 - group leaders and "technical assistants" (TA) functioned as a team. TA was resource for centrally available data and assisted the group leader as a catalyst.
 - practice sessions prepared leaders, TA's, and workshop staff as to objectives, tactics, options, and feedback techniques.
 - continuous evaluation of group progress and quick followup on planning gaps stimulated flexibility in response to needs identified and achievement of realistic group consensus.

•Findings

- (1) Variety of participation, development of a central data source, and deliberately flexible evolution of the workshop were key elements in the problem-solving process.
- (2) The workshop was endorsed as an effective and realistic approach in development of future training conferences which ought to involve a similar variety of manpower, education, and industrial development planners.

'Accomplishments

Resource Material from Planning Manpower Strategies Conference, outlining the workshop proceedings, assessing the technique, and suggesting guidelines for similar planning sessions, was published.

> Work Group on Education and Training of Manpower Development Personnel (CONTINUING)

•Objective

The Work Group, composed of university personnel and manpower development practitioners, has as its objective development of programs which would pro-

	SECOND PRIORITY PROJECTS
FIELD EXPERIENCE TRAINING FOR MANPOWER DEVELOPMENT PERSONNEL (CONTINUING)	vios education and training for specialists and professionals in human resource development. *Accomplishments A summary status statement on the work group's activities was prepared in March 1971. TAT staff attended the Southeastern Manpower Advisory Committee meeting in July to brief that group on the work group's activities.
FIELD	

Activity
Area

INTERNSHIPS
(CONTINUING)

*Objectives

To cooperate with university personnel and to use TAT facilities to orient and train potential manpower personnel; to utilize interns to accomplish a primary assignment, a "residency package" for the benefit of TAT; to utilize university interns to accomplish secondary assignments; to cooperate with the university in allowing interns to utilize the TAT site to accomplish university field work training goals.

•Accomplishments

First half of the year:

- (1) Completed orientation of two UT School of Social Work interns at TAT November 1970-April 1971. Interns made aware of manpower training needs and overall goals. Both interns are potential candidates for leadership in future programs.
- (2) Primary assignment complete: "residency packages," guidelines for TAT for bringing in personnel for short-term residency programs in supportive services and job development, with a three-week plan completely outlined, including pre-entry and followup goals.
 - (3) Secondary assignments completed, including:
 - first draft of self-study and recommendations regarding TAT internship program;
 - intern study and recommendations regarding trainee transportation system;
 - daily participation in various supportive services and counseling programming.
- (4) Completion of all UT requirements in relation with TAT field work site. This includes special university thesis work, utilizing TAT data as a base.

Activity Area	SECOND PRIORITY PROJECTS
	Second half of year:
	(1) Planned for additional six-month internship for November 1971-April
	1972.
PS NG)	(2) Selected university intern from UT School of Social Work with consul-
	tation and final arrangements being completed with university personnel.
	(3) Previously developed residency package was field tested with the new
	intern. After numerous in-depth staff interviews, the primary assignment,
	an analysis of WIN participation at TAT, was completed.
	•Work to be Done
	(1) Planning and implementation of three-month administrator's assistant
	assignment with senior staff administrator.
	(2) Completion of all UT requirements in relation to TAT field work site.
INTERNSHIPS (CONTINUING)	
NTER	
н	
	·

Ac tiv ity Area	SECOND PRIORITY PROJECTS
	NEW AREAS (CONTINUING)
	Building Allied Health Manpower Programs—TAT-MED (Continuing)
	• Objectives
	To apply existing TAT industrial technical training resources to techni-
	cal training for allied health occupations; to apply industrial training
	innovations to field of medical education and thereby significantly reduce
	course lengths; to use TAT experience in training disadvantaged to design a
	program which would provide persons with less than ninth grade level achieve-
	ment in math and science an opportunity for occupational training and employ-
	ment in the allied health field.
	• Accomplishments
NEW AREAS (CONTINUING)	(1) Following a study of health manpower needs and resources in 1970, a
	training program using the capabilities of ORAU's Special Training Division,
	Medical Division, and TAT was designed to train certified laboratory assis-
	tants; proposal was given provisional approval by American Medical Association
	Council on Medical Education and Tennessee Department of Public Health.
	(2) In January, a Rockefeller Foundation official visited ORAU's facili-
	ties, and revisions to the proposal were made in line with Rockefeller
	Foundation's interest in funding portions of the program.
	(3) In April, Rockefeller's associate director for medical and natural
	sciences visited ORAU and discussed the program with potential TAT-MED staff.
	(4) Contacts with Foundation continued and in June, the revised proposal
	Building Allied Health Manpower Programs was published. Course outlines and
	schedules were included in the revision.
	(5) In July, the TAT-MED proposal was discussed with Knoxville Employ-
	•

ment Service and sent by them to Nashville for review.

Activity Area	SECOND	PRIORITY	PROJECTS

- (6) Received inquiry regarding TAT-MED from National Institutes of Health in September. Maintained contact with Rockefeller Foundation.
- (7) Learned NIH could not fund CLA program in November. Continued funding efforts with state.
- (8) In December, continued efforts with state to obtain approval of partial funding of TAT-MED. Maintained contact with Rockefeller.
 - Work to be Done

Contacts with Rockefeller Foundation will continue to be maintained in connection with the Foundation's plan to consider funding the proposal at Rockefeller's review board meeting in September. Meetings took place to resolve questions by the state. Contacts will be maintained with both state and Rockefeller Foundation in hopes of obtaining a joint funding arrangement.