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Oak Ridge Associated
Universities

TRAINING AND TECHNOLOGY STATISTICAL REPORT

October 1979—September 1980

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**TRAINING AND TECHNOLOGY
STATISTICAL REPORT**

October 1979–September 1980

January 1981

**Manpower Education, Research, and Training Division
Oak Ridge Associated Universities
Oak Ridge, Tennessee**

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TRAINING AND TECHNOLOGY

Training and Technology (TAT), a manpower development program coordinating industrial resources with human resource agencies, joins the training needs of the disadvantaged with industrial job requirements. TAT combines the management capability and training resources of Oak Ridge Associated Universities (ORAU) and Union Carbide Corporation, Nuclear Division (UCC-ND), to provide skills and technical training in an advanced industrial complex--the Oak Ridge Y-12 Plant of the U.S. Department of Energy (DOE). Monies for training are provided by state and local prime sponsors through the Comprehensive Employment and Training Act (CETA), other human resource agencies, high schools, employers, and individuals.

Training is conducted in the following areas: industrial drafting, machining, pipefitting (formerly mechanical operations), physical testing, and combination welding. Trainee sponsors in 1979-1980 were Adult Education, the Atmospheric Turbulence and Diffusion Laboratory (a DOE contractor), Chattanooga Human Services Department (including CETA Title III), Cherokee CETA, DOE, Kentucky Balance of State, Kentucky Special Grants, Knoxville/Knox County Community Action Committee, the Migrant and Seasonal Farmworker Program (a Department of Labor program), Oak Ridge High School, Tennessee Balance of State (CETA funds from Title IIB and III), Tennessee Special Grants, Tennessee Work Incentive Program, Trade Readjustment Act, UCC-ND, and the Vocational Rehabilitation Division of the Tennessee Department of Education. Enrollees who were sponsored by Adult Education paid their own tuition through the Adult Education Office of the Oak Ridge school system. TAT is also approved for Veterans Administration educational benefits. In addition, working relationships are maintained with the U.S. Department of Labor, the Tennessee Department of Education, organized labor at the local, state, and international levels, Roane State Community College, and the University of Tennessee.

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SUMMARY

A total of 839 trainees were enrolled at TAT during the 1979-1980 training year. Of these, 246 trainees had been carried over from the 1978-1979 training year, and 226 trainees were carried over into the next training year (1980-1981). Section One of this statistical report includes information on only those 613 trainees who exited training between October 1, 1979, and September 30, 1980. Demographic, educational, and employment data on the 613 exiting trainees--graduates and nongraduates--are summarized in Table I. As this table shows, trainees vary in age from 17 to 50. In order to facilitate placement, only those trainees who will be 18 at completion of training are enrolled. To be enrolled in the physical testing area, a trainee must be 18 at entry. Information on exiting trainees is categorized by funding agency or source in Table II.

There were 478 graduates (78 percent of concluding trainees), of whom 459 were available for placement.* Profile summaries of graduates and nongraduates appear in Tables III and IV. Those 19 unavailable for placement after graduation either returned to school or were ill (see Table V). Of the 459 available for placement, 432 were placed in jobs with beginning wages averaging \$6.34 per hour. The estimated annual income for those who were placed, assuming 2,080 hours per year, was \$13,187.

The majority of graduates, 85.8 percent, were unemployed at the time they entered TAT, therefore their starting wages after graduation represent a 100 percent increase. The remainder, 14.2 percent of graduates, reported wages averaging \$3.62 per hour at entry to training. Projected on an annual basis, those graduates employed at entry earned \$7,529. Compared to the average starting wage of placed TAT trainees on their first jobs after graduation, \$13,187, their increased earnings were \$5,658 or a 75 percent increase after training.

During the training year there were 135 trainees who did not graduate (22 percent of the 613 concluding trainees). Exit information on these nongraduates appears in Table VI.

In addition to industrial skills training, TAT offers trainees who do not have a high school diploma or its equivalent the opportunity to work on the General Education Development (GED) by studying at TAT and taking the GED test at a nearby institution of higher learning. Trainees who obtain passing scores may receive GED certificates. Thirty-five trainees received their GED certification during the 1979-1980 training year.

*Information is based on data available in TAT files as of January 1, 1981, and information gathered by telephone interviews with trainees or sponsors.

Cumulative and historical data appear in Section Two. Table VII contains a statistical profile of TAT enrollments by training year from September 1966 through September 1980. Table VIII presents a summary of demographic, educational, and employment data on all TAT graduates and nongraduates. TAT graduate and placement statistics by training years from 1966 through 1980 are presented in Table IX. Table X, Enrollees/Graduates in TAT Training Areas by Funding Years, concludes this section.

SECTION ONE
TRAINING YEAR SUMMARY TABLES

TABLE I
DEMOGRAPHIC, EDUCATIONAL, AND EMPLOYMENT DATA
OF GRADUATES AND NONGRADUATES

(N = 613)

Characteristic	Number	Percent
SEX		
Male	535	87.3
Female	78	12.7
AGE		
Range	17-50	
Average	24.2	
RACE/ETHNIC GROUP		
American Indian or Native American	2	0.3
Black	107	17.5
Hispanic	2	0.3
White	500	81.6
Asian or Pacific Islander	2	0.3
STATE OF PERMANENT RESIDENCE		
Tennessee	492	80.3
Other	121	19.7
PRIOR MILITARY SERVICE		
Veteran	196	32.0
Nonveteran	417	68.0
EDUCATIONAL STATUS AT ENTRY		
High School Graduate	309	50.4
Less Than High School Graduate	109	17.8
More Than High School Graduate	195	31.8
EMPLOYMENT STATUS AT ENTRY		
Employed	86	14.0
Unemployed	527	86.0

TABLE II

1979-80 TAT DEMOGRAPHIC, GRADUATION, AND PLACEMENT STATISTICS BY FUNDING AGENCY OR SOURCE

Funding Agency or Source ^a	Graduates and Non-Graduates	Sex		Race/Ethnic Group					Employed at Entry ^b		Graduates ^c		Graduates Available for Placement ^b		Placed ^c		Average Starting Wage/Hr.	Yearly Post-TAT Earnings ^d
		M	F	W	B	H	AI	PI	No.	%	No.	%	No.	%	No.	%		
Adult Ed	40	36	4	40	-	-	-	-	11	28	35	88	33	94	30	91	\$ 6.91	\$14,373
CHAT HSD	5	5	-	1	4	-	-	-	-	-	4	80	4	100	2	50	3.18	6,614
CHAT STIP	62	59	3	19	43	-	-	-	3	5	47	76	46	98	46	98	7.25	15,080
DOE/UCC-ND	10	5	5	8	2	-	-	-	4	40	9	90	9	100	9	100	6.65	13,832
ETHRA	2	-	2	2	-	-	-	-	-	-	2	100	2	100	2	100	4.53	9,422
HAM CO	5	5	-	4	1	-	-	-	-	-	3	60	3	100	3	100	7.07	14,706
KY BOS	22	22	-	17	3	1	-	1	1	5	21	95	21	100	21	100	6.03	12,542
KY SP GR	16	14	2	16	-	-	-	-	2	13	10	63	10	100	8	80	6.08	12,646
K/KC CAC	24	10	14	15	9	-	-	-	6	25	15	63	13	87	12	92	4.99	10,379
MSFW	119	110	9	93	23	1	2	-	29	24	91	76	90	99	82	91	6.93	14,414
ORHS	8	8	-	8	-	-	-	-	1	13	7	88	5	71	5	100	4.57	9,506
TN BS IIB	110	90	20	103	6	-	-	1	5	5	97	88	91	94	88	97	6.31	13,125

TABLE II

1979-80 TAT DEMOGRAPHIC, GRADUATION, AND PLACEMENT STATISTICS BY FUNDING AGENCY OR SOURCE (Continued)

Funding Agency or Source ^a	Graduates and Non-graduates	Sex		Race/Ethnic Group					Employed at Entry		Graduates		Graduates Available for Placement ^b		Placed ^c		Average Starting Wage/Hr.	Yearly Post-TAT Earnings ^d
		M	F	W	B	H	AI	PI	No. Enrollees	%	No. Enrollees	%	No. Graduates	%	No. Graduates	% Available		
TN BS-120	54	50	4	49	5	-	-	-	4	7	27	50	27	100	24	89	\$ 6.37	\$13,250
TN BOS-DH	2	0	2	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
TN BOS-M	2	2	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
TN STIP	110	97	13	106	4	-	-	-	14	13	100	91	95	95	93	98	5.65	11,752
TN SP GR	8	8	-	4	4	-	-	-	3	38	-	-	-	-	-	-	-	-
TRA	2	2	-	2	-	-	-	-	-	-	2	100	2	100	2	100	11.27	23,442
Voc Rehab	12	12	-	12	-	-	-	-	3	25	8	67	8	100	7	88	6.27	13,042
TOTAL	613	535	78	500	107	2	2	2	86	14	478	78	459	96	432	94	\$ 6.34	\$13,187

^aKey to abbreviations follows this table.

^bThose unavailable for placement either (1) continued education or training or (2) were deceased, ill, or incarcerated.

^cAll individuals who graduated during FY 1979, were available for placement, and were known to have found unsubsidized employment by December 31, 1979, were considered placed.

^dAssumes full 2080-hour workyear for all placed graduates.

KEY TO TAT FUNDING AGENCY ABBREVIATIONS

Adult Ed	Adult Education
Chat HSD	Chattanooga Human Services Department
Chat STIP	Chattanooga Skill Training Improvement Program
DOE/UCC-ND	Department of Energy/Union Carbide Corporation, Nuclear Division
ETHRA	East Tennessee Human Resources Agency
HAM CO	Hamilton County CETA
KY BOS	Kentucky Balance of State
KY Sp Gr	Kentucky Special Grants
K/KC CAC	Knoxville/Knox County Community Action Committee
MSFW	Migrant and Seasonal Farmworker Program
ORHS	Oak Ridge High School
TN BS IIB	Tennessee Balance of State IIB
TN BS 120	Tennessee Balance of State IIB-120
TN BOS-DH	Tennessee Balance of State - Displaced Homemaker
TN BOS-M	Tennessee Balance of State - Minority
TN STIP	Tennessee Skill Training Improvement Program
TN Sp Gr	Tennessee Special Grants Program
TRA	Trade Readjustment Act
Voc Rehab	Vocational Rehabilitation

TABLE III
GRADUATE PROFILE SUMMARY
(N = 478)

Sex		Race/Ethnic Group					Avg. Age	Employment Status at Entry	
M	F	AI	B	H	W	A/PI		EM	UNEM
420	58	2	73	2	399	2	24.1	68	410

TABLE IV
NONGRADUATE PROFILE SUMMARY
(N = 135)

Sex		Race/Ethnic Group					Avg. Age	Employment Status at Entry	
M	F	AI	B	H	W	A/PI		EM	UNEM
115	20	0	34	0	101	0	24.4	18	117

TABLE V
PROFILE OF GRADUATES UNAVAILABLE FOR PLACEMENT

Reason	Number of Graduates
Illness	3
In School	<u>16</u>
TOTAL	19

TABLE VI
SYNOPSIS OF NONGRADUATES' REASONS FOR LEAVING

Reason	Number of Nongraduates
Obtained Employment	4
Entered School	4
Entered Armed Services	2
Health	8
Family Care	1
Moved from Area	1
Administrative Separation	5
Voluntary Termination	59
Excessive Absenteeism	37
Incarcerated	1
Lack of Progress	2
Other Reasons	<u>11</u>
TOTAL	135

SECTION TWO
CUMULATIVE AND HISTORICAL SUMMARY TABLES
(September 1, 1966 - September 30, 1980)

TABLE VII
TAT TRAINEES BY TRAINING YEARS
(September 1966-September 1980)

Training Years	Total Enroll- ments	Exits			Carry- Overs
		Graduates	Non- graduates	Total	
TAT-I (Sept. 1966-June 1968)	624	525	99	624	
TAT-II-Phase I (Sept. 1968-Sept. 1969)	386	339	47	386	
TAT-II-Phase II (Oct. 1969-Sept. 1970)	393	328	65	393	
TAT-II-Phase III (Oct. 1970-Sept. 1971)	379	271	108	379	
TAT-II-AEC Industrial Training Center-Phase IV (Oct. 1971-Sept. 1972)	476	392	84	476	
TAT-ISTT-Phase V (Oct. 1972-Sept. 1973)	458	391	67	458	
Oct. 1973-Sept. 1974	244	187	57	244	
Oct. 1974-Sept. 1975	371	262	109	371	
Oct. 1975-Sept. 1976	380	308	72	380	
Oct. 1976-Sept. 1977	555	338	64	402	153 ^a
Oct. 1977-Sept. 1978	552	406	102	508	197 ^a
Oct. 1978-Sept. 1979	662	462	151	613	246 ^a
Oct. 1979-Sept. 1980	<u>593</u>	<u>478</u>	<u>135</u>	<u>613</u>	226 ^b
TOTAL	6,073	4,687	1,160	5,847	

^aNumber of enrollees carried over into next training year. These figures already appear within the following year's graduate and nongraduate figures.

^bNumber of enrollees carried over into next training year. These figures will appear within next training year's graduate and nongraduate figures.

TABLE VIII
DEMOGRAPHIC, EDUCATIONAL, AND EMPLOYMENT
DATA OF ALL TAT GRADUATES AND NONGRADUATES^a

Data Items	Number	Percent
TERMINATION INFORMATION		
Graduates	4,687	80.2
Nongraduates	1,160	19.8
AGE AT ENTRY		
Range	17-54	
Average	23	
SEX		
Male	5,300	90.6
Female	547	9.4
RACE/ETHNIC GROUP		
Black	1,517	25.9
White	4,280	73.2
Other (American Indian, Eskimo, Hispanic, Asian, or Pacific Islander)	50	0.9
STATE OF PERMANENT RESIDENCE		
Tennessee	4,901	83.8
Other States	946	16.2
EMPLOYMENT STATUS AT ENTRY		
Employed	1,812	31.0
Unemployed	3,997	68.4
Unknown	38	0.6
ENTRY EDUCATION LEVEL (Only since 1968; N = 5,262)		
High School Graduates	4,113	78.2
Non-High School Graduates	1,119	21.3
Unknown	30	0.5

^aData includes all graduates and nongraduates from September 1966 through September 1980. Not included are 226 carry-overs into next training year (1980-1981).

TABLE IX
TAT GRADUATE AND PLACEMENT STATISTICS BY FUNDING YEARS

Enrollee Category	1966-68	TAT-II-I 1968-69	TAT-II-II 1969-70	TAT-II-III 1970-71	TAT-II-AEC-IV 1971-72	TAT-ISTT-V 1972-73
Enrollments	624	386	393	379	476	458
Graduates & Nongraduates ^b	624	386	393	379	476	458
Graduates	525	339	328	271	392	391
Available for Placement ^c	476	333	315	253	365	358
Placed (Percentage)	473 (99%)	325 (97%)	297 (94%)	241 (95%)	341 (93%)	344 (96%)
Average Hourly Starting Wage	\$2.85	\$3.03	\$3.09	\$3.15	\$3.29	\$3.61
Projected Annual Post-TAT Earnings ^d	\$ 5,928	\$ 6,302	\$ 6,427	\$ 6,552	\$ 6,843	\$ 7,509
Not Employed at Entry (Percentage)	219 (42%)	245 (72%)	231 (70%)	166 (61%)	273 (70%)	248 (63%)
Employed at Entry (Percentage)	306 (58%)	94 (28%)	97 (30%)	105 (39%)	119 (30%)	143 (37%)
Employment Status at Entry Unknown (Percentage)						
Projected Annual Pre-TAT Earnings of Graduates Who Were Employed at Entry	() ^e	\$ 3,349	\$ 3,661	\$ 3,778	\$ 4,526	\$ 4,484

^aNumber in parentheses indicates number of enrollees carried over into following training year.

^bNumber for years 1966-68 through 1975-76 equals number of enrollments. Beginning in 1976-77, it equals the number of enrollments plus the number of carry-overs from the previous year, minus carry-overs to the next year.

^cThose unavailable for placement either (1) entered military service, (2) continued education and/or training, (3) were deceased, ill, or incarcerated, or (4) opted not to work. After January 1974, entering military service (volunteer) is considered placement.

^dAssumes 2080 hours of work per year.

^eInformation not available.

TABLE IX
TAT GRADUATE AND PLACEMENT STATISTICS BY FUNDING YEARS (Continued)

Enrollee Category	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	TOTALS
Enrollments	244	371	380	555	552	662	593	6,073
				(153) ^a	(197) ^a	(246) ^a	(226) ^a	-
Graduates & Nongraduates ^b	244	371	380	402	508	613	613	5,847
Graduates	187	262	308	338	406	462	478	4,687
Available for Placement ^c	177	242	297	325	402	449	459	4,451
Placed	170	220	288	319	392	412	432	4,254
(Percentage)	(96%)	(90.9%)	(97%)	(98%)	(97.5%)	(91.8%)	(94.1%)	(95.6%)
Average Hourly Starting Wage	\$3.96	\$4.20	\$5.58	\$5.04	\$5.43	\$5.31	\$6.34	-
Projected Annual Post-TAT Earnings ^d	\$ 8,237	\$ 8,736	\$11,606	\$10,483	\$11,294	\$11,045	\$13,187	-
Not Employed at Entry	116	156	239	246	255	327	410	3,131
(Percentage)	(62%)	(60%)	(77%)	(72.8%)	(62.8%)	(70.8%)	(85.8%)	(66.8%)
Employed at Entry	68	103	61	91	145	134	68	1,533
(Percentage)	(36%)	(39%)	(20%)	(26.9%)	(35.7%)	(29%)	(14.2%)	(32.7%)
Employment Status at Entry Unknown	3	3	8	1	6	2	-	23
(Percentage)	(2%)	(1%)	(3%)	(0.3%)	(1.5%)	(0.4%)	-	(0.5%)
Projected Annual Pre-TAT Earnings of Graduates Who Were Employed at Entry	\$ 4,971	\$ 4,909	\$ 5,356	\$ 5,512	\$ 6,178	\$ 6,552	\$ 7,529	-

^aNumber in parentheses indicates number of enrollees carried over into following training year.

^bNumber for years 1966-68 through 1975-76 equals number of enrollments. Beginning in 1976-77, it equals the number of enrollments plus the number of carry-overs from the previous year, minus carry-overs to the next year.

^cThose unavailable for placement either (1) entered military service, (2) continued education and/or training, (3) were deceased, ill, or incarcerated, or (4) opted not to work. After January 1974, entering military service (volunteer) is considered placement.

^dAssumes 2080 hours of work per year.

^eInformation not available.

TABLE X

ENROLLEES/GRADUATES IN TAT TRAINING AREAS BY FUNDING YEARS

Training Areas	TAT-I, TAT-II, Phases I-V 9/66-9/73		1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	TOTALS	
Chemical Technology	15/	14	-	-	-	-	-	-	-	15/	14
Drafting	244/	205	2/ 0	33/ 27	-	6/ 0	30/ 24	37/ 30	26/ 17	378/	303
Electro-Mechanical	14/	8	-	-	-	-	-	-	-	14/	8
Electronics	241/	220	27/ 20	45/ 34	15/ 13	-	-	-	-	328/	287
Glassblowing	42/	27	-	-	-	-	-	-	-	42/	27
Industrial Electricity	34/	31	27/ 22	-	-	-	-	-	-	61/	53
Instrument Repair (Paducah only)	15/	12	-	-	-	-	-	-	-	15/	12
Machining	883/	719	56/ 44	80/ 55	82/ 69	83/ 72	84/ 64	170/134	146/120	1,584/1,277	
Maintenance Mechanics (Paducah only)	70/	55	-	-	-	-	-	-	-	70/	55
Mechanical Operations	390/	313	27/ 13	59/ 37	68/ 51	50/ 37	82/ 62	103/ 73	123/ 99	902/	685
Physical Testing	353/	290	46/ 39	59/ 46	78/ 66	121/101	176/157	147/116	159/137	1,139/	952
Process Operations (Goodyear only)	20/	19	-	-	-	-	-	-	-	20/	19
Welding	395/	333	59/ 49	95/ 63	137/109	142/128	136/ 99	156/109	159/105	1,279/	995
TOTAL	2,716/2,246		244/187	371/262	380/308	402/338	508/406	613/462	613/478	5,847/4,687	