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HISTORY AND COMMENTS

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VOCATIONAL EDUCATION IN AFGHANISTAN - HISTORY AND ORGANIZATION

Trade and craft training in Afghanistan has followed the same pattern that existed in most countries throughout the centuries in that this was primarily through apprenticeship passed down from father to son or members within the family and tribal groups. The first trade and technical training that could be considered organized and taught in a more or less formal school situation was in the Military School established by Amir Shair Ali Khan. This was a military school established for all types of military training and contained an element of trade training or ordinance repair and maintenance. This school was established in approximately 1860.

The modern educational system in Afghanistan has grown out of the establishment of Habibia College which is now Habibia High School, and was established by Amir Habibullah in the Afghan year 1279, that is 71 years ago. This school is entirely academic, a one-track, transfer-type and does not contain any vocational, terminal programs.

The Ministry of Education was first established under the name Nizara-ti-Maaref which means educational supervision. This was later changed to the present Wazarat-i-Maaref, or Ministry of Education.

The Ministry of Education has grown out of this original start and is now organized to include 14 presidencies within the Ministry. These administrative divisions within the Ministry of Education include Secondary Education, Planning, Administration, Vocational Education, etc., as well as directorates and other administrative divisions to make up the

present system. The first presidency within the Ministry of Education was called Text and Education and carried the responsibility for educational planning and programs. This was established some 52 years ago.

Following thisthere was established the Presidency of Inaugurates, Secondary and Vocational Education. This was established in 1947. Dr. Mohammed Yousuf was the President of the department. General Directorates were established under this department, one of which carried the responsibility for vocational education. Seven years later this General Directorate of Vocational Education was upgraded to a separate Presidency and Dr. Mohammed Haider became the first President of Vocational Education. Subsequent presidents have been: Dr. Samadi, Dr. Jalal, and Dr. Yaqoubi who is the encumbent President of Vocational Education. Ten years ago a Technical Director's position was established. Three persons have held the position of Director General of Vocational Education. Mr. Ashraf, a former Director of AIT, presently holds this position.

The following is a list of vocational schools under the Vocational Department of the Ministry of Education:

The first vocational school established in Afghanistan was the Kabul Agriculture School. This was established 48 years ago, and was located in Karte Char in the city of Kabul and served grades 7, 8 and 9, teaching general studies, Farsi, arithmetic and geometry with agricultural fundamentals covering a good percentage of the instructional time According to reports, this included some practical projects in agriculture. The school at one time was aided by a group of French

specialists in agriculture who taught there for a number of years. The school was eventually moved to another location in Karte Se, and upgraded to serve grades 10 through 12. It has subsequently been moved to the Helmand Valley where it still exists as a vocational agriculture school.

The Kabul Art School was the first school established under the Ministry of Education to serve the industrial arts in craft areas. This school was established 42 years ago in the Afghan year 1308, and at one time taught ten different majors or branches in the industrial arts. These included civil, construction, art and painting, carpentry, carpet weaving, tailoring, mosaics, lithography and ceramics. The school was operating in grade levels 6 through 9. It would appear that this school had very little success in the areas in which it was teaching. Various branches and majors were gradually dropped due to the poor quality of students and the lack of employment available for graduates until it was reduced to teaching only two branches--carpentry and tailoring. They had a serious fire some 13 years ago that destroyed most of the remainder of the school. However, out of this has grown the present craft school now existing in Kabul as a school under the Vocational Department. It has received help over the last few years in the form of two or three German instructors. At present there are no German instructors remaining in this school.

Kabul Mechnical School was established 34 years ago. This school was serving grades 6 through 9 and was patterned after what would be generally classified as a vocational day trade school. They offer

training in electronics, power electricity, plumbing, sheet metal and blacksmith and machine work. Upon the establishment of this school, one Director and several instructors were hired from Germany to establish the new school and to select, train and guide its technical education phase. World War II interrupted the use of German nationals in this school, and they were called back to Germany during this period. Immediately after World War II, Austrian nationals were contracted and brought in to conduct the operation of the school. At this time, the process of sending Afghan instructors to German for training in the trade-technical areas was begun. Since this time, many scholarships have been granted to West Germany for the training of persons to return and teach in this and the other vocational day trade schools patterned after the German concept. These instructors did not receive professional degrees, but were rather given straight trade training, much of it in German shops and factories as practical work experience. These instructors who have received such training in Germany now carry the rank of "meister" of their trade. We have no equivalent title in the American system. This means essentially that they have reached a proficiency in craft attitude that allows them to be recognized as a fully trained person in their craft field. It goes without saying that these persons have spent neither the time nor had the experience that would make them the equivalent of German meisters.

In 1947, a team of German specialists returned to the Kabul mechanical school and remained as instructors and advisors through 1971. At this time all advisors were phased out at this school. The school has been upgraded to serve grades 9 through 12. There are now new negotiations with the German government to determine whether or not this foreign aid will continue in the mechanical schools.

The Kabul Commercial School was established 28 years ago. This school served two levels--the middle grades 7 through 9 and the high school level grades 10 through 12. This school is under the Vocational Education Division of the Ministry of Education with its curriculum designed to teach commercial accounting systems, economics, and financial procedures. It is primarily a vocational school to train clerks and accountants for the government.

The Farah Art School was established some 14 years ago to train students in carpentry and masonry in that provincial area.

The Kandahar Mechanical School was established at the same time. It is patterned very much after the Kabul Mechanical Schools, but has a somewhat more limited curriculum. It is primarily for metals and the metal trades. The Khost Mechanical School was established at the same time and is essentially the same kind of school as the Kandahar Mechanical School.

The Technicum established at Mazar-i-Sharif is a part of the proposed system of what was originally to be four high-school level vocational-technical schools operating and having a curriculum very much like the one at AIT. This system is supported by the Russians, and the Mazar-i-Sharif Technicum was opened in the fall of 1971. It has a curriculum that could best be described as a technical high school. Buildings are almost completed for another technicum that is located in Kabul near the Jangalak Industries factory and was supposed to be a cooperative between Jangalak Industries and the Technicum School. This school, however, has not been opened; work is still continuing on some of the buildings and the plant is almost completed, but it shows no signs of being opened in the near future.

The Polytech Technicum system was announced some 8 years ago to be sponsored by the Russian government and comprised a system extending from the 10th grade through 5 years of engineering training. This was originally conceived with the Polytech Engineering School as the central school of the system with 4 high-school level technicums to be established to feed a certain percent of their graduates into the Polytech; the remainder to be terminal at the 12th grade. This system was originally to have been under the Ministry of Mines and Industries to work as a closely cooperating instructional system with the existing industries and industries to be established in Afghanistan. Under this concept, the system would have been entirely outside the Ministry of Education and Kabul University, and would have operated as

an independent parallel system serving the Ministry of Mines and Industries. This, however, ran into opposition from other Ministries and officials within the government as they felt that Afghanistan could not afford or should not run parallel educational systems operating out of different Ministries that would be in competition with each other. Eventually the Ministry of Education won control of this system. The Polytech is now located in Kabul and is a part of Kabul University, while the one technicum now operating is a part of the vocational educational system of the Ministry of Education. The technicum located near Jangalak Industries in Kabul, will, I am sure, eventually open as a lycee-level school. As yet, we haven't been able to determine whether this will be a vocational high school operating under the Vocational Department or whether it will be a straight academic high school. In any event, the Polytech-Technicum system has had a very slow development over the last 8 years. The Polytech as a part of Kabul University was developed quickly enough it is now operating, but the technicum system seems to have fallen on hard times and after 8 years, only one of the schools has opened and there is some question if the remaining 3 will ever open and operate under the original concept. The technicum now operating in Mazar-i-Sharif does have a transfer element in the curriculum whereby a certain percentage apparently will be able to transfer for engineering training in the Polytech of Kabul University. That school has 8 Russian national advisors working full time in the school.

HISTORY OF AIT

The Afghan Institute of Technology is a school operating within the Vocational Education Department of the Ministry of Education. AIT was established at a somewhat later date than many of the previously discussed schools. It was conceived by Mr. Richard R. Soderberg who was teaching in Habibia College (a high school) in Kabul under a private contract with the Ministry of Education. Mr. Soderberg had been a member of the Faculty of the College of Engineering, University of Southern California. Apparently a proposal to establish the school was written by Mr. Soderberg and accepted by the Ministry of Education in July 1948. The school was to be located in Kabul. It would be a dormitory school and set up primarily to attract students from the provinces. It was termed an institute of technology to serve grades 10 through 12 on a level to be terminal in nature, and at a later date grades 13 and 14 were to be added. This would round it out as an institution patterned after the 13th-14th year institutions in the United States. The 13th and 14th years were to have been devoted entirely to engineering studies. The original concept was quite ambitious in that the curriculum was to include five major fields of study in engineering. At this time, there was no engineering school in Afghanistan. This was conceived as an institution that would serve the needs of the Afghan community on a quasi-engineering concept rather than the establishment of a full engineering school. Mr. Soderberg was commissioned to return to the United States to set up an organization in California called the Afghan Institute of Technology, Inc. This was a non-profit organization to recruit American teachers, secure

donations of money and equipment, organize the whole, write curriculum and select text and library books and return to Afghanistan as a working unit. Twelve instructors were recruited and contracted, with the Afghan government paying travel expenses back to Afghanistan. They would set up in what was formerly a warehouse building on Shair Shah Mina Road in Kabul. This building required extensive remodeling and renovation to accommodate the school. The cost was borne by the Ministry of Education. The first school year at AIT started in March 1951 with Mr. Soderberg as Director and 12 faculty members--all American nationals. The students were recruited from the Avicenna middle school to make up the first entering class. Some 6,000 volumes of books were received and shipped to Afghanistan as donations from schools principally in California. Quite a large tonnage of equipment was also shipped to Afghanistan at this time--all donations from engineering schools in the United States. During this first school year, the Ministry of Education and other Afghan officials became a bit apprehensive about the operation of the Afghan Institute of Technology, Inc.--perhaps because they had no Afghans serving on the Board in the United States. The equipment being donated in the form of library books and engineering laboratory equipment left much to be desired. Library books donated were confined primarily to old retired books from US libraries. Testing and laboratory equipment was of the same character and most of it probably was not worth the shipping costs from the States to Afghanistan which was paid by the Afghan government. The Afghan Ambassador to the United States was asked to investigate the situation. He requested and received aid for the school in the form of money grants both from UNESCO and the American Point IV. Records show that the Ministry received $26,000

from the Point IV program of 1951 for AIT. In spite of some of the troubles encountered during those early years, AIT was apparently quite successful in that some of our present leaders at this institution started their training during this period and eventually received scholarships to the United States. These began in 1953 as scholarships awarded to the University of Wyoming under the Foreign Operations Administration.

In 1955, a contract was awarded to the University of Wyoming to furnish teachers and advisory personnel to AIT, this also included commodity orders for equipment, textbooks and other needed items for the school. The University of Wyoming operated this contract until 1961, at which time it was phased out. Records show a large group of participants sent to the United States during this period of operation. However, the listing of participants was not entirely those associated with AIT--many of them were chosen for the other contracts held here by the University of Wyoming. In any event, many of the participants who went to the United States for training during that period are now leaders and hold positions of authority in AIT. The Wyoming contract was phased out in December 1961. Apparently it was not phased out with the concept that the school was a viable institution able to operate on its own, but rather it was decided that the advisory personnel and assistance would be taken over by direct hire AID technicians. From 1962 to 1964, two direct hire technicians were assigned to AIT. These were Mr. William Waffle and Mr. August R. Anderson who had advisory responsibilities to the school which included all phases of the school's operation. This included a participant training program as well as commodity procurement through United States sources.

In 1964, it was decided that another contract should be let under AID to provide a team of teachers and advisors to AIT. A commodity procurement and participant training program would continue, funded directly by AID. At the same time it was decided that AIT should have a new physical facility. Land was set aside by the Ministry of Education. This was a 17-acre plot immediately adjacent to the old AIT facility. A contract was let to Daniels, Mann, Johnston and Mendenhall, an architectural firm in the United States to draw plans and make a survey in Afghanistan for the design and construction of a new AIT physical plant. This work was completed and a contract was awarded to Afghan Highway Contractors, an American construction company to construct a new physical facility.

PHILOSOPHY AND CONCEPTS UNDER THE SIU CONTRACT

The SIU contract to provide advisors to AIT was signed at the University in November 1964. At this time the Director of the Vocational Technical Institute and the designated Chief of Party traveled to Afghanistan for a survey trip prior to fulfilling the contract. Facilities in the existing program was surveyed and it was agreed the team would be comprised of six technicians including the Chief of Party. These were all to be specialists in the technical areas--no advisor was to be assigned to the general studies area. The Chief of Party arrived at post in February 1965. Prior to coming to post he had recruited and secured contracts on most of the personnel to fill the contract needs. Immediately after the arrival of the Chief of Party, Mr. Jack Comer, automotive specialist arrived with his family and was followed by Mr. Karl Rose, electricity/electronics specialist. Mr. Ron Price, civil engineer and Mr. Joseph Gregory, aviation

specialist also joined the team. The University was a bit slow in filling the position of building construction advisor, however, this was subsequently filled by bringing out Mr. William Woodfin.

The original concept of AIT was that the school would include the 13th-14th year technical institute program, and supposedly would offer a program on the Associate degree level. This was raised again at the beginning of the SIU contract, and according to existing plans, we were to continue training in grades 10 through 12 and add grades 13 and 14 to bring the school to the original concept of a post-high school technical institute training. The situation was a bit different in 1965 than it had been in 1948. At the time of the beginning of the SIU contract, Kabul University had a well-established Faculty of Engineering and the Polytechnic, an engineering school was well on its way in planning and construction started soon thereafter. We surveyed the situation and seriously considered the concept of adding the 13th and 14th years at AIT. This was even carried to the point that we wrote a proposed curriculum. This concept, however, was a concern to most people involved in planning the future of AIT. Many of us could not see a need for adding two more years to the AIT program, but rather we believed that AIT should remain as a technical high school with a completely new curriculum serving the most used and best defended areas. We reasoned that with the establishment of two engineering schools, given the limited resources as well as limited job opportunities for graduates in Afghanistan that the school could best serve the community by remaining on the technical high-school level. We further reasoned that this new curriculum should be broadened to cover some of the areas in trade technical training that were not, at that time, being covered at AIT; that the curriculum should be

a broad and general one as opportunities for placing graduates in narrowly trained areas would not exist as well as not being able to determine what was needed in a program involving narrowly trained students in highly skilled specialties. The new curriculum was also to include a strong instruction in the English language, as well as a strong program in the sciences and mathematics. We believed also that AIT should prepare students to pass the entrance examination for the Faculty of Engineering, Kabul University for further training. This was confined to only a small percentage of each graduating class and would serve the purpose of attracting a better quality student to AIT as well as providing an incentive for keeping a high level of instruction. This was not too hard to achieve as we needed a good strong program in mathematics, science and languages to support instructions in the technical areas. Armed with these concepts and arguments, we used this as a justification to persuade the authorities both in the Ministry of Education and AID to continue AIT on the technical high-school concept by completely rewriting the curriculum adding two new majors in the technical area and working within the framework in which we felt that the Ministry of Education had the resources, and could achieve the means of making AIT a viable self-sufficient institution capable of better serving the community in which it is located.

The original concept of providing some intermediate engineering-type training that was conceived for AIT at its founding when no engineering schools existed in Afghanistan had no doubt a valid purpose. Engineers existing in the country at that time were foreign trained, and persons could look forward to a quasi-engineering specialist that might serve many areas of the country quite well. However, with the subsequent establishment

of the engineering colleges in Kabul University, it no longer seemed necessary to train a person who was left with the concept that he was somewhat of an engineer, but could never achieve that full status. Fourteenth-year students serve a real purpose in industrialized countries that require numbers of highly skilled and narrowly trained specialists. Afghanistan has not reached that point of industrial development. At the present time, perhaps the greatest need is for maintenance of imported transportation equipment, machine tools, and the mechanical equipment associated with their larger buildings. This would also extend to the maintenance of communication lines and imported construction equipment and electricity generating systems. Most major projects that have been completed in Afghanistan were sponsored by a foreign government. Along with the loan or grant funding of these projects invariably go engineers and planning personnel imported from outside sources. Afghanistan must have graduate engineers to work in the maintenance areas as directors and planners as well as counterpart engineers for foreign-sponsored development projects. They can look forward in the future to doing much of this technology and engineering work on their own, however, the intermediate, highly-trained technician is not in demand in Afghanistan at the present time, but rather the need to depend on existing engineering training programs and have supporting programs such as AIT to turn out rather broadly-trained, well-oriented and well-grounded graduates in the well-established trade and technical areas. They have not, for instance, reached the point where they would need a highly specialized micro-wave station operator. New industries are being established in Afghanistan, but they run quite heavily

to those industries of the food processing and textile types. These industries do not require great numbers of highly-skilled persons. They will require small numbers of well-skilled maintenance men to service and maintain imported equipment. Afghanistan needs more and more terminal programs in the technology and agriculture areas to orient people toward the concept of production. It probably will be many years before Afghanistan will be manufacturing machine tools and transportation equipment. However, they can be oriented toward manufacture and production of lesser items--many such are now being imported. Technology and craft-education programs terminal at the 12th grade would appear to be the best answer to craft and technology training in Afghanistan.

There has been some measure of interest in the junior college and community college training in Afghanistan during the last year or so. It is a little difficult to tell just what they have in mind in some of the panel discussions that have been held toward this end. There seems to be an awareness that some kind of terminal training programs should be in effect short of university training. The general concept seems to be to continue academic high schools with college preparatory programs, and those graduates that do not enter the university could then be enrolled in a terminal program in a community college to perhaps enter either agricultural production, industries, or the service industries. It would appear that Afghanistan does not have the resources to conduct such a program, but rather could sort students' interests and abilities at an earlier date by offering this terminal training in the existing high schools by converting them to a comprehensive program. Some officials seem to have the concept

that specialty schools should be formed to absorb graduates from the academic high schools whereby they would pursue a retraining program in a school that would properly be classified as a trade school. There are some trade-school type institutions operating in Kabul at the present time. These have real value, and perhaps more should be encouraged. This kind of school, of course, must be very closely tied to the industry and service groups in which it is designed to serve. In any event, we believe quite strongly that a school such as AIT should remain on a high-school level given the present resources of Afghanistan. If junior and community colleges are established, then it follows that AIT should be the leading technical institute within this system. But only if it is forced into that role by a change in the overall educational system.

Many of the community-college systems in the United States are there and flourishing because of the level of affluence attained by the US system. Labor laws and minimum wages tend to force the beginning work years past the 16-18 year levels. After all, if we can afford to do so, why not give the machinist and carpenter a high school education first, then two years of specialty, terminal training afterward. Does Afghanistan have such resources that they can afford to do so?

With these concepts it was not too difficult to convince officials both in the Ministry of Education and in AID to adopt this direction for AIT, at least for the following few years. It was to be that of a technical high school offering a strong program in mathematics, science, languages and sports in the general studies area, and six well-chosen majors to be offered in the technical areas with the technical majors being rather broadly

designed to give the students a good grounding in the craft and technology area of his choice as well as orient these students toward the concepts of trade-technology production. The continuation of a rather heavy program in the English language could be justified from the standpoint of our use of English language texts and reference books and a reasonable command of the English language becomes a good saleable skill for a student who has completed a terminal program at AIT. With these goals well in mind and the philosophy determined and with most officials agreeing to these goals and philosophies, we were free to start the process of institutional building at AIT. It was very necessary that our enabling linkages in the institutional building process were fully aware of our goals and that they agreed with these concepts. In the concept of institutional building or redirecting, it is absolutely necessary that everyone agree on common goals. It is especially important that the host country nationals agree with these goals, otherwise the program will not succeed regardless of its merits. Our remaining enabling linkages were somewhat predetermined in that the school had been a going institution for a number of years. The Afghan government was supplying all salaries, food and operating expenses for the school. AID, through the SIU contract, was to supply technical advisors, machine tools, laboratory equipment and hand tools. Construction of the new physical facility was to be a joint project with the cost being shared by a USAID grant and an appropriation by the Ministry of Education.

Our normative linkages were not so clear-cut nor easily defined. We were establishing essentially as an American-oriented school through

all aspects of the operation from the construction of the building to the equipment, shops and laboratories as well as the scholarship training of staff members in the United States--essentially it is a very American-oriented school. This institution in turn must operate within the public-school system of Afghanistan and must of necessity follow many of the rules and regulations of the Ministry of Education. This causes some problems and in many cases confusion and misunderstanding, as American-trained personnel does not have the freedom to operate under some of the concepts of a modern American-oriented school. These differences have their greatest impact perhaps in the recently returned participants who are expected to immediately put their training to use by passing it on to students that will disseminate it throughout the community. Instead, many times the newly returned participant finds himself restricted by old operating procedures and by persons in authority who neither understand or are willing to accept many of the new concepts he is attempting to introduce. These, of course, are the result of our attempts to entice people to step out of the old ways and by the use of education introduce the more modern concepts in institutional building.

CURRICULUM DEVELOPMENT

In the beginning of the school year in 1965, AIT was a going institution measured by some standards. It was operating with a partially trained staff--some of the staff being well trained. It had enjoyed a measure of growth since its inception and this can be one measure of the institutionality of an organization, however, at this time no one was recommending or assuming that AIT was a viable institution able to operate self sufficiently.

Enrollment at this time was 404 students including 257 dormitory students. There were 48 Afghan teachers on the staff at that time, this included assistant teachers who were still under a training program. Some time was wasted at the beginning of the 1965 school year in working out a curriculum that would have added the 13th and 14th year to the existing years 10 through 12. After goals were properly worked out, this concept was dropped. With the use of staff members and American advisors, a new curriculum was written to include a stronger program in the general studies area and to refine and add on to the technical areas to make a choice of 6 majors. The administrative organization of the school was also changed to place a coordinator at the head of the new 7 departments that emerged from this replanning. The curriculum was completely rewritten during the 1965 school year. Originally majors were offered in aviation, civil technology and a combined automotive-mechanical major and electricity technology; other departments had been somewhat equipped in the school, but only these 4 majors were being offered. Under the new curriculum, building construction was added, aviation and civil technology remained majors. Electricity was changed to an electricity/electronics major and automotive mechanics was separated to form a major in automotive-diesel and another in machine tool technology. This made a total of 6 majors being offered in the technology areas. In the old, curriculum physics and math were being taught and the language program remained the remants of the language training program that was supervised and conducted by the Teachers College Columbia University Team. A new curriculum was written for teaching physics and mathematics. Chemistry was added and English language

training was put on a firm definite number of hours per week basis. Sports were encouraged as a part of the curriculum. Pushto and Farsi were given their place in the alloted hours of instruction. Subsequently one hour of religious training was added. The introduction of the new curriculum and the changeover from the old to the new posed some problems regarding students who were already under the old curriculum. It was decided that the new curriculum would be introduced to the beginning class of the 1966 school year. Students who had been entered and worked under the old curriculum would remain under the old curriculum and graduate each class in turn with the new curriculum being introduced as new classes entered each year. In this manner the old curriculum was phased out and a new curriculum was introduced. 1968 was the first year of operating solely under the new program.

An American advisor was assigned to each technical area during this period. The new curriculum outline was essentially made up by the Chief of Party and the school Director as far as priority of areas and arrangement of subject matter to conform with the school philosophy. The American advisors and their counterparts in the various technical areas then completed the curriculum and course descriptions pertaining to their specialty. This new curriculum was then presented to the Ministry of Education and to AID. It was also presented to other doner agencies then operating in Afghanistan for their information and possible critical comments. The curriculum was approved principally as written. It has been in effect now for six years. It seems to fit our educational planning and has proven to be very well on target as far as community needs. Only minor changes have been made during

this time. Each year some minor adjustments are required to meet changing needs with the community. This curriculum includes a fourth--or 13th year--that has never been completely accepted by the students. The concept of a 13th year for AIT has come as a bit of an awkward appendage in that it is outside the normal school divisions. Middle schools run grades 6 through 9 and high schools run grades 10 through 12. It was felt by most people concerned that we needed the additional year for training in the technical areas. This posed a problem of whether we would take students prior to their graduating from the middle school at the end of their 8th year and bring them into AIT or whether we would add one year beyond the 12th year to gain this additional time. It was decided that it would be much better to take the additional year beyond the 12th grade rather than attempting to upset the normal divisions of the middle schools. The German sponsored higher mechanical school and the Russian sponsored technicums have followed this procedure in attempting to get an extra year of training in the technical schools. Most school officials seem to agree that we do need this extra year in our technical high schools. However, it has not been well accepted by the students and probably will never be an acceptable part of these schools. Students are given an extra certificate for completing this 13th year, and when they are assigned to a job, they are given an additional step on the civil service scale. This, however, does not seem to be enough incentive to have this 13th year generally accepted. The curriculum, however, is designed in such a way that the 13 year can operate as an option. Those who choose to terminate at the 12th grade may do so without this materially affecting their program. Those who choose to attend the 13th year are given additional training in the technical areas. They meet all of their academic requirements prior to completion of the 12th grade.

Under the present curriculum, students are in class a full 40 periods per week. This would seem to be a little heavy for normal school work, however, a majority of our students are dormitory students and they have neither the money nor the opportunity for recreation outside of school hours. It was felt that they should have a full working day associated with their class and shop work. We do have organized sports, both intramural and in competition with other high schools in the city. This affords some recreational activity for these students. We have also provided games and some other athletic equipment that can be drawn by the students for recreational purposes after school hours. This has always posed a problem as to the recreational facilities available to the dormitory students that would keep them busy and essentially out of trouble. Since our move into the new dormitories, they do have well lighted desks for evening studies.

The school year continues to run from the beginning of the Afghan year, approximately March 22, to December 22. With our new facilities, we could reverse this and operate through the winter months, however, most public schools in Kabul have no heating system and they are required to operate on the summer schedule because of the severe winter weather. As long as this is true and with the added cost of winter operation, AIT will continue to follow the normal school year laid down by the Ministry of Education.

AMERICAN PERSONNEL

The contract essentially began operation in February 1965. At this time, the contract called for six American technicians, all specialists in one of the trade-technical areas. The first group to arrive was the Chief of Party who was also an advisor to the machine tool department, an

automotive diesel advisor, a civil engineer, and electrical advisor, a specialist in aviation and a building construction technician. In 1967, it was agreed that we should have an additional advisor assigned to the mathematics/science department, as this is a full department in the school and it is very important to the overall operation. Also, it was decided to bring out an advisor for the machine tool department. This made a total of 8 technicians--one for each of the 7 departments within the school and the Chief of Party. These were gradually phased out beginning in 1969 and in 1970 the entire group was phased out and a new Chief of Party was assigned from the SIU campus to serve the two remaining years to the end of the contract in June 1972. The replacement was not able to complete this phase of the contract, and the former Chief of Party was brought out for the last remaining year of the contract.

AFGHAN PERSONNEL

At the beginning of the SIU contract in 1965, 48 Afghan instructors were assigned full time to AIT. There are presently 50 instructors. This does not include toolroom attendants in the various shop areas.

During the period of the SIU contract, 26 participants were sent to the States for training. This included short-term as well as degree programs. This also included persons from the Vocational Department of the Ministry of Education who were sent under this project although they were not working directly at AIT. Participants' monies were held and administered by AID. SIU personnel recommended participants for training programs and they were chosen by a committee of SIU and Afghan personnel.

The general concept of choosing and granting participant scholarships to the faculty members at AIT was to limit their time spent in the United States to two years. Assistant teachers would be chosen for participant training from an area within the school that needed training for that particular department. After it was determined which department should receive the scholarship, then a committee comprised of Americans and their Afghan counterparts would choose an instructor in that department to receive the scholarship. In many cases this participant would be sent to the United States for two years of training in a technical institute in one of the technical areas being taught at AIT. Many of these participants received their associate degree during that two-year period that they spent in the States. It was not a requirement on our part that they receive this degree, we were interested principally in their receiving two years of technical training in a trade area. Teachers who had completed two years of training were sometimes chosen to return to the States to earn the BS degree in vocational education. This usually exceeded the two-year limit rule by a few months, as it usually takes the instructor two and one-half years to complete his BS degree after he has completed two years of technical training. In any event, we tried to hold the duration of a participant's stay in the States not to exceed approximately two years. The teaching staff at AIT is well trained by Afghan standards, and many of them are well trained by U.S. standards. We have 7 faculty members who hold the BS degree or better in vocational education. Two of these hold a Master's degree and one has

the one year specialist's certificate beyond the Master's degree. Our general studies area has not been neglected in the participant training program. Many of those teaching--especially in the English language section--have had training in the States. This is true, too, to some extent in the science and mathematics department. However, the great majority of our teachers in the general studies area hold a BS degree from Kabul University.

During this period, participants were sent to many schools in the United States. Among those that were sent for two years of technical training, we seemed to get the best results from Dunwoody Technical Institute in Minneapolis, Los Angeles Trade, Vocational-Technical Institute of SIU, and the Oklahoma Technical Institute. Among those going for the BS degree in vocational education, we had very good results from Wayne State University in Detroit. We seemed to have troubles with students sent to Williamsport Technical Institute and Milwaukee School of Trades. Previous to our contract, they seemed to have very good results from participant training at the University of Wyoming.

COMMODITIES

AIT is very well equipped with machine tools, hand tools, laboratory equipment and a small reference library containing some 6,000 volumes. Most of the commodities in use at AIT were direct grants from U.S. sources. These commodities were ordered over a period extending from the time of the Wyoming contract through the two-year period of direct hire and during the SIU contract period. Many of the basic machine tools and larger commodity items were ordered during the period 1962-64. Many commodities

had been ordered prior to the SIU contract, and they had arrived and were still in boxes which were stacked in the halls of the old AIT building. These orders that were made prior to the SIU contract essentially made the machine tool fill at AIT. Commodities were allotted to this project during the SIU contract, and monies were held by AID. Orders were placed upon the recommendation of SIU and Afghan personnel.

Present equipment at AIT is valued at approximately $600,000. The actual cost did not run to this amount, as much government surplus equipment was utilized during the SIU contract.

PHYSICAL PLANT

The old physical plant at AIT was a converted warehouse that had been converted for the school's use in the early 1950's. The school was quite adequate from the standpoint of space, however, shops and laboratory buildings were quite open. Dust was a real problem and many of the shop buildings leaked on expensive machine tools. Electricity was a problem in the old buildings as the electrical system was not a completely planned entity but rather circuits were added on when equipment was received. As a result, the old system had grown up without order causing severe voltage drops in areas where electrical demands were great. We moved into the new AIT facility in 1968. We had anticipated this move and had collected a wrecker, a forklift and a number of warehouse wagons. We did not ask for an outside contract to complete this move; as a matter of fact, we asked for no help from the Ministry or any other agency outside of the school. The move was organized according to departments. Each

department was given its alloted time with the equipment that we had available for moving, and by using teachers, students and assigned janitors and maintenance personnel, the move was made entirely by the AIT organization.

The buildings of the physical plant at AIT have, to this point, been kept in a good, acceptable state of repair. During the winter of 1971-72, the kitchen, cafeteria and parts of the dormitories were repainted. All furnaces and other equipment associated with the physical plant are operating and in an acceptable state of repair. There are some problem areas, of course. One of these is associated with locks and door latches. I am sure that this installation was done with institutional-type hardware, however, the German-made locks that were installed in areas of heavy use such as the administration building gradually began to break down with less than a year of use. This problem is associated with both leaf and coil springs contained in the locking mechanism. They seem to fatigue and break at less then a year's usage, and replacement or coorection of these poses some real problems. This will probably culminate in the changing of these latching mechanisms. Many broken and worn parts associated with the physical plant can be made or repaired in our present shop facilities. The only exceptions to this are switches, relays and other electrical parts that are encased in plastic and are usually not repairable. These must be purchased as spare parts. Electronic tubes also fall into this category. Most other repairs can be done within the AIT facilities. The installation of instant-start flouroescent tubes of the latest design in AIT facilities

has proven to be a mistake. Flouroscent tubes are available in Afghanistan but the kind installed at AIT are not available and probably will not be for some time as they are not commonly used in Afghanistan. Our normal usage of these tubes run to about 500 per year. We are attempting to convert the lighting in some areas to ordinary, incandescent bulbs in places such as study desks in the dormitory, storerooms, cabinets etc. where the use of the flouroscent tube is not entirely necessary.

EVALUATION

Operating procedures that insured both us and our counterparts how well-defined and well-understood goals have been one of the principal contributing factor to the success of AIT. The writing of the new curriculum changed the course and philosophy of the school during the early days of the contract. This was worked out directly with both Afghan and American personnel with the Afghans carrying their share of responsibility for making decisions and initiating plans. I would not say that we have never been guilty of imposing something on our counterparts that we felt they needed for development, however, it is a sure rule of the game that if the locals are not in favor of changing procedures or goals, then there is a very good chance that the project will not succeed. Also, it is a rule of the game that an advisor must always work with his chief counterpart. Occasionally we have persons who are guilty of dropping back and working with a lesser counterpart simply because he is easier to work with. This is never successful. The principle counterpart carries the authority for the department or institute. He is the man with whom the advisor must always

work. The curriculum and philosophy of the school as well as the training of most of the faculty members is very American oriented. Again, although it is an American-oriented school, it must fit certain rules and regulations within this society. We sometimes become impatient because certain projects are not initiated or certain changes cannot be made. With some patience and an effort to understand, the advisor usually will find that there is a good reason for the change not being made--at least on a very quick basis. At AIT we use the established Afghan procedures for the accountability of property. This system is stiff and sometimes slow, but I am convinced at this point that it is probably the best system for their operations under these conditions. Other procedures and problems are probably not so easy to accept, however, laws and rules must be changed slowly over a period of time, and not immediately flaunted. We must contribute to the solution and not become a part of the problem.

The curriculum at AIT has been very well on target. There are some changes that we would like to make, but again, these are the kinds of changes that must come with time. For instance, our school like all schools in Afghanistan, is a one-track system in the general studies area. There are no allowances for a person to choose more or less science, mathematics, or languages according to his interest and apptitude. We would like to see this changed, but with the present laws and regulations in Afghanistan, a credit system does not exist that would allow this flexibility. This seems to be sometime in the future. The number of majors offered in the

technical areas should remain essentially as they are at present. The adding of related areas can be done with no major changes in the curriculum. We would like to see closer ties with industry, however, this is a public school. We have used advisory committees from industry and we have had winter on-the-job training programs to give students a measure of practical experience before graduation. The entire vocational education system in Afghanistan needs revising and upgrading. We are only a part of this with our program at AIT. With the establishment of a few successful projects such as AIT, then the department should look forward to building a unified system in vocational education to include schools such as AIT, and perhaps some middle-level vocational day trade schools on a very limited basis. These public schools should be tied to an apprenticeship system controlled by laws and properly indentured. This could be a system whereby the trainee would receive a certain number of years credit on their apprenticeship, by having graduated from one of the vocational-technical schools within the public school system. After assignment to a job, he would be required then to complete his apprenticeship on the job with proper supervision and continuing on-the-job training. When he had completed this type of system, then he would be licensed in some way as a qualified tradesman in his chosen area. There is also a place for the trade-school type institute that would be very closely associated with industry or perhaps in many instances run as a part of that industry. Some of this is being done in Kabul now, but schools are scattered and not under a unified system. This would be the

type of school that would give supervised training in the trades and crafts on practical industrial processes. Adult education is badly needed in the trades and industrial area. Workers in local shops and small factories are ill trained and do not have the concept of high-quality workmanship. This could be corrected with adult programs aimed specifically at those persons who now hold a job and are making their living in their chosen trade. This kind of instruction usually is successful as the incentives are there because the man is already working and has a job in his chosen field. Much work in this kind of training could be done in Afghanistan by sorting out and giving aid to those industries that are already established and going. As an example, villages where most of the people make their living pouring cast iron in a very crude and old-fashioned way--these people could be upgraded by technical knowledge and better techniques. But this would not be successful unless they have help in establishing wider markets. This would simply be a system where you build production on a basis that is already established. The greatest lack at the present time is technical knowledge, new procedures, and above all, markets.

Along with this system, of course, must go a system of broadening the training of vocational-technical teachers. This has been worked on and the system completely developed over the last six months. Curriculum is written, and justifications have been worked out. This is now in the Ministry of Education, but is would appear that it has very little chance of being initiated. The vocational education department needs this kind of a person. In addition, if the high schools in Afghanistan are

developed and reorganized to comprehensive high schools, then the first shortage will be in the area of vocational teachers.

The Vocational Department has had help from foreign technical advisors in their procedures and organization over the last several years. These have been German, Russian and American nationals as well as several assignments from UNESCO and ILO. Regardless of this help, this department has not emerged as a viable organization. The principle reason for this is the variety of doners who have been working in the vocational-technical schools. When a foreign doner establishes an institution, by its very nature it will be oriented strongly toward the philosophy of the group that is principally responsible for its establishment. The Afghans have had some good leadership in this area, but the tendency of each branch to go their separate ways has been very difficult to control. The Germans have established schools that have pretty well operated in an autonomous manner. This is true also of our own project at AIT. It is also true of the Russian-sponsored Technicums. The Vocational Department has generally taken the attitude that as long as the schools are operating properly and making a contribution to the community, then they have taken a hands-off approach and have not interferred materially with the internal workings of the institution. As a result of this, the schools within the department have been a fragmented operation and each is essentially going his separate way. It is understandable that this would happen under these conditions. The situation, however, looks much better at the present time

as the German advisors have all been pulled out of the mechanical schools and the American project at AIT is essentially phased out. This would create a climate whereby well-trained and imaginative Afghans could create a unified system in vocational-technical education. This should be built solely with an attempt to bring all the vocational schools under similar operating procedures. A vocational teacher training system could feed qualified persons into these schools, and an indentured apprenticeship system to tie these schools closely to industry. They should encourage some basic trade-type schools either run by industry or created specifically for a particular industry and established without regard to the previous educational levels of the students who are directly assigned to a particular industry and whose previous educational level might vary from 9th to 12th grade.

Adult in-service education is badly needed. Workers who are already in service in a particular craft have built-in incentives for additional learning that usually makes this kind of program very successful. Existing academic high schools in Afghanistan are of the one-track college-preparatory type. These should be changed to comprehensive high schools with an effort to sort the interests and abilities of students at approximately the 10th grade level. The Russian influence in the one technicum that is now operating will probably be there for some time, but strong foreign influence seems to be on the wane and this unified vocational system could be built step by step over the next few years and emerge with a viable and community-oriented program. Above all, in this kind of system the small shop employing one to ten workers in a basic, already-established production and service areas should receive their share of vocational-technical education.

The vocational department and cooperating industries should train for specific skills in production and service industries as they apply to special-purpose trade schools, apprenticeships and in-service adult training. Those vocational-technical schools that are a part of the public school system should direct their philosophies and curriculi toward the education, direction and orientation of students in the skills and technology associated with the production and service industries. They should contain strong programs in science and mathematics. These schools cannot and should not attempt to train for specific positions in these industries. Aptitudes, interests, locations and many other factors enter into the eventual choice of work for these graduates. Students who are taught basic skills in one of the trade-technical areas during their secondary school years will have an attitude and orientation that will affect their choice of employment and interest in business, vocation or advocation. They will, in most cases, be more interested in the tangibles of production than the intangibles of social and political theory.

STUDENTS

Student enrollment at AIT has gradually increased over the past few years, but the government correctly holds enrollment down to a level that they feel they can probably place when the students graduate. We have recommended that AIT grow at a steady rate to a level of an enrollment of 650 students. The enrollment should be held near this figure for a few years until more resources are available for an increased enrollment. We

would prefer to see the enrollment kept near this figure to facilitate a reasonable handling of students rather than to open the school to an enrollment far in excess to what they can reasonably handle.

Graduates of AIT generally have been quite successful in being placed or in finding placement for themselves. Students are under a total government scholarship. They pay no tuition, everything is furnished including food, textbooks, paper and pencils, etc. At one time they received a small stipend, but this was discontinued some four years ago. A few years ago when Afghanistan started to build and expand their educational system, it was necessary to offer all students government scholarships and make education totally free in order to entice people, aspecially from the provinces, to enter the educational system. Times have changed in the last ten years, and now this has proven to be a serious problem in that most parents now want their children to enter the school system--in fact they apply rather heavy political and private pressure to have children entered into the school system. The government is now caught holding the old incentives to entice students to schools while the trend is now reversed and everyone feels he has the right to go completely through the educational system in Afghanistan on a government scholarship. In addition, he feels that he has the right to have the government find employment for him once he has completed a certain level in the educational system. This concept of furnishing everyone free education is now written into the Afghan constitution. This tends to create problems in the educational system, but it is apparently politically impossible to correct at the present time.

Many of the graduates from AIT are assigned to Ministries, government agencies and semi-government companies. Most expect to receive such assignments when they graduate from AIT. This, of course, is true of all graduates in Afghanistan. When large numbers of people opt to be assigned to government positions such as occurs here, then there is usually a very good reason for them doing so. The pay is low and incentives are almost nonexistent in the government Civil Service system, however, once they enter this system, they have almost total tenure. If they do not succeed in one position, they are kept in the system and simply transferred somewhere else. Although the pay during their working lives is very low, when they retire from the government system, the percentage of pay relative to the working pay is very high indeed. This tenure and these retirement benefits over and against the benefits that the worker receives from private industry causes most people to opt for the government Civil Service system. In private mills and small shops, the pay is also low, and retirement systems entirely nonexistant. They have no tenure and are subject to being dismissed at any time and almost without reason. Most of our graduates who are working in private industry are working for either foreign-sponsored or established projects, they have established their own shops or they work in a family business where they are essentially a part of that operation.

Students continue to cause problems with strikes, refusals to take examinations and other harassing tactics. This has happened all during our tenure at AIT, but so far it has never taken the form of violence--they have invariably been passive. However, student harassment is on the increase in the last three years. Much of this comes from dissatisfaction

with government policy or economic conditions within the country, and their chances of receiving a job or an assignment that will provide a decent standard of living after graduation. Some of it comes from the antiquated attitudes that still prevail within the educational system. There is still much of the European concept of education whereby the student believes that regardless of what he does in the way of academic preparation, attendance, etc., during the year, all that is necessary for him to pass the year's work is to complete the final examination. As a result of this, at the beginning of the school year, students look to nine long months before they have to pass the final series of examinations and they are not concerned, especially at the beginning of the year, about serious work or school attendance. Invariably, as the year wears on, and especially as they approach the mid-point, students' work habits, attendance and attitudes improve remarkably. There is also the system of probationary examinations whereby a student failing his year's work has a second-chance examination to attempt to make up his failing work. Also, if he fails, he may repeat the year without dormitory privileges. This procedure has had negative effects in that teachers and administrators are prone to pass the trouble maker regardless of his academic achievement in order to get him out of the school and remove his influence on other students.

PHYSICAL PLANT

The ten buildings in the new AIT complex have proven to be well constructed and have given no serious maintenance problems to this point. The heating systems within these buildings are of good quality and

seem to be well chosen. It would be a useless exercise to comment at length on how it would have been had they been constructed differently, however, there are some points regarding maintenance and the general function of the buildings that might be useful to persons facing such a project in the future. Lock and latch hardware on the doors have not held up under the heavy institutional use that has been given them. A simpler latching and locking system would probably have been more practical. The latest innovations in lighting, heating and power systems are always very desireable; however, if replacements are not available, then it is probably a mistake to choose systems that cannot be properly serviced ih Afghanistan. The use of wood in the outside doors has proven to be a maintenance problem. The intense sunshine in Kabul during the summer months tends to make the use of wood for outside doors not a good choice. A better choice would have been some form of metal doors. The use of ribbon windows in the AIT buildings is a good design feature from the standpoint of saving wall space, but we are convinced that south-facing walls containing much more glass could effect a fuel saving in the winter of probably as high as 30 per cent. The ribbon-window construction does not allow for this advantage. If some of us here were to repeat such a project, I am sure there would be some strong voices toward containing the entire institution in one multi-storied building, maybe with the exception of the dormitories which would also be incorporated in one building. Heating systems properly designed would be far more simple; less spare parts would be necessary to keep one or two heating systems operating than the ten which we have at the present time, most of which are of different models.

TEXTBOOKS

Textbooks in some of the areas of a school such as AIT can be a formidable problem indeed. Those used in the general-studies area will become available in the local language, but the intermediate, technical-level textbook that is neither a trade manual or an engineering text will not have wide use in Afghanistan for several years. The chances of these becoming available in the local language in the near future is quite slim indeed. To import replacement textbooks in these areas would put an added burden on the school budget after the foreign aid has been withdrawn. The solution will probably take the form of instructors translating and writing instructions and workbooks growing out of existing text and class notes. Some of this is being done at the present time. The Minister of Education does offer incentives for instructors to translate or write textbooks, however, this is a slow process and only a few instructors are capable of producing resonable textbooks in their particular area.

CONCLUSION

We feel that the seven years in which SIU has been associated with AIT have proven to be a fruitful operation. In many ways there was a good base existing at AIT when we started the contract in 1965. This base consisted primarily of some trained personnel and equipment that had been ordered and was on hand. The changes in direction of the philosophy and curriculum as well as additional training of faculty and staff at AIT has proven successful, and by many standards this school can be classified

as a viable institution. It could, of course, use additional help, but this help should be more in the form of branching out into other aspects of vocational education which in turn would support and strengthen AIT. AIT is a school to be proud of. Both the Americans and the Afghans can point to this as a successful cooperative project. It is operating somewhat as an island with some of its linkages and interdependent regulations hampered by lack of development in some of the other areas of vocational education.

PHYSICAL PLANT

The new physical plant constructed and occupied during the SIU tenure was constructed by DMJM and AHC for the following costs:

1. 4 Dormitories each with an area of 12,480 square feet constructed at a cost of $14.39 per square foot.

2. 1 Shop building 20,500 square feet at $13.71 per square foot.

3. 1 Shop building 20,225 square feet at $14.22 per square foot

4. Classroom building #1 - 14,740 square feet at $13.33 per sq. foot
   Classroom building #2 17,220 square feet at $17.78 per sq. foot

5. The administration building contains 5,575 square feet and was constructed at a cost of $18.00 per square foot.

6. Multi-use building - 8,770 square feet at $27.30 per square foot.

7. The maintenance building - 4,000 square feet was constructed at a cost of $8.89 per square foot.

8. Guards quarters, miscellaneous structures, paving and sitework brings the total construction value to:

   Total $3,584,369.92

   Breakdown:

   2,299,093.00 in US dollars
   1,185,276.92 in afghanis at a rate of 65- 1.00 US dollar

COMMODITIES

Commodity allotments for this project are outside the contract. Appropriations were held by USAID and purchases were made through USAID/A supply division. These expenditures have not been separated for SIU tenure on this project. The total value of machine tools, hand tools, laboratory equipment, and library books is valued at approximately 600,000,dollars. Actual expenditures are somewhat less than this figure as much government surplus property was purchased for the SIU contract.

PARTICIPANTS
Afghan Institute of Technology
Vocational Education Department, Ministry of Education

Participant training under the SIU contract was funded directly with no participant training monies allotted under the contract.

Participant training allotted to AIT during this contract also extended to scholarships to the Vocational Department of the Ministry of Education. Participant scholarships started at AIT in 1954. These scholarships break down to the following numbers in the overall total from the beginning:

Afghan Institute of Technology participants	43
Vocational Department, Ministry of Education	11
Short visit and seminars, AIT and Vocational Department	6

Within this group, 4 have received 3 scholarships, 12 have received 2 scholarships and 5 are active participants in the United States at the present time.

Participants during the SIU contract:

24	regular one to two and one-half years from AIT
6	Vocational Education Department, MOE
4	Short-term seminars - 6 weeks American University of Beirut
34	Total

The following is a list of participants under the AIT/Vocational Department project beginning in 1954 listing names, school attended, dates attended, field of study, degree awarded and their present location when known. Many names are repeated from one group to the next in cases where a person has received more than one scholarship.

PARTICIPANTS SENT FROM AIT 1953-1972

Name of Participant	Place of Study	Field	Degree	Duration of Study	Present Position
A. PARTICIPANTS AIT, POINT IV - 1954					
*1. Abdul Hai Abaucy	Wyoming	Mech.Eng.	B.S.	2/53-8/55	Pres.Irrig.Constr.Min.of Agn
2. A. Satar Atiqee	L.A. Trade-Tech	Elec. Tech.		8/54-7/56	Head, Elec. Dept., AIT
	Wayne State U.				
3. A.G. Qaissaunee	Wyoming	Civ.Eng.	B.S.(hons)	2/53-8/55	Dean, Faculty of Engineering
4. Khan M. Sidiqee	L.A. Trade-Tech,				
	Wayne State U.	Mech.Tech.		8/54-8/56	In U.S.
5. G.S. Taymuree	L.A. Trade-Tech,				
	Wayne State U.	Auto Tech.		8/54-9/56	Head, Auto Dept., AIT
6. A. Wahed Zia	Wyoming	Elec. Eng.	B.S.	2/53-8/55	Fac. of Eng. Participant
B. PARTICIPANTS WYOMING CONTRACT 1955-1961					
1. Sayed Ashraff	Wyoming	Math	M.S.	1/60-9/61	Dir.Gen.,Tech.Educ.,MOE
2. Mohammad ATA		Voc.Ed.		8/61-9/62	Asst.Dir., Ghazi High School
3. A.Satar Atiqee	Wayne State U.	Elec.Tech.	B.S.	1/59-3/61	Head, Elec. Dept., AIT
*4. Mohammad Aziz	Syracuse (?)	A-Visual		10/55-10-56	Min. of Education (?)
5. Hussain Faizi	Wyoming	Civ.Tech		1/59-6/61	Teacher, AIT
6. Said Z Hofioni	Wyoming	Drafting		1/60-12-61	Left Afghanistan 4/64-in U.S.
7 Abdul Majid	Wyoming	Sch.Admin.		11/57-9/58	Asst.Pres.,Voc.Educ. MOE
8. M. Sarwar Mohmand	Wyoming	Civ.Eng.		9/55-1/58	Teacher, AIT
9. M.Hasan Muti	Wyoming	Civ.Eng.	B.S.	9/55-6/59	Asst.Dir.AIT- Part. U.S.
10. M. Omar Noor	Syracuse	A.Visual		8/56-9/57	News Reporter, Anis (?)
11. Sharafuddin Rehoi	Wayne State U.	Auto Tech.	B.S.	12/58-4/63	Farm Mach.Shop,Min.Agr.
12. Ghulam Sakhi	Wyoming	Math-Sci.	M.S.	12/58-6/60	Director, AIT
13. Mahmud Shah	Syracuse (?)	A-Visual		6/56-8/57	Bldg.Const.Dept.,MOE
14. Khan M.Sidiqee	Wayne State U.	Mech.Tech.	B.S.	1/59-3/61	In U.S.
15. G.S. Taymuree	Wayne State U.	Auto Tech.	B.S.	1/59-3/61	Head, Auto Dept. AIT
16. Abdul Wahed Zia	Wyoming	Elec. Eng.	M.S.	1/60-2/63	Fac.of Eng. Participant

*From Vocational Dept., MOE
+Short Term

Name of Participant	Place of Study	Field	Degree	Duration of Study	Present Position
C. PARTICIPANTS USAID 1962-1964					
1. G.S. Ahmadzai	L.A. Trade-Tech.	Carpentry	A.A.	1/65-7/67	Teacher, AIT
+2. Sayed Ashraf	Philippines	Tech.Ed.		1/65-2/65	Dir. Gen. Voc. Ed., MOE
3. M. Husayn Ateesh	TCCU	English	M.A.	2/63-8/64	Deceased
4. A. Saboor Awa	Milwaukee V&A	Av. Elec		1/64-7/65	Teacher at AIT
5. M. Aslam Bashir	Florida State U.	Science	M.S.	1/64-7/65	Head, Math/Sci.Dept. AIT
6. A. Zaher Ghaznawi	L.A. Trade-Tech.	Mech Tech	A.A.	12/64-7/67	Teacher, AIT - Part. U.S.
7. M. Iqbal Haider		Mech Tech.	A.A.	1/64-6/66	In U.S.A.
+8. Enayatullah Kargar	Philippines	Tech.Educ.		1/65-2/65	In Germany
9. M. Jan Mayar	E.Michigan U.	Maps & Surv.	B.S.	8/63-9/66	Head, Civil Dept. AIT
10. Azizullah Amri Motaj		Mech.Tech		8/62-8/65	In U.S.A. (?)
11. Mohammad Musa	Dunwoody, Minn.	Elec. Tech.	A.A.	8/63-6/66	Teacher, AIT
12. S. Maqsud Nazimi	Dunwoody, Minn.	Bldg. Const.		2/64-5/66	Head, Bldg. Const.Dept.AIT
*13. S. Taher Porjosh	Indiana U.	Inust.Educ.	B.S.	8/62-2/64	Dir.Voc.Guidance, MOE
14. Rahimi	Oklahoma State U.	Elec..Tech.	A.A.	9/62-6/64	Teacher, AIT
15. M. Aman Rashiq	N.E. Oklahoma A&M	Machine Tech.		8/62-8/63	Head, Mach.Dept.AIT,DD AIT
16. M. Ibrahim Soroush	Indiana U.	Lib. Sci, Eng.	M.A.	1/64-6/65	Faculty Engineering, KU
17. Lal M. Sultan		Mech. Eng.	B.S.	1/63 ?	Private Industry
18. M. Eshq Waffash	Milwaukee VT&A	Foundry	A.A.	1/65-6/67	Teacher, AIT
*19. M. Alim Wardak	Williamsport	Elec. Tech.	A.A.	1/64-5/66	Pub. Dept. MOE
20. A.G. Zalal	Milwaukee V&A				
	Indiana State U.	Bldg. Const.	A.A.	8/62-3/64	In U.S.A.
21. M. Anwar Zaland	Kent State U.	Indus.Ed.	A.A.	12/62/-11/63	Ministry of Justice
D. PARTICIPANTS SIU CONTRACT 1965-1970					
*1. Fazel Ahmad		Tech.Educ.		1/66-6/66	Unknown
*2. Mir Jan Alawi		Pb.Sch.&Bus.Ed.		6/69-?	Unknown
3. Sayed Ashraf	SIU	Sch. Admin.	M.S.	9/66-9/67	Dir.Gen.Voc.Educ.,MCE
4, A. Satar Atiqee	Wayne State U.	Indus. Ed.	M.S.	9/67-9/68	Head, Elec. Dept., AIT
5. A. Saboor AWA	SIU	Aviation		3/69-6/69	Teacher, AIT
+6. M. Aslam Bashir	Beirut (AUB)	Seminar	B.S.(KU)	6/69-8/69	Head, Math/SciDept. AIT
7. M. Ebrahim Faizi	SIU	Arch.Tech.	A.A.	9/66-11/69	Teacher, AIT
8. A. Majid Hafez	Ferris State	Eiesel Tech.		3/67-3/69	In Canada (Left Afghan.8/69)
9. Enayatullah Kargar		Sch.Sys.Oper	M.S.	2/67-9/67	In Germany
10. Nazar M. Karzay	SIU	Sci.Teach'g		3/69-?	Science Teacher AIT

+ Short Term
*From Vocational Dept., MOE

D. PARTICIPANTS SIU CONTRACT 1965-1970

11.	M. Ibrahim Kohi	SIU	Av.Tech	A.A.	2/67-8/69	Canada
12.	M.Sarwar Mohmand	U.Colorado,Boulder	Div.Tech.		6/65-6/66	Teacher, AIT
13.	M. Hasan Muti	Wyoming	Civ.Eng.	B.S.	6/66-6/67	Part. U.of Calif.
+14.	M. Hasan Muti	AUB,Beirut	Seminar		6/69-8/69	Part. U.Of Calif.
15.	Homayun Niazmand	Ferris State	Civ.Tech.	A.A.	3/67-?/69	Teacher, AIT
16.	M. Nazi Noorsay	SIU	Mach.Tech	A.A.	3/68-4/70	Teacher, AIT
17.	M. Akbar Omary	SIU	Auto Tech.	B.S.	3/68-5/70	Teacher, AIT
*18.	M. Taher Porjosh		Voc.Guidance		8/67-9/69	Dir.Voc.Guidance,MOE
19.	M. Aman Rashiq	SIU	Mach. Tool	B.S.	2/69-11/69	Asst.Director, AIT
20.	Ghulam Sakhi	U.Connecticut	Tech.Sch.Admin		3/68-6/69	Director, AIT
*21.	Saif R. Samadi		Voc.Educ.	Ph.D.	4/65-5/65	U.N.
22.	Najibullah Sayami	Dunwoody, Minn.	Auto Tech.	A.A.	3/68-6/70	In Canada
23.	Mohammad Shafi	Washington	English		2/66-1/67	Teacher, AIT
*24.	Khalillulah Subat	AUB, Beirut	Seminar		6/69-8/69	In U.S.A.
25.	G.S.Taymuree	Wayne State U.	Indus.Ed.	M.S.	4/66-10/67	Head, Auto Dept.AIT
*26.	M.Anwar Zaland	AUB, Beirut	Dorm.Man.	A.A.	10/67-11/67	Ministry of Justice
27.	S.A.A. Najibi	Dunwoody,Minn.	Bldg.Const.	non-degree	6/69-6/71	Teacher, AIT
28.	A.G. Rahimi	Oklahoma State	Elec.Tech	B.S.	3/69-6/71	Teacher, AIT
29.	M. Zahir Toba	Williamsport	Bldg.Const.	non-degree	6/69-5/71	Teacher, AIT
*30.	M. Alim Wardak	W. Michigan U.	Voc.Ed.	B.S.	6/69-5/71	Pub. Dept., MOE

E. PARTICIPANTS, ACTIVE -- SIU CONTRACT 1965-1972

					Departure	Scheduled Return
1.	Azizuraham	Ferris State	Civ.Tech.	A.A.	9/70	8/72
2.	A.Z. Ghaznawi	W.Michigan U.	Mach.Tech.	B.S.	4/70	9/72
3.	Hasan Muti	U. Calif.	Adult Ed.	non-degree	1/72	1/73
4.	Wardak	U. Connecticut	Voc.Ed.	non-degree	2/71	2/73
5.	Wadud	Dunwoody Tech.	Elect.Tech	A.A.	1/72-	1/74

+ Short Term
* From Voc. Dept. MOE

ROSTER OF AFGHAN PERSONNEL
including U.S. P.C volunteers

Personnel	Position	Max. Degree
Administration		
Ghulam Sakhi	Director	M.S. + 1 yr Diploma Ed.US.
M.A.Rashiq	Assist Dir.Instruction	B.S. U.S.
A. Latief	Assist Dir.Dormitories	12 yrs. (DMA)
Fazli Elahi	Head of Maintenance	12 yrs. (AIT)
Automotive Technology		
G. S. Taymuree	Head of Dept.	M.S. & Ed. (U.S.)
M. A. Omary	Instructor	B.A. (U.S.)
M. Y. Gardezi	Instructor	12 yrs. (AIT) Part.Japan
Amir Jan	Toolman	12 yrs. (K. Mech.School)
Aviation Technology		
Jack Bredemeier	Instructor	U.S. Peace Corps.
M. Ismail	Instructor & Toolman	12 yrs (AIT)
Building Construction Technology		
S. Maqsud Nazimi	Acting Head of Dept.	14 yrs. (U.S.)
G. S. Ahmadzai	Instructor	A.A. (U.S.)
M. Ibrahim Faizi	Instructor	A.A. (U.S.)
S.A.Samad Najibi	Instructor	14 yrs. (U.S.)
M.Z. Toba	Instructor	14 yrs. (U.S.)
M.Amon	Toolman	12 yrs. (AIT)
A.Latief	Toolman	12 yrs. (AIT)
Civil Technology		
M. H. Muti	Head of Dept.	B. S. (U.S.) Part. US
M. J. Mayar	Instructor	B. S. (U.S.)
M. Hussain Faizi	Instructor	13 yrs. (U.S.)
M. S. Mohmand	Instructor	13 yrs. (U.S.)
Azizurrahman	Instructor	12 AIT Participant US
A.Shakoor Mohinyar	Instructor	B.S. (K.U.)
Electrical-Electronics Technology		
A. S. Atiqee	Head of Dept.	M.S. & Ed. (U.S.)
A. G. Rahimi	Instructor	B.S. (U.S.)
A. Wadud Kawsary	Instructor	12 AIT Participant US
M. Musa	Instructor	A.A. (U.S.)
N. M. Wardak	Instructor Participant US	B.S. (K.U.)
Abdul Ali	Toolman	12 yrs(Mech.School)
Gh. Qader	Instructor	13 yrs (AIT)

Machine Technology

A. Zaher Ghaznawi	Instructor Participant	A.A. (U.S.)
M. Nazir Noorzai	Instructor	A.A. (U.S.)
M.Eshaq Zaman	Instructor	13 yrs (U.S.)
Samad Ali	Instructor	12 yrs (AIT)
Owrbali Shah	Toolman	K. Mech. School

English

Allen J. Kepchar	Instructor	US Peace Corps
Joseph Gerace	Instructor	US Peace Corps
M. Shafie	Instructor	B.A. (K.U.)+ 1yr U.S.
M. Taher Zamoni	Instructor	B.A. (K.U.)
A. Manon	Instructor	B.A. (K.U.)
Khan Aqa Waisi	Instructor	B.A. (K.U.)
M. Saber	Instructor	B.A. (K.U.)
A.S.Awa	Instructor	13 yrs (U.S.)

Dari and Pashto

S. M. Sergund	Instructor	(DMA)
Gh. Dastagir Hazrati	Instructor	B.A. (K.U.)
A. Qadeer	Instructor	B.A. (K.U.)

Science and Mathematics

M. Aslam Bashir	Head of Science Dept.	B.S. (K.U.) + 1 yr U.S.
S.A.Q.Obaidee	Instructor	B.S. (K.U.)
Roshendil	Instructor	B.S. (K.U.)
Qiyamuddin	Instructor	B.S. (K.U.)
N.M.Karzai	Instructor	B.S. (K.U.) + 1 yr U.S.
R. Noori	Instructor	B.S. (K.U.)
A.Q.Najib	Instructor	B.S. (K.U.)
A.Baqi	Instructor	B.S. (K.U.)
Paik Ali Ajeer	Instructor	B.S. (K.U.)
Gul Ali	Toolman	12 yrs (DMA)

Islamic Theology

M. Zaher	Instructor	12 yrs (D.S.K)

Sports

M. Salim Ayubi	Instructor	12 yrs (Sports School)

Dormitory Staff

M. Omer Rafiq Zada	Hotel Management
Hazrat M.	DMA
M. Afzal	DMA

Secretary

M. Omer

Controller

Mohammed Zarief

Accounting

Hazrat Gul
Khan Aqa
Abdul Jamil
Bismillah
Faqir Mohammed

Business

Mohammed Hashim Jafar
Gul Aqa
Mahazuddin
Serfiraz

Total staff - 72

ROSTER OF SIU TEAM PERSONNEL

Chief of Party

John E. Griswold

Secretaries, Local-Hire

Mrs. Crandall, Alix

M. Nazir Saddiqi

Driver

Ahmad Jan

INDUSTRIES WHERE AIT GRADUATES ARE EMPLOYED

GOVERNMENT

Jangalak - 10 (3 of which are department heads)
Afghan Motors - Foreman
Ariana Afghan Airlines - Chief Engineer and most pilots and technical staff
Air Authority
Bakhtar Airlines - Foreman and others
Power Company
Afghan Radio
Afghan Film
Ministry of Communications - Chief Engineer
Nangarhar Irrigation Project (several)
Shirbigan Gas
Faculty of Engineering, Kabul University
Afghan Textiles Company
Army Technical School (Several)
Visiting Professor (Dr. Quaissaune)
Habosse - Department of Agriculture
Silo - maintenance and construction
U.N. Expert (Sadiddiqi)
Rural Development
Chief of Police at Airport
Logar Valley Religious Leader
Teachers other than AIT (English principally)
Helmand Valley Authority
Scholarships (India)
General Director of Guidance
Vocational Education (General Director)
Director in Ministry of Planning
Vice President Afghan Construction Unit Kabul
City Construction Department (Vice President Urban Planning)
Binail (Chief Engineer)
Public Works (General Director)
Ariana Afghan Airlines - bookings abroad
Air Traffic Controllers
Fire Chief Gulbahar Textiles
Afghan National Bank - Computer Program
Para-Medical (artificial limbs - 3)
Mimaina City Mayor
Afghan Highway Maintenance (Deputy Chief)
Kill Gai Shop Foreman (Puli-Kumri Irrigation Project)
Kabul University (Director of Personnel)
Institute of Education (Teacher of English)
Ministry of Education (Draftsmen in construction department)
Cadastrial Survey
Irrigation and Power
Ministry of Defense (technicians)
Officers of Police Department
Army Officers including at least 4 pilots

INDUSTRIES WHERE AIT GRADUATES ARE EMPLOYED

PRIVATE

Mercedes Benz (Foreman)
Indamere (General Foreman)
25-Hour Club Restaurant
Marco Polo Restaurant
AID Garage
ASTCO (2)
Raisin Production
Insurance Firms
Businesses (Plastic and leather)
Radio Shops (small private)
Shops in Canada
Foreign Car Repair (Washington, D.C.)
Photography Shops
SIU secretary
Ariana Publishing (Head)
Loan Businesses (Accounting machines)
Theater (Private)
Pair-War General Motors Agency (Chief of the Division for importing parts)
U.S.I.S.
USAID/Staff House