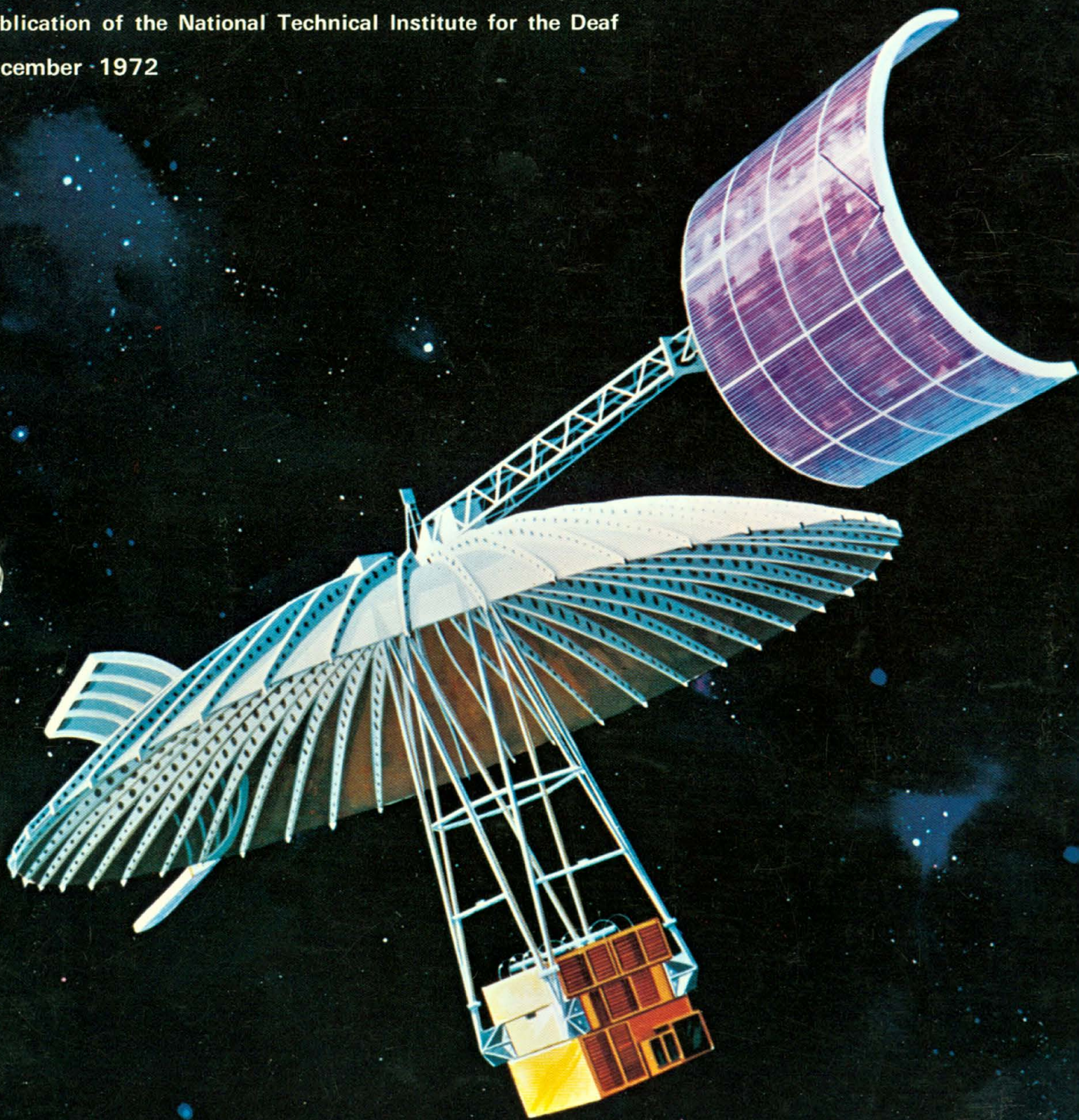


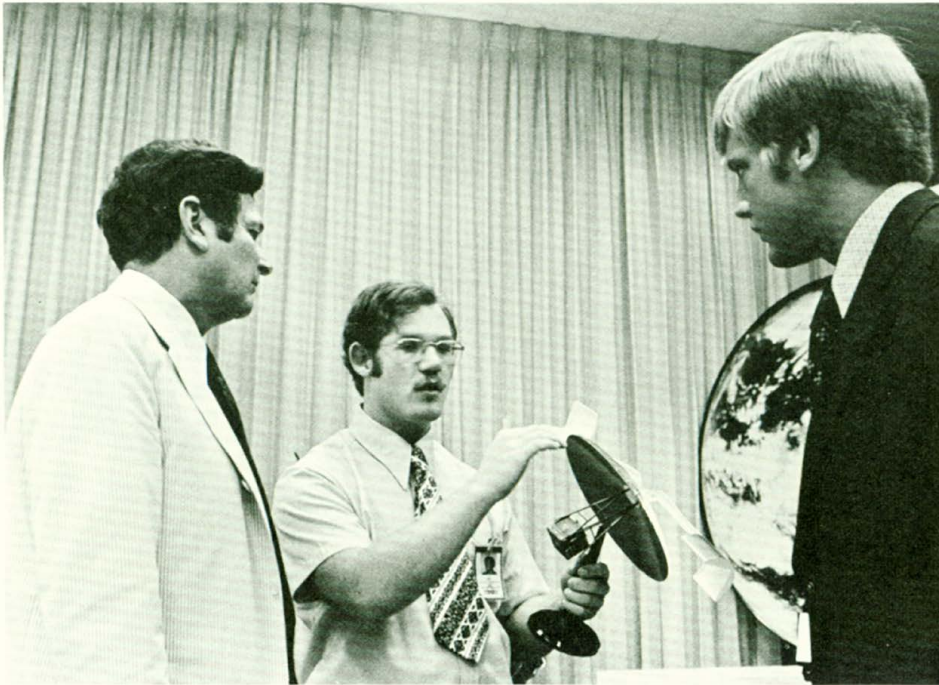
# ntid focus

Publication of the National Technical Institute for the Deaf

December 1972







**SPACE ENGINEER**—Geoff Lowe (center) holds a model of the new ATS (Applications Technology Satellite), while NASA/Goddard officials, Herman E. LaGow (left) and Paul E. Shelton, look on. Lowe is helping with the engineering aspects of testing the satellite.

## NTID Co-op at Goddard

# Student Part of Space Team

By JACK SMITH

*Public Information Director*

In an attempt to put together the finest team of scientific, technical and managerial personnel, the NASA/Goddard Space Flight Center in Greenbelt, Md., is looking to the deaf of America to help fill a pressing need.

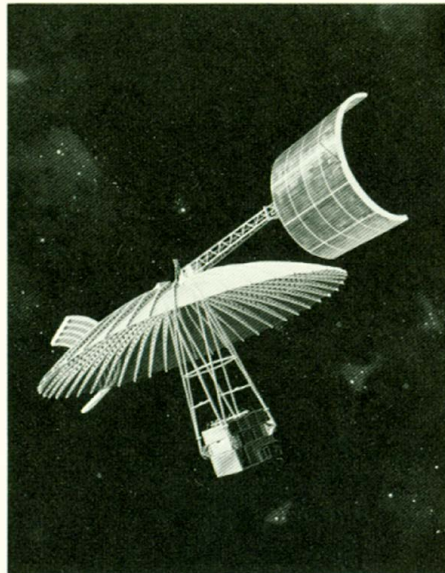
"The deaf of our nation obviously provide us with another area to look for outstanding people," said Samuel W. Keller, director of the Administration and Management Directorate. "We're not doing the deaf a favor; it is in our best interest to look to the handicapped to help fill our need."

The Goddard Space Flight Center has put Keller's words into an "action program" that has resulted in the hiring of Geoff Lowe, a mechanical engineering student from the National Technical Institute for the Deaf (NTID), in a Cooperative Work-Study Program.

Under the Co-op program, students spend part of their college education in business and industry, applying and testing what has been learned in the classroom.

Since Goddard has had a Co-op relationship with Rochester (N.Y.) Institute of Technology for some time, it was a natural progression for NTID, located on the campus of RIT, to develop a working relationship with the space flight program.

Then there is the "charge" to the Congressionally established and funded National Technical Institute for the Deaf, to provide the deaf of the nation with the technical competence to be meaningfully employed. The



**OUT IN SPACE**—The newest communications satellite, the ATS F&G, expected to be launched in 1974-75, will carry out experiments in educational television broadcasting, air traffic control, meteorology and space science.

Co-op program has become an integral part of the educational process at NTID, the only national postsecondary technical program for the deaf.

Seventeen colleges and universities are involved in the Co-op program with Goddard, and 30 students participate in the program each month. All are studying for bachelor's degrees in the areas of engineering, mathematics, physics, business and accounting.

"Geoff Lowe is an excellent first," offers Gladys Chasnoff, who coordinates the Co-op program at Goddard. "I personally hope it opens the doors for other deaf, but each person will be judged on his or her own merit."

Lowe, a senior from Hinsdale, Ill., was hired in June as a Co-op student in the Test and Evaluation Division. In that division, a team of engineers help conceive, formulate and execute test programs designed to give maximum assurance that a spacecraft and its experimental equipment can withstand the rigors of ground handling and launch, and carry out its mission in the extreme conditions of space. The group also provides a liaison with space projects to tailor test programs to specific space mission needs.

Geoff has impressed his co-workers with his strong academic foundation in mathematics and engineering and his knowledge of structural analysis.

"He's quick to learn and we've been

*Continued on Page 4*





**AT THE COMPUTER—**Lowe (standing) learns from his co-worker Albert Seifer, Computer Operations group leader.



**COFFEE BREAK—**Lowe stops to discuss his co-op work with the people who helped to hire him (from left) Paul E. Shelton, Samuel W. Keller, and Gladys Chasnoff.

**BUTTONS AND DIALS—**Lowe (center) learns about control room operations from Harry Cyphers (sitting). Looking on is John C. New, chief of The Test and Evaluation Division.





# NTID Student Part of Space Team

*Continued from Page 2*

unable to spot any weak points," says Bill Case, a co-worker and acting head of the Structural Research and Technology Section where Geoff is assigned. He finishes assignments much faster than we anticipate and has fit in well from the very beginning. It's obvious that he has been broadly educated in many things other than engineering."

The Co-op experience has been an exciting one for the 23-year-old. For as long as he can remember he has been in love with the sky. At NTID he has been building a turbo-jet engine for hobby use in a model airplane.

He confesses that he has some difficulty relating to outer space. "Maybe it will be different when I can experience a space flight." And while he is thoroughly enjoying his work at the space flight center, his long-range job interest is to join the rapidly expanding field of vertical and short takeoffs in the aeronautical field.

Geoff will return to college for the winter quarter, but hopes to be able to work at Goddard again next spring. Following graduation next June, he would like to continue his studies for an aeronautical engineering degree.

But looking at the reality of the moment, he fully understands that his action and success could influence the hiring of other deaf students at the Goddard Space Flight Center.

"I know I'm a guinea pig because I'm the first deaf co-op hired here," he points out. But he explains that he has been in a gold fish bowl all of his life anyway. He was among the original 70 to enroll at NTID when the school first accepted students in 1968. He also is the first deaf person from his hometown to strive for a bachelor's degree.

Geoff has his own ideas of what it takes for a deaf person to succeed in industry.

"The basic requirement is patience," he states. "The deaf person must make a real effort to communicate and put the hearing at ease. It takes patience to have hearing people accept you. Many will be afraid of a deaf person because it is their first experience with them. People tell me my speech impediment sounds like a German accent. I try to overcome that barrier with a sense of humor."

He insists that the deaf can't afford to be impatient any more than

they can afford not to have technical skills. But co-workers like Jim Mason are quick to point out that "Geoff is part of the gang."

The enthusiasm of including qualified deaf persons in the space program also has reached John C. New, chief of the Test and Evaluation Division.

What pleases New most is that the program to hire the deaf emerged from the working level, and not as a result of a decree from top management.

"If a program like this is going to succeed, you must have the cooperation at the first level of supervision. That is critical in the first years of anyone's career," New stresses. By having the immediate supervisor involved in the interviewing process, it helps make the program become more effective.

"This is a highly technical business," he continues. "Generally it is

## **NTID Helps Form New Math Center At American School**

The American School for the Deaf in Hartford, Conn., has set up an innovative mathematics program, with the help of college officials from the National Technical Institute for the Deaf.

Some 42 high school-aged students at the American School are now learning their algebra, geometry and trigonometry in what is called a Math Learning Center. The Center allows students to study math individually and at their own pace, and at the same time gives students a greater chance of learning the "why" of a math problem as well as the correct answer.

The Center also uses films to make mathematics as visible as possible to deaf students.

NTID set up a similar math program a year ago. A direct phone line between the two math learning centers has been installed; and with the use of an electrowriter, students from the American School will have access to NTID's staff, curriculum materials and computer.

"If the results of this year's evaluation are positive, we hopefully will be able to help other high schools for the deaf set up similar programs," says Ross Stuckless, director of NTID's Office of Educational Extension.

a mistake to put someone in a position that is beyond his grasp. The important thing is placing someone in a job where you can insure his success. My experience is that properly trained handicapped persons seem to have reached a level of maturity that makes them effective beyond the normal work force.

"Many non-handicapped seem to be diverted too easily. We haven't had to face any real obstacles, so that when we do meet problems, we are diverted in our approach and start off in other directions instead of coping with the problem. In a way, a person's handicap is a real asset because it helps form that decision part of him that gives him direction. Our attitudes about hiring deaf and other handicapped are the result of our convictions that have led to action."

New, like others who are interested in seeing the hearing handicapped hired at Goddard, is influenced by personal experiences outside the space flight center. In New's case, there are deaf attending his church.

Paul E. Shelton, a former procurement analyst in the Administrative and Management Directorate has a deaf brother who has had difficulty advancing in the world of work. It has been Shelton's personal involvement that has helped generate interest at the "grass roots level" in a variety of programs for the deaf.

Now persons like Matthew Opeka, assistant chief for operations in the Test and Evaluation Division, are caught up in the excitement of this unique program.

"I'm beginning to look around the Goddard facilities and see many areas where visual, rather than audible alarms could be installed, which would make present positions available to qualified deaf persons," Opeka says. "In the computer area, for example, the deaf would not be bothered by the high level of noise."

Many Goddard officials are now beginning to see the scope of employment possibilities for the deaf. But all agree that the program should proceed with caution in terms of proper placement, cooperation at the first level of supervision, and insuring the potential for success.

But as top management points out—"We are not doing the deaf any favors. We need the top scientific and technical minds in the country, and many of them are deaf."

# Farid's Life Like Tale From Arabian Nights

By JUDY COX

*Public Information Assistant*

Farid Bozorgi's life story reads almost like a tale from the Arabian Nights.

It's the story of a young, artistic boy struck deaf, who is almost pushed aside as being of little use to society. Then one day he is asked to paint a portrait of a princess, and she is so impressed with the finished painting that she grants him his one greatest wish, which is to get an education.

It sounds unreal, and yet it happened exactly like that in the land we associate with royalty, genies and magic lamps.

Farid, 25, is a bachelor-degree art student, cross-registered into RIT's College of Fine and Applied Arts. Seven years ago he came from his home in Tehran, Iran, to live with his sister, Mrs. Greg Thomas Bringard of St. Clair Shores, Mich.

Farid's art stands out from that of many of his American classmates. Everything he creates, whether it is an abstract painting or a new design of a facial tissue box, has a kind of romantic flavor that reflects back to his Persian heritage and the almost mystical lifestyle of his homeland.

"He has great potential for success in the art field," says Thomas Raco, NTID educational specialist in the College of Fine and Applied Arts.

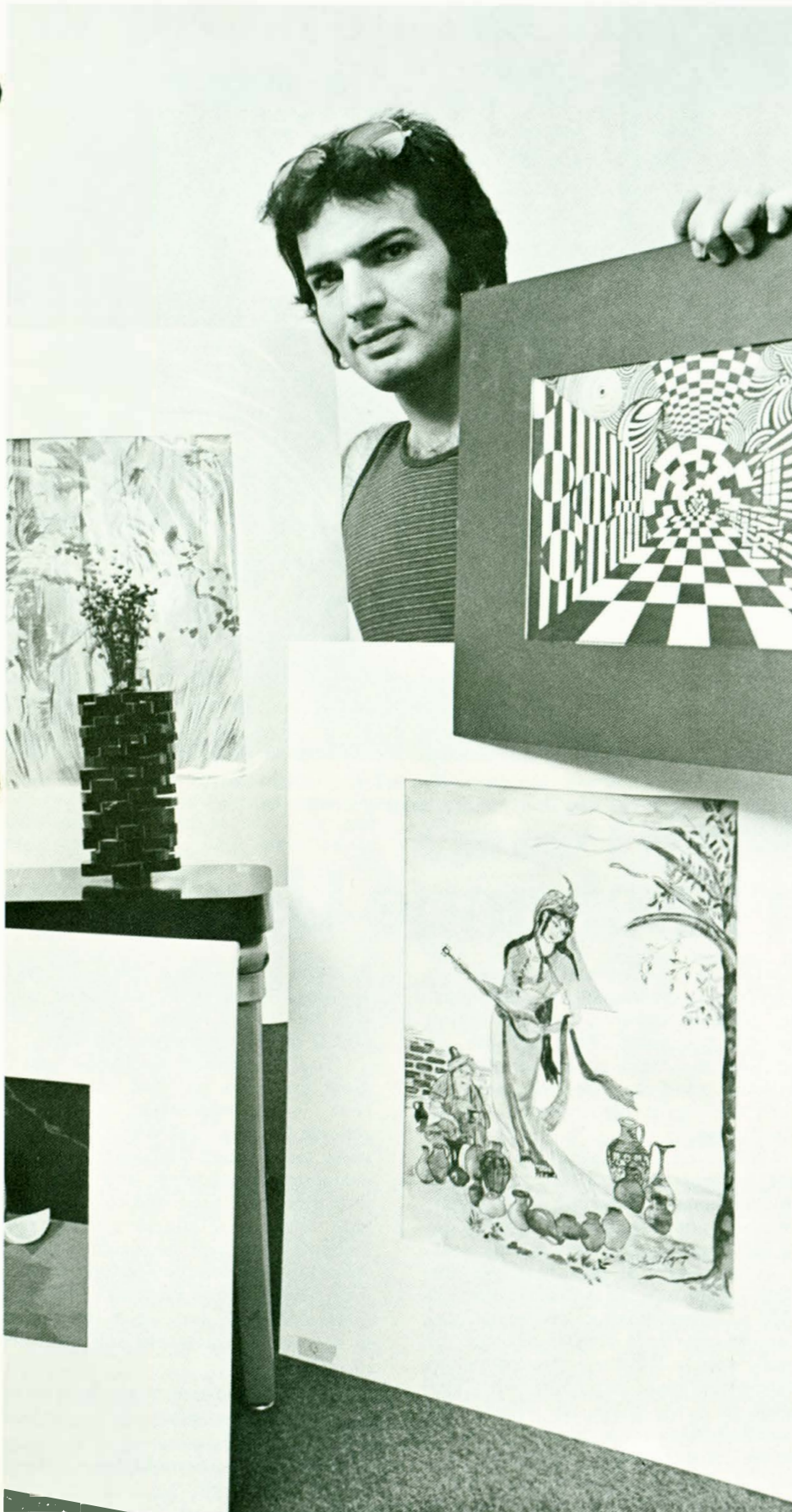
And yet because he is deaf, Farid's talent nearly went to waste.

Farid's story begins when he was two years old and was struck with polio and a high fever, while he and his parents were crossing the desert in the cold of winter on a religious pilgrimage. Their car broke down, and they were left stranded in a stable. Farid became paralyzed in the left leg as well as deaf. "He was only fortunate to have escaped with his life," says his sister Fariba.

At the age of six, his parents placed him in a school for the deaf in Tehran, and he immediately showed an inclination for art. But at age 15, he had to quit school; there were no high schools for the deaf, and the regular public schools would not accept him.

With all doors closed to him in

*Continued on Page 7*



**FLAIR FOR ART**—Farid Bozorgi's work reflects much of the mystery and romance of his homeland, Iran.





**SPEECH AND HEARING**—Clinical Audiologist Donald Sims demonstrates NTID's audiometric equipment to visitors from Model Secondary School for the Deaf, Mary Hockersmith (in the sound booth), Caryl Purdue, and Beverly Chewning.

## Information Exchange Useful

Put together a group of speech pathologists, audiologists and communication specialists from different schools for the deaf, and you get many "hungry" questions about an area of study which in the past has gone almost untouched and unresearched.

This is what happened when the staff from the NTID Communication Center met in September with four staff members from the Model Secondary School for the Deaf (located on Gallaudet College campus in Washington, D.C.). The three-day meeting was billed as an "Information Exchange," the first of its kind ever held at NTID by the Communication Center.

"We have never tried such an exchange before, because until now we didn't have enough information to pass on," says Donald D. Johnson, director of the Communication Center. "So little research has been done in this whole area of training deaf people to communicate, that we have had to start from scratch."

NTID has undertaken 29 research projects in speech, 11 in audiology, and 10 in interpreting services during the past two years. This research, as well as the training and evaluation methods used by the two schools, were the topics of conversation and questioning.

MSSD was established by the federal government in 1970 to try out new methods of teaching deaf youngsters and possibly to serve as a model for all future high schools for the deaf.

As a result of the meeting, the MSSD staff took back information on NTID's communication counselor program to set up a similar program of their own. NTID's communication counselors meet regularly with students to guide them on where their communication strengths and weaknesses lie and what training they will need to improve their skills.

The MSSD staff also were given six films to use to evaluate students in their lipreading, manual reception and simultaneous (manual, lipreading, and

listening at the same time) reception abilities. These newly produced films will be tested jointly by NTID and MSSD on their students this year.

"The 'Information Exchange' was of great value to us, and we hope to have more exchanges with other schools," says Johnson. "We now know more about MSSD's training and evaluation procedures, and in the future they have promised to provide us with advance information about their students who will be coming here—what kind of communications training they have had and how well they have done. This will save us a lot of time in preparing to evaluate and train students."

About 50 per cent of students entering NTID have unintelligible speech, he added. "So we are more than eager to pass on any information, any new developments, any new research that might help students upgrade their speech while they are still in high school."



# Farid's Life Like Tale From Arabian Nights

Continued from Page 5

Iran, his mother borrowed money to take him to Germany and Holland; but in every school he was tested, he was told that he had already accomplished as much as the European schools for the deaf could offer him.

They went back home disappointed. Farid's father offered to help him become a landowner, but this he rejected, still hoping to pursue his education. For three years, he painted at home and taught himself English. In the meantime, his mother's efforts to persuade the Iranian Ministry of Education to give him a scholarship to study in America were rejected by officials because of his handicap.

"But in their own mysterious way, the fates were conspiring in Farid's favor," says his sister. In 1962, she met an American at a house party in Iran, and a year later she came to this country to marry him.

Then late in 1965, Farid's mother, who worked in the offices of Princess Shams, one of the Shah's three sisters, took Farid to see the Princess and to tell her about Farid's aspirations. The Princess told Farid to paint her portrait; and after returning home, he did so, using a magazine picture of her as his model.

"When the painting was presented to her, she was so overcome by the unanticipated surprise and pleasure of its studied perfection, yet sensitive beauty, that she rewarded Farid with a wristwatch, 1000 tumans or \$135, and a \$500 airplane ticket to the U.S.A.," says Fariba. It was a generous gift in a country where it might take a year to earn as much.

It was like a fairy tale ending, yet it was a beginning for Farid. Once in the U.S., he attended the Detroit Day School for the Deaf and then Osbourne High School in Detroit. Determined to make his own way, he also took on various odd jobs as a dishwasher, gas station attendant, busboy, janitor and baker's assistant.

In spite of his love for art, he started at NTID a year and a half ago in architectural drafting, because he had been discouraged about the job opportunities in the art field for a deaf person. But Racó met him on campus, and after discovering Farid's ability, talked him into transferring into the art program.

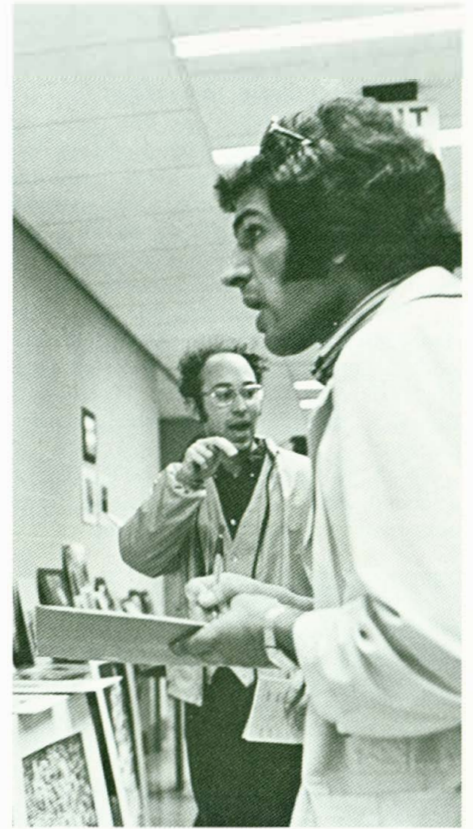
"Farid is still in the very early

stages of his development, but he has a nice beginning in terms of design and knowing how to use color and how to apply color to the solution of creative problems," says Racó. "This, for example, might mean he could be successful in the general field of interior design or communication design."

Farid expects to graduate in 1976. Then he plans to either teach art in a school for the deaf or go into communication design.

"With his background, he could be a real motivating factor for other deaf students if he were to enter deaf education. But he also has the mockys and ability to be successful in the commercial art world," says Racó.

Farid, who holds a permanent residence visa, hopes to become an American citizen. He went to Tehran this summer and he plans to continue making regular trips home. But it is here he got an opportunity for an education, and he believes that here in the U.S. he will have the best chance, as a deaf person, to make a useful living.



FARID BOZORGI

## Career Flexibility Aids Success

Job satisfaction, personal growth and development, and a sense of accomplishment are important factors in deaf students' electing careers at NTID.

Flexibility in both curriculum and career choice for students helps insure future success. Because many entering students are not well informed or knowledgeable about many opportunities in the world of work, NTID conducts an extensive career orientation program.

But what happens to the student who selects a career and then discovers that he has made a bad choice?

"What we are really talking about is salvaging a human being," says Dean William E. Castle. "Sometimes it does take time for a person to find oneself. A student learns by studying beside students in other fields. Some students are bound to change as they share. We feel that it is not right to let a student flounder."

As an alternative, NTID has built in flexibility so that the students won't become "drop-outs." A student's request for a change in his major is evaluated individually. The student's

present aptitudes, interests, abilities and past performance are all evaluated along with new career goals and the available programs.

A broad range of professionals including a student's personal counselor, academic advisor, faculty, and department head are involved in the final decision to approve a change in a student's major.

"The entire procedure is designed to foster independence of the student in helping him decide on a future that will bring him personal satisfaction and job success," stated Bill Darnell, director of Student Planning and Evaluation.

## Campus Visitation Coordinator Named

To take care of the some 600 visitors who come to NTID each quarter, Carolyn Eike has been named to the newly created position of visitor's coordinator.

To arrange visits or receive literature, write to Carolyn Eike, One Lomb Memorial Drive, Rochester, N.Y., 14623 or call (716) 464-2341.



# Prejudice on NTID Campus—Deaf Faculty, Staff Outstanding

By JACK SMITH  
and LYNNE WILLIAMS

There is prejudice on the campus of the National Technical Institute for the Deaf, prejudice that deaf members of the faculty and staff are making outstanding contributions that are helping deaf students develop and succeed educationally and socially.

"The deaf members of the staff have demonstrated unusual inventiveness and commitment to the development of NTID and the success of its students," says Dr. Robert Frisina, director.

Deaf professionals at NTID fulfill a broad array of key positions from administration to faculty. Three of 15

are department chairmen and two of those are full professors. There are two educational specialists, one social and cultural development specialist, one senior laboratory associate and one counseling specialist. In total, they touch almost every phase of the key tasks at NTID.

"One of the purposes of NTID is to raise the aspiration level of deaf youngsters," Frisina adds. "The accomplishments and performances of this distinguished group provide a model for our deaf students to emulate."

Interest in NTID by present members of the staff was evident in the earliest phases of the program. Bob

Panara was on the National Advisory Board which studied the possible sites for NTID. He then went on to become NTID's first faculty member. Professor Panara helped establish and assists in directing NTID's Experimental Educational Theater.

Panara is a "multi-media" personality and demonstrates his love and knowledge of the theater in the classroom.

John Kubis has proven his success with both hearing and deaf students. Two years ago Professor Kubis taught a Rochester Institute of Technology course to both the hearing and deaf. The class was so popular that a number of students transferred from their

assigned section to his.

It was Kubis, chairman of the math department, who led the development of the flexible curriculum in NTID's technical mathematics program. He is now working on a mathematics book to be published by Prentice Hall.

Working with Kubis in the math department is Tom Rucker, assistant professor. Kubis points out that Rucker brings a broad work background to his position and has the "ability to make math clear and precise."

Another key position is held by Bill Darnell, who directs the Office of Student Planning and Evaluation, an office that has the responsibility of keeping student records and monitoring

student progress from the time they enter the NTID program.

NTID provides a variety of support services for students entering advanced programs. Tracy Hurwitz, an educational specialist in the College of Engineering coordinates the services which help foster the independence of deaf students in a hearing environment. Assisting Hurwitz is Warren Goldmann, who also is pursuing his master's degree in engineering at RIT.

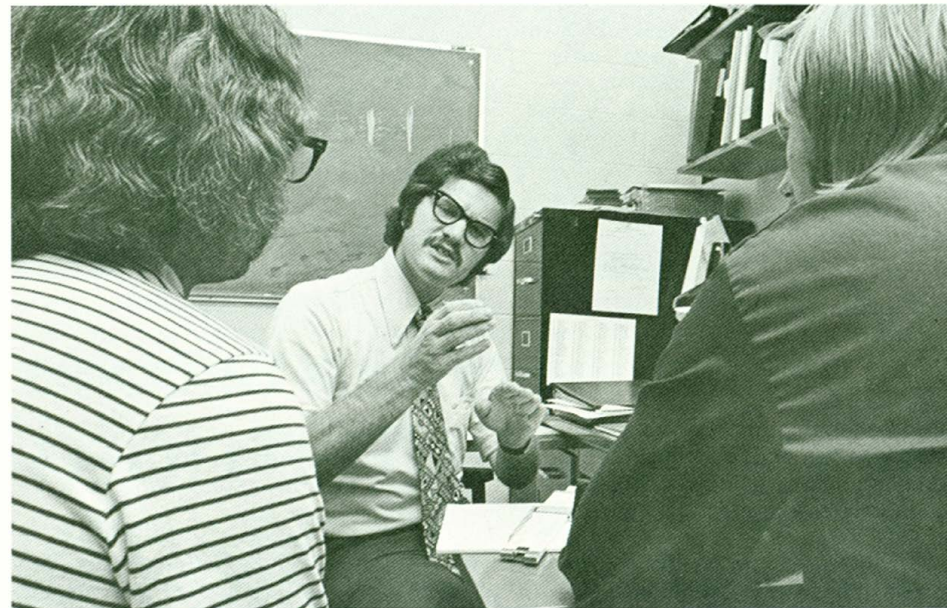
Teaching the deaf for more than a quarter of a century, Loy Golladay now shares his wealth of knowledge with deaf students as an assistant professor in the English Department.

NTID boasts another assistant professor, Dale Rockwell, in the Technical Science Department. He came to NTID from William Backus Hospital Nursing School in Connecticut where he taught anatomy, physiology, bacteriology and chemistry. He now handles the major teaching load in chemistry at NTID.

"Dale, like many of the deaf general staff, is continuing his education at RIT," Dean William E. Castle points out.

In Business Technology, assistant professor Marshall Wick has played a key role in establishing the curriculum for that program.

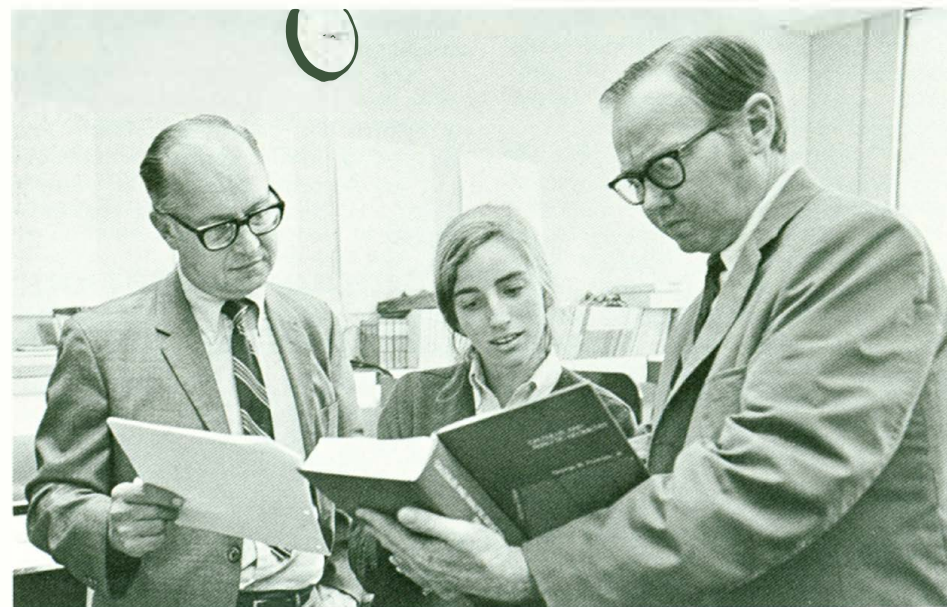
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**ENGINEERING AID**—NTID Educational Specialist Tracy Hurwitz counsels and tutors deaf students seeking a bachelor's degree in The College of Engineering.



**IN THE DORMITORY**—Judy Tingley (left), social and cultural development specialist, and Jane Bolduc, counseling specialist, talk informally with Alan Gifford, of Fairhaven, Mass., and other students.



**MATH LEARNING**—Linda Ross of St. Louis, Mo., receives help from John Kubis (left), chairman of the Technical Math Department, and Thomas Rucker, math instructor.



**PHYSICS LESSON**—Harry Lang works in Physics Learning Center with two NTID students.

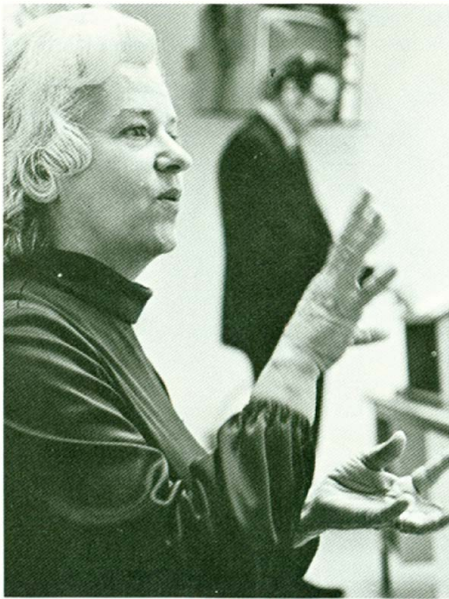


# Prejudice on NTID Campus – Deaf Faculty, Staff Outstanding

Continued from Page 9

Since NTID began accepting students in 1968, it has looked for knowledgeable people from business and industry to help teach the realities of the work world. Edna Wilkinson brings that experience to students in the area of Medical Technology.

"Edna held a certified license for clinical laboratory, but didn't have degree work," says Dr. Jack Clarcq, assistant dean for Technical Education. "She has since earned an associate degree in technical science and is now



**ALICE BEARDSLEY**



**DALE ROCKWELL**

continuing her study for a baccalaureate degree."

Judy Tingley, at one time a member of the English faculty, has since become part of the Social and Cultural Development area because it gives her "more opportunity to be with a greater number of deaf students for a longer period of time."

It was under Judy's guidance that NTID students hosted and conducted a Junior National Association of the Deaf conference in June. She also has the responsibility for a programmed housing project which is helping to make the dormitories a living, learning experience for students.

Another counseling specialist, Jane Bolduc, has been working with the Rochester Community Service Council of/for the Deaf as chairman of the television committee. She has been instrumental in getting national news translated for the deaf on the Rochester public television station.

Harry Lang, an especially productive member of the staff, is an instructor in the Technical Science Department.

A member of the general staff, Janet Harvey, is a part-time secretary in the Division of Support Education. She is a longtime resident of Rochester, having graduated from Rochester School for the Deaf.

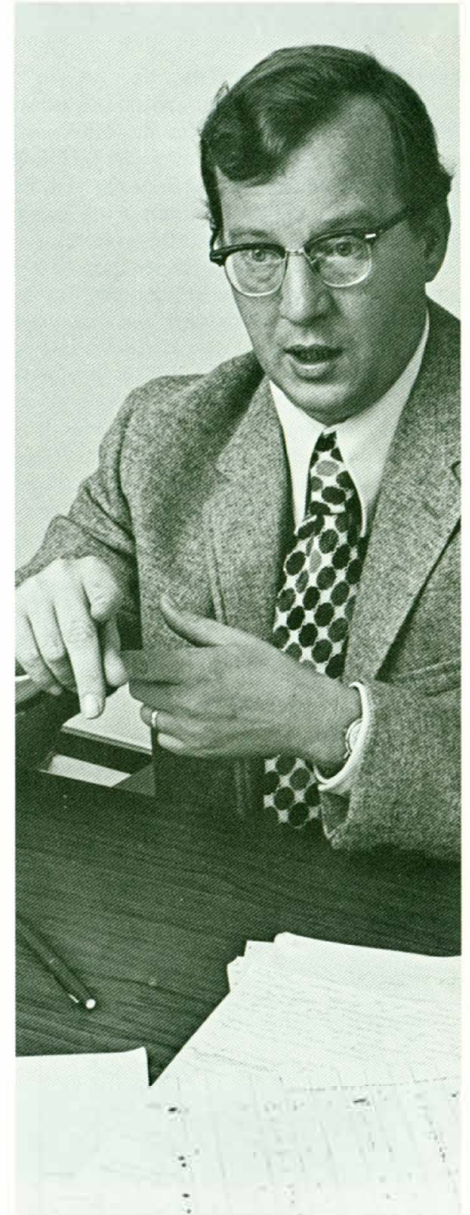
The newest addition at NTID is Mary Jo Nixon, who recently began her duties as a secretary in the Administrative Services Center. Miss Nixon graduated from the NTID Business Technologies program last June and was an honor student.

Even those deaf persons who have gone to other challenges have left a legacy of innovation that will benefit NTID students for years to come.

Victor Galloway left in 1970 to become director of Special Services with the Model Secondary School for the Deaf in Washington, D.C. When at NTID, Galloway was instrumental in developing much of the curricula currently being used in the Technical Education Department.

Larry Stewart, who had helped develop systems and procedures in NTID's Counseling Center, is now associated with the vocational guidance program at the University of Arizona.

Alice Beardsley has had the unique experience of living in both worlds—deaf and hearing. A professional in-



**WILLIAM DARNELL**

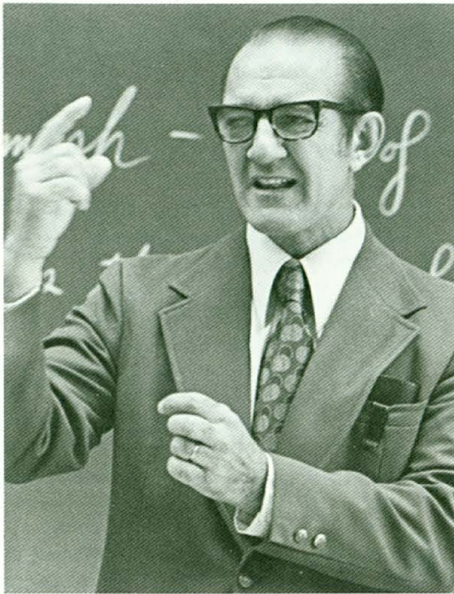
terpreter at NTID, Alice's hearing was restored nine years ago through an operation.

"Because of her ability to sign and her in-depth knowledge of the problems of deafness, she has demonstrated extraordinary understanding of students' needs," Dean Castle states.

Alice interprets 30 hours a week in the classroom and also helps with the Evening News for the Deaf on the Rochester public TV station.

"I may be prejudiced," Alice said, "but the deaf at NTID are making great contributions to the school and to students. But then it seems to be a prejudice strongly felt throughout NTID."





ROBERT PANARA

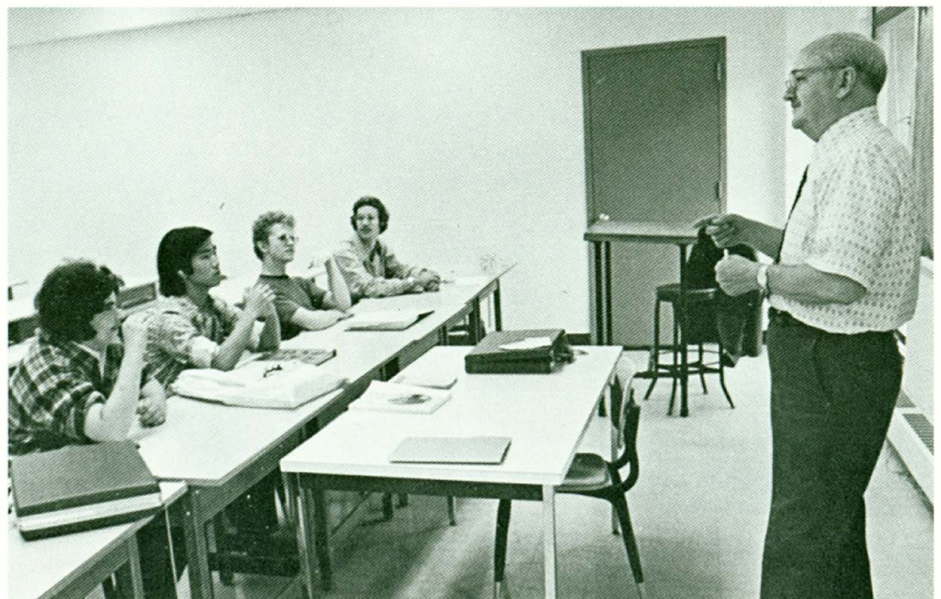


MARSHALL WICK

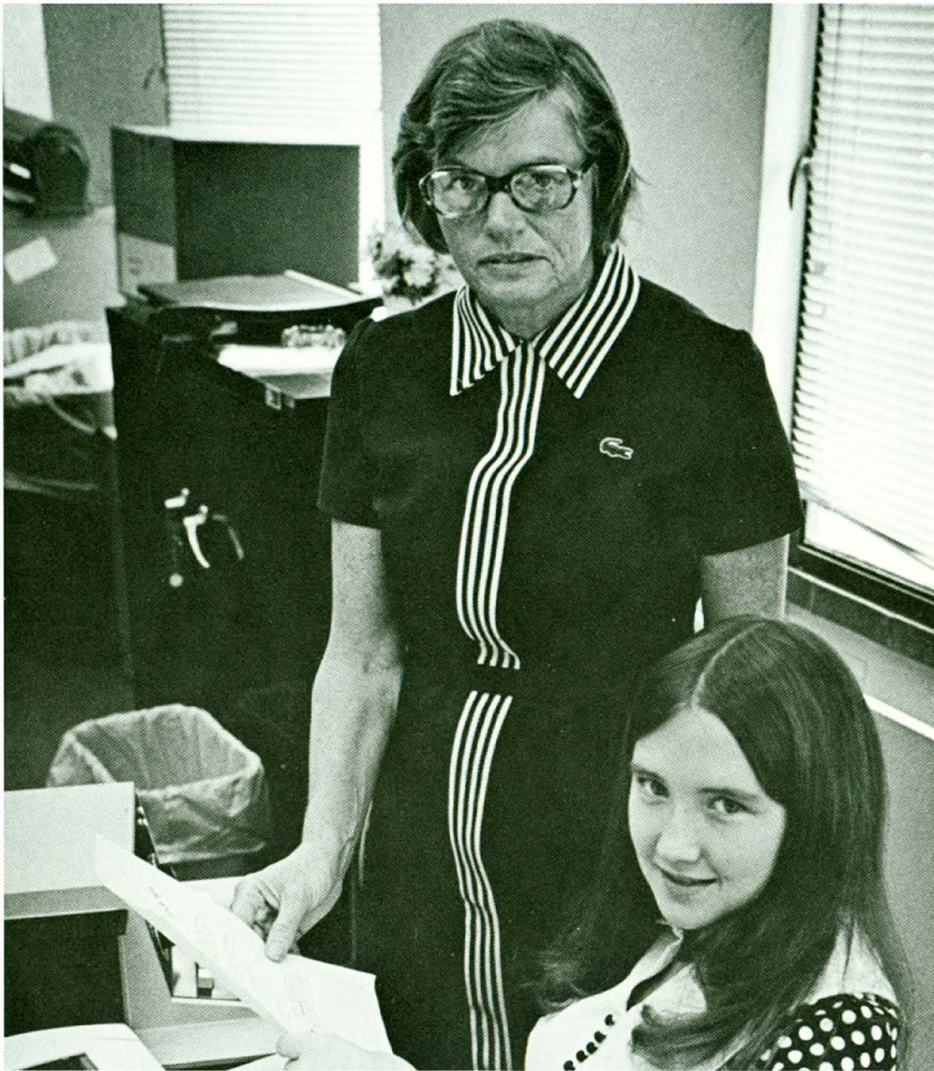
NEW ENGLISH—Loy Golladay teaches technical English to photography students through the use of photography terms.



IN THE MIDDLE—Edna Wilkinson finds herself surrounded by medical technologies students.







**NTID SECRETARIES**—Janet Harvey (standing) works in the office of Student Planning and Evaluation, and Mary Jo Nixon, a recent NTID graduate, is an MT/ST operator.



**TUTOR AND COUNSELOR**—Assistant Educational Specialist Warren Goldmann helps students cross-registered into The College of Engineering.

## Radio Performs Public Service For the Deaf

The radio announcer invites the audience to listen to the following message.

But what follows is silence, and that is the message.

Then the announcer explains that silence is what deaf people "hear" all the time. He asks the audience to become more aware of the needs of deaf people and to seek information about deafness from the National Technical Institute for the Deaf.

This announcement has been broadcast over WCMF radio in Rochester for the last several months, along with another which starts with the revelation that Beethoven wrote his Ninth Symphony when he was deaf and ends with a similar plea for understanding the needs of the some 1,000 deaf people in Rochester and Monroe County.

More such free public service announcements will be broadcast over the FM station, and, under the sponsorship of NTID, some may be distributed to other Rochester radio stations.

The purpose of the announcements is to educate the general public about deafness, to promote employment of the deaf, and to assist in getting NTID students accepted by the community.

The idea for the announcements came from WCMF chief engineer Jacob Schanker, who is also an electronics instructor in the College of Continuing Education at Rochester Institute of Technology, NTID's sponsoring Institute. The spots were written by Richard Nowell, NTID supervisor of interpreting service development, and Sue Rose, NTID social and cultural development specialist. They were recorded by WCMF announcer John McGhan.

WCMF was ripe for such involvement, says Schanker, who has been interested in the needs of deaf people for some time.

"We've done a lot for minorities throughout WCMF's existence," he says. "We have among the handicapped another minority which is usually excluded from consideration. Deafness is really a profound handicap. It's time we did some service for deaf people as well."



# High School Seniors Should Apply Now

The NTID offices of Student Planning and Advance Studies and the Coordinator of Admissions are turning their attention to deaf students now entering their senior year of high school.

When Joseph Dengler, coordinator of Admissions, was asked the question, "When should a senior begin considering his application to NTID?" his answer was definite. "Right away." Dengler went on to say that "Seniors cannot begin too soon to assure themselves a place in the student body for the quarter following their graduation, or completion of present studies."

In regard to student quotas and budget, NTID planning is already well into 1973; and until the new NTID building complex is completed in 1974, the number of students that can be accepted is limited.

The first important fact the deaf senior should know is that no examination is required for entrance to NTID. There are, however, certain records, forms, and affidavits that are necessary in the consideration of the student application. The final decision is made on the basis of the following: audiological information; test information (achievement); high school record; references from principals, teachers, vocational rehabilitation counselors; and proof that the applicant is either a U.S. citizen or a permanent resident.

Applicants that are currently enrolled in other postsecondary educational programs will be considered for admission if there is clear evidence that the support services provided by NTID are required for the student's success, and are not available at his present institution or if the support services are available but the student is changing educational objectives and the desired program is not offered.

At the office of Student Planning and Advanced Studies, the assistant dean, Dr. James Speegle, spoke with enthusiasm about the integration of the NTID student in the Rochester Institute of Technology community, the home of NTID. "Not only is it exciting to see our students settle into their chosen programs, but it is extremely rewarding to see them graduate into well-paying and satisfying jobs along with their hearing classmates."

A variety of opportunities are open to the deaf student in the ever-expanding NTID program. Careers in Technical Education, to name just a few, include the hematology, clinical chemistry, microbiology, medical laboratory technician, accounting, data processing, electronics, industrial drafting, architectural drafting, machine tool operation, applied photography, printing, and applied art.

In addition, deaf students who qualify can cross-register for more than

40 majors offered by the schools and colleges at RIT. Included are RIT's Schools of Applied Science and Computer Systems, and its colleges of Business, Continuing Education, Engineering, Fine and Applied Arts, General Studies, Graphic Arts, and Photography.

The deaf student enrolled in any of these programs has the support services of interpreting, tutoring, note-taking, speech and hearing training, and personal, social and academic counseling.

To complement their studies, NTID students are encouraged to participate in a variety of activities, for social as well as academic development. They include programmed housing, student Congress, NTID Drama Club, volunteer programs, religious activities, captioned film programs, and fraternities. The athletic program enjoys great popularity with swimming, track, hockey, tennis, fencing, basketball, baseball and tennis.

In short, if you are a deaf senior, and all of this sounds like the sort of challenge you would enjoy, don't hesitate. Write immediately to: Admissions Coordinator, National Technical Institute for the Deaf, Rochester Institute of Technology, One Lomb Memorial Drive, Rochester, New York, 14623.

## New Projects to Aid Placement

Two projects to improve job placement services at NTID are being planned for 1972-73.

The first is a more comprehensive vocational counseling program being set up jointly by the Placement Office and Counseling Services. Students will begin to receive intensive group and individual counseling during their last two quarters at NTID to better prepare them "for separation from the Institute and for job placement," says Joseph Avery, coordinator of Counseling Services.

"We have found that a large number of students lack information about job placement," says Avery. "For example, some tend to have unrealistic pay expectations, or they are naive about the job market. They may insist on working in a town where jobs in their profession are not available. Others, we have found, are inadequately prepared for applying and interviewing for a job on their own; they tend

instead to depend on help from others."

NTID students already receive vocational counseling during the summer Vestibule Program when they first enter. A counselor also follows a student's progress throughout his stay at NTID to help him make any changes and adjustments in his job aspirations. The third and newest phase of this vocational counseling system will hopefully be started in January, says Avery.

The second placement project will be to begin following up graduates more closely to analyze their success on the job. This information will in turn be used to keep NTID's program up-to-date and relevant, says Vic Maguran, NTID's coordinator of Career Development.

In the past, graduates were followed up informally, says Maguran. "But we now have more than 100 NTID graduates, and we believe the time is right for a more comprehensive, systematic program."

### ntid focus

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# Business Tech Fights To Change Outlook

NTID is fighting to change the practice of business which often channels the deaf worker into lower level, repetitious jobs all day long, with little or no chance for advancement.

NTID believes there is a greater future for the deaf graduate who can meet the modern demands for a highly skilled, versatile office worker, capable of accepting responsibility.

So says Hans Kurzik, chairman of NTID's Business Technologies Department, in which some 80 students are enrolled this fall. NTID's goal is to help these students fit into and advance in the world of business by emphasizing basic skill training and work attitude development.

"We are attempting to provide students with superior skills and education not only for entry level positions, but also to provide means of progressing from those positions to ones with increased responsibilities," says Kurzik.

To date, some 36 students have graduated with either a certificate, diploma or associate degree in Business Technologies, and placement of these students has generally been successful. One diploma graduate of NTID's office practice program started as a technical typist at Rochester-based Stromberg-Carlson Corp. and now has

worked her way up to doing much more complex work as an engineering drawing typist.

One associate degree graduate of the office practice program who elected to receive more training in accounting is an accounting department clerk for a firm in Wellesley, Mass. A diploma student recently graduated from the accounting technologies program was the first deaf person hired by the Rochester brokerage office of Merrill, Lynch, Pierce, Fenner and Smith.

"These may not be glorious top-level jobs, but they are jobs in which deaf people have seldom been before and jobs which provide career paths leading to increased responsibilities and upward mobility," says Kurzik.

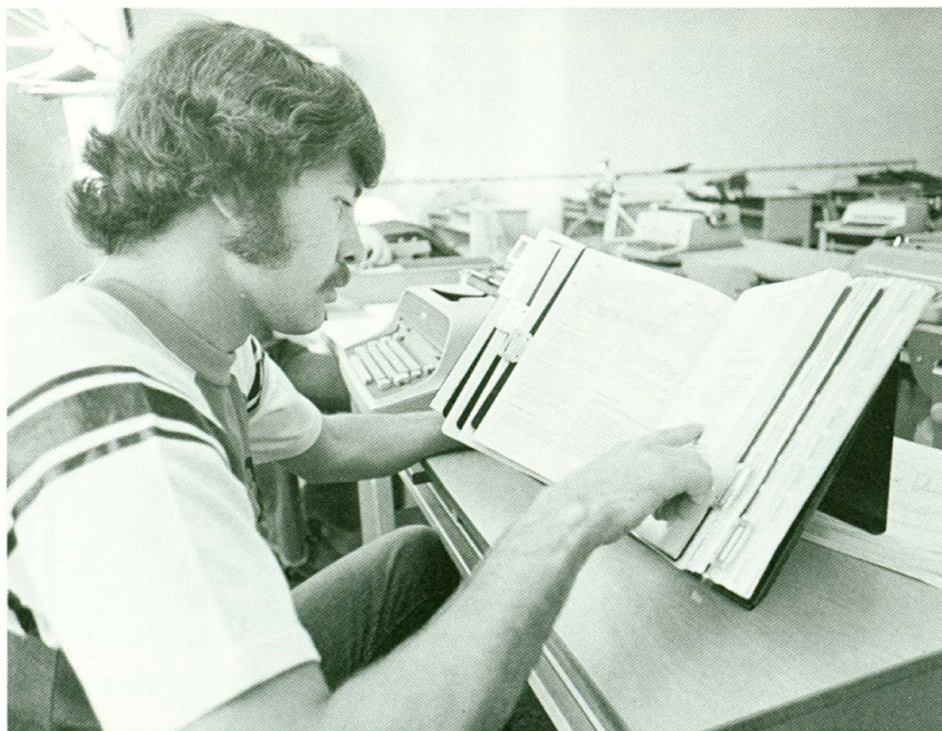
Students in Business Technologies may enroll in one of three programs—office practice and procedures, accounting technologies, or data processing. These programs take anywhere from two to seven quarters to complete, depending on the degree. The purpose of office practice is to train versatile, multiple-skilled office workers. The accounting program is designed to train technicians who can apply the basic skills and rules of accounting. The data processing program provides skill training for entry level computer programmers.

In all three programs, the emphasis is on teaching students basic skills by giving them actual "hands-on" experience. This skill training is supplemented by practical application of business concepts of management, marketing, economics, and personal development for the business environment. In office practice, for example, students learn to operate the various types of business machines and perform such tasks as preparing a payroll from start to finish. In accounting technologies, increasingly complex accounting problems are solved with exposure to a simulated accounting environment. In data processing, students are exposed to computer operations, learn three or more basic computer languages, and are taught to apply these languages to actual business problems.

"We try to stay away from lectures on high-flying theories and concentrate more on knowledge and skills directly applicable to the job," says Kurzik. Even economics is brought down to a personal level; the daily newspaper serves as a textbook in which students discover how they, as workers and consumers, are affected by inflation, production costs and pricing, supply and demand, false advertising, etc.

Another important feature is the cooperative work experience, one in which deaf students, many of whom have never worked before, go out on the job for one quarter before they graduate to test their skills and "spread their wings" a little bit.

"We are at a point now in our history where a good number of our students have been placed on co-op or permanent jobs," says Kurzik. "You couldn't write a success story about every last one of them, but we have found that deafness is little or no obstacle to the majority of students who develop superior skills and work attitudes."



**DATA PROCESSING—** Patrick Cullen of Madison, Wisc., is checking the manual for specific instructions to program a computer.



## Students Strive For High Level Business Jobs

Can a deaf person ever expect to reach the higher-level business administration jobs?

"It depends entirely on the individual—his professional and academic background, his intelligence, his personality and drive," answers Tom Connolly, NTID educational specialist in the College of Business at Rochester Institute of Technology, NTID's sponsoring Institute. Some 200 NTID students are enrolled in RIT's business administration program, training for professional careers alongside hearing RIT students.

Connolly believes that these deaf students can realistically expect to compete on the job market with their fellow hearing students. "You must remember, though, that you cannot generalize about deaf students anymore than you can about hearing students. Our students have widely varying communication skills and diverse interests. The important thing is to help each student find his own place in the business world."

Bachelor degree candidates can pick from one of four areas—food administration, retailing, general business or accounting. They go much deeper into theory work than do the NTID Business Technologies students, studying four years rather than one or two.

It is Connolly's job, along with his assistant Dan Strong, to counsel deaf students, provide tutoring, arrange for notetakers and interpreters in class, and serve as liaison between NTID and other RIT instructors, should any problems arise.

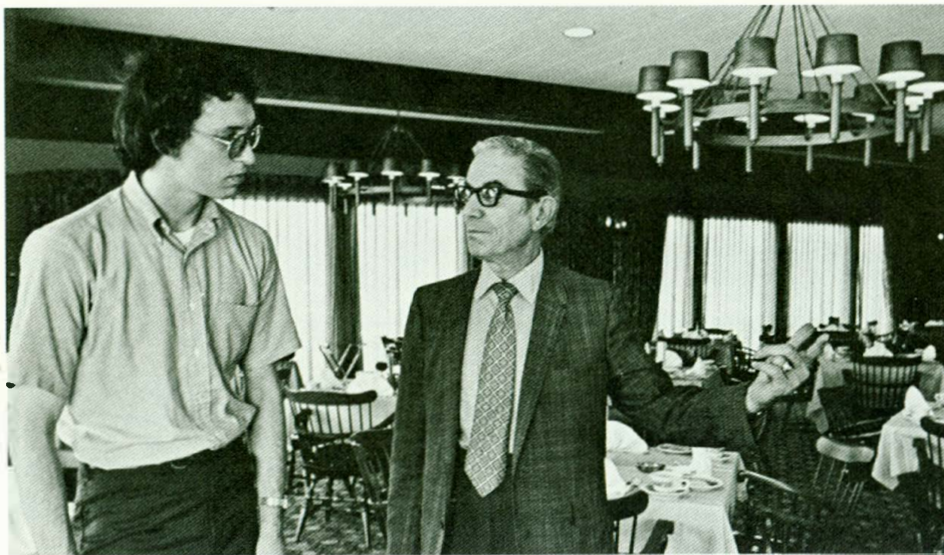
There are several qualifications Connolly looks for in deaf students. Academically, they must have an adequate mathematics background and a good enough grasp of the English language to handle the theory work.

In addition to this, Connolly examines their motivation. "A student must have an honest-to-goodness desire to succeed in business and a realistic view of what he can accomplish."

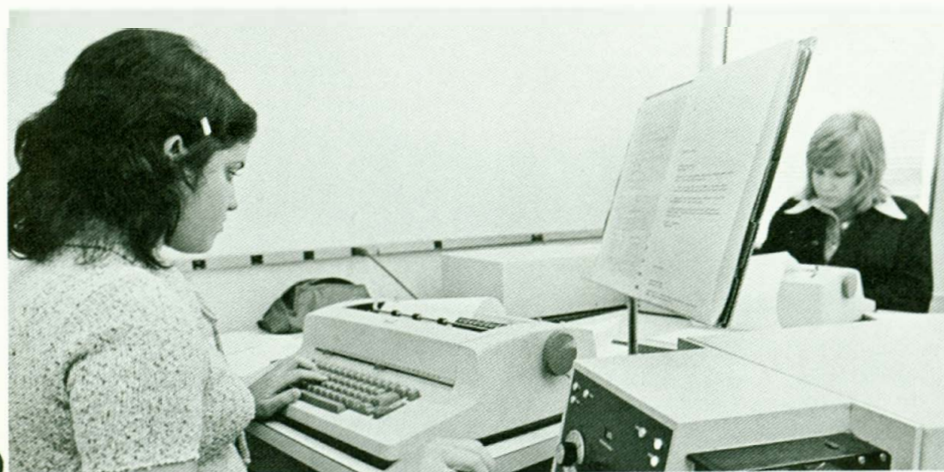
To date, six NTID students have graduated from the program. One is an accountant for the Internal Revenue Service in New York State; another teaches business courses at a school for the deaf in Maryland; one is in the retail store business in California; another is in graduate school studying deaf education; and another is working for an accounting office in Rochester.



**ACCOUNTING**—Bernard Smith lectures students, who are well-equipped with workbooks and business machines.



**RESTAURANT MANAGEMENT**—Michael Capie (left) of Trevoze, Pa., hopes to get a bachelor's degree in business and become a restaurant manager someday. He gets first-hand counseling from Robert Kohler, manager of the Inn on the Campus at RIT.



**MT/ST OPERATION**—Office practice students Jan Manfredonio (left) of Brooklyn, N.Y., and Nancy Jagielski of Detroit, Mich, learn a skill which has been in good demand by industry.



## New Faculty Experience

# Students Teach the Teacher

By MARIANN TEUBER

"Deaf people can't and won't hide behind words and subtle phrases. They're teaching me to appreciate the real value of candor and openness."

Twenty-three-year-old Bonnie Meath is becoming acutely sensitive to the needs and attributes of non-hearing people as a result of an intensive training program she underwent this summer as a new NTID faculty member.

"The program hasn't changed my feelings about deaf people in the sense that I feel the opposite of what I did," she comments, "but I am much more sensitive to their needs. I realize the importance of communication in every form. That's something hearing people don't always appreciate."

Developing that sensitivity to the world of deaf people is a major goal of the new faculty training program, according to Kenneth R. Nash, coordinator of professional development for NTID.

Like most of the 35 new faculty members in the program, Bonnie had minimal experience with deaf people before and no knowledge of manual communication. Her expertise was a master's degree in her subject, English. She'll be teaching English to NTID students in technical art and fine arts programs.

The only faculty training program of its kind in the country, the NTID training offered eight weeks of classes for eight hours a day.

At least four and a half hours a day were devoted to sign language instruction.

The new faculty members studied all aspects of deafness. They were given an introduction to the goals of NTID and actual practice in designing classroom curriculum.

They were introduced to some controversial issues in the education of the deaf, such as whether deaf people think differently from hearing people.

They listened to deaf people and blind people discuss the similarities and differences between their handicaps.

They socialized with deaf students, and were given the chance to live in the dormitories for one or two weeks.

They visited the Rochester Deaf Club for a view of one way in which deaf adults socialize.



**REVERSE ROLES**—New faculty member Bonnie Meath (left) learns sign language and fingerspelling from students Andrew Mayer of University City, Mo., and Susan Judd of Dallas, Tex.

They visited the Rochester School for the Deaf for a view of one kind of academic environment from which some NTID students come.

They participated in the sampling of educational programs alongside NTID students during orientation.

Some faculty members went into downtown Rochester pretending they were deaf, and attempted to make purchases and register to vote using sign language.

The program, says Bonnie, was "a very, very good start" toward preparing her to step into the classroom in September. It will be followed by continual sign language practice and other types of in-service training.

"Of course, if I'm at NTID ten years from now, I still won't feel totally prepared, but I am prepared to learn," she says. "It's no lack in the program that I don't feel totally prepared."

"All this exposure to various the-

ories of education makes you realize there are no answers," she continues. "It makes you feel responsible to evaluate yourself in every lesson program. It forces you to be really flexible."

One of the most valuable aspects of the program, according to Bonnie, was the opportunity to participate with other NTID faculty members and deaf students.

"Their enthusiasm maintained my enthusiasm," Bonnie remarks. "A lot of these new faculty members have an awful lot to give."

Perhaps most important, Bonnie believes the program gave her a new understanding of deaf people.

"I stopped thinking of deaf people in terms of their deafness," she says. "Now instead of thinking about them as deaf people, I think about them as people."