



Institute
R I T
COLLECTION
Publications

February 10-16, 1975

Engineering prof out to change machines, not people

You're a beginning skier who wants to minimize the possibility of injury while learning and enjoying the sport.

The most obvious place to start is with release bindings, says Jasper Shealy. He recommends plate-type ski bindings.

Dr. Shealy, assistant professor of industrial engineering at RIT has spent four years researching ski bindings and other safety factors in skiing.

A plate-type binding is one where the binding releases a plate attached to the boot rather than the boot directly, Dr. Shealy explains.

These bindings generally allow a roll-out release along the long axis of the boot when the ski is trapped.

This is especially important for beginners, says Dr. Shealy, because novices often trap one ski under the other and fall to the side of the trapped ski. If the binding will not release under this situation, an injury is very likely.

Cable-type bindings have the worst injury rate. Dr. Shealy found that people using cable

bindings had the greatest mean severity index, highest percent of medical treatment, longest number of days lost, and lowest percent of binding release.

"Reading ski binding manufacturers' advertisements will leave you in a very confused state if you're seeking the safe binding," Dr. Shealy says. "Many, if not most manufacturers claim their binding is best. Various retailers will claim this or that binding is best with generally no empirical data to back their contention."

Thanks to research like Dr. Shealy's, skiers may have some data on which to base their choice. Dr. Shealy's findings along with others are being used by a committee of the American Society for Testing and Materials (ASTM) to come up with standards for release bindings.

Dr. Shealy has been able to combine his love of skiing with his professional field of human factors engineering.

Human factors engineering looks at people in their relationship to machines with the idea that it's easier to redesign the machine than to retrain the person.

When Dr. Shealy needed a research topic for a master's thesis at the State University of New York at Buffalo, his wife suggested ski injuries as an area of his interest which was relevant to human factors engineering. He found existing literature in the area scarce and of poor quality.

SUNY Buffalo, with the largest collegiate ski club in the country, provided nearly 3,000 skiers for Dr. Shealy's closed-population study.

Besides his findings about ski bindings, Dr. Shealy arrived at other findings that in some cases dispute previous assumptions.

Contrary to popular belief, females are not more prone to skiing injuries than are males, he says.

Females are more concentrated in the inexperienced skiing group, which has a higher accident rate, he explains.

Beginners have twice as many accidents as more advanced skiers, not 15 to 20 times as many as previously reported, Dr. Shealy says. Experience is more responsible for safety than technique, he found.

Dr. Shealy confirmed that people who learned to ski by

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RIT will hike tuition, room and board next year

RIT undergraduate and graduate tuition, and room and board will increase for the 75-76 school year, Dr. Todd H. Bullard, provost announced.

"Because inflation and recession have hit all private and public institutions alike, as it has business and industry and every worker in the nation," Dr. Bullard stated, "we are forced to make the following tuition and room and board changes:"

--Undergraduate tuition will increase \$249 to \$2,649, except for the College of Business which will be \$2,574 for three quarters.

--Graduate tuition will increase \$264 to \$2,814.

--College of Continuing Education (CCE) will increase \$4 per credit hour to \$47.

Rood and board at RIT for



Dr. Todd H. Bullard

75-76 will increase \$105 to \$1,593. This covers double room occupancy and 20 meals per week.

Undergraduate fees will remain at \$130.

Educational communicators will take group to conference

The Association for Educational Communication and Technology (AECT) is having its annual convention in Dallas, Texas, April 13-17. The RIT department of Instructional Technology is organizing a flight

to Dallas at a group rate. If you are interested in taking advantage of this group rate please indicate your interest, in writing, to Linda McMillion c/o Dr. Barnes' office-01-1360.

Co-op gave him chance to "find out what's going on"

"It seemed like a good idea to find out what's going on in the outside world, how the things you're learning about are being used, and whether it's what you want to do the rest of your life."

Douglas Batt, 21-year-old son of Mr. and Mrs. Melville, J. Batt of 170 Keil St., North Tonawanda, is commenting on his cooperative education experience.

Batt, a third-year chemistry student at RIT's College of Science, spends every other quarter working in the Color Chemical Research Laboratory at Kodak Park in Rochester.

Students gain practical experience in their chosen fields through RIT's cooperative education (Co-op) program.

Ugly Man funds go to foundation

The Alpha Phi Omega annual Ugly Man on Campus fund raising contest will be held Sunday, February 23 through Sunday March 2.

This year the net proceeds will be donated to the Kidney Foundation of Genesee Valley. Several students on campus have directly received assistance from the Foundation. The foundation only raises funds through independent efforts.

Last year 17 UMOC candidates helped raise \$1200.00 for the Henrietta Volunteer Ambulance Service. Dan Dedo of Sigma Pi was voted Ugliest Man last year.

Any group of people can nominate a candidate. Pictures are taken of each, and "votes" are cast by placing money in containers in front of the photographs on display in the College Union lobby from 9-4 p.m. daily, NTID dining hall, 4-7p.m., and Grace Watson, 24 hours a day.

Applications for candidates are now available at the College Union desk. A \$10 fee per candidate is required to cover the cost of 3 color 8 x 10 photos and black and white prints. Candidates will be contacted when pictures are to be taken. The deadline for applications is February 7th.

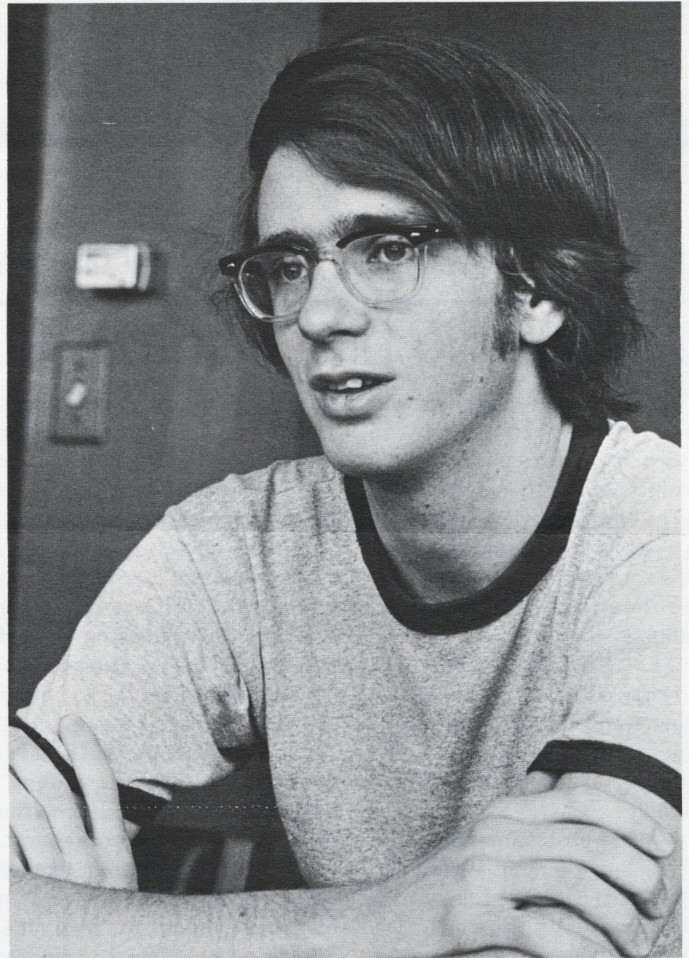
Science students spend their last three undergraduate years alternating academic quarters with industrial work quarters.

Batt and his co-workers are experimenting to produce new dyes for color film.

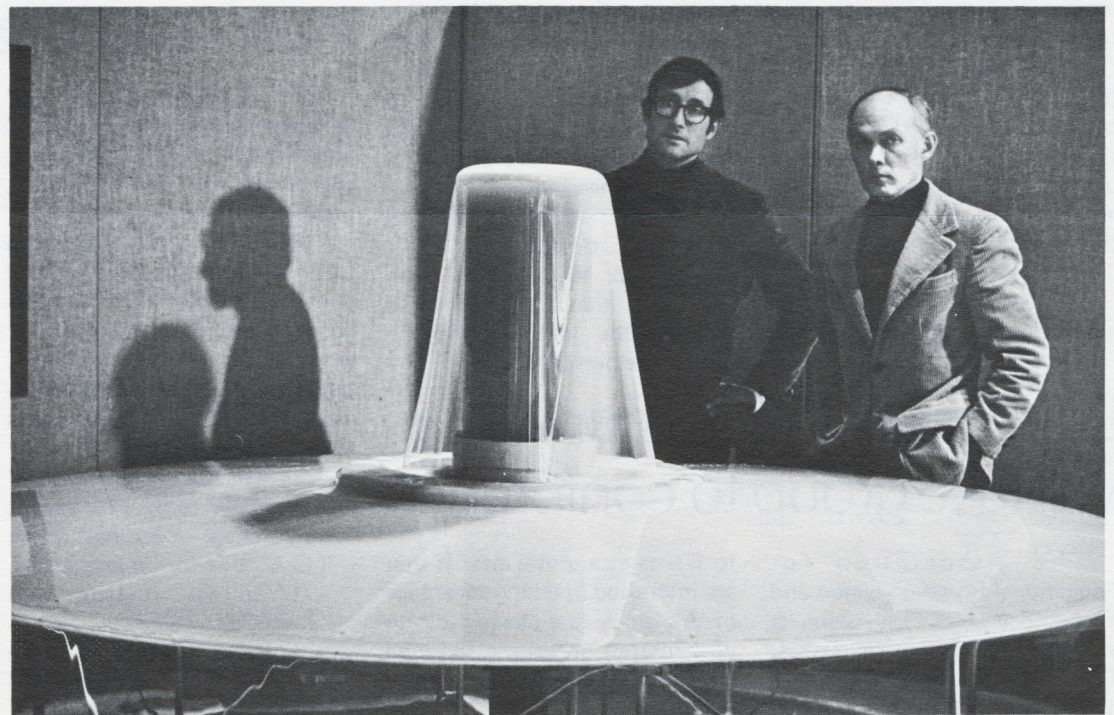
"I found a lot of application for what I'd learned at RIT," says Batt, a 1972 graduate of North Tonawanda High School. He decided he wants to continue in some type of organic synthesis research after graduation.

Besides its advantages of providing work experience and helping to settle career decisions, Co-op provides money to finance the college education, Batt adds.

College of Science students in chemistry, biology, mathematics and physics have taken their "work blocks" in research, quality control, industrial production, technical service, marketing and data processing at Xerox, Eastman Kodak, Alliance Tool and Die, American Cyanamid, Burroughs Corp., NASA's Goddard Space Flight Center, Pennwalt Corp., Rochester Gas & Electric, Bausch & Lomb, the Central Intelligence Agency, and other places.



Douglas Batt



RIT professors Phil Bornarth and Franklin Schwaneflugel with their "Experiment in Sculptural Form" from the recent faculty art exhibit at the Bevier Gallery.

Grant Deadlines

The Office of Grant & Contract Administration reminds all faculty, staff and students that the following are deadlines for proposal application. Since Institute review and approval must be accomplished prior to mailing a proposal, applicants are requested to forward their proposals to Grants Administration one week before the listed deadline.

Guidelines and application forms for listed program are either on hand in, or on order by Grant & Contract Administration Office. For additional information and/or assistance, please call ext. 2388.

NATIONAL SCIENCE FOUNDATION

Feb. 7, 1975 - Faculty Fellowships in Science (applications of science to social problems, 3-9 months stipends for Faculty with minimum of 5 year teaching.)

March 1, 1975 - NATO Senior Fellowships in Science (This program is oriented toward the study of new scientific techniques and development during short visits abroad; awards to be announced on May 15, 1975).

OPEN - Science Information Grants (Research, Development and Demonstration projects to improve scientific and technical information service).

DEPARTMENT OF HEALTH EDUCATION & WELFARE

Feb. 17, 1975-Fund for the Improvement of Postsecondary Education:

- 1) National Project I-Better Information for Student Choice
- 2) National Project II-Alternatives to the Revolving Door, effective learning for low-achieving students.
- 3) National Project II-Elevating The Importance of Teaching.

Office of Assistant Secretary for Planning & Evaluation:

April 15, 1975 - Grants for Research on Social Security and Welfare-Co-op sponsorship is encouraged.

NATIONAL ENDOWMENT FOR THE HUMANITIES

Feb. 17, 1975 - Fellowships. Summer seminars for College Teachers 1975.

March 15, 1975 - Education Programs. Education Projects Grants beginning after Dec. 1, 1975.

April 1, 1975 - Fellowships for Journalists.

April 1, 1975 - Youthgrants. Projects beginning after Sept. 1, 1975 (Student Directed Research).

April 17, 1975 - Public Program. Projects beginning after Oct. 15, 1975.

June 2, 1975 - Fellowships for Independent Study & Research 1976-77. (Intended for scholars, teachers, writers who have completed

their formal academic training by date of application.)

NATIONAL ENDOWMENT FOR THE ARTS

March 17, 1975 - Summer Work Internship Programs, June 2-Aug 29, 1975. Stipend of \$1,885 plus travel. 10-13 appointments to be made for assignments in Wash. D.C.

May 30, 1975 - Photographers Fellowships FY76.

U.S. DEPT HEW OFFICE OF EDUCATION

March 16, 1975 - Ethnic Heritage Studies Program.

U.S. OFFICE OF EDUCATION

Feb. 15, 1975 - Educational Programs to meet needs of Indian Children.

DEPT. OF TRANSPORTATION

April 1, 1975 - University Research Program-to solve transportation problems at normal state or local levels.

VETERANS ADMINISTRATION

March 1, 1975 - Grants for Development, Expansion & Improvement of Allied Health Education.

E.R. Murrow FELLOWSHIP

April 1, 1975 - Ed. R. Murrow Fellowship for Americans in Print or Electronic Media.

Cosmopolitan features chapter from RIT prof's book

Cosmopolitan magazine, in its February issue currently on the newsstand, has excerpted Chapter 2, "A Unisex Strategy for Success," from Dr. Andrew J. DuBrin's *Survival in the Sexist Jungle*.

Dr. DuBrin, of 208 Pitts Colony Drive, Henrietta, is professor in the College of Business.

Survival in the Sexist Jungle was also chosen the 1975 Bonus Book Digest Choice by Collegiate Woman's Career Magazine.

"Of the current crop of books purporting to illuminate the problems, the progress and the promise of economic, social and other areas of equal opportunity for women, Collegiate Woman's Career Magazine is much impressed with the work of Dr. Andrew J. DuBrin," the editors



Dorothy B. Wadsworth, director of development at RIT, was named one of five commissioners of a special investigation of the nursing home industry last week. Mrs. Wadsworth, 55, of 147 Chelmsford Road, Brighton, will serve with Dr. Isadore Rossman, specialist in geriatrics, Peter A.A. Berle, former state assemblyman and adjunct professor of law at Hunter College, and Aminda Wilkins, retired assistant deputy commissioner of the New York City Department of Social Services. The commission will be chaired by Morris B. Abram.

Human factors engineering

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taking lessons do not seem to have a lower injury rate than those who learned on their own.

That's because lessons stress technique and form and not how to cope with hazards like ice, rocks, trees and other people, he believes.

News and Newsmakers

Robert Wickson of the College of Fine and Applied Arts (3-D Design and Sculpture) has been appointed by Town Supervisor, James Guthrie as the fire prevention officer of the town of Wheatland on a part-time basis....The NITD classroom /dormitory building has received TOP HONORS in the 1975 Architectural Competition. The entry was submitted by the architect, Hugh Stubbins and Associates....Harvey Carapella Producer, Media Production Center, has been given a certificate of merit from Curtis Paper Company for his "exercise of outstanding skill and design in the field of Graphic Arts." It was given for the 1974 Library Calendar design....Lauralee Over, Director of Community Relations, has been appointed to the State Advisory Council on Post-secondary Continuing Education....

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Events

Monday February 10

Technila Senior Portraits, Conf. Rm., A., C.U., 27 Jan - 14 Feb.

CUB meeting, 5 p.m., C.U., Alumni Rm.

Intervarsity Christina Fellowship, every Monday, Mezzanine Lounge, C.U., 7 p.m., singing, 7:30 p.m. meeting.

"Accepting Love - Giving Commitment"; Program Sponsored by the Chaplins office, non-sectarian in nature. For more information call 464-2135 or stop by the Chaplins offices in the college union.

Interviews: Sign up 8:30 a.m.; **F.W. Woolworth Company** interviews February 24, students graduating in all Majors College of Business, for Management Training.

Interviews: Sign up 8:30 a.m.; **United States Navy** interviews February 24. Military Positions. Students graduating in all majors for Managerial position, and supervisory and operational opening.

Interviews: Sign up 8:30 a.m.; **National Security Agency**, interviews February 24 and 25, students graduating in Printing Tech., for Large scale photo offset.

Interviews: Sign up 8:30 a.m.; **Schmidt Printing, Inc.** students graduating in all Majors of School of Printing, for Management Trainee for Sales Service/Sales Development Field or Production Management Field. Interviews 24,25,26.

Tuesday/February 11

Commuter Organization meeting, Conf. Rm. C, CU 1 p.m.

Ice Cream Give-away, 1 - 2 p.m., CU Main Lobby, sponsored by CUB recreational, served by members of the Student Affairs Division.

"Second Tuesday" - Breakfast Seminar. Robert Metz, New York Times - speaker. 7:45 a.m. - 10 a.m. Contact Robert Way at 2225.

Concert: Rod Steward; To be held at the Rochester War Memorial For more information call 334-7484.

Interviews: Sign up 8:30 a.m.; **Department of the Navy Civilian Positions** - interviews February 25, students graduating in Industrial Engineering and Mech. Engineering, for Project Engineering, Program Management, and Logistics Engineering.

Concert: Christopher Parkening on the virtuoso guitar; Eastman Theatre, 8:15 p.m. For more information call 325-1070.

Wednesday/February Sims TM Intro Lecture Conf. Rm. B, C.U. 7:30 p.m.

P.B.A. meeting, Henry Lomb Rm, 12:30 p.m. C.U.

Commercial Web Offset Workshop, Gannett Bld., All Day, 12 - 14 Feb. Info: x2757.

Interviews: Sign up 8:30 a.m.; **General Electric Company** interviews February 26, students graduating in Photo, Elec. Tech., Mech. Tech., Elec. Engineering, and Industrial Engineering for positions in Research and Development, Product Design, Field Engineering, Service Sales, Project Engineering, Manufacturing Engineering, and Quality Control.

Interviews: Sign up 8:30 a.m.; **Dresser Clark Division of Dresser Ind.** interviews February 26, students graduating in Mech. Engineering, Industrial Engineering and Mech Tech., for Associates Engineers, and Manufacturing Supervisors.

Thursday/February 13

SOS-5 Executive Board Meeting, 5:30 p.m., Conference Room B, CU' NSC Cabinet meeting, NSC office, Dorm C-043, 7 p.m.

C.P.A. meeting, CU, 9 a.m.
Scuba Club meeting, 7 p.m., Cu main lounge.

CPA's - Flowcharting - Preparation and Interpretation, M-2. 9-5p.m. Contact Bill Gasser at 2312.

Friday/February 14

Valentine's Day Dance and Breakfast CU Main Cafeteria, 8:30 p.m., tickets \$5.00 a couple, on sale at CU Dest Live Entertainment featuring "Sly Noveli and His Orchestra".

Last Day for Technila Senior Portraits, Conf. Rm., A, CU 27 Jan - 14 Feb.

Evening College SA meeting, 7 p.m., Conf. Room C., CU.

Talisman Films - "The Seduction of MIMI," 7:30 and 10, Ingle.

"Design in Theatre" - 10:30 Coffee 10:00 a.m. Memorial Art Gallery - U. of R. "Life Upon the Open Stage," John Jensen. (fee) Call 275-3081.

Saturday/February 15

Monroe Professional Eng. Society

Banquet, Clark Dinning Rm., CU, 5p.m.

Talisman Films - "The Way We Were" 7:30 and 10, Ingle.

Caption Film: "Ben Hur" Part II, 7 p.m. Fri/Sat. General Studies Bld. A-205.

Monroe Professional Engineers Society, 1829 Room, Clark Dining Room. 4-11:30 p.m. Contact Dr. Kenyon at 2146.

Shadows of Forgotten Ancestors; movie. To be held at the Rochester, Museum and Science Center Auditorium (Main Building) For more information call 271-4320.

Sunday/February 16

Boswell Coffee House, 7-10 p.m., 1829 RM, CU live entertainment, refreshments, free admission.

Talisman Films - "Lucia", 7:30 and 10, Ingle.

Gallery Concert, Memorial Art Gallers - U. of R. Eastman School of Music faculty and students. 2:30. Call 275-3081.

Continuing Events

Every Tuesday

Christian Science Org—Regular meeting, 7:30 p.m., CU, Room M-2. Counseling from 1-2 p.m., Conf. Room B, CU. Contact Ron Clarke at 4359.

February 20-21

"The Art History of Photography: Recent Investigations"—Dryden Theater, Eastman House. Registration fee is \$15, \$7.50 for students. Reservations may be addressed to the museum, Attn. SYMPOSIUM. Both dates, 2-6 p.m. Also 10 a.m.-noon on Feb. 21.

February 1-April 30

"The Extended Document"—International Museum of Photography, An investigation of information and evidence in photographs. Brackett-Clark Galleries. Photographers include John Baldessari, Thomas Barrow, Michael Bishop, Marcia Resnick, Richard Schaeffer, and William Wegman. Call 271-3361.

Through February 23

"Recent Acquisitions and Memorial Bequests"—Memorial Art Gallery of the U of R. Also, "Animales," same dates.

February 12-14

Commercial Web Offset Workshop—Gannett Building, all day. Contact Judy Torkington at 2757.

February 17-21

Quality Control for Photographic Processing Gannett Building, all day. Contact Judy Torkington at 2757.

February 10-March 5

Vocabulary Workshop—Learning and Development Center, Session 2 Monday and Wednesdays 10-11 a.m., Room 01-2338. Call 464-2281 for more information.

February 18-19

Writing a Research Paper—LDC Workshop. Session 1, noon-2 p.m. Session 2, 7-9 p.m., Room M-2, CU. Call 464-2281 for more information.

Every Wednesday

Outing Club Meeting—NRH South Lounge, 7:30 p.m. Trips every weekend, movies, speakers. Learn about outdoor life.

February 25-26

Taking College Exams—LDC Workshop. Session 1, noon-2 p.m., 01-2358. Session 2, 7-9 p.m., Room M-2, CU. Call 2281 for more information.

Placement Interviews

Central Placement Services announces that the following employers will be on campus this week to interview graduating students:

Mon., Feb. 10

MORSE DIVISION BERGE-WARNER will interview for Industrial Management Trainee and Production Training. NOTE: This is not a Sales Training Program. GAF CORP. will interview for Tech. Service, Production Management, Quality Control Engineering, Process Plant.

Tues., Feb. 11

SQUARE D COMPANY will interview for Field Sales. BABCOCK & WILCOX will interview for Engineers for design applications R&D Field Service Mfg. GAF CORP will interview for Tech. Service, Production Management, Quality Control Engineering, Process Plant.

News and Events is published every Monday during the academic year by Rochester Institute of Technology and distributed free of charge to the Institute community.

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