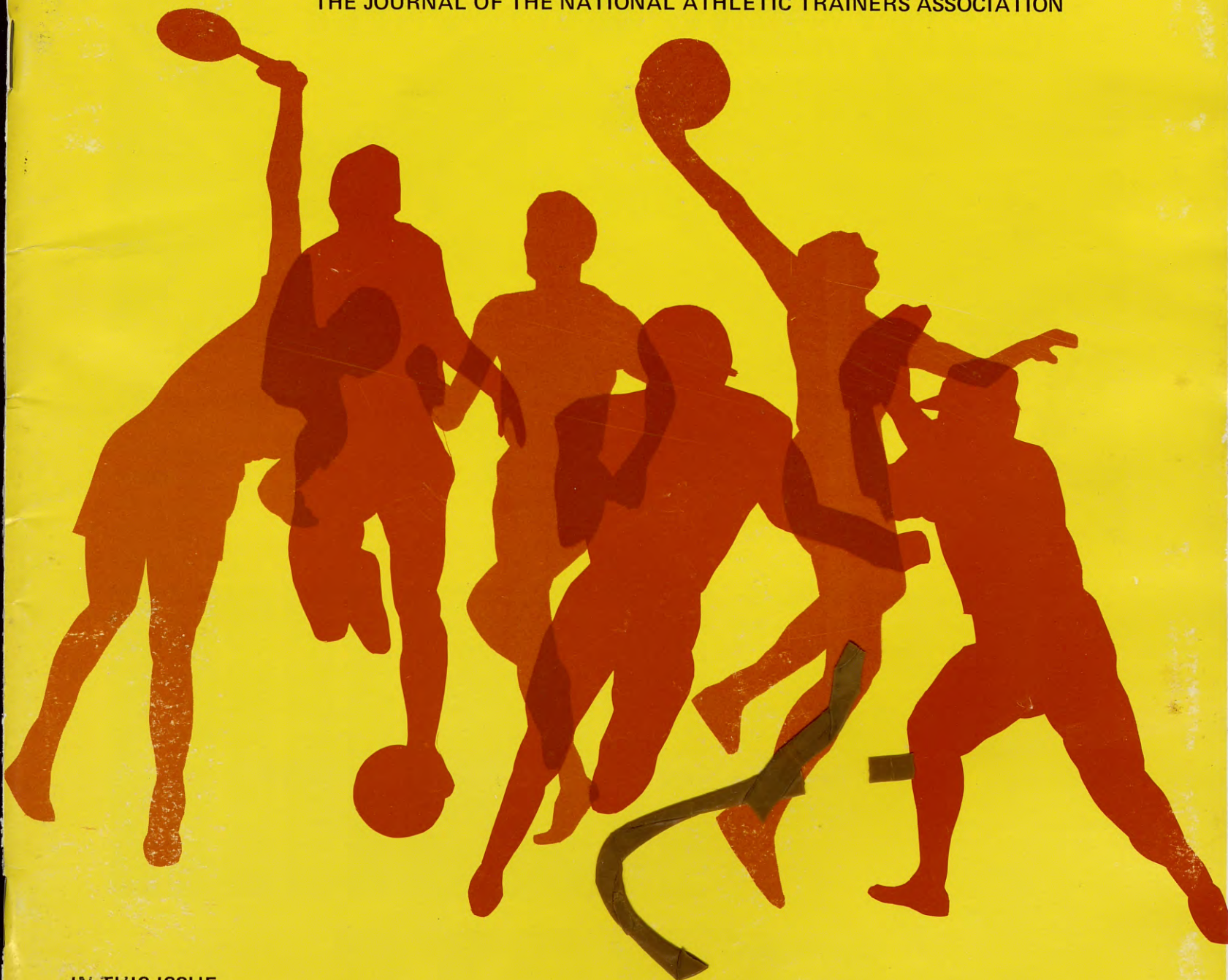




ATHLETIC TRAINING

THE JOURNAL OF THE NATIONAL ATHLETIC TRAINERS ASSOCIATION

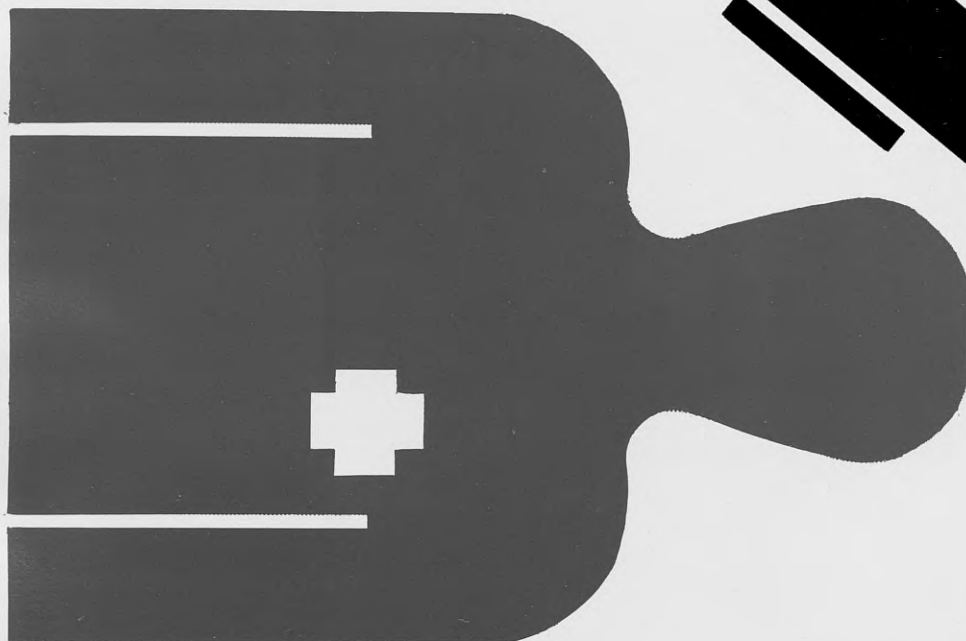


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NATA JOURNAL SURVEY
THERMOGRAPHY & ATHLETIC INJURIES
MINUTES OF MID-YEAR BOARD MEETING
NATA PRESIDENTIAL CANDIDATES
SPECIAL INJURY PADS

VOLUME 9
NUMBER 1
MARCH 1974

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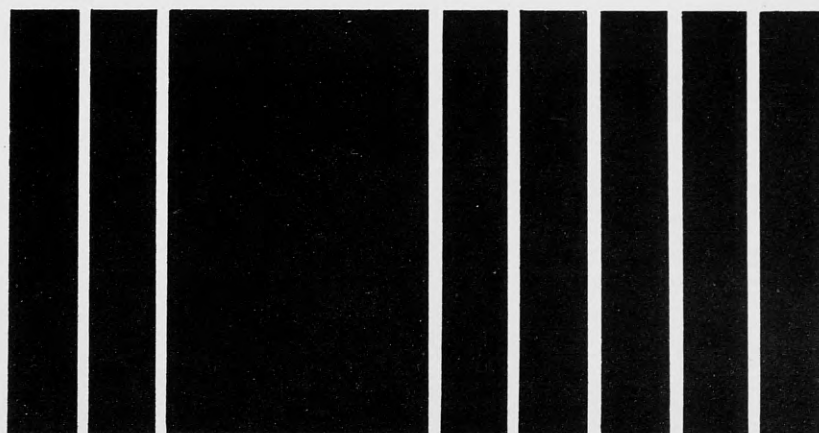
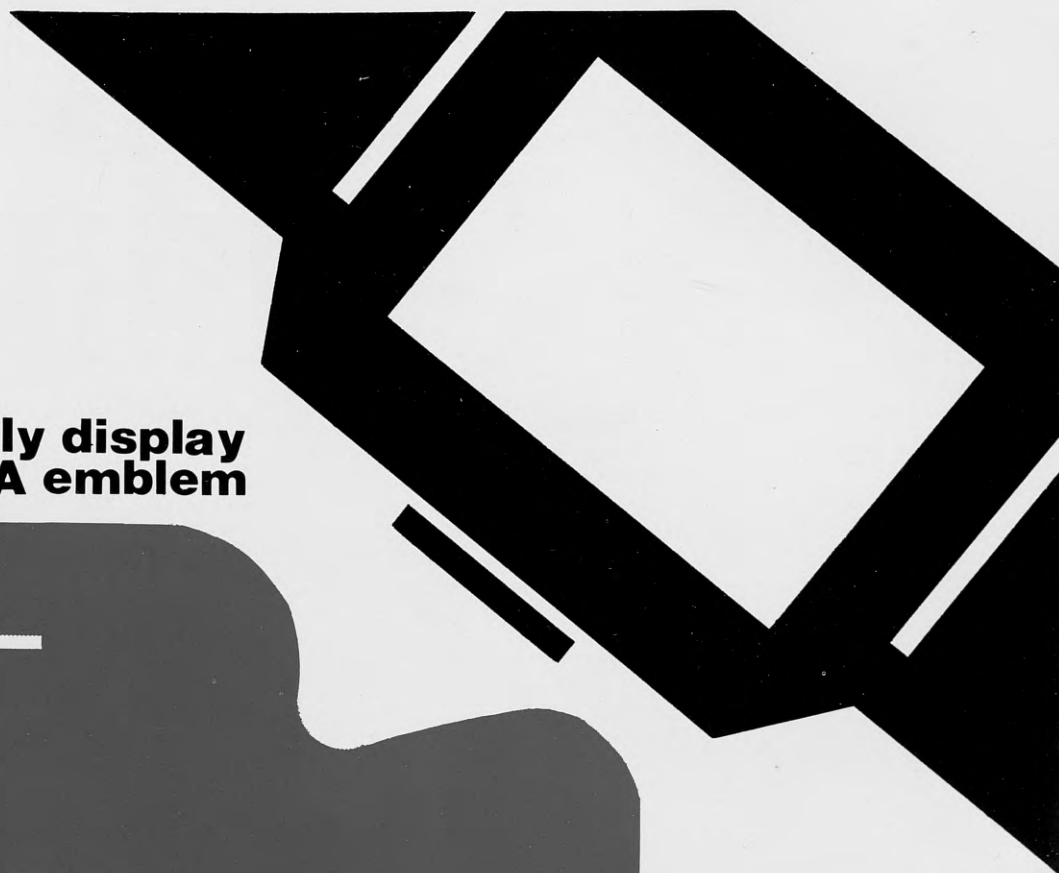
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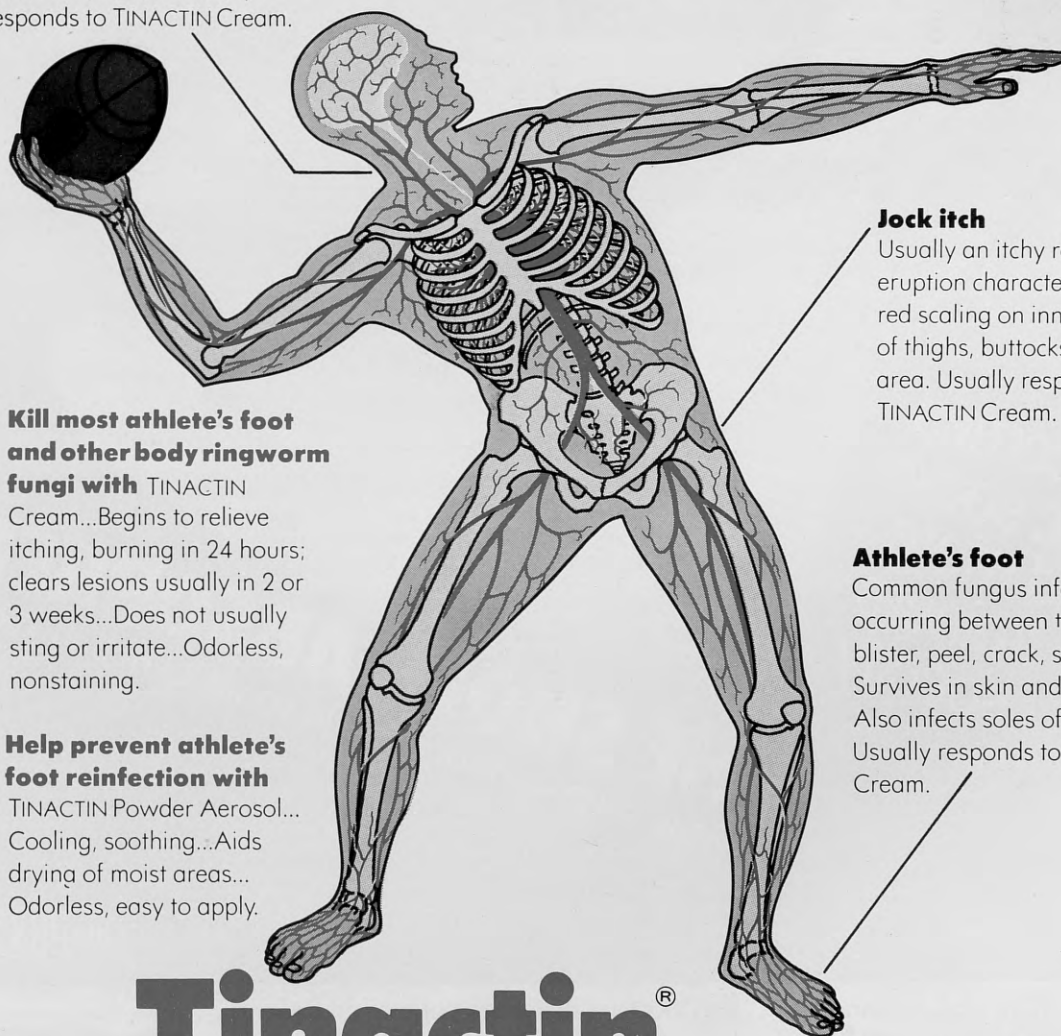


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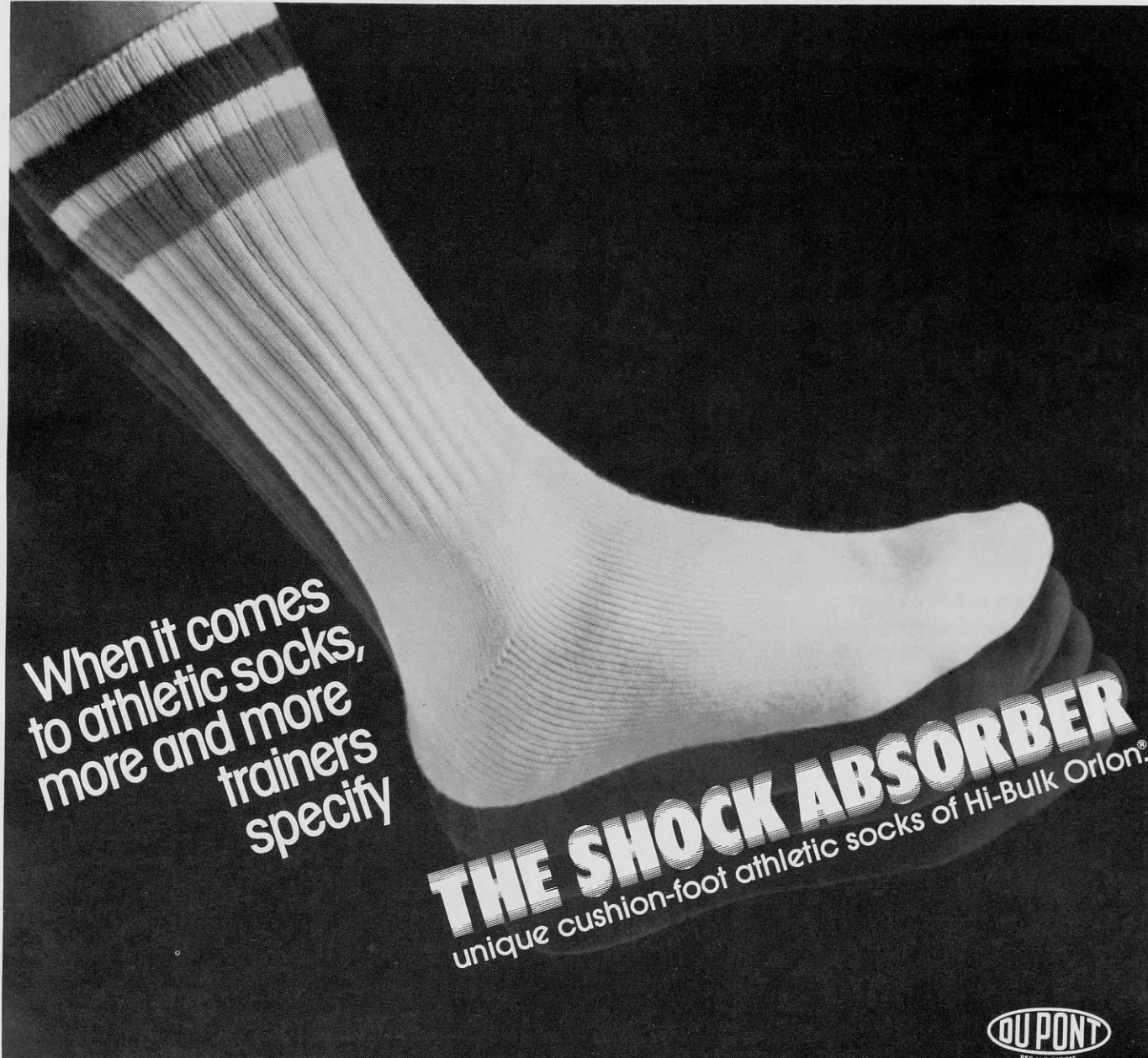
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VOLUME 9

NUMBER 1

MARCH, 1974

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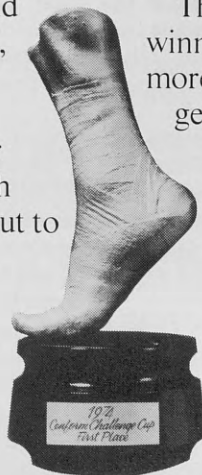
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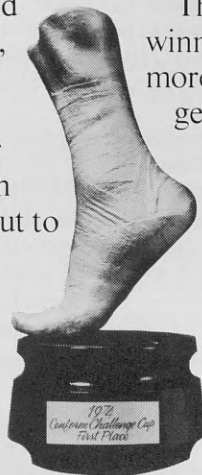
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Dear Editor:

First of all, to Bobby Gunn, if any of my words or actions in the past year were interpreted to be an attack on your personal integrity, intentions, or leadership, I publicly apologize through this media. Our association needs strong progressive leadership as you and the Board of Directors have demonstrated, and we will continue to need this manner of leadership to steadily progress as a profession.

I feel that our disagreement over the Dellum's Bill occurred through a lack of total communication and through interpretation of limited communications. The intent of the bill-to safeguard and upgrade the health and welfare of participating athletes at the secondary school level, was not in dispute, but its implementation as stated in the bill was. I first saw a copy of the bill after it apparently had already been presented in congressional committee. To anyone, as myself, that is not inclined nor knowledgeable in the intricacies of legislative procedure or political maneuverings, it appeared that this is the way it was going to be.

In a sense, I'm not totally unhappy that my open opposition created a stir at our national meeting in Atlanta. Hopefully, a positive approach to the progression of our profession of athletic training will develop. Hopefully, more members will become involved in promoting and telling the story of the profession of athletic training; and become more active in the affairs of their professional association-The National Athletic Trainers Association.

Every Board of Education member, superintendent, principal, and athletic director in every school in every state must know our professional competencies and curricular goals. These people are the hiring personnel of our secondary schools and they must know that our curriculums are turning out the Teacher-Certified Athletic Trainer. Our brochures should be in the hands of each and every one of these people. Hopefully, more positions will open for the graduates of our certified curriculums and internships.

Total research on injuries in all sports is needed to initiate and justify legislation. Hopefully, our membership will provide the manpower and leadership to conduct and obtain accurate data. Who else should be more competent to do so?

Hopefully too, we will someday become officially recognized as an accredited health profession or paramedical profession as our leadership and membership deems it feasible for us to be.

Gordy Graham, RPT
Certified Athletic Trainer
Mankato State College

LETTERS TO THE EDITOR

Dear Editor:

It has been brought to my attention recently the selection of trainers to the Olympic, Pan American, and World Games.

I would be interested in the qualifications, age, and years of experience needed for selection. I would also like to know the process of selection by whom, how (by secret ballot or at a conference), and where. I would also be interested in how many districts are represented in these games.

Finally, after selection has been made by the NATA, who makes final decision on who will be selected. Thank you for your time and interest on this subject.

Sincerely,
Steve Yates

Certified Athletic Trainer
Virginia Military Institute

Dear Steve,

We contacted Charles Medlar who heads up the Committee now handling this area. His answer is as follows:

Each N.A.T.A. district canvasses their respective members for those who are interested in applying for the Pan American, Winter, and Summer Games. After their members make application for these Games each district should then send a ballot again to their membership to vote on these applicants. We recommend that each district director should then formulate a committee to tabulate these returning votes.

The final nominees from each respective district are then sent to me as Chairman of the N.A.T.A. International Games Trainer Nomination Committee. This Committee, consisting of myself as Chairman, and four other N.A.T.A. members will meet at our N.A.T.A. Convention in Kansas City in June and make the final selections. These names are then forwarded to the United States Olympic Medical Services Committee and from then on it is in their hands.

The numbers of trainers for each Games, Pan American, Olympic, and Summer, are set by the United States Olympic Committee. As of this date there is no definite commitment.

Sincerely yours,
Charles E. Medlar,
Head Athletic Trainer
The Pennsylvania State University

Editor's Note: We have learned the dates of the games are as follows:

Pan American Games

San Paulo, Brazil - May, 1975 (last two weeks)

Note: Must be available beginning May 1, 1975

Winter Olympic Games

Innsbruck, Austria - February 4 to 15, 1976

Note: Must be available beginning January 15, 1976

Summer Olympic Games

Montreal, Canada - July 16 to August 1, 1976

Note: Must available June 1, 1976

Dear Editor:

Not knowing just who to write, I decided to present this idea to you and maybe you would be able to get it to the right people. Why doesn't the National Athletic Trainers Association have some type of book club so that its members could keep up to date on the latest material on our profession?

We are making progress in all areas, but we lack any type of easy to purchase books on our subject. Ken Murray does a great job of reviewing the latest material but a book club that offered certain books say every two months or when the journal came out would greatly facilitate obtaining of the good works of athletic training.

I would like to hear your comments on this subject. I personally feel that this would benefit our association. Thank you for your time.

Yours truly,
Doug May
Head Athletic Trainer
Mississippi State University

Sounds good to me. What do you think, Members?





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Several sections are new to this classic text. A new chapter looks at specificity of training. Another chapter outlines training and conditioning methods utilizing the latest ideas, trends and practices. Making its first appearance is a new section stressing fundamental technique development and teaching skills for basic diving. The dolphin crawl, a new stroke, is introduced in a special report. And finally, a new chapter details how to teach and play water polo. These are just the new sections! Qualities acclaimed in previous editions have been retained and refined: graphic coverage of the all-stroke "Armbruster" method for teaching beginning swimmers; complete explanations of the racing start and seven types of racing strokes; to name a few. Through five previous editions, this work has been dubbed "the best all-around swimming book on the market." Edition six is no exception.

By **DAVID A. ARMBRUSTER, Sr., B.A., M.A.**; **ROBERT H. ALLEN, B.S., M.A.**; and **ROBERT SHERWOOD BILLINGSLEY, B.S., M.S.** April, 1973. 6th edition, 290 pages plus FM I-X, 7" x 10", 214 illustrations. Price, \$10.25.

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niques for the skilled performer. It contains new material on teaching relay events and current data on outstanding performances. The latest information on techniques is presented, including information from the 1972 Olympics. Numerous, graphic illustrations clarify instructions. Appendixes provide sample teaching plans, event result sheets, and training programs.

By **FRANCES WAKEFIELD, M.S.**; and **DOROTHY HARKINS, Ed.D.**; with **JOHN M. COOPER, Ed.D.** September, 1973. 3rd edition, 296 pages plus FM I-XVI, 6 3/4" x 9 3/4", 276 illustrations. Price, \$9.50.

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MODERN PRINCIPLES OF ATHLETIC TRAINING — The Science of Injury Prevention and Care

This carefully rewritten and updated edition describes athletic conditioning to prevent injuries and reconditioning as an aid in the management of injuries. Touted as one of the best all-around works in its field, the contents now include new chapters on facilities, equipment and supplies, and athletic conditioning. More mobilization techniques are added to the appendixes plus specific information for keeping medical records for high school athletes. An up-to-date chapter on training girls and women, with information interspersed throughout the text on their training and conditioning, is included. Other important discussions report on medicine in sports; evaluation of injuries; bandaging techniques; therapy and massage; and physical, environmental, pharmacological and psychogenic effects on performance.

By **CARL E. KLAFFS, Ph.D., F.A.C.S.M.**; **DANIEL D. ARNHEIM, D.P.E., F.A.C.S.M., F.A.C.T.A.** April, 1973. 3rd edition, 458 pages plus FM I-XII, 6 3/4" x 10", 595 illustrations. Price, \$9.75.

MOSBY
TIMES MIRROR

CALENDAR OF COMING EVENTS

March 7-9, 1974 — The American Academy of Orthopaedic Surgeons will sponsor "Sports Medicine Problems in All Age Groups." Dr. Frank H. Bassett III will provide any information you may wish if you write him at the Duke University Medical Center, Durham, North Carolina 27710.

March 10, 1974 — The First Annual Hamilton College Sports Medicine Clinic will be held on the Hamilton College campus in Clinton, New York. For additional information, contact Steven Heckler, Hamilton College, Clinton, New York 13323.

March 14-16, 1974 — A Symposium on "The Hand" will be sponsored by the American Academy of the Orthopaedic Surgeons in Philadelphia, PA. Further information may be obtained by Dr. James M. Hunter, 243 South Tenth Street, Philadelphia, PA 19107.

March 15-16, 1974 — The NATA District 4 meeting will be held at the Admiral Convention Center, Holiday Inn Complex, 800 East 81st Avenue, Merrillville, Indiana 46410.

March 16-17, 1974 — The Seventh Annual Sports Medicine Seminar will be held in conjunction with the District 10 Meeting at the Sea-Tac Motor Inn, Seattle, Washington. For further information, contact Dr. Keith D. Peterson, 5409 17th N.W., Seattle, Washington 98107, or Dr. John Anderson, District 10 Secretary.

March 25-28, 1974 — The American College of Surgeons will hold its second annual four-day Spring Meeting in Houston, Texas at the Albert Thomas Convention Center and the Hyatt Regency Hotel. The nine-hour post graduate courses will be supplemented by two days of symposium, panels, lectures and motion pictures. Further information may be obtained from the American College of Surgeons, 55 East Erie Street, Chicago, Illinois 60611.

March 30, 1974 — Fifth Annual Midland Sports Injury Conference. St. Francis Hospital, Peoria, Ill. Contact: Bernard R. Cahill, M.D., 416 St. Mark's Court, Peoria, Ill. 61603.

April 2-5, 1974 — The American Academy of Orthopaedic Surgeons in Buena Vista, Florida will sponsor a clinic on "Biomechanics and Sports Medicine." For information, contact Dr. William C. Allen, University of Florida Medical Center, Box 213, Gainesville, Florida 32603.

April 8-10, 1974 — The American Academy of Orthopaedic Surgeons in New York City, New York will sponsor a symposium on "The Neck." Write to Dr. J. William Fielding, 105 East 65th Street, New York, New York 10001.

April 19, 1974 — The deadline for requesting application forms for Certification is April 19, 1974. The applications should be received by May 3, 1974. Applications may be obtained from the NATA, 3315 South Street, Lafayette, Indiana 47904. Information concerning Certification is available from Lindsay McLean, Chairman, Board of Certification, 1000 South State Street, Ann Arbor, Michigan 48105.

April 20, 1974 — The American Academy of Orthopaedic Surgeons in Raleigh, North Carolina, will sponsor a clinic on the "Present concepts of knee Problems." For further information, contact Dr. Thomas Dameron, P. O. Box 10707, Raleigh, North Carolina 27605.

April 22-24, 1974 — The American Academy of Orthopaedic Surgeons in New York City, New York will sponsor a clinic on the "Current Concepts of the Shoulder." For information, contact Dr. David L. Andrews, 161 Fort Washington Avenue, New York, New York 10032.

April 25-27, 1974 — The American Academy of Orthopaedic Surgeons in Columbus, Georgia will hold a seminar on the "Shoulder in Sports." For further information, contact Dr. Jack C. Hughston, 105 Physicians Building, Columbus, Georgia 31901.

May 4, 1974 — The Seventh Annual Medical Aspects of Sports Seminar will be held at the Catonsville Community College. It is co-sponsored by the Catonsville Community College and the Medical and Chirurgical Faculty of Maryland. For information, contact Ramsey B. Thomas, M.C., 1211 Cathedral Street, Baltimore, Maryland 21201.

May 9-11, 1974 — The Annual Meeting of the American College of Sports Medicine will be held in Knoxville,

Tennessee. For information, contact J. Trove Wolf, American College of Sports Medicine, 1440 Monroe Street, Madison, Wisconsin 53706.

May 10-11, 1974 — The Fourth Annual East Carolina University Sports Medicine Conference will be held in the Allied Health Building. The Conference is aimed at high school student trainers, coaches and team physicians. Details may be obtained from Rod Compton, Sports Medicine Division, Box 3247, East Carolina University, Greenville, North Carolina 27834.

May 13-15, 1974 — The American Academy of Orthopaedic Surgeons will sponsor a symposium on "Physical Fitness." For information contact Dr. Fred Allman, 615 Peach Tree Street, N.E., Suite 1100, Atlanta, Georgia 30308.

June 9-12, 1974 — The Twenty-Fifth Anniversary of the N.A.T.A. Convention will be held at the Crown Center Hotel in Kansas City, Missouri. For further information, contact Otho Davis, Executive Director, N.A.T.A., Philadelphia Eagles.

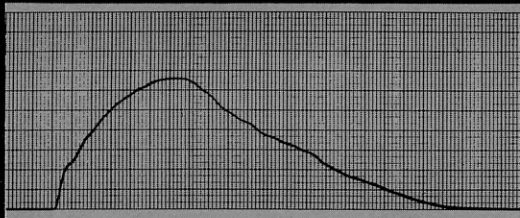
June 16-24, 1974 — The annual conference of the American Physical Therapy Association will be held at the Queen Elizabeth Hotel in Montreal, Canada. For information, write to the American Physical Therapy Association, 1156 15th Street, N.W., Washington, D.C. 20005.

June 24 - July 3, 1974 — The School of Physical Education, West Virginia University, will sponsor two one-week work shops. The June 24-27 Workshop is open to all High School student student trainers and coaches and emphasizes the aspects of public school athletic trainers. The June 28 - July 3 workshop is open only to graduate students who will receive one graduate credit for each session. It is an introduction to therapeutic modalities with special emphasis on clinical practice. For information, contact Charles Peter Yost, School of Physical Education, West Virginia University, Morgantown, West Virginia 26506.

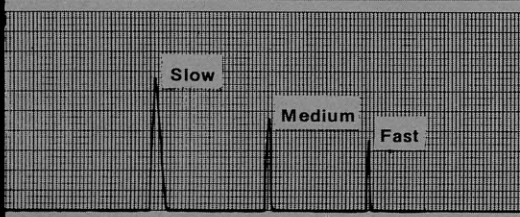
Athletic Training will be happy to list events of interest to persons involved in sports medicine, providing we receive the information at least two months in advance of publication. Please include all pertinent information and the name and address of the person to contact for further information. This information should be sent to Jeff Fair, Athletic Department, Oklahoma State University, Stillwater, OK 74074.



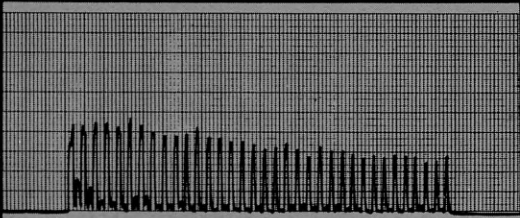
uninjured limb



Test at slow contractile speed to measure strength throughout range of motion.

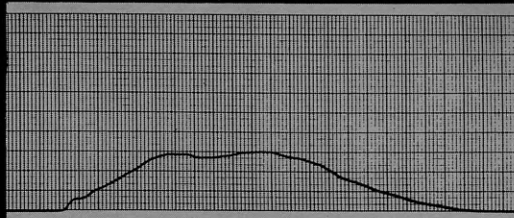


Test of muscular output at slow, medium, and fast contractile speeds.

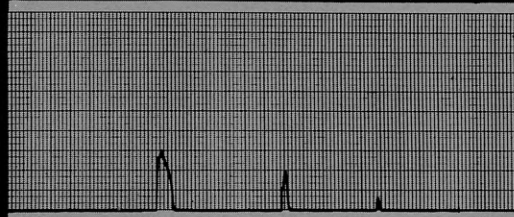


Test of muscular output over a series of repetitions at medium speed.

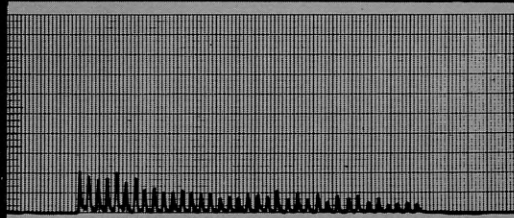
injured limb



Note 58% strength deficit and abnormal shape of curve



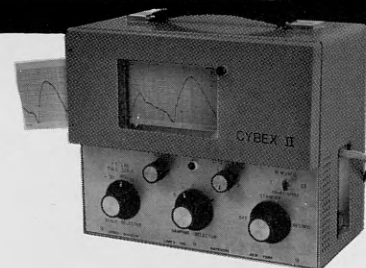
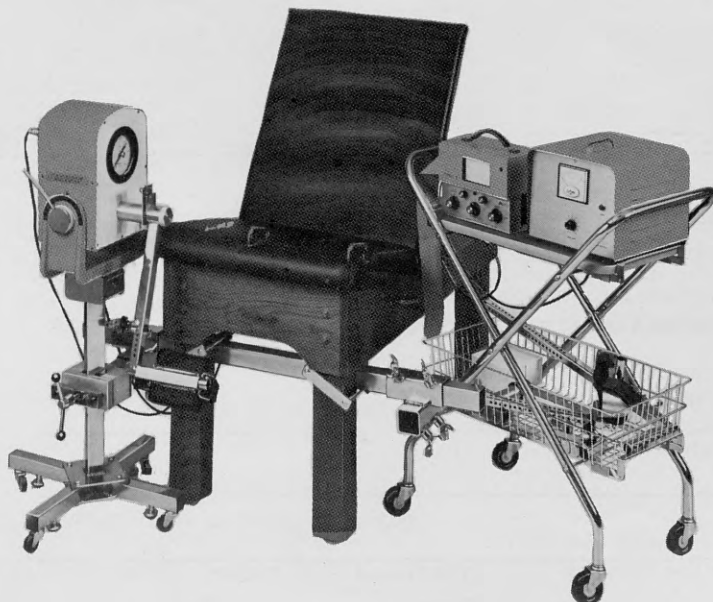
Note 80% power deficit (fast speed) as compared to 58% strength deficit (slow speed).



Note fatigue rate is almost double — 78% decrease compared to 45% decrease in equal no. of repetitions.

(Actual chart recordings shown 1/2 size.)

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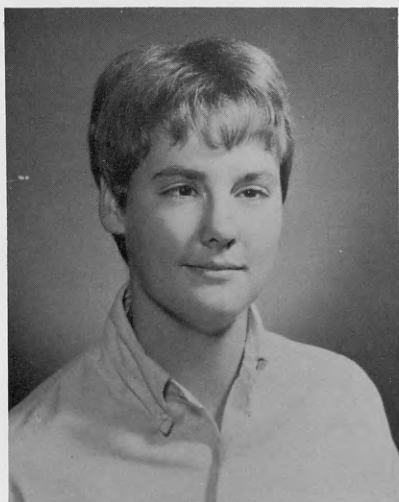
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NOT FOR MEN ONLY



by Holly Wilson
Certified Athletic Trainer

An Open Letter to Women Trainers:

An Ad Hoc Committee on Women in Athletic Training was appointed by Bobby Gunn, President of the N.A.T.A., at the mid-year meeting of the Board of Directors in January. The purpose of this special committee is to identify the needs of women trainers and make recommendations on how the N.A.T.A. can provide for the advancement of women in athletic training.

Holly Wilson was appointed chairperson of the committee and the following women have consented to serve on the committee.

Marge Albohm, Concordia Teachers College, River Forest, Indiana

Marge Albohm, Concordia Teachers College, River Forest, Illinois

Kaye Cosby, Indiana State University, Terre Haute, Indiana

Linda Hammett, Lake Braddock Secondary School, 5401 Burke Lake Road, Burke, Virginia 22015

Sherry Kosek, University of Washington, Seattle, Washington

Linda Treadway, West Chester State, West Chester, Pennsylvania

Sue Schneider, Michigan State University, East Lansing, Michigan

Gail Weldon, Indiana State University,

Terre Haute, Indiana

Presently, the committee is attempting to identify our needs so that recommendations can be made. A questionnaire has been sent to AIAW schools to determine the job market for women athletic trainers. Information is being gathered on injury incidence among women athletes.

A detailed report of the committee's recommendations, including justifications for them, must be submitted to the Board of Directors by May 15, 1974. The chairperson will present a defense of the recommendations to the Board on June 8, 1974.

In view of the fact that the committee has a deadline to meet, it is imperative that we have your suggestions and recommendations as soon as possible. The future of the woman trainer in the N.A.T.A. is our responsibility. Please send any thoughts you might have on what direction women trainers want to take in the N.A.T.A. Suggestions made by the Board members to meet our special needs include the organization of a permanent women's committee and/or the appointment of women to the existing committees. Our success as a committee will be influenced by your help and instrumental in the decision of the Board of Directors in June. We women trainers will determine our future in the profession.

INTERESTING READING

"Sexual Evaluation of 'Female' Athletes," Francois, Jules and M. TH. Matton-Van Leuven. **The Journal of Sports Medicine** 1:5 March-April 1973.

DGWS Research Reports: Women in Sports, edited by Dorothy V.

Harris. Washington, D.C.: AAHPER, 1971.

Women and Sport: A National Research Conference, Harris, Dorothy V. Pennsylvania: Penn State University, 1972.

"Women in Sports: Some Misconceptions," Harris, Dorothy, V. **The Journal of Sports Medicine** 1: 5 March-April 1973.

* * *

On the Lighter Side

Ode To A Lumpy Leg
by Joyce Bachtis, Indiana State University

ODE TO A LUMPY LEG

Don't stand still!
Your "Venus pump" is nil.
Fluid leaks in tissue spaces;
Legs swell--Varicose bases.

Veins overstretch, valves do not,
Valves function all for naught.
Lumps on legs soon appear,
Ace bandages you'll don I fear.

Lumps on legs don't have to be
If you move just moderately.
Good work the valves can do
As blood returns to the heart of you.

When you're resting, play it smart--
Feet propped high above the heart.
In this position better than best,
Your valves will be the happiest.

In the event that it's too late,
Lumpy legs aren't always your fate.
Happy with stripping you can be
As you return from surgery.

So don't ignore the hand of fate--

Heed this advice e'er it's too late.
Follow instructions in the lines above
And everyone your legs will love.

REFERENCE:

Guyton, Arthur C., **Textbook of Medical Physiology**. Philadelphia and London: W. B. Saunders Company, 1966.

* * *

Athletic Training Workshops for Women:

July 8-19, 1974: University of Northern Iowa, Cedar Fall, Iowa.

Undergraduate physical education majors, high school and college physical education instructors and anyone interested in obtaining knowledge in athletic training may attend.

Two credit hours are offered, either graduate or undergraduate.

Contact Ms. Jane Mertesdorf in the Women's Physical Education Department for further information.

June 17-21, 1974: Indiana State University will hold an Athletic Training Workshop for Women. For details contact Ms. Holly Wilson at Indiana State University, Terre Haute, Indiana.

IMPROVISED EXERCISE EQUIPMENT

Many women's training programs are run on a minimal budget that does not allow for expensive rehabilitation equipment. Presented below are the plans for two inexpensive exercise machines that can easily be built by an industrial arts class or physical plant personnel.

KNEE MACHINE

This piece of equipment was made from plumber's pipe and bolted to the end of a treatment table. Its use is limited in that it can only be used for quadriceps strengthening and hold approximately thirty pounds of disc weights. Either knee can be exercised by switching the protective vinyl sponge roll.

ANKLE EXERCISER

This machine, made from plywood and dowelling, can be used for both plantar-dorsiflexion and inversion-eversion exercises in rehabilitating an ankle injury. It's only limitation is that the athlete is restricted to exercising in one plane. She cannot circumduct the ankle.

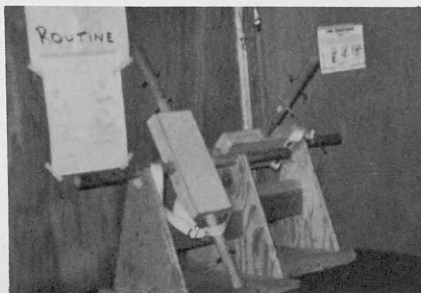
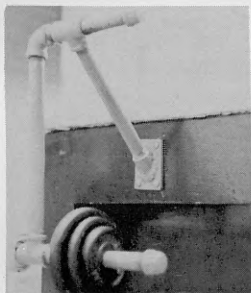


ANNOUNCEMENT New Drug Education Chairman

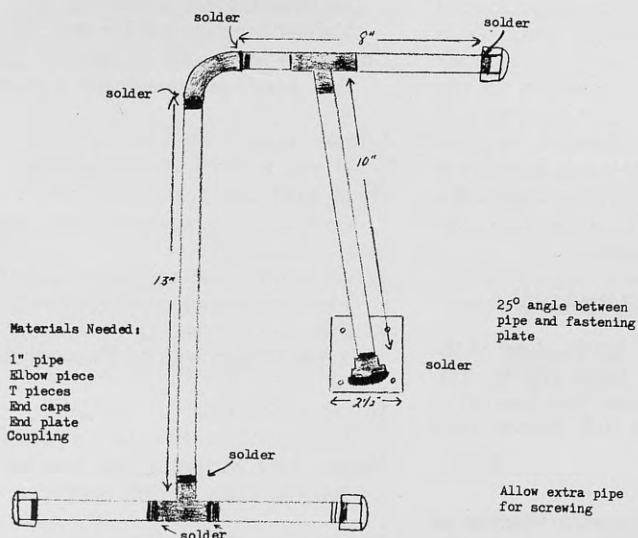
Dr. John Wells has been appointed to the chairmanship of the Drug Education Committee within the National Athletic Trainers' Association, which was formerly held by Mr. Al Hart.

John received his B.S. from Valparaiso University in 1960, his R.P.T. from Hermann Hospital in 1961, and his M.S. from Indiana State University in 1969. Two years later he completed his doctorate in Health and Safety at Indiana State University.

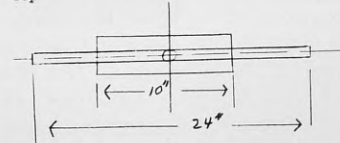
Our membership will recognize John as a frequent contributor to the "Abstracts" section of **Athletic Training**.



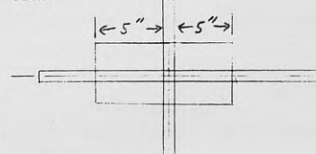
Knee Machine



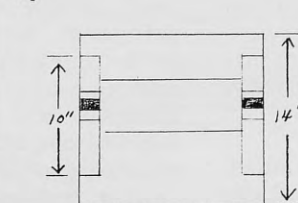
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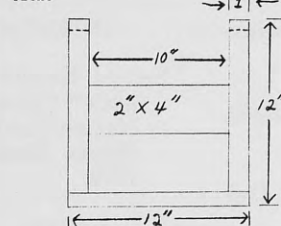
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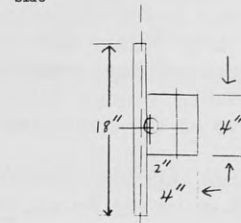
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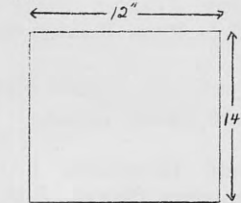
Materials Needed: Plywood, 1" dowel, dowel pegs, cotton twill straps

Ankle Exerciser

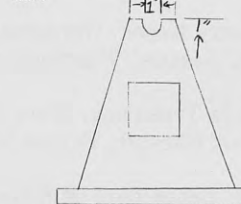
Side



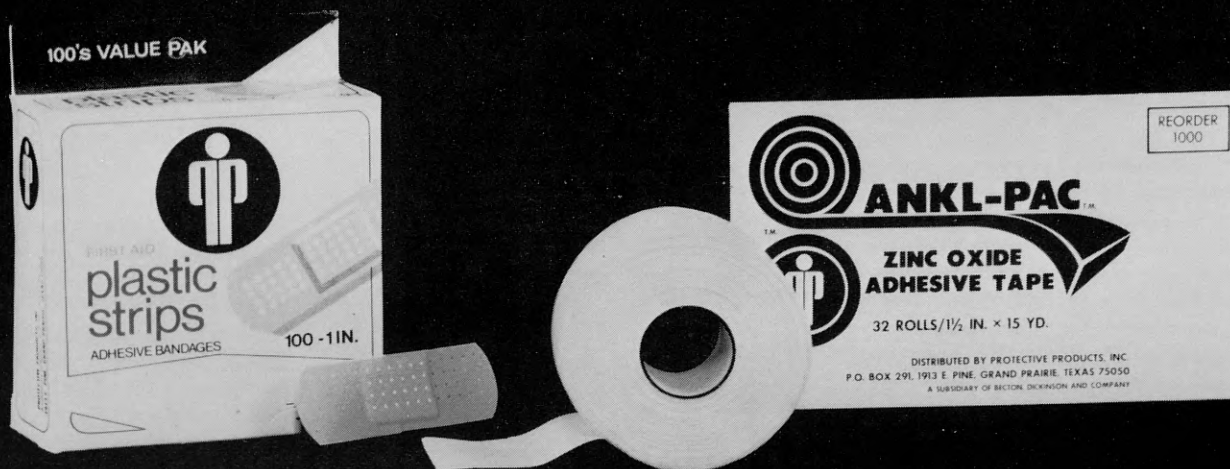
Base



Side



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Abstracts



"Diagnostic Pitfalls in the Sportsman's Knee," Williams, J.G.P., FRCSEd DPhys Med, **Proc. Roy. Soc. Med.** (Vol. 64, June, 1971) pp. 640-641.

The author of this paper contends that while serious sports injuries are typically well documented, the less severe conditions receive comparatively little attention and are often unrecognized or misdiagnosed. Williams identifies four conditions of the knee which he considers as falling into this category. These include: (1) the weak quadriceps syndrome, (2) biceps femoris insertion strain, (3) nipping of the alar synovial fringes, and (4) "stable instability".

According to Williams, the weak quadriceps syndrome is characterized clinically by a loss of tone or bulk in the vastus medialis muscle occasionally associated with chondromalacia patellae. The history may or may not include trauma but usually does include an absence of physical training or exercise

which involves full extension of the knee joint. Thus, the vastus medialis muscle tends to be relatively underdeveloped and ineffective in stabilizing the patella medially.

A second condition commonly misdiagnosed, according to Williams, is a strain of the biceps femoris at its insertion on the head of the fibula. Early symptoms include diffuse, acute tenderness over the tendon behind the knee. The primary symptoms of chronic conditions include pain, especially during exercise, on the outside of the knee at the joint line and a characteristic inability to fully extend the knee. The author maintains that chronic conditions are often misdiagnosed as tears of the lateral meniscus.

Williams also maintains that nipping of the alar synovial fringes may be misdiagnosed as meniscus tears of the knee and is often associated with the weak quadriceps syndrome. Immediate hemorrhagic effusion is a symptom of the acute condition.

Another troublesome diagnostic problem discussed in the article is

"stable instability" of the knee joint. Williams points out that clinical cruciate or collateral ligament instability may be of little functional significance. He maintains that support which maintains the functional stability of the knee in the event of stress is provided by the musculature. The joint capsule and the ligaments play a limited role. "... functionally the knee is sound if the integrity of the supporting musculature is unimpaired."

The author concludes by citing the high incidence of knee injuries in athletes which give rise to disability. He suggests fundamental approaches to the examination of knee injuries which should be used in an attempt to avoid diagnostic pitfalls.

Gary Delforge

"The Effects of Training Frequencies on the Retention of Cardiovascular Fitness"; Paul Brynteson, Wayne E. Sinning, **Med. and Sci. in Sports**, Vol. 5, No. 1, 29-33, 1973.

This study was done because information in this area is not extensive. Research was directed toward the area of effects of physical conditioning on retention of cardiovascular fitness. More specifically, the study was concerned with the effects of training one, two, three, or four times per week after pre-training in which subjects exercised five times per week for five weeks.

Twenty-one male volunteers who ranged in age from 20 to 38 years served as subjects for this study. These individuals were tested before physical conditioning, after physical conditioning, and after completion of post-conditioning program. Individuals were placed randomly into one of four groups for study. The various groups trained for either one, two, three, or four days per week after the five weeks of pre-conditioning.

During the conditioning program, each subject training at a heart rate equal to 80 percent of his maximum. For the post-conditioning period, this same percent was used for each training session.

The result of this study indicated that cardiovascular fitness was retained by exercising three times per week. However, the data did not indicate if this fitness could be retained indefinitely by the same amount of training. There was also indication that pulmonary function improvements were apparently easier to retain than those of cardiovascular function.

Tom Carter

"The Safety of Ultrasound," Dewhurst, C.J., *Proc. Roy. Soc. Med.*, Vol. 64, Sept. 1971.

Although various investigations have concluded that clinical applications of ultrasound are safe, two recent papers (1970) warranted a review on this aspect by the questions they raised. Destructive ultrasound is used in medicine, but its potential to destroy tissue is dependent on the intensity used, frequency, whether the sound is continuous or pulsed, and the duration of sound passage. However, the intensity and time used in therapeutic ultrasonics is far below that of destructive applications (0.5-3.0 watts/cm² for therapeutic as opposed to 22 watts/cm² for destructive).

In order to test the validity of claims that ultrasound in the very low intensity used in diagnostics (below 30 microwatts per cm) may bring about chromosomal aberrations in blood, a study was undertaken. The fetuses of twenty-four mothers about to terminate pregnancy by hysterotomy were insonated at such intensities. No increase in chromosomal aberration over reported incidence figures were found.

Although these results are neither complete nor conclusive, they provide no support for the argument of ultrasound being unsafe. Dewhurst does call for more safety research in this matter, but demands that it be carried out most carefully, so that it may hold up against critical analysis.

Greg Vergamini

"Diet, Muscle Glycogen, and Endurance Performance," Karlsson, J., and Saltin, B., *Journal of Applied Physiology*, Vol. 31, No. 2, August, 1971.

The influence of high muscle glycogen content on the performance of prolonged heavy exercise was evaluated. Ten subjects ran the same race (30 km) twice, 3 weeks apart. Six subjects performed race I after maintaining a special regimen including a carbohydrate enriched diet. The other four subjects maintained a mixed diet prior to race I. Before race II the subjects reversed the procedure. After the special regimen, mean muscle glycogen content in the lateral portion of the quadricep muscle was 35 gm/kg and after the mixed diet the corresponding value was 17 g/kg wet muscle. The best performance (shortest work time) was attained in all subjects when they had followed the special diet. However, there was nothing to indicate that a high initial muscle glycogen content made it

possible to run faster at the beginning of the race. Mean glycogen usage in the quadricep muscle was calculated to amount to approximately 0.5 g (kg wet muscle times km), and an optimal pace could not be maintained with a 3-5 g/kg muscle glycogen content in the thigh.

Kent Falb

"Comparison of Rope Skipping and Jogging as Methods of Improving Cardiovascular Efficiency of College Men," Baker, John A., *The Research Quarterly*, 39: 240-243, May, 1968.

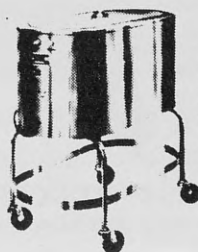
This study was conducted to determine the effects upon cardiovascular fitness that result from programs of rope skipping and jogging. Male college students (N = 92) were randomly placed in two groups: group I, the rope skipping group, and group II, the jogging group. Subjects in group I skipped rope 10 minutes per day, five days per week, for six weeks. The beginning speed was 125 turns of the rope per minute. As the investigation progressed, subjects were allowed to gradually increase skipping speed in accordance with the Prentup table of skipping speeds. Subjects in group II jogged 30 minutes per day, five days per week, for six weeks. The subjects began jogging at a speed suggested by

Bowerman and Harris. The Harvard Step test was administered after the six week conditioning programs. In calculating the Harvard Step test scores, the sum of three 30 second post exercise heart rates were used. The finding revealed that upon completion of the conditioning programs, there was no significant difference in the mean performance between the two groups ($p = .05$). The post mean of the rope skipping group was 82 and the post mean of the jogging group was 83. The findings revealed that upon completion of the conditioning programs there was no significant difference in the mean performance between the two groups, ($p = 0.05$). Conclusions: 1. A daily 10 minute program of rope skipping will significantly improve cardiovascular efficiency. 2. A daily 30 minute program of jogging will significantly improve cardiovascular efficiency. 3. A 10 minute daily program of rope skipping is as efficient as a 30 minute daily program of jogging for improving cardiovascular efficiency. It is therefore recommended that rope skipping, being less time consuming than jogging, can be a valuable phase in any physical education program that includes endurance type activities.

John Wells

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PIONEERS IN HYDROTHERAPY



EDITOR'S COMMENTS

by Rod Compton

ANTI-APATHY

Before I joined the NATA I didn't know what the word "apathy" meant, and now that I'm a member I don't really care what it means. This seems to be the typical attitude of our membership as a whole. We do have a small number of enthusiastic, concerned members who do a great deal for our organization, but apathy truly is the by-word for the majority.

In order to serve and represent the membership properly the officers and committees of the NATA must have your opinions, comments, feelings, support, disagreements, etc. on many important areas such as the Dellums Bill, elections, and conventions.

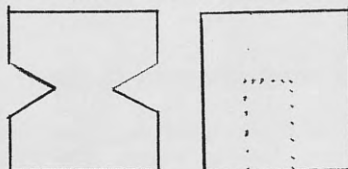
Athletic Training is starting a questionnaire program to help fight this apathetic situation. All you have to do is answer the questions, tear out the page, fold it, and mail it. We will have the survey's results in the following issue.

The first subject for the questionnaire will be the Journal. I am hoping this will give some insight as to what

the membership wants to see in their publication.

OOPS!

In the last issue of **Athletic Training** (December 1973) a diagram was omitted from Dr. Rylander's article (page 169) "Custom-Made Protective Pads and Heel Cup". At the end of item number 5 the diagrams should come in the last statement. "Examples of cuts":



Sorry about that!

SUPPORT YOUR ADVERTISERS

Your Journal is brought to you by the support of the various companies that advertise in it. Please support these people by using their products

and show our appreciation. Let them know that you saw their product in **Athletic Training**.

PAD THE PRESS

Recently I have noticed a rather dangerous situation in basketball when a hustling player will run into the press and/or scorer's table due to an extreme effort or lack of coordination. Usually these tables have sharp corners, hard edges, and an occasional nail or two that can wreck havoc on the human body. Also, well-exposed typewriters can become flying hazards to both player and spectator.

Perhaps we should look into some type of safety rule or regulation that would require padded corners and edges of these tables similar to the rules concerning backboard padding. Recessed typewriter facilities may also be considered to stop the press from becoming victims of their own implements. So come on trainers, let's protect our players and cushion the Cosells of America.

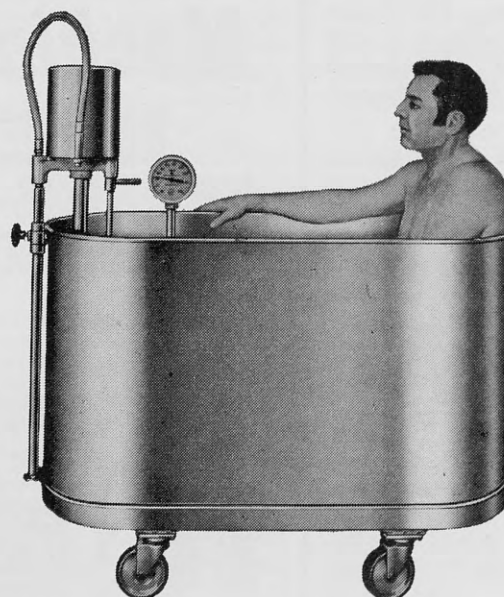
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NATA JOURNAL MEMBERSHIP SURVEY

No. 1 Subject: Athletic Training

Circle appropriate response in left-hand column

A B C D E 1. Membership classification: A. Certified B. Active C. Associate D. Student E. Other (specify)

A B C D 2. Position level: A. High School B. College C. Pro (what sport) D. Private

- yes no 1. Do you read the Journal regularly?
- yes no 2. Do you use the Journal for reference more than 50% of the time?
- yes no 3. Do you show the Journal to other coaches, friends, or physicians?
- yes no 4. Does your team physician subscribe to the Journal?
- yes no 5. If he does not subscribe, does he receive a copy as a member?
- yes no 6. Do you read the advertisements in the Journal?
- yes no 7. Have you ever bought or tried a new product due to an advertisement in the Journal?
- yes no 8. Would you be willing to contribute an article or some of your time to the Journal?
- yes no 9. Do you keep all the past issues of the Journal on file?
- yes no 10. Do you feel something else should be added in content?
If yes please list:_____
- yes no 11. Do you feel something should be dropped from the Journal?
If yes please list:_____
- yes no 12. Do you receive 4 issues per year?
- yes no 13. Are there some parts of the Journal that are not useful to you?
- yes no 14. Does your library subscribe to the Journal?
- yes no 15. Are you dissatisfied with the number of issues per year?
- yes no 16. Are you proud that this type of Journal represents the N.A.T.A.?
- yes no 17. Are you interested in over 50% of the articles you read?
- yes no 18. Would you like to read other types of articles related to sports medicine other than strictly educationally oriented articles? (e.g. human interest)
- yes no 19. Have you ever purchased a book due to the "Book Review" section?
- yes no 20. Have you ever seen a coming event in the "Calendar" that you didn't know about and eventually attended?
- yes no 21. Have you ever seen a periodical article that interested you in the "Current Literature" section and later found that particular periodical and read it?
- yes no 22. Do you read these other sections thoroughly such as "Book Reviews", "Current Literature", "Calendar of Events", "Potpourri", "Not For Men Only", "Abstracts", "Student Trainers Corner", etc.?
- yes no 23. Do the abstracts that are written provide something new and/or informative to you?
- yes no 24. Does "Potpourri" interest you and do you pick up some new things from this section?
- yes no 25. As a student trainer, do you think the "Student Trainers Corner" is a valuable part of the Journal? (Answer only if student trainer)
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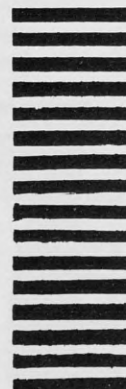
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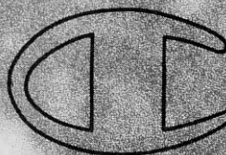


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BOOK REVIEWS

By Ken Murray, Certified Athletic Trainer

MAN IN MOTION

by Joe Falls
List Price \$6.95
252 pages
Illustrated

School-Tech Press
745 State Circle
Ann Arbor, Michigan 48104

The book *Man in Motion* is the story of the life of Bo Schembechler, who is the head football coach at the University of Michigan. Besides being an enjoyable reading book, there were two areas that the reviewer felt would be of interest to an athletic trainer.

The first area was in the area of Bo Schembechler's heart attack. Trainers that push themselves hard, as some coaches do, may take warning from that area of the book.

The second area of interest to the trainer was the chapter titled "Bandaids, Bruises, and Bluegills". This

chapter was written by Lindsay McLean who is the trainer at the University of Michigan. The relationship between a head coach and his trainer was of extreme interest, as well as one of showing the value of a trainer to an athletic program.

An enjoyable book for relaxed reading.

HEAD AND NECK INJURIES IN FOOTBALL

by Richard C. Schneider, M.D.
Univ of Michigan Medical Center
List Price \$18.75
272 pages
Illustrated

The Williams and Wilkins Co
428 E. Preston Street
Baltimore, Maryland 21202

Dr. Schneider has presented a work that provides information on mechan-

isms, treatment and prevention of neck injuries that can be a profession ranging from the trainer to specialist in neuro-surgery. The value of information on the anatomy of the head and spine, mechanisms of injury, first-aid and treatment, and suggestions for reduction of the number of head and neck injuries is tremendous. Not only is the book detailed, but one of the most informative books this reviewer has read.

His data is well documented by interested case histories and explanations of how a number of such injuries occur. The photographs, x-rays, photogenic specimens, and other illustrations did a fine job of showing what the author was talking about.

The reviewer feels that this book has been the most informative book that he has reviewed this year. It is a must for a trainer's library.



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CONSTRUCTION OF SPECIAL INJURY PADS

by Freddy Schwake
Certified Athletic Trainer
Assistant Trainer,
University of Florida

A special injury pad is used to give additional protection and comfort to a localized area, such as a contused shoulder, humerus, femur, tibia, ribs, or hip pointers. The special pad can be used to immobilize a sprained wrist for practice sessions and with proper padding may also be used in games if officials approve. These pads can be made to conform to the individual's body, thereby affording correct fit and maximum protection. The pads can be made quickly which is advantageous to the injured player and trainer. No special equipment for making the pad is needed that is not usually found in the average training room.

The following presentation illustrates a step by step procedure for making a special injury pad for the A-C joint in the shoulder. Special injury pads for other areas of the body use the same basic steps.

MATERIALS NEEDED:

*Pliable plastic material (approximately 7" X 24") • **Shoulder pad strapping material (elastic) • Three Eighths inch thick foam rubber • Four (4) football face mask fittings (short) • Moleskin • Felt tip pen • Rubber cement • Box cutter • Scissors • Screwdriver • Petroleum Jelly • Drill motor and three-eighths inch drill bit

Step 1: Cut a piece of orthoplast approximately 7" X 24", using a box cutter.

Step 2: Cut a piece of 3/8 inch foam rubber large enough to cover injured area.

Step 3: Have injured player outline the area of soreness with the felt tip pen.

(Figure 1)

Step 4: Immediately place foam rubber over the outlined area pressing hard enough so that the ink leaves the pattern on the foam rubber. (Figure 2)

Step 5: Cut foam rubber along the edge of the outlined pattern.

Step 6: Place the cut piece of foam rubber over the outlined area. Tape firmly to the body with one inch adhesive tape. Cover the top of the foam rubber with a thin layer of petroleum jelly. (This will allow the plastics to be easily removed from the pad.) (Figure 3)

Step 7: Place the pliable plastic in hot water for thirty to forty-five seconds, following the instructions accompanying the material.

Step 8: Place the heated sheet of plastic (it should be soft and flexible) with its approximate middle at the top of the shoulder. Plastic will conform to the body. At this time, work the area around the foam rubber pressing down around the edges so that it leaves a raised area in the plastic. (Figure 4)

Step 9: Allow the plastic to set in this position for five to ten minutes. During this period of time, outline the area of the plastic that will become the pad proper. (Figure 5)

Step 10: Using scissors cut the plastic along the outline, while it is still flexible. (Figure 6)

Step 11: Have the player move as near as possible to the cold tank. Remove the pad from the shoulder using care as to retain the shape of the shoulder. Submerge the pad in the cold water for thirty to forty five seconds. The cold water will cause the plastic to become hard and retain its designed shape.

Step 12: Place a sheet of foam rubber inside the plastic pad. Outline the pad on the foam rubber with the felt tip pen cut the foam rubber allowing one inch all the way around the outlined pattern. This allowance prevents the edge of the plastic from irritating the skin. (Figure 7)

Step 13: Use a 3/8 inch drill bit to drill holes in each corner of the pad.

Step 14: Place the pad (without the foam rubber) on the injured player. Take shoulder pad strapping and measure two pieces: one piece extending across the chest and around the back and a second shorter piece extending under the other arm. Make sure they are snug. (figure 8)

Step 15: Using face bar hardware, attach the shoulder pad strapping to the pad.

Step 16: Cut one inch wide strips of moleskin and cover the edge of the pad. This will minimize rough and sharp edges. The corners and edges can also be filed to eliminate sharp edges. (Figure 9)

Step 17: Cut a hole in the foam rubber matching the indentation in the pad making sure the foam rubber is properly aligned with the pad, so there is approximately a one inch overlap of foam rubber. (Figure 10)

Step 18: Apply rubber cement to the inside of the pad and the foam rubber. Place the foam rubber in the pad and

press firmly until rubber cement begins to set. (Figure 11)

Step 19: Allow the pad to dry overnight.

Step 20: Check the pad for proper fit before allowing player to use it in participation. (Figure 12)

Step 21: Write player's name on the outside of pad with felt tip pen.

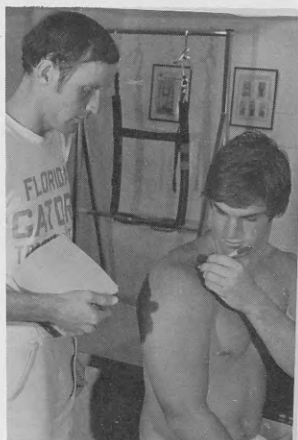


figure 1

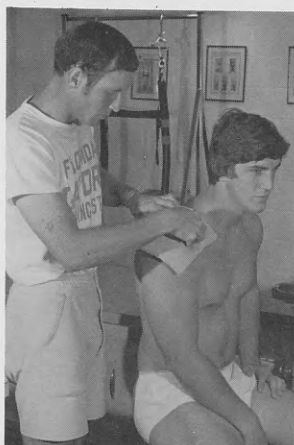


figure 2



figure 3



figure 4



figure 5



figure 6



figure 7



figure 8



figure 9

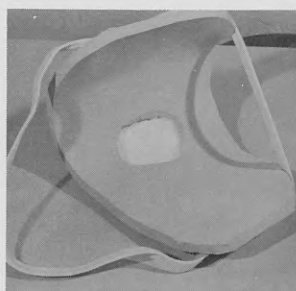


figure 10



figure 11



figure 12

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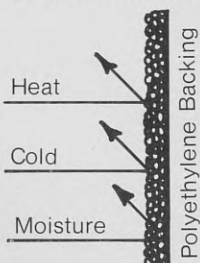
3. Store refrigerated, water soaked Mlastic bandages in a styrofoam cooler and keep at the team bench.



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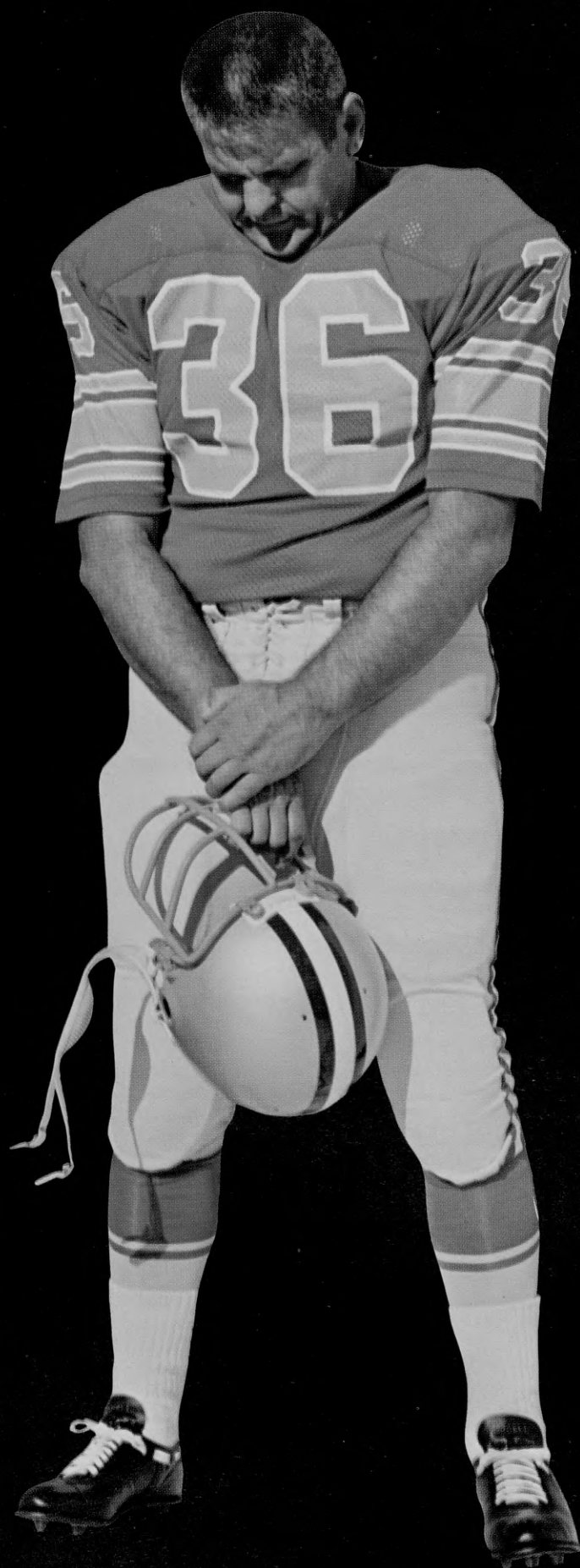
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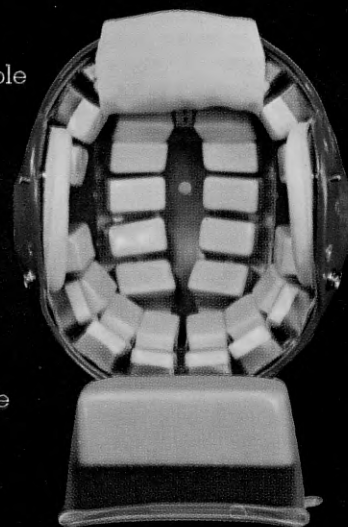
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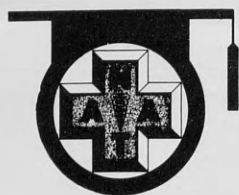
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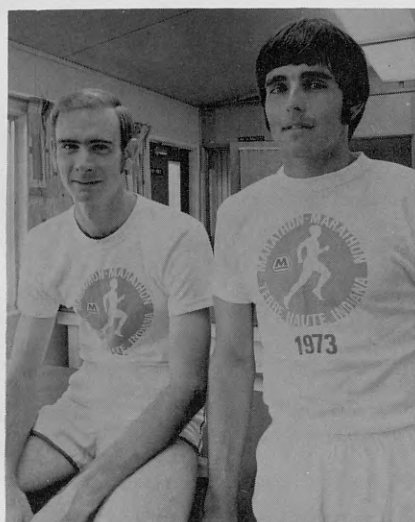
Riddell, Inc., 1151 W. Roscoe, Chicago, IL 60657

*Patent Applied For



THE STUDENT TRAINERS' CORNER

by Ray Baggett
Certified Athletic Trainer



These two Athletic Trainers practice what they preach. They participated in a 26 mile Marathon run in July 1973 in Terre Haute, Indiana, and completed the race. On the left is Ben Davidson, B.S. Utah State and M.S. Indiana State University. On the right is Hal Gunter, B.S. Manchester College, Manchester, Indiana and M.S. Indiana State University.

Physical Fitness and the Athletic Trainer

Why is it that athletic trainers in general seem to be so physically unfit? It certainly is not because they are not knowledgeable about the subject. As a group, athletic trainers, during their career attain a vast amount of knowledge pertaining to physical well being. How can one justify preaching fitness to others when he himself cannot be presented as an example of it.

Is it possible that we as athletic trainers need to practice what we preach? An athletic trainer has an ideal situation in terms of facilities and equipment. Everything that is necessary for the execution of a basic conditioning program is at hand. Each of us should give some thought to making better use of that which is readily available.

It is felt that in order for a trainer to receive the respect of those that

require his knowledge, he himself must present some semblance of that which is of utmost importance, in this case, physical fitness.

It is our belief, that many trainers suffer from low back problems caused by maintaining a stoop position for a long period of time. This might be alleviated by a proper strength and conditioning program. Trainers could probably work for longer periods of time with less stress if they were better conditioned.

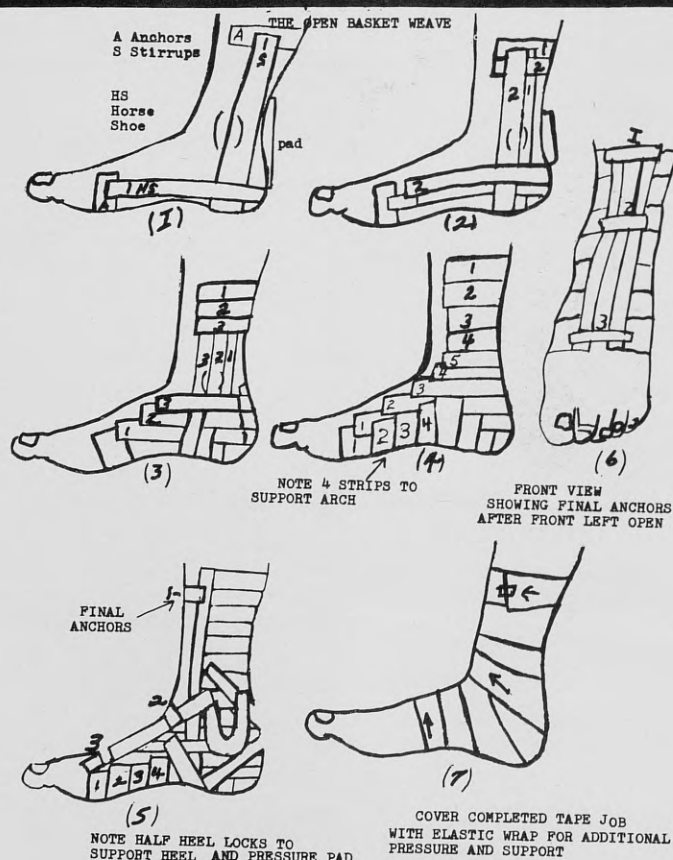
In conclusion, we do not wish to aim this article at any one individual. We do hope that these thoughts will motivate trainers enough to take an honest look in respect to their own personal fitness.

Dear Mr Baggett:

One of the biggest frustrations during my high school career was that there was always a serious lack of presentations for my fellow student trainers here on the West Coast. It still seems that this is the case, with

most of the clinics and conventions taking place east of the Rockies or in the equally distant Pacific Northwest. I am finally happy to see a symposium has been planned which is not only close enough to attend, but also has emphasis toward those who need it most—the student trainer and the high school coach/trainer. I understand that this free two-day clinic will take place March 8 and 9 at the International Hotel in Los Angeles, and is sponsored by the National Athletic Health Institute and the local branch of the N.A.T.A. I hope that this event will be well publicized in the Journal, and that the Association will continue this practice, so that student trainers here can take advantage of such great opportunities.

Sincerely yours,
Dave Pevsner
Student Athletic Trainer
U. C. L. A.



Tips for Student Trainers

The Open Basketweave with a Heel Lock

The open basketweave, a modification of the closed basketweave, has been used along with pressure, ice, and elevation (P I E) for many years by trainers when treating sprained ankles. The open basketweave provides pressure and support for the injured ankle. We use the closed basketweave with a heel lock to provide support for weak ankles and prevent ankle sprains.

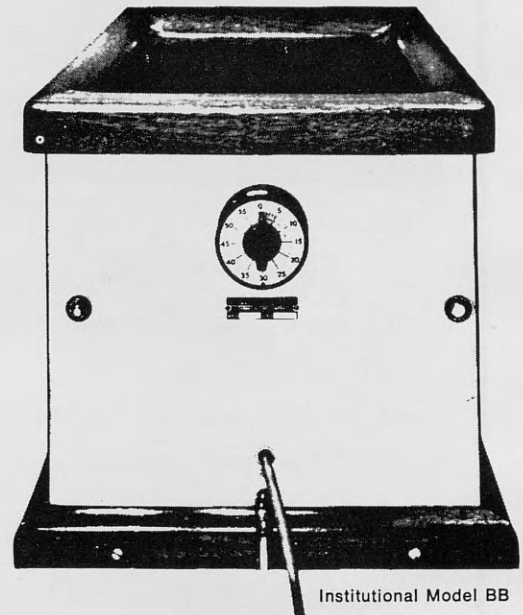
Why not make the open basketweave more efficient by adding heel locks? I used the open basketweave successfully for years without heel locks, and never thought about adding them. I do not recall seeing it illustrated in the literature.

One of Indiana State University's basketball players came into the training room for a treatment and a new open basketweave. When I completed the open basketweave technique he requested more support around the heel. I applied half heel locks for additional support. He said it gave him more confidence in the tape job and he left the training room walking almost at a normal pace. I now use the heel locks on every open basketweave.

I am sure my trainers have used this technique or similar ones and I do not take credit for a new modification. However, you student trainers may find this technique helpful in the future. My students have been applying this open basketweave over one of the popular underwrappings when the skin shows signs of irritation after several open basketweaves have been applied to the skin. this is usually the third day after the injury and the support does not need to be as secure as in the early acute stage.

Note in the illustration that the pressure pad is applied on the outside so that it can be removed when ice packs are applied to the ankle. If any student trainers have difficulty following the illustrations write me and I will send a more detailed explanation; also write if you would like to see an illustration of the closed basketweave with heel locks or any other illustrations in the next issue.

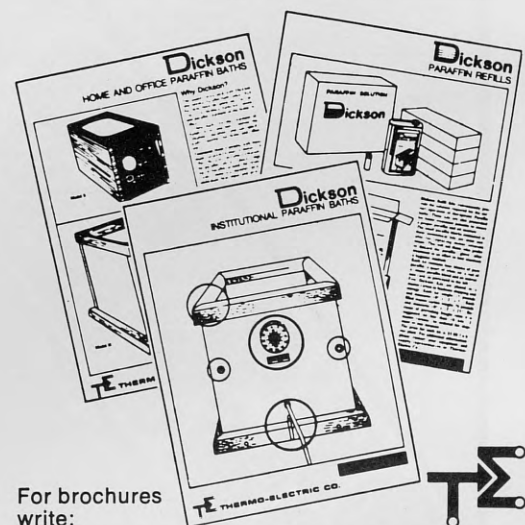
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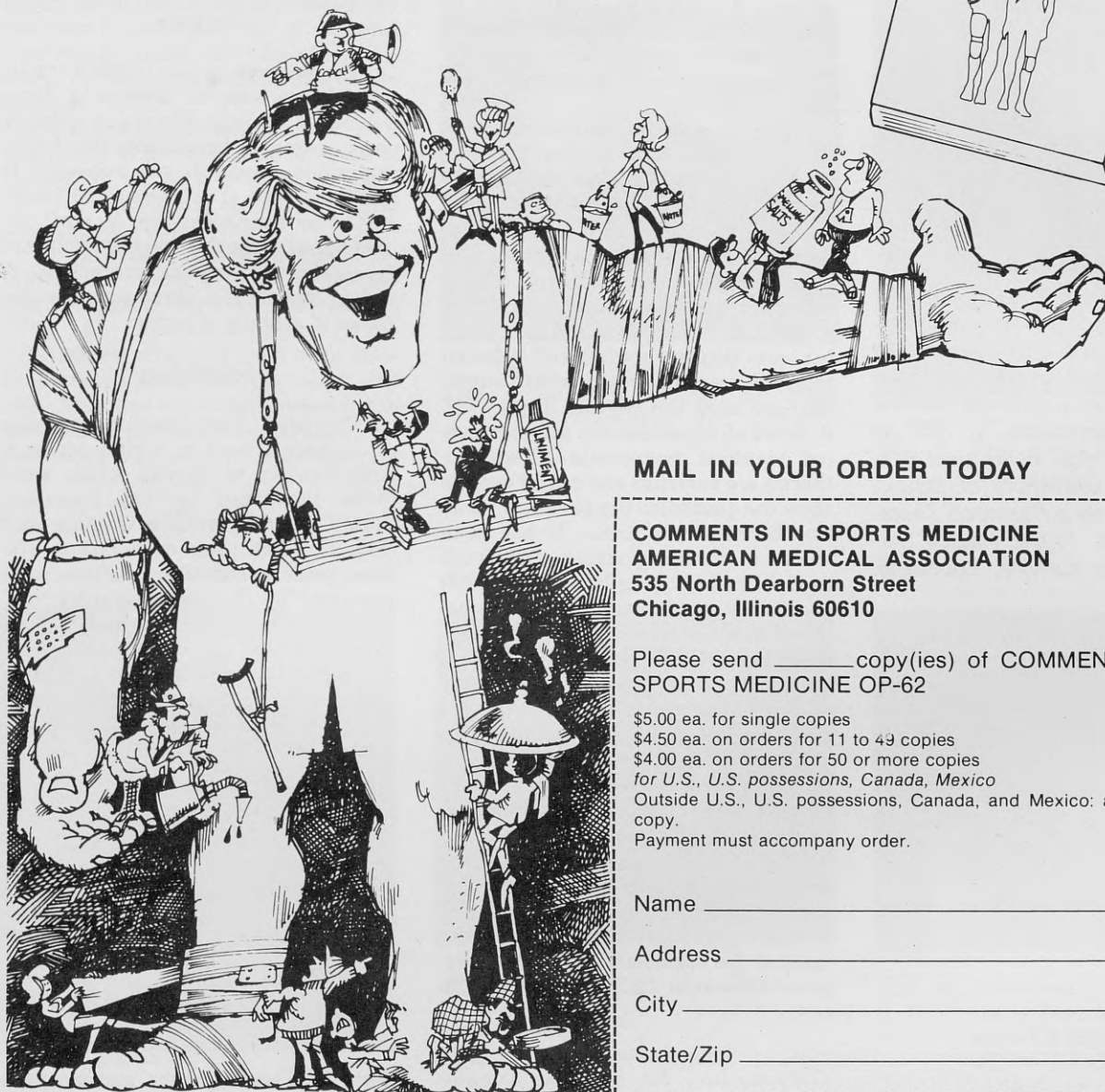
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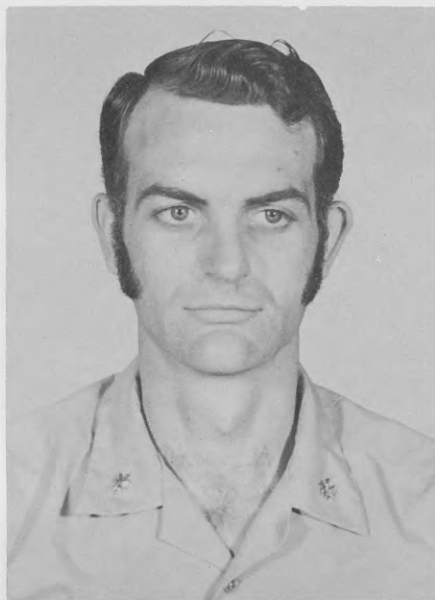
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THERMOGRAPHY & ATHLETIC INJURIES

Harry T. Bergtholdt, L.P.T., M.S.



Harry Bergtholdt received his B.S. in Physical Education from the University of California (Davis) in 1964. The following year he earned his certificate in Physical Therapy from the University of California Medical Center (San Francisco). In 1968 he completed his M.S. in Physical Education at the University of Illinois. Harry is presently a Research Therapist at the U.S. Public Health Service Hospital at Carville, Louisiana.

Introduction

The premier consideration in sports rehabilitation is to return the injured athlete to competition as soon as possible without risking further injury. Many factors contribute to the assessment of rehabilitation: clinical impressions, roentgenograms, laboratory tests, strength and range of motion tests, etc. All of these factors make significant contributions to the assessment, but many times the effect of rehabilitation on the injury remains unclear. Is an exercise routine or the limited workout demanding but not too severe? A subjective answer may be given. A quantitative answer would be ideal, but is not usually available. Thermography may be a possible quantitative method.

All objects emit infrared energy as a function of their temperatures. A thermographic unit is capable of forming a visual image of the thermal pattern of any object. It is capable of detecting the surface temperature anywhere on the human body and depicts it in varying shades of black and white. Using an AGA Thermovision*, an isotherm display produces at selected temperatures, an area of white superimposed upon the regular display (8). It shows all areas that are at a preselected identical temperature. Two isotherms are available and can be used to show the quantified temperature variation between two areas. It has been shown that corresponding sites (such as right and left patella, right and left great toes, etc.) should under normal conditions be equal in temperature (less than 1°C difference) (2). The isotherms can then show the relationship of corresponding parts.

Many factors influence the temperature of the skin: external temperature, body core temperature, inflammation, exercise, clothing, eating, smoking, etc. Too many variables affect the skin temperature to follow the temperature of one area alone; but following the area of interest, in relation to its contralateral area, eliminates many of the variables, and the temperature difference (ΔT) may be significant.

*AGA Thermovision 680, AGA Corporation, 550 County Avenue, Secaucus, New Jersey.

Thermography has in recent years been effective in detection of breast cancer (9) and useful in evaluation of peripheral vascular diseases (10), placenta localization (3), burn management (4), and rheumatoid arthritis activity (5).

Thermography was reported in early investigations to be useful in the diagnosis of orthopedic problems (6), and, more recent, Tai (11) found thermography to have far reaching effects in orthopedic care. He found "... in many cases, such as March fracture, the x-ray will be negative whereas the thermogram will show local increases in skin temperature." Karpman, et. al. (7) more recently stated that thermography offered the first objective techniques for clinical evaluation of musculoskeletal injuries, but had trouble quantifying objectively the findings. The AGA Thermovision is capable of quantifying temperature differences quickly and accurately through its isotherm system.

Purpose

The purpose of this preliminary investigation was to observe a large variety of athletic injuries in order to form a sound foundation for future quantified efforts. It was necessary to see what type of injuries could be detected by thermography, to what extent specific injuries were evident, and to establish necessary procedures to obtain meaningful thermographic pictures of athletic injuries.

Methodology

The AGA Thermovision unit was set up once a week to rapidly screen a large number of injuries which were under treatment by the Louisiana State University athletic training staff (Fig. 1). With their cooperation, athletes, prior to and after practice, were examined by the thermographic unit. Although few of the usual controls were instituted due to the preliminary nature of the study and the limitation of time and space, many of the injuries were clearly manifested on a thermogram.



Fig. 1 Thermography unit in operation.

The athlete was seated, or reclined, on a table with the injured site and its corresponding bilateral site exposed to the ambient conditions five to fifteen minutes in a neutral position to prevent excess pooling of blood in the extremity. No control of room temperature was possible, and it varied from 22°C to 31°C on various visits. There was no control of prior food intake or activity. No physical modalities were used prior to examination. Many of the injuries were being treated by the team physician with prescribed injections of anti-inflammatory and enzymatic agents which may have diminished the degree of inflammation present (6).

Findings

Warm or hot areas corresponding to the injured area were seen in most types of injuries. A bilateral temperature difference (ΔT) was easily depicted by use of the isotherms, setting one isotherm on the injury site or inflamed area temperature, and the other isotherm on the corresponding site on the opposite extremity (Fig. 2). The ΔT could be calculated using the grid. At a sensitivity of 5°C (slash on left side of picture at 5), each grid unit equals $\frac{1}{2}$ °C; at a sensitivity of 10°C, each grid unit equals 1°C.

A warm area corresponding to the injured area was evident in bruises (Fig. 3), sprains (Figs. 4,5), dislocations (Fig. 6), and fractures (Figs. 7,8). Muscle strains (Fig. 9) were rarely detected with the thermographic unit. This was expected because it has been stated by Abramson (1) that "... cutaneous temperature readings give



Fig. 3 Bruise to medial inferior aspect of left knee 2 days previous. $\Delta T = 0.7^\circ\text{C}$.

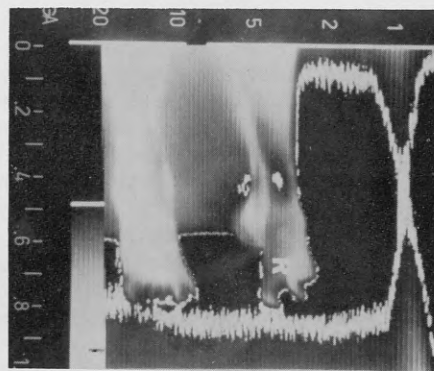


Fig. 4 Severely sprained left ankle 3 weeks prior. $\Delta T = 4.4^\circ\text{C}$.

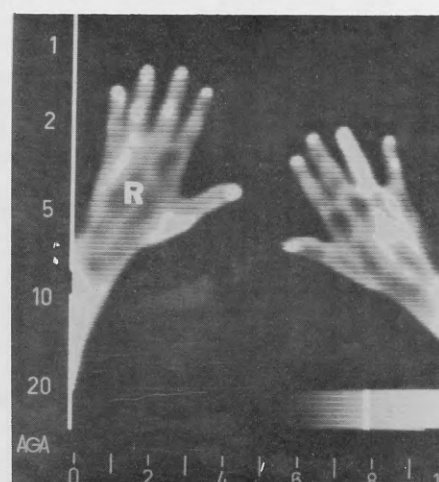


Fig. 6 Right MCP joint dislocation 2 weeks prior. Left fourth PIP dislocation 3 days prior.

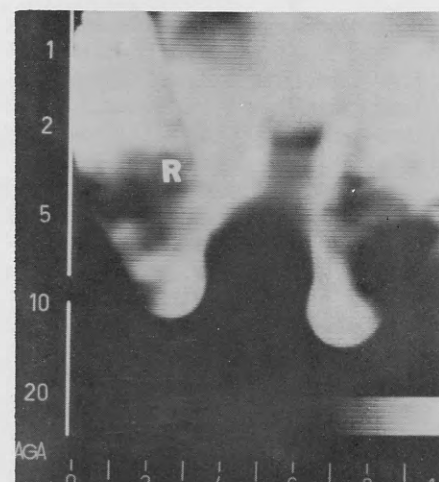


Fig. 7 Fracture of base of right fifth metatarsal 5 weeks previous.

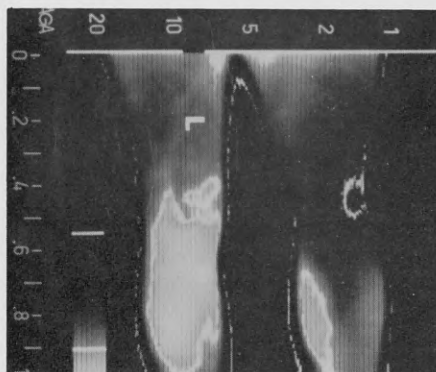


Fig. 2 Ligamentous repair of left knee 12 weeks prior; acute synovitis remaining. $\Delta T = 4.5^\circ\text{C}$.

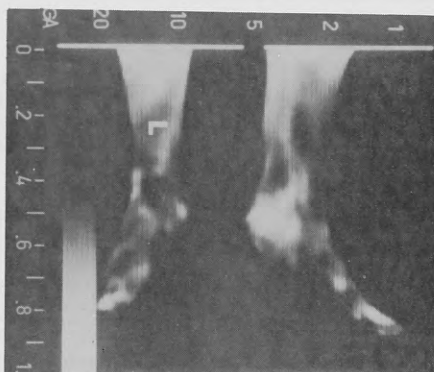


Fig. 5 Right ankle sprain 2 weeks prior.

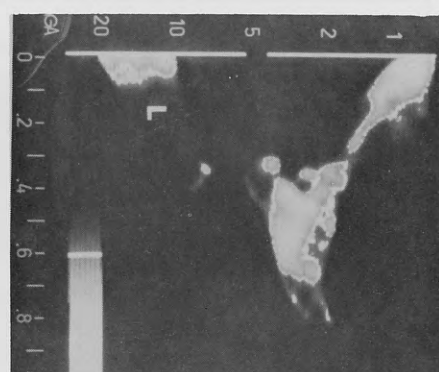


Fig. 8 Fracture of right medial malleolus 7 weeks prior; cast removed 4 days prior. $\Delta T = 1.4^\circ\text{C}$

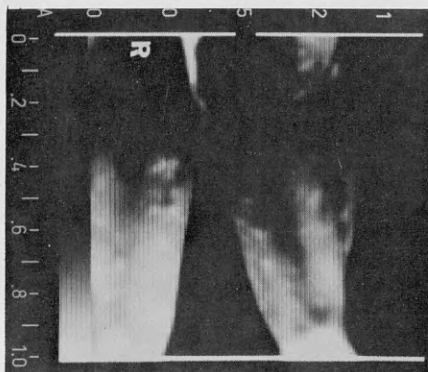


Fig. 9 Left hamstring strain 2 weeks prior.

no indication of changes occurring in the underlying muscle." Chronic injuries occurring from repetitive stresses as those occurring in runners and throwers were clearly demonstrated (Fig. 10).

Sixty-two injuries were examined with an AGA Thermovision unit. An abnormal ΔT was found in fifty injuries; no abnormality was noted in twelve. Some injuries were likely overlooked due to the lack of controls necessary for maximum clarity, or the injuries were muscle strains which were rarely visible on a thermogram.

A quantified evaluation of the ΔT was attempted, but proved inconsistent due to the infrequent visits and the lack of controls necessary for a critical analysis. An objective measurement necessitates strict controls as reported by Tiselius (12).

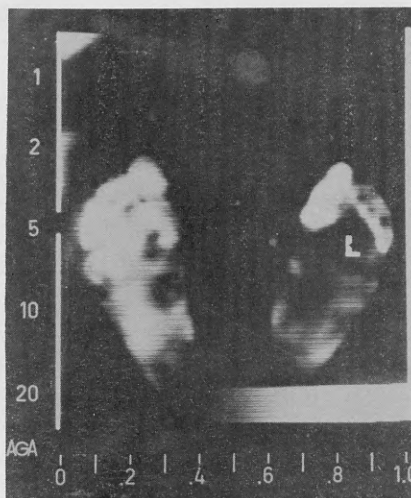


Fig. 10 Chronic right plantar ligament strain.

Case Study

It was of interest to follow an orthopedic injury with thermography regularly and under strict controls necessary for maximum benefit of thermographic evaluation. The following case study exemplified such procedure and demonstrates its effectiveness in monitoring the state of the injury during the rehabilitation period.

An employee of the U.S. Public Health Service Hospital, Carville, Louisiana, sustained a synovitis of the left knee which could be followed regularly with the thermographic unit under ideal controlled conditions, allowing a quantified thermographic evaluation of the ΔT .

The employee has been actively engaged in sports activities until the recent synovitis. After a series of trau-

matic injuries which severely hampered his athletic competition for two years, a medial meniscectomy was performed on the left knee in 1963. The surgery was successful, and no complication occurred until a synovitis became evident on January 7, 1972, having a gradual onset over several days with unknown etiology. A thermogram showed the inflammation present (Fig. 11). The ΔT was fol-

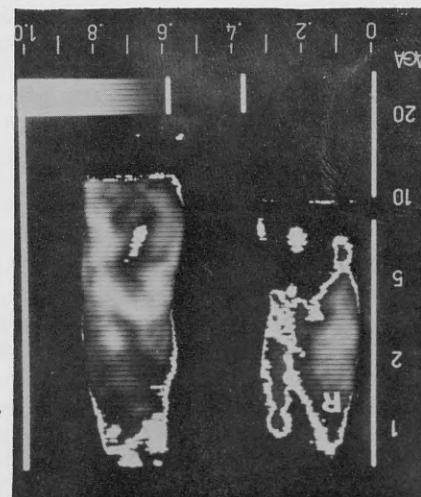
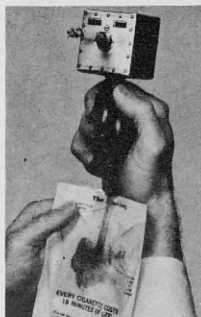


Fig. 11 Synovitis left knee.
 $\Delta T = 2.1^{\circ}\text{C}$.

lowed with the AGA Thermovision unit and summarized in Figure 12. After several days of rest, a progressive running program was instituted. The degree of ΔT present was closely related to the discomfort and swelling present, and gave an objective measurement of the response of the knee to rehabilitation. On February 1, 1972, a clicking began to occur frequently at terminal extension of the knee with subsequent discomfort. Placing the

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knee in full flexion relieved the clicking until it was extended again. This problem continued to increase in frequency until February 4, 1972, and then it began to diminish. The ΔT corresponds closely to the extent of the clicking. On February 2, 1972, a progressive resistive exercise program was begun. This did not increase the ΔT or other signs of inflammation, indicating the exercise was well tolerated.

Under ideal control conditions of proper room temperature, adequate cooling time, etc., the synovitis was clearly monitored by thermography and gave a quantitative assessment of its response to a rehabilitation program.

Summary

Sixty-two athletic injuries were thermographically examined. Fifty of these injuries displayed abnormal thermal patterns, but quantitative bilateral temperature differences were not possible due to the lack of necessary controls. A case study is presented, however, which was followed regularly and closely under controlled conditions, and the degree of thermal abnormality could be quantified. Preliminary investigation has shown that orthopedic injuries occurring in athletic competition can be evaluated with thermography, along with the standard diagnostic procedures. A quantitative approach under the proper conditions can be made and may help in evaluating the rehabilitation of the injury.

Determining the beneficial or aggravating effects of an exercise program is often difficult when mild edema, slight loss of motion and/or minimal discomfort are present. Evi-

dence has been presented demonstrating heat assessment as a method of rehabilitation assessment.

Although few chronic injuries were followed, it appeared that thermography may be an excellent method to aid in the evaluation of existing pathology in chronic ligamentous sprains, shin splints and stress fractures. These injuries are a real problem in track and field, and often create a misunderstanding among the athlete,

coach and trainer regarding the severity of the injury, its treatment and the daily workout. Use of heat assessment may improve the understanding of the extent of the injury and aid in evaluating the course of its rehabilitation.

Thermographic units are becoming more available in the major medical institutions in the country and could be available to many teams. Less expensive methods of heat assessment (i.e.

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Guide to Contributors

The editor of **Athletic Training**, the **Journal of the National Athletic Trainers Association** welcomes the submission of articles which may be of interest to persons engaged in or concerned with the progress of the athletic training profession. The following recommendations are offered to those submitting articles:

1. all manuscripts should be typewritten on one side of 8½ x 11 inch typing paper, triple spaced with 1 inch margins.

2. Photographs should be glossy black and white prints. Graphs, charts or figures should be clearly drawn on white paper, in a form which will be readable when reduced for publication.

3. The list of references should be as follows: a) books: author, title, publisher with city and state of publication, year; b) articles: family names and initials of all authors, title of article, journal title (abbreviations accepted as per Index Medicus), volume, page, year.

4. It is the understanding of the **Athletic Training** editor that manuscripts submitted will not have been published previously; and that the author accepts responsibility for any major corrections or alterations of the manuscript.

5. It is requested that each submitting author include with the manuscript a brief biographical sketch and photograph of himself in coat and tie.

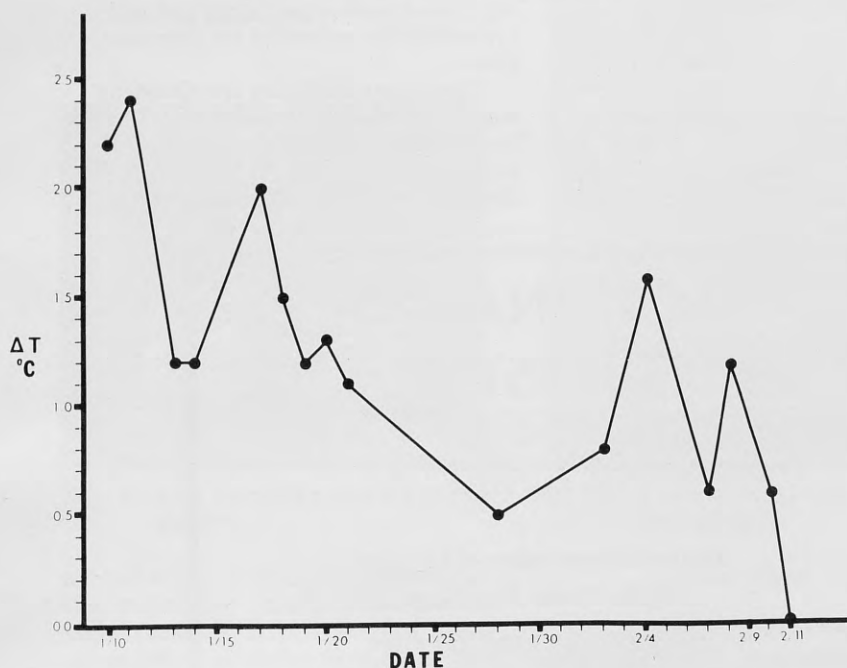
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East Lansing, Michigan 48823





thermistors, radiometers and thermocouples) are available and may be more applicable for use in sports medicine. Many physical education research programs currently have these instruments in their laboratories. Although these temperature recording devices are not as flexible and dynamic as thermography, they do give accurate spot skin temperature recordings.

*AGA Thermovision 680, AGA Corporation, 550 County Avenue, Secaucus, New Jersey.

ACKNOWLEDGMENTS. The author wishes to express his appreciation to Dr. Paul W. Brand, C.B.E., F.R.C.S., for his guidance, and to Dr. Marty Broussard and Mr. Tracy Ladd of the Louisiana State University athletic training staff for their willingness to help.

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ABRASIONS

by L.W. Stauffer, M.D.

Every sport seems to be busy developing its own complicated variation on the abrasion theme—swimming with its acid fast or microbacterial complication of abrasions from cement, football and synthetic turf abrasions, wrestling and mat burns, basketball and floor burns, baseball and its strawberries, etc.

All share a few points in common. Abrasions represent the damage to skin and subcutaneous tissue from forceful sliding over rough surfaces. We usually find a surface component of mechanical destruction of the integrity of the skin and a deeper component of hemorrhage into subcutaneous tissue or bruising. The superficial wounds of the skin frequently are impregnated with fine particles of gravel or sand or wood, and in the case of abrasions from synthetic turf there is an additional finding of multitudes of small incision-type wounds made by the plastic blades of grass.

Traumatic removal of portions of the epidermis results in liberation of blood and blood serum. A crust is formed as these substances clot. Secondary infection very frequently becomes part of the problem. Commonly, abrasions are persistent because they heal with great reluctance during the active season. Re-injury, tearing of the crusts, continued bruising of the area are inclined to produce very poor healing responses.

Diagnosis of abrasion is an extremely elementary problem. Determining at which point this lesion has changed from a simple abrasion to a secondarily infected abrasion sometimes requires a bit more skill. If the periphery of the lesion appears to become redder, hotter and tender, if the center begins to crack and drain pus, it is very obvious that something has happened and that something most likely is secondary infection.

Treatment of an abrasion should begin as soon after the damage has occurred as is possible. First thoroughly cleanse the area by gentle sudsing with either soap and water or a detergent and water. I am not inclined to favor the scrub brush approach to this cleansing; it seems to me to be more advantageous to do this job gently, attempt to float out foreign material with sudsing or even by the addition of hydrogen peroxide. These lesions which have a considerable amount of ground-in foreign material should best

be referred to a physician for more complete surgical cleaning.

When the lesion has been cleaned, it should be patted dry, sprayed with a steroid aerosol, dressed with a plastic type absorbent dressing, then bandaged with a soft bandage. After practice or after the game these dressing can be removed, the area resprayed and left open. Re-dress all abrasions before practice sessions or game.

If secondary infection becomes part of the problem, enzymatic debriedment ointment to remove crusts and debris becomes a very handy tool. There are several of these on the market, most of them involving preparations containing streptokinase and streptodornase. They do a fairly good job of cleaning up crusts (by liquifying the exudate) and allowing access to get to the base of the abrasion. After a day or two of treatment with the enzymatic cleansing agent, local antibiotics applied very sparingly, gently massaged into the infected abrasion frequently are sufficient. It is always a good idea to do cultures and sensitivity studies in case there is a reluctance on the part of the infection to heal, in which case systemic antibiotic therapy might then be needed. When infection becomes part of the problem it is more important to avoid re-injury and it may be wise to put that athlete on a restricted participation basis, temporarily.

The prevention of abrasions has always appeared to me to be more sensible than the treatment of abrasions. Knee pads and elbow pads on basketball players are helpful though sometimes difficult to sell. Long sleeves and stockings on football players exposed to synthetic turf is a very intelligent preventative measure. There is no earthly reason to prove one's manhood by exposing bare arms to the cutting abrasions of synthetic turf. Proper use of sliding pads and proper techniques of sliding in baseball can be quite helpful in the prevention of the strawberry.

Prevention of infection in abrasions is a whole different ball game. It appears to me that our modern fetish of hypercleanliness of the skin contributes considerably to the likelihood of secondary infection developing in minor or major breaks in the integrity of skin surface. Unfortunately, a good bit of skin defense against infection

appears to be related to the presence and activity of the normal bacteria that are supposed to colonize the surface of the skin, the hair follicles of the skin and the oil glands of the skin. Attempting to dispense with these organisms by the use of hexachlorophene or other anti-bacterial agents in soaps does not really do the job of replacing their activity. One cannot depend on hexachlorophene to produce twenty-four hour protection, hence the invasion of abnormal unwanted organisms.

Many athletes suffer from overwashed skin. They shower after P.E., they shower after practice, they bathe before going to bed, and perhaps will shower again the first thing in the morning, each time removing additional protective oil and protective organisms, leaving the skin more open to colonization by some of the bacteria possibly spit on the skin by activity of our next-door neighbors. This author really does not mean to shock people when the preference may be for these athletes to leave soap alone and rinse sweat off with clear, cool water. Skin can tolerate frequent use of soap in the armpits, feet and groin (which are the odor producing areas of the body) but to the author it is relatively senseless to insult the whole rest of the skin in the presence of potential problems when it is quite uninvolved in the odor production business.

Abrasions should be prevented by proper use of protective clothing. When trauma penetrates your protective shield:

1. Clean the abrasion gently with mild soap and warm water.
2. Spray with aerosol steroid.
3. Cover with non-stick dressing.
4. Dress with soft pad for duration of work-out or contest.
5. Leave un-bandaged between sessions, re-spraying 2 or 3 times a day.

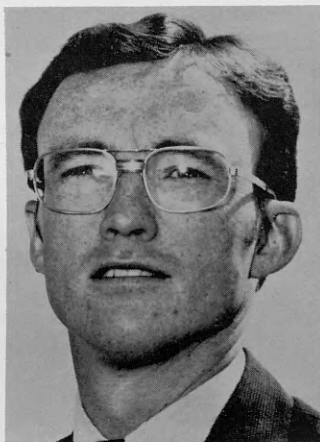
Should secondary infection develop:

1. Have a Culture/Sensitivity done by the laboratory.
2. Remove crust enzymatically.
3. Use topical antibiotic cream sparingly.
4. Treat orally with antibiotics when indicated.

Try not to wash away all natural skin defenses.



INVESTIGATING A NEW POSITION IN ATHLETIC TRAINING



by

Joe Gieck, A.T.C.; R.P.T.

Head Trainer

University of Virginia

INTRODUCTION

In today's limited job market for athletic trainers, how you go about applying for a position can often mean the difference between a good job and an average one, or possibly none at all. You may be the most talented athletic trainer in America, but unless you can convey this to the prospective employer you may never get the type of job you desire. In talking about exploring job opportunities, this presentation will divide the topic into 3 areas: Preparation for the interview, and the resume, and the interview itself.

PREPARATION FOR THE INTERVIEW

The employment interview is one of the most important events in the average person's experience, as it may determine the entire future course of his life. Many drift into the interview without any apparent preparation, and only the vaguest idea of what they are going to say. Their manner says, "Well here I am." They create an impression of indifference by acting too casual. The interviewer may be slouching in the chair smoking, or at the other extreme he may appear in the last stages of nervous fright and unable to do much but gulp and answer in monosyllables. The individual applying for a position of athletic trainer should make a few simple preparations before the interview. He should know the time and place of the interview and plan to arrive at the designated place at least 15 minutes early. Arriving a few minutes ahead of time will also help take care of unexpected emergencies. Late arrival for a job interview is almost never considered excusable. The interviewee should have the name of the school straight and know the proper pronunciation of the interviewer's name. Nothing turns off a person quicker than to have his name mispronounced. A little basic research on the school interviewing you can help. Such things as the names of coaches, the conference the school is in, their won-loss records, traditions, reputation, etc., will be of benefit. This information may be obtained by consulting various colleagues in the immediate area. Questions that you would like answered should be prepared before you arrive. They may include:

1. **A job description**--what teaching and other assignments are included or expected in the job? Do you set up travel arrangements? Are you responsible for buying and taking care of the equipment room? What sports are you responsible for?
2. **Contract**--do you have one? How many months a year are included? What possible outside income or jobs are possible?
3. **Budget**--what is it now, if any? Is there a projected increase in the future if it is inadequate?
4. **Facilities**--are they adequate? If not are there plans for

improvement and if so to what extent? What type of quality athletic training program is desired, the best or just the minimum?

5. **Medical support**--who is the team physician? What is his philosophy, interest, and attitude toward sports, his specialty? What medical facilities are available? Who is responsible for determining who plays and who doesn't from a medical standpoint? How much confidence does the M.D. have in the athletic trainer? Will he back you all the way?
6. **Supervisor**--who are you responsible to, the A. D., the football coach, the team coach, the team physician? Is this person amiable, easy to work for, or does this relationship appear strained or unpleasant?
7. **Monetary rewards**--what is the situation with respect to salary, raises, retirement system, moving expenses, convention expenses, medical meeting expenses, and vacations?
8. **Staff**--how many assistants and what is their remuneration?
9. **Athletic trend**--what is their won-loss tradition and current trend? Does the program appear to be on the upswing or downswing?
10. **Area**--will you be happy working in this section of the country?

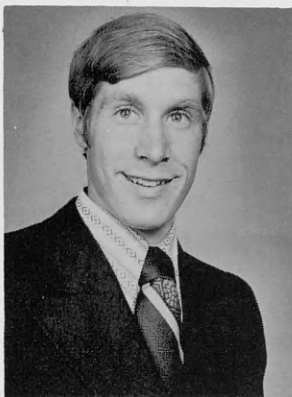
These questions should be brought up with tact so that you do not appear to be the interviewer, or a person who may be afraid of the job, but will show a knowledge of athletic training situation and a genuine concern for the position.

OTHER SUGGESTIONS FOR THE PREPARATION OF THE INTERVIEW

- 1- Have some paper and pen with you for notes as you may be asked to take something down. Do not make notes during the interview as this is most distracting, but wait to make your notes immediately after the interview.
- 2- Neatness and cleanliness with particular attention paid to the nails, hair, and shoes are essential, a suit should be worn, a sport coat being unacceptable as a mixed ensemble of clothes. Your own good taste is your best guide; simply remember that you are

(con't. on page 42)

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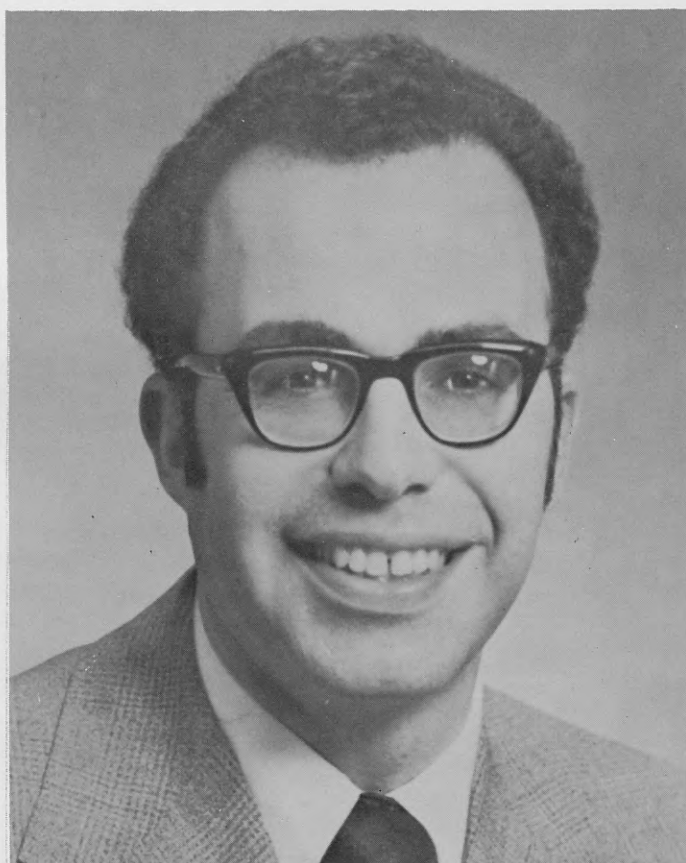
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NATIONAL ATHLETIC TRAINERS ASSOCIATION



Francis J. "Frank" George

Frank George has been employed as the head athletic trainer at Brown University, Providence, Rhode Island since 1966. He is married and the father of four children. In 1962 he received a B.S. degree in physical education from the University of Massachusetts. In 1963 he received his Certificate of Physical Therapy from Boston University, where he was awarded an OVR Scholarship. In 1966 he received an honorable discharge from the U.S. Army

after serving as a First Lieutenant at Fort Sam Houston in Texas and Fitzsimons General Hospital in Denver, Colorado.

Mr. George began in the athletic training profession as a student trainer at the University of Massachusetts, from 1958-61; football trainer at Medford High School, Medford, Massachusetts 1962; staff physical therapist and athletic trainer for the post athletic teams, Fitzsimons General Hospital 1964-66; from 1966 until the present time he has been head athletic trainer at Brown University. At Brown he has been the Host Athletic Trainer for the 1973 Heptagonal Track and Field Meet, for the 1973 New England Track and Field Meet, and for the 1974 New England Swim Meet.

Mr. George received his National Athletic Trainers Association certification in 1970. He has been an officer in the National Athletic Trainers Association, as Vice President 1973-74; and as Director of District One 1970-74; he is also serving on two ad hoc committees: one to study the feasibility of N.A.T.A. becoming its own Accrediting Agency and one on Professional Liability Insurance. He is also serving as liaison representative to the American Physical Therapy Association. He has been a member of the District Membership Committee since 1968 and was Program Chairman for the Eastern Athletic Trainers Association Meeting in 1970.

He is a member of the following professional organizations: the National Athletic Trainers Association, the Eastern Athletic Trainers Association, the American College of Sports Medicine, the American Physical Therapy Association and its Rhode Island Chapter.

Mr. George has lectured or presented papers to many sports medicine and physical therapy organizations. He has manned the former N.A.T.A. Scientific Exhibit at an American Medical Association Meeting, and led many local workshops and meetings for high school trainers and coaches. He has written articles on fluid and electrolyte replacement, conditioning, nutrition for the athlete, and the profession of athletic training.

PRESIDENTIAL CANDIDATES



Sayers J. "Bud" Miller

Bud Miller's present position is head athletic trainer for the University of Washington. He received his B.S. degree from Purdue University, 1953, and his M.S. degree in 1954. After receiving his Certificate of Physical Therapy at the University of Pennsylvania in 1956, he continued his graduate work at Stanford University during 1964-65 and 1967-68.

He became a member of the National Athletic

Trainers Association in 1957 and a Certified Athletic Trainer in 1970.

His experience includes being the Athletic Trainer at Blue Island Community High School, Blue Island, Illinois, 1954-55; Athletic Trainer and Instructor in Physical Education at Moorhead State College, Moorhead, Minnesota, 1957-58; Head Athletic Trainer, Chief Physical Therapist and Assistant Professor of Physical Education at Ball State University, Muncie, Indiana, 1958-69; from 1969 until the present time he has held his present position as Head Athletic Trainer at the University of Washington. In addition, he has been the Host Athletic Trainer for the 1971 NCAA Track and Field Meet, for the 1973 NCAA Wrestling Meet, and for the 1972 AAU Track and Field Meet.

He has held office as District #10 Director, 1972-73, and presently is the Chairman of the Professional Education Committee. He has also served on the following N.A.T.A. committees: National Membership Committee, Professional Advancement Committee, Reorganization Committee, the Ad-hoc Committee to Study Accreditation, and Certification Committee. In addition, he is presently serving in a liaison capacity to the American Association of Health, Physical Education and Recreation.

Besides the N.A.T.A., he has been a member and held office in the following professional associations: American Association of Health, Physical Education and Recreation, and Central Indiana and Washington Chapters of the American Physical Therapy Association. He is also a member of the American College of Sports Medicine.

Mr. Miller has given lectures before many sports medicine and physical education organizations.

He has published articles in the following publications: **Athletic Training**, **The Research Quarterly**, **Journal of Health, Physical Education and Recreation**, and **The Journal of Sports Medicine and Physical Fitness**. In addition, Mr. Miller has authored chapters or articles included in the following books: **Encyclopedia of Sports Medicine** and **Fundamentals of Athletic Training**.

ANNOUNCEMENTS

OFFICIAL DEFINITIONS

ATHLETIC TRAINING: the art and science of prevention and management of injuries at all levels of athletic activity.

ATHLETIC TRAINER: One who is the practitioner of athletic training.

Sayers "Bud" Miller, Chairman
Professional Education Committee

SCHOLARSHIP ANNOUNCEMENTS

The NATA recognizes that not all students and parents can afford to finance their education entirely from their income and assets.

The NATA has established an undergraduate and professional study program honoring outstanding students of the NATA membership who have excelled academically as students of athletic training. This is in the amount of \$500.00 and is awarded annually to a high ranking student in a college or university who has participated with distinction in an athletic training program. This award is open to sophomores and juniors.

There is also a scholarship of \$500.00 being awarded annually to a high ranking senior in a college or university who has participated with distinction in a student athletic training program. This award is intended to encourage the continuing education of the individual beyond that of a bachelor's degree.

The William E. Newell Scholarship Award of \$250.00 will be given to a high ranking junior or senior who has worked as a student trainer at the college level.

At the present time there are no monies available from the association for the secondary or high school level student of athletic training. This is something the NATA is striving for, and hopefully will be available in the near future.

Nominations for the above are limited to students who are NATA members. Each nomination must come from the supervising athletic trainer. The deadline for nominations is March 15, 1974.

Applications are available from the Chairman of The Committee on Grants and Scholarships, 3315 South Street,

Lafayette, Indiana 47904.

The Ed Wojecki Scholarship is given by Larson Laboratories to the outstanding man or woman on the certification examination for 1973.

EDUCATIONAL PROGRAMS LEADING TO PROFESSIONAL CERTIFICATION IN ATHLETIC TRAINING

Programs listed here are approved by the National Athletic Trainers Association. For detailed information, write to the program director whose name is given in parentheses in the listings. Two basic plans of education for athletic training are listed in the following key:

- (1) Bachelor's degree level curriculum
- (1) Master's degree level curriculum
- (3) Accepts women students

ARIZONA

UNIVERSITY OF ARIZONA (2,3)
Department of Health, Physical Education and Recreation
Tucson, Arizona 85721 (Gary Delforge or Miss Peggy Anderson, Physical Education for Women)

CALIFORNIA

CALIFORNIA STATE COLLEGE
AT LONG BEACH (1)
Department of Health, Physical Education and Recreation
Long Beach, California 90801 (Dr. Daniel Arnheim)

ILLINOIS

WESTERN ILLINOIS UNIVERSITY
(1,3)
College of Health, Physical Education and Recreation
Macomb, Illinois 61455 (Roland E. LaRue)

INDIANA

BALL STATE UNIVERSITY (1,3)
Department of Men's Physical Education
Muncie, Indiana 47306 (Ronald Sendre)

INDIANA UNIVERSITY (1,3)
School of Health, Physical Education and Recreation
Bloomington, Indiana 47401 (Robert Young or Sam Newberg)

INDIANA STATE UNIVERSITY
(1,2,3)
School of Health, Physical Education and Recreation
Terre Haute, Indiana 47809 (Mel Blickenstaff)

PURDUE UNIVERSITY (1)

Athletic Department
Mackey Arena
West Lafayette, Indiana 47907
(William E. Newell)

(Curriculum offered by both the Physical Education Department and Health Education Department)

LOUISIANA

LOUISIANA STATE UNIVERSITY (1,3)
Department of Health, Physical Education and Recreation
Baton Rouge, Louisiana 70803
(Marty Broussard or John Wells)

MASSACHUSETTS

NORTHEASTERN UNIVERSITY
(1,3)
Department of Physical Education
Boston, Massachusetts 02115
(Kerkor Kassabian)

MICHIGAN

CENTRAL MICHIGAN UNIVERSITY (1,3)
School of Health, Physical Education and Recreation
Mount Pleasant, Michigan 48859
(Kenneth Kopke)

MINNESOTA

MANKATO STATE COLLEGE (1)
Men's Physical Education Department
Mankato, Minnesota 56001 (Gordon Graham)

MONTANA

UNIVERSITY OF MONTANA
(1,3)
Department of Health, Physical Education and Recreation
Missoula, Montana 59801 (Dr. Walter C. Schwank, Chairman)

NEW MEXICO

UNIVERSITY OF NEW MEXICO
(1)
Department of Health, Physical Education and Recreation
Albuquerque, New Mexico 97106
(L.F. Diehm)

NORTH CAROLINA

APPALACHIAN STATE UNIVERSITY (1,3)
Department of Health, Physical Education and Recreation
Boone, North Carolina 28607 (Ron Kanoy)

NORTH DAKOTA

UNIVERSITY OF NORTH DAKOTA (1,3)
Department of Health, Physical Education and Recreation
Grand Forks, North Dakota 58201
(A.G. Edwards)

OHIO

OHIO UNIVERSITY (1,3)

Athletic Department
Convocation Center
Athens, Ohio 47501 (Charles
Vosler)

OREGON

OREGON STATE UNIVERSITY
(1,3)

Physical Education Department
Corvallis, Oregon 97331 (Richard F.
Irvin)

UNIVERSITY OF OREGON (1,3)
College of Health, Physical Educa-
tion and Recreation
Eugene, Oregon 97403 (Lou Oster-
nig)

PENNSYLVANIA

WEST CHESTER STATE COL-
LEGE (1,3)

School of Health & Physical Educa-
tion
West Chester, Pennsylvania 19380
(Philip Donley)

TEXAS

LAMAR UNIVERSITY (1)
Department of Intercollegiate Ath-
letics
P.O. Box 10066 Lamar Station
Beaumont, Texas 77710 (Paul Zeek)

SOUTHWEST TEXAS STATE
UNIVERSITY (1,3)

Department of Health and Physical
Education
San Marcos, Texas 78666 (Dr.
Bobby Patton)

TEXAS CHRISTIAN UNIVER-
SITY (1)

Department of Athletics
Fort Worth, Texas 76129 (Elmer
Brown)

WASHINGTON

WASHINGTON STATE UNIVER-
SITY (1,3)

Department of Physical Education
for Men
Pullman, Washington 99163
(Richard Melhart)

GRADUATES FROM N.A.T.A. APPROVED ATHLETIC TRAINING CURRICULUMS

Appalachian State (Curriculum ap-
proved June 1973)

No graduates since approval.

University of Arizona (Curriculum ap-
proved June 1972)

Gary Giffen (1973)
Steve Last (1973)
Richard Morris (1973)
Don Ogle (1973)
Jerry Starkey (1973)
Mike Shinensky (1973)
Dave Stenger (1973)

Ball State University (Curriculum ap-
proved June 1972)

No report on graduates.

**California State University, Long
Beach** (Curriculum approved June
1971)

No graduates since approval.

Central Michigan (Curriculum ap-
proved June 1973)

No graduates since approval.

Indiana University (Curriculum ap-
proved June 1973)

No graduates since approval.

Indiana State University (Curriculum
approved June 1969)

No report on graduates.

Lamar University (Curriculum ap-
proved June 1969)

Charlie Henry (1969)
John McDonald (1970)
Don Garrett (1971)
Ken Crawford (1973)
Clifford Brown (1973)

Louisiana State University (Curricu-
lum approved June 1973)

No graduates since approval.

Mankato State College (Curriculum ap-
proved June 1973)

Rex Raine (1971)
Tom Schaecher (1971)
Gary Reinholtz (1972)
Les Luedtke (1972)
James Colehour (1972)
Tom Rygh (1972)
Richard Grenell (1973)
David Engelhardt (1973)
Kerry Olson (1973)
Brian Jekel (1973)
Kent Nance (1973)
Sterling Monroe (1973)
James Murphy (1973)
Bruce Klutz (1973)

University of Montana (Curriculum ap-
proved June

Walter Serba (1972)
Wiley R. Kendle (1973)
Gary A. Minster (1973)
Stephen H. Hackney (1973)

University of New Mexico (Curricu-
lum approved June 1969)

No report on graduates.

North Dakota University (Curriculum
approved June 1973)

No graduates since approval.

Northeastern University (Curriculum
approved June 1972)

No report on graduates.

Ohio University (Curriculum approved
June 1973)

No graduates since approval.

University of Oregon (Curriculum ap-
proved June 1973)

No graduates since approval.

Oregon State University (Curriculum
approved June 1972)

No report on graduates.

Purdue University (Curriculum ap-
proved June 1970)

Joseph A. Bell (1970)
David H. Craig (1970)
John R. Geiger (1970)
James H. Kausek (1970)
William G. Morgan (1970)
Robert C. Reese, Jr. (1970)

Perry E. Russel (1970)
Philip D. Cottrell (1971)
Thomas D. Boo (1971)
Steven E. DeMent (1971)
John C. McLaughlin (1971)
Donald S. Meck (1971)
Michael K. Caine (1971)
Frederick M. Randolph (1972)
John W. Schrader (1972)
James K. Schendel (1972)
Jay A. Smith (1972)
Steven G. Himes (1973)
Thomas S. Jones (1973)
David J. Purcell (1973)
Peter J. Roepke (1973)
Mark A. Rule (1973)
John E. Thiel (1973)
Stanton E. Troy (1973)

Southwest Texas State University
(Curriculum approved June 1972)

No report on graduates.

Texas Christian University (Curricu-
lum approved June 1972)

Jot Smith (1972)
Wayne Cooper (1972)
Patrick Jopling (1972)
Jerry Fischer (1972)
Larry Bradley (1972)

No report on 1973 graduates.

Washington State University (Curri-
culum approved June 1972)

No report on graduates.

West Chester State College (Curricu-
lum approved June 1970)

Marsha King (1972)
Earl Osborne (1972)
Rich Saylor (1972)
Linda Treadway (1972)
Tom Murphy (1972)
Patricia Unger (1973)
Robert Shank (1973)
Clairbeth Lehn (1973)

Western Illinois University (Curricu-
lum approved June 1972)

No graduates since approval.



Arthur Z. Berenstain, Presi-
dent of Larson Laboratories,
Inc., regrets to announce the
passing of Mr. Napoleon
Veroneau. Mr. Veroneau was
the Past President and Direct-
or of the company. He died fol-
lowing a short illness on
November 28, 1973.

(con't. from page 36)

looking for a job - not going to a party. Do not become unduly worried over too many details. A genuinely attractive personality and a good school or employment record will overcome most small errors. Be friendly, honest and sincere and you will always make a good impression.

THE INTERVIEW

It is normal to be nervous and the interviewer will discount a certain amount of nervousness. Your best guide is to rely on your own native courtesy and good sense. The interviewer is talking to you because he wants to hire a trainer, not because he wants to embarrass you. He wants to hire you if you have something definite to offer his athletic program and if he thinks you will fit into his program.

Greet him by his name as you enter his office, again, being sure of the proper pronunciation of his name. Take your cues from him at the start. If he moves to shake hands, do so - but not unless he makes the first gesture. Normally wait until he offers you a chair before you sit down. If he shakes hands with you, use a firm grip - a limp fish handshake will make a bad impression. However, don't try to prove how strong your grip is by grabbing his hand and crushing it. Don't chew gum or smoke unless invited to do so. Be ready for at least one surprise question right at the start. They may be: Why are you interested in the position and/or the school? Tell me about yourself. If you think those are easy questions to answer without previous thought, just try it. This is where preparation will count.

Keep following the lead of the interviewer. Don't answer by saying just yes or no. On the other hand, don't talk too much. Be prepared for a few personal questions. Sit up in your chair and look alert and interested at all times. Don't look tense, or relax so much that you look slouchy. Show that you can be a wide-awake, an intelligent listener as well as a talker. Look your interviewer directly in the eye - and keep doing it from time to time during the conversation. This is important. The interviewer will be conscious of this. And remember to smile frequently, at appropriate occasions.

Hands can betray nervousness. If you don't know where to put them, leave them in your lap and keep them still. Don't drum with your fingers or tap with a pencil.

A few interviewers like to do most

of the talking and judge you by your reactions--the interest, comprehension and intelligence you show. Others hardly speak at all, and for an amateur these are the hardest to deal with. Their attitude is that it is your job to sell yourself. That is where you will have to call on your knowledge of yourself and your interest in the position and school. Preparation for an unexpected turn of events in the interview with strengthen your case for the job by preventing stumbling awkward answers and responses.

Make sure that your good points get across to him--he won't know them unless you tell him--but try to appear factual and sincere, not bloated with conceit. If you can mention your best qualities in relation to something concrete, so much the better. For example, saying I paid for 80 percent of my college expenses is better than saying I'm a hard worker.

Questions you want answered may be naturally brought up if you lead the interviewer on certain topics of conversation.

Most interviews will follow a rather simple question and answer formula. If such is the case, your ability to answer quickly and intelligently is of great importance. If your answers are confused and contradictory your cause is damaged. The greatest preventative against contradictory answers is the plain, unembroidered truth. A frank, answer, even if it seems a little unfavorable to you, is better by far than an exaggeration which may tangle you up in the next question. Often a frank admission can be turned to your advantage. Frankness is admired and you may be able to recover in this fashion. He asks you if you always pitch right into an assignment and get it done ahead of time. You answer, "I'm afraid I don't always get assignments done before they are due. I sometimes have a tendency to put a thing off until it has to be done. However, I have never turned in a major assignment or term paper that was late. And I am sure that the trainers or athletic directors I've worked for will be glad to tell you that my work for them was always finished on time. They told me that my work was thorough, reliable, and very accurate." Score one here for frankness as well as for responsibility, accuracy and giving satisfaction in previous jobs.

Be ready to give an answer to the question, "What do you plan to be doing in 10 years?" The purpose here is to determine your ambition, attitude, and soundness of thinking.

Never make a slighting reference about a former employer or coach.

Derogatory remarks only make the interviewer question your loyalty to his program especially if the going gets rough. Loyalty is at the top of the list of attributes an athletic trainer must possess.

Conduct yourself as if you are determined to get the job. Don't, however, appear desperate for the job, but as you have other irons in the fire. On the other extreme avoid giving the impression that you have just come in to look over the possibilities, and that you are not yet sure what you want. The interviewer wants to think that you want the job.

Differences of opinion are a part of our heritage of freedom. But the job interview is no place for arguments. Be honest, of course, in what you say, and don't be evasive. If you can agree with the employer in general, so much the better. If you stray off into talking about your pet enthusiasms you may hang yourself on the particular. Stick to the subject at hand. Don't let yourself wander away on a tangent because you like the sound of your own voice. Some talk themselves into a job and then right out of it.

You may be asked why you left your last two or three jobs. Return to school, better pay, a challenge and more responsibility are acceptable reasons. Be careful, however, not to give the impression that you are a job jumper or shopper. If you are asked if you've ever been fired - and you have been - frankness again is the answer. Tell him you've learned from your mistakes. Also, there is the possibility you got into a wrong job situation through a misunderstanding. This is why the job opportunity should be thoroughly explored before it is accepted.

If you get the impression that the interview is not going well and that you have already been rejected, don't let your discouragement show. You have nothing to lose by continuing the appearance of confidence and you may gain much. The last few minutes may change things. The employer may seem to discourage you in order to test your reaction. If you remain confident and determined, you have probably made a good impression.

What if you so impress the employer that he offers you a job on the spot? If you are absolutely sure it is the one you want, accept with a definite yes. If you have the slightest doubt or do not want to accept without further thought, or further interviews, ask for time. You must not embarrass the person who has made you the offer. Be courteous and tactful in asking for time to think it over. Try to set a definite date when you can provide an ans-

A shot against cancer?



One day the scariest thing about cancer may be the needle that makes you immune to it.

The theory: build up the body's defense to fight off a disease naturally.

Dramatic research in this direction is going on right now.

Scientists are working on mechanisms to make the body reject cancer.

And the promise for the future is staggering.

Wouldn't you feel good knowing you contributed to the research?

Feel good.

Please contribute. Your dollars will help further all our cancer research.

We want to wipe out cancer in your lifetime.

**American
Cancer Society**

THIS SPACE CONTRIBUTED BY THE PUBLISHER

wer. This will reassure him that you are giving his offer serious consideration. Above all, don't create the impression that you are playing one institution off against the other to drive up your salary. If you accept more than one job offer, you will reflect badly upon yourself and your school. If you have accepted one job and a chance turns up suddenly to interview for a really irresistible position, consult several of your colleagues who you respect. Job engagements have been broken before, but the way it is done is important.

TRAVEL

If you make a visit at a school's expense, your expense sheet should include only costs actually relating to your trip, such as transportation, meals, housing and tips.

Don't make applications for jobs in which you are not interested. You will find yourself in an extremely awkward position and you stand to lose the confidence of everyone involved if you are asked to interview for the job.

SALARY

What about salary? The interviewer may ask how much you want. The usual answer in that case is to indicate that you're more interested in a job where you can prove yourself than you are in a specific salary. This politely passes the question back to the interviewer. If he is interested, he will suggest a figure. In most cases reputable employers will offer a fair salary. It is in your interest, or course, to have found out what the rate is. You know, also, the level beneath which your needs and responsibilities will not permit you to go.

At the end of the interview be certain to thank the interviewer for his time and his consideration of you. Resist the temptation to flatter him or the school. Even if the position is the greatest around, don't say so. You may be misunderstood. You will learn much from you first interview and you will almost certainly do better in succeeding ones. The important thing is to keep trying if you are not hired the first time.

POSSIBLE QUESTIONS FROM THE INTERVIEWER

Some of the non-technical questions you may be asked are:

1. What jobs have you held? How were they obtained, and why did you leave?
2. What courses did you like best in school, the least, why?
3. Why did you choose athletic training as a field?

4. What percentage of your college expenses did you earn? How?
5. How did you spend your vacations while in school?
6. Do you feel that you have received a good general training in the field? How so?
7. What qualifications do you have that make you feel that you will be successful in athletic training?
8. Are you contemplating marriage, or describe your family.
9. What was your academic record?
10. Why did you choose your particular college?
11. What are your extracurricular activities?
12. Give a short biographical history of yourself.
13. Who are your best friends?
14. Can you take instructions or criticism without feeling upset?
15. What have you learned from some of the jobs you have held?
16. Have you ever had any difficulty getting along with students, faculty, or other athletic personnel?
17. What is your major weakness?
18. What do you do to keep in good physical condition?
19. Is it an effort for you to be tolerant of persons with a background and interests different than your own?
20. What types of people seem to rub you the wrong way?
21. What extent do you use liquor or drugs?

SOME OF THE NEGATIVE FACTORS THAT LEAD TO THE REJECTION OF THE APPLICANT DURING THE INTERVIEW ARE:

1. Poor personal appearance, limp, fishy handshake
2. Overbearing, overaggressive, conceited, superiority complex, know it all
3. Inability to express ideas clearly, poor voice, diction, grammar
4. Lack of planning for career, hit and miss planning, indecisive
5. Lack of interest, enthusiasm, confidence, poise, vitality
6. Interest only in the best dollar offer, expects too much too soon
7. Poor scholastic record, just got by, marked dislike for school
8. Makes excuses, evasive, hedges on unfavorable factors in record
9. Lack of tact, maturity, courtesy, social understanding
10. Friction and/or condemnation of past employers
11. Poor eye contact along with indefinite responses to questions
12. Unhappy life, poor handling of personal finances

13. Merely shopping around, wants a job for only a short time
14. Lack of technical knowledge
15. No sense of humor, cynical, lazy, low moral standards
16. Intolerant, strong prejudices
17. Radical ideas, narrow interests
18. Inability to take criticism
19. Lack of appreciation of the value of experience
20. High pressure type, or at the other extreme, asks no questions about job

RESUME

The basics to be included in a resume are: name, address (permanent and present), date and place of birth, photograph, marital status and children, health status, height and weight, military service or classification, and publications. (See sample resume) Work experience is an essential ingredient of any resume. Dates should be given, along with addresses, and a brief description. The job list should begin with the last job you held. It should include listings in reverse order, ending with the earliest. Some applicants have made strong cases for themselves because they have held jobs for a considerable length of time. Others who have had successively more responsible or more important jobs, emphasize that growing responsibility. High school, college, Physical Therapy, professional, and teaching experience should be listed. Subjects you enjoy teaching and are qualified to teach should be stressed. The more skills you possess the better your chance to get the job.

Your resume should be filed with the NATA placement office when you contact them about job openings.

The school may have a specific data sheet for you to fill out, but a resume of your own will be of help in that it represents you to people who have never met you. This is your supplement to your face-to-face interview. A good resume will go a long way toward helping you make a good impression. A bad resume can seriously hurt the chances of an applicant who may seem desirable in every other way. It must be typed and neat. Mimeographed or otherwise duplicated copies are unacceptable. Careless erasures and misspelled words are inexcusable, and the latter, particularly, may cost you a good chance at a job. A sloppy or haphazard resume indicates a sloppy, careless person. Keep carbon copies of the resume to save yourself a re-writing job if the original is lost.

Your method of organizing the separate elements of your resume is not as important as the fact that you

show some kind of orderly, reasonable process. It is best to stick to a rather conventional layout as gimmick type resumes, while attracting attention, may backfire. Your use of white space is most important in creating an impression of neatness and orderliness. Space can be used to isolate important points to which you want to draw attention. Sufficient spacing between all elements help to create a clean, pleasing impression. Crowding too many details too close together results in an untidy appearance, as well as a fine print look that repels a reader. Try, however, to keep it simple and to one page. Seek to highlight your strong points in an honest, straight forward fashion, emphasizing such traits as athletic training experience, high grades, professionalism, extracurricular activities, broad experiences, etc. A number of years after graduation your work experience will, of course, be highlighted. College activities will then ordinarily be reduced in the resume to

a statement of your university's name, the year graduated, your degree, and possibly your major. Recent graduates will stress their educational history, high school, college and professional school degrees, minor and major subjects.

Personal references related to your work experience are to be included. They should not be social acquaintances, relatives, or good friends. Courtesy dictates that you ask your references' permission before using their names. These references may be filed with the NATA placement office, your college placement office and available upon request or otherwise available to the employer.

You must sell yourself to the employer and appeal to the employer's interest in what you have to offer. Everyone has something to offer if he will only analyze his abilities, talents and interests correctly, and stress his strong points as they relate to the job he is seeking.

SAMPLE RESUME

PHOTO

NAME: Jack Smith
 ADDRESS: 15 South 5th Street, Central Oklahoma
 PHONE: 449-9411
 PLACE AND DATE OF BIRTH: Hollis, Oklahoma, 15 December 1948
 HEALTH: Excellent
 HEIGHT AND WEIGHT: 5'10", 170 pounds
 MARTIAL STATUS: Single
 RELIGION: Methodist
 MILITARY STATUS: 3A
 EDUCATION: Hollis High School 1967
 Central University BS Physical Education 1971
 Central University M. Ed. Physical Education 1972
 PRACTICAL EXPERIENCE: Student Trainer 1967-71 Central University
 Assistant Trainer 1971-72 Central University
 TEACHING EXPERIENCE: 1971-72 Central University P.E. Department--
 tennis, basketball, track, health education
 PROFESSIONAL ORGANIZATIONS: National Athletic Trainers Association
 Phi Delta Kappa--Honorary Educational Society
 PUBLICATIONS: The Trainer--National Society Magazine May 1972
 REFERENCES: Jack Dollins, Athletic Trainer Central University
 Central, Oklahoma
 Dr. J. H. Henry, Team Physician Central University
 Central, Oklahoma
 Henry Dawkins, Football Coach Central University
 Central, Oklahoma

The above references are on file at the Central University Placement Office and NATA Placement Committee and available upon request.

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tn: Skip Vosler

accidental childhood poisoning. Recently, FDA promulgated a regulation requiring special safety closures (child-proof caps) for all aspirin containers to prevent accidental ingestion by children. The effective date of this order is August 14, 1972.

Bufferin

A Comparison with Plain Aspirin

The essential ingredient of Bufferin is aspirin. Experts who evaluated the effectiveness of Bufferin for FDA stated that the advertising claims, Bufferin is "twice as fast as aspirin" and Bufferin "helps prevent the stomach upset often caused by aspirin," are misleading. There is no evidence to indicate that the speed of onset of its action in relieving pain is significantly increased over plain aspirin. Most of the published studies indicate there is little difference in the incidence of stomach upsets after ingestion of Bufferin or plain aspirin.

Side Effects

Although aspirin does not frequently cause side effects, the following have been reported:

1. Gastro-intestinal irritation. Symptoms: indigestion, nausea, vomiting, and bleeding.
2. Allergic reactions: Skin rashes, asthmatic attacks, loss of consciousness.
3. Salicylism—a condition produced by ingestion of large doses of aspirin or other salicylates, the symptoms of which are ringing in the ears, headache, dizziness

4. Individuals with gastric or who have a history of stomach ulcer should avoid aspirin as much as possible.
5. Bleeding, including vomiting of blood, following ingestion of aspirin requires immediate medical attention.
6. Ingestion of large doses of aspirin by children requires immediate medical attention.

PARENTS CAN ALLEVIATE INJURIES

As more than one million high school boys again storm through that frantic world of fly patterns and goal line stands, an Atlanta doctor with a unique practice steps up a campaign to correct what he considers a glaring weakness in American sports.

Statistics show that perhaps half the boys playing football in the fall will be hurt. Some inevitably will die. But many of the injuries, says Dr. Fred Allman, could be avoided.

The real shortcoming, he says, is what happens before the athlete ever suits up.

The way Allman looks at it, the "physical" is just not enough. It merely scratches the surface. He will quickly tell you that he and his fellow doctors have been negligent in the past in "pre-participation evaluation."

He wants to convince parents that they, better than anyone, can give sports medicine the shot in the arm it needs -- as well as making the sports arena safer for all concerned -- by

insisting on proper evaluation while fostering the kind of atmosphere that mentally prepares the youngster as well.

"There's a principle in medicine called S.A.I.D. -- Specific Adaption to Imposed Demands. The body will prepare for those demands if given adequate time and proper preparation."

"The medical profession, school people, the athletic teams, all have been negligent about doing a thorough examination," Allman said. "By that, I don't simply mean we don't listen to the heart well, but when we listen to the heart, look in the ears, look in the throat, we're just ruling out obvious disease. We know they don't have a heart murmur, that their tonsils are not infected.

"But we are not checking their maturity, we're not checking their strength, we're not checking their endurance capability, we're not evaluating their posture.

"We're not classifying them according to the sport they want to engage in and whether they are ready to engage in it.

"In other words, were we're saying you're free of disease, therefore you can do anything you want to."

Although injuries cannot be totally eliminated, the risk, with proper medical supervision, is well worth it.

"The value of sheer physical exercise demanded by participation in sports cannot be denied, nor can the benefit of competition," he says. "Competition is a part of life and there is no better way to learn to compete than through well controlled sports activities." (Atlanta UPI; Times-Courier, Nov. 3, 1973)

EXERCISE AND APPETITE

Studies conducted at the University of Illinois at Chicago Circle indicate that appetite is not increased by short bouts of exercise. According to the report, confusion has existed because no distinction has been made in the past between an hour of workout and eight hours of hard labor.

Exercise has often been discounted as a means of weight control because of the impression that all exercise stimulates appetite.



13. Merely shopping around, wants a job for only a short time
14. Lack of technical knowledge
15. No sense of humor, cynical, lazy, low moral standards
16. Intolerant, strong prejudices
17. Radical ideas, narrow interests
18. Inability to take criticism
19. Lack of appreciation of the value of experience
20. High pressure type, or at the other extreme, asks no questions about job

RESUME

The basics to be included in a resume are: name, address (permanent and present), date and place of birth, photograph, marital status and children, health status, height and weight, military service or classification, and publications. (See sample resume) Work experience is an essential ingredient of any resume. Dates should be given, along with addresses, and a brief description. The job list should begin with the last job you held. It should include listings in reverse order, ending with the earliest. Some applicants have made strong cases for themselves because they have held jobs for a considerable length of time. Others who have had successively more responsible or more important jobs, emphasize that growing responsibility. High school, college, Physical Therapy, professional, and teaching experience should be listed. Subjects you enjoy teaching and are qualified to teach should be stressed. The more skills you possess the better your chance to get the job.

Your resume should be filed with the NATA placement office when you contact them about job openings.

The school may have a specific data sheet for you to fill out, but a resume of your own will be of help in that it represents you to people who have never met you. This is your supplement to your face-to-face interview. A good resume will go a long way toward helping you make a good impression. A bad resume can seriously hurt the chances of an applicant who may seem desirable in every other way. It must be typed and neat. Mimeographed or otherwise duplicated copies are unacceptable. Careless erasures and misspelled words are inexcusable, and the latter, particularly, may cost you a good chance at a job. A sloppy or haphazard resume indicates a sloppy, careless person. Keep carbon copies of the resume to save yourself a re-writing job if the original is lost.

Your method of organizing the separate elements of your resume is not as important as the fact that you

show some kind of orderly, reasonable process. It is best to stick to a rather conventional layout as gimmick type resumes, while attracting attention, may backfire. Your use of white space is most important. Impression is important. Space is important. Points to be considered: all of the following: please, many, in an, fine, Try, one p, points, fashion, athletic, grades, lar act, number, work, highlight, ordinary

a statement of your university's name, the year graduated, your degree, and possibly your major. Recent graduates will stress their educational background.

THE AL HART ENDOWMENT AWARD FUND

I Pledge \$ _____

- ☐ I am enclosing a check (payable to the Ohio University Fund Inc.) in an envelope.
- ☐ Please charge Bank Americard. (My card number is _____)
- ☐ Please bill me.

NAME _____

Street Address _____

City _____

State _____

Zip Code _____

SAMPLE RESUME

PHOTO

NAME: Jack Smith

ADDRESS: 15 South 5th Street, Central Oklahoma

PHONE: 449-9411

PLACE AND DATE OF BIRTH: Hollis, Oklahoma, 15 December 1948

HEALTH: Excellent

HEIGHT AND WEIGHT: 5'10", 170 pounds

MARTIAL STATUS: Single

RELIGION: Methodist

MILITARY STATUS: 3A

EDUCATION: Hollis High School 1967
Central University BS Physical Education 1971
Central University M. Ed. Physical Education 1972

PRACTICAL EXPERIENCE: Student Trainer 1967-71 Central University
Assistant Trainer 1971-72 Central University

TEACHING EXPERIENCE: 1971-72 Central University P.E. Department--
tennis, basketball, track, health education

PROFESSIONAL ORGANIZATIONS: National Athletic Trainers Association
Phi Delta Kappa--Honorary Educational Society

PUBLICATIONS: The Trainer--National Society Magazine May 1972

REFERENCES: Jack Dollins, Athletic Trainer Central University
Central, Oklahoma

Dr. J. H. Henry, Team Physician Central University
Central, Oklahoma

Henry Dawkins, Football Coach Central University
Central, Oklahoma

The above references are on file at the Central University Placement Office and NATA Placement Committee and available upon request.

POTPOURRI

ASPIRIN

The Food and Drug Administration gives the following data regarding an often used (many times overused) item in the training room.

Aspirin (acetylsalicylic acid) belongs to the group of drugs, known as salicylates. It continues to be the popular self-medication for the relief of headache, minor pains, and reduction of fever.

Accidental Poisoning in Children

Aspirin continues to be the medicine most frequently involved in accidental childhood poisoning. Recently, FDA promulgated a regulation requiring special safety closures (child-proof caps) for all aspirin containers to prevent accidental ingestion by children. The effective date of this order is August 14, 1972.

Bufferin

A Comparison with Plain Aspirin

The essential ingredient of Bufferin is aspirin. Experts who evaluated the effectiveness of Bufferin for FDA stated that the advertising claims, Bufferin is "twice as fast as aspirin" and Bufferin "helps prevent the stomach upset often caused by aspirin," are misleading. There is no evidence to indicate that the speed of onset of its action in relieving pain is significantly increased over plain aspirin. Most of the published studies indicate there is little difference in the incidence of stomach upsets after ingestion of Bufferin or plain aspirin.

Side Effects

Although aspirin does not frequently cause side effects, the following have been reported:

1. Gastro-intestinal irritation. Symptoms: indigestion, nausea, vomiting, and bleeding.
2. Allergic reactions: Skin rashes, asthmatic attacks, loss of consciousness.
3. Salicylism—a condition produced by ingestion of large doses of aspirin or other salicylates, the symptoms of which are ringing in the ears, headache, dizziness

and mental confusion.

4. Aspirin in too-long-continued, frequent doses can cause kidney damage.
5. Acute poisoning (infants and children) - Deaths have occurred.

Warnings

1. Do not give aspirin indiscriminately to anyone, especially infants and children.
2. Keep all aspirin medications out of the reach of children.
3. Patients with a history of allergy to salicylates should avoid taking aspirin.
4. Individuals who are allergic or who have a history of stomach ulcer should avoid aspirin as much as possible.
5. Bleeding, including vomiting of blood, following ingestion of aspirin requires immediate medical attention.
6. Ingestion of large doses of aspirin by children requires immediate medical attention.

PARENTS CAN ALLEVIATE INJURIES

As more than one million high school boys again storm through that frantic world of fly patterns and goal line stands, an Atlanta doctor with a unique practice steps up a campaign to correct what he considers a glaring weakness in American sports.

Statistics show that perhaps half the boys playing football in the fall will be hurt. Some inevitably will die. But many of the injuries, says Dr. Fred Allman, could be avoided.

The real shortcoming, he says, is what happens before the athlete ever suits up.

The way Allman looks at it, the "physical" is just not enough. It merely scratches the surface. He will quickly tell you that he and his fellow doctors have been negligent in the past in "pre-participation evaluation."

He wants to convince parents that they, better than anyone, can give sports medicine the shot in the arm it needs -- as well as making the sports arena safer for all concerned -- by

insisting on proper evaluation while fostering the kind of atmosphere that mentally prepares the youngster as well.

"There's a principle in medicine called S.A.I.D. -- Specific Adaption to Imposed Demands. The body will prepare for those demands if given adequate time and proper preparation."

"The medical profession, school people, the athletic teams, all have been negligent about doing a thorough examination," Allman said. "By that, I don't simply mean we don't listen to the heart well, but when we listen to the heart, look in the ears, look in the throat, we're just ruling out obvious disease. We know they don't have a heart murmur, that their tonsils are not infected.

"But we are not checking their maturity, we're not checking their strength, we're not checking their endurance capability, we're not evaluating their posture.

"We're not classifying them according to the sport they want to engage in and whether they are ready to engage in it.

"In other words, were we're saying you're free of disease, therefore you can do anything you want to."

Although injuries cannot be totally eliminated, the risk, with proper medical supervision, is well worth it.

"The value of sheer physical exercise demanded by participation in sports cannot be denied, nor can the benefit of competition," he says. "Competition is a part of life and there is no better way to learn to compete than through well controlled sports activities." (Atlanta UPI; Times-Courier, Nov. 3, 1973)

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Exercise has often been discounted as a means of weight control because of the impression that all exercise stimulates appetite.



NATA Mid-Year Board of Directors Meeting

January 16-17, 1974

O'Hare Inn - Des Plaines, Illinois

The Mid-Year Meeting of the Board of Directors of the National Athletic Trainers' Association was convened at the O'Hare Inn, Des Plaines, Illinois, at seven twenty o'clock p.m., Mr. Robert Gunn, President, presiding.

Those present were:

Mr. Robert Gunn	President
Mr. Otho Davis	Executive Director
Mr. Bruce Melin	Parliamentarian
Mr. Frank George	District 1
Mr. Francis J. Sheridan	District 2
Mr. Craig J. Lewellyn	District 3
Mr. Roland "Duke" LaRue	District 4
Mr. William Flentje	District 5
Mr. Eddie Lane	District 6
Mr. Rodney Kimball	District 7
Mr. Lewis C. Crowl	District 8
Mr. Eugene Smith	District 9
Mr. Richard Melhart	District 10

I. The meeting was opened with a prayer by Mr. Gunn.

II. Mr. Melin lead a discussion of the review of the Association By-Laws, which were classified by Article and Section. (NOTE: As soon as the By-Laws are in complete form, each member will receive a copy.)

A motion was made by Mr. Lewellyn and seconded by Mr. Sheridan to accept the changes made in the By-Laws and constitutional changes, which will be submitted to the membership at the June, 1974, meeting.

Action: Approved.

III. Mr. Lindsay McLean, Certification Committee Chairman, appeared before the Board and presented a report for his committee.

IV. The costs of incorporating the improvements into the certification examination made at the August meeting with the Professional Examination Service are as follows: (A) Thirty-five (35) items revised at \$15.00 each - \$525.00; (B) replace items with new items at \$20.00 each - \$160.00; (C) eleven (11) items replaced from the NATA files - no charge; TOTAL \$685.00. The revision is necessary to keep the examination current, relevant, reliable and fair to all applicants. This first revision is especially important since all new examinations have obvious flaws shown by statistical analysis after the first 100 candidates.

A motion was made by Mr. Sheridan and seconded by Mr. George that the NATA appropriate \$685.00 for revising the NATA certification examination based on the item analysis and NATA - PES Committee recommendations.

Action: Approved.

V. Mr. McLean recommended that the Procedures for Certification should be amended as follows: The wording following each section pertaining to the encouragement of continuing education should be deleted and replaced by the following: "A person who is once certified under these procedures remains certified as long as he or she meets the minimum requirement for continuing professional education as defined by the Board of Directors and only as long as such requirements are met."

A motion was made by Mr. George and seconded by Mr. Sheridan to accept the above recommendation.

cept the above recommendation. Action: Approved.

VI. Mr. McLean recommended that the Procedures for Certification should be amended under Section III (Physical Therapy Degree Graduate) by the addition of letters of recommendation as are now required under Section I and Section IV.

This will standardize the Procedures for Certification and would lessen the possibility that we might be examining someone not properly skilled in athletic training techniques.

A motion was made by Mr. Crowl and seconded by Mr. George to accept the above recommendation.

Action: Approved.

VII. Mr. McLean requested that effective July 1, 1974, the application fee for certification be raised from \$35.00 to \$40.00.

A motion was made by Mr. Sheridan and seconded by Mr. Kimball to accept the above request.

Action: Approved.

VIII. Mr. McLean requested that the NATA and the Board of Certification share equally the cost of a brochure for the Certification Committee and that \$200.00 be allocated by the Board of Directors for this purpose.

A motion was made by Mr. George and seconded by Mr. Melhart to accept the above request.

Action: Approved.

IX. The Audio Visual Aids Committee report was discussed. A motion was made by Mr. Crowl and seconded by Mr. Melhart to accept the Audio Visual report.

Action: Approved.

X. There was discussion in reference to the Schering Corporation Symposium that will be held at the Crown Center Hotel, Kansas City, Missouri, June 9, 1974, from one (1) p.m. to four (4) p.m. This symposium is being developed through the Audio-Visual Committee. The topic for 1974 will be an in-depth presentation on the foot and ankle.

A motion was made by Mr. George and seconded by Mr. Sheridan for the Board of Directors to approve the Schering Symposium.

Action: Approved.

XI. There was discussion in reference to the "time limitation for certification".

A motion was made by Mr. Kimball and seconded by Mr. Lane that the above topic be presented to Mr. McLean for further recommendation.

Action: Approved.

XII. President Gunn recommended to the Board of Directors that the chairmanship of the Drug Education Committee be filled by Dr. John Wells, Ed.D., Louisiana State University.

A motion was made by Mr. Lane and seconded by Mr. LaRue that the Board accept Dr. John Wells as the chairman of the NATA Drug Education Committee; also that his name be submitted to the NCAA Drug Education Committee for consideration as the NATA representative to NCAA in this area.

Action: Approved.

XIII. Presented to the Board of Directors was a letter from Mr. William Newell, Grants and Scholarship

Committee Chairman, to Mr. Jim Cody, president and General Manager of Protective Products, in reference to a possible grant and award established through NATA and Protective Products. At this date all details are not final.

A motion was made by Mr. LaRue and seconded by Mr. George to approve the work by Mr. Newell on the Protective Products-NATA award and instructs Mr. Newell to make a formal proposal to the Board, including the mechanics and the qualifications for the award.

Action: Approved.

XIV. The Twenty-Five Year Award was discussed in relation to the Honor Awards Committee.

A motion was made by Mr. George and seconded by Mr. Lane that the Honors Awards Committee review and revise the Twenty-Five Year Award application and take into consideration the Board of Directors wishes, that the word "uninterrupted" be deleted from the requirements for the NATA Twenty-Five Year Award and it should read "Twenty-five years service as an athletic trainer beyond the level of student trainer".

Action: Approved.

XV. Submitted to the Board for approval was the appointment of Mr. Ed Christman, William and Mary College, to the Journal Committee, replacing Mr. Tom Waugh.

A motion was made by Mr. Lewellyn and seconded by Mr. Flentje to accept the above appointment.

Action: Approved.

XVI. The Placement Committee was discussed and pointed out that this committee informs NATA members only of available positions and informs employers of prospective NATA applicants. The Placement Committee does not attempt to find employment for individuals who are not NATA members.

XVII. The Public Relations Committee report, submitted by chairman Richard Malacrea was discussed. Mr. Malacrea received wholehearted support of the Board for the progress he has made with this committee.

XVIII. The Recruitment Committee report was discussed. Chairman Blickenstaff made a request for \$300.00 for printing additional inserts for the brochures.

A motion was made by Mr. Sheridan and seconded by Mr. Kimball to accept the above request.

Action: Approved.

XIX. The Research and Injury Committee was discussed. This committee should be involved with all research and injury data collection involving NATA. Too many times the NATA does the work for other organizations but receives little or no credit, therefore, involvement by the Research and Injury Committee is necessary.

XX. A motion was made by Mr. George and seconded by Mr. Sheridan to accept the resignation of Mr. Gordon Graham as Chairman of the Research and Injury Committee and appoint Mr. Ted Quedenfeld Temple University, as Chairman.

Action: Approved.

XXI. Liaison reports to other organizations were discussed.

XXII. Mr. Sayers "Bud" Miller, chair-

man of the Professional Education Committee appeared before the Board and reported on the activities of his committee. The committee had no curriculums to present to the Board for approval at this meeting; however, 120 universities and colleges have requested materials for consideration in establishing a program. Mr. Miller informed the Board that his committee would begin re-evaluating all approved programs which have been in operation for the past five years.

XXIII. The College of Arts and Science at the University has dropped several courses from their offerings, including athletic training courses. With the elimination of these courses the University of Washington athletic training curriculum does not meet the NATA approval requirements.

A motion was made by Mr. Kimball and seconded by Mr. Lane that the Board of Directors of the NATA drop the approval of the University of Washington athletic training curriculum.

Action: Approved.

XXIV. The Professional Education Committee annual survey conducted by Mr. Phil Donley was discussed. The 1972 study has been published in Volume 8, Number 4, December, 1973, issue of *Athletic Training, The Journal of the National Athletic Trainers' Association*. It was noted that the survey pointed out that there are a total of 2,633 student trainers (not all NATA members) preparing to be athletic trainers.

XXV. The report of the Sub-Committee on Graduate Education was discussed as was the Guidelines for Development of National Athletic Trainers' Association Approved Graduate Level Programs in Athletic Training.

Mr. Crowl made a motion which was seconded by Mr. LaRue to include under Section I-B of the Prerequisites for Acceptance into Graduate Certificate Programs that "the 300 clock hours of laboratory or practical experience required at the graduate level cannot be used to satisfy undergraduate requirements." Also, under Section II-A-2, "The laboratory or practical experience in athletic training requirements be reduced to three (3) semester hours or 300 total clock hours".

Action: Approved.

XXVI. It was recommended to the Board of Directors to approve the appointment of Mr. Al Proctor to the Professional Education Committee.

A motion was made by Mr. George and seconded by Mr. Flentje to accept the above recommendation.

Action: Approved.

XXVII. The continuing education problems and recommendations were discussed in length.

A motion was made by Mr. George and seconded by Mr. Sheridan that the Board of Directors approve the pilot program in definition of continuing education for Certified Athletic Trainers as developed by the Professional Education Committee, with interpretation and evaluation of numbers of required units to be

presented to the Board in June, 1974.

Action: Approved.

XXVIII. The Professional Education Committee requested approval from the Board of Directors to meet June 6 and 7, 1974, prior to the National Convention in Kansas City, Missouri.

A motion was made by Mr. George and seconded by Mr. LaRue to accept the above request.

Action: Approved.

XXIX. The Professional Education Committee presented the following definition of "Athletic Training" to the Board for consideration: "The art and science of prevention and management of injuries at all levels of athletic activity". In addition the Committee developed the following definition of "Athletic Trainer": "One who is the practitioner of athletic training".

A motion was made by Mr. Kimball and seconded by Mr. Sheridan that the Board of Directors approve the Professional Education Committee's definition of "Athletic Training" and "Athletic Trainer".

Action: Approved.

XXX. The Professional Education Committee, with Certification Committee approval, recommended that the Board of Directors approve, effective July 1, 1974, of changing the order of procedure for certification as listed in all official NATA publications to read as follows:

1. Students who have graduated from an approved undergraduate or graduate program.
2. Apprenticeship.
3. Athletic Trainers actively engaged within the profession.
4. Physical Therapy Degree graduate.
5. Special consideration.

A motion was made by Mr. George and seconded by Mr. Smith to accept the above recommendation.

Action: Approved.

XXXI. Mr. Charles James, representing the Foremost Insurance Company, notified the Board that the company is no longer writing liability insurance. Mr. James will continue to search for another carrier.

XXXII. Mr. Bill Manning, Kendall-Bike, reports that the "Twenty-Five Year Award" Lapel pin with a diamond chip will be ready for presentation at the June, 1974 convention.

XXXIII. There was discussion in reference to a "Womens' Athletic Trainer Committee". It was decided that additional guidelines, objectives, and goal investigation was needed in the efforts for the advancement of women in athletic training.

A motion was made by Mr. Sheridan and seconded by Mr. LaRue that President Gunn appoint an ad hoc committee under the chairmanship of Miss Holly Wilson, Indiana State University, with the other members to be appointed by Miss Wilson, for the purpose of developing definite recommendations concerning the advanced copies of their recommendations be presented to the Executive Director and the President before May 15, 1974, and with the personal appearance of the Chairman at the NATA Board Meeting on Saturday, June 8th, 1974.

Action: Approved.

XXXIV. There was discussion to the proposal from Dr. Russell M. Lane, M.D., Amhurst College, concerning membership in the American Col-

lege Health Association for athletic trainers.

A motion was made by Mr. George and seconded by Mr. Kimball to instruct Mr. James Dodson, NATA liaison representative to ACHA, to further investigate the above proposal.

Action: Approved.

XXXV. The equipment managers meeting was discussed and again stated that NATA would not sponsor this group. If they wish to attend the NATA convention it will be necessary to register as a non-member of NATA and pay registration fees as such. The NATA will not be responsible for meeting space for this group at the NATA convention.

XXXVI. There was brief discussion in reference to the "Athletic Care Act" and reported that the bill now has over thirty (30) co-sponsors. It was suggested by Mr. Crowl that Congressman Dellums be invited to come to the convention in June and give a presentation.

XXXVII. The amendment by Congressman Dellums be invited to come to the convention in June and give a presentation.

XXXVII. The amendment by Congressman Edwin Forsythe, New Jersey, to the House of Representatives Bill Number 69 was discussed. Information in reference to this amendment is as follows:

TO: Members of the Education and Labor Committee

FROM: Edwin B. Forsythe

DATE: October 29, 1973

RE: H.R. 69

There will be millions of youngsters participating in interscholastic athletics this year. A significant number of these young men and women will sustain some form of an injury. Preliminary studies based on spot surveys suggest that as many as 40,000 knee injuries requiring surgery are sustained by scholastic athletes each year. Other preliminary studies estimate that only one quarter of these 40,000 would have needed surgery if the involved schools had a qualified athletic trainer available to administer the proper specialized care that any athlete needs.

It seems that the young athlete has too often been the victim of specialized neglect. Too many youngsters have had untended cuts and blisters turn into infections. Too many young athletes have had a muscle tear treated as a simple sprain by well meaning but untrained student "trainers".

The American Medical Association estimates that approximately 50% of the 1.2 million young men who play high school football will sustain some form of injury this year. Many of these injuries will be recurring ones because of the lack of proper on-the-spot and long term medical care. According to the athletic trainer at Wake Forest University, "Most of the injuries you get in college can be traced directly to old high school injuries."

Despite these staggering injury statistics, there is a striking absence of certified athletic trainers in our nation's schools. Of the nearly 15,000 high schools in the United States with football programs, it is estimated that only about 100 have full time certified athletic trainers. In the entire Washington Metropolitan area there are only eight athletic

trainers and six of them are employed by area colleges.

The Texas State legislature has recognized the seriousness of scholastic athletic injuries in that state and in 1971 enacted legislation requiring adequate medical care for every schoolboy athlete. The result is that almost every Texas high school has or is in the process of acquiring a qualified athletic trainer.

The few statistics I have presented thus far point to the existence of a problem of some magnitude. The problem stems in great measure from the lack of certified athletic trainers and training facilities in our nation's schools. While legislation has been introduced to require each scholastic institution with an athletic program to employ a full time trainer, I do not believe that there are sufficient statistics presently available for this committee to make a wise decision. The data indicates the presence of a severe problem, but I cannot delineate the precise scope of the national problem.

Therefore, at the appropriate time during tomorrow's markup of H.R. 69 I intend to offer an amendment directing the Secretary of Health, Education and Welfare to undertake a study to determine the exact extent of the incidence of injuries in our nation's scholastic athletic programs. It is my hope that the Secretary's report will provide the basis with which we can determine the precise scope of the problem and fashion an appropriate solution.

Enclosed is a copy of my amendment and excerpts of letters supporting the view that the problem of scholastic athletic injuries is a serious one meriting the attention of this committee.

There is a Need

"How safe are school sports? One look at a prep injury survey is enough to convince you that something must be done."

Johnny Futch,
Daily Sports Editor,

Athens Georgia Banner-Herald

"I agree 100% with your thinking that too many schools and colleges do not follow sound safety practices. If every school had a full time athletic trainer it would certainly be one of the great steps forward in preventing athletic injuries."

O. Charles Olsen,
O. Charles Olsen, J.D.,
Spokane, Washington

"The necessity of establishing athletic trainers in all of our county high schools in an attempt to upgrade our treatment of the vast number of athletic injuries that are occurring at the high school level is clear."

Gerald A. Engh, M.D.
Arlington, Va.

"We happen to be one of the very fortunate few that has an athletic trainer (M.S. degree from Indiana University in Athletic Training), and I can assure you that he is worth his weight in gold-and he weighs about 250 pounds. Heaven knows athletic trainers are needed. Most coaches do not know enough about athletic training plus the fact they do not have the time to do it, in addition to their coaching."

Orville E. Johnson,
Athletic Director
West High School

Bremerton, Washington
"It is estimated that around one-

half of the nation's football players from the high school through professional levels, suffer some sort of injury every year. The trouble is that high quality medical care often is lacking at the high school level."

Editorial, The Daily Progress
Charlottesville, Va.

"We at the University see many athletic injuries which could have been prevented if only someone with a knowledge of athletic injuries could have been with the school system."

Joe Gieck,

Dept. of Interscholastic Athletics,
University of Virginia

"I would like to strongly encourage the efforts of Congressman Dellums toward the enactment of the Athletic Care Act of 1973."

Anne E. Atwater, Ph.D.
Associate Professor and Coordinator of the Graduate Program in Physical Education for Women,
University of Arizona

"The presence of athletic trainers is essential to the well being of our athletes."

William Busit,
Director of Athletics
Hudson High School,
Hudson, Mass.

and Secretary of the Mass.
Athletic Director's Association

"Last fall, a young high school football player in a nearby state suffered a severe spinal injury in an attempt to make a tackle. His coaches and teammates had no idea of the extent of the injury. There was no qualified athletic trainer present to tell them the boy should not be moved. So they carried him off the field. He was paralyzed, and died less than a month later."

Bill Millsaps,
Associate Sports Editor
Richmond Times Dispatch

Amendment to Committee Print of H.R. 69 Offered by Mr. Forsythe

Page 82, immediately after line 19, insert the following new title:

TITLE VIII—STUDY OF NEED FOR ATHLETIC TRAINERS IN SECONDARY SCHOOLS AND INSTITUTIONS OF HIGHER EDUCATION

Sec. 801. (a) The Secretary of Health, Education and Welfare (hereinafter referred to as the "Secretary") a full and complete investigation and study to determine--

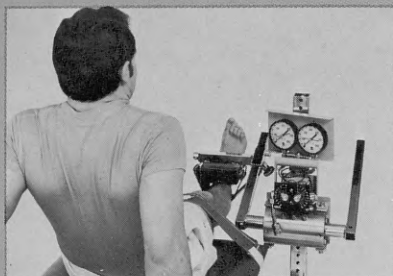
(1) the number of athletic injuries and deaths occurring in athletic competition between schools and in any practice session for such competition, for the 12-month period beginning 60 days after the date of enactment of this Act;

(2) the number of athletic injuries and deaths occurring (for the 12-month period under paragraph (1)) (a) at each school with an athletic trainer, at the time of such death or injury, who is certified by the National Athletic Trainers Association (hereinafter) in this section referred to as "certified trainer") and (b) at each school with an athletic trainer, at the time of such death or injury, who is not certified by the Association (hereinafter in this section referred to as "non-certified trainer");

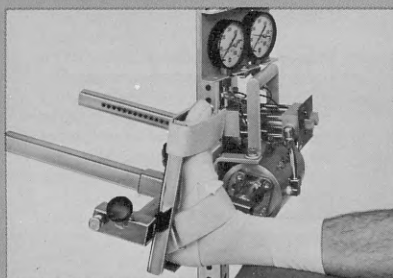
(3) the number of schools which have a certified trainer during the 12 month period under paragraph (1);

(4) the number of schools which have student and nonstudent non-

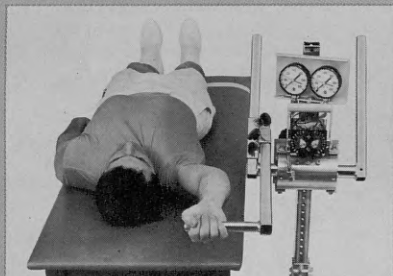
Fast, Safe, Complete Rehabilitation of Strength, Power and Endurance...



Reciprocal Knee extension/flexion



Reciprocal ankle plantar/dorsiflexion



Reciprocal shoulder extension/flexion
(or abduction/adduction)

FAST because of the efficiency and intensity of reciprocal Iso-kinetic loading.

SAFE because accommodating resistance never overstresses.

COMPLETE because the wide range of controlled speeds provides optimal power and endurance training in addition to the most effective strength building method known.

ORTHOTRON has proven itself in Pro and Collegiate Training Rooms, Sports Medicine Clinics, Hospitals and Rehabilitation Centers.

Call or write

LUMEX Inc.
CYBEX DIVISION

Sports Medicine Dept.
100 Spence Street
Bay Shore, New York 11706
(516) 273-2200

certified trainers during the 12 month period under paragraph (1);

(5) the period of time required before a certified trainer could reasonably be available for all of the schools which have only a noncertified trainer pursuant to paragraph (4);

(6) the estimated cost to the schools included in paragraph (5) for having a certified trainer for each of the 3 fiscal years beginning with the first full fiscal year immediately following the period of time under paragraph (5); and

(7) appropriate certification procedures for athletic trainers for schools, such procedures to be formulated in consultation with appropriate professional organizations (including the National Athletic Trainers Association).

(b) Within 50 days after the date of enactment of this Act, the Secretary shall request each school to maintain appropriate records to enable it to compile information under paragraphs (1)-(4) of subsection (a) and shall request such school to submit such information to the Secretary immediately after the 12 month period beginning 60 days after the date of enactment of this Act. Not later than 18 months after the date of enactment of this Act, the Secretary shall make a report to the Congress on the study required by subsection (a), together with such recommendations as he may deem appropriate. In such report, all information required under each paragraph of subsection (a) shall be stated separately for the two groups of schools under clauses (1) and (2) of subsection (c), except that the information shall also be stated separately (and shall be excluded from the group under clause (2) for institutions of higher education which provide either of the two year programs included under section 901(e) (3) of the Elementary and Secondary Education Act of 1965.

(c) For the purposes of this section, the term "school" means (1) any secondary school or (2) any institution of higher education, as defined in section 901 of the Elementary and Secondary Education Act of 1965.

Sec. 802 for the purposes of this Title there is authorized to be appropriated the sum of \$75,000.

XXXVIII. Mr. Fred Hoover, National Convention Chairman, appeared before the Board of Directors to report on the progress of the convention in Kansas City and also in future years. Mr. Hoover also reported that there would be a pressroom and the Public Relations Committee will be in charge of this responsibility.

Because of hotel rates and convention rates, it will be necessary to begin the National Convention on Monday, June 12, 1978, instead of

the traditional Sunday.

Future convention sites and hotels will be discussed in June, 1974.

XXXIX. The Board of Directors was asked to nominate two persons as candidates for the office of President of NATA. The candidates were Frank George, Joe Gieck, Roland LaRue, Sayers Miller, Fran Sheridan and Richard Vanderwant. Eddie Lane had submitted his name earlier as a candidate but requested that it be removed from the list of candidates during the Board meeting.

President Gunn announced, following a secret ballot, that the Board of Directors nominated Mr. Frank George, Brown University and Mr. Sayers "Bud" Miller, University of Washington as candidates for the office of President of NATA.

XL. The Olympic Selection Committee was discussed and the name changed to the International Games Trainer Nomination Committee. A motion was made by Mr. Sheridan and seconded by Mr. LaRue to accept the above change and appoint Mr. Charles Medlar as Chairman.

Action: Approved.

XLI. The dates of the Olympic Games are as follows:

Pan American Games

Sao Paulo, Brazil
May 18 to 31, 1975

Winter Olympic Games

Innsbruck, Austria
February 4 to 15, 1976

Summer Olympic Games

Montreal, Canada
July 16 to August 1, 1976

XLII. Mr. George submitted the following revised number of certified athletic trainers to be submitted to the NATA International Games Trainer Committee, based on one (1) name for each sixteen (16) certified members from each district:

District 1 — 6
District 2 — 11
District 3 — 4
District 4 — 10
District 5 — 3
District 6 — 5
District 7 — 2
District 8 — 5
District 9 — 3
District 10 — 2

These figures also include women trainers from each district.

XLIII. It was requested that Mr. Ted Quedenfeld, Chairman of the NATA Research and Injury Committee, be the official representative for the NATA to Dr. Kenneth Clarke's Injury Surveillance Systems Committee, and Mr. William E. Newell be an advisory ex-officio representative on the same committee.

Action: Approved.

XLIV. The Placement Committee requested \$250.00 for the development and publishing of a brochure.

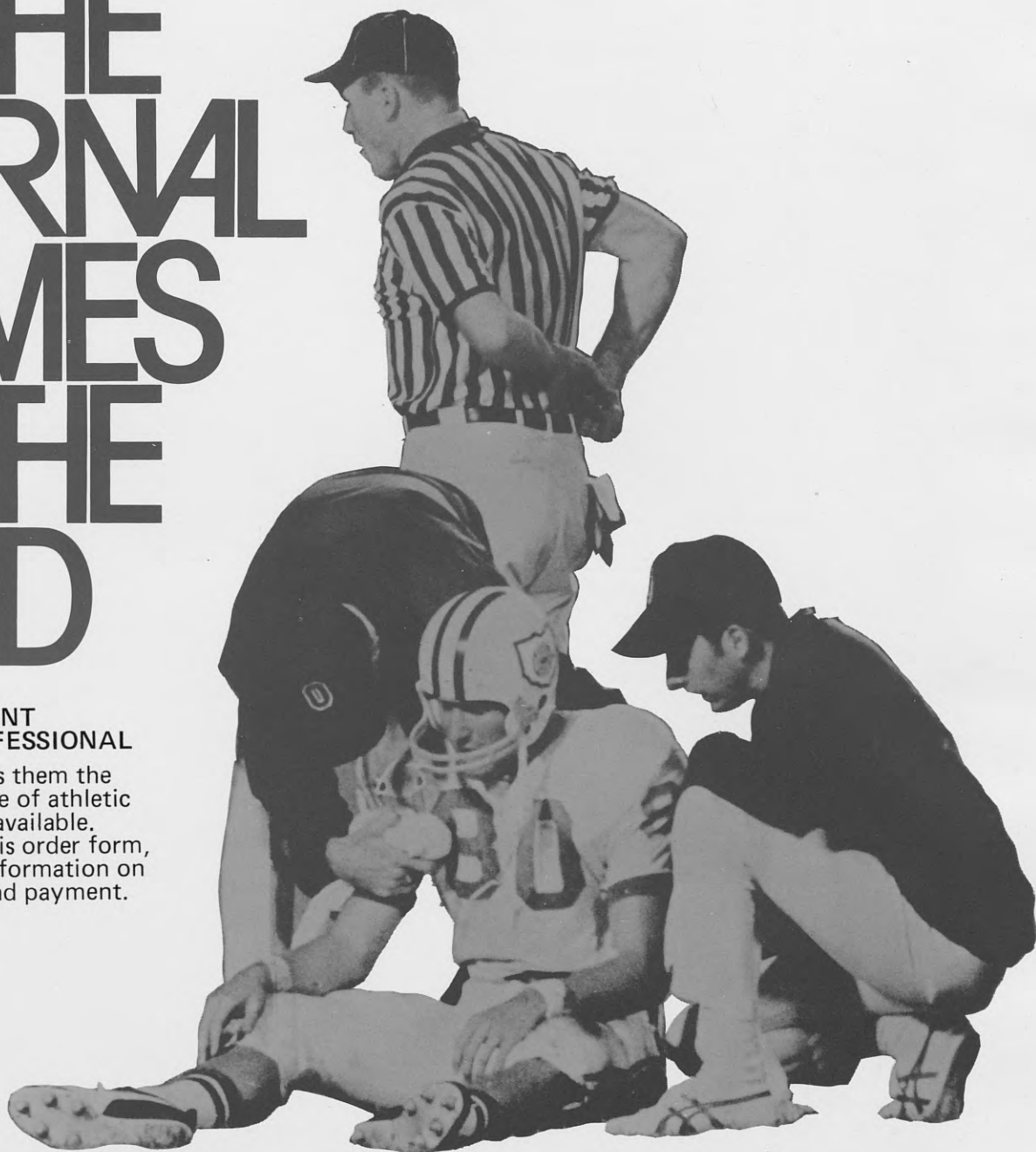
Action: Approved.

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Barbecue**

INVITATION

Athletic Trainers, Physicians, students, wives and families are cordially invited to join the Cramer Chuck Wagon on Sunday afternoon. Transportation to this gathering will be furnished from the Crown Center Hotel. Come Early—and its casual dress as usual—Don't be afraid of the weather it may be held indoors or out!



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