

# ATHLETIC TRAINING

THE JOURNAL OF THE NATIONAL ATHLETIC  
TRAINERS ASSOCIATION, INC.



VOLUME 20  
NUMBER 3  
FALL 1985

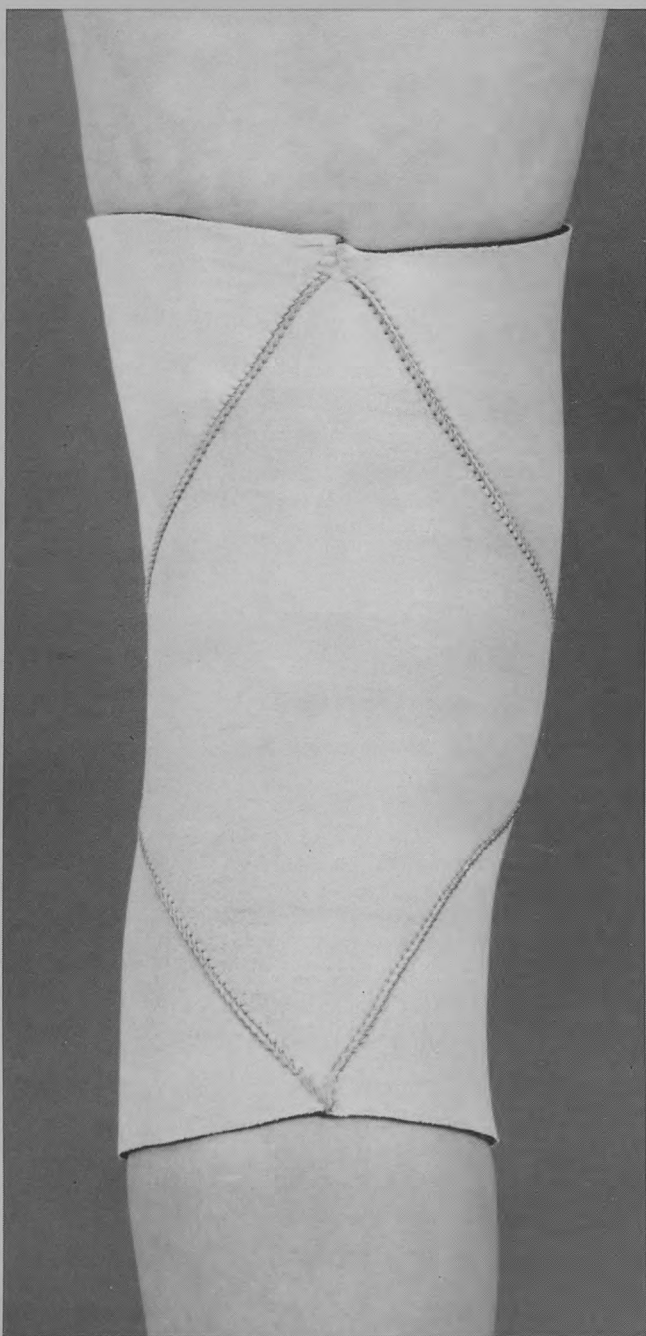


## IN THIS ISSUE:

- Introducing Athletic Training to the American Public
- Proceedings of Annual Meeting
- How To Acquire An Athletic Trainer On The High School Level
- Wanted: Athletic Trainer for Special Olympic Athletes
- New Department: Committee Forum



# WHO REDESIGNED THE KNEE SLEEVE TO ELIMINATE SEAM BITE?



## PRO.

Only PRO offers you three choices in Neoprene knee sleeve seam construction . . . the standard style, the patented Dr. "M" family, and now the dramatic new Diamond Back construction—so unique it's patented too!

The Diamond Back concept makes PRO sleeves the most comfortable ever developed. Geometrically opposed seams provide a bent knee configuration while eliminating bothersome popliteal irritation. The comfortable controlled tension fit makes it ideal for all day wear.

The choice is yours—when popliteal irritation is a concern, turn to PRO for a wide selection of sleeves to choose from:

- the 100B & 100B Modified Deluxe Knee Sleeves
- The 100 Deluxe Knee Sleeve
- The Knee Hinged Stabilizing Brace
- The Dr. "M" Family of Patellar Braces

And now the 130 Diamond Back Knee Sleeve . . . one more innovation from PRO.

Only PRO gives you more choices to narrow your choices, so choose a PRO.

To order or to get our 1985 catalog of all 48 Neoprene products, write or call toll free 1-800/523-5611 (9 to 5 Eastern Time).



**PRO Orthopedic Devices, Inc.**

P.O. Box 1 • King of Prussia, PA 19406 • 215/265-3333



# The National Athletic Trainers Association, Inc.

**President**  
Bobby Barton  
Eastern Kentucky University  
Athletic Department  
Richmond, Kentucky 40475

## BOARD OF DIRECTORS

Jack Baynes  
Northeastern University  
Boston, Massachusetts 02115

E. Hal Biggs  
Bucknell University  
Lewisburg, Pennsylvania 17837

Andy Clawson  
The Citadel  
Charleston, South Carolina 29409

Gordon Graham  
Mankato State University  
Mankato, Minnesota 56001

Denis Isrow  
North Dakota State University  
Fargo, North Dakota 58102

Paul Zeek  
Lamar University  
Beaumont, Texas 77710

Dan A. Libera  
University of Northern Colorado  
Greeley, Colorado 80639

Janice Daniels  
1525 Woodland Oaks Way  
Sacramento, California 95833

Jerry Rhea  
Atlanta Falcons  
Suwanee, GA 30174

Mark Smaha  
Washington State University  
Pullman, Washington 99164



## District

\* \* \* 1 \* \* \*

\* \* \* 2 \* \* \*

\* \* \* 3 \* \* \*

\* \* \* 4 \* \* \*

\* \* \* 5 \* \* \*

\* \* \* 6 \* \* \*

\* \* \* 7 \* \* \*

\* \* \* 8 \* \* \*

\* \* \* 9 \* \* \*

\* \* \* 10 \* \* \*

## Administrative Assistant

Mary Edgerley  
NATA National Office  
Greenville, North Carolina 27834

**Executive Director**  
Otho Davis  
Philadelphia Eagles  
Veterans Stadium  
Philadelphia, Pennsylvania 19148

## DISTRICT SECRETARIES

Christopher Troyanos  
Babson College  
Wellesley, Massachusetts 02157

Donald Lowe  
Syracuse University  
Syracuse, New York 13210

Terry O'Brien  
Towson State University  
Towson, Maryland

Patricia Troesch  
Miami University  
Oxford, Ohio 45056

Jerry Weber  
University of Nebraska  
Lincoln, Nebraska 68588

James Dodson  
Midland High School  
Midland, Texas 79701

Mike Nesbitt  
Northern Arizona University  
Flagstaff, Arizona 86001

Ed Ferreira  
Fresno State University  
Fresno, California 93740

Sherry Buickel Sutton  
University of Florida  
Gainesville, Florida 32604

Dennis Sealey  
University of Washington  
Seattle, Washington 98195

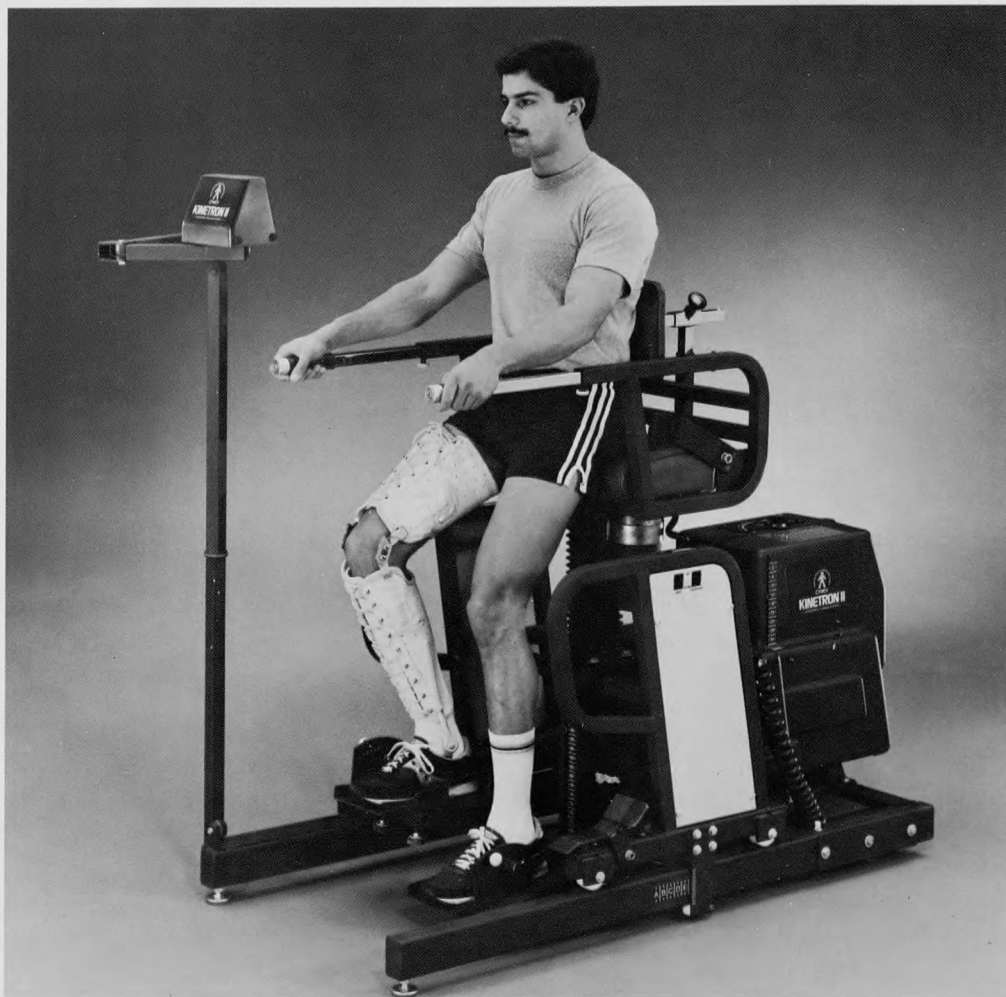
## COMMITTEE CHAIRMEN

**Audio Visual Aids** — Jerry Nowesnick  
**Career Information & Services** — Charles Demers  
**Certification** — Paul Grace  
**Continuing Education** — Jim Gallaspy  
**Drug Education** — John Wells  
**Ethics** — Chris Patrick  
**Grants & Scholarships** — Frank George  
**History & Archives** — Mike O'Shea  
**Honor Awards** — George Sullivan  
**International Games** — Troy Young

**Journal** — Steve Yates  
**Licensure** — Ed Crowley  
**Membership** — Bruce Melin  
**Memorial Resolutions** — Dennis Helwig  
**National Convention** — Fred Hoover  
**Placement** — Craig Sink  
**Professional Education** — Gary Delforge  
**Public Relations** —  
**Publications** —  
**Research & Injury** — John Powell



# KINETRON® II gets your injured athletes back into action faster



Now, post-surgical lower limb rehabilitation and fast functional speed exercise can begin earlier with KINETRON II.

## **Controlled Weightbearing and Range of Motion**

KINETRON II exercise can begin as soon as some weightbearing is permitted. A prescribed percentage of weightbearing is set by the clinician and easily maintained by the patient. Where flexion and extension must be limited, KINETRON II adjustments give the clinician complete control over hip, knee and ankle range of motion.

## **Controlled Speed**

KINETRON II resistance is Isokinetic — the speed of motion is constant and controlled. This allows the patient to develop fully supported weightbearing force,

and ultimately to exercise at fast functional speeds. KINETRON II exercise improves power capacity as the patient develops force more quickly at higher speeds.

## **End-Loaded Accommodating Resistance**

Injuries such as anterior cruciate ligament and Achilles tendon tears, or patellofemoral problems, are effectively rehabilitated with KINETRON II exercise. The end-loaded compressive resistance pattern maintains bone density and provides functional exercise. Resistance accommodates perfectly to patient force output, virtually eliminating the risk of overstressing damaged structures while safely restoring total leg strength.

## **High-Strength Construction**

The welded steel frame construction and the Isokinetic resistance mechanism of KINETRON II are specifically designed to withstand the high forces produced by repeated intense exercise bouts. The high-force gauge provides readouts of up to 350 lbs. and gives motivational feedback of improved performance.

KINETRON II . . . for the only Isokinetic end-loaded resistance exercise that develops total leg strength and power capacity at any level of prescribed weightbearing.

CYBEX Div. of Lumex, 2100 Smithtown Ave., Ronkonkoma, NY 11779

- ☐ Please send more KINETRON II information  
☐ Please have Sales Representative call me

Name \_\_\_\_\_ Title \_\_\_\_\_  
Facility \_\_\_\_\_  
Bus. Phone (      ) \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_ Zip \_\_\_\_\_

AT 3/85



**CYBEX** Division of Lumex Inc.  
2100 Smithtown Ave., Ronkonkoma, NY 11779 • (516) 585-9000





**Editor-in-Chief  
and Journal Committee Chairman**  
Steve Yates  
Wake Forest University  
Winston-Salem, North Carolina 27109

**Editor**  
Don Kaverman  
Ferris State College  
Big Rapids, Michigan 49307

**Journal Committee**  
Dennis Aten  
Eastern Illinois University  
Charleston, Illinois 61920

Deloss Brubaker  
United States Sports Academy  
Mobile, Alabama 36608

Phil Callicutt  
Federal Law Enforcement Training Center  
Glynco, Georgia 31520

Jeff Fair  
Oklahoma State University  
Stillwater Oklahoma 74074

Phil Mateja  
University of Maine  
Orono, Maine 04469

Barrie Steele  
Washington State University  
Pullman, Washington 99164

John Wells  
UNC-Asheville  
Asheville, North Carolina 28804

Dave Yeo  
Montgomery County Community College  
Blue Bell, Pennsylvania 19422

**Editorial Board**  
Ken Knight  
Dan Libera  
Bob Moore  
Jim Rankin  
Sue Halstead Shapiro  
Mike Sherman

**Business Manager**  
Barbara Manning  
1001 East Fourth Street  
Greenville, North Carolina 27834  
National Office: 919/752-1725

*Athletic Training* is published in the Spring, Summer, Fall and Winter by the National Athletic Trainers Association, Inc., a non-profit organization. Second class postage paid at Greenville, NC 27834, and additional mailing offices.

The views and opinions in *Athletic Training* are those of the authors and not necessarily of the National Athletic Trainers Association, Inc.

Non-member subscriptions are available at \$20.00 per year and may be obtained by writing to Athletic Training, 1001 East 4th Street, Greenville, NC 27834.

CHANGE OF ADDRESS may be made by sending old address and new address with zip code number. Instructions should state whether change is temporary or permanent. Allow thirty days for changeover. Address changes should be sent to: 1001 East 4th Street Greenville, NC 27834.

ADVERTISING - Although advertising is screened, acceptance of the advertisement does not necessarily imply NATA endorsement of the product or the views expressed. Advertising rates available on request. Contact *Athletic Training*, 1001 East 4th Street, Greenville, NC 27834 (Telephone 919-752-1725).

Copyright © 1985 by the National Athletic Trainers Association, Inc. (ISSN 0160-8320) All Rights Reserved. Printed by Hunter Publishing Company, Winston-Salem, North Carolina 27103. Typesetting and design by Caravan Graphics, Greenville, North Carolina 27834.

# ATHLETIC TRAINING

THE JOURNAL OF  
THE NATIONAL ATHLETIC TRAINERS ASSOCIATION, INC.  
**Volume 20, Number 3, Fall 1985**

## Features

- 195** CEU QUIZ  
Schering Symposium  
Considerations of Anatomy,  
Physiology and Pathology  
of Sports Related Ocular Injuries  
JOHN B. JEFFERS

- 199** How to Acquire an Athletic  
Trainer on the High  
High School Level  
PHILLIP HOSSLER

- 204** Wanted: Athletic Trainers for  
Special Olympic Athletes  
BRENT C. MANGUS  
RON FRENCH

- 206** Free Weights: A Review  
Supporting Their Use in  
Training and Rehabilitation  
LARRY J. NOSSE  
GARY R. HUNTER

- 210** Standards and Norms of Fitness  
and Flexibility in the  
High School Athlete  
STEPHEN C. HUNTER  
WILLIAM C. ETCHISON  
BRIAN C. HALPERN

## Departments

- |                                   |                                   |
|-----------------------------------|-----------------------------------|
| <b>246 Abstracts</b>              | <b>255 Guide to Contributors</b>  |
| <b>248 Announcements</b>          | <b>186 Letters to the Editor</b>  |
| <b>221 Association Activities</b> | <b>235 Memorial</b>               |
| <b>245 Book Reviews</b>           | <b>220 National Office Notes</b>  |
| <b>226 Calendar of Events</b>     | <b>230 Potpourri</b>              |
| <b>250 Committee Forum</b>        | <b>187 President's Message</b>    |
| <b>244 Editorial</b>              | <b>238 Student Trainer Corner</b> |

## In This Issue

- |            |   |
|------------|---|
| <b>188</b> | <b>Presidential Candidates</b>                                  |
| <b>190</b> | <b>Proceedings of the Annual Business Meeting</b>               |
| <b>193</b> | <b>Introducing Athletic Training to<br/>the American Public</b> |
| <b>213</b> | <b>Annual Survey of Football Injury Research</b>                |
| <b>256</b> | <b>Reducing a Trainer's Liability</b>                           |
| <b>260</b> | <b>Proceedings of the Board of Directors</b>                    |



# Editor's Comments



Steve Yates, ATC, M.Ed.  
Wake Forest University  
Winston-Salem, NC 27109

## New Editor

It is a pleasure to announce Mr. Don Kaverman, Head Athletic Trainer, Ferris State College, as the new Editor of the Journal. Please help make his job easier by following the "Guide to the Contributors" found in the back section of the Journal, and in every issue.

## San Antonio

It was indeed a pleasure seeing and visiting with all my colleagues in San Antonio. This city certainly extended itself for the National Athletic Trainers Association and is to be applauded for their fine hospitality.

## Thanks, Mr. Detty . . .

On my recent visit to the National Office I was very much impressed with the painting of Mr. William E. "Pinky" Newell in the main hall. Mr. G. E. "Moose" Detty is to be commended for his thoughtfulness and generosity in having this painting commissioned for our Association.

## New Section . . .

Beginning in this Journal, a new committee section will appear to aid the membership with information pertaining to the various committees. See COMMITTEE FORUM beginning on page 250.

## Welcome . . .

I would like to welcome to the Journal Committee Mr. Barrie Steele, Assistant Athletic Trainer at Washington State University. Barrie will be in charge of the *New Products* and *Tips From the Field* sections.

## Protective Cover . . .

By now, you should have noticed the new protective cover for the Journal. Hopefully this will protect and maintain your Journal in a condition acceptable for your personal library.

## Closing . . .

Thank you again for all the comments and contributions to your Journal. There have been some "bugs" to work out over the past year, but I feel we are progressing with new ideas in each issue.

I trust all members will take an active role in our organization and continue your fine contributions to the Journal.

Have a successful and healthy fall season.

SY(SSSA)  
©

# Letter to the Editor

Dear Steve:

I have just spent the past two days with John LeGear, the Public Relations Director of NATA. John has been in Albuquerque doing a story on the High School Training Program. During his stay here we have visited quite extensively about the corporate sponsorship for NATA.

You may be aware of the fact that I am a charter member and have served on the Board of Directors, as well as being the Chairman of the Board at one time.

I do have an understanding as to the inner workings of the Association. I know that in order for our Association to achieve the goals our officers strive to reach we need money. This could be achieved by increasing dues, or taking the route the Directors chose, that of the corporate sponsorship.

As a member I did have some reservations about the route the Board had chosen. I can assure the membership if they had the opportunity that I have had the last two days visiting with Mr. LeGear, any doubts about the program would be alleviated.

I am sure that, with time, all of the membership will eventually accept and approve of this program. Any misgivings that have arisen, in my opinion, have come about from a lack of communication about the program.

To the membership I say "Please be patient", and in due time I feel that you will feel the same as I do about the route we are taking.

In closing I congratulate Otho, Bobby and the entire Board for the brave steps they took to establish this program.

Sincerely,

L. F. "Tow" Diehm  
Head Athletic Trainer  
The University of New Mexico

*Support Our  
Advertisers —  
They Support You . . .*



# President's Message



Dear Members:

It is with extreme pleasure that I announce Quaker Oats/Gatorade as the first corporate sponsor of the NATA, Inc. Those of us fortunate enough to attend the San Antonio meeting were able to view the evidence of our first public education/public relations program that is explained further in this issue.

In addition to Fred Hoover and the entire Alamo Athletic Trainers Association, I would like to publicly thank Mission Pharmacal Company, the Denver Broncos, the Seattle Seahawks, Johnson & Johnson and the National Football League for an outstanding meeting in San Antonio.

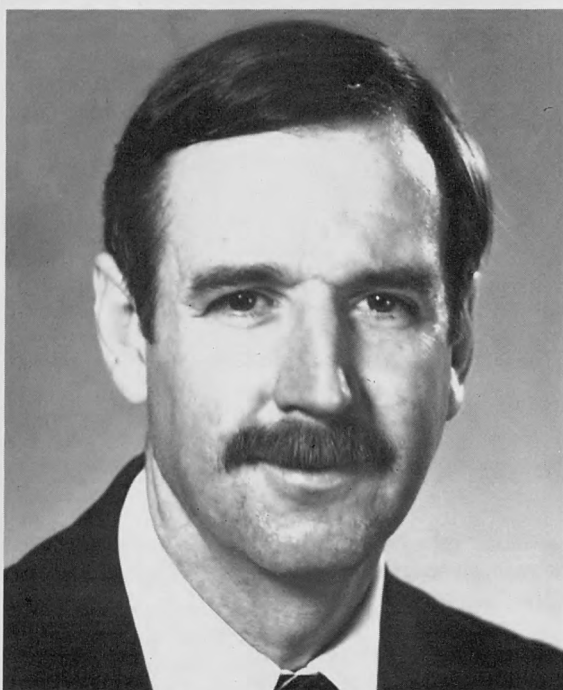
I have had the opportunity of attending District meetings in District 3, 6, 8 and 9 in recent months, each District has asked questions regarding the final actions of the Board of Directors regarding the athletic training major. No new action has been taken during the past academic year. Previously approved education programs that were reevaluated in 1985 had the option of being evaluated by either 1981 or 1983 guidelines. All new education programs seeking initial approval must now be a major in athletic training or what the Professional Education and the university determine to be a major equivalent. Dr. Gary Delforge will be more than happy to discuss your particular program. The athletic training internship remains a viable and popular route to certification. The NCHCA not only appreciated our internship route, it actually requires more than one route to certification. There is absolutely no intention on the part of your present Executive Director or District Director to phase out internship programs. Certain states have had particular difficulty separating state and national guidelines. It is very important that all athletic trainers specify about being specific in discussing certification programs at the national and state levels. Obviously it is possible to be certified at either level and it is imperative that our members do not misrepresent their certification status.

Our membership should be proud of our presidential candidates Jack Baynes of District One and Jerry Rhea of District Nine. They are both outstanding professionals, very worthy of leading our profession in a positive direction. Please take time to review the enclosed information regarding the presidential election. All certified members will be receiving ballots within the next few weeks. Please take time to participate in this important organizational process of our Association. The quality of these two candidates is indicative of the continuous upgrading of our profession.

Respectfully,

A handwritten signature in cursive script that reads "Bobby".

Bobby Barton, ATC



**JACK BAYNES**

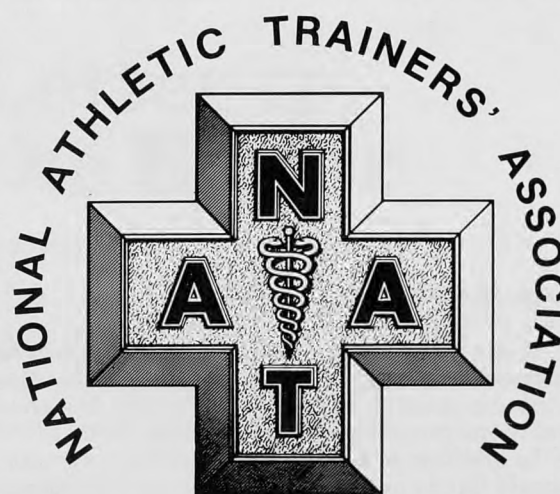
Jack Baynes has been the Head Athletic Trainer at Northeastern University in Boston, Massachusetts since 1972. He graduated from Mansfield Junior Senior High School, Mansfield, Pennsylvania in 1962. He then received his Bachelor of Science in Health and Physical Education from East Stroudsburg State College, East Stroudsburg, Pennsylvania in 1966. He married the former Connie Trask of Mansfield, Pennsylvania on April 9, 1966 and upon graduation he and his wife volunteered for a two year service with the Peace Corps in El Salvador, Central America.

Following his two years of service in El Salvador Mr. Baynes returned to Mansfield, Pennsylvania in 1968 to teach Physical Education at his high school alma mater. In addition to his teaching duties he served as assistant soccer coach, assistant track and field coach, and acted as volunteer athletic trainer for the school's various teams. In 1970 he entered a full time graduate program in Physical Education with an Internship in Athletic Training at the University of Arizona. He was Head Athletic Trainer at Palo Verde High School, Tucson, Arizona as part of this internship experience. He completed his Master of Education degree in 1972.

Mr. Baynes began his full time Athletic Training career in August 1971 when he joined the Athletic Training staff at Northeastern University as an Assistant Athletic Trainer. In July 1972 he was promoted to the position of Head Athletic Trainer, a position which he continues to hold today.

In 1973 Jack was selected to be a guest lecturer for the American Alliance for Health, Physical Education, Recreation and Dance and for the Mexican government's National Sports Confederation in a mutually sponsored program for coaches and physical educators of Mexico. In 1975 he was selected as a staff trainer for the Pan American Games which were held in Mexico

## PRESIDENTIAL CANDIDATES



\* 1950 \*

City, Mexico. His primary assignment with the Pan American Team was with the Track and Field Team. In 1980 he served as a Staff Athletic Therapist for the host sportsmedicine team selected to serve athletes participating in the Lake Placid Winter Olympics, Lake Placid, New York. In 1984 at the annual meeting of the Eastern Athletic Trainers Association he was presented with the Cramer Award for outstanding contributions to the profession of Athletic Training.

Jack has a long standing record of service to the National Athletic Trainers' Association, Inc., and the Eastern Athletic Trainers Association. In 1976 he acted as Banquet Chairman for the national convention of the NATA which was held in Boston. In 1978 he served as a committee member on the EATA Constitution and By Laws Committee and from 1979 - 1980 he was the District One representative to the NATA Memorial Resolutions Committee. In 1980 he was elected District Director for District One and was reelected to a second three year term in 1983. He has served as a member of the Executive Council of the Eastern Athletic Trainers Association since 1980 and he served as Vice President of NATA, Inc. since June of 1984.

Jack is a charter member of Athletic Trainers of Massachusetts, a group which achieved state licensure in 1984. He has been closely involved with Northeastern University's Athletic Training Curriculum and has taught courses in Athletic Training to undergraduate and graduate students at the University. During his tenure as Head Trainer at Northeastern, Jack has been a popular speaker in the New England area regarding current issues facing Athletic Training and the Athletic Training profession. Jack has been a Certified Member of both NATA and EATA since March 1973.

Jack and his wife Connie currently live in Hingham, Massachusetts with their two children Alan and Sharon.



# NATIONAL ATHLETIC TRAINERS ASSOCIATION, INC.



## JERRY RHEA

A member of the National Athletic Trainers Association Hall of Fame, Jerry Rhea has been in the training profession over 25 years. During that time, he has served on numerous NATA committees and has become a frequently requested convention and clinic speaker.

A native of Ennis, Texas, Rhea began his training career while earning his degree in Physical Education at Texas A&M in 1958. He has spent the past 16 years as head trainer of the Atlanta Falcons. Prior to his long service to the Falcons, Rhea worked two years as assistant trainer for the Los Angeles Rams. The first eight years of his career were devoted to the Odessa schools where he was head trainer.

Highlighting a career of such length is never easy. Trying to pick the high spots of Rhea's career from its beginning as Publicity Director of District VI in 1960 through his selection to the NATA Hall of Fame last June is virtually impossible.

On the high school level, Rhea worked as a trainer for the North All Stars in the Texas High School All Star games. As a professional trainer, Rhea has worked the National Football League Pro Bowls in 1968, 1969, 1970, and 1981 as well as the Senior Bowl in 1978.

As an office holder, possibly no member of NATA has been more active. In 1984, he served as Director of District IX after being President of the District in 1983. He was Chairman of the Georgia Board of Athletic Trainers from 1978-1981 and President of the Professional Football Association of Trainers from 1980-1983. In 1973, he served as Co-Chairman for the NATA Annual Convention in Atlanta, and while serving as head trainer of Odessa High Schools, Rhea was District VI President (1962), Vice President (1961), and Secretary (1964-1966).

In recent years, Rhea has excelled as a convention speaker, not only in the United States but abroad as well. He was a speaker at the NATA Convention in Houston (1968), St. Louis (1978), Fort Worth (1981) and Nashville (1984), as well as traveling to Australia in 1981 as tour lecturer in New South Wales. Seven times

he has been a guest lecturer at the Dogwood Sports Medicine Clinics in Atlanta.

Rhea has also been among the more progressive innovators in the training profession. He was instrumental in the move by the Georgia Board of Medical Licensure to certify trainers in Georgia, making it only the second state to pass such a code. He was also a contributing author of two chapters in the *Rehabilitation of the Injured Knee*, published in 1983.

With such a background, it is not surprising that honors have come Rhea's way. As a high school trainer, he received the "Cap Harding" Award as the outstanding trainer in District VI in 1963 and 1965. Twice, 1979 and 1982, he was named Professional Trainer of the Year by NATA. In 1985, recognition culminated for Rhea with his selection to the NATA Hall of Fame by his peers.

While Rhea has made major contributions to his field, he has also devoted time to areas that were not "marquee" events. He has served with the NATA Injury Committee (1964) and Recruitment Committee (1964). In addition to speaking at the NATA National Conventions, he has taken time to lecture groups such as the Nevada Coaching Clinic, the Yuma, Arizona Schools Sports Medicine Seminar, the National Podiatric Convention, the Georgia Tech Athletic Trainers Symposium, the American College Health Association, the West Virginia Sports Medicine Symposium, and the Southeast Athletic Trainers Convention.

Most important, Rhea has served well in his day to day responsibilities with the Atlanta Falcons. He began his Falcon career under Norm Van Brocklin, and has also worked for head coaches Marion Campbell, Lee-man Bennett, and Dan Henning. In every case, he has met the team and staff physical needs as well as serving in the unofficial training capacities of friend and advisor to the many athletes that pass through his training room. On all stops, Rhea has given his field integrity and professionalism.

Rhea is married to the former Beverly Alford of Ennis, Texas and they have one son, John.

# PROCEEDINGS of the NATIONAL ATHLETIC TRAINERS' ASSOCIATION, INC.

June 9, 1985  
Marriott Hotel  
San Antonio, Texas  
ANNUAL BUSINESS MEETING

SUNDAY MORNING SESSION  
June 9, 1985

The Thirty-Seventh Annual Business Meeting of the National Athletic Trainers' Association, Incorporated, was convened in the Convention Center, San Antonio, Texas, at eleven-ten o'clock a.m., Mr. Bobby Barton, President, presiding.

PRESIDENT BARTON: Ladies and gentlemen, at this time I would like to call to order this business meeting of the NATA and remind you that if you are a certified trainer, you should be in the front of the aisle crossing the auditorium widthwise. If you are not a certified trainer, please sit behind the aisle in the rear of the auditorium.

At this time, I would like to ask Mike O'Shea of the University of Louisville, to come forward to begin our meeting with a prayer and the Pledge of Allegiance to the Flag.

MR. MIKE O'SHEA: Will you all please stand. Please join me in prayer.

Thank you, Lord, for letting us attend this Thirty-Seventh Annual National NATA Convention. Thank you for our leaders who have done so much this past year and we ask that they might guide us through another year.

Lord, we again ask that you will never let us forget those people who have made this Association what it is today and, finally, Lord, we ask that we always remember the name of Pinky Newell and never let us forget what this man gave to the profession of athletic training and the NATA.

Lord, we ask this in your name. Amen.

Now, will you please remain standing for the Pledge of Allegiance.

... Whereupon, the Pledge to the Flag ensued ...

PRESIDENT BARTON: Thank you very much, Mike.

As always, we begin our meeting on a very high level.

I asked our Parliamentarian, Mr. Bruce Melin, to please determine if we have a quorum present. While we are waiting for these results, I would ask that Mr. Nils Bormanis of the Fugazy Travel Company, come forward.

As you will recall, a great deal of information was sent out by Mr. Fred Hoover and his committee regarding Fugazy.

One of the best promotional ideas was to give away some free gifts. At this time I would like to present to you Mr. Bormanis.

MR. BORMANIS: Good morning.

As you will recall, you saw the mailing in your convention information. Fugazy is a national travel bureau.

As you know, we have gotten together with American Airlines and now, at this time, what we are going to do is to pull out a number here and then I will look up the name here on the sheet I have and the lucky winner will get two tickets from American Airlines good anywhere in the United States, including Puerto Rico, Hawaii and the Virgin Islands.

Therefore, at this time, I will ask your President to pull a name from the hat here and somebody is going to be on their way.

... Drawing ensued ...

MR. BORMANIS: The number chosen has been number forty-eight and this is issued to Steve Tollefson.

He has won two tickets on American Airlines good for one year to anywhere American flies.

In conclusion, I wish to thank those of you who booked your travel with Fugazy and for those of you who have not, maybe the next time.

Thank you very much. (Applause)

PRESIDENT BARTON: Thank you very much.

I see that Steve did not show up today but then I do have several volunteers that will be glad to take that off of his hands. (Applause)

Ladies and gentlemen, the count indicates that we do not have a quorum and so, at this time, I would like to briefly tell you that the NATA has made some changes to help promote our profession and before our meeting is over we will see the first evidence of that and we will have a multi-media explanation of what the athletic trainer is.

During my three years as President, we have continually discussed this problem and feel strongly that it is still a major problem. Namely, that the world outside has an incorrect or at least an opinion we would like to alter somewhat.

As you know, we have discussed this for a number of years and I am elated to see that our public relations package is now in order.

I would also like to tell you, and I do not think you have been informed, that we have begun a relationship, I think, which is a great step forward in our profession as well as our organization — we have a corporate sponsor for the next year.

Corporate sponsorship has been discussed for over a year. It has been debated, been analyzed, been studied by your officers like no other issue has been studied during my term of office.

The legal ramifications have been studied and they have been studied diligently by a group of lawyers.

I am delighted that we have taken this bold step. Our officers are all enthused with the project and our presentation that we are going to have regarding public relations will better explain our approach.

Many of you have heard the name of Timothy Communications. This is the company that is handling our public relations package. Mr. John LeGear is our agent manager and has been working just about daily with the Board of Directors, Mr. Otho Davis and myself since he came with us.

At this time, I would call upon Mr. LeGear to begin a public relations presentation that we told him he had to put together in about a month.

Also, he asked me to assemble all of the good looking pictures of athletic trainers that we could muster. I sent all of them from Eastern Kentucky and also the Philadelphia Eagles and he rejected every one of them and so you will be seeing a sizable number of our professional colleagues in this.

Let me say before you see this presentation that a great aspect to this program is that the slides can be removed and replaced on a daily use basis and we definitely intend to spread out and include many of you in this room as soon as we have the time.

Now, Mr. LeGear has put this presentation together very quickly and we feel he did a great job and it is the first actual item that I have been listening to being discussed since at least 1963 on how to promote our profession. Therefore, let the show begin ...

Whereupon, a sound/slide presentation to be used in relation with public relations activities concerning the athletic trainer ensued ... (Applause)

PRESIDENT BARTON: Was that not great!?

Let me say, Mr. LeGear, that if you can do this in one month, think what we want him to do over the next thirty-five years. We certainly look forward with anticipation to our future relationships.

Also, at this time I would like to announce that the first corporate sponsor of the NATA is the Quaker Oats Company, Gatorade.

I have the pleasure of being President at this time and, of course, it is truly a great honor but, on the other hand, I am well aware that the history of our Association, the many, many people already mentioned today, deserve a great pat on the back for a presentation such as this.

At this time, I would like to present to you Mr. Bill Schmidt, who is a former athlete of worldwide acclaim.

He was born in Texas. The State of Texas claims him as their own.

Bill, as many of you no doubt know, was a six-time All-American in track and field. He was a member of the 1972 United States Olympic Team and won the bronze medal in javelin.

Also, if you happened to be in Knoxville, Tennessee, a few summers ago, you more than likely attended the World's Fair there and saw many displays pertaining to sports and physical activity. Bill Schmidt was the Director of Sports for the 1982 World's Fair and assistant to Mr. Peter Ueberroth during the 1984 Olympic Games in Los Angeles.

At this time, Bill is the Director of Sports Development for Quaker Oats and it is a pleasure to introduce to you Bill Schmidt. (Applause)

MR. WILLIAM SCHMIDT: Thank you very much, Bobby.

I would like to say that Texas has been my home for quite awhile and, as mentioned, I went to school in Texas and also that I am a six-time All American. However, that does not mean I spent six years at North Texas State in getting my degree. (Laughter)

The only problem I have with visiting Texas is that I have an affinity for Mexican food and so, at least for the next three days, I am not going to have a problem enjoying my meals.

Now, let me say that the history of Quaker Oats and Gatorade in the sport area is widely known. We have been involved with it for some time and I personally have been involved in sports for over twenty years and will continue to be involved in sports throughout my entire life.

I know what your job and profession is all about and, personally, I would not have been able to be involved with it had it not been for some individuals in this room and through your profession and I know that. Also, the individuals at Quaker Oats, along with Gatorade know that.

In recent years, Quaker Oats and Gatorade have assisted the athletic trainers in professional sports in furthering their message and servicing them in some way to get the public aware of what this profession is all about, what they do, why it is so important and why there should be an athletic trainer in every high school in the United States as well as every university and



college.

This is an important message and so several months ago, when Bobby Barton and Otho Davis approached me personally and made us aware of the fact that the NATA was embarking on a public awareness program, it was natural that we get involved and we were invited to become involved and to help come up with a program that we are delighted to be involved with.

Also, in relation to our history and relationships with other associations within your group, and I believe you can ask any number of those organizations this, we have never prostituted our relationship with any association and we do not ever plan on doing that with the NATA and, in the future, we will be there to service your needs, to get the word out and basically make the public aware of what your profession is all about.

As I mentioned, the Quaker Oats Company is well behind this program. We make a variety of products in addition to Gatorade.

At this time I would like to introduce the President of the Specialty Foods Division of Quaker Oats to say a few words, Mr. Phil Marineau. (Applause)

MR. PHIL MARINEAU: Thank you very much, Bill. I will not take up much of your time. However, I would like to reiterate what Bill said — that Quaker Oats has been in the business of making nutritious food products for consumers for over a hundred years.

However, it is really only in the last two years that we have been lucky enough, in relation to Gatorade, to become involved in the multi-dimensional world of sports and sports medicine. We are excited about this opportunity and we are committed to making a major contribution to sports medicine.

This contribution includes scientific research in the area of hydration and sports nutrition as well as supporting the major leaders and major organizations within the sports medical community.

We really are known throughout the world and, of course, we still have a lot to learn but, on the other hand, one thing that we have quickly learned is that you, the athletic trainers of America, are really the key to the successful advancement of sports medicine in America. You are really the only people out there that are trained and educated to be employed in the sports medical field, at both the college, university, high school and professional sports levels and, as a result, those of you working out there now really are the ones that make things happen out there.

Consequently, we are very pleased to be associated with you and to be given this much closer association from what we have had in the past and, of course, we are committed to helping you educate the American Public through the role of the athletic trainer in sports and the key role that you play in the sports field.

We are very, very excited about this new sponsorship and I pledge the support of the Quaker Oats Company in any way possible that we can in the future as you begin your new era of public awareness.

Thank you so much for giving us this opportunity. (Applause)

PRESIDENT BARTON: Thank you very, very much. At this time I would like to present to you Mr. Brooks McIntyre of Eastern Management Association.

I am sure that most of you know that Brooks has been handling our financial affairs for a number of years now and so, Brooks, will you now come up here to the podium and render your Treasurer's report?

MR. BROOKS MCINTYRE: Thank you, Bobby. First let me say that it is always a pleasure to be here.

Each year we prepare a combined summary of the assets, liabilities and fund balance or net worth of the various entities that make up your national organization.

Each separate identified entity was formed for a specific purpose. For example, the NATA Foundation was formed to own and maintain the land and building of the National Office. Grants and Scholarships, of course, was formed to receive and award scholarships and grants. The Board of Certification was formed to deal with certification processes and the NATA, Incorporated, to provide general operations to the organization.

As of April 30, 1985, the combined assets of these entities totaled \$1,703,179. The combined liabilities were \$106,283, leaving a fund balance or equity position of \$996,896.

In Denver in 1983, the Board made a difficult decision of increasing the dues. I exercised all the influence which I had to encourage this increase primarily because I knew that if the organization was effectively going to meet its goals, it needed to have significant funds with which to do so.

I am pleased to report to you that adequate funding has been generated and assets set aside to begin the process of public relations, which has been identified as the top priority of the organization.

I fully support and encourage the corporate sponsorship as a means of furthering the public relations efforts.

Our projections indicate that we will be able to continue to progress and realize a reasonable level of growth each year.

I would like to congratulate the Board of Directors for their efficiency, effectiveness in making the tough decisions that have faced them, and also to congratulate you for your support of the programs instituted.

In my opinion, this organization is healthy and well on its way to meet all of its objectives. I am pleased to be a part of it.

If any of you have any questions, I will be more than happy to answer them at this time. Are there questions? If not, again, thank you very much. (Applause)

PRESIDENT BARTON: Thank you, Brooks.

At this time, I will entertain a motion to accept the Treasurer's report as given on June 9, 1985. Do I hear a motion to that effect?

I have a motion by Craig Sink of District 3, seconded by Jim Rudd of District 3. Is there any discussion?

If not, those in favor of approving the report of your Treasurer as of June 9, 1985, please signify by saying aye; opposed; abstentions. The motion has carried to accept your Treasurer's report as submitted by Mr. Brooks McIntyre.

At this time, we will receive the report of your Executive Director regarding the meetings of the Board of Directors held in San Antonio on June 5, 6, 7, 8 and 9 and still continuing.

I give you Mr. Otho Davis, your Executive Director. MR. OTHO DAVIS: You have heard the financial summary by Mr. Brooks McIntyre. You have been presented with the sound/slide presentation of the corporate sponsorship by Gatorade.

Also, the financial picture of this Association is very good. Our assets, at the present time, are over a million dollars and you have the printout relative to this in your registration packets.

I expressed at District 3 in Norfolk, Virginia, last month that I think your work and your backing the Association through corporate sponsorships can raise another \$2 million within the next two to three years and I will guarantee you it is going to be one of my personal goals for this Association. I feel very strongly about this. We have had our heads in the sand long enough and we have had sand kicked on us and it has come to the point that each of us as members are going to have to be the ones to grab ourselves by our bootstraps and pull ourselves up in order to keep going forward.

You know what the coaches are doing in America now and you know how they are getting money and it is not going to their Associations, it is going to individuals. I think that it is time that we as athletic trainers did something for ourselves and so, rest assured, this group up here, your Board of Directors, has taken that first step. There are others in the wings that are going to follow soon and help us, the same as Quaker Oats-Gatorade.

Insofar as a report on our meetings is concerned, as President Barton mentioned, we began our meeting at eight o'clock in the morning on Wednesday, June 5th and all of the matters presented and considered by us will likewise be presented to you at your various district meetings and will also be discussed there and, as in the past, be indicated in your Journal.

There was an item we did discuss and this is an item that came to us as a concern during visitations to districts during the past year. It pertains to the classification of student membership.

We have had a lot of discussion pertaining to students. As you know, student dues are \$25 a year but once you are certified, your dues automatically jump to \$75 a year and if you are in graduate school or if you leave a position and return to graduate school as a graduate student and you have reached the certified status, as all of you know, as a graduate student, you are not making a heck of a lot of money and, in turn, it puts a burden on that individual.

Your Board of Directors has seen fit to create a three-tiered student classification simply because of the confusion.

We cannot increase our total number of membership classifications but we can make subsections among the ones we presently work under.

Therefore, at the present time, code 4 will have an undergraduate classification, will have a student graduate non-certified classification and it will have a student graduate certified classification. This will allow a student to remain in that category three years beyond his degree. (Applause)

Let us hear it for the individuals who accomplished that for you, your Board of Directors. (Applause)

Under this new procedure, your dues, instead of being \$75 as they would have been, will be \$25.

You students who are in the certified and graduate classifications will retain full privileges of a certified member.

Other things that we did is that we discussed and took care of a lot of items by mail vote and one of the items which I will read to you concerns the definition of an athletic trainer, certified.

Let me say that you are going to see a couple of definitions concerning the athletic trainer, one or two pertaining to licensing. Now, the ones you will see relating to licensing pertain mainly to states working for licensing and the licensing legislative process.

However, this particular definition that I am going to present to you is for the purposes of the NATA and its general membership and reads as follows:

"Athletic Trainer, Certified: An allied health professional who has successfully completed the college/university undergraduate degree, fulfilled the requirements for certification as established by the Board of Certification of the National Athletic Trainer's Association, Incorporated; and has passed the NATA certification examination administered by the NATA Board of Certification.

"The six domains of athletic training from which specific tasks are measured in the examination are:

1. Prevention of athletic injuries.
2. Recognition and evaluation of athletic injuries.
3. Management, treatment and disposition of athletic injuries.
4. Rehabilitation of athletic injuries.
5. Organization and administration of athletic training program.
6. Education and counseling of athletes.

The certified athletic trainer works under the direction of a licensed physician in the practice of the art and science of athletic training.

That is our presently revised definition of athletic training.

Also, as I mentioned earlier, the Board started meeting on Wednesday morning and has been in session constantly, with intervening other matters taking place since that time.

I did mention that all of these actions will be published in your Journal and you will receive further information in more detail during your district meetings.

At this point, I will conclude my report. (Applause)

PRESIDENT BARTON: At this time, I would like to accept a motion to approve the Executive Director's report as presented as of June 9, 1985.

I have a motion from Bill Battershall of District 2, seconded by John Leard of District 1.

All in favor of the motion please indicate by saying aye; opposed; abstentions. The motion carries to approve your Executive Director's report.

Now, as you may remember, I came into this office saying that Mr. Davis does far more work than most of you will ever know for our Association. Now, I have often been asked as to why he does it and I always refer them to Otho. However, I am delighted to have had the opportunity to go through this year with him in helping develop this public relations package and I only wish that I could, in some way, communicate to our entire membership how much he loves this Association and has fought for the good of our profession. (Applause)

I would now like to call on Troy Young, our Arizona State University Athletic Trainer, who has headed up our Twenty-Five Year Award program and he will announce the winners.

MR. TROY YOUNG: I would like to have the following names go into our membership record as the Twenty-Five Year Award winners.

They are Dennis Aten, Ray C. Baldwin, William H. Chambers, George H. Christman, Jr., Gary Delforge, Gordon Graham, Bernard E. LaReau, Theodore C. Quedenfeld, John F. "Jeff" Snedeker, Richard R. Vandervoort and Fred J. Zamberletti.

PRESIDENT BARTON: Thank you very much, Troy.

As in relation to all of our awards, they will be formally presented at the banquet.

I would now like to call upon Mr. George Sullivan, University of Nebraska at Lincoln, Chairman of our Honors and Awards Committee, and he will announce the winners for the honorees of the Hall of Fame, Honorary Membership and the President's Challenge Award.

MR. GEORGE SULLIVAN: Mr. President and Members of the Board of Directors and Members: I am happy to present to you this year's President's Challenge Award winner. The award goes to Dr. James Andrews, Columbus, Georgia.

The Hall of Fame recipients will be Lewis Crowl, Jerry Rhea, James Dodson, Paul Schneider, Wilford F. "Billy" Pickard and Larry L. Lohr.

For Honorary Membership we present to you Dr. Robert E. Anderson, Dr. Karl D. Boyers, Jr., Dr. R. W. "Red" Covington, Raymond R. Fagan, Dr. Michael W. Hakala, Dr. Jack H. Henry, Dr. Jerry D. Julian, George Wilson "Willie" Meyers, Dr. Gerald O'Connor, Dr. Charles A. Rockwood, Jr., Dr. James W. Shuffield and Mr. James Viola.

PRESIDENT BARTON: Thank you very much.

At this time, I would like to call on Mr. Al Ward of the National Football League Charities. Mr. Ward will make a special presentation.

As you know, our Grants and Scholarship program has continued to grow and prosper under Pinky Newell and now with Frank George, chairman. However, let us not forget that the National Football League Charities has helped that to happen. Again, I would like to present to you Mr. Al Ward.

MR. AL WARD: It was in 1978, I believe, when the National Football League Charities first came to this convention and here we are eight years later. Our relationship continues as strong as it can be.

Well, we are back again this year because we believe in the Association and this year also, I think, is a little special, because when the National Football League Charities helps to sponsor a program, we also help to salute the work and memory of Pinky Newell, a friend to all of us.

Therefore, it is a special privilege for me to represent Mr. Pete Rozelle of the National Football League Charities, and really the entire National Football League, in presenting this check for \$5,000 to Bobby Barton for use in relation to your scholarship fund.

Thank you very much.

... Check presentation and applause ensued ...

PRESIDENT BARTON: Thank you very much, Al.

It would have done everyone's heart good to have been at the Student Trainer's Banquet last night and to see that they had to postpone the serving of the food for approximately fifteen minutes in order to bring in an extra table for people to attend. The gathering was great!

At this time I would like to present to you Ms. Sara Paxton of Nutrament and the Drackett Company, who will announce the winners of the Trainer of the Year Awards.

MS. PAXTON: Thank you, Mr. President.

On behalf of Nutrament and the Drackett Company, I wish to express our continued pleasure to be associated with NATA in sponsorship of the Trainer of the Year Awards.

The award was conceived not only to honor some of your outstanding members but also to promote public awareness of your profession.

This is the ninth year of the awards, in which you, the members of the NATA, extend special recognition to four of your peers.

And now, Mr. President, I would like to introduce this year's winners.

In the High School Division, you selected Richard Carey. Rich is trainer at Lyons Township High School in LaGrange, Illinois, where he supervises the health care for 1,800 athletes participating in twenty-two sports.

In addition, his day begins with a seven-thirty a.m. class, the first of five. Rich says he is proud to be a high school trainer because the high school is the frontier in athletic training — that is where the need is.

Rich has served on the Governor's Task Force on Sports Medicine in Illinois and has been named an Outstanding Young Man of America by the Jaycees.

He is Treasurer of the Illinois Athletic Trainers' Association and has made several presentations at national conventions. He has been published in numerous professional journals and is a co-author with John Schrader of an athletic training textbook.

A native of Aberdeen, Washington, Rich graduated from the University of Washington and earned his Master's Degree at Penn State.

Will you please stand, Rich, as the High School Trainer of the Year.

... Applause ensued as Mr. Richard Carey arose ...

MS. PAXTON: Thank you.

The Junior College Trainer of the Year is Leon Skeie. Leon is Director of the Sports Medicine Center at Orange Coast College in Costa Mesa, California. He is originally from Iowa and a graduate of Iowa State University, where he earned his BS and MA Degrees. He went from Iowa State to Corona Del Mar High School at Newport Beach, California and promptly received the Athletic Director's Award for Excellence in Teaching. He then moved to nearby Orange Coast College, where he was named Outstanding First-Year Community College Teacher in the nation.

Leon now supervises the Fitness Specialist Program, the Athletic Training Program and the Adapted Physical Education Program at Orange Coast College. He is also a Strength Coach.

In 1982, Leon received an award from the Orange Coast study body for outstanding students.

He has served on the Professional Education and Ethics Committees of the NATA and is a sought-after speaker for seminars.

May I present to you the Junior College Trainer of the Year, Mr. Leon Skeie.

... Applause ensued as Mr. Skeie arose in recognition.

MS. PAXTON: Thank you, Leon.

Winner of the University Division Award is John Schrader.

John wears two managerial hats in that he is

Director of Athletic Training and Coordinator of the Athletic Training Education Program at Indiana University.

John is President-Elect of the Great Lakes Trainers' Association, District 4, and has served on the Indiana Governor's Council of Physical Fitness and Sports Medicine since 1980.

He has also served as Chairman of the NATA Professional Education Committee and has chaired several workshops and conferences.

A native of the State of Indiana, John is a true Hoosier in that he graduated from Purdue University and has spent his entire professional career working at Indiana University.

John also holds a Master's Degree from the University of Washington where he co-authored an athletic training text with Richard Carey.

John is currently completing a Ph.D. at Indiana University. Also, he has authored numerous research studies which have been published in professional journals.

Please recognize the University Division Trainer of the Year, Mr. John Schrader.

... Applause ensued as Mr. Schrader arose in recognition ...

MS. PAXTON: The Professional Team Trainer of the Year is Kent Falb, originally from Iowa. Kent graduated from the University of Iowa and took additional work there to become a registered physical therapist. He held positions at West Point, with the Minnesota Vikings and at Boston College before joining the Detroit Lions almost twenty years ago.

Kent remembers vividly when he, as a very young trainer, went to his first meeting of the National Football League Trainers Association and sat down next to the Steelers trainer, Ralph Berlin — who looked down at him, kind of poked him and said, "Who are you with, kid?" Well, twenty years later, that "kid" is still with the Lions and is a Past President of the NFL Trainers Society. He is also a Past President of the Great Lakes Trainers Association.

Currently, Kent serves on the NATA Ethics Committee and is Editorial Advisor for the Public Relations Newsletter of the Professional Football Athletic Trainers' Society.

Will you stand, please, the Professional Division Trainer of the Year, Kent Falb.

... Applause ensued as Mr. Falb likewise stood in recognition ...

MS. PAXTON: You know, over the years I have heard wonderful stories about surprise parties, phone calls, letters, television appearances, newspaper articles and other forms of recognition that have been generated from these awards for the recipients and the athletic training profession.

If the award causes people to stop and say, "Hey, I really appreciate you and the work you have done," then I know that we have accomplished something worthwhile.

The high school and college recipients each receive a \$1,000 award for scholarships or equipment and Nutrament donates \$4,000 to the NATA scholarship fund in honor of the professional team winner.

Mr. President, I am pleased to present this check for \$7,000 in honor of the Trainers of the Year.

... Check presentation and applause ensued ...

PRESIDENT BARTON: Thank you so very much, Sara.

At this time, I would like to call on Mr. Paul Grace of Massachusetts Institute of Technology and Chairman of the NATA Board of Certification, who will announce the Eddie Wojewicki Scholarship Award sponsored by the Mueller Chemical Company.

MR. PAUL GRACE: Mr. President, the winner of the 1984 Eddie Wojewicki Scholarship Award is David O. Draper from Brigham Young University. (Applause)

PRESIDENT BARTON: Thank you, Paul.

I would now like to recognize Joe Gieck of the University of Virginia, and who has done such a great job for us as liaison to the American Orthopaedic Society for Sports Medicine group, to announce the winner of the Distinguished Service Trainer Award.

MR. JOE GIECK: The Distinguished Service Trainer Award from the American Orthopaedic Society for Sports Medicine for 1985 goes to Warren Morris, University of Georgia. (Applause)

PRESIDENT BARTON: Thank you.

I will now ask Frank George, a Past President of our Association and head trainer at Brown University and our new Chairman of the Scholarship Committee, to announce the winners that were presented last night at our banquet for the student trainers.

MR. FRANK GEORGE: Before I announce the winners, I would like to extend a special thanks to Sara Paxton of Drackett and to Al Ward of National Football League Charities. We went on a big fund raising drive this year in memory of Pinky and two other companies responded with \$5,000 in awards to the NATA Grants and Scholarship Committee.

First I would like to ask Jim Viola from Johnson and Johnson to come up and present his award.

Whereupon, Mr. Viola approached the podium and

presented his check to President Barton ... (Applause)

MR. FRANK GEORGE: And also, from the Chattanooga Corporation, I would like to recognize Hank Kanies.

... Whereupon, Mr. Hank Kanies likewise presented a check to President Barton ... (Applause)

MR. GEORGE: And now I would like to recognize the winners of this year's awards.

For the Undergraduate Scholarship Awards, Kathleen Sue Hornickel, Kearney State College; Bradley A. Siebler, University of Nebraska and Kirby T. Kauk, Western Montana College.

For the Robert H. Gunn Scholarship Award, Daniel Phillip Petra, North Dakota State University.

For the Sayers J. Miller, Jr., Scholarship Award, Phillip Gregory Bogle of East Carolina University.

For the Chuck Cramer Scholarship Award, Dawn A. Neff, Ohio University.

For the Frank Cramer Scholarship Award, Susan Rose Roy, Bridgewater State College.

For the William F. X. Linskey Scholarship Award, Kathleen Mary O'Neill, California State University at Fullerton.

For the William E. Newell Scholarship Award, Scott James Belham, University of Southern Mississippi.

For the Harold W. Mundy Scholarship Award, Janet R. Bristor, Ithaca College.

Postgraduate Scholarship Awards go to Leslie Paul Sewall, Northeastern University; Jody Carl Anderson, Mankato State University; Charles Michael Williamson, University of Southern Mississippi; Michael D. Ryan, Central Connecticut State University; Michael Green, Brigham Young University and Karen A. Baker, East Carolina University.

The winner of the Otho Davis Postgraduate Scholarship Award is Paula Tomasovich, University of Pittsburgh.

The winner of the Del C. Humphrey Postgraduate Scholarship Award is Gregory R. Kreitz, California State University at Long Beach.

The winner of the G. E. "Moose" Detty Postgraduate Scholarship Award is Christopher John Zang, West Virginia University.

The Good-Smith Postgraduate Scholarship Award goes to Richard Stephen Taddei, Lock Haven State University.

Lastly, the Schering-Plough Foundation Postgraduate Scholarship Award goes to Russell Joe Hoff, Ohio University.

PRESIDENT BARTON: Thank you, Frank. We also thank all of our sponsors very much for making these awards possible. We are very proud of our students because they are our future and did a wonderful job.

I would also like to extend special thanks to you, the members of the NATA, for supporting the Scholarship Committee through your donations. Thank you for supporting us with your recommendations for scholarship applicants.

Of course, we would like to have more applications. The money is there. Please have your students apply for these awards — please sponsor them for it. Also, please continue with your generous contributions.

Again, I thank all of you very much for your cooperation and support.

MR. FRANK GEORGE: Mr. President, I wonder if we might all arise for a moment of silence in memory of Pinky Newell.

... The membership arose in a moment of silence ...

PRESIDENT BARTON: Thank you, Frank.

We appreciate the continued work you do for our profession.

Also, in addition to Pinky, we have several other members who passed away during this past year, the names of the majority of whom have appeared in our Journal. However, as always, we find some of our members have not reported to our Memorial Resolutions Committee the names of deceased members in time for them to be honored.

Those who I wish to announce at the present time are as follows: Joseph A. Blankowitsch, David R. Carlyon, Charles Cramer, Anne A. Hefty, William F. X. Linskey, George MacKinnon, Harold Mundy, William "Pinky" Newell, Henry Schmidt, Paul H. Seymour, Maureen G. Stafford, Earlin Tober, Wanda J. Walters and Roy W. Harvey.

Again, I would ask you to stand in a moment of silence in memory to all of these deceased members.

... The membership arose in a moment of silence ...

PRESIDENT BARTON: May these great members of our Association and members of their families find eternal peace. Amen.

Now, at this time, I would like to call Mr. Otho Davis back to the podium to help in honoring those people that have done such a great job for our Association in the past year. So, at this time, will you please present these various awards.

MR. DAVIS: Before making these award presentations, there are a group of individuals and firms to whom I would like to express deep appreciation and gratitude in helping us with the entertainment session while we have been at this convention.

*continued on page 280*



# Introducing Athletic Training to the American Public

John LeGear

The National Athletic Trainers' Association has worked hard to put its house in order over the years, and the time has come to invite the public in for a showing.

The NATA Board of Directors formally announced in June, 1985 that it had commissioned a national public relations program. The goal was to establish a line of communication with the American public to develop a greater understanding of the athletic training profession. A brief review of the NATA's history supports the Board's rationale.

Since 1950, the NATA has been committed to building a credible allied health care organization. The Association was reorganized in 1970 to build a stronger infrastructure, one that meets the demanding education and health care standards of the medical community.

NATA objectives were redefined. Education and NATA certification requirements were rewritten to build a system that would produce qualified health care professionals. A Continuing Education program was designed that would help athletic trainers maintain high standards, as well as share knowledge and information.

Plans for state licensure, better research capabilities and stronger membership programs were among other innovations in an association that was about to enter a new era.

Fourteen years later, the NATA reaped one of its most prized rewards for its efforts. It was officially recognized as an integral part of the allied medical community when it earned full membership in the National Commission for Health Certifying Agencies. This accreditation provided the NATA with the right to set the standards, evaluate and certify those who sought to become athletic trainers. The NATA had earned its rightful place in the health care field.

## Looking Ahead

From that moment in 1983 when the NATA received the NCHCA seal of approval, the organization set its sights on a new challenge that had been beckoning them for years: educating the public.

The Board of Directors knew that the NATA, like its members, had always maintained a low profile in a world of sports, where "high profile" is part of the game. If the Association was to continue to grow, the Board felt that athletic trainers would have to step from the shadows.

The NATA determined that it would actively reach into the public sector to help people gain a better understanding of the certified athletic trainer. A public relations agency would serve as the conduit to carry NATA messages to the public.

Among the NATA's most important objectives: respond to the need for better injury prevention and health care where it is needed most, in the high schools.

---

*Mr. LeGear is General Manager with Timothy Communications, Oak Park, Illinois and is directly responsible for all facets of public relations for the National Athletic Trainers Association.*

At the 35th annual NATA meeting last year in Nashville, the Board of Directors reviewed capabilities of three public relations agencies. Eight months later, the Board voted to retain Timothy Communications, a public relations agency in Oak Park, Illinois, to handle the NATA assignment.

## Building Public Awareness

The goal of the NATA public relations program was clearly stated by the Board from the outset: encourage continued growth and development of the athletic training profession by making key segments of the public more aware of its value and importance to physically active people.

"The NATA has accomplished some great things over the years, and we're proud of the fine reputation that this organization has worked so hard to earn within the medical community," explains NATA Executive Director Otho Davis.

"But up until now, we have been providing health care service mostly to college athletic departments and professional sports teams, where people have come to understand more about the need for a certified athletic trainer on staff. Our time has come to go beyond the traditional boundaries of athletic training, and respond to the needs of a rapidly changing sports climate in America."

## Today's New Frontier

The average American's transition from sports spectator to active athlete since the 1970s is well documented.

There are more than 10,000 commercial health clubs in the United States now. There are 16 million joggers and runners, 19 million cyclists and about 27 million people who swim for exercise. There are five million varsity and junior varsity sports participants at the high school level of sports alone. A growing number of them are girls competing in sports like gymnastics, track and field, and soccer.

The NATA has been adjusting and fine-tuning to adapt to some of these changes. A cohesive public relations program that reflects the image of the NATA is just one new color in the changing portrait of the Association.

## NATA Injury Prevention Program

A survey was conducted by the Department of Health, Education and Welfare in 1975 to determine the level of health care in high school sports. At that time, high school athletic trainers with NATA certification were a rarity, except in Texas. Student-athletes in Texas were benefiting from the first state licensing law governing the practice of athletic training, which had passed in 1973.

HEW realized that coaches and assistant coaches were most often responsible for providing health care for high school athletes where athletic trainers were not present. So the government agency polled coaches who were designated as "the primary health care person for that school's athletic teams" to learn more about their

qualifications. Results showed that only about half of these coaches had the minimum qualifications of certification in CPR and American Red Cross first aid.

Ten years later, fewer than one thousand NATA athletic trainers are employed in America's 24,000 high schools. Fewer coaches want the responsibility for providing health care and injury protection programs today, partly due to the increasing risk of legal liability. So why don't more schools employ athletic trainers?

"Lack of available funds in the high school athletic departments is the reason most often given," said NATA President Bobby Barton.

But in a court of law, "lack of funds" for an NATA certified athletic trainer often is being translated to mean "lack of concern" for student athletes.

In noting the legal liability issue, Barton suggests that most parents and educators would probably agree that the value of certified athletic trainers more than outweighs the cost of employing one.

"We think one of the most significant reasons for so few athletic trainers in high schools is lack of awareness, so we set out to do something about that," Barton said.

### Mass Communications

With the objective for year one firmly set, the public relations firm presented its strategies to the Board, and received approval in April 1985.

The target audience for the NATA campaign is parents, specifically those of the estimated 20 million junior high school and secondary school students.

The target date for national rollout is September 1985, although much time has been given to developing the program on a local basis since March.

The focus of the program is on injury prevention, one aspect of health care where athletic trainers distinguish themselves from the greater medical community. The NATA Injury Prevention Program is being brought to the public by the "experts in injury prevention, certified athletic trainers of the NATA."

There are many ways by which the NATA injury prevention program can be delivered to millions of people through the mass media. Radio and television public service announcements have been produced and are being distributed this fall. Several hundred newspapers will be contacted directly by the NATA's agency to provide information on the Association, its members and the injury prevention program. Local talk shows and major magazines offer other opportunities to carry the NATA message to the public.

There are two rules to achieve success in this type of public service program: deliver the message to the NATA's target audience — parents of student athletes; and do it cost effectively.

The relatively high cost of effective communications is always cause for concern, especially when the public relations program is national in scope. How does a non-profit association with modest funds like the NATA gain a share of the public's attention when competing with companies that seemingly have unlimited advertising dollars?

One way is to have a meaningful message that people will want to learn more about. Another is to seek the assistance and support from organizations that share the NATA's concern for sports safety, and may want to help.

On June 10, 1985, Bobby Barton announced at the 36th annual NATA meeting that a three-year agreement had been reached with the Quaker Oats Company, maker of Gatorade® Thirst Quencher. In addition to

providing financial support that will enable the NATA to reach millions more people, the agreement demonstrates that Quaker Oats endorses the new NATA injury prevention campaign. Several other organizations have also expressed interest in lending their assistance and expertise to the NATA.

### Anticipated Results

From conception and implementation through the end of their projected plan, most public relations programs take about two years to develop before coming to fruition, depending on size and scope. Timothy Communications estimated a minimum two-year maturation period for the NATA program when it was presented to the Board, and received approval on that basis. But with additional support from outside, the program should begin to take root by next summer or fall, and begin to yield results sometime in its second year.

The success of the program depends on many variables, some of them beyond the control of the NATA and its public relations agency. Unlike paid advertising, which is prohibitively expensive, there are no guarantees for newspaper space or air time built into public relations programs. And there is no standard form of measurement to gauge the relative success of this program against another.

But there is reason to believe that the public will take notice, because prevention programs make sense to people who understand their need. With high school athletes suffering 800,000 time-loss injuries every year, about 100,000 of them considered significant, there is ample cause for concern by parents and educators, not to mention the student-athletes.

When measuring the relative impact of the NATA public relations program, be aware of some benchmarks along the way that merit the attention of all NATA members.

In the Fall, the first of six television public service announcements will be circulating around the country, this one hosted by CBS sports commentator Irv Cross. In addition, more than 500 radio stations will receive the first two of 12 public service announcements from the NATA on injury prevention. Ten to 20 percent will use them.

Print publicity will evolve much more slowly, due to the nature of the newspaper and magazine industries, but already there is evidence that more information is desired by newspaper reporters. By next June when the NATA meets in Las Vegas, a public relations status report will be presented to the membership at the annual Business Meeting.

### New NATA Sound/Slide Show Now Available on Videotape

A videotape version of the new NATA sound/slide presentation entitled, "Athletic Training: In The Public Interest," is available for purchase to members through the NATA office in Greenville, North Carolina.

The nine-minute sound/slide presentation was commissioned by the Association to help acquaint more people with the athletic training profession. The three-projector slide show was presented for the first time in the business meeting at the 36th annual NATA clinical symposium in San Antonio.

"Athletic Training: In The Public Interest" illustrates the critically important role played by NATA athletic trainers today in a diverse and expanding sports

*continued on page 281*



# Considerations of Anatomy, Physiology, and Pathology of Sports Related Ocular Injuries

John B. Jeffers, MD

Edited by:  
Don Kaverman, ATC

The eye is considered by many to be a sacred land upon which one should not set foot and, to a certain extent, this concept may be valid. We do indeed have more than enough feet or hands that are used as ocular trauma-producing devices. The bottom-line philosophy when considering sports related ocular injuries is to "not fear the eye - but respect it!"

In that regard some general knowledge of the anatomical and physiological aspects of the eye is necessary to then correlate this with the subsequent pathology of the injury.

In general when attempting to evaluate the severity of an ocular injury it certainly is more prudent to err on

the side of referral than to carelessly pass it off as nothing.

## Orbit and Periorbital Tissue

Although the orbit does offer some protection to the eye a missile striking the orbit may result in damage either by the direct hit or indirect force transmitted inside the orbit by the impact on the globe and its subsequent equatorial expansion.

The most common abnormality resulting is a fracture of the orbit floor otherwise known as a "blow-out" fracture. The weakest area of the orbit is the floor and it thus actually "blows-out" from the inside. When extra-ocular tissues (muscles) become entrapped in the fracture site there is usually a resultant decrease in upgaze and this produces double vision (diplopia). An open reduction must then be performed.

Another bony area that is occasionally involved is the ethmoid bone. When this is fractured the ethmoid sinus is opened. When an athlete blows his/her nose air rushes into the subcutaneous tissue (subcutaneous emphysema).

The roof of the orbit is not commonly involved but one must realize the adjacent tissue is the cranial cavity.

Fractures of the rim of the orbit often are not displaced; when displacement does take place some form of open reduction is necessary.

## Eyelids

The human eyelid is a very vascular tissue and when struck by an external force ecchymosis and edema usually result.

Superficial, deep, marginal and canalicular (lacrimal drainage system) lacerations may result from injury. According to the severity of the injury careful apposition may be necessary.

Because the lid acts as a spreader of the tearfilm or



*Dr. Jeffers is Director of Resident Education and Director of Emergency Room of Wills Eye Hospital, Philadelphia, PA. He is a Fellow of the American Academy of Ophthalmology, American Medical Association, Pennsylvania State Medical Society, Pennsylvania Academy of Ophthalmology and Otolaryngology, and Philadelphia Medical Society, and Team Ophthalmologist for the Philadelphia 76ers, the Philadelphia Eagles, and the Baltimore (Philadelphia) Stars.*

sweeper of foreign material over the corneal surface, the margin and mucous membrane aspect have to be smooth and moist. In some instances microscopic surgery may be indicated to close the defect.

It is also essential to recognize involvement of the lacrimal drainage system. If the drainage apparatus is lacerated, meticulous closure, maintaining a patent pathway, must be accomplished. Considering that the tears do not merely drain out of the eye but are also pumped out (blinking) is another reason to, when evaluating lid trauma, recognize potential deformities of the lids.

Among the more minor but nonetheless painful problems that an athletic trainer may encounter in regard to the eyelids is the foreign body that gets lodged under the upper lid. The structure of the lid margin is such that there is a small groove extending the length of the lid; this all too often acts as a retainer of foreigner material. Everting the upper lid with an applicator stick will allow one to remove the foreign body with a moistened applicator stick.

### Conjunctiva

This is the transparent, mucous membrane-like tissue that covers the inside of the eyelids and partially covers the eyeball (globe). It becomes more apparent when injected or bloodshot as a result of the vascular supply being in a dilated state.

Very commonly we see, following trauma, hemorrhage over the white of the eye (sclera). This is usually a benign finding referred to as subconjunctival hemorrhage. It has to be evaluated in light of the history of the type and force of the trauma, symptoms and findings in the other ocular or periocular tissues.

The conjunctiva contain lymphoid tissue and therefore responds to those substances that produce allergies. Aside from the subjective discomfort the eye may appear very inflamed.

Usually the distinction between inflammation from an allergic source and infection involves the type of discharge. Exudate, or pus, suggests a bacterial involvement whereas a serous or water discharge is secondary to allergy or virus. More often than not the athlete has a positive history of allergies.

### Cornea

The cornea is comparable to a watch-crystal and should be clear because there are no blood vessels or opaque tissue present.

The abrasion of the cornea probably is the most common eye injury a trainer will encounter. Usually the epithelial surface has been scratched off and pain is experienced when the eyelid rubs over the area.

A foreign body embedded in the surface corneal tissue also results in similar pain. When it is removed one is left with an abrasion.

Inflammations are frequently encountered in this era of the contact lens. Lacerations of the cornea can be partial or full thickness. The amount of scarring depends on the depth of the laceration. There will be dense scarring when the stroma (thickest portion of the cornea) is injured.

The cornea develops cloudiness, or edema, as a result of infection resulting in an increase in the intraocular pressure. This is secondary to fluid being forced into the substance of the cornea. Along similar lines blood pigment, from blood in the anterior chamber, may also be forced into the cornea resulting in staining. This clears very slowly once the pressure is brought back to a more normal level.

### Anterior Chamber

The anterior chamber is the front region of the eye bounded by the posterior surface of the cornea, the chamber angles (containing the drainage apparatus or trabecular meshwork), and the anterior surface of the iris.

The aqueous humor that flows in this chamber is produced by the ciliary body or "faucet" and exits through the trabecular meshwork or "drain." Following an injury the aqueous may contain inflammatory cells or blood. These substances drain out through the trabecular meshwork and at times actually partially clog the "drain" which results in a rise in intraocular pressure. This condition is termed secondary glaucoma.

Severe contusion injuries may actually tear the tissue in the region of the ciliary body (angle recession) and as a result of scarring may alter the drainage so that glaucoma may develop as a delayed reaction to the injury.

### Iris-Pupil

The iris is part of the pigmented tunic of the eye (uvea) and is comparable to the face of a watch.

With contusion the iris may become inflamed and the athlete may experience pain especially in light (photophobia). The reason for this is that the constrictor muscle of the iris, by its action, reduces the size of the pupil in response to the light - hence pain. One of the treatments for traumatic iritis therefore is to dilate the pupil with topical medication - and in a sense put it at relative rest. With iris injury the pupil may become distorted, often in a teardrop shape.

Tears in the iris tissue may occur anywhere. However, the more common areas are at the pupillary margin, resulting in a slightly irregular pupil, or at its attachment in the region of the junction of cornea and sclera. This causes a distorted pupil.

### Lens

The normally clear crystalline lens located behind the iris is approximately the size of an M & M<sup>o</sup> but is very flexible for focusing light rays. It is suspended by zonules for 360° at its equator which may rupture when traumatized resulting in a subluxated or luxated lens. Aside from affecting the focusing mechanism of the eye an out of place lens may produce inflammation or glaucoma.

### Vitreous

The vitreous cavity makes up approximately 90% of the volume of the globe and is filled with a gel-like substance.

When suspended or free-floating tissue is observed by the athlete, he/she is described as having floaters. Alone, floaters present no problem other than being annoying. However, it is always wise to have the athlete undergo a good retina exam to rule out more serious problems.

### Retina-Choroid

The retina is part of the complex neurosensory tissue of the eye.

Trauma may result in acute or delayed pathology. Unless there is enough force to rupture the eyeball the abnormality in the retina is a result of the contra-coup effect. The acute phase may consist of hemorrhage and/or edema with the hemorrhage severe enough to extend into the vitreous.



Detachment of the retina may be acute or delayed. Often inflamed tissue that is healing may, with time, contract and tug on the retina thus producing a hole and/or a detachment.

The choroid underlying the retina may develop ruptures and, depending on location, may or may not interfere with vision. ⊕

# CEU Credit Quiz

## CONSIDERATIONS OF ANATOMY, PHYSIOLOGY AND PATHOLOGY OF SPORTS RELATED OCULAR INJURIES

John B. Jeffers, MD

As an organization accredited for continuing medical education, the Hahnemann Medical College and Hospital certifies that this continuing education offering meets the criteria for .3 hours of prescribed CEU credit in the program of the National Athletic Trainers' Association, Inc., provided the test is used and completed as designed.

To participate in this program, read the material carefully and answer the questions in the test. Mark the answers you

select by placing an X in the proper square. Then tear out the test sheet, fill in your name, address and other information, and mail with \$12 for processing to: Hahnemann University, School of Continuing Education, Broad and Vine, Philadelphia, PA 19102.

The NATA National Office will be notified of all members with passing scores over 70%. CEU credit will be issued to each member's record at that time. Participation is confidential.

### Questions

		a	b	c	d	e
1. When there is a "blow-out" fracture of the floor of the orbit and the extra-ocular muscles become entrapped in the fracture site, there is usually a resultant decrease in _____ gaze.	a. lateral b. upward c. downward d. a and b above e. a and c above					
2. Subcutaneous emphysema may occur in patients with fractures of the	a. roof of the orbit b. rim of the orbit c. floor of the orbit d. ethmoid bone					
3. Open reduction is indicated for all fractures of the rim of the orbit.	a. True b. False					
4. Foreign bodies lodged under the upper eyelid may be removed by evertng the upper lid with a moistened applicator stick.	a. True b. False					
5. Which of the following statements is/are true of the cornea? 1. there are no blood vessels present in the cornea 2. abrasion of the cornea is a common athletic injury involving the eye 3. cloudiness of the cornea may occur as a result of infection 4. staining of the cornea occurs with the forcing of blood into the cornea	a. 1,2,3 b. 1,3 c. 2,4 d. 4 only e. 1,2,3,4					
6. Severe contusions in the area of the anterior chamber may result in secondary glaucoma.	a. True b. False					
7. Tears in the iris tissue at the _____ cause a change in the shape of the pupil. a. pupillary margin b. junction of the cornea and sclera c. both a and b above d. neither of the above						
8. Retinal detachment may occur during the healing process in an individual who has sustained trauma to the retina.	a. True b. False					

**FOR CREDIT, form must reach  
Hahnemann Medical College by December 15, 1985**

Name \_\_\_\_\_  
Institution or Team \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Social Security Number \_\_\_\_\_

Mail with \$12 fee to:  
Hahnemann University  
School of Continuing Education  
Broad and Vine  
Philadelphia, PA 19102

Check one

- ☐ certified                      certification number \_\_\_\_\_  
☐ associate                      membership number \_\_\_\_\_

Please indicate below the level at which you are now working.

\_\_\_\_\_ High School  
\_\_\_\_\_ Junior College  
\_\_\_\_\_ College  
\_\_\_\_\_ University  
\_\_\_\_\_ Sports Medicine Clinic

If you are interested in submitting an article to be used in the Journal quiz please contact Don Kaverman at Ferris State College. All authors of published articles will receive 1.0 CEU.

Other (please specify) \_\_\_\_\_

*(Make copies of this page.)*

---

## **Eighth Annual N.A.T.A. Student Writing Contest**

In an effort to promote scholarship among young athletic trainers, the National Athletic Trainers Association, Inc. sponsors an annual writing contest.

1. This contest is open to all undergraduate student members of the NATA.
2. Papers must be on a topic germane to the profession of athletic training and can be case reports, literature reviews, experimental reports, analysis of training room techniques, etc.
3. Entries must not have been published, nor be under consideration for publication by any journal.
4. The winning entry will receive a \$100.00 cash prize and be published in *Athletic Training* with recognition as the winning entry in the Annual Student Writing Contest. One or more other entries may be given honorable mention status.
5. Entries must be written in journal manuscript form and adhere to all regulations set forth in the "Guide to Contributors" section of this issue of *Athletic Training*.
6. Entries must be received by March 1. Announcement of the winner will be made at the Annual Convention and Clinical Symposium in June.
7. The Writing Contest Committee reserves the right to make no awards if in their opinion none of the entries is of sufficient quality to merit recognition.
8. An original and two copies must be received at the following address by March 1, 1986.

**NATA Student Writing Contest  
Deloss Brubaker, ATC  
U.S. Sports Academy  
PO Box 8650  
Mobile AL 36508**



# How To Acquire An Athletic Trainer On The High School Level

Phillip Hossler, ATC

*The emergency care given to athletes on the high school level has been the subject of many recent articles, roundtable discussions and medical symposiums. In addition, careful thought has been given to the post-trauma care that these athletes receive.*

*Studies have investigated the preparation that high school coaches have to care for emergency and initial first aid situations that occur in high school athletes. In addition, the availability of medical personnel and physician care has been investigated. This article briefly reviews the training in first aid by coaches and the availability of team physicians in three different states, followed by a presentation of eight methods by which a high school may obtain the services of a qualified athletic trainer.*

The fitness boom that is sweeping this country has made persons involved in medical care painfully aware of three facts. First, there is a shortage of qualified physicians to deal with the recreational and competitive athletes' various injuries. Accurate injury diagnosis may be difficult as there may be a vague cause-and-effect relationship. At the same time the athlete is different from the normal patient since he/she is not necessarily incapacitated in all endeavors, rather only temporarily limited in his/her physical capabilities. The second result stemming from the expanded interest by both males and females in athletic and recreational pursuits is that there must be an immediate increase in both the scope and depth of knowledge made available to athletes, parents, coaches, and physical education departments in high schools and colleges. As is true in all fields of endeavor today, the depth of our understanding is undergoing many changes. The practices and beliefs that were accepted without hesitation twenty years ago, may already be changed or are undergoing renovation. The third revelation of this country's interest in athletic health is that young people are becoming involved at much younger ages, thus extending their athletic lives. The realization that young people in their teen years and younger are capable of astounding feats of physical strength, stamina and body control has caused the medical world to alter its

outlook on athletes of all ages.

The genesis of a large number of athletic careers and recreational exercise programs is the time spent in high school athletic programs. It is during this time in life, when many developmental processes are particularly acute, that the exercise habits, injuries sustained, lessons learned and advice given from role models can be particularly potent. It is bewildering how many school systems feel that they are apparently capable of operating their athletic programs on the hope that none of the athletes will get injured; or if someone is injured, that it will be a minor injury. This premise may be based on the belief that local hospitals, first aid squads and physicians are able to provide adequate coverage of all athletic events and practices. This article has a two-fold purpose: first, to provide evidence supporting the position of athletic trainer on the high school level; second, to provide various methods in which an athletic trainer can be included in a practical manner within the athletic program.

Even under ideal conditions, anyone engaging in a physical activity is subject to the possibility of sustaining an injury. In the absence of a qualified athletic trainer, the school is faced with the following options in dealing with an injured athlete: 1) the coach can decide the severity of the injury, 2) the coach can call for a first aid squad to transport the athlete to a hospital for further evaluation, 3) the athlete can be sent home and recommended that he/she see the family physician, or 4) the coach can make the appointment for the athlete to see the appropriate specialist. The glaring problem with all of these options is that the athlete is not being seen soon enough by a qualified person who has been trained in skills such as injury evaluation, first aid procedures, preventative taping techniques and rehabilitation exercise development.

Insurance premium for coverage of every athlete having to go to the hospital or doctor out of necessity should be encouragement enough for placing such a trained person within easy access of the athletic program. In addition, many athletes may lose valuable playing time if their next doctor's appointment is not for five to seven days. This is not to imply that there are not cases of athletic injuries which belong in hospitals and doctors' offices; however the skills of today's athletic



Mr. Hossler is Head Athletic Trainer at East Brunswick High School, East Brunswick, N.J.

trainer are varied, using such talents as establishing conditioning programs for healthy and rehabilitative programs for injured athletes; application of protective strapping and padding; initial evaluation and assessment of injuries; assisting in the selection and fitting of athletic equipment; advising and counseling athletes in areas such as nutrition, flexibility and health practices; as well as the administration of initial first aid.

The National Athletic Trainers Association (NATA) is the national education and certification organization in the field of health care problems associated with sports participation on the high school, collegiate and professional levels. The NATA is a member of related professional organizations in the field, including the National Collegiate Athletic Association (NCAA), the United States Olympic Committee (USOC) and such prestigious medical associations as the American Academy of Pediatrics. The NATA's certified athletic trainer has a thorough knowledge of anatomy, physiology, nutrition, conditioning, hygiene, rehabilitation and injury methodology. The certification requirements established by the NATA require not only extensive course work, but also 800 hours of practical experience under a certified athletic trainer for students enrolled in an approved college curriculum (1800 hours under a certified athletic trainer for persons who are preparing for the examination under the NATA Internship route). In addition, the prospective trainer must have current cardiopulmonary resuscitation registration and standard first aid certification before being allowed to sit for the certification examination. Once certified, the athletic trainer must stay current with the field by acquiring six continuing education units every three years.

As reported in the August, 1975 issue of *THE PHYSICIAN AND SPORTSMEDICINE* (McGraw-Hill Publishers), R.W. Redfearn stated:

"There is no other person who can unify a health care program for the athlete with greater dispatch than the properly trained and accredited athletic trainer. With the conspicuous absence of the physician and the evident variations of training, experience, and capabilities demonstrated by the coaches, there is an absolute need for a qualified person to administer the various training programs, assist with physical examinations, provide qualified emergency care capabilities, monitor safety standards in equipment and training techniques, and administer a comprehensive rehabilitation program to high school athletes" (1).

More and more administrators are recognizing what a certified athletic trainer can contribute to the quality of the athletic program. However, there are still some who feel that one person can adequately handle both the coaching duties and athletic training responsibilities. They fail to realize that a coach is most likely not schooled in the various areas of concern that a certified athletic trainer has studied. By attempting to perform both the coaching and athletic training duties, one of these two roles will surely suffer.

In a 1973-74 survey of 216 high schools in Michigan, Richard W. Redfearn, Ph.D., as reported in the August, 1975 issue of *THE PHYSICIAN AND SPORTSMEDICINE*, indicated that "the most critical facet of the health care continuum for the high school athlete is the availability of a competent physician to care for and treat the injured athlete. Twenty-seven percent of all the schools had a physician under contract." Table 1 demonstrates the breakdown for all four classes of high schools in the Michigan study (1).

**Table 1**  
**Percentage of Schools Having A Physician Under Contract for Medical Services at Athletic Contests**

CLASS A	CLASS B	CLASS C	CLASS D
52%	31%	18%	8%

It is of paramount importance that a school district retain the services of a physician for the benefit of the athletic programs. Since most school districts generally retain more than one physician, it is suggested that in addition to a general practitioner that an orthopaedic surgeon also be retained to evaluate the variety of injuries sustained by the athletic population. One of the most troublesome situations faced by high school coaches, athletes and athletic trainers is the difficulty faced when either locating or scheduling an appointment with an orthopaedic surgeon who has a sports medicine interest.

It is not possible to retain a physician to attend all home athletic events, not to mention the practices. Considering the two, it would make more sense to have a qualified person in attendance at practices since teams obviously have more practice sessions than contests. Who is on-site to oversee injury management when, for example, football, boys and girls soccer, boys and girls gymnastics, boys and girls cross-country are all practicing at the same time? If there is no physician present, who is to tend to the care of the injured athlete? According to the Michigan survey, high schools rely heavily on the coach for the coverage (Table 2).

**Table 2**  
**Percentage of Schools and Persons Who Attend to Medical Emergencies**

	CLASS A	CLASS B	CLASS C	CLASS D
Coach	57	68	84	70
Trainer	27	8	6	4
Person with first aid training	11	11	6	6
Physician	-	2	2	-

The above figures show an average strongly in favor of the coach (70%) with coverage by a trainer second (11%), a first aider third (8.5%) and physician fourth (1.0%). A 1983-84 survey of 72.5% of the high schools in Wisconsin (2) revealed similar findings as reported in the January, 1985 issue of *THE PHYSICIAN AND SPORTSMEDICINE*. The data revealed that medical coverage for the athletes in Wisconsin was sparsely organized and supervised. Although fifty-two percent (52%) of the schools indicated that physician services were volunteered, only 7.8% of the schools had contracted for the services of a team physician. Eight and one-half (8.5%) percent of the schools had an NATA certified athletic trainer on staff, sixteen percent (16%) designated a staff member to perform athletic training duties, and forty percent (40%) use some type of student-trainer program.

The provision of first aid to the athletic population in the Wisconsin study revealed some interesting points. As in the 1973 Michigan study, the Wisconsin study showed that the coach performed the bulk of first aid



coverage (43.8%). Yet only seventeen percent (17%) of the high schools responding required their coaches to have a standard first aid certificate, only five percent (5.2%) required an advanced first aid certificate and only four percent (4.6%) required cardiopulmonary resuscitation certification.

In October, 1982 a survey of 602 Illinois high schools (3), of which 397 (66%) responded, produced similar results as the Michigan and Wisconsin studies. When questioned if their schools employed an athletic trainer, 27.3% indicated that they did; of this number, 61.7% employed an NATA certified athletic trainer. An interesting response in this particular study was that of the schools that employed an athletic trainer, 55.9% indicated that they would consider hiring an additional trainer. Of the schools which did not currently employ an athletic trainer (72.7%), the majority of them responded that they did not plan to hire one (87.4%). The majority of schools which planned to hire a trainer in the future responded that they planned to do so in 1-5 years (57.9%). Money was the main reason given for schools not planning to hire an athletic trainer (77.5%), with administrative apathy (11.8%) and coaches already functioning as trainers (10.7%) being the other reasons given.

When asked who performed the trainer's duties in the schools, 92% responded that coaches provided this health service. The Illinois survey collaborates with the Michigan and Wisconsin studies in many areas. The coach is the person most responsible for initial first aid in these three states. There is a movement in a few states toward requiring coaches to pass a certification requirement. The obvious intent is to ensure quality care for the athletes in their respective sports. The requirements in such a certification procedure should be directed toward ensuring that prospective coaches remain current in their knowledge in areas such as conditioning, skills, strategies and equipment. In addition, an important portion of the certification requirements for coaches should be the maintenance of current first aid and cardiopulmonary resuscitation certification. However, due to the present shortage of coaches, most states cannot impose certification requirement since many schools are having difficulty getting coaches. A truly prudent administrator can provide quality coaches for the athletic teams by encouraging the coaching staffs to attend clinics, by providing in-house opportunities to obtain CPR certification, by financing local certified athletic trainers to provide in-service seminars on sports medicine if the school does not have a trainer on staff and by establishing protocols of action in the event of an athletic injury.

Let us assume that the school district has agreed to the above arguments and is considering hiring a certified athletic trainer. What are the options open to the district for employment? What type of position should be offered as far as duties, hours, and pay? The following is a presentation of several options that can be used to acquire the services of a qualified athletic trainer.

---

#### OPTION #1 FULL-TIME TRAINER

A full-time athletic trainer is someone who does not teach classes during the school day. The duties during the day generally include treatments and rehabilitation exercises for those athletes who have been injured. Many schools also include in this position varying amounts of equipment responsibilities. The hours worked vary depending upon the method of salary payment. For example, a full-time trainer who receives a teacher's salary with no additional stipend, may be permitted to

come into school later in the day since the athletic schedule requires that the trainer be at school after the regular teaching day has ended. This is based on the idea that the trainer can be expected to be on the job the same number of hours as the teacher who receives the same salary. In actual practice, however, the athletic trainer is on the job more hours due to athletic practices and contests on Saturdays, evenings and often during vacations. An adjunct to this method is to provide the athletic trainer with the appropriate salary, based on the teacher's guide plus a stipend per sport season to equate the hours. The trainer's salary may also be negotiated based on job description and responsibilities. If the athletic trainer is to be paid on a scale other than the teacher's guide, it is imperative that the laws governing inclusion in the teacher's union and pension be investigated.

This is considered, by this author, to be the most ideal position. It allows a professionally competent person to provide a valuable service of the highest quality to a large athletic population. The athletes are able to be scheduled for treatments and rehabilitative exercises during their study halls, lunch periods and, if their injury restricts participation, during their physical education period. The certified athletic trainer, in turn, is able to work one-on-one with the injured athlete to ensure the most comprehensive treatment and exercise regimen possible in the high school setting. This care is able to be reinforced when the athlete is seen for the second time after school during practice time.

---

#### OPTION #2 TEACHER-TRAINER

A teacher-trainer is someone who teaches classes during the school day and serves as the athletic trainer after school. This option is popular with school districts as it allows one person to fill two positions. There are, however, drawbacks that accompany this option of employment. One of the most obvious drawbacks is that care and treatment during the school day will suffer since the athletic trainer may not be available when the athlete is available for treatment. This problem can be controlled if a few guidelines are adhered to for the teacher-trainer position: first, the teacher-trainer should teach a reduced number of classes so as to increase the availability for treatment and therapy sessions. For example, if the normal teaching load is five classes, the teacher-trainer should only teach two or three. The difference may be termed "duty periods" which the teacher-trainer serves in the training room. The classes to be taught should be scheduled for the second and the next to last periods of the day. This allows the teacher-trainer to be freed during the student-athletes' lunch periods as well as providing the flexibility of allowing the teacher-trainer to arrive at school after first period in the morning during the busy months of the Winter sports season when so many evenings are spent at school covering basketball and wrestling contests. The trainer should be free during the last period of the school day in order to prepare materials for practices, provide treatments and clear up last minute details for those teams that are traveling to away games.

The salary for a teacher-trainer is based on the appropriate step of the teacher's guide plus a stipend for the position of athletic trainer. This stipend should be equivalent to that of the highest paid assistant since the athletic trainer serves as an assistant to every coaching staff throughout the Fall, Winter and Spring seasons.

The position of teacher-trainer is a very plausible solution to providing the school and athletic populations with a certified educator and a certified athletic

trainer. The administration must be aware that anyone in this position is subject to professional burnout due to the demands during and after the school day, non-stop for the length of the school year. Therefore, concessions such as class load adjustments, duty periods, salary and sport coverages must be logically approached and acted upon to ensure continued quality care.

---

#### OPTION #3 SUBSTITUTE ATHLETIC TRAINER

---

There are other options open to a school district that will provide the district with the services of a certified athletic trainer which are possibilities but not as commonly seen as is the teacher-trainer option. For example, the athletic trainer may be retained by the district as a "permanent substitute" within the high school or district. This will provide the trainer with gainful employment and may keep the individual foremost in the minds of those responsible for hiring in the district should an opening occur. The quality of the service provided will naturally suffer due to the unavailability of the trainer during the school day, but the person will be in the district and most likely can be freed in order to be at the high school in time for practice sessions.

The "substitute" trainer would receive whatever pay is contractually decided upon for substitutes, plus the stipend for athletic trainer. This position has been most successful with certified athletic trainers who are convinced that they want to eventually work within this district and are willing to tolerate some inconvenience until they are able to be hired full-time. Often when a certified athletic trainer returns to the high school that he/she graduated from, they are willing to tolerate the inconvenience of not knowing where they will be assigned because any setting may draw forth childhood memories.

---

#### OPTION #4 ADMINISTRATIVE ASSISTANT-ATHLETIC TRAINER

---

Depending upon the size of the district or the organizational pattern within a district, it may be possible to hire a certified athletic trainer as an assistant athletic director. The logical assignment of duties would include working closely with the coaching staffs in the ordering of equipment since most trainers learn the differences in quality and durability of a variety of sport equipment. In addition, the assistant athletic director/athletic trainer could maintain an accurate inventory of all equipment and be responsible for distribution and collection at the beginning and end of each sport season. This type of close supervision would markedly reduce the amount of lost or stolen equipment.

The assistant athletic director/athletic trainer would also be freed during the school day to provide both quality and comprehensive care to the athletic population of the school. The salary might follow the teacher/stipend route or it may be negotiated since many athletic directors are on the administrators' salary guide rather than the teachers' guide.

---

#### OPTION #5 NURSE'S OFFICE/ATHLETIC TRAINER

---

Another option open to acquire an athletic trainer in the high school setting is to hire a certified athletic trainer for routine clerical work within the high school nurse's office. This would allow the nurse to obtain often much needed assistance while at the same time make the athletic trainer accessible to the athlete during the day. The athletic trainer would be in a position of assisting with blood pressure recording, as well as

vision and hearing examinations which are a regular part of the nurse's duties. In addition, the trainer would be in a position to organize the pre-season sports physical examinations. The athletic trainer would be able to, in certain circumstances, provide the injured athletic population with treatment and exercise regimens. This could be done if the nurse's office is large enough to accommodate such treatments, if the training room is adjacent to the nurse's office, or if the trainer's schedule would allow him/her to be away from the nurse's office during the day.

The salary for such a health office aide may be negotiated. In addition, the athletic trainer would receive the stipend paid for the athletic training position. This type of position would necessitate close working relationships between the nurse's and the athletic director's offices in order to ensure both quality and adequate care for the athletic population of the school.

---

#### OPTION #6 PART-TIME TRAINER

---

A part-time trainer is someone who is certified as an athletic trainer but works at a job outside of the school district. The trainer would arrive at school near the end of the school day in order to provide coverage for practices and games. This type of option allows the school to have the services of a qualified person for on-site injury evaluation, rehabilitation exercise programs and treatments, but only during the after-school hours. This type of program limits the effectiveness of the athletic program because athletes are not able to be seen during the day which means that while they are in the training room for their treatments after school, they might be missing skill explanations, team strategies and conditioning that is being covered at practice. This places the athlete in a position of missing both the mental and physical aspects of the sport due to time restrictions. Many athletes may yield to real or imagined pressure from themselves, teammates or coaches and rush or eliminate their treatment/therapy in order to return to competition. The value of a qualified athletic trainer is the assurance that athletes return to practices physically capable of withstanding the trauma associated with athletic competition. If an athlete takes the shortcut route in his return to practice, he may later take the expressway back into the training room because he was playing with an injury that had not sufficiently healed and regained its initial strength. Placing time restrictions on the athlete and the athletic trainer may hinder the acquisition of quality care for the athlete. In this regard, the positions of part-time and teacher-trainer are similar.

The position of part-time athletic trainer is difficult to fill because there simply are not a sufficient number of certified athletic trainers who are not employed in high schools and who are in a position of being able to be released from their full-time job at two o'clock each day to arrive at school for practice. One viable possibility exists in hiring a certified athletic trainer who has retired from full-time employment, but is willing to come to school for those hours after school and during the evenings in the Winter season.

The salary for a part-time athletic trainer may be negotiated as a package or may be equal to that of the highest paid assistant coach.

---

#### OPTION #7 SPORTS MEDICINE CENTERS

---

If a high school is unfortunate enough to be without the services of a certified athletic trainer and fortunate



enough to be located near one of a handful of sports medicine centers across the nation, it may be possible to obtain competent, though limited, care. These sports medicine centers which are often university or hospital affiliated offer a visiting trainer program similar to the well-known visiting nurse program. These centers offer assistance to both coaches and athletic trainers on the high school level. For the high school athletic trainer, sports medicine centers work as a doctor referral service where the trainer is assured that the patient will be treated as an athlete. For the coach, a sports medicine center serves as a resource for education and a source of immediate consultation with doctors, trainers, and physical therapists who can offer suggestions and/or answer individual problems. While this does not reduce the coach's responsibility for initial first aid, it does alleviate some of the problems of follow-up care.

An example of such a sports medicine center which provides the services of a free consulting certified athletic trainer is the Temple University Center for Sports Medicine. Upon request, athletic trainers who are employed by the Center will visit a high school to bring new techniques to the coaches and act as an educational resource. The consulting trainer follows up on any athlete seen by the physicians at the Center and serves as a link between physician/treatment and athlete/rehabilitation. The Temple Center is one of a handful of centers that practice sports medicine on a full-time basis. Some physicians or centers may hold sports medicine clinics on a part-time basis while continuing their general practice. However, comprehensive centers like the Temple programs are almost one hundred percent for sport-related injuries. While these facilities are open to the public, one of the most important aspects of a sports medicine program is that it is geared toward high schools and their athletes.

Typically, sports medicine centers are staffed by orthopedic surgeons, podiatrists, athletic trainers, physical therapists, nutritionists and exercise physiologists. The sports medicine center would also have all medical specialties available should referral be necessary. This is important to ensure continuity of medical care while maintaining comprehensive medical histories. The concept of a sports medicine center is to offer a broad spectrum of services which were formerly reserved for professional and collegiate athletes only. While the Temple University Center provides the services of certified athletic trainers at no cost to the high school, there are other such programs across the nation which may or may not be cost free.

This type of program requires a tactful deployment of the athletic trainers so as not to offend the medical practitioners within the geographical coverage of the program. The sports medicine center must provide public relation information so that there can be no misinterpretation of the scope of service provided by the athletic trainers.

#### OPTION #8 TRAINER ROTATION PROGRAM

The majority of secondary schools in this country do not have access to the services of a certified athletic trainer. The reasons given for not employing an athletic trainer include declining enrollment and budget cuts. An alternative to this dilemma is offered by The Institute for Medicine in Sports of Hamilton Hospital of Trenton, New Jersey. The basis for this program can be compared to that of the shared-teacher program employed by school districts. In the standard shared-teacher program, a teacher is shared by two or more schools within the

district so as to provide a full teaching load or to meet special needs of students in two locations. In the program offered by The Institute for Medicine, two schools share the services of a certified athletic trainer and split the cost. Programs similar to this have been implemented elsewhere across the country, however, these programs are often too narrow in scope.

When two or more schools attempt to provide rotational coverage they are immediately faced with two glaring obstacles: 1) Which school will determine the trainer's salary and benefits package? and 2) Where will the trainer be scheduled to provide services on any given day? In order to resolve this situation, The Institute for Medicine serves as a catalyst for the employment of the certified trainer, who is in reality employed by the Institute. The Institute and the two schools mutually agree upon a salary for the athletic trainer which is then split evenly between the schools. The Institute provides the athletic trainer with a medical benefits package for twenty-five percent (25%) of the salary agreed upon. The cost of the benefits package is also divided evenly between the two schools. This equates any disparities that may exist between the medical benefits of the two school districts. The cost of the athletic trainer's salary and benefits package which are divided equally between the schools is paid to the Institute which in turn pays the athletic trainer and provides the coverage assigned in the benefits package.

There are several options open to decide the presence of the athletic trainer on any given day or night. The trainer may alternate whole days between schools or he/she may alternate morning and afternoon attendance at each school. For example, the trainer may be at school A on Monday morning and Tuesday afternoon and be at school B on Monday afternoon and Tuesday morning. Coverage of athletic contests may be difficult and a constant source of conflict. The coverage of a game at school A would supercede coverage of a practice session at school B. When such a conflict arises, there must be an agreement to abide by a rotation system such that no one is slighted excessively.

The rotation of athletic trainers would work just as well if three schools were to retain the services of two certified athletic trainers. The presence of a hospital or medical university to act as a catalyst and to provide the medical benefits is crucial. Although not ideal in design, the trainer rotation program does allow high schools to provide care even though it cannot be comprehensive or consistent in nature.

The National Athletic Trainers Association (NATA) is an organization dedicated to the advancement, encouragement and improvement of the athletic training profession. The NATA currently has sixty-four undergraduate and nine graduate curriculums in athletic training in thirty-three states. If a high school is fortunate to be located close to one of these schools, there is another option available to obtain the services of an athletic trainer.

The sixty-four undergraduate curriculum schools cannot "loan" their student trainers to local high schools because in order for the student trainers to take the certification examination given by the NATA, the hours spent as a student trainer must be under the supervision of an NATA certified athletic trainer. Some colleges with approved curriculums will provide their student trainers with actual practical experience by placing them in high schools, but only if the high school already has an NATA certified athletic trainer on staff. This is an excellent method for the high school to

*continued on page 228*

# Wanted: Athletic Trainers for Special Olympic Athletes

Brent C. Mangus, EdD, ATC  
Ron French, EdD

*Since the passage of the Rehabilitation Act of 1973 there have been more and more athletes with mental deficiencies participating in competitive sporting events. Most of these athletes are competing in the Special Olympics. To compete in the Special Olympics these athletes must have a physical examination which addresses the physical requirements to participate in competitive sports. However, these athletes many times have special needs which should be closely monitored before and during competition. The majority of the coaches working with these athletes were not trained in the area of physical education or athletic training. For this reason there is a need to have competent medical and paramedical personnel working with these athletes. The inclusion of an athletic trainer to monitor Special Olympic competitive events would not only help these athletes, but would benefit the individual athletic trainer and the profession of athletic training.*

Many school districts across the nation are or will be employing athletic trainers to assist in the prevention and rehabilitation of athletic injuries. This role in the past has been exclusively related to the elite school athletes. With the passage of federal legislation this role is expanding to handicapped students who compete in various athletic events. The athlete trainer must also be knowledgeable about the treatment of these athletes. The purpose of this paper is to discuss the two federal laws involving athletic participation for the handicapped athlete and then apply the intent of these laws to the most widely known national and international sports program for these individuals, the Special Olympics.

The federal laws are Public Law 93-112 (9), The Rehabilitation Act of 1973 and PL 94-142 (10), the Education for All Handicapped Children Act of 1975. The Rehabilitation Act is considered the first federal rights law to protect the rights of handicapped individuals of all ages (1). In Section 504 of this law specific areas of physical education and athletics are specifically addressed. Some of the requirements stated in this law are:

1. In providing physical education courses, athletics, and similar programs and activities to any of its students, a recipient to which this subpart applies may not discriminate on the basis of handicap. A recipient which offers physical education courses or which operates or sponsors interscholastic, club, or intramural athletics shall provide to handicapped students equal opportunities for comparable participation in these activities.
2. Physical education and athletic activities offered to handicapped students may be separate or different from those offered to nonhandicapped

students to the extent that separation or differentiation is necessary to ensure the health and safety of the students or to take into account their interests (p. 22685).

In the rules and regulations of Public Law 94-142 published in 1977, physical education was defined as:

1. Physical and motor fitness;
2. Fundamental and motor skills and patterns; and
3. Aquatics, dance, and individual and group games and sports (including intramural and lifetime sports).

Appenzeller (1) stated that with the passage of these two laws there will be an increasing number of students with handicapping conditions participating in sports and a concurrent rise in litigation. One area of litigation will relate to athletic injuries and the school responsibility to plan and supervise the athletic programs for these individuals in the same manner as the elite school athletes.

During the 1980's there has been increased participation in recreational and competitive sporting activities by those individuals who are mentally retarded. As more teachers of mentally retarded people realize the benefits of physical exercise and participation in sport for this population there will be increasing opportunities for the mentally disabled in sport and recreation. Many of these sports participants will have a secondary handicapping condition such as, seizure disorders, hyperactivity, and cardiorespiratory deficiencies.

One of the major organizers of sport for the mentally retarded population is the Special Olympics Inc. which was established in 1968. Today there are over two million athletes in the program participating in all 50 states and 50 foreign countries. Each year there is an increase in the local and state competitions of Special Olympics. Geographically, more states expand their programs and an increasing number of countries become involved each year. Concurrently, the number of participants will continually increase as new sports competitions are included. With the growth of this program, there becomes an increased need for competent medical supervision which includes the prevention and care of sports injuries for this population.

---

*Dr. Mangus is currently a research associate with the Developmental Center for Handicapped Persons at Utah State University, Logan, Utah.*

*Dr. French is currently an associate professor of Special Physical Education at Texas Womens University, Denton, Texas.*



## Special Olympics Medical Requirements

The Special Olympics Foundation requires each athlete participating in a Special Olympics sponsored competition to have a current medical/physical examination. This examination can be completed by a physician or a nurse. The only medical information required by the Special Olympics Inc. is the type of medication that the athlete is presently taking or requires on a daily basis. However, participation in the Special Olympics by athletes with Down's Syndrome, who represent approximately 17% of the athletes, does require a more extensive medical evaluation (4). The possibility of an atlantoaxial dislocation in the Down's population prompted the Special Olympics to require these athletes to obtain complete x-rays with views of full extension and flexion of the neck (11). The attending physician then must complete a release statement before the Down's Syndrome athletes can train or compete in specific activities. The contraindicated activities for Down's Syndrome athletes with a possibility of atlantoaxial dislocation include: gymnastics, diving, butterfly stroke in swimming, diving start in swimming, high jump, pentathlon, soccer, and any warm-up exercises placing pressure on the head and neck muscles.

Maxwell (8) pointed out that many of the Special Olympic athletes are receiving their medical examinations by nurses because of the cost involved to the participants when they go to a physician for this examination. The authors of this manuscript have witnessed medical examinations completed by physicians that are generally or sometimes cursory in nature. That is, the physician may listen to the athlete's heart, look down the throat, and sign the medical release form. As a result of this type of physical examination given to these athletes there is an indication that a competent athletic trainer be part of the medical team at Special Olympic competitions. These athletes also have medical needs before, during, and after their training and competitive participation. The coaches that are doing the actual coaching of these athletes are many times Special Education teachers who have not had a first aid or a physical education course. The teachers and coaches of these athletes are not always aware that these athletes suffer sports injuries and have special medical needs due to their individual disabilities.

## Precautions

In addition to being mentally disabled many of these athletes who are mentally retarded have a secondary physically disabling condition athletic trainers should be aware of when assisting in Special Olympic competitions. A good example of this is the athlete with Down's Syndrome. It is estimated that 50% of this population have a congenital heart defect (7). Some of the more common heart defects in this population include; large cushioning septal defect, atrioventricularis communis, and tetralogy of Fallot. There have been other congenital heart defects discovered in this population, however the aforementioned deficits are most common. Starek (12) recommended that these and other congenital heart diseases in the postoperative stage should be dealt with on an individual basis. The inclusion of these athletes into strenuous and/or nonstrenuous sporting activities should be done on a discretionary basis by the individual's physician. The problem is that many of these athletes do not receive medical advice from their individual physician before practice sessions and competition begins, leaving the decision of participation up to the coach.

Another physical disability associated with these athletes is seizure disorders. The athlete with diagnosed seizure disorders in most cases will be taking some type of anticonvulsive medication. Many of the competitive events the athletes participate in require an overnight stay. This brings about different problems with the athlete being administered the medication. At times the athlete will forget to bring the medication from home or will forget to take the medication while competing.

Athletic trainers working as part of the medical team at a Special Olympics competition should be aware of this and be knowledgeable in the care of a person during and after a seizure. Assist the person to the ground if possible, roll the individual on the side so that any discharge from the mouth or nose will exit the body quickly and the tongue will not fall back into the throat. Next, protect the person from injury. Do not try to hold the person during the convulsion. Move any hard object that might accidentally injure the athlete. Monitor respirations and heart rate after the convulsion has ceased. Make every attempt to protect the person from public embarrassment. The person should be taken to a medical facility. If the person has seizures regularly and is taking medication for the disorder, let the person rest and inform the coach or parent what has transpired (5).

## Injuries Common to Special Olympics Competition

Some of the common sports injuries suffered by mentally retarded athletes were outlined by Birrer (3). Injury reports were kept over a three year period on a total of 2,056 Special Olympic athletes during competitive participation. The injuries reported were comparable to an athletic competition of intellectually normal participants. In this report 2.8% of the competitive athletes sustained injuries that were evaluated by an attending physician to be mild to moderate in severity. There were no injuries requiring hospitalization. Many of the injuries were due to environment, i.e. heat cramps, fatigue, exhaustion, and sunburn. Being aware of the environmental conditions is not only important at summer games competitions but also during winter games competitive activities. According to Hage (6) preparation for cold weather must be a major consideration for disabled athletes. The possibility of frostbite, hypothermia, and circulatory impairment needs to be constantly monitored in the athletes. Those athletes that have physically disabling conditions which accompany mental retardation have an increased probability for this type of injury due to the loss of sensation in the affected body part.

## Conclusion

As Bedo, Demlow, Moffit, and Kopke (2) stated related to their observations of one International Special Olympics competition,

By and large the pattern of injuries was similar with the exception of those caused by the competitors' underlying conditions. This is why, from the point of view of the responsible medical team, we could not consider them just like any other kids except a little slower. We had to be prepared to anticipate difficulties and be ready to treat them in a hurry. Any major mishap could cause a severe setback to this splendid program (p. 56).

We, as athletic trainers, should be aware that these athletes sprain the same ligaments and sustain injuries to the same tissues as our varsity athletes. The severity

*continued on page 259*

# Free Weights: A Review Supporting Their Use in Training and Rehabilitation

Larry J. Nosse, MA, PT, ATC  
Gary R. Hunter, PhD

*Various strengthening modalities are compared and contrasted. The review reflects a bias in favor of free weights at selected phases of training and rehabilitation. It is suggested that isokinetic strengthening equipment is less effective since it does not include eccentric loading and does not duplicate the force-position curve for each movement and each individual. Isokinetic movements were found to be inferior to isotonic at every speed with the exception of slow, which resulted in equal strength gain. Free weights are felt to have an advantage in developing specific usable strength and neuromuscular coordination. The main advantages in isotonic equipment use for rehab are the multiple movement direction potential, the eccentric muscle contraction, and the offering of a known resistance for better control.*

Manufacturers of the newer machines for strengthening (Cybex, Nautilus, Orthotron, Universal, etc.) have invested a great deal of time and effort advertising their "latest and best" machines. Those of us involved in strengthening and rehabilitation fields have been subjected to many forms of this advertising. Much of the glamour of the new devices, however, may be based more upon potential benefits than upon independently demonstrated benefits compared to traditional strengthening modes. The following review focuses on the point that, as yet, there is insufficient evidence to conclude that the use of strengthening machines result in superior performance, fewer injuries or shortened rehabilitation periods compared to traditional weight strengthening. The initial part of the review deals with the functional morphological benefits which can increase performance capacity and prevent injury. The latter section discusses free weight use in the rehabilitation of the injured athlete.

## Resistance Training for the Healthy Athlete Strength

Specific strength development is certainly one important aspect in improving performance capacity for many athletes. Companies that produce isokinetic and variable resistance apparatus advertise their equipment

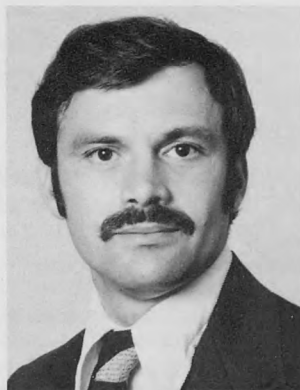
as superior to other methods in developing strength. However, both isokinetic and variable resistance apparatus may have serious limitations. First, research indicates eccentric training may cause more hypertrophy than concentric training (11, 17). This might in part explain why researchers, coaches, and athletes have indicated for years that eccentric contractions may be important in developing strength. Research in the Russian literature (8) and by others (1) indicates this may be the case. With one exception, isokinetic training apparatus does not include eccentric loading.

All variable resistance apparatus cause the resistance to change throughout the range of motion (via cams or changing lever arm, etc.). The manufacturers maintain that the changing resistance duplicates the force-position curve for each movement. This accomplishment is, for all practical purposes, impossible. Many things affect force-position curves, for example, the ratio of the length of segments that make up a joint, the point of insertion of the working muscle, the speed at which the movement is performed. In order for the force-position curve to be duplicated it would mean a separate machine would have to be built for each person, and for many different conditions. It may be possible to build a machine that approximates the "average" force-position curve. However, to our knowledge, no manufacturer has provided scientifically satisfactory evidence that his equipment is even related to the various force-position curves. In fact, recent research comparing strength position curves of college subjects with the machine torque position curves of one major variable resistance device found that the machine torque curve is very dissimilar to appropriate subject strength position curves on several machines. In several instances machine torque was increasing while strength was decreasing demonstrating almost opposite shaped curves. In addition, there was a large degree of variability between subjects. This substantiates the view that manufacture of one variable resistance machine for all users may be a more difficult matter than originally thought (7).

The scientific literature on the development of strength has largely been inconclusive, indicating no advantage in variable resistance or isokinetic training over isotonic training. Several authors have found that slow isokinetic and isotonic training are similar in the



Mr. Nosse is Associate Professor of Physical Therapy, Marquette University, Milwaukee, Wisconsin.



Dr. Hunter is Assistant Professor, Department of Health and Physical Education, University of Alabama - Birmingham.



development of strength (6,9,10) while fast isokinetic movements have been found inferior to isotonic movements in the development of strength (6,30). In addition, Meadors et al. (22) and Stevens (30) found moderate speed isokinetic to be inferior to isotonic exercise in the development of strength. Waltham (34) compared strength development on a pseudo-isokinetic device to isotonic training and found that the isotonic group improved the most when testing was done isotonicly but no difference was seen in strength improvement when testing was done isokinetically. The only study the authors are aware of that show isokinetic exercise in a positive light when compared to isotonic exercise is by Pipes and Wilmore (24). However, Wilmore has raised doubts about the validity of the findings after re-analyzing the data (35).

Coleman (4) and Sanders (28) both found no difference in development of strength when isotonic and variable resistance training programs were compared, while Pipes (23) indicated that strength improvements were greatest when tested on the modality the subjects trained. Finally, Stone (32) and Raitsin (summarized in Atha, 1) found constant resistance training to be superior to variable resistance training devices in the development of strength.

It would be very difficult to claim that these studies favor either isokinetic or variable resistance over isotonic strengthening exercise. In fact, the reverse hypothesis may be slightly favored.

### Specificity

At the beginning of this discussion of strength development, we qualified strength development with the term "specific". Obviously, athletes want to develop usable strength, and it must be usable in the specific sport movements important for each athlete. Free weights are often felt to have an advantage in developing specific strength (8,31). Several arguments follow that we feel help substantiate this statement.

It is well recognized that increases in strength are specific to muscle length (1). Since many of the important large muscles of the body cross two joints (triceps, rectus, femoris, gastrocnemius, etc.) their muscle length will be influenced by both their proximal and distal joint positions. Thus, it is very important that some attention be made to position at joints immediately proximal or distal to joints where movement occurs. Most machine systems offer only one or two potential movements per major muscle. These may or may not incorporate the needed joint positions. A free weight system allows the freedom to select exercise that will encompass the correct joint positions.

Movement in most sports does not occur at only one joint at a time. Movement occurs multi-segmentally. In all probability, greater improvement in strength for multi-segment movements will be obtained when training multi-segment movements (8). It is also much more efficient in use of time to train muscles in multi-segments as opposed to each joint separately. Many of the various machine companies focus predominantly on single segment movements. Most of the mainstay movements used in free weight training are multi-segment exercises (squats, cleans, deadlifts, etc.).

Finally, muscles that stabilize joints and are active in balance also need to be trained. For strong action to take place at a joint, adjoining segments must be fixed very strongly. Training the movers at one joint is useless unless the stabilizers at surrounding joints are also trained to insure a stable base for movement. Machines use some form of guidance system that limits the

movement to only one plane. In addition, surrounding joints are often fixed so that movement can only take place at one joint. This may result in decreased development of neuromuscular coordination and strength improvement in stabilization muscles (32). Free weight exercises are not limited to one plane and the exerciser must use muscular force to stabilize non-moving segments.

### Power

The ability to generate power is also an important component in many sports.

Since both force and velocity influence power ( $P = F \times V$ ) it is important that in any discussion of differences in power output between athletes or changes in power output due to training, either force or velocity is fixed. Power output is quite specific to the relative velocity or force (16). In comparing two athletes, or the same athlete at different times, it is obvious that wrong conclusions may be reached if comparisons are not made at similar velocities or forces.

Recent research indicates that training adaptations are probably at least partially specific to the velocity at which training occurs (5,14,15,19). For training to be most specific, it would be best to have the greatest changes in force and thus power occur at velocities or resistances that will occur in the athlete's sport. This approach at first would seem to favor isokinetic or constant velocity exercise, since an athlete could choose a velocity for training that is similar to the velocity inherent in his sporting movement. Human movement, however, does not normally occur with constant velocity. Humans are constantly accelerating and decelerating their various segments. In fact, in much high velocity movement, the segments move ballistically and little or no muscular action is occurring during inertial phases.

Acceleration thus is an important factor in many sport movements. Isokinetic resistance prevents acceleration by definition (although it does not do this entirely at high speeds, little resistance will occur during these periods of high acceleration) and variable resistance limits the ability to accelerate by increasing resistance. Acceleration is much more easily performed with free weight exercise. Although free weight exercise is often called isotonic or constant tension exercise, it is in reality not. Leverage changes, length tension variations, and changing bar velocity (acceleration) all act to vary the tension. If an athlete attempts to accelerate a bar through a joint's full range of motion, the athlete is able to accelerate the bar more in his strong leverage positions (8). Athletes will also likely accelerate to a much greater extent at strong leverage points when performing typical sporting movements like jumping, throwing, etc. The free weight system enables us to accommodate to differences in our force position curves by changes in velocity, thus, creating a condition in which the resistance will always match the effort in a fashion not unlike sporting movements.

One final point for the development of both power and strength, to be discussed, is the concept of variability in training. There is a large body of empirical knowledge both in the United States and Russia to indicate that variability in intensity, volume, and exercises performed is necessary for progress to continue over long periods of time (8). This variability needs to encompass many exercises of varying degrees of specificity. As mentioned before, only a very limited number of movements are available for each muscle group with any kind of machine system. Free weight systems provide a very wide selection of exercises of varying specificity.

## Rehabilitation

The purposes of this section of the paper are to call attention to the phases of the rehabilitation process and identify the place of free weights as a strengthening mode within the process. While the previous discussion was directed toward strength building in the normal individual this part addresses strength building after injury or surgery. The key points are based upon lower limb rehabilitation suggestions but they are generally applicable to other body areas.

Rehabilitation of a limb post soft tissue injury or following surgery covers many activities which take place over an extended time span. This time span can be divided into stages. It is our wish to limit our views to methods used to progressively increase functionally useful strength.

Table 1 summarizes a typical strengthening progression of an injured limb (no surgery).

**Table 1**  
**General Progression for Strengthening in Non Surgical Cases**

Rehabilitation Stages	Strengthening Modes
Advanced	Unrestricted free weights for overall strengthening (18)
	Resistive machines for specific muscle groups (12)
	Isokinetics for specific muscle groups at all speeds (29)
Intermediate	Moderate free weights (21)
	High speed isokinetics maximal effort (33)
	Various traditional strengthening machines (33)
Late Acute	Light free weights (27)
	Elastic straps (26)
	High speed isokinetics, less than maximal effort (13)
	Manual resistance (13)
Early Acute	Active exercise (21)
	Active assistive exercise (33)
	Isometrics (20)

When there has been surgical reparation to a body part the strengthening progression is modified to allow healing. An extracapsular repair requires less time to go through the rehabilitation process than intracapsular procedures. Likewise a closed arthroscopic surgical procedure is less traumatic than an open surgical procedure to accomplish a comparable repair (25). As can be seen in Table 2 even though there is a duration difference, the process is similar in progression.

The two tables identify the common use of free weights in intermediate and advanced rehabilitation stages. Isokinetic devices are depicted as being appropriate in the same stages. In our opinion, free weights offer several advantages over isokinetic exercise during these stages particularly where intracapsular surgical procedures were performed.

First, the multiple movement direction potential discussed in the earlier section of the paper may be

equally important for rehabilitation. Strength should be increased in two joint muscles over a range of motion that includes different joint positions at all involved joints and stabilizing muscles should also be strengthened (or at least maintained or they may become injury prone).

Second, if as indicated earlier, hypertrophy of skeletal muscle is facilitated when strong eccentric contractions are included in the training program of normal muscle, perhaps muscle growth may also be facilitated in atrophied muscle by strong eccentric contractions when healing permits such overloading. Currently only one very expensive isokinetic apparatus provides an eccentric mode.

Finally, free weights offer a known resistance. Subject effort is controllable assuming velocity is fixed within reasonable limits. Isokinetic devices have been reported to cause exacerbations because of uncontrollable subject

**Table 2**  
**General Progression for Strengthening in Post Surgical Cases**

Rehabilitation Stages	Strengthening Modes
Advanced	Unrestricted free weights for overall strengthening (12)
	Resistive machines for specific muscle groups (12)
	Isokinetics for specific muscle groups at all speeds (29)
Intermediate	Moderate free weights (21)
	High speed isokinetics moderate effort (27)
	Light free weights (3)
Late Acute	Elastic straps (27)
	High speed isokinetics, minimal effort level (13)
	Manual resistance (13)
Early Acute	Active movements (18)
	Active movements in controlled ranges (27)
	Assisted movements in controlled ranges (3)
	Isometrics (2)

exuberance (13,21). Free weights are safer when there is concern about a subject's reliability and when there is a need to control the progression of resistance for his or her protection.

In summary, it must be remembered that many movements are not easily trained without the use of some form of weight machine (i.e. knee extensions, knee curls, latissimus machine pull downs). In addition, isokinetic apparatus offers the opportunity to choose speeds of contraction that are specific to segment speeds in particular sports. This may be a positive feature in sports in which little or no segment acceleration generally occurs. Finally, the intermediate and later stages of rehabilitation may incorporate isokinetic exercise if done judiciously.

However, a large amount of empirical and research knowledge indicates the importance of free weight training for the healthy and recuperating athlete. This



must be considered when equipping facilities and developing training and rehabilitation programs for athletes.

## References

- Atha J: Strengthening Muscle. *Exercise and Sports Sciences Reviews*. Editor: Doris Miller. 9:1-73, 1981.
- Brand RL and Collins MD: Operative management of ligamentous injuries to the ankle. *Clinics in Sports Medicine* Joseph S. Torg, Editor, Philadelphia, W. B. Saunders, pp 117-130, 1982.
- Brewster CE, Moynes DR, Jobe FW: Rehabilitation for anterior cruciate reconstruction. *J Ortho Sports Phys Ther* 5(3): 121-126, 1983.
- Coleman AW: Nautilus vs. Universal Gym strength training in adult males. *American Corrective Therapy Journal* 31(4): 103-107, 1977.
- Coyle EF, Feiring DC, Ratkis TC, et al.: Specificity of power improvements through slow and fast isokinetic training. *J Appl Physiol* 51(6): 1437-1442, 1981.
- Davies AH: Chronic effects of isokinetic and alloknetic training on force endurance and muscular hypertrophy. *Dissertation Abstracts International* 38(A): 53, 1977.
- Flemming L: Accommodation Capabilities of Nautilus Weight Machines to Human Strength Curves. Unpublished Master's Thesis, University of Alabama - Birmingham, Birmingham, AL 1984.
- Garhammer J: Free weight equipment for the development of athletic strength and power - Part I. *National Strength and Conditioning Association Journal* 3(6): 24-26, 1981.
- Gettman LR, Culter L, Stratham T: Isotonic vs. isokinetic circuit strength training - physiological changes after 20 weeks. (Abst.) *Medicine Science in Sports* 11(8): 81, 1979.
- Gondola JC: Three strength building programs: their effects on selected muscle groups of the knee joint after nine days of immobilization of the lower limb. *Dissertation Abstracts International* 36(A): 3919, 1974.
- Hakkinen R, Komi PV: Effect of different combined concentric and eccentric muscle work regimens on maximal strength development. *J Human Mov Stud* 1(1): 33-44, 1981.
- Holland DP: Exercise prescription and therapeutic rehabilitation in sportsmedicine. *Athletic Training* 17(4): 283-286, 1982.
- Jones AL: Rehabilitation for anterior instability of the knee: Preliminary report. *J Orthop Phys Ther* 3(3): 121-128, 1982.
- Kanehisa H, Miyashita M: Effect of isometric and isokinetic muscle training on static strength and dynamic power. *Eur J Appl Phys* 50:365-371, 1983.
- Kanehisa H, Miyashita M: Specificity of velocity in strength training. *Eur J Appl Phys* 52:104-06, 1983.
- Komi PV: Neuromuscular performance. Factors influencing force and speed production. *Scand Sports Sci* 1(1): 2-15, 1979.
- Komi PV, Buskirk ER: Effect of eccentric and concentric muscle conditioning on tension and electrical activity of human muscle. *Ergonomics* 15:417-434, 1972.
- Kuland DN: *The Injured Athlete*. Philadelphia, J.B. Lippencott Co., pp. 150, 404-439, 1982.
- Lewis SK, Rose SJ, Ericson GC, Zuelzer W, Fox EL: Extreme fast-speed training induces speed-specificity of exercise (Abst.) *Phys Ther* 63(5): 768, 1983.
- Mack RP: Ankle injuries in athletics. *Clinics in Sports Medicine* Joseph S. Torg, Editor, Philadelphia, W. B. Saunders, pp. 71-84, 1982.
- Malone T, Blackburn TA, Wallace LA: Knee Rehabilitation. *Phys Ther* 60(12): 1602-1610, 1980.
- Meadors WJ, Crews TR, Adeyanju K: A comparison of three conditioning protocols on the muscular strengths and endurance of sedentary college women. *Athletic Training* 18(3): 240-242, 1983.
- Pipes TV: Variable resistance versus constant resistance strength training in adult males. *Eur J Appl Phys* 39: 27-35, 1978.
- Pipes TV, Wilmore JH: Isokinetic vs isotonic strength training in adult men. *Med Sci Sports* 7(4): 262-274, 1975.
- Prietto CA, Caiozzo VJ, Prietto PP, McMaster WC: Closed versus open partial meniscectomy: Postoperative changes in the forcevelocity relationship of muscle. *Am J Sports Med* 11(4): 189-194, 1983.
- Quillen WS: An alternative management protocol for lateral ankle sprains. *J Orthop Sports Phys Ther* 2(4): 187-190, 1981.
- Roy S, Irvin R: *Sports Medicine: Prevention, Evaluation, Management, and Rehabilitation*. Englewood Cliffs, Prentice Hall, Inc. pp. 114-115, 121, 194, 322, 348-357, 1983.
- Sanders M: A comparison of two methods of training on the development of muscular strength and endurance. *J Ortho Sports Phys Ther* 1(4): 210-213, 1980.
- Sherman WM, Plyley MJ, Pearson DR, Habansky AJ, Vogelgesang DA, Castill DL: Isokinetic rehabilitation after meniscectomy: a comparison of two methods of training. *Phys Sports Med* 11(4): 121-125, 132-133, 1983.
- Stevens R: Isokinetic vs. isotonic training in the development of lower body strength and power. *Scholastic Coach* 49(6) 74-76, 1980.
- Stone M: Considerations in gaining a strength-power training effect. *National Strength Coaches and Conditioning Journal* 4(1) 22-24, 1982.
- Stone M, Johnson RL, Carter DR: A short term comparison of two different methods of resistance training on leg strength and power. *Athletic Training* 14(3): 158-160, 1979.
- Vegso JJ, Harmon LE: Non-operative management of ankle injuries. *Clinics in Sports Medicine*, Joseph S. Torg, Editor, Philadelphia, W. B. Saunders, pp. 85-98, 1982.
- Wathen D, Shutes M: A comparison of the effects of selected isotonic and isokinetic exercises, modalities and programs on the acquisition of strength and power in collegiate football players. *National Strength and Conditioning Association Journal* 4(1): 40-42, 1982.
- Wilmore JH: Letter to the Editor. *Med Sci Sports* 11(3): iii, 1979. @

Your copies of

# ATHLETIC TRAINING

are valuable.

**KEEP THEM FOR READY REFERENCE**

Custom-made for ATHLETIC TRAINING, these magazine cases will keep your copies clean, orderly and readily accessible for reference. Rich appearance of dark blue simulated leather cover and gold leaf embossed lettering make these magazine cases a distinctive addition to your bookcase. Rugged. Handsome. A perfect way to conserve space. Prices: \$6.95 each; 3 for \$20; 6 for \$36. To order, just fill in and mail the coupon below. Allow three weeks for delivery.

### ATHLETIC TRAINING

P.O. Box 5120  
Philadelphia, PA 19141

Please send me \_\_\_\_\_ ATHLETIC TRAINING Library Cases.  
Prices: \$6.95 each; 3 for \$20; 6 for \$36. My check (or money order)  
for \$ \_\_\_\_\_ is enclosed.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip Code \_\_\_\_\_

# Standards and Norms of Fitness and Flexibility in the High School Athlete

Stephen C. Hunter, MD  
William C. Etchison, MS  
Brian C. Halpern, MD

*Conditioning and fitness help determine athletic performance. By developing standards and norms of fitness and flexibility, one can attempt to project an athlete's capability and weaknesses. With the reviews of 2,774 preseason examinations for 1982-1983, this paper presents normal fitness values for the high school athlete.*

Conditioning and fitness have become essential to performance in competitive sports. Endurance, quality of performance, and decreased risk of injury all improve in the properly conditioned athlete. The problem now is determining who is fit; and to this end, we will mainly be focusing on motor performance, with reference to flexibility and body composition. Body composition is an important parameter since increased body fat impedes the athlete's performance (8).

The initial performance work began in the schools and focused on calisthenics and gymnastic activities designed to improve muscle strength and flexibility (13). One of the first large scale tests, the American Alliance for Health, Physical Education, and Recreation Youth Fitness Test of 1958 (1,9) incorporated sit-ups, pull-ups, a run, a standing broad jump, and a softball throw to evaluate muscle strength, endurance, speed, power, agility, and cardiorespiratory endurance. In 1980 the test was revised as the American Alliance for Health, Physical Education, Recreation and Dance Health-Related Physical Fitness Test (2). Less emphasis was placed on motor performance, concentrating instead on muscular strength, endurance, cardiorespiratory fitness, flexibility and body composition through sit-ups, a run, sit and reach, and skinfold measurements.

The purpose of the present project is to develop standards and norms of fitness and flexibility in the high school athlete only, rather than in the entire population of preadolescents and adolescents. With this information, we anticipate the ability to project an athlete's capabilities and weaknesses. Performance physiologists, likewise, have studied small segments of the population and developed tests of relevance in assessing performance and fitness, with hopes of establishing some standards.

Traditional reference standards involve a large number of individuals and calculations of percentiles for each test item, such that one could compare individual scores with the norms. This method is more appropriate for athletic fitness tests, as we are doing, than for application as a test for health fitness (4). When the desired goal is good health, not maximal performance, criterion reference standards may be better (3,4,10).

The goal of this study is to develop a program capable of screening large numbers of athletes that will produce accurate data. This data can be tabulated to develop standards and norms of fitness and flexibility. Comparing individual performance to these tables will allow athletes and trainers to work toward specific goals and conditioning. Also, athletes with marked deficiencies can be detected and directed away from sports that

would be excessively hazardous due to the athlete's weaknesses.

## Materials and Methods

The annual screening physicals for area high school athletes provided a vehicle for performing this study. Using the parameters of this study 2,774 exams were performed from 1982 to 1983. The athletes ranged from 12 to 18 years old and were screened for all sports. Twelve different measurements done in a station-to-station manner produced data for tabulation. All testing was monitored and controlled to a critical standard of performance. Physical therapists, trainers, and physiologists scored and recorded the data.

Passive measurements were documented first. Quadriceps girth was determined bilaterally by a circumferential reading at seven inches above the joint line. With the athlete supine flexibility of the hamstring was determined by measuring the angle of knee contracture with the hip flexed and held at 90 degrees. Heel cord flexibility, likewise, measured with a goniometer, was noted in degrees of active dorsiflexion of the ankle with the leg extended and the athlete supine. The athlete's height in inches and weight in pounds were also documented.

Somatic measurements included the bony diameter of the wrist which was determined with a caliper, and body fat calculations. Skinfold measurements of the arm, chest and abdomen in male and arm and hip in female, were applied to standard nomograms to give the body fat scores (11,12).

Several methods of standard strength testing were performed (6,7). Grip strength was measured by using a Jamar hand dynamometer\*. This tested absolute strength by applying a force to an immovable object.

Reverse hand chin-ups and parallel bar dips were both done to grade relative strength. Females were asked to do bent arm hangs instead of chin-ups. These tests determine strength in moving body weight.

Relative muscular endurance was tested by doing timed sit-ups. The athlete was given 60 seconds to do as many sit-ups as possible. A sit-up was done with hands behind the head and knees flexed, with the feet fixed or held by another student.

Vertical jumping measured explosive muscle function or relative power. This is defined as the force of moving body weight quickly.

These are good parameters to determine an athlete's capabilities. With these guidelines in mind, this study attempts to collect enough data on adolescent male and

\*(Asimow Engineering Company, Los Angeles, California)



female athletes to develop basic standards and norms of fitness and flexibility.

## Results

The passive measurement data (Table 1) revealed that quadriceps girth was generally greater in male athletes and tended to increase with age. Quadriceps girth in female athletes remained virtually constant throughout the age ranges. Flexibility of the hamstrings tended to increase with age in male athletes and remained fairly constant in females. The female athletes demonstrated greater flexibility than the males. Heel cord flexibility did not vary significantly with age in both sexes. There was no difference in the degree of flexibility between males and females. Females tended to maintain the same height and weight, while males averaged five inches of growth and forty pounds of added weight over the six year span.

Wrist diameter measurements (Table 2) for skeletal age remained constant in the females and increased slightly in the males. As expected, the females had a higher percentage of body fat than the males; however, the scores tended to remain constant within each sex. Thus, the general increase in body weight in males indicates an increase in lean body mass during growth.

yet the scores for bent arm hangs show a significant increase. Power measurements increased in the males and remained constant in the females, while endurance measurements remained constant in both sexes.

The fitness factors (Table 4), or scores of strength per pound of body weight, reflect the overall findings that strength in males increases in the adolescent growth spurt and remains constant in females.

## Discussion

The fitness factors shown in Table 4 reflect the overall findings that males increase in body strength during the adolescent growth spurt. One can speculate the female would show a similar curve if they were tested in their preteen years. Endurance, however, did not change with age. It is possible that endurance does not increase while growth and strength are developing, but more probable that the endurance rise with age occurred prior to this study's age group as demonstrated by Cumming, et al. (5).

While the original intent of this study was to develop standards and norms of fitness and flexibility in the high school athlete that could be used to correct deficiencies and direct athletes into more appropriate sports activities, a physiologic phenomenon was inci-

**Table 1: Average Passive Measurements**

	AGE	NO.	HEIGHT (inches)	WEIGHT (pounds)	QUADRICEPS GIRTH (inches)	HAMSTRING FLEXIBILITY (degrees of flexion)		HEEL CORD FLEXIBILITY (degrees of dorsiflexion)		
					R	L	R	L	R	L
MALES	12	11	63.8	114.6	16.1	17.4	29	28	12	13
	13	117	64.2	126.0	17.8	17.8	21	20	9	9
	14	351	65.9	133.0	17.9	17.9	22	21	9	9
	15	485	67.5	144.7	18.5	18.4	20	19	9	9
	16	550	68.3	151.1	19.3	18.7	19	19	8	8
	17	409	68.9	158.1	19.1	19.1	18	19	8	8
	18	85	68.2	152.3	18.8	18.8	18	19	8	8
FEMALES	12	16	60.7	105.3	17.4	17.3	13	13	10	11
	13	40	63.3	116.7	17.8	17.8	15	15	9	9
	14	186	63.5	119.2	17.9	17.9	12	12	8	8
	15	190	64.0	124.2	18.2	18.1	12	12	9	9
	16	194	63.9	124.6	18.3	18.3	11	11	9	9
	17	124	64.0	125.8	18.4	18.4	12	14	9	8
	18	16	63.5	127.7	18.3	18.3	16	17	8	8

**Table 2: Average Somatic Measurements**

AGE	WRIST DIAMETER (inches)		BODY FAT (%)	
	males	females	males	females
12	5.6	4.9	9.9	15.7
13	5.6	5.2	8.8	18.8
14	5.7	5.0	8.6	18.3
15	5.8	5.1	8.5	18.4
16	5.8	5.1	8.3	18.4
17	5.8	5.1	8.7	18.5
18	5.7	5.1	7.6	17.6

Measurements of grip strength (Table 3) were greater in males than in females. The males' scores tended to increase with age, while the females' scores increased in the early years and then leveled off. Both chin-up and dip measurements for relative strength increased in the males. The dip scores remained constant in the females,

mentally rediscovered. Females in their adolescent years are apparently mature as far as increases in growth and strength are concerned. Males, on the other hand, show considerable changes in size and strength during this time. Thus, the question arises as to whether conditioning can change these scores significantly. Assuming, however, that an athletic population is already working at a high level of performance, these scores are probably a true reflection of the inherent physical ability of the individual. Surely areas of deficiencies could be corrected, but the overall capability of the athlete is probably a fixed value.

One other thought comes to mind regarding conditioning. Reservations have been voiced in the past regarding the intense training of the growing athlete. The findings of this study indicate that the female athlete can probably train harder at an earlier age than can the male athlete, who, because he is still growing, could alter his growth potential by excessive training.

We must determine if appropriate training during the

**Table 3. Average Strength, Endurance and Power Measurements**

AGE	TEST: MEASUREMENT:	GRIP STRENGTH		CHIN-UPS	WOMEN (ARMHANGS)	DIPS	SIT-UPS	VERTICAL JUMP
		POUNDS		NO.	(SECONDS)	NO.	NO. IN 60 SECONDS	INCHES
		R	L					
MALES	12	60.2	51.5	3.1		6.9	33.4	13.8
	13	67.6	56.8	4.3		7.8	39.1	14.8
	14	77.4	67.6	5.5		10.1	40.7	16.6
	15	87.7	75.9	6.6		11.8	41.8	17.9
	16	94.9	83.5	7.9		13.5	41.9	18.6
	17	98.5	87.0	8.1		15.7	42.2	19.0
	18	101.4	88.6	8.4		15.5	41.6	19.6
FEMALES	12	47.9	42.9		(7.9)	3.1	32.3	11.5
	13	56.7	49.5		(9.4)	2.5	31.5	13.4
	14	56.6	46.9		(11.2)	3.7	31.7	13.7
	15	60.9	50.1		(12.0)	3.1	33.6	12.9
	16	64.0	53.6		(12.7)	2.9	33.8	13.8
	17	63.6	53.1		(12.9)	2.8	32.5	14.0
	18	61.2	55.0		(19.3)	2.8	32.2	12.7

period of an athlete's growth and strength development can increase that athlete's ultimate potential. In addition, other areas of fitness need attention. Plans are being instituted to add tests for reflexes, agility, and speed to the athletic screening program. With this information, not only can the athlete's general condition be calculated, but some athletes can be directed into skill positions that are most suited to their capabilities.

**Table 4: Fitness Factor  
(Strength/Body Weight) For Athletes Twelve  
Through Eighteen Years**

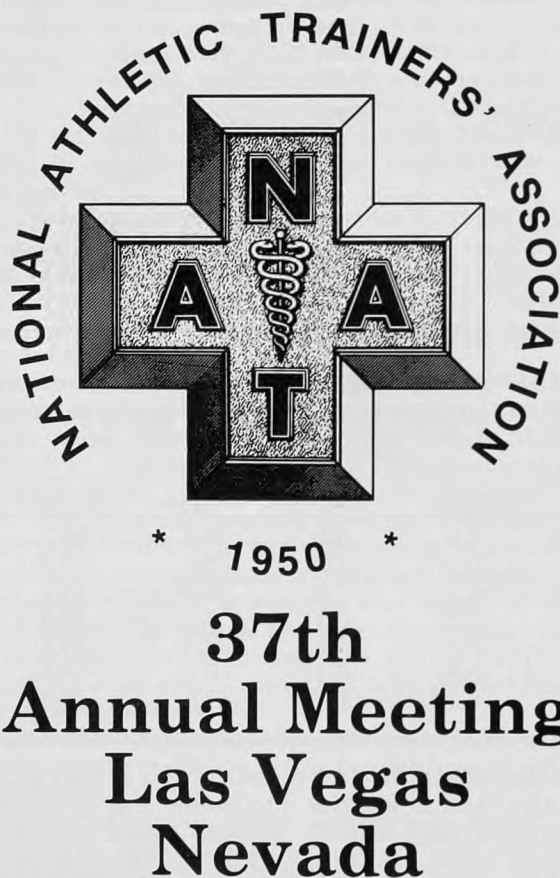
AGE	MALES	FEMALES
12	1.37	1.32
13	1.44	1.30
14	1.53	1.29
15	1.56	1.32
16	1.62	1.36
17	1.63	1.32
18	1.67	1.39

#### References

1. American Alliance for Health, Physical Education and Recreation: *Youth Fitness Test Manual*. Washington DC, AAHPER, 1958.
2. American Alliance for Health, Physical Education, Recreation and Dance: *AAHPERD Health Related Physical Fitness Test Manual*. Washington DC, AAHPERD, 1980.
3. Baumgartner TA, Jackson AS: *Measurement for Evaluation in Physical Education*. Boston, Houghton Mifflin Co. 1975.
4. Blair S, Falls H, Pate R: A new physical fitness test. *Physician and Sportsmedicine* 11(4): 87-95, 1983.
5. Cumming GR, Everatt D, Hastman L: Bruce treadmill test in children: normal values in a clinic population. *American Journal of Cardiology* 4: 69-75, 1978.
6. Fox EL: *Physiology of Exercise and Physical Fitness*. *Sports Medicine*, Edited by Strauss RH, Philadelphia, WB Saunders Co. 1984, pp. 448-450.
7. Falls HB, Baylor AM, Dishman RK: *Essentials of Fitness*. Philadelphia, W.B. Saunders Co. 1980, p. 236.
8. McLeod WD, Hunter SC, and Etchison W: Performance measurement and percent body fat in the high school

athlete. *American Journal of Sports Medicine* 11(6): 390-397, 1983.

9. Pates RR: A new definition of youth fitness. *The Physician and Sportsmedicine* 11(4): 77-83, 1983.
10. Safrit JF: *Evaluation in Physical Education*, ed. 2. Englewood Cliffs, NJ, Prentice-Hall Inc. 1973.
11. Sloan A: Estimation of body fat in young men. *Journal of Applied Physiology* 23: 311-315, 1967.
12. Sloan A, Burt J, Blyth C: Estimation of body fat in young women. *Journal of Applied Physiology* 17:967-970, 1962.
13. Van Dalen DB, Mitchell ED, Bennett BL: *A World History of Physical Education*. Englewood Cliffs, NJ, Prentice-Hall Inc. 1953. ⊕







# Annual Survey Of Football Injury Research 1931 - 1984

**Frederick O. Mueller, Ph.D.**

Chairman, American Football Coaches Committee on Football Injuries  
and

**Richard D. Schindler**

Assistant Director of the National Federation of State High School Associations

**Prepared For:**

American Football Coaches Association, Orlando, Florida

National Collegiate Athletic Association, Shawnee Mission, Kansas

The National Federation of State High School Associations, Kansas City, Missouri

Copyright 1985 by The American Football Coaches Association,  
The National Collegiate Athletic Association and the  
National Federation Of State High School Associations.

**Submitted February, 1985**

## **Section I INTRODUCTION**

**I**n 1931 the American Football Coaches Association initiated the First Annual Survey of Football Fatalities. The original survey committee was chaired by Marvin A. Stevens, M.D., of Yale University, who served from 1931-1942. Floyd R. Eastwood, Ph.D., Purdue University, succeeded Dr. Stevens in 1942 and served through 1964. Carl S. Blyth, Ph.D., University of North Carolina at Chapel Hill, was appointed in 1965 and served through the 1979 football season. In January 1980, Frederick O. Mueller, Ph.D., University of North Carolina at Chapel Hill, was appointed by the American Football Coaches Association and the National Collegiate Athletic Association to continue this research under the new title, Annual Survey of Football Injury Research.

The primary purpose of the Annual Survey of Football Injury Research is to make the game of football a safer and, therefore, a more enjoyable sport activity. Because of these surveys, the game of football has realized many benefits in regard to rule changes and

improvement of equipment.

### **Data Collection**

Throughout the year, upon notification of a suspected football fatality, immediate contact is made with the appropriate officials (coaches, administrators, physicians, trainers). Pertinent information is collected through questionnaires and personal contact.

Football fatalities are classified for this report as direct and indirect. The criteria used to classify football fatalities are as follows:

**Direct** — Those fatalities which resulted directly from participation in football.

**Indirect** — Those fatalities which are caused by systemic failure as a result of exertion while participating in football activity or by a complication which was secondary to a non-fatal injury.

In several instances of reported football fatalities, the respondent stated the fatality should not be attributed to football. Reasons for these



*Frederick O. Mueller*



*Richard D. Schindler*

statements are that the fatality was attributed to physical defects that were unrelated to football injuries.

Dr. Mueller compiled and prepared the survey report on college, professional, and sandlot levels, and Mr. Richard D. Schindler of the National Federation of State High School Associations assumed complete responsibility for collecting and preparing the senior and junior high school phase of the study. Sandlot is defined as non-school football, but organized and using full protective equipment.

At the conclusion of the football season, both reports are compiled into this Annual Survey of Football Injury Research. This report is sponsored by the American Football Coaches Association, the National Collegiate Athletic Association, and The National Federation of State High School Associations.

## Acknowledgements

This 1984 report was compiled with the assistance of executive officers, high school and college coaches, athletic directors, school administrators, physicians, a national newspaper clipping agency, and professional associates of the authors. Dr. Carl S. Blyth served as a consultant for the 1984 report.

## Section II SUMMARY

1. Six fatalities were directly related to football during the 1984 season. Four of the direct fatalities occurred in high school, one in college and one in sandlot. (Table 1).

2. The incidence of direct fatal injuries is very low on a 100,000 player exposure basis. For the approximately 1,575,000 participants in 1984, the number of direct fatalities was .38 participants per 100,000 players.

3. The incidence of direct fatalities in high school and junior high school football was .30 participants per 100,000 players. The incidence of direct fatalities in college was 1.33 participants per 100,000 players. (Table III)

4. Most direct fatalities usually occur during regularly scheduled games, but during the 1984 season two direct fatalities occurred in games and four in practice.

5. The 1984 survey shows that of six

direct fatalities two occurred in August, three in September, and one in October.

6. The major activities in football would naturally account for the greatest number of direct fatalities. In 1984 two players were injured on defensive play tackling, and the activity of four was unknown. The four listed as unknown collapsed on the field or sideline and a specific activity could not be identified. (Table V)

7. In 1984 all six of the direct fatalities resulted from injuries to the head. (Table VI)

8. In many cases football cannot be directly responsible for fatal injuries (heat stroke, heart failure and so forth). In 1984 there were three indirect fatalities. All three of these were the result of heat stroke. All of the indirect fatalities were associated with high school football. (Table VIII)

## Section III DISCUSSION AND RECOMMENDATIONS

The 1984 research continues the trend for fewer football fatalities when compared to fatality data collected for the past 25 years. Progress has been made and an all out effort must be made to continue this trend and to avoid another rise in direct fatalities.

### Head and Neck Injuries

Past efforts that were successful in reducing fatalities to the level indicated in the 1979 and 1983 data should again be emphasized. Rule changes for the 1976 football season which eliminated the head as a primary and initial contact area for blocking and tackling is of utmost importance. Since 1960 most of the direct fatalities have been caused by head and neck injuries. The 1984 survey shows that all six of the direct

**TABLE I**  
Fatalities: Directly Due to Football - 1931-1984\*

	SANDLOT	PRO AND SEMIPRO	HIGH SCHOOL	COLLEGE	TOTAL
Year	Direct	Direct	Direct	Direct	Direct
** 1931-1959	115	68	262	41	486
1960	1	1	11	1	14
1961	3	0	10	6	19
1962	6	1	12	0	19
1963	1	1	12	2	16
1964	4	1	21	3	29
1965	4	0	20	1	25
1966	4	0	20	0	24
1967	5	0	16	3	24
1968	4	1	26	5	36
1969	3	1	18	1	23
1970	3	0	23	3	29
1971	2	0	15	3	20
1972	3	1	16	2	22
1973	2	0	7	0	9
1974	0	0	10	1	11
1975	1	0	13	1	15
1976	3	0	15	0	18
1977	1	0	8	0	10
1978	0	0	9	0	9
1979	0	0	3	1	4
1980	0	0	9	0	9
1981	2	0	5	2	9
1982	2	0	7	0	9
1983	0	0	4	0	4
1984	1	0	4	1	6
<b>TOTALS</b>	<b>170</b>	<b>75</b>	<b>576</b>	<b>78</b>	<b>899</b>

\* No study was made 1942.

\*\*Yearly totals available from past reports.



fatalities resulted from injuries to the head. We must continue to reduce head and neck injuries.

Several suggestions for reducing head and neck injuries are as follows:

1. Athletes must be given proper conditioning exercises which will strengthen their necks so that participants will be able to hold their heads firmly erect when making contact.

2. Coaches should drill the athletes in the proper execution of the fundamentals of football skills, particularly blocking and tackling.

3. Coaches and officials should discourage the players from using their heads as battering rams when blocking and tackling. The rules prohibiting spearing should be enforced in practice and in games. The players should be taught to respect the helmet as a protective device and that the

helmet should not be used as a weapon.

4. All coaches, physicians, and trainers should take special care to see that the player's equipment is properly fitted, particularly the helmet.

5. When a player has experienced or shown signs of head trauma (loss of consciousness, visual disturbance, headache, inability to walk correctly, obvious disorientation, memory loss), he should receive immediate medical attention and should not be allowed to return to practice or game without permission from the proper medical authorities.

Another important effort has been and continues to be the improvement of football protective equipment under the guidance of the National Operating Committee on Standards for Athletic Equipment (NOCSAE). The NOCSAE organizations continue their research

on improving helmets for football. It is imperative that old and worn equipment be properly renovated or discarded and continued emphasis be placed on developing the best equipment possible. Manufacturers, coaches, trainers, and physicians should continue their joint and individual efforts toward this end.

The authors of this research are convinced that the current rules which eliminate the head in blocking and tackling, the helmet research conducted by NOCSAE, excellent physical conditioning and proper medical supervision have played the primary role in reducing fatalities and serious head and neck injuries in football.

## Heat Stroke

A continuous effort should be made to eliminate heat stroke deaths associated with football. Since the beginning of the survey through 1959 there were five cases of heat stroke deaths reported. From 1960 through 1984 there have been seventy-three heat stroke cases which resulted in death (Table IV). Since 1974 there has been a dramatic reduction in heat stroke deaths with the exception of 1978 when there were four. Three deaths were caused by heat stroke in 1984. All coaches, trainers, and physicians should continue their efforts toward eliminating athletic fatalities which result from physical activity in hot weather.

Heat stroke and heat exhaustion are prevented by careful control of various factors in the conditioning program of the athlete. When football activity is carried on in hot weather, the following suggestions and precautions should be taken:

1. Each athlete should have a complete physical examination with medical history and an annual health history update. History of previous heat illness and type of training activities before organized practice begins should be included.

2. Acclimatize athletes to heat gradually by providing graduated practice sessions for the first seven to ten days and other abnormally hot or humid days.

3. Know both the temperature and the humidity since it is more difficult for the body to cool itself in high humidity. Use of a sling psychrometer is recommended to measure the relative humidity and anytime the wet-

**TABLE II**  
Fatalities: Indirectly Due to Football - 1931-1984\*

	SANDLOT	PRO AND SEMIPRO	HIGH SCHOOL	COLLEGE	TOTAL
Year	Indirect	Indirect	Indirect	Indirect	Indirect
** 1931-1959	72	12	112	28	224
1960	0	0	2	2	4
1961	4	1	11	0	16
1962	0	1	4	2	7
1963	2	0	4	2	8
1964	3	0	12	1	16
1965	4	1	14	5	24
1966	0	0	6	2	8
1967	0	0	4	1	5
1968	2	0	8	2	12
1969	3	1	8	3	15
1970	0	0	12	2	14
1971	2	1	7	2	12
1972	0	0	10	1	11
1973	0	0	5	3	8
1974	0	0	5	3	8
1975	2	0	3	3	8
1976	1	0	7	2	10
1977	0	0	6	0	6
1978	0	0	8	1	9
1979	1	0	8	1	10
1980	0	0	4	0	4
1981	0	0	6	0	6
1982	1	0	7	3	11
1983	0	0	6	3	9
1984	0	0	3	0	3
TOTALS	97	17	282	72	468

\* No study was made 1942.

\*\*Yearly totals available from past reports.

bulb temperature is over 78 degrees practice should be altered.

4. Adjust activity level and provide frequent rest periods. Rest in cool, shaded areas with some air movement and remove helmets and loosen or remove jerseys. Rest periods of 15-30 minutes should be provided during workouts of one hour.

5. Provide adequate water replacement during practice. Water should always be available and in **unlimited quantities** to the athletes. **GIVE WATER REGULARLY.**

6. Salt should be replaced daily and liberal salting of the athletes' food will accomplish this purpose. Coaches should not provide salt tablets to athletes while they practice. Attention must be directed to water replacement.

7. Athletes should weigh each day before and after practice and weight charts checked in order to treat the athlete who loses excessive weight each day. Generally, a three percent body weight loss through sweating is safe, and a five percent loss is in the danger zone.

8. Clothing is important and a player should avoid use of long sleeves, long stockings, and any excess clothing. Never use rubberized clothing or sweatsuits.

9. Some athletes are more susceptible to heat injury. These individuals are not accustomed to work in the heat, may be overweight, and may be the eager athlete who constantly competes at his capacity.

10. It is important to observe athletes for signs of heat illness. Some trouble signs are nausea, incoherence, fatigue, weakness, vomiting, cramps, weak rapid pulse, flushed appearance, visual disturbances, and unsteadiness. If heat illness is suspected, seek a physician's immediate service. Recommended emergency procedures are vital.

## Recommendations

Specific recommendations resulting from the 1984 survey data are as follows:

1. Mandatory medical examinations and medical history should be taken before allowing an athlete to participate in football. The NCAA recommends a thorough medical examination when the athlete first enters the

college athletic program and annual health history update with use of referral exams when warranted. If the doctor or coach has any questions about the athlete's readiness to participate, the athlete should not be allowed to play. High school coaches should follow the recommendations set by their state high school athletic associations.

2. All personnel concerned with training football athletes should emphasize proper, gradual, and complete physical conditioning. Particular emphasis should be placed on neck strengthening exercises.

3. A physician should be present at all games and practice sessions. If it is impossible for a physician to be present at all practice sessions, emergency measures must be provided.

4. All personnel associated with football participation should be cognizant of the problems and safety

measures related to physical activity in hot weather.

5. Each institution should strive to have a team trainer who is a regular member of the faculty and is adequately prepared and qualified.

6. Cooperative liaison should be maintained by all groups interested in the field of athletic medicine (coaches, trainers, physicians, manufacturers, administrators, and so forth).

7. There should be strict enforcement of game rules, and administrative regulations should be enforced to protect the health of the athlete. Coaches and school officials must support the game officials in their conduct of the athletic contests.

8. There should be a renewed emphasis on employing well-trained athletic personnel, providing excellent facilities, and securing the safest and best equipment possible.

9. There should be continued

**TABLE III**

Direct Fatalities Incidence per 100,000 - 1931 - 1984\*

YEAR	HIGH SCHOOL	COLLEGE
** 1931-1959		
1960	1.78	1.53
1961	1.62	9.23
1962	1.94	0.00
1963	1.94	3.04
1964	2.23	4.56
1965	2.00	1.33
1966	2.00	0.00
1967	1.60	4.00
1968	2.60	6.60
1969	1.64	1.33
1970	1.92	4.00
1971	1.25	4.00
1972	1.33	2.67
1973	0.58	0.00
1974	0.83	1.33
1975	1.08	1.33
1976	1.00	0.00
1977	0.53	1.33
1978	0.60	0.00
1979	0.23	1.33
1980	0.69	0.00
1981	0.38	2.67
1982	0.54	0.00
1983	0.30	0.00
1984	0.30	1.33

\* No study was made in 1942.

\*\*Yearly totals available from past reports.

Based on 1,300,000 junior and senior high school players and 75,000 college players.



research concerning the safety factor in football (rules, facilities, equipment, and so forth).

10. Coaches should continue to teach and emphasize the proper fundamentals of blocking and tackling to help reduce head and neck fatalities. KEEP THE HEAD OUT OF FOOTBALL.

11. Strict enforcement of the rules of the game by both coaches and officials will help reduce serious injuries.

12. When a player has experienced or shown signs of head trauma (loss of consciousness, visual disturbances, headache, inability to walk correctly, obvious disorientation, memory loss), he should receive immediate medical attention and should not be allowed to return to practice or game without permission from the proper medical authorities.

#### Section IV CASE STUDIES DIRECT FATALITIES

##### High School

A 15 year old high school football player was injured on September 2, 1984, and died on September 8, 1984. The player collapsed on the sidelines during early football practice. Cause of death was a subdural hematoma. At the time of this writing the activity which caused the injury was unknown.

A 17 year old high school football player died of a subdural hematoma in September 1984. He collapsed on the sideline during the second quarter of a game and died the next day. The athlete showed no signs of head injury before he collapsed and the medical examiner stated the blows to the head probably occurred several days earlier in practice.

A high school football player died of a fractured skull on August 23, 1984. He was injured on August 14, 1984. At the time of this writing, the activity which caused the injury was unknown.

A 17 year old high school football player collapsed during practice on August 17, 1984 and died on August 21, 1984. Autopsy reports that the athlete died from a hard blow to the head. The activity that caused the injury was unknown.

##### College

A 21 year old college football player was injured during a game on October 6, 1984, and died on October 16, 1984.

**TABLE IV**

Heat Stroke Fatalities 1931-1984\*

YEAR	TOTAL	YEAR	TOTAL
1931-1954	0	1970	8
1955	1	1971	4
1956-1958	0	1972	7
1959	4	1973	3
1960	3	1974	0
1961	3	1975	0
1962	5	1976	1
1963	0	1977	1
1964	4	1978	4
1965	6	1979	2
1966	1	1980	1
1967	2	1981	2
1968	5	1982	2
1969	5	1983	1
*No study was made in 1942.		1984	3

**TABLE V**

Direct Fatalities 1984: Type of activity engaged in

TYPE OF ACTIVITY	SANDLOT	PRO	HIGH SCHOOL	COLLEGE	TOTAL
Tackling	1	0	0	1	2
Activity Unknown	0	0	4	0	4
TOTALS	1	0	4	1	6

**TABLE VI**

Direct Fatalities 1984: Cause of death

CAUSES	SANDLOT	PRO	HIGH SCHOOL	COLLEGE	TOTAL
Head Injury	1	0	4	1	6
TOTALS	1	0	4	1	6

**TABLE VII**

Direct Fatalities 1984: Position played

POSITION	SANDLOT	PRO	HIGH SCHOOL	COLLEGE	TOTAL
Linebacker	0	0	0	1	1
Tight End	0	0	1	0	1
Offensive Lineman	0	0	1	0	1
Defensive Back	0	0	1	0	1
Unknown	1	0	1	0	2
TOTALS	1	0	4	1	6

Cause of death was a subdural hematoma. He received a blow to the head while tackling in the first quarter and another blow to the head while tackling in the fourth quarter. He collapsed on the sideline.

### Sandlot

A 13 year old football player was injured on September 1, 1984, while tackling in a game. He received a concussion. On September 11, 1984, he was allowed to practice and was injured again. On September 19, 1984, after eight days in a coma, he died of a head injury.

## Section V CASE STUDIES INDIRECT FATALITIES

### High School

A 17 year old high school football player died of heat stroke after collapsing on the field during practice. The in-

jury occurred on August 8, 1984, and he died August 17, 1984. The athlete was five feet, eleven inches tall and weighed 225 pounds.

A 17 year old high school football player collapsed on the sidelines of a game of September 21, 1984, and died on September 28, 1984. Early reports indicated death was caused by a brain injury, but an autopsy report revealed

that the probable cause of death was heat stroke.

A 14 year old high school football player died of heat stroke on July 8, 1984. He was injured on July 5, 1984. The athlete was participating in conditioning drills supervised by the coaching staff. The young man was six feet, five inches tall and weighed 265 pounds.

**TABLE VIII**

Indirect Fatalities 1984: Cause of death

CAUSES	SANDLOT	PRO	HIGH SCHOOL	COLLEGE	TOTAL
Heat					
Stroke	0	0	3	0	3
TOTALS	0	0	3	0	3



ATHLETIC TRAINING SERVICES, INC.

"PROMOTION OF THE  
CERTIFIED ATHLETIC TRAINER"

## ATTENTION: ALL CERTIFIED ATHLETIC TRAINERS NEED A JOB? OR LOOKING TO CHANGE YOUR PRESENT POSITION?

If you answered YES to either question, the **Athletic Trainer National Registry** can assist you.

Developed by **Athletic Training Services, Inc.**, the **Athletic Trainer National Registry** provides a communication network of job opportunities for the certified athletic trainer in high schools, college/universities, professional athletics, sports medicine clinics, industry, and hospitals. Also, provides for the employer the opportunity of easy access to those certified athletic trainers who have the necessary qualifications to fill their present job opening. Through the **Job Opportunity Bulletin** and **Computerized Recruitment Service** the **Athletic Trainer National Registry** offers not only job opportunities but career advancement for the certified athletic trainer.

Remember, at this very moment, the perfect job could be looking for you. But you'll never know unless you register with the **Athletic Trainer National Registry**.

So, if you are a certified athletic trainer looking for a job, or an employer with a job opening for a certified athletic trainer, let the **Athletic Trainer National Registry** assist you.

For further information please complete and return the coupon below.

I am interested in the **ATHLETIC TRAINER NATIONAL REGISTRY** introduced by **ATS, Inc.**

(Check) ☐ Employer ☐ ATC ☐ Other \_\_\_\_\_

Please send:

- ☐ Further information about the  
**ATHLETIC TRAINER NATIONAL REGISTRY**
- ☐ Application for membership into the  
**ATHLETIC TRAINER NATIONAL REGISTRY**
- ☐ **ATS Brochure**
- ☐ Have Representative Call

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone ( ) \_\_\_\_\_

Mail To: **ATHLETIC TRAINING SERVICES, INC.**

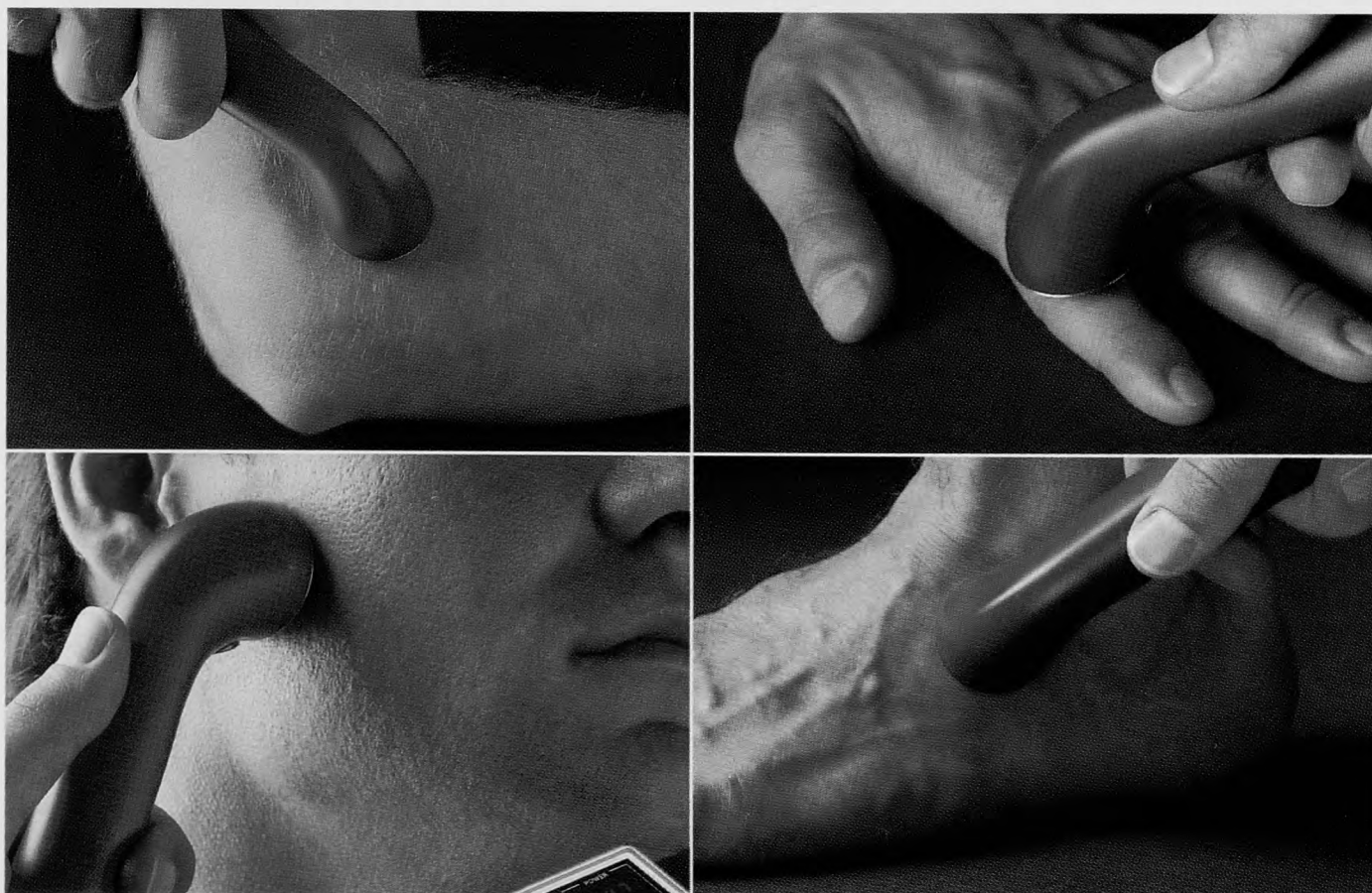
2020 South Mission

Mt. Pleasant, Michigan 48858

Attn: Ron Rummel, Marketing Director -(517)772-5888



# The new Sonicator® 705 can get you into some tight spots.



Between the fingers.  
Around the elbow. Along  
the ankle.

The small-transducer  
Sonicator 705 is easy to  
maneuver around difficult to  
treat places. Half the size of a  
regular sound head, the transducer  
of the Sonicator 705 is small enough  
to make solid surface contact with nar-  
row or angular anatomy.

Solid surface contact permits maximum  
ultrasonic transmission. The result is maximum  
therapeutic effect.

Except for the size of the transducer, the Sonicator  
705 is the same as the Sonicator 706...the world's

leading instrument for therapeutic ultra-  
sound. Both the Sonicator 705 and  
706 provide solid-state reliability  
and state-of-the-art treatment  
flexibility. Together they  
deliver clinical versatility  
never before possible.

Why not find  
out how the new, small-  
transducer Sonicator  
705 can expand your  
application of ultrasound?  
When it comes to treat-  
ing hard to reach anatomy,  
it really hits the spot.



## The new small-transducer Sonicator 705

**METTLER**  **ELECTRONICS®**

1333 S. Claudina St., Anaheim, CA 92805 USA  
(714) 533-2221, Cable SONICATOR  
Telex: 3718749 SONICATOR

# National Office Notes

## SADNESS AND GLADNESS

Sadness is saying goodbye to our mentor, Clint Thompson, who gave us 15 years of caring and dedication as editor, pioneering a fledgling publication, guiding and molding it into the present professional periodical which benefits our Association so much. Gladness is welcoming Don Kaverman as our new editor and knowing that while Clint's shoes will be extremely difficult to fill, Don's feet are capable and large!

## COVER-UP

We hope you are as happy to receive this issue of the Journal in a covered condition as we are to get it to you this way. After batting around the pros and cons of a cover for the Journal for quite a while, we're giving it a try with this issue. This will put an end to mutilated covers and the dreaded "label over valuable cover information" problem. If you like this revival of an old idea, please let us know.

## NEW DEPARTMENT

Beginning with this issue, the Journal will feature selected information from various committees under **COMMITTEE FORUM** (see page 250). We believe this will be an informative and helpful way to get new information to you from your working committees. From now on you may turn to one department for NATA Committee announcements and updating, rather than searching throughout the Journal as in the past.

## FROM THE CERTIFICATION OFFICE

Please take note of the revised Clinical Hours Form that appears in this issue under **COMMITTEE FORUM**. The Forms A and B have been combined into one form. When the student initials the form, that is considered to be verification that the hours as listed are correct. Pay special attention to the new submittance date. The hours will be recorded in accordance with the school year: *June 1st to May 31st*. Therefore, the forms should be completed and submitted to the Certification Office no later than June 30th, i.e.: record hours from June 1, 1985 through May 31, 1986 and submit them by June 30, 1986.

## MOVING?

Fall is historically "moving season." If you have moved, remember that address changes must be sent to the National Office (not to your district secretary) at least 30 days prior to the publication of each issue to assure that you will not miss an issue. The problem of missing Journals is a continuing dilemma that causes our members a great deal of worry and costs your Association a great deal of money. Therefore, please send your new address and the date it is effective (along with your old address label for reference) just as soon as you have this

information. Missed Journals due to an address change will not be replaced unless notice of address change is on file. (See Spring 1985, page 38, "Replacement Journals.") Of course, the best way to deal with this problem is to never let it arise — by notifying your post office to forward your magazines *at the time you change your address*.

Also, don't forget to notify the National Office of name changes, if applicable. Remember that district transfer applications are no longer necessary. District transfers are automatically processed when the address change is received.

## "DESIGNATED DRIVER"

The advent of football season brings memories of past fun and anticipation of new plans for this year's activities. Picnics, ball games and tailgate parties offer outdoor fun and the celebration of friendship. To keep friendships from ending suddenly, the National Safety Council has prepared "Designated Driver: Being a Friend." This brochure is designed to help reduce the approximately 25,000 fatalities and 300,000 injuries which result annually from alcohol-related traffic accidents. The pamphlet is available free of charge by sending a self-addressed, stamped business-size envelope, along with your request, to Department PR, National Safety Council, 444 North Michigan Avenue, Chicago, IL 60611. Limited bulk quantities are available to community organizations upon request.

## GRAFFITI

\*If you've been meaning to get your 5x7 picture in to the National Office but just haven't gotten around to it yet, why not today?

\*A catalog of Krames Communications' health, safety, and medical information products is free upon request by writing to Krames Communications, 312 90th St., Dept. 85174, Daly City, CA 94015.

\*Please direct your insurance inquiries (liability and group life) to Doris Stancill at the National Office.

\*President Reagan has designated October 12, 1985 as "American Running and Fitness Day." Take a runner to lunch!

\*Mail is delivered daily to the National Office building at 1001 East Fourth Street here in Greenville. The post office box address should not be used. "Flagging" the envelope helps our mail handling more than you can possibly know. Many thanks to those of you who take the time to do this!

## HAVE A GREAT FALL!!!

## Schedule of Future Sites and Dates NATA Certification Examination

All regional sites are subject to a **minimum of six** candidates per site and limited to a **maximum of thirty** candidates. Completed applications must be received by the Certification Office within the prescribed deadline for the exam date chosen.

**January 12, 1986** — Deadline for receipt of applications is December 2, 1985

New Britain, CT	Forth Worth, TX
Montclair, NJ	Albuquerque, NM
Coraopolis, PA	Costa Mesa, CA
Greensboro, NC	Richmond, KY
Anderson, IN	Cheney, WA
Madison, WI	

**March 16, 1986** — Deadline for receipt of applications is February 3, 1986

Boston, MA	Lincoln, NE
Mechanicsburg, PA	Greeley, CO
Columbia, SC	Sacramento, CA
Holland, MI	Portland, OR
Granville, OH	

**May 18, 1986** — Deadline for receipt of applications is April 7, 1986

New Britain, CT	Houston (Katy) TX
Montclair, NJ	Tucson, AZ
Virginia Beach, VA	Cost Mesa, CA
Anderson, IN	Richmond, KY
Chicago, IL	Seattle, WA
Lawrence, KS	

**July 13, 1986** — Deadline for receipt of applications is June 2, 1986

Boston, MA	Madison, WI
Claymont, DE	Dayton, OH
Coraopolis, PA	Maryville, MO

**The following date will be open to re-exam candidates only: November 23, 1986** — Deadline for receipt of applications is October 13, 1986.

Bethlehem, PA	Costa Mesa, CA
Charlotte, NC	(tentative)
Omaha, NE	Richmond, KY
(tentative)	

Application requests *must* be in written form. It is suggested that you submit your request to the following address at least four months prior to the exam date:

**NATA Board of Certification  
Application Request  
1001 East Fourth St.  
Greenville, NC 27834**



# Association Activities



**David G. Yeo, DPE, ATC**  
Montgomery County  
Community College  
Blue Bell, PA 19422

The NATA takes great pride in presenting the annual awards and scholarships at the NATA Convention each June. At the Awards Banquet, prominent leaders within the profession are honored for their significant and continued contributions, initiative, and dedicated years of service. At the Student Trainer Awards Banquet, outstanding young men and women who are currently enrolled in athletic training programs are awarded scholarships in recognition of their excellent performance and potential. To these established professionals and these future leaders, the *Journal* extends the sincere thanks and congratulations of the entire NATA membership. The sacrifice and commitment the awards represent serve to inspire others within the profession.

Sincere appreciation is extended to Frank George, Chairman of the NATA Grants and Scholarships Committee, and George Sullivan, Chairman of the NATA Honor Awards Committee for their diligent effort in coordinating the respective awards.

## FIRST INTERSTATE BANK ATHLETIC FOUNDATION HALL OF FAME

Lewis C. Crowl, Sacramento, CA, District 8  
James E. "Doc" Dodson, Midland, TX, District 6  
Larry L. Lohr, Weslaco, TX, District 6  
Wilford "Billy" F. Pickard, Jr., Bryan, TX, District 6  
Jerry Rhea, Tucker, GA, District 9  
Paul J. Schneider, Lincoln, NE, District 5

## NATA 25-YEAR AWARD RECIPIENTS FOR 1985

Dennis W. Aten, Eastern Illinois University, District 4  
Ray C. Baldwin, Xavier University, District 4  
William H. Chambers, Fullerton College, District 8  
George H. Christman, Jr., Kenyon College, District 4  
Gary D. Delforge, University of Arizona, District 7  
Gordon L. Graham, Mankato State University, District 4  
Bernard E. LaReau, University of Texas at San Antonio, District 6  
Theodore C. Quedenfeld, Temple University, District 2  
John F. Snedeker, Milwaukee Bucks, District 4  
Richard E. Vandervoort, Houston Rockets, District 6  
Fred J. Zamberletti, Minnesota Vikings, District 4

## PRESIDENT'S CHALLENGE CUP AWARD FOR 1985

James R. Andrews, M.D., Orthopedic Surgeon, Columbus, GA

## HONORARY MEMBERSHIP RECIPIENTS FOR 1985

Robert E. Anderson, M.D., Team Physician, University of Michigan, District 4  
Karl D. Bowers, Jr., M.D., Orthopedic Surgeon & Team Physician, West Virginia University, District 3

R. W. "Red" Covington, M.D., Orthopedic Surgeon & Team Physician, Baylor University, District 6  
Raymond F. Fagan, Manager, Information Services, Schering Corporation, District 2  
Michael W. Hakala, M.D., Orthopedic Surgeon, Richmond, Virginia, District 3  
Jack H. Henry, M.D., Orthopedic Surgeon, San Antonio, Texas, District 6  
Jerry D. Julian, M.D., Orthopedic Surgeon & Team Physician, University of Texas at Austin, District 6  
G. Wilson "Willie" Myers, Jr., Athletic Trainer, Somerset, PA, District 2  
Gerald A. O'Connor, M.D., Orthopedic Surgeon & Team Physician, University of Michigan, District 4  
Charles A. Rockwood, Jr., M.D., Orthopedic Surgeon, University of Texas Medical School at San Antonio, District 6  
James W. Shuffield, M.D., Orthopedic Surgeon, Beaumont, Texas, District 6  
V. James Viola, Sales Manager, Athletic Division, Johnson & Johnson Products, Inc., District 4

## SAYERS J. MILLER, JR. DISTINGUISHED ATHLETIC TRAINING EDUCATOR AWARD

Phillip B. Donley, West Chester University

## 1985 SCHOLARSHIP AWARDS

### Eddie Wojcecki 1985 Achievement Award

David O. Draper, Utah State University & Brigham Young University  
Sponsored by: Mueller Chemical Company

### Undergraduate Scholarship Awards

Kathleen Sue Hornickel, Kearney State College  
Sponsored by: National Football League Charities

Bradley A. Siebler, University of Nebraska  
Sponsored by: National Basketball Trainers Association

Kirby T. Kauk, Western Montana College  
Sponsored by: P.F.A.T.S.

### Robert H. Gunn Scholarship Award

Daniel Phillip Petra, North Dakota State University  
Sponsored by: National Athletic Trainers Association, Inc.

### Sayers J. Miller, Jr. Scholarship Award

Phillip Gregory Bogle, East Carolina University  
Sponsored by: National Athletic Trainers Association, Inc.

### Chuck Cramer Scholarship Award

Dawn Anne Neff, Ohio University  
Sponsored by: Cramer Products, Inc.

### Frank Cramer Scholarship Award

Susan Rose Roy, Bridgewater State College  
Sponsored by: Cramer Products, Inc.

### William F. X. Linskey Scholarship Award

Kathleen Mary O'Neill, California State-Fullerton  
Sponsored by: Johnson & Johnson Products, Inc.

### William E. Newell Scholarship Award

Scott James Belham, University of Southern Mississippi  
Sponsored by: Chattanooga Corporation

### Harold W. Mundy Scholarship Award

Janet R. Bristor, Ithaca College

### Post Graduate Scholarship Awards

Leslie Paul Sewall, Northeastern University  
Sponsored by: National Football League Charities

Jody Carl Andersen, Mankato State University  
Sponsored by: National Basketball Trainers Association

Charles Michael Williamson, University of Southern Mississippi  
Sponsored by: P.F.A.T.S.

Karen A. Baker, East Carolina University  
Sponsored by: American Orthopedic Society for Sports Medicine

Michael D. Ryan, Central Connecticut State University  
Sponsored by: Cybex Division of Lumex Corporation

Michael Dee Green, Brigham Young University  
Sponsored by: Professional Baseball Athletic Trainers Society

### Otho Davis Post Graduate Scholarship Award

Paula Tomasovich, University of Pittsburgh  
Sponsored by: National Athletic Trainers Association, Inc.

### Del C. Humphrey Post Graduate Scholarship Award

Gregory Ray Kreitz, California State University - Long Beach  
Sponsored by: Schutt Manufacturing Company

### G. E. "Moose" Detty Post Graduate Scholarship Award

Christopher John Zang, West Virginia University  
Sponsored by: PRO Orthopedic Devices, Inc.

**Good-Smith Post Graduate Scholarship Award**

Richard Stephen Taddei, Lock Haven State University  
Sponsored by: School Health Supply Company

**Schering-Plough Foundation Post Graduate Scholarship Award**

Russell Joe Hoff, Ohio University  
Sponsored by: Schering-Plough Foundation

**Annual 1985 Student Writing Contest**

Eve Elisabeth Boe, West Virginia University  
Sponsored by: National Athletic Trainers Association, Inc.

**1985 DISTRICT AWARD WINNERS****Joseph N. Abraham Scholarship Award**

Stephen W. Kennelly, Northeastern University

**Joseph N. Abraham Scholarship Award**

Christopher A. White, Ithaca College

**Eastern Athletic Trainers Association Kerkor "Koko" Kassabian Award**

Craig A. Devine, Lowell University

**Victor D. Recine Award - Outstanding High School or Prep School Student Trainer**

Sandra Sue Bargainner, Lock Haven University

**A. C. "Whitey" Gwynne Award**

Andrew D. Barker, Clemson University

**Edward Block Scholarship Award**

Martha J. Cherry, East Carolina University

**Rocky Mountain Athletic Training Association Student Achievement Award**

John Garramone, Arizona State University

**Naseby Rhineheart Award**

Kent Depher, Western Montana College

**FIRST INTERSTATE BANK ATHLETIC FOUNDATION HALL OF FAME - 1962 to 1985**

- |                          |                           |
|--------------------------|---------------------------|
| * Joseph N. Abraham      | Louis K. Grevelle         |
| Jack Aggers              | Walter A. Grockowski      |
| Warren Ariail            | Robert H. Gunn            |
| Walter B. Bakke          | * A. C. "Whitey" Gwynne   |
| Robert Bauman            | * Charles E. Harper       |
| * Roland Bevan           | Thomas E. Healion         |
| Edgar Harold "Hal" Biggs | * Jack Heppinstall        |
| * Ernest Biggs           | Fred W. Hoover            |
| * Samuel E. Bilik, M.D.  | M. Kenneth Howard         |
| * Byron Bird             | James Edward Hunt         |
| * Joseph Blankowitsch    | * James H. Johnston       |
| Z. M. "Mel" Blickenstaff | * Carl Jorgensen          |
| * Edward Block           | Kerkor Kassabian          |
| * William H. S. Bohm     | C. Rodney Kimball         |
| * Francis "Packey" Boyle | * Lincoln Tamotsu Kimura  |
| Martin Broussard         | * Wesley I. Knight        |
| * Bobby Brown            | John Lacey                |
| Delmer Brown             | Eddie Lane                |
| Elmer Brown              | Robert "Bobby" Lane       |
| David M. Bullock         | * Samuel Randall Lankford |
| Edward A. Byrne          | Mike Linkovich            |
| Michael C. Chambers      | * William F. Linskey      |
| Earl "Click" Clark       | * James W. Littlejohn     |
| Richard Kent Cole        | Roland Logan              |
| * E. J. "Jay" Colville   | Larry L. Lohr             |
| Jim Conboy               | * Werner J. Luchsinger    |
| Edward A. Coppola        | * Thomas Fitz Lutz        |
| * Charles Cramer         | Frank H. Mann             |
| * Frank Cramer           | Larnard "Lon" Mann        |
| Lewis Crowl              | Fritz Massmann            |
| LeRoy Otho Davis         | Frank Medina              |
| Oliver William Dayton    | Charles E. Medlar         |
| Charles O. Demers        | Bruce Melin               |
| Oliver J. DeVictor       | * Sayers "Bud" Miller     |
| * Arthur Dickinson, Sr.  | * Ross Moore              |
| L. F. "Tow" Diehm        | * Laurence "Porky" Morgan |
| Lilburn J. Dimmitt       | * James H. Morris         |
| Dwayne "Spike" Dixon     | Warren G. Morris          |
| James E. "Doc" Dodson    | Edward N. Motley          |
| Anthony Frank Dougal     | Leo Murphy                |
| Elvin "Ducky" Drake      | Michael Murphy            |
| Carl Erickson            | * George "Doc" Nelson     |
| William J. Fallon        | Dean B. Nesmith           |
| Donald J. Fauls          | * William E. Newell       |
| * Bill Ferrell           | * Einar Nielsen           |
| Jim Goostree             | M. J. "Mickey" O'Brien    |
| Tad Gormley              |                           |

- \* Eugene S. Paszkiet
- Herbert Patchin
- \* Erastus W. Pennock
- Robert A. Peterson
- Wilford "Billy" F. Pickard, Jr.
- Edward Pillings
- \* Earl "Bubba" Porche
- \* Kenneth Rawlinson
- Victor D. Recine
- Jules Reichel
- Jerry Rhea
- Naseby Rhinehart
- Wayne Rideout
- William B. Robertson
- Gayle Robinson
- John D. "Jack" Rockwell
- Joseph Romo
- Wayne Rudy
- Micheal Ryan
- \* Allan Sawdy
- \* Henry Schmidt
- Paul J. Schneider
- John L. Sciera

- \* Francis Sheridan
- Claude "Big Monk" Simons
- Joseph Stanitis
- Lloyd "Snapper" Stein
- Edward A. Sulkowski
- George F. Sullivan
- Buddy Taylor
- \* Charles W. Turner
- Raymond Ulinski
- Bruce Vogelsong
- Howard E. Waite
- Stanley M. Wallace
- Frank Wandle
- Richard A. Wargo
- Robert Weingart
- Robert White
- Thomas D. Wilson, Jr.
- \* Stephen W. Witkowski
- \* Eddie Wojecki
- Joe Worden
- \* Alfred "Duke" Wyre
- \* Edward G. Zanfrini

**N.A.T.A. 25-YEAR AWARDS - 1954 to 1985**

- |                          |                             |
|--------------------------|-----------------------------|
| * Joseph N. Abraham      | * Arthur D. Dickinson, Sr.  |
| Ed Abramowski            | L. F. "Tow" Diehm           |
| Jack B. Aggers           | Dwayne "Spike" Dixon        |
| Robert Ainsworth         | James E. "Doc" Dodson       |
| Joseph R. Altott         | Anthony Dougal              |
| H. L. "Buck" Anel        | George Ebersole             |
| George Anderson          | James Emmerich              |
| Dennis Aten              | Vernon P. Eschenfelder, Jr. |
| Warren Ariail            | John P. Fadden              |
| Walter Bakke             | Frederick R. Fahey          |
| Ray C. Baldwin           | Donald Fauls                |
| C. A. "Bob" Bauman       | * Bill Ferrell              |
| Robert Beeten            | Keith Fitzpatrick           |
| * Joseph Begala          | * Tom Floyd                 |
| James Benson             | Frank Foley                 |
| Edgar "Hal" Biggs        | Irving Fountain, III        |
| * Ernest Biggs           | Eddie Froelich              |
| * Byron Bird             | Kenneth Gearhart            |
| William Black            | John Gimmler                |
| Harold Blackwell         | James Henry Goostree        |
| * Joe Blankowitsch       | Gordon L. Graham            |
| Z. Mel Blickenstaff      | * Chester Grant             |
| * Edward Block           | Brady Greathouse            |
| * Wilbur Bohm            | Charles "Win" Green         |
| August T. Bonanne        | Louis Grevelle              |
| * William M. Bostwick    | Kurt Grimm                  |
| * L. J. "Packey" Boyle   | Walter Grockowski           |
| LeRoy J. Brandimore      | * Herb Gulick               |
| Martin Broussard         | Robert H. Gunn              |
| Delmer Brown             | * A. C. "Whitey" Gwyne      |
| Elmer Brown              | Leo J. Hamel                |
| * Robert Kenneth Brown   | * Robert F. Hand            |
| Carl Bruner              | * Jack Heppinstall          |
| John Herman Bunch        | * Charles E. Harper         |
| Arno Buntrock            | Larry Harrington            |
| * George Busenberg       | Eugene Harvey               |
| Jack Butoroc             | Emil A. Havach              |
| Ed Byrne                 | Kenneth Hawks               |
| Richard E. Carr          | Thomas Healion              |
| William H. Chambers      | Rev. Jerome Healy           |
| George H. Christman, Jr. | Fern Hitchcock, Jr.         |
| Prosper F. Cima, Sr.     | Frederick M. Holmes         |
| Donald Cochren           | H. Norman Hommas            |
| Alden Coder              | Fred Hoover                 |
| * Richard K. Cole        | M. Kenneth Howard           |
| * Roosevelt Collins      | Ernest Hudak                |
| * Jay Colville           | James E. Hunt               |
| Jim Conboy               |                             |
| Edward Coppola           | Richard Iliano              |
| Alfred Coulthard         | D. Conrad Jarvis            |
| Alan S. Crawshaw         | Birger Johnson              |
| * Earl Cripe             | John Johnson                |
| George H. Crow           | * James H. Johnston         |
| Lew Crowl                | Frank G. Jones              |
| Otho Davis               | Jack Jones                  |
| O. William Dayton        | * Carl "Bud" Jorgensen      |
| Gary D. Delforge         |                             |
| Charles Demers           |                             |
| * Ollie J. DeVictor      |                             |



## NUTRAMENT

### Honors Athletic Training Professionals

#### TRAINER OF THE YEAR

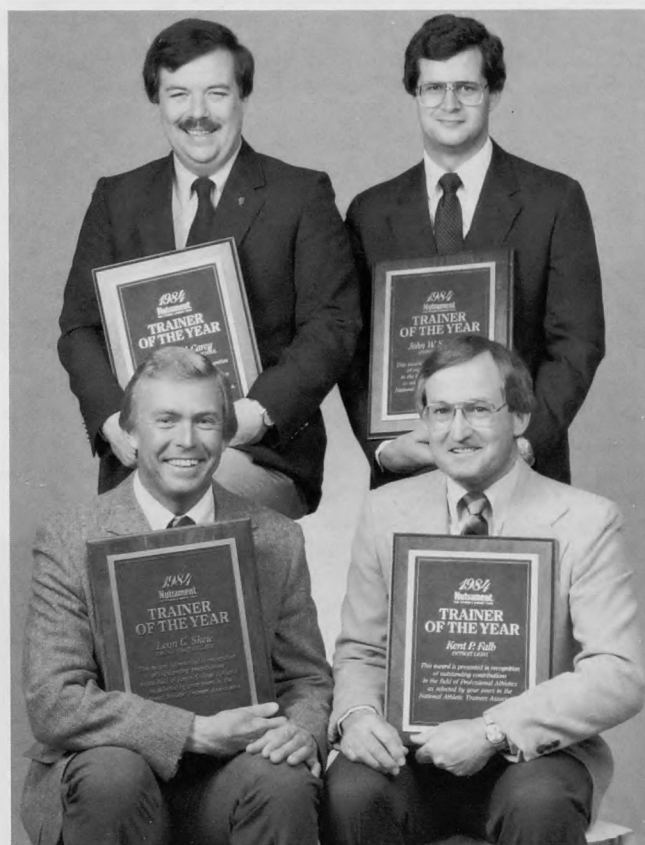
##### Awards

Four members of the athletic training profession have been recognized as one of the best by their peers, the 4,500 certified members of the National Athletic Trainers Association. Voted Trainer of the Year, for their contributions to the profession are seated, Leon Skeie, Orange Coast (CA) College and Kent Falb, Detroit Lions. Standing are Richard Carey, Lyons Township (IL) High School and John Schrader, Indiana University.

NUTRAMENT is proud to honor the entire Athletic Training Profession through our sponsorship of the Trainer of the Year Awards. We take this opportunity to call attention to the highly skilled and dedicated trainers whose care of athletes promotes conditioning and injury prevention as well as emergency care and rehabilitation.



Distributed by  
**Micro Bio-Medics, Inc.**  
Mt. Vernon NY and South S.F., CA  
For information or team price call  
**1-800-431-2743**  
NUTRAMENT is a product of the  
Drackett Company.



John D. Kammer  
Kerkor Kassabian  
Frank Kavanaugh  
Joseph Kearns  
Victor Keedy  
Charles Kerr  
Christopher Kevatos  
Paul Kichline  
C. Rodney Kimball  
\* Lincoln Tamotsu Kimura  
Leo W. Klein  
\* Wesley Knight  
Hal F. Knowlton  
Walter Koch  
\* Charles Kruzan  
Joseph Kuczo

John E. Lacey  
Eddie Lane  
R. A. "Bobby" Lane  
Joseph Langi  
\* Sam Lankford  
Bernard E. LaReau  
Roland E. LaRue  
Louis J. Leone  
Mont. M. Linkenauger  
Mike Linkovich  
\* William F. Linskey  
Ned Linta  
\* James Littlejohn  
Larry L. Lohr  
\* W. J. "Dutch" Luchsinger  
\* Thomas Fitz Lutz

Robert Lewis Martin  
Fritz Massman  
Nicholas Maurillo  
Bobby E. McClintock  
Charles W. McDowell  
\* Herman McGee  
\* Roger McGill  
John F. McKinnon

Leonard McNeal  
Frank Medina  
Charles Medlar  
Bruce Melin  
\* Sayers "Bud" Miller  
Thomas Monforti  
\* Ross Moore  
Melvin Moretti  
Grady Morgan  
\* Laurence "Porky" Morgan  
\* Jim Morris  
Warren Morris  
William Morrow  
Richard O. Morsch  
Edward Motley  
Leo Murphy

Carl E. Nelson  
\* George Nelson  
Dean Nesmith  
John "Jake" Nevin  
\* William E. "Pinky" Newell  
James D. Nice  
\* Einar Nielson  
\* John Noonan

M. J. "Mickey" O'Brien  
Robert Officer  
Al Ortolani

Lenwood Paddock  
\* Eugene S. Paszkiet  
Herbert Patchin  
\* Erastus W. Pennock  
Robert Peterson  
Billy Pickard  
Edward J. Pillings  
Francis Poisson  
\* Earl J. "Bubba" Porche  
Ralph Pritts

Theodore C. Quedenfeld  
Joseph P. Quigley

\* Ken Rawlinson  
Victor D. Recine  
Albert Rector  
Frank A. Redd  
Jules Reichel  
J. C. "Dutch" Reinhardt  
Jerry Rhea  
Naseby Rhinehart  
Joe E. Richardson  
Wayne Rideout  
Marvin R. Roberson  
\* William B. Robertson  
Gayle Robinson  
John D. "Jack" Rockwell  
Joe Romo  
Leon "Red" Romo  
John R. Rourke  
Wayne Rudy  
C. Roy Rylander

William Samko  
\* Davis Sandlin  
\* Al Sawdy  
\* Henry Schmidt  
Paul J. Schneider  
\* Rudy Schneider  
John Sciera  
Frank Semanick  
Sherrod Shaw  
James D. Sheehan  
\* Thomas Sheehan, Sr.  
Robert E. Shelton  
\* Francis Sheridan  
Robert W. Sinkler  
\* John "Red" Sisley  
Andrew Sivess  
John F. Snedeker  
\* Robert Spackman  
Michael A. Stang  
Joseph Stanitis  
Francis "Biff" Stannard  
Lloyd "Snapper" Stein  
Duane Stober

George Stockwell  
Edward Sulkowski  
Bart F. Sullivan  
George F. Sullivan  
Thomas Sullivan

Charles W. Taylor  
Henry "Buddy" Taylor  
\* Charles "Doc" Turner

Raymond V. Ulinski

Seymour Van Blake  
Richard E. Vandervoort  
Bruce E. Vogelsson

Wayne F. Wagner  
Howard Waite  
\* Stanley M. Wallace  
Fred Wappel  
Jack C. Ward  
\* Richard Wargo  
Richard W. Waterman  
Robert E. Weingardt  
Ray West  
Robert C. White  
Frank J. Wiechec  
William L. Wild  
Lewis H. Williams  
Jack Williamson  
Billy B. Wilson  
Thomas D. Wilson, Jr.  
\* Steve Witkowski  
\* Edward J. Wojewski  
Joe Worden  
Herman Wrigley  
\* Alfred J. "Duke" Wyre

Fred J. Zamberletti  
\* Edward Zanfrini

\*Deceased

## Donley Receives Distinguished Athletic Training Educator Award

Phil Donley, Professor and Head Athletic Trainer at West Chester University, is the second recipient of the Sayers J. Miller, Jr. Distinguished Athletic Training Educator Award. To follow the initial recipient, William E. "Pinky" Newell, is perhaps the highest honor that can be given an athletic trainer involved in an NATA curriculum. Phil Donley is, indeed, worthy of such recognition and tribute, and it is important to summarize some of his contributions to athletic training education.

Donley's academic background includes a B.S. from West Virginia University, a Certificate of Physical Therapy from D.T. Watson, and an M.S. from West Virginia University. He has been the Head Athletic Trainer at West Chester University since 1965, developing the fifth approved NATA program in 1970, the first co-ed athletic training education program, and an Athletic Training major (1982). He designed all of the ten athletic training courses required for the Majors program, co-authored the course outline for Sports Medicine Administration Course for Sports Medicine Education Institute, and developed the athletic training behavior objectives for an athletic training education program adopted by the NATA.

Phil Donley was privileged to have known and worked with "Bud" Miller and "Pinky" Newell. In 1970, Donley presented his ideas for an Athletic Training Education curriculum to the Professional Education Committee, and served on the committee from 1970-1982. While a member of the PEC, Donley was the principal author of several advances in athletic training education: Continuing Education Requirements, Faculty-Trainer Education Guidelines, Visitation Checklist, and Behavioral Objectives. Donley was instrumental in the development of the Pennsylvania Athletic Training Society and state licensure for trainers. He received the Pennsylvania Distinguished Academic Service Award in 1976 for his development of athletic training education programs, and he was the EATA Athletic Trainer of the Year in 1978.

Significant contributions to athletic training education have also been as Program Director for EATA and NATA conferences, chief visitation officer for the NATA, and as editor, author, or contributing writer for over 20 publications. Donley has been a frequent speaker at community, state, regional, and national meetings, and served as trainer at the 1980 Winter Olympics.

By all criteria, Phil Donley has truly proven to be a distinguished athletic training educator, unselfishly committed to quality education. In accepting the award at the Student Awards Banquet, Donley stated, "These are new times with new challenges for the profession. We must educate trainers for the many new roles that trainers have in the sports medicine movement. We need to retool if we are to keep pace with the varied job opportunities and changing clientele. We are the only health care profession devoted solely to the health care of the athletes. We are unique and we should be proud of it."

\* \* \*

Lester Hagan, a student athletic trainer at the University of Evansville, Indiana, has been credited with saving the life of an Aurora College baseball player. The player had collapsed near his team's dugout after having received a blow to the head in a collision with a teammate while fielding a ball. The player stopped breathing three times, and Hagan applied

mouth-to-mouth resuscitation, treating him also for advanced shock and administering oxygen and fluids before the ambulance arrived. Hagan has been nominated for an American Red Cross lifesaving citation.

\* \* \*

Fred Fahey and Dick Hoover have been inducted into the Illinois Athletic Trainer Association Hall of Fame.

\* \* \*

## Nevin Made Kentucky Colonel

Prior to the final game between Villanova and Georgetown at the 1985 NCAA Final Four in Lexington, Kentucky, Jake Nevin, Trainer Emeritus (56 years) at Villanova, was presented a proclamation from Kentucky Governor Collins making Nevin an official Kentucky Colonel. The Villanova team had dedicated the 1984-85 season to Jake who suffers from Lou Gehrig's Disease.



\* \* \*

Ernie Golin of the Athens Sports Medicine Clinic, Georgia, was appointed as a trainer for the U.S. team in the 12th World Maccabiah Games in Israel this July. Golin has been a trainer for over 25 major bowls and tournaments.

\* \* \*

Bill Coughlin of Harvard University has been asked by the Irish American Sports Foundation to head up an Advisory Trainers Group. Twenty American trainers will be asked to communicate with the trainers in the Irish Basketball Association as to the latest techniques, modalities, and materials in athletic training. If interested, please forward your name, address and a brief statement as to why you would want to participate in this program to:

Harvard University  
Bill Coughlin, Head Trainer  
60 J. F. Kennedy Street  
Cambridge, MA 02138

©



# Mettler delivers muscle stimulation that's right on the button.

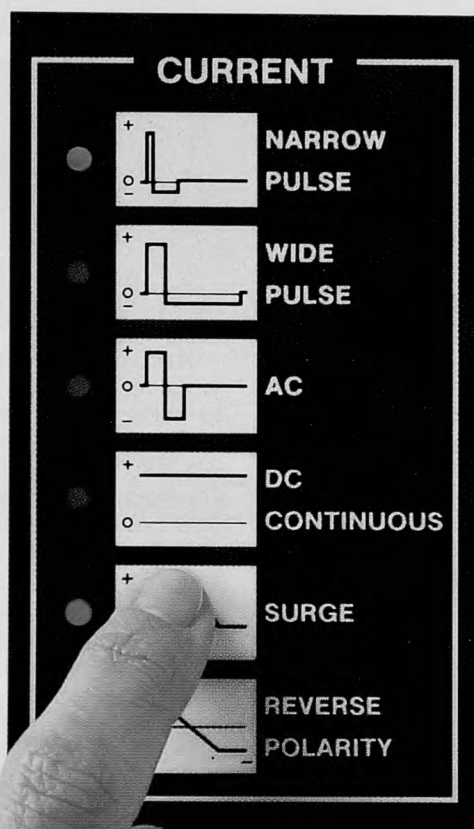
Output waveforms on the new Sys-Stim 206 muscle stimulator are pre-programmed for effectiveness.

For comfort too.

The Sys-Stim 206 delivers waveforms that have been precisely designed for different clinical applications. Large muscle stimulation. Small muscle stimulation. Pain management. Normal or denervated muscle excitation.

All at the touch of a button.

The microcomputer-controlled waveforms of the Sys-Stim 206



are balanced for comfort. Current flow is equalized to produce zero net ion flow reducing skin irritation.

The advanced new Sys-Stim 206 has several unique safety features. An automatic disconnect protects patients if energy exceeds predetermined levels. There's also an interlock sensor that makes accidental mode change virtually impossible.

The Sys-Stim 206 is right on the button when it comes to effectiveness, comfort and safety. Yet it's affordably priced. Find out more about the new Sys-Stim 206. It's right on the money too.

**METTLER ELECTRONICS®**

1333 S. Claudina St., Anaheim, CA 92805 USA  
(714) 533-2221, Cable SONICATOR, Telex: 3718749 SONICATOR

## The new Sys-Stim™ 206



# Calendar of Events



Jeff Fair, ATC, MS  
Oklahoma State University  
Stillwater, OK 74074

## September

**4-17** Amateur Athletic Union National Conference, Chicago, IL.

**12-13** Ethics in Sports Medicine, Hartford, CT. Contact Department of Orthopedics, University of Connecticut Health Center, 263 Farmington Ave., Farmington, CT 06032.

**13-14** How to Implement and Manage a Sports Medicine Program, Atlanta, GA. Contact Faye Paris Sports Medicine Education Institute, Inc., 993 Johnson Ferry Road, NE130-F, Atlanta, GA 30342.

**18** 3rd Annual Pioneer Valley Sports Medicine Conference, Springfield, MA. Contact Nancy Caron, S.T.A.R.T., 91 School Street, Springfield, MA 01105.

**21** Second National Conference on the Triathlete, Virginia Beach, VA. Contact Claire LeBlanc, ATC, Virginia Beach Sports Medicine, 1016 First Colonial Road, Virginia Beach, VA 23454.

**28-Oct. 5** Annual Conference for American Academy of Physical Medicine and Rehabilitation, Kansas City, KS.

**28-Oct. 5** Annual Conference of Rehabilitation Medicine, Kansas City, KS.

## October

**7-11** American Dietetic Association, National Meeting, New Orleans, LA.

**9-12** 59th Annual Convention of the American School Health Association, Little Rock, AR. Contact Tom Reed, American School Health Association, P.O. Box 708, Kent, OH 44240.

**11-13** 1985 Alaskan Sports Medicine and Recreation Conference, Anchorage, AK. Contact Given Otte, RN, MN, Director, Continuing Ed. in Health Sciences, University of Alaska, 3211 Providence Drive, Anchorage, AK 99508.

**26-27** 9th Annual New England Emergency Medical Training Seminar, Springfield, MA. Contact I.R. Desrosiers, M.Ed., Human Services Training Institute, Box 1567, Springfield College, Springfield, MA 01109.

**28-31** National Safety Council's Annual Meeting, New Orleans, LA.

**30-Nov. 2** La Crosse Health and Sports Science Symposium, La Crosse, WI. Contact La Crosse Exercise, 221 Mitchell Hall, UWL, La Crosse, WI 54601.

## November

**10-14** American Osteopathic Academy of Sports Medicine National Meeting, Atlanta, GA.

**15-16** 5th Annual Sports Health Forum, Minneapolis, MN. Contact Institute for Athletic Medicine, 606 24th Avenue South, Minneapolis, MN 55454.

**15-17** Medithon '85, Running Injuries Seminar, San Diego, CA. Contact Medithon '85, P.O. Box 89, Jackson, MI 29204.

**17-18** Annual Meeting for Central States Chapter, American College of Sports Medicine, Emporia, KS. Contact J. L. Mayhew, NMSU, Kirksville, MO 63501.

**18-19** ATLS Provider Course, Baltimore, MD. Contact Patricia McAllester, MIEMSS, 22 S. Greene Street, Baltimore, MD 21201.

**20-22** 8th National Trauma Symposium, Baltimore, MD. Contact Patricia McAllister, MIEMSS, 22 S. Greene Street, Baltimore, MD 21201.

*Athletic Training* will list events of interest to persons involved in sports medicine, providing the information is received **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, Head Athletic Trainer, Athletic Department, Oklahoma State University, Stillwater, OK 74078. ©

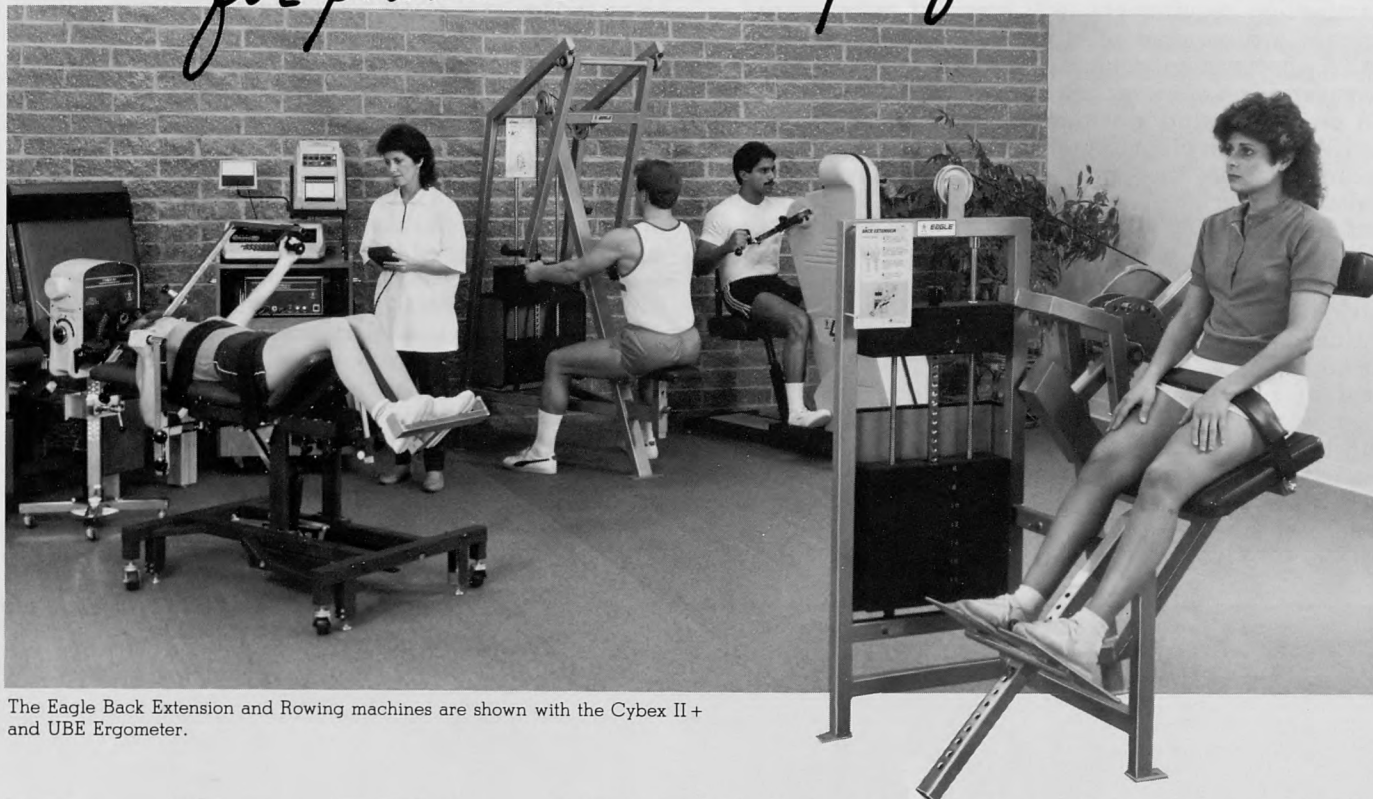
## 37th Annual Meeting



Las Vegas,  
Nevada



*There is no substitute  
for proven clinical performance*



The Eagle Back Extension and Rowing machines are shown with the Cybex II+ and UBE Ergometer.

## Eagle. The Clinical Performer.

Eagle Fitness Systems by Cybex are the *only* variable-resistance isotonic weight machines designed specifically for clinical applications in physical therapy and sports medicine. The Cybex tradition of functional design

has been incorporated into all 19 machines to ensure the safety and efficacy of your patients' treatments and to maximize *your* productivity. Eagle offers you these clinically-proven features:

The addition of Eagle to your clinic allows you to treat more patients in less time. And Eagle increases your ability to offer specific exercise rehabilitation: You can exercise your patients in both the concentric and

eccentric modes with the efficiency of variable-resistance isotonic *and* safety.

**Eagle Fitness Systems by Cybex.** There is no substitute for proven clinical performance.

Feature	Clinical Application
Body-Fitting Adjustments	Precise alignment of biomechanical axis of rotation for both short and tall users.
Variable-Resistance Isotonics	Exercise resistance is matched with human torque curve for each pattern to create the most efficient muscular overload.
Range of Motion Limiting	Safe, easily adjustable mechanisms allow you to tailor your rehabilitation programs to your patients' limitations. (Available on Leg Extension, Leg Flexion, Back Extension, and Pullover).
Eccentric Resistance	Integrate a safe, proven method of eccentric exercise with Cybex® isokinetic rehabilitation.
Space-Saving Designs	Access to weight stack from user's position reduces floor space requirements; on the average, <i>only</i> 13.5 square feet of floor space is required to safely operate an Eagle machine.

AT/85

☐ I would like a sales representative to call me.

☐ Send more information about the Eagle variable-resistance system.

Name \_\_\_\_\_ Title \_\_\_\_\_

Bus. Phone \_\_\_\_\_ Facility \_\_\_\_\_

Bus. Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_



**EAGLE**  
FITNESS SYSTEMS by CYBEX

CYBEX, Division of Lumex, 2100 Smithtown Avenue, Ronkonkoma, NY 11779

**HOW TO ACQUIRE AN ATHLETIC TRAINER,** *from page 203*

improve and expand the coverage provided to the student athletes, but it may not help those schools that have no certified athletic trainer. The reasoning for this is simple: in order to ensure the student trainer that his hours of practical experience will count toward the examination requirement (800 hours of practical experience are required of students going through an NATA approved curriculum) the hours must be under the supervision of a certified athletic trainer.

A practical solution which can be accepted by both the NATA curriculum school and the high school is for the high school to pay either the college's certified athletic trainer or the college's curriculum director, if that person is NATA certified, to serve as the athletic trainer at the high school. This would, in turn, allow the college trainer the option of placing one or two of the curriculum student trainers within the high school setting since the college trainer is actually employed by the high school. This would satisfy the NATA requirement of supervising the student trainer's hours of practical experience while providing the high school with the services of an athletic trainer. The college's restrictions dictating employment by their faculty and staff would have to be investigated. The high school could ease the college's dilemma of having one of its

employees hired by two educational institutions by making the trainer's salary an adjunct to programs such as adult education, community school, in-service pay, or a coach's stipend so as to avoid the necessity of signing a contract with the board of education. The practical experience afforded to the student trainers of being in the "real world" of budget limitations, limited facilities, various and often lengthy athletic practices and contests as well as the irreplaceable experience gained as the individual upon whom so many depend, would certainly make this appealing from the student's perspective.

The certified trainer may set up such a program in various ways, utilizing many options as far as the number of students sent to the high school, hours and sport coverages. Minimum requirements for the student trainers in this type of program should include current first aid and cardiopulmonary resuscitation certification. There are obvious legal restrictions as to the type of services that the student trainers could provide, especially as the number of states which adopt licensure for athletic trainers increases. The services provided by the students should be restricted to initial first aid, taping and assessment of severity. By working closely with the team physician and the college trainer, the student trainer will certainly gain.





The same restrictions stated previously apply to the nine graduate curriculums. It may be possible, however, to find within the graduate curriculum someone who is already NATA certified and has returned to college to pursue an advanced degree. As a college graduate, this person can be hired as the athletic trainer at the high school if his/her obligations at the college will allow it.

### Conclusion

School administrators should be aware of the medical as well as the possible legal ramifications of hiring persons who are not certified or state licensed to provide the service for which they were hired. This is becoming increasingly acute as the number of states that adopt licensure for athletic training increases. There are presently fifteen states which have enacted licensure requirements for the position of athletic trainer. At this time, the fifteen states are: Massachusetts, Oklahoma, Kentucky, Texas, Missouri, Georgia, South Carolina, South Dakota, North Dakota, New Mexico, Rhode Island, Pennsylvania, New Jersey, Tennessee and New Hampshire. This action is meant to ensure quality care for the athletes. Licensure was not meant to eliminate the care provided by high school coaches such as initial first aid, tape application or the development of strengthening programs for healthy athletes. Rather, it provides

limits of care so that in order to provide the services as outlined within the law, the person must have met the requirements necessary to be licensed or registered within that state.

The purpose of this article has been to reinforce the need for competent medical care for athletes during their high school years. Often school districts have strong motivation to provide services for the student/athlete population but are faced with budgetary restraints. The options presented should ease the dilemma while providing practical means of obtaining qualified medical care.

### References

1. Redfearn RW: Are High School Athletes Getting Good Health Care? *The Physician and Sportsmedicine*. McGraw-Hill Publishers. August, 1975. pp. 34-38.
2. Sherman B: A New Approach to Athletic Training in Southern Wisconsin High Schools. *The Physician and Sportsmedicine*. McGraw-Hill Publishers. January, 1985. pp. 57-64.
3. Bell G et al.: Athletic Training Manpower Survey of Selected Illinois High Schools. *Athletic Training*. National Athletic Trainers Association, Spring, 1984 pp. 233-24. ©

## Shaping the future of fitness

They look to you because they want to be better, healthier human beings. To perform better at work; at play. And to reach these fitness goals, they demand the highest quality, most innovative yet easy-to-use equipment, like Universal's new ComputeRow™ rowing machine. They also favor the most time-efficient training and exercise programs: Universal's Aerobic Super Circuit™, for example.

Yes, they expect the latest, the most efficient, the best. Anticipate — and satisfy these expectations, and you shape the future of fitness. You...and Universal.



1. Single Station and Multi-Station Machines
2. Computerized Aerobic Equipment
3. Free Weight Equipment
4. Planning Services and Exercise Videos

**UNIVERSAL**

Subsidiary of Kidde, Inc.

**KIDDE**

**Shape your future**

Please provide more information on:

- ☐ Universal's new ComputeRow.
- ☐ How to design a new fitness facility.
- ☐ How to upgrade our present facility.
- ☐ Send me a Universal Conditioning Equipment Catalog.

P.O. Box 1270 • Cedar Rapids, Iowa USA 52406  
Phone: 319-365-7561 • Toll Free: 800-553-7901 • Telex: 464460 UNI GYM CDR

Please have a representative call:

Phone \_\_\_\_\_ Best Time \_\_\_\_\_

Name \_\_\_\_\_

School/Organization \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

F155

AT95

# Potpourri



Dennis Aten, ATC, RPT, MS  
Eastern Illinois University  
Charleston, IL 61920

## Spreading Colds?

### News Release

#### University of Connecticut Health Center

Cold viruses can live for more than fifty days when drawn by back suction into the liquid in a squeeze-spray nasal decongestant bottle but tests at the University of Connecticut Health Center show this contamination can be prevented by a new, one-way pump dispenser.

The scientific studies were conducted by Raymond W. Ryan, PH.D., associate director of microbiology in the department of laboratory medicine at the Health Center, under a grant from Boehringer Ingelheim, Ltd., (B-I) of Ridgefield.

Ryan said today in-vitro (test tube) laboratory tests have shown that back suction of squeeze-and-release dispensers drew rhinoviruses, as well as other viruses associated with the common cold, into the solutions.

Some of them have survived in the solutions for more than fifty days. Ryan is continuing to study their length of survival.

He reported that tests under the same conditions with the unique, one-way pump dispensing system developed by B-I did not detect any "drawback" contamination.

According to B-I, the pump spray mechanism is the first metered dispenser to deliver specific amounts of nasal decongestant intended to relieve nasal congestion due to the common cold, sinusitis, hay fever and other upper respiratory allergies.

Company officials say the metering pump delivery system was developed to prevent "back suction" contamination and afford controlled, precise doses of decongestants. Squeeze-spray dose amounts depend on the strength of the user's hand.

Boehringer markets two decongestants available without a prescription.

One contains phenylephrine hydrochloride and is intended to clear nasal passages for up to four hours. It comes in two strengths for use by adults and children.

The other, aimed at clearing nasal passages for up to twelve hours, contains oxymetazoline hydrochloride and is for adults only.

B-I says these two medications are the ones most recommended by physicians for relieving nasal congestion because of their safety and efficacy.

## Back Care

### Your AAOS Report

(American Academy of Orthopaedic Surgeons)

Two video and audio patient education programs for treatment and prevention of back pain are being developed for the Academy and will be available in January, 1985. The programs, which are designed for home use contain flexibility and strengthening exercises, relaxation techniques and detailed instruction on body mechanics.

Content of the program is being supervised by the Academy's Committee on the Spine, chaired by *Edgar G. Dawson, M.D.* The program will be produced and distributed by *Feeling Fine Programs*, an educational firm headed by *Arthur Ulene, M.D.* (best known as NBC TODAY Show's "Family Physician").

Our program, tentatively titled "Back Pain Recovery Program", is designed for use by patients with acute pain and significant disability. The other, tentatively titled "Back Pain Prevention Program", is designed for regular, preventive use by patients with recurring back pain attributable to poor muscular conditioning. It will also be appropriate for healthy individuals who desire a preventive exercise routine.

The exercise routines are progressive in nature and designed to accommodate the wide variation in fitness levels that are encountered. Packaged with each video and audio cassette will be a booklet containing illustrated exercise routines and other appropriate information. The booklet will be useful for convenient review and for use when traveling.

The Academy's programs will be distributed in a uniquely professional manner, with primary emphasis on making them available in health care settings such as pharmacies. In addition, Academy members will be able to purchase the programs for distribution directly to their patients. A mechanism is also being established to service patients via direct mail or phone order.

The Academy decided to enter this joint venture to produce these programs primarily because of the clearly defined need for them. A survey of selected AAOS members revealed that 96% would use the "preventive" program routinely in their practice and 92% would use the "recovery" program for appropriate patients. The Academy was concerned, also, about the release of ineffective and inappropriate programs produced by nonprofessionals (such programs are already appearing in the marketplace). By involving itself in the development of these programs and controlling their content, the Academy can assure its members that acceptable programs will be available.

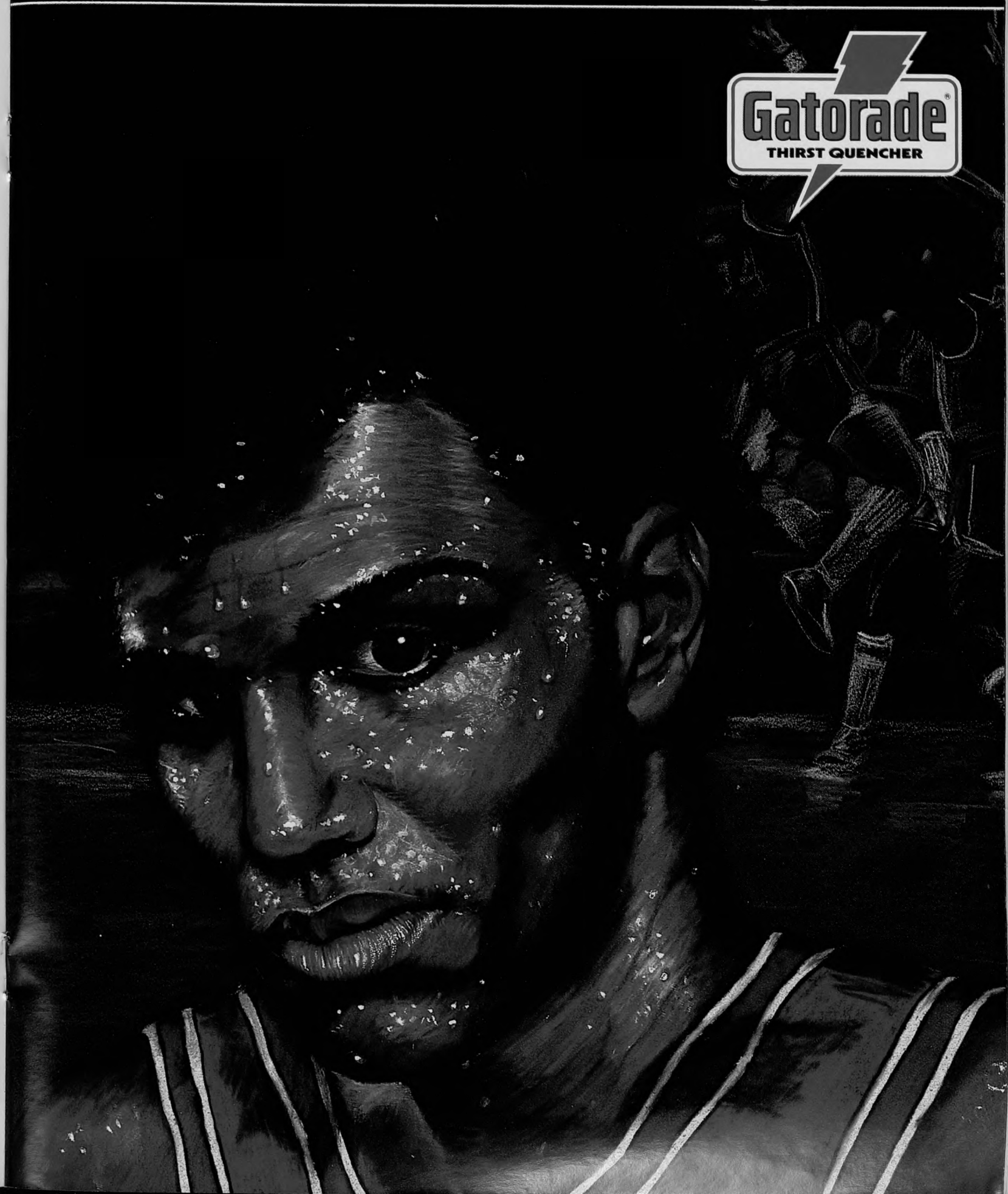
If anyone is interested in this for educational purposes, ask your local orthopaedist. ☺

## Brochure Requests

Requests for the brochure entitled "Careers in Athletic Training" should be sent to the National Office at 1001 East 4th Street, Greenville, N.C. 27834. Single brochures are supplied upon request at no charge. NATA officers and committees, schools having an approved athletic training curriculum, and those having an apprenticeship program are furnished multiple copies of the brochure at no charge.



**Heat Stress.  
One injury you needn't ever treat again.**



# An Important Message from Gene Gieselmann

*Athletic Trainer of the  
St. Louis Baseball Cardinals*

Dear Fellow Trainer,

Of all the injuries that can befall an athlete, probably the most insidious—and potentially dangerous—is heat stress.

As head trainer of the St. Louis Cardinals baseball team, I'm keenly aware of this. Summer temperatures in St. Louis sometimes soar above 100°F often accompanied by extremely high humidity. Players having to perform day after day under such conditions are exceptionally vulnerable to dehydration, which can result in heat cramps, heat exhaustion, and in some cases, severe heat stroke. Even a partial loss of body fluids can impair an athlete's performance, cutting down on physical and mental efficiency.

Yet, while heat stress may be one of the most devastating sports injuries, fortunately, it's also one of the most preventable. It requires that athletes be well hydrated at all times, to keep their bodies cool and properly functioning—a responsibility that rests primarily with a team's trainer.

In the Cardinals organization, we've found that nothing accomplishes this task better than Instant *Gatorade*® Thirst Quencher. For years we've been providing ballplayers with unlimited quantities of *Gatorade* before, during and after games and practices. And, consequently, there has been a marked drop in the number of players who have suffered from heat injuries.

Interestingly, a lot of pros don't have to be told to drink *Gatorade*. They know through experience that it works—many having used it since they were kids.

As one who is responsible for keeping highly paid professionals in top performing condition, I heartily recommend the use of Instant *Gatorade* Thirst Quencher. And I'm not alone. Many other teams in all sports, at every level, have made Instant *Gatorade* an essential part of their athletic programs.

## *Gatorade:*

### Number One Because It Works

It's no mere coincidence that Instant *Gatorade* Thirst Quencher is number one among athletic trainers all over America.

Instant *Gatorade* is scientifically formulated to quickly replace the fluids and electrolytes your players lose during rigorous games and workouts, while reducing waterlogging, cramping and bloating.

Instant *Gatorade* also contains glucose to provide energy reserves and enhance endurance. Its pleasant flavor encourages your athletes toward greater fluid consumption and re-hydration. The Cardinal players really enjoy drinking it.

## *Gatorade:*

### Better Than Water, Soft Drinks, Fruit Juices

While some trainers elect to use water, Instant *Gatorade* Thirst Quencher provides more benefits. Instant *Gatorade* is isotonic—balanced with the fluids in the body for rapid replacement of electrolytes. Water isn't. Instant *Gatorade* provides a readily available source of energy, has a pleasant taste—for greater consumption. Water doesn't.

Instant *Gatorade* Thirst Quencher contains less sugar than

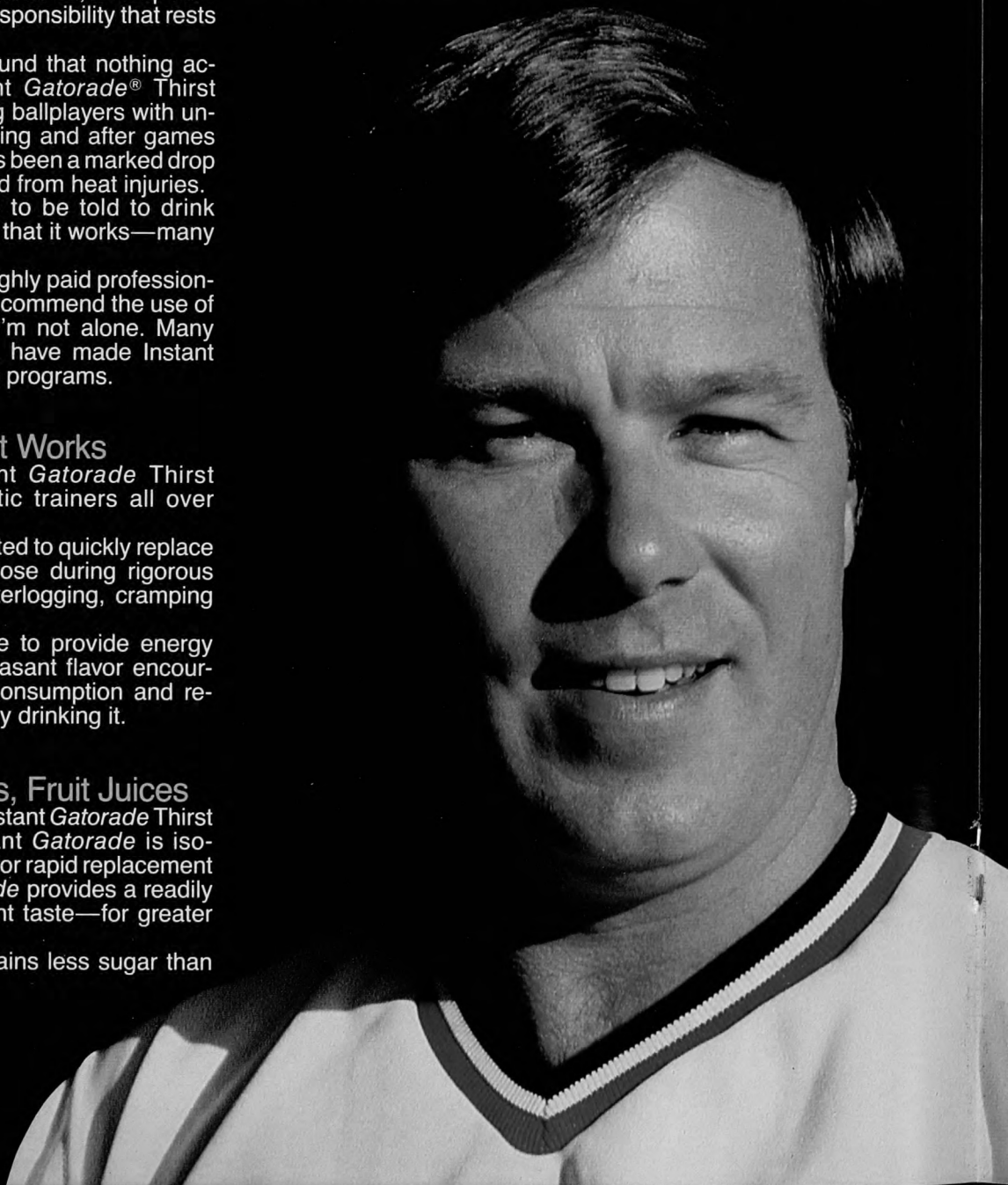
most soft drinks and fruit juices, thus promoting quicker hydration. It replaces lost body salts, is more compatible with body fluids, is more easily absorbed.

## First Choice of America's Athletic Trainers

The list of trainers and trainers' associations endorsing or recommending Instant *Gatorade* is as long as it is prestigious.

It's the "Official Sports Beverage of the Professional Baseball Athletic Trainers Society" and the "Recommended Thirst Quencher of the Professional Football Athletic Trainers Society." And the "Official Sports Beverage of the National Basketball Trainers Association."

Instant *Gatorade*, in fact, is used by more trainers, coaches and athletes than any other sports beverage in America. It works for the St. Louis Cardinals; it'll work for you.





# Studies Confirm Gatorade®'s Effectiveness

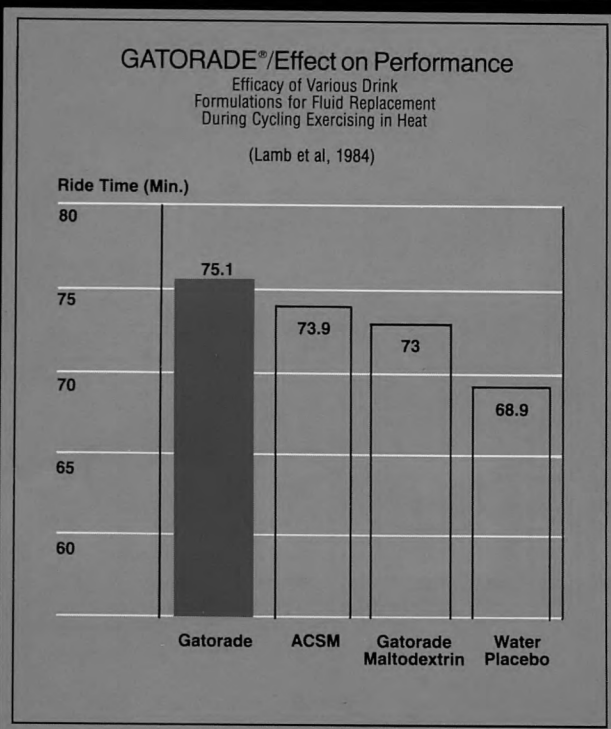
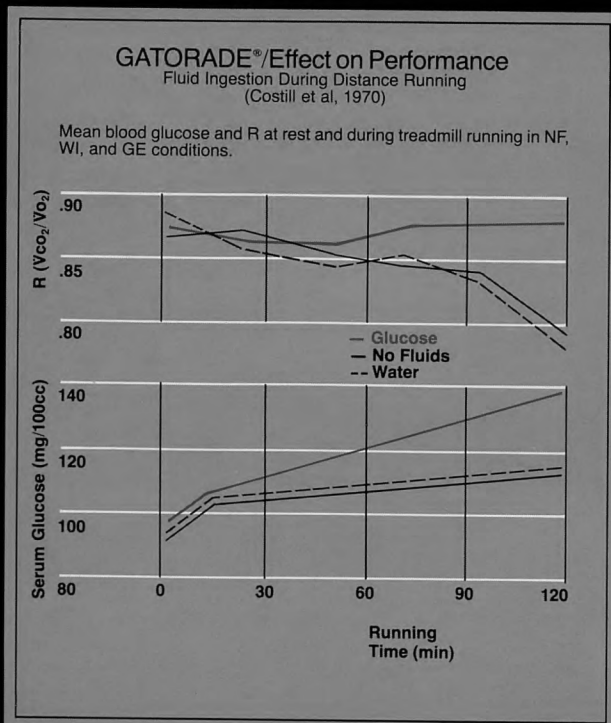
Test results show that Instant Gatorade Thirst Quencher can prolong the peak performances of athletes. Here are the findings of two tests:

1. Studies on runners (athletes) performed by Dr. David Costill at Ball State University concluded: "Our findings indicate that frequent GE (Gatorade) feedings tend to maintain carbohydrate utilization throughout the 120 minutes of running (exercise). Subjects suffered extreme muscular fatigue during WI (water ingestion). . . . another subjective observation noted was a rapid muscular recovery after GE (Gatorade) trial. Three of the subjects ran additional 5-10 miles on the GE trial day as part of their training but were too exhausted on the other test days."\*

2. In a test performed by Dr. David Lamb, at Purdue University in 1984, on prolonged exercise in a hot environment, he concluded that "The cyclist's (athlete's) endurance during the Gatorade trial was 9% better than during the water placebo (control) trial. Fifteen out of twenty-two subjects rode longer during the Gatorade trial."\*\*

\* Costill D L, et al: Fluid ingestion during distance running. Archives of Environmental Health. VOL 21 (October), p. 520-525, 1970.

\*\* Brodowicz G R, Lamb D R, et al: Efficacy of various drink formulations for fluid replacement during cycling exercise in heat. Medicine and Science in Sports and Exercise; VOL 16, p. 138, 1984.



## Put Gatorade in your program today

To order Instant Gatorade Thirst Quencher, please contact your local retail sporting goods or team dealer.

For information on the Gatorade dealer nearest you, or to receive a Free Gatorade Product Catalog, call toll-free: 1-800-428-6000.

In Indiana, call: 1-317-542-7616.

Instant Gatorade. We help keep your players on the winning edge.

## Spring

Spring is the time for getting back into shape after a long winter layoff and adhering to a training program that grows more rigorous each day.

Spring, then, is an ideal time to make Instant Gatorade Thirst Quencher an essential part of an athlete's regimen. In the Cardinals organization, we use it right from the start at spring training in February. It keeps our players in top form through the workouts, the practices and the long season ahead.

Instant Gatorade, in fact, is the "Official Sports Beverage of Major League Baseball." And any other team that values the peak condition of its athletes.

## Summer

Summer brings the high heat and humidity that can be perilous to my athletes' performances—and health. For any sport, any activity, Instant Gatorade is number one under the sun, to quickly replace fluids, to help protect against the danger of heat stress.

Instant Gatorade helps my players go longer, farther under the most trying hot-weather conditions. Maybe that's why it's the preferred electrolyte-replacement drink used in many marathons, triathlons, and 10K races and is an "Official Supplier to The U.S.A. Track and Field Team."

## Fall

After our season winds down, football and soccer take center stage. It means heavy workouts in heavy protective gear that inhibits the body's ability to cool off.

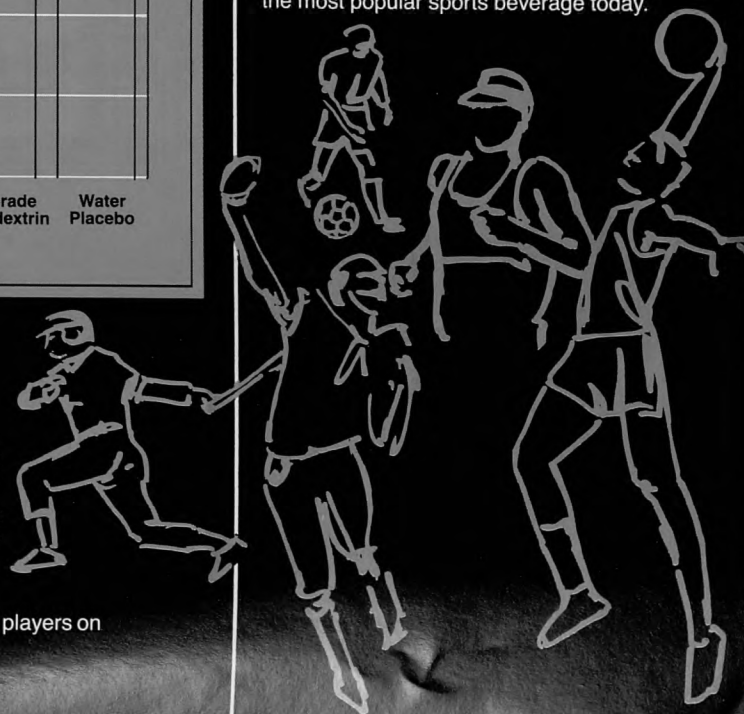
Instant Gatorade is formulated to help rehydrate an athlete's body, keep it cool under the stress of strenuous activity and to restore its natural mineral balance. Instant Gatorade is standard equipment for the pros, as well as for athletes in every sport, in every sphere of competition.

## Winter

Winter is the most deceptive season of all. Because even though it may be cold out, an athlete still loses vital body fluids through perspiration. And even worse, is less aware that it's happening.

What's more, indoor sports like basketball are usually played in hot, dry arenas. Realizing this, the pros have made Instant Gatorade the "Official Sports Beverage of the National Basketball Association," to replace vital minerals and electrolytes lost during play.

No matter what the season, the sport, the environment, the level of play . . . Instant Gatorade is the most popular sports beverage today.



## Gatorade keeps athletes on the winning edge

For more than 15 years, Instant *Gatorade* Thirst Quencher has been important to winning teams and top performers everywhere. Chosen by coaches and trainers as indispensable for team effectiveness. Used by athletes in all sports, at every level of play.

*Gatorade*. The number-one thirst quencher on the American sports scene. A great asset to have on your side.

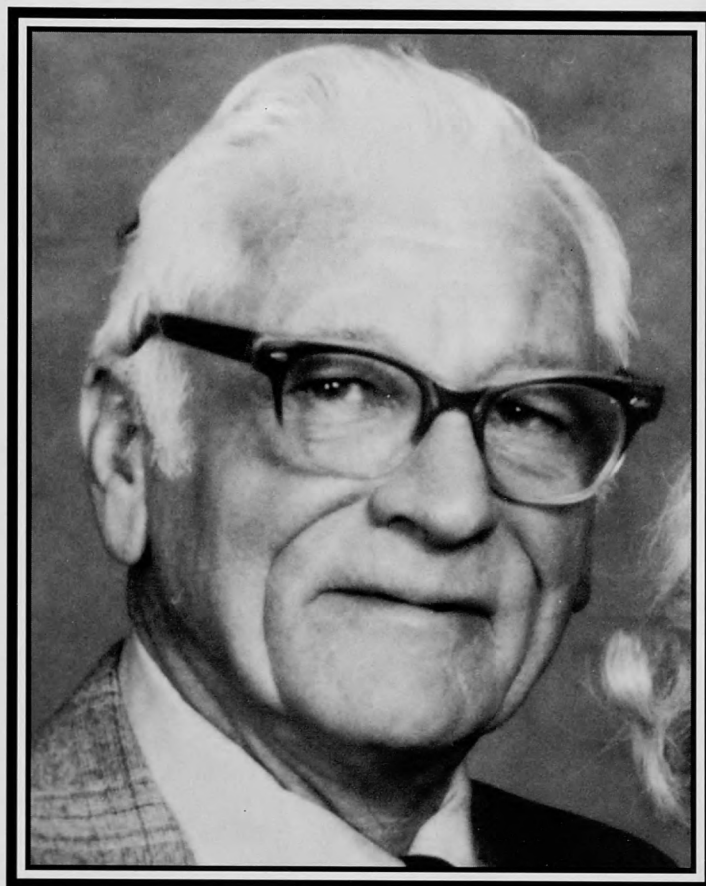


© 1985 The Quaker Oats Company

The Quaker Oats Company/6815 East 34th Street/Indianapolis, IN 46226/1-800-428-6000



## In Memoriam



**Harold Mundy**  
**June 19, 1915 - April 22, 1985**

The NATA has lost one of its originating fathers in Harold Mundy, owner of Mundy Athletic Training Supply in Detroit, Michigan. Harold's life came to a tragic end from an assailant's bullet while he was on a business trip. He is survived by his wife Evelyn.

Harold was graduated from Linden Area High School in 1933. After serving in World War II, Harold began his career selling heat lamps and that progressed to the present athletic training supply business. Harold and his wife, Evelyn, were instrumental in the formation of the NATA. Both were in attendance at the first meeting in Kansas City in 1950 and have rarely missed an annual meeting since.

Harold was bestowed Honorary Membership in the NATA in 1974 and has served the Association as few can serve it. He not only served his clients with a great professionalism, but his clients also became his friends. An NATA Scholarship Fund has been established in District IV in his honor. Harold will be sadly missed by all.

# Why every knee patient you have is as important to us as Dan Marino.

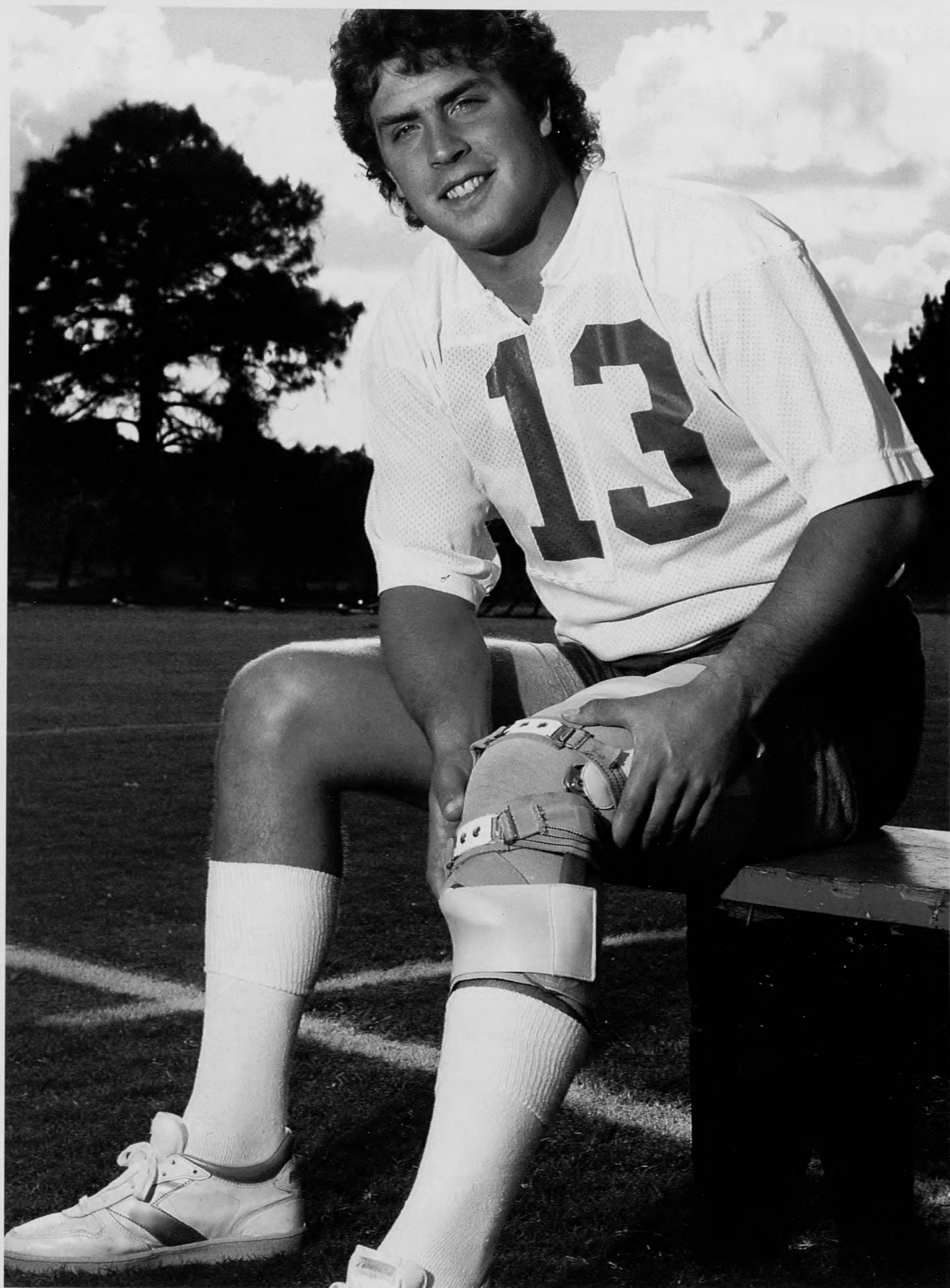


*The Lenox Hill® Derotation® Brace has always been, and will always be, custom built to prescription. It is formed by experienced hands, faithfully following the contours of the cast mold that must accompany each prescription. And whether that cast bears the name Dan Marino, or the name of a small town postman who just wants to get back to delivering the mail, makes no difference to us. No one brace is built with any less care than another. True, we're called on to keep some pretty famous knees on the field of competition. And our patients include some of the biggest names in sports. But there is no patient more important to us than the next one you decide to put into a Lenox Hill Derotation Brace.*



**Lenox  
Hill  
Brace  
Shop,  
Inc.**





# Student Trainer Corner



"From the student,  
for the student,  
about the student"

Deloss A. Brubaker, EdD, MS, ATC  
United States Sports Academy  
Mobile, AL 36808

## The Physiological and Psychological Consequences of Excessive Weight Loss in Athletics

Winning Entry of the 1985 Student Writing Contest

Eve Elisabeth Boe

*Excessive weight loss in athletics may have serious physiological and psychological consequences. Many dieting athletes use weight loss techniques identical to those used by patients with anorexia nervosa and bulimia. The results of such severe dieting and weight loss techniques can be dangerous. The simplest and most effective solution to this problem is active intervention and guidance from coaches, athletic trainers, and parents. Dieting athletes who are directed in the proper methods of reaching a healthy minimum weight will enjoy optimal performances, achieve athletic success, and develop a positive outlook on their athletic experience.*

Competitive athletics fosters and develops many positive individual qualities, such as commitment, goal setting, and determination. However, an athlete's drive to be "the best" or merely to earn a place on a team may also have negative results. For example, it is increasingly common for athletes intentionally to lose excessive weight. Such extreme weight loss once occurred mainly among wrestlers, gymnasts, and ballet dancers, but with today's highly competitive and scientific approach to athletic preparation, athletes in many fields are now becoming aware of the benefits of minimal fat level for speed, strength, and energy reserves (16). This paper will examine the physiological and psychological consequences of intentional excessive weight loss in athletics, and will follow with solutions. Perhaps through recognition and intervention, the devastating occurrence of excessive weight loss among aspiring athletes can be dealt with more effectively.

### The Practice of Excessive Weight Loss in Athletics

In the past, extreme weight loss was common practice only in those athletic activities which impose weight-class divisions, such as wrestling and lightweight crew, or which emphasize slender body types, such as gym-

nastics and ballet. In their attempts to "make weight", for example, high school and college wrestlers would often lose from three to twenty percent of their preseason body weight before certification, with most of this loss occurring in the last few days before the official weigh-in (5). However, the incidence of extreme weight loss has been increasing in other sports as well. Varying notions of the ideal healthy minimal fat level for each individual athlete, and also of proper and safe techniques for losing weight, can lead to problems. An athlete who is convinced of the advantages of attaining a minimal fat level is not necessarily well informed or directed in the intense effort to lose unwanted weight. In other words, the problem may exist not in theory but rather in practice, although some would argue otherwise. Typically, wrestlers who lose the highest percentage of body fat are also the youngest or lightest, and are usually not fat to begin with (16, 17). Furthermore, when young impressionable athletes are required to lose weight they may develop distorted perceptions of themselves, and such distorted physical self-images may have serious long-term consequences. In addition to the psychological implications of excessive weight loss among young athletes, there are physical dangers, such as the possibility of stunted growth. These psychological and physical dangers will be discussed later in this paper.



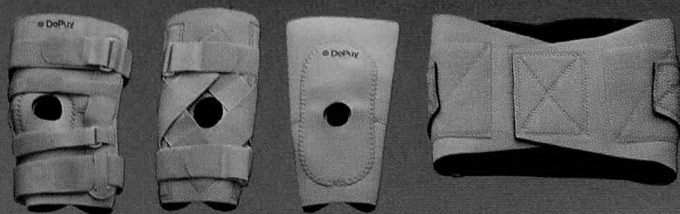
# ADVANTAGE™



## TOUGH AS THE ATHLETES WHO WEAR THEM.

The Advantage™ Series offers a large selection of joint supports, braces and splints designed to improve performance by providing support and protection, warmth, comfort and durability.

Popular DePuy® items include: Tracker™ Knee Brace (pictured above), Advantage™ Series Hinged Knee Support, Ligament Stabilizer Knee Brace, Knee Support with Cutout and Contoured Lumbo-Sacral Support.



**DePuy®**  
SUCCESS THROUGH INNOVATION

P.O. Box 988, Warsaw, Indiana 46580 – (800) 348-5182, or  
(800) 342-5694 in Indiana

584

What does "excessive weight reduction in athletics" actually entail? To begin with, any athlete, male or female, is a potential candidate for excessive weight reduction. The reasons for losing weight are numerous and varied: some athletes may be trying to meet weight-class requirements, some may be trying to achieve an additional competitive advantage, some may be responding to pressures from parents and coaches, and some may be losing weight solely for personal esthetic reasons.

Weight loss techniques used by athletes are often severe and unsafe. Among the most common are dehydration, semi-starvation, self-induced vomiting, spitting, over-exercising, wearing rubber suits while exercising, and the use of laxatives, diuretics or water pills. In the preparation of this paper, interviews with 16 athletes (nine wrestlers, five gymnasts, and two swimmers) turned up further details on common weight loss techniques. One 22 year old wrestler in the 177 pound class, who had been in his sport for ten years, explained the weight loss methods he had relied upon in high school as follows:

"I would become very dehydrated and a few days before the competition I would begin dieting very strictly, usually eating no more than 500 calories a day. When I did eat, I'd eat foods like beef bouillon and diet soft drinks. If my weight was real close or still over, I would force myself to vomit, use laxatives, spit for an hour or more, wear a plastic sweat suit while working out, go for long runs, jump rope, ride a stationary bike, find a furnace room to sit in or work out in, take hot showers, go in steam rooms, take water pills, and once I even cut my hair. Whatever would work!"

Another characteristic of excessive weight loss in athletics is the great degree of weight fluctuation which typically occurs between competitions. A head wrestling coach at a major university reports that his wrestlers gain an average of five to eight pounds after weigh-in and before competition, and then lose the weight after competing to make weight for the next week (13).

### **Anorexia Nervosa and Bulimia**

Anorexia nervosa and bulimia are two severe eating disorders which typically occur among adolescent girls. In anorexia nervosa the victims literally starve themselves, whereas bulimia victims succumb to huge, uncontrolled episodes of overeating but follow the binge with self-induced vomiting, laxatives, diuretics, or a combination of all three (2, 3, 4, 8). Both anorexia nervosa and bulimia are classified as severe psychological disturbances which may become life-threatening (2, 3). A comparison of these two eating disorders with excessive weight loss patterns among some athletes reveals many disturbing similarities. The actual weight loss techniques of each group are often identical (i.e., semi-starvation, self-induced vomiting, the use of laxatives and diuretics, and over-exercising) and therefore, so are the physiological consequences (amenorrhea, hypokalemia, dental problems, etc.).

Similarities are also found between the personality traits of anorectics or bulimics and those of athletes who lose excessive weight. In her discussion of anorexia nervosa and bulimia, Buickel (2) states that the prime candidates for these two eating disorders are high achievers and people who have an intense desire to please others.

Fear of failure, stated by Boskind-Lodahl and Sirlin (1) to be a key element in bulimia, is also a common

characteristic of athletes who diet excessively (16). It has been suggested that bulimia is initiated in response to other stresses because it provides temporary solace for the dieter who is feeling deprived (4). In interviews conducted during the research for this paper, it was found that the athletes who practice severe dieting techniques respond to stress and food deprivation in much the same way as bulimics. All athletes interviewed reported that they had, at one time or another, gorged themselves on food. When asked what types of food they preferred to binge on, most of the respondents exclaimed "Everything! All types!" However, as with bulimics, the athletes would usually experience a sense of guilt and regret following their eating binges and would resort to purging and vomiting.

In contrast with bulimics, some athletes who diet severely may develop a true physiological aversion to food typical of anorectics (16). In addition, the dieting athlete may have psychological traits which resemble those of anorectics. Both groups may feel in control of themselves and their behavior, and believe that their behavior is normal, which helps to explain why the body changes are not personally recognized as dangerous. Many team competitors who lose excessive weight are surrounded by fellow athletes who are also dieting severely, and therefore the extreme dieting behavior is actually normal within that group. In fact, many of the athletes interviewed for this paper described considerable comradeship and support among dieting teammates. Spitting in Mason jars until time of competition, or group gatherings in the sauna, were reflected upon with amusement and even seemed to represent good memories for some.

In view of these disturbing similarities between victims of anorexia nervosa and bulimia and athletes who diet excessively, it becomes imperative to ask, what is the likelihood that, after temporary yet excessive dieting among athletes, disorders such as anorexia nervosa and bulimia may develop and, if the likelihood is great, will these eating disorders persist after the athlete discontinues involvement in sports? Addressing these questions should be of primary concern to parents, coaches, and medical personnel.

## **PROBLEMS OF EXCESSIVE WEIGHT LOSS IN ATHLETES**

### **Physiological Consequences**

It is ironic that a great deal of medical literature has been published recently describing the numerous physical dangers of excessive dieting techniques, and yet these warnings continue to be underestimated and often completely ignored in athletics.

The most obvious physical danger of excessive dieting is death. Like anorectics, athletes who restrict virtually all food intake may die of starvation. Athletes who develop eating behavior typical of bulimics run the risk of developing hypokalemia if the behavior persists frequently and over an extended period of time (2). Hypokalemia results from constant vomiting and is characterized by severe dehydration and large losses of electrolytes, especially potassium which regulates the heart rhythm (2). Although fatalities among athletes caused by excessive dieting are rare, the possibility should be taken seriously.

The second leading danger of excessive dieting is severe dehydration, the result of restriction of fluids and abnormal sweating achieved by wearing plastic suits during workouts, taking long saunas, spitting, and so forth. Dehydration may cause fainting, convulsions,



heat cramps, heat exhaustion, heat stroke, decreased muscular strength and endurance, increased heart rate, increased electrolyte loss, renal ischemia, and circulatory collapse (5, 6, 12, 17). The dangerous state of dehydration is seldom significantly eliminated between competitions. Two independent studies examining the urinary profiles of Iowa wrestlers found that the athletes were not adequately rehydrated between the weigh-in and the initial match (19, 20).

Various other weight loss techniques used in combination with dehydration and semi-starvation can also present dangers. The use of diuretics and laxatives may lead to dehydration and significant losses of potassium (necessary for proper muscle function), which may lead to extreme fatigue, heat cramps, heat exhaustion, and heat stroke (11, 15). Diuretics may also damage the liver, stomach, and pancreas, as well as causing skin reactions, serious changes in the blood, and hypotension (11). A serious consequence of excessive dieting for female athletes is the increased incidence of menstrual abnormalities. In response to the low percent of body fat, the female's body will become infertile because it no longer has the ability to protect and nourish the developing fetus. Binge-eating behavior may result in acute pancreatitis, and the vomit-and-purge that follows the binge is especially hazardous. Among the dangers of purging and vomiting are potassium depletion, urinary infections, renal failure, epileptic seizures, tetany, swollen salivary glands, and dental problems (7, 10). A further major hazard of excessive dieting, especially in athletics because so many athletes are dieting at young ages, is the possibility of stunted growth (5, 13).

A closing point concerning the physiological dangers of excessive weight reduction is that many of these negative physical conditions can develop in a short time. If an adolescent boy begins wrestling during high school and continues to wrestle through college, the harmful effects of "making weight" year after year may begin to take their toll on this still-youthful body. He may be considered a successful wrestler, but he might have been able to enjoy a more satisfying and successful athletic career had he been able to maintain a healthy stable weight.

### Psychological Consequences

A key point in considering the psychological consequences of extreme weight loss in athletics is that most of the athletes who are required or expected to maintain low-fat percentages are young and extremely impressionable. We live in a society in which fatness is morally and esthetically undesirable, and the ideal body type is young, slender, and athletic. When diets and fat tests are imposed upon young, aspiring athletes, they are likely to adopt society's negative attitudes toward fatness. Unfortunately, a young athlete may not understand that in athletics, having to lose weight does not necessarily imply that the athlete's aversion to fatness is often reinforced by persons who fill dominant roles in the athlete's life: coaches, teammates, and parents (16). The young athlete may believe that in order to satisfy others or to succeed, it is necessary to make deep commitments or sacrifices which may include losing as much weight as possible. At this point, the athlete may develop the same predisposing psychological characteristics which exist in anorexia nervosa or bulimia. The pressure and stress of both making weight and being a successful athlete can be extremely heavy. These two stressful forces eventually cause some aspiring athletes to develop negative attitudes toward their sport and even to drop out altogether.

In addition to the negative socializing effects of weight loss upon athletes, there are some more obvious consequences. For example, as a result of dehydration and semi-starvation, many athletes demonstrate reduced learning abilities. The Minnesota starvation study (13) found that comprehension, learning ability, performance ability, and interest levels all decreased among individuals who had fasted or were dehydrated. Unfortunately, athletes who experience learning difficulties as a result of unhealthy dieting will probably be considered by others, and even by themselves, as merely slow learners or "dumb jocks".

### Recommendations and Possible Solutions

Fortunately, there are some constructive pathways available when confronting the problem of excessive weight loss in athletics. The crux of the problem may be the weight classification system itself, and the reluctance of coaches and trainers, as well as athletes, to challenge the demands made by the system. Excessive weight loss can become a matter of life or death, and yet be difficult to discuss with a young athlete whose self-image is distorted, who is under intense pressure from family or teammates, or whose competitive drive and desire to succeed is simply very strong. But once the problem is recognized, intervention by involved and responsible adults becomes not only possible, but essential. Coaches and medical personnel can and should take active initiative through prevention, recognition, referral, and support. This process of intervention has been badly neglected in the past. What is meant by intervention, and what does it involve?

First of all, intervention requires that appropriate adult figures learn to recognize the dangerous physical and psychological symptoms of excessive dieting. According to Dr. Timothy Roberts, an assistant professor at the School of Medicine of West Virginia University (18), an athlete who is dieting severely may demonstrate the following behaviors: leaving teammates and coaches immediately after eating (possibly to vomit), eating little or no food on away trips, and the most obvious — a noticeable change in appearance (dry skin, thinning hair, extreme skinniness, dental problems). Dieting athletes may also be abnormally restless, depressed, moody, withdrawn, and fatigued prior to competition. Intervention means, too, that appropriate adult figures (i.e., coaches or athletic trainers) adopt improved systems for monitoring the athletes' weight. According to current literature and responses from the athletes interviewed for this paper, daily weights of athletes are not usually monitored by anyone except the athletes themselves (13). As a result, an athlete could conceivably gain or lose great amounts of weight between competitions without its being noticed.

Intervention also requires that adults who have adequate knowledge about proper diet and weight loss offer counseling and guidance to the dieting athlete. If adults in the immediate situation do not have adequate knowledge of nutrition and diet, they should refer the athletes to others who do, such as team physicians or nutritionists. Guest speakers, films, books, and brochures should be made available to dieting athletes. It may seem surprising, but most athletes know very little about proper dieting methods because so many of them are young and have never had to diet before. In fact, most athletes receive their dieting advice from other athletes. There are many helpful articles and books available today which offer sound information on proper nutrition in sports, information which should be passed on to dieting athletes.

Current literature strongly recommends that athletes lose no more than two to three pounds in one week, that the diet should provide no less than 1,800 to 2,200 kcal for most young men and 1,600 to 2,000 kcal for most young women athletes, and that an athlete's weight should not fluctuate more than five pounds above the recommended weight so that excessive dehydration prior to competition will not occur (13, 15, 16). It has also been suggested that the minimum body fat levels of young athletes should exceed the seven percent value currently recommended (14). A final note on diet is that while carbohydrate loading may increase energy stores, it also increases water retention. Therefore, athletes who must meet a weight requirement will experience difficulties if they are advised to try a carbohydrate loading technique. Instead, dieting athletes need an adequate and well-balanced diet consisting of fats, proteins, and carbohydrates as well as plenty of fluids, especially water (2, 15). Athletes should also avoid excessive protein (which may cause dehydration), excessive salt, caffeine drinks, and alcoholic beverages (15).

Another important factor to keep in mind is that often, when athletes want to lose weight, they want to lose it fast. The Tcheng-Tipton formula for ideal weight loss suggests that a loss of three to four pounds on consecutive days is too much (5). However, crash diets are popular in athletics and the dangers of such techniques need to be explained to the dieting athlete.

Aside from recognition of the danger signals, monitoring weight, and providing nutritional guidance, the best and most effective means of intervention is to develop a good relationship with the athlete. Roberts (9) feels that maintaining good relationships between athletes and their coaches and trainers can greatly reduce the dangerous use of improper dieting techniques.

Direct intervention, as described above is the most immediate form of possible action. However, there are also many indirect forms of intervention which actually go to the root of the problem — the system itself. For example, the American College of Sports Medicine and many others in the medical profession have advocated a reorganization of the weight classification system established for wrestlers (5, 17, 18). The fundamental problem is that most wrestlers compete in a weight class which is below their normal healthy weight because they feel that being bigger in a smaller weight class will give them an advantage. What actually happens, though, is that the wrestlers with whom they compete have done the same thing. No one gains any real advantage because everyone is usually wrestling in a weight class lower than his normal body weight. Perhaps a wrestler competing at his normal weight would have the real advantage, because although he would be facing taller opponents, he would be superior in muscular strength and endurance.

### Summary

Excessive weight loss among athletes may have numerous physiological and psychological consequences, all of which are unfavorable and potentially dangerous. The weight loss techniques practiced by some athletes are often identical to those used by anorexia nervosa and bulimia victims, and therefore, the resulting symptoms and physical conditions of some dieting athletes cannot be distinguished from those of anorexia nervosa and bulimia patients.

It is crucial that adult figures, such as parents, coaches, and athletic trainers, become actively involved in the weight loss process of young athletes in order to

minimize or eliminate the possible negative consequences. In the course of adequate intervention, adults should offer nutritional guidance, monitor the weight of the athlete daily, become knowledgeable about the danger signs of excessive dieting, be prepared to refer an athlete to others who can help, and finally, develop and maintain a good relationship with the athlete. Only after providing support and demonstrating an ongoing concern for the well-being of an athlete can we expect to see optimal performances and athletic success.

### References

1. Boskind-Lodahl M, Sirlin J: The gorging-purging syndrome. *Psychology Today* (March): 50-85, 1977.
2. Buickel S: Anorexia nervosa and bulimia in athletics. *The Journal of the National Athletic Trainers Association* (18): 137-138, 1983.
3. Garfinkel P, Moldofsky H, Garner D: The heterogeneity of anorexia nervosa. *Archives of General Psychiatry* (37): 1036-1040, 1980.
4. Garner DM, Bemis KM, Garfinkel PE: Bulimia. *The International Journal of Eating Disorders* 1(2): 35-43, 1982.
5. Hansen NC: Wrestling with making weight. *The Physician and Sports Medicine* (April): 197-110, 1978.
6. Katch FI, McArdle WD: *Nutrition, Weight Control, and Exercise*. Boston, Houghton Mifflin Co. 1977.
7. Mitchell JE, Pyle RL: The bulimic syndrome in normal weight individuals: a review. *The International Journal of Eating Disorders* 1(2): 61-73, 1982.
8. Mizes JS, Lohr JM: The treatment of bulimia (binge eating and self-induced vomiting). *The International Journal of Eating Disorders* 2(2): 59-65, 1983.
9. Roberts TG: Personal interview, December 1984.
10. Russell G: Bulimia nervosa: an ominous variant of anorexia nervosa. *Psychological Medicine* (9): 429-448, 1979.
11. Ryan AJ: The problem: diuretics for weight loss. *The Physician and Sports Medicine* (8): 30, 1980.
12. Ryan AJ: Weight loss in wrestlers. *The Physician and Sports Medicine* 4(10): 32-34, 1976.
13. Ryan AJ: Weight reduction in wrestling. *The Physician and Sports Medicine* 9(9): 79-96, 1981.
14. Sady SP, Thomson WH, Savage M, Petratis M: The body composition and physical dimensions of 9 to 12 year old experienced wrestlers. *Medicine and Science in Sports and Exercise* 14(3): 244-248, 1982.
15. Smith NJ: *Food for Sport*. California, Bull Publishing Co. 1976.
16. Smith NJ: Excessive weight loss and food aversion in athletes simulating anorexia nervosa. *Pediatrics* 66(1): 139-142, 1980.
17. Tipton CM: Physiologic problems associated with the "making of weight". *American Journal of Sports Medicine* 8(6): 449-450, 1980.
18. Tipton CM, Tcheng TK, Zambraski EJ: Iowa wrestling study: weight classification systems. *Medicine and Science in Sports* 8(2): 101-104, 1976.
19. Zambraski EJ, Foster DT, Gross PM, Tipton CM: Iowa wrestling study: weight loss and urinary profiles of collegiate wrestlers. *Medicine and Science in Sports* 8(2): 105-108, 1976.
20. Zambraski EJ, Tipton CM, Tcheng TK, Jordan HR, Valias AC, Callahan AK: Iowa wrestling study: changes in the urinary profiles of wrestlers prior to and after competition. *Medicine and Science in Sports* 7(3): 217-220, 1975. ©

*Support Our  
Advertisers —  
They Support You . . .*





# Penetration without pain

## THIRTY-FIVE YEARS AGO NEMECTRON INVENTED "INTERFERENTIAL CURRENT"

Since then they have masterminded one major breakthrough after another. Today Nemectron continues to lead the field with exclusive concepts within the realms of deep penetration without pain.

## PENETRATION VS. COMFORT

Most systems are plagued by two problems. A current strong enough to penetrate deeply and effectively, unfortunately, causes great discomfort to the skin, the entry surface. Yet, a single low frequency current, adjusted to skin comfort, is too weak to be effective in depth.

## NEMECTRON'S ANSWER— INTERFERENTIAL CURRENT

Two currents of medium frequency, each gentle enough to penetrate the skin without painful resistance, intersect accurately at the target level with composite strength stimulating at a gratifying depth.

## ENDOSCAN® TREATS THE ENTIRE AREA

Nemectron continues to out-innovate their mimics. Most followers are still stranded with limited treatment to the "X" shape where the currents intersect—leaving large portions of that area unattended.

Nemectron's Endoscan® system flares the stimuli, scanning the entire three dimensional sphere providing strong therapy to areas other systems neglect. If you think Nemectron is proud, you're right.

**VACUUM-FIXED ELECTRODES** are comfortable, quickly applied, and can even be placed on body areas veritably impossible for other systems to achieve.

**CAPABILITIES FOR PAIN MANAGEMENT  
PLUS MUSCLE STIMULATION** are combined in one unit.

Even as your patients search out the finest health-care, Nemectron invites you to explore the finest, state-of-the-art system that exists. Please call toll free or mail the coupon for a deciding experience.

- ☐ Please send additional information on the Nemectron systems.
- ☐ I'm interested in Nemectron's free demonstration in my office, and free trial usage of the equipment.

Name

Organization

Address


City

State

Zip

Phone

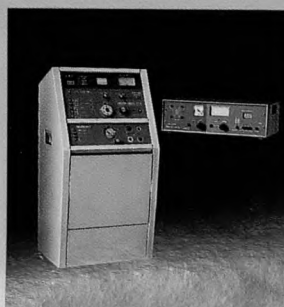
AT 85

 **Nemectron  
Medical**

"The leader in interferential systems."

# Nemectron

Nemectron Medical, Inc, 28069 Diaz Road, Unit A, Temecula, California 92390  
(714) 676-2884, Toll Free (800) 428-4010, In California (800) 821-0742



# Editorial

## The Use of Athletic Training Personnel in Oregon High Schools during 1984-1985

A recent study undertaken at the University of Oregon to determine the background of paid coaches in Oregon High Schools during 1984-85 revealed some interesting findings about the employment of athletic trainers in High Schools in the State of Oregon.

The study analyzed data from 187 (74.2%) of the high schools in the State of Oregon, and information was obtained about 4,238 coaches. Only 43 (20.4%) of these schools indicated that personnel were employed specifically for athletic training. This percentage includes 9.8% employed as a faculty member, 6.6% as a graduate student and 6.6% other. Of these, 62.8% were certified athletic trainers. Further, 30.2% were employed full-time, 51.2% part-time, and 18.6% as volunteers.

Within this sample 2,884 (68%) of the coaches are responsible for the athletic injury management of their athletes. Preparation in basic athletic injury management for coaches is essential. Data analyzed revealed that 76% of the coaches held a first-aid certificate, 21% a CPR certificate, 36% had taken a care and prevention

course in college/university and 22% had received in-service training for athletic injury management.

These results appeared to indicate that there is inadequate provision for athletic training or athletic injury management in the high schools in the State of Oregon, a pattern which may or may not be repeated in other states. High school athletes could be at risk if they incur injuries during athletic competition, therefore questions need to be answered as to how best to overcome this. Is it feasible for schools to have personnel specifically for athletic training? Can coaches be better prepared for this task? Can school districts help in this matter by providing personnel to be jointly shared by a number of high schools? This situation needs to be looked at carefully and analyzed as to what is the best answer in each situation.

The study was conducted by Becky L. Sisley and Susan A. Capel of the Department of Physical Education and Human Movement Studies at the University of Oregon. Contact the first author for further information.

Ⓢ

## MULTIAXIAL® ANKLE EXERCISER ... A BETTER WAY

**Multiaxial® Ankle Exerciser builds strength, power, endurance and coordination, plus ...**



... **universal movement** allowing motion in straight plane, diagonal, rotatory or more complex patterns permitting the muscles to work in all phases and extremes of motion

... **adjustable** from 1 to 235 footpounds with a **calibrated** force scale to compare and record progress

... **portable, self-contained** unit that uses internal resistance, so no weights are required.

... **easy** to use with no complex equipment set-up

... **durable stabilization** base made of high impact ABS plastic over metal understructure to prevent unit movement

The Multiaxial® Ankle Exerciser ... the ideal component for complete sports conditioning and therapeutic exercise programs ... comes complete with a detailed exercise chart.

FOR MORE INFORMATION ON OUR  
ENTIRE LINE, PLEASE CALL OR WRITE



**MULTIAXIAL, INC.**  
P.O. Box 404, 9 Raymond St.  
Lincoln, Rhode Island 02865  
(401) 334-3232



# Book Reviews



Phil Callicutt, ATC, EdD  
Federal Law Enforcement  
Training Center  
Glynco, Georgia 31524

## Athletic Injury Assessment

James M. Booher, Ph.D., A.T.C., R.P.T.

Gary A. Thibadeau, Ph.D.

Times Mirror/Mosley College Publishing

11830 Westline Industrial Drive, St. Louis, MO. 63146  
1985

585 pp., 776 illustrations

Under \$25.00

In the preface of this excellent text the authors sum up my initial feeling concerning the true need for such a publication. "Assessment of athletic injuries is one of

the most vital skills required of the athletic trainer. Yet its significance has not been given adequate attention in athletic training textbooks currently available."

This superbly illustrated text is divided into six units comprised of nineteen chapters. The six units are as follows: Introduction and Anatomic Basis for Athletic Injury Assessment, Athletic Related Trauma, Athletic Injury Assessment Process, Athletic Injury of the Axial Region, Athletic Injuries of the Lower Extremities, and Athletic Injuries of the Upper Extremities.

Each unit is clearly written and gives a step by step plan for the assessment of injuries germane to that particular part of the body. Chapter six, entitled "The body's response to trauma and environmental stress", has never been more clearly and thoroughly covered. Page 95 has the best illustration concerning the cycle of an athletic injury I've ever seen published.

This text is a must for all individuals charged with assessment of athletic injuries at any level ranging from junior high school to the professional ranks. The authors have given us a classic in a period of time when every month a new book is released in the field of sports medicine. ☉

## MOVING?

Please notify the National Office  
of your new address as well as  
your old address (at least 30 days  
in advance of publication).

### EGS 100-2



UL LISTED  
E-58942  
CS CERTIFIED  
IR35767-1

**EGS 300** the patient can take the treatment home with him as this unit is totally portable, battery operated, and ideal for patient self-application as prescribed by a licensed practitioner. These solid state high voltage galvanic stimulators are effective in relieving spasticity and spasms, reducing edema, and increasing local blood flow. The **EGS 100-2** and **EGS 300** are totally safe, nonirritating and nonburning units additionally indicated for use in relieving T.M.J. dysfunction, re-educating muscle as in regaining joint control, and delaying atrophy from disuse in partially denervated muscle. Additionally, **EGS 300** can be applied as a T.E.N.S. for pain relief. **EGS** is covered by products liability insurance.

### ELECTRO-MED HEALTH INDUSTRIES, INC.

6240 N.E. 4th Court • Miami, Florida 33138

Phone: (305) 756-6013, Telex: 152303EMHI

CAUTION: FEDERAL LAW RESTRICTS THIS DEVICE TO SALE BY OR ON THE ORDER OF A LICENSED PRACTITIONER.



## EGS 100-2 EGS 300

### VERSATILITY IN HIGH VOLTAGE GALVANIC STIMULATION

The **EGS** systems offers you the professional the versatility you need to meet the broadest range of patient care. The **EGS 100-2** is a clinical unit with a new face and new features, designed to identify and target treatment of specific areas through the use of interchangeable electrodes. With the



**EGS 300**  
(18.6 oz.)

☐ I would like additional information on EGS systems.  
☐ I would like a FREE demonstration of EGS systems.

Name \_\_\_\_\_  
Bus. Phone No. \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
AT55

# Abstracts



John Wells, ATC, PT, PhD  
UNC-Asheville  
Asheville, NC 28804

"The Effect of Heel Pads on the Treatment of Achilles Tendinitis: A Double Blind Trial", Lowdon, A., et al.: *The American Journal of Sportsmedicine*, 12, 431-435, 1984.

The study investigated the gait characteristics of three groups of patients before and after different treatment regimens. The 33 patients (26 males), who ranged in ages from 11-51 years were randomly allocated to one of three treatment groups. Group I was provided with a pair of Sorbothane heel pads of suitable width in wedge form by the physiotherapist and was asked to wear them in all sports and walking shoes for two months. Group II was provided with soft sponge rubber pads of "Molefoam" cut from a standard sheet of 15 mm thickness and was asked to use them in the same way. Group III received no pads. Patients in all three groups received five consecutive daily five minute treatments with ultrasound from the day of entry into the study. They were shown standard stretching and strengthening exercises for the posterior leg structures and were asked to perform them throughout the study. Patients were not told to rest, but were encouraged to maintain a gradual and progressive program of training, provided it failed to cause an increase in Achilles tendinitis and associated symptoms. All patients underwent clinical and biochemical assessment on entry to the trial, after 10 days, and after two months. Results suggest that the soft sponge rubber produces more significant changes following treatment than the viscoelastic polymer pads. This finding is contrary to the previous report of complete recovery in almost all of the subjects with Achilles tendinitis, regardless of duration, following a three month period of wearing Sorbothane heel inserts. Recent reports in the literature all agree that a pronated foot predisposes an athlete to such injuries as Achilles tendinitis. Therefore, it may be that alleviation of this pronation is the most important factor in the recovery of the injury. This would explain the relative failure of heel inserts, particularly the Sorbothane pads which are wedged in a posterior-anterior direction. Further work is planned using inserts wedged in the lateral-medial direction to reposition the pronated foot.

David E. Knoeppel

\* \* \*

"Overuse injuries in athletes: a perspective," Standish, W. D.: *Medicine and Science in Sports and Exercise* 16: 1-7, 1984.

The vast majority of injuries evaluated daily in any sports medicine facility are injuries to the musculoskeletal structures which are many times the so-called "overuse injury." By definition, an overuse injury occurs when a structure is exposed to a repetitive force beyond the abilities of that specific structure to withstand such a force. The intrinsic causes are the defects in the genotype. The extrinsic factors include all other factors ranging from equipment to coaching which may affect the athlete and his/her performance. The most obvious intrinsic problem is mechanical derangement or malalignment. The vast majority of the malalignment problems affect the lower extremities, however, no anatomical level is exempt from this problem. The general fitness level of the active athlete is another intrinsic factor. Many people caught in the current wave of increased participation in sports are not physically prepared for the levels of activity at which they begin. A final consideration of intrinsic factors involves the child athlete with open epiphyseal plates and actively growing cartilage on joint surfaces. Studies conducted in Japan have suggested that excessive exercise loads can cause growth-plate injury and lead to permanent boney deformity. There are many extrinsic causes of overuse syndromes. Terrain is another important extrinsic consideration for the jogger and runner. Improper skill technique is another important extrinsic factor. The methods of training are equally important. A rapid change in training sessions can lead to a system failure. The quest for information such as the ideal duration and intensity for each age and sport could be invaluable in avoiding overuse injuries. Optimally, we will soon be able to identify and measure early warning signals to alert coaches and athletes. It is a delusion to think that enforced rest and immobility is the panacea it would seem to be for the overuse phenomenon. Our energies must be directed to intercepting the overuse injuries rather than merely discouraging the athlete from further participation. The major issue, vital to offering a permanent solution to the overuse injury, is in the understanding and correction of underlying mechanical problems related to the injury. Essentially and simplistically, the treatment program must prepare the injured tissue to withstand the stress which triggered the injury initially, realizing that if this objective is not realized, reinjury is predictable.

Brent C. Mangus

\* \* \*

"The effects of ankle guards and taping on joint motion before, during, and after a squash match," Myburgh, Kathryn H., et al.: *The American Journal of Sports Medicine*, 12: 441-446.

The purposes of this paper are to compare the effects of two elastic ankle guards and two types of adhesive taping, and to measure range of motion before, during, and after exercise. Twelve league players from the University of Cape Town squash club acted as subjects. Their ages ranged from 18 to 22 years, all had a dominant right foot, and none had a history of ankle injury. Each subject played two matches wearing an ankle guard on the right foot and tape on the left. There was a break in play after ten minutes to perform



measurements and during this time subjects were not permitted to walk around. The strapping technique that was used was a combination of basketweave, stirrup, and heel lock applied to the skin. The results of each range of motion were analyzed by an analysis of variance. The first point that one notices is that the two ankle guards did not provide significant support for any of the motions measured before, during, and after exercise. Before exercise both types of tape provided support for all motions except dorsiflexion, in which restriction was significant only for the zinc oxide elastic tape for plantar flexion. After 10 minutes of exercise, elastic tape had loosened considerably more than zinc oxide tape and provided restriction only for plantar flexion and neutral eversion. After one hour of exercise, no tape strapping provided significant support for any of the motions measured. A comparison between unsupported motion before and after exercise showed the same additional motion. However, this apparent "warming up" effect was not statistically significant.

Dave England  
Ⓢ

## MOVING?

Please notify the National Office of your new address as well as your old address (at least 30 days in advance of publication).

*Support Our Advertisers —  
They Support You . . .*

# Am Pro Knee Guard

## *with Bilateral Support*

**A**m Pro Sport Supports now offers the coach, trainer and player a knee device which has a proven documented record of success.\* When used as a preventive device, Am Pro Knee Guard will not prevent *all* knee injuries, but it offers *bilateral* support to the very vulnerable medial collateral ligament, as well as the lateral collateral ligament.



As demonstrated on ESPN.

**Am Pro Knee Guards** are available in three (3) cuff sizes and can be mixed or matched to give a more comfortable and secure fit. Each Am Pro is packaged complete with instructions for fitting.

### **Am Pro Sports Supports Knee Guards are versatile.**

- Hinges can be adapted for special problems.
- Thigh and calf cuff were formed over model leg forms to give a comfortable, secure fit.
- Nylon uprights and joints offer additional shock absorbing qualities not present in metal guards.
- Tested in a variety of competitive sports: football, basketball, hockey, skiing, softball.
- Easily fitted by trainers, coaches, and players.

**Am Pro Knee Guard** was worn throughout its three year development by a Division I football team in a major athletic conference.

### **Three year test results.**

- In cases where injuries did occur, they were confined to contusions and ligament strains of substantially reduced severity (less than second degree).
- Speed tests in 40 yard dash and clover leaf agility runs were not substantially hindered in the uninjured athletes.
- The previously injured athlete showed no substantial reduction in 40 yard dash and a .70 second faster agility run.
- Am Pro Knee Guard weighs only 12-13 oz.

■ **\$190 per pair**

Am Pro Sport Supports Knee Guard is a product of American Prosthetics, Inc.

\*Journal of Orthotics & Prosthetics, March 1984.

**For more information write:**

**Athletic Training Specialists, Box 1023, Welch Street, Ames, Iowa 50010 (515) 232-4886**

# Announcements

TO: N.A.T.A. Journal  
FROM: Al Wilson, Chairman  
Texas Advisory Board of Athletic Trainers

The Advisory Board of Athletic Trainers in the State of Texas would like to pass along some information concerning licensure of athletic trainers in the State of Texas.

The law in Texas states "No person may hold himself out as an athletic trainer or perform any of the activities of an athletic trainer without first obtaining a license or a temporary license under this Act." In order to teach in a public school in Texas, a person must have a teaching certificate. Out of state applicants have up to one year from date of employment to satisfy Texas and Federal requirements in order to obtain a Texas certificate. This is *not* true in regard to the athletic trainer's license. A prospective trainer must apply for his license *prior* to employment. (A letter from the prospective employer is also required with each out of state application). A temporary license may be granted, if qualified and if needed. A temporary license is valid only until the next exam date. Exams are given in April, July, and December of each year.

The requirements for an athletic trainer license in the State of Texas are:

## Apprenticeship Requirements

A minimum of three academic years (fall-spring semesters) under the direct supervision of the supervising athletic trainer on the same campus where the student is enrolled. Candidates *must* serve a minimum of 600 block hours per academic year in the training room. Hours over 600 per year are not accumulative.

## Academic Requirements

- 3 Hours - Human Anatomy
- 3 Hours - Human Physiology or Physiology of Exercise Exercise
- 3 Hours - Kinesiology
- 3 Hours - Health Education
- Basic Red Cross first aid, emergency care attendant, or emergency medical technician
- C.P.R. training completed in the last three years

The fees for licensure in Texas are:

Temporary License Fee	\$12.50	Initial License Fee	\$35.00
Examination Fee	\$30.00	Annual Renewal Fee	\$25.00

Applications and more information may be received from the:

Bureau of Licensing & Certification  
Texas Department of Health  
1100 West 49th Street  
Austin, TX 78756 (512) 458-7583

March 22, 1985

Garnett E. Detty, ATC  
525 General Muhlenberg Road  
King of Prussia, PA 19406

Dear "Moose":

The painting is hung at the end of the long hall and brings instant attention to those entering the "mecca"

Pinky never visited. This week one of Pinky's former students visited the office, he was overwhelmed by the impressive painting located at the focal point of the building Pinky laid the foundation to build. This impression has enabled me to realize the impact that this painting will have on those individuals who knew him as both you and I did.

The semblance of this gesture relates your love and devotion to the athletic training profession. We are grateful to be associated with individuals who possess your thoughtfulness and generosity.

Respectfully,

Otho Davis, ATC  
Executive Director

To: Bobby Barton, Board of Directors  
From: Otho Davis  
Date: April 3, 1985  
Reference: Presentation of Painting to National Office

Our friend "Moose" Detty commissioned Tommy MacDonald, King of Prussia, Pennsylvania and former Philadelphia Eagle football team member to paint an oil portrait of William E. Newell. This painting is housed in our National Office and hangs at the end of the main hall.

Our first impression of this painting, as was the impression of "Moose" - "it is beautiful and gives those of us who knew him a feeling that his everyday presence is there." *It is!*

Hopefully you will all be able to visit the office soon and see this beautiful memorial.

## Note From the Editor of *Athletic Training*

To all those authors who have submitted manuscripts to *Athletic Training* for publication we beg your indulgence during this period of transition. The job of editor has changed hands for the first time in fifteen years and it will take me a little time to get "squared away". Thanks to all for your patience and understanding.

Don Kaverman

## Editorial Board Vacancies:

There are several vacancies on the Editorial Board of *Athletic Training* to be filled. Any certified trainer interested in reviewing articles for the Journal should send a letter indicating their interest along with a resume to:

Don Kaverman  
Department of Athletics  
Ferris State College  
Big Rapids, MI. 49307

Only those certified members chosen to serve on the Editorial Board of *Athletic Training* will be notified. Thanks, in advance, for your interest.

DLK

⊕



# NEW



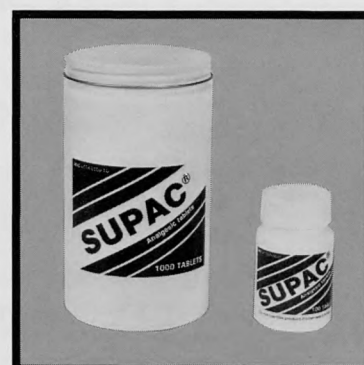
## CHLORASTAT™

CHLORASTAT™ with 3% PCMX (Parachlorometaxyleneol), detergents, and emollients has been proven to be an effective cleanser with antimicrobial, antifungal and antiviral properties. CHLORASTAT™, the totally versatile antiseptic, wound cleanser.



## SCRUB BRUSH®

Mission® Scrub Brush (with Chlorastat™) contains 3% PCMX (Parachlorometaxyleneol), detergents, and emollients. Scrub units are pre-wet, mild (with a soft bristled brush), and can be carried on the field in an anti-septic manner.



## SUPAC®

SUPAC® is a pain reliever that minimizes mild to moderate pain without interrupting reflexes or trained muscular response. SUPAC® is quick acting, non-prescription, and non-narcotic.

**Perhaps you should try these products in your program. For additional information and trial samples call Toll Free 1-800-531-3333 or in Texas 1-800-292-7364.**



**Mission**  
PHARMACAL COMPANY  
SAN ANTONIO, TEXAS 78296  
ATHLETIC PRODUCTS DIVISION

I am interested in MISSION PHARMACAL ATHLETIC PRODUCTS.

Please send free: ☐ samples  
☐ literature

Name \_\_\_\_\_

School \_\_\_\_\_

Phone \_\_\_\_\_

Address \_\_\_\_\_

City, State \_\_\_\_\_

Zip \_\_\_\_\_

Mission Pharmacal Co., P.O. Box 1676, San Antonio, TX 78296

# Committee Forum

## Certification

To: Curriculum and Internship Program Directors Athletic Training Students

From: Paul Grace  
Chairman, Board of Certification

Re: Reporting Clinical Hours

In an effort to plan future examination sites and to verify fulfillment of the Clinical Hours requirement for all students, several changes have been made in the reporting of this information to the Certification Office at the National Office in Greenville..

Please note these changes and file them for future reference:

1. Athletic Trainers who are supervising students (NATA approved curriculum directors or internship program directors) must submit the form "Clinical Hour Report" no earlier than *June 1st* and no later than *June 30th*.
2. Internship students no longer are required to submit Form A.
3. If hours are attained at more than one facility, a separate form *must* be completed by the supervising Athletic Trainer at each facility.

Your cooperation, as always, is appreciated. Thank you for your continued support.

### BOARD OF CERTIFICATION NATIONAL ATHLETIC TRAINERS' ASSOCIATION CLINICAL HOURS REPORT

This form is to be completed by the supervising Athletic Trainer and sent to the Certification Office by *June 30th* of each year. DO NOT send weekly logs. DO NOT submit this form prior to June 1st, nor later than June 30th.

Name of supervisor: \_\_\_\_\_ Membership #: \_\_\_\_\_

Signature: \_\_\_\_\_ Certification #: \_\_\_\_\_

Institution where clinical hours were attained:

Name: \_\_\_\_\_

Location: \_\_\_\_\_

Please list names of other NATA Certified Athletic Trainers who supervised interns at the institution listed above:

NAME	MEMBER. #	CERTIFICATION #
------	-----------	-----------------

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

#### CLINICAL HOURS LOG

June 1, 19\_\_ to May 31, 19\_\_

STUDENT NAME	S.S.#	MEMBER (Y/N)	# HOURS	STDNT. INIT.	EXP. YR. OF CERT.
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____



## Grants & Scholarships

The first NATA scholarship was the 1970 William E. Newell Award in the amount of \$250.00. Since then the NATA has awarded \$141,250.00 to deserving members of the Association. These scholarships have been totally funded by the members of the Association and by private corporations and scholarship funds. We are very grateful to those members and corporations who have been so generous and supportive of these scholarships. The sponsors of each scholarship are noted in the 1985 list of award winners in this issue (See Association Activities). We could not make these grants without the help of our friends who have supported us for so many years.

This past year at the Annual Clinical Symposium, twenty-two awards of \$1000 each were made. There were ten undergraduate awards, eleven graduate awards and an achievement award for top score on the Certification Examination.

Next year we are raising the awards to \$1500 each and we hope to be able to continue raising the amounts of the awards to meet the increasing costs of education. In 1985 more than 55% of all qualified applicants received an award.

Following is a description of the types of scholarships and the general requirements for each one:

The NATA Grants and Scholarships Committee reviews applications for three categories of scholarships: Undergraduate, Curriculum, and Post Graduate student athletic trainer categories.

The Undergraduate Scholarship is for an undergraduate student in the sophomore or junior year of baccalaureate degree study. If the student is in a program of study requiring more than four years, then he/she may be in the third or fourth year of study.

The Curriculum Scholarship is for a junior in an NATA Approved Undergraduate Athletic Trainer Education Program. A student in a program which requires more than four years of undergraduate study must be in the third or fourth year.

The Post Graduate Scholarship considers students in their final year of a four year baccalaureate degree or those returning to school. If the program of study is no longer than four years, then the student must be in his/her final year. The student must signify an intention to continue academic work beyond the baccalaureate degree as a full-time graduate student.

The following are basic requirements for eligibility.

1. In all scholarship categories the applicants must be a member of the NATA for at least one year prior to the deadline date for submitting completed applications (February 1st).
2. NATA scholarships will not be awarded to the same student two consecutive years.
3. The student must have at least a 3.00 (based on a 4.00 maximum) grade point average.
4. The student must signify an intent to continue academic work at the appropriate level.
5. The student must signify an intent to pursue the profession of Athletic Training as his/her means of livelihood.

There is also another type of scholarship given and that is to the children of an NATA Certified Athletic Trainer who was an active member of our profession and Association at the time of death. This award is from the National Athletic Trainers Association Benevolent Fund and is named in memory of Warren H. Lee, the

former Head Athletic Trainer at the University of Arizona. The funds are to be used for tuition, fees, board, room and books at an accredited university, college or junior college. Any Certified Athletic Trainer may submit a nomination for this award.

## Placement

The number for the 24-hour telephone "HOT LINE" offering information on job opportunities is (919) 752-1266. Two different tapes are used: Graduate Assistantship tape is run on Monday, Wednesday and Friday from 5:00 pm until 9:00 am the following working day. General employment tape is run at all other times. Have pen and paper available to take down the following information: Position Title, Location, Deadline, Person to Contact.

A good idea some trainers are using: The HOT LINE tape is recorded for later play-back or transcription for posting on bulletin boards.

A current Placement File is also maintained by Committee Chairperson Craig Sink. If you would like to be included in this cross-indexed file, mail your current resume to him at NCSU, Box 5187, Raleigh, NC 27650.

## Professional Education

### Sayers "Bud" Miller Distinguished Athletic Training Educator Award

Nominations are being received for the annual Distinguished Athletic Training Educator Award to be presented by the NATA Professional Education Committee in recognition of excellence in athletic training education:

#### I. Qualifications

To be nominated for the award, educators must have the following qualifications:

1. Current member of the National Athletic Trainers Association, Inc.
2. Member of a teaching faculty in the area of athletic training/sports medicine for at least ten (10) years.
3. Minimum of ten years of outstanding service in the area of athletic training education and research.
4. Recognized excellence in the field of athletic training education.
5. Outstanding service in district, state or national professional organizations concerned primarily with the field of athletic training.
6. Evidence of quality in publications and public speaking on topics in athletic training/sports medicine.

#### II. Nomination Procedures

1. the candidate's current personal resume which includes:
  - a. academic background
  - b. employment background
  - c. published research and other publications (journal articles, books, etc.)
  - d. course work taught (during past five years)
  - e. classroom teaching innovations
  - f. course work/curriculums developed
  - g. professional memberships
  - h. positions on state, district, or national level of the National Athletic Trainers Association, Inc.

- i. positions on state, district, or national level of related sports medicine professional organizations
  - j. consultant work
  - k. speaking engagements on community, state, regional, and national levels
  - l. community service
  - m. college or university service (i.e. committee involvement, thesis advertising, etc.)
  - n. any other pertinent materials
2. A minimum of three letters (additional letters may be submitted) from professional colleagues, administrators, or students providing detailed rationale in support of the candidate's nomination.

Nominations including the above materials should be sent to the Professional Education Committee Project Director, Honors and Awards, and must be received by **March 1, 1986**. Presentation of the award will be made to the recipient at the 1986 NATA Annual Meeting and Clinical Symposium in Las Vegas, Nevada. Send nominations to:

Ken Murray  
Athletic Department  
Texas Tech University  
P.O. Box 4199  
Lubbock, Texas 79409

## Research & Injury

### Free Communications Call for Abstracts June 1986

Each year during our National Convention, members are continually sharing ideas, procedures, techniques and innovations in and for the profession of athletic training. Most of these conversations are among small groups of members and much of the information exchanged would be highly meaningful for the larger group. Many of these ideas have been developed through systematic data collection and observations made by the athletic trainers in the performance of their responsibilities. The accumulation of this information represents an important form of applied research.

With this in mind, the NATA Research and Injury Committee will offer a **Free Communications Section** at our National Meeting in Las Vegas in June 1986. The purpose of this section is to provide a forum in which information regarding the techniques and knowledge attendant in athletic training rooms all over the country can be openly exchanged. In order to provide organization to this session, the Committee is issuing a **CALL FOR ABSTRACTS** from the NATA membership. The titles of the projects to be presented will be available to members prior to the convention so that they will know which topics will be discussed and at what time during the session.

The response to this session has been excellent. We encourage each member to participate in these information exchanges. So please submit your abstract soon and we look forward to seeing you in Las Vegas.

Yours in sport,  
John W. Powell, PhD, ATC  
Chairman  
Research and Injury Committee

## Instructions for Completion of Free Communication Abstract

Please read all instructions before preparing abstract. Carefully develop your abstract so it can be placed easily in the space provided on the following page. Mail the original and **3 copies** prior to February 15, 1986.

1. Type title of paper or project in all caps.
2. Type the name of all authors with the author that will make the presentation listed first.
3. Indent three spaces on a new line and type the text of your paper.
4. Indicate any funding or grants information on one line at the bottom.
5. Indicate if presenting author is "member of the NATA."
6. Indicate any audio-visual aids required.
7. Sign the completed abstract.

**Remember:** Your abstract should be of the informative type and should contain:

- A. Sentence stating the specific objective of the project.
- B. Brief statement of methods.
- C. Summary of results.
- D. Statement of conclusion.

Due to the time frame a limited number of papers will be presented. Each presenter will have fifteen minutes in which to deliver his/her topic. The Committee will select the papers to be presented. Submission of an abstract therefore does not mean you will automatically be responsible for a presentation. Notification will be made in plenty of time for final paper preparation.

Refer questions to: Russ Cagle, (503) 370-6420

### MAIL TO:

Russ Cagle  
Research and Injury Committee  
Willamette University  
Salem, OR 97301

## National Athletic Trainers Association Outstanding Research Award Call For Paper

The Research and Injury Committee of the National Athletic Trainers Association has as its overall mission to encourage members of our Association to conduct, document and report research in the athletic training profession. In order for our profession to continue to grow we must continually search for new methods of prevention, care and rehabilitation of athletic related trauma. We also have a responsibility to continually monitor and strive for excellence in our current procedures. To this end the NATA Board of Directors has approved the establishment of an Outstanding Research Award.

The Outstanding Research Award will be selected on a competitive basis from those completed and written documents submitted to Russ Cagle at Willamette University by February 15, 1986. A sub-committee for Outstanding Research Award consisting of Members of the NATA Research and Injury Committee will review all completed projects. Each member of this group will conduct the review without benefit of the author's name or clinical affiliation. From the projects submitted to this Sub-Committee, the most highly rated projects will be submitted to a Final Selection Committee. This Committee to consist of three athletic trainers who have proven competency in the conduct of research projects. The two non-athletic trainers will be selected based on their record of excellence in research within the professional discipline closely associated with Sports



**Call For Abstracts  
NATA Free Communication  
National Convention  
Las Vegas, Nevada  
June, 1986**

Presenting Author: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: (      ) \_\_\_\_\_ Audio Visual Needs: \_\_\_\_\_

Is presenting author a member of NATA? \_\_\_\_\_

Member Signature: \_\_\_\_\_

Membership No: \_\_\_\_\_ Telephone No: (      ) \_\_\_\_\_

Medicine i.e., Exercise Physiology or Biomechanics. All review will be done without knowledge of author or institution. The Final Selection Committee will submit their established order of merit to the Chairman of Research and Injury Committee for announcement of the award.

In order to be eligible for this Award the following criteria are established:

1. Principal investigator must be a Certified Athletic Trainer.
2. The project must be of original design and not have been published at the time of application.
3. The project must have been completed at the time of application.
4. The paper must be manuscript format according to the standards established by the NATA Journal and Award winners must submit an article to the NATA Journal relevant to their research.
5. Completed papers must be sent to Russ Cagle, Willamette University, Outstanding Research Award, Salem, OR 97301, prior to February 15, 1986. (6 copies)

The basic criteria for final selection will be as follows:

1. Originality
  - a. Background for research design

- b. Creativity
  - c. Need based on existing review of literature
2. Depth of Analysis
    - a. Use of appropriate statistical designs and methodologies
    - b. Application of theoretical and practical design
    - c. Interpretations based on the project design
  3. Application of profession
    - a. Effectiveness and relationship of research to the clinical setting
    - b. Application for growth of the profession
    - c. Contributions to the theoretical and practical knowledge
  4. Presentation
    - a. Clarity of organization
    - b. Internal consistency
    - c. Bibliography

It should be noted that this project is not to be confused with the Call For Abstracts for the 1986 Free Communication Session in Las Vegas. The Outstanding Research Award is offered based on fully completed research projects and requires written documentation of background, method, data collection, findings, discussion bibliography, and auxiliary funding sources.

### Outstanding Research Award Application Form

Please complete the following information and return this form with the six (6) copies of your completed research project.

Name \_\_\_\_\_ Position \_\_\_\_\_

Institution Address \_\_\_\_\_

City

State

Zip

Phone (     ) \_\_\_\_\_

Home Address \_\_\_\_\_

City

State

Zip

Phone (     ) \_\_\_\_\_

Certification Number \_\_\_\_\_ Membership Number \_\_\_\_\_

Contributing Authors \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

If you have any questions relevant to this award, please contact:

Russ Cagle  
Athletic Department  
Willamette University  
Salem, OR 97301  
(503) 370-6420



# Guide to Contributors

*Athletic Training*, The Journal of the National Athletic Trainers Association, Inc. welcomes the submission of manuscripts 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 MANUSCRIPTS:

1. Four copies of the manuscript should be forwarded to the editor and each page typewritten on one side of 8½ x 11 inch plain paper, triple spaced with one inch margins.

2. Good quality color photography is acceptable for accompanying graphics but glossy black and white prints are preferred. Graphs, charts, or figures should be of good quality and clearly presented on white paper with black ink in a form which will be legible if reduced for publication. Tables must be typed, not hand written. Personal photographs are encouraged; however photographs cannot be returned if the manuscript is published.

All artwork to be reproduced should be submitted as black and white line art (either drawn with a Rapidograph [technical fountain pen] or a velox stat or PMT process) with NO tonal values, shading, washes, Zip-a-tone — type screen effects, etc. used.

All artwork to be reproduced in black plus a second (or more colors) should be submitted as black and white line art (see above paragraph), with an Amberlith® or similar-type overlay employed for each area of additional color(s). Also, all areas of tonal value, shading, "washes", etc. should be supplied on a separate clear or frosted acetate or Amberlith® overlay. In addition, all areas to be screened (a percent or tint of black or color) should be supplied on an Amberlith® overlay. Artwork cannot be returned if the manuscript is published.

3. The list of references and citations should be in the following form: a) books: author, title, publisher with city and state of publication, year; b) articles: family names, initials and titles of all authors, title of article, journal title, with abbreviations accepted as per Index Medicus, volume, page, year. Citations in the text of the manuscript will take the form of a number in parentheses, (7), directly after the reference or name of author being cited, indicating the number assigned to the citation. Example of references to a journal, book, chapter in an edited book, and presentation at a meeting are illustrated below. Reference page accompanying manuscript should list authors in alphabetical order numerically.

- a. Knight K: Preparation of manuscripts for publication. *Athletic Training* 11 (3):127-129, 1976.
- b. Klafs CE, Arnheim DD: *Modern Principles of Athletic Training*. 4th edition. St. Louis, CV Mosby Co. 1977 p. 61.
- c. Albohm M: Common injuries in womens

volleyball. *Relevant Topics in Athletic Training*. Edited by Scriber K, Burke EJ, Ithaca NY: Monument Publications, 1978, pp. 79-81.

- d. Behnke R: Licensure for athletic trainers: problems and solutions. Presented at the 29th Annual Meeting and Clinical Symposium of the National Athletic Trainers Association. Las Vegas, Nev, June 15, 1978.
4. In view of *The Copyright Revision Act of 1976*, effective January 1, 1978, all transmittal letters to the editor must contain the following language before manuscripts can be reviewed for possible publication: "In consideration of the NATA taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns or otherwise conveys all copyright ownership to the NATA, in the event that such work is published by the NATA." We regret that transmittal letters not containing the foregoing language signed by all authors of the manuscript will necessitate return of the manuscript. Manuscripts are accepted for publication with the understanding that they are original and have been submitted solely to *Athletic Training*. Materials taken from other sources, including text, illustrations, or tables, must be accompanied by a written statement from both the author and publisher giving *Athletic Training* permission to reproduce the material. Photographs must be accompanied by a signed photograph release form.

Accepted manuscripts become the property of the Journal. For permission to reproduce an article published in *Athletic Training*, send request to the Editor-in-Chief.

5. Manuscripts are reviewed and edited to improve the effectiveness of communication between the author and the readers and to assist the author in a presentation compatible with the accepted style of *Athletic Training*. The initial review process takes from six to eight weeks. The time required to process a manuscript through all phases of review, revision, and editing, to final publication is usually six to eight months depending on the timeliness of the subject. The author accepts responsibility for any major corrections of the manuscript as suggested by the editor.
6. It is requested that submitting authors include a comprehensive abstract, a brief biographical sketch and acceptable black and white glossy photograph of themselves. Please refrain from putting paper clips on any photograph.
7. Published manuscripts and accompanying artwork cannot be returned. Unused manuscripts will be returned when submitted with a stamped, self-addressed envelope.

The following recommendations are offered to those submitting CASE HISTORIES:

1. The above recommendations for submitting manuscripts apply to case studies as well but only two copies of the report need be sent to the Editor-in-Chief.
2. All titles should be brief within descriptive limits. The name of the disability treated should be included in the title if it is the relevant factor; if the technique or kind of treatment used is the principal reason for the report, this should be in the title. Often both should appear. Use of subtitles is recommended. Headings and Subheadings are required in the involved report but they are unnecessary in the very short report. Names of patients are not to be used, only first or third person pronouns.
3. An outline of the report should include the following components:
  - a. Personal data (age, sex, race, marital status, and occupation when relevant)
  - b. Chief complaint
  - c. History of present complaint (including symptoms)
  - d. Results of physical examination (Example: "Physical findings relevant to the physical therapy program were...")
  - e. Medical history — surgery, laboratory, exam, etc.
  - f. Diagnosis
  - g. Treatment and clinical course (rehabilitation until and after return to competition) use charts, graphs when possible
  - h. Criteria for return to competition
  - i. Deviation from the expected
  - j. Results — days missed

#### 4. Release Form

It is mandatory that *Athletic Training* receive, along with the submitted case, a signed release form by the individual being discussed in the case study injury situation. Case studies will be returned if the release is not included.

The following recommendations are offered to those submitting material to be considered for TIPS FROM THE FIELD:

1. The above recommendations for submitting manuscripts apply to Tips From the Field but only two copies of the paper need be submitted.
2. Copy should be typewritten, brief, concise, in the first or third person, and using high quality illustrations and/or black and white glossy prints.

The following guidelines must be met for submission of papers or material to the "STUDENT TRAINER CORNER."

1. Author must be an undergraduate student member of NATA.
2. Topics must relate to athletic training. (case reports, experimental reports, suggestions, new ideas, tips and/or specifics for a given problem)
3. Articles should be no more than 2 to 3 pages in length, double spaced.

## Journal Deadlines

In order to avoid confusion and delays on contributions to the Journal the deadlines for various sections are provided below.

The Editorial Board will review papers submitted on an individual basis, work with the authors and prepare the papers for publication.

The deadlines are:

Journal	Deadline
Spring Issue	December 15
Summer Issue	March 1
Fall Issue	June 15
Winter Issue	September 15

Send material for "Announcements", "Case Histories", "Letters to the Editor" and miscellaneous items to:

Steve Yates, Editor-in-Chief  
P.O. Box 7265-Sports Medicine Unit  
Wake Forest University  
Winston-Salem, NC 27109

Send manuscripts to:

Don Kaverman  
Athletic Department  
Ferris State College  
Big Rapids, MI 49307  
(616) 796-0461

Information on upcoming events for the "Calendar of Events" section should be sent to:

Jeff Fair, ATC

Athletic Department  
Oklahoma State University  
Stillwater, OK 74074

"Tips From the Field" and "New Products" should be sent to:

Barrie Steele  
Training Room Bohler Gym  
Washington State University  
Pullman, WA 99164

Items for the "Student Trainer Corner" should be sent to:

Deloss Brubaker  
U.S. Sports Academy  
PO Box 8650  
Mobile, AL 36608

# REDUCING A TRAINER'S LIABILITY

## "A PRACTICAL APPROACH"

Nathaniel E.P. Ehrlich, JD, ATC

In the last several years, there has been a sharp increase in the number of medical malpractice lawsuits instituted against physicians and other health care providers. Despite this litigation, trainers have essentially avoided such exposure. However, it is increasingly clear that as our society becomes better educated to the role of the athletic trainer, an increasing number of suits will be directed at the trainer. The NATA Ethic Committee has approved the following series of forms in an effort to assist the trainer in attempting to limit potential exposure.

These forms will *not* eliminate liability. However, if utilized properly, these forms *may* act as a deterrent to suit, may limit liability in the event suit is instituted, and may help the trainer to plan his/her program so as to reduce exposure in areas that were never anticipated. These forms are *not* a license to do that which is beyond the legally accepted limits of a trainer's ability or authority.

Obviously, the extent of a trainer's practice varies from state to state. It is suggested, therefore, that before any of these forms are utilized, the trainer should check with an attorney. Further, even if the athletes being treated are minors, it is still recommended that both the athlete and the legal guardians be required to sign these forms.

The following is an explanation of the various forms:

### PRE-SEASON PHYSICAL (Exhibit 1)

It is undisputed that some form of pre-participation exam is essential to the physician and trainer in order to allow the practitioner to establish an athlete's physical status. Without this exam, neither the physician nor trainer has the necessary data to evaluate an athlete's ability to participate. It is arguably the trainer's duty to not only recommend that a physical be given, but also to inform the physicians giving the exams that the screening should meet certain minimum standards. The days of the two-minute physical are long past.

Exhibit 1 is just one example of what might be acceptable. There are several acknowledgements which are part of the exhibit. Similar acknowledgements appear in later exhibits, since the more times an athlete and/or the guardians see and sign them, the less plausible is the argument that, "I did not see them."

*Mr. Ehrlich is with the law firm of Post and Schell in Philadelphia, PA, and specializes in defending medical malpractice suits. He is a member of the NFL Players Association and serves on the Workmen's Compensation panel.*

Finally, there is a section which the athlete and/or the guardians sign allowing a trainer to release information concerning the athlete's physical condition during the season to the coaches and/or sports information director. This acknowledgement is designed to reduce the potential for a suit wherein it may be alleged that confidential or privileged information was released to these parties without the athlete's consent.

### CONSENT TO TREATMENT (Exhibits 2A, 2B)

Part of the trainer's duties include recognition and evaluation of athletic injuries; management, treatment, and disposition of athletic injuries; and rehabilitation of athletic injuries. Obviously, these duties include some form of treatment, either by the trainer himself or by some other trained medical practitioner. If the injury is so severe that immediate attention is required, the trainer may not have time to obtain consent from the athlete and/or the athlete's guardians. Unnecessary delay and additional injury can be prevented by having one of the following forms executed prior to a season. Furthermore, in many states treating personnel in a life-threatening situation are further protected by "Good Samaritan" statutes. One additional benefit of these forms is that in the traditional athlete-trainer situation, the argument that treatment was performed without consent will be eliminated or reduced, further protecting the trainer.

Of the two forms, Exhibit 2A is the more complete as it provides additional protection for any injury which may be sustained during treatment. Nonetheless, these forms will *not* protect the trainer if he/she commits malpractice. As, under most circumstances, a party will not be held to have waived a claim based upon negligence.

### ACKNOWLEDGEMENT OF INJURY (Exhibit 3)

Many trainers are faced with a situation where an athlete who should not participate wishes to participate. The ideal protection would be if the athlete secured a court order requiring that the individual be allowed to participate. Such an order will only be issued in the most unusual circumstance. Another alternative is to have a form *similar* to the one attached executed by the athlete and/or the guardians. This form is only an example of what can be developed. In each situation, an attorney should be consulted to prepare a more complete authorization if time permits.



## RELEASE OF INFORMATION (Exhibits 4A and 4B)

Another area of concern for the trainer is whether to release information concerning an athlete who has been under the athletic trainer's care. Requests for information may come from the team's coaches, the sports information director, professional scouts, college coaches recruiting high school players, the media and from coaches and sports information personnel. If the trainer releases information without the athlete's consent, the trainer may be exposing himself to suit under a variety of theories. Exhibit 1 (The Pre-Season Physical) contains an authorization for the release of information to coaches and sports information personnel. As previously mentioned, there are others who will be contacting you for information and the trainer must be extremely careful in how this information is disseminated.

The ideal situation would be for the trainer to release no information to anyone. Obviously, this is not very practical. Therefore, the trainer will have to ascertain whether each athlete desires to have information regarding himself released. If the athlete wishes to have information released, there are certain procedures which must then be followed. The ideal procedure is to have the athlete execute the attached authorization each time someone requests information, with the athlete noting on the form to whom the information is being released. The next best scenario would be to have the athlete execute the authorization before each season with the authorization being reexecuted during the season when circumstances warrant.

Two cautionary notes are in order here. First, under no circumstances should a trainer release any information verbally. Second, the trainer should not make any comments on the player's personality, injury rate, etc. Only information contained in the form should be provided.

## REQUEST FOR CONFIDENTIAL INFORMATION (Exhibit 5)

As an additional precaution, it may be wise to have the individual requesting information about the athlete execute this form. This form is an attempt to limit the use of the information and to limit a trainer's liability for the dissemination of that information beyond that authorized.

## INFORMATION PROVIDED (Exhibit 6)

A trainer must keep records and this is one suggestion for recording the information provided to the requesting parties. If records are kept accurately the trainer will be able to properly verify not only when the information was released, but to whom the information was released and what was released.

## CONCLUSION

These forms will not completely eliminate liability for athletic trainers. However, the forms may reduce the number of suits against trainers. In addition to the forms, the trainer should attempt to keep accurate records which reflect the time and type of treatment and the person who performed the treatment. These records are important since they may be a trainer's only way to verify activities should a suit be instituted. Finally, it is highly recommended that the athletic trainer take advantage of the malpractice insurance offered to NATA members.

## (EXHIBIT 1)

### STANDARD MINIMUM PRE-SEASON PHYSICAL EXAMINATION

Should there be the need for additional examination or testing in any specific area, such will be permitted.

#### GENERAL MEDICAL EXAMINATION

1. History
  - player
  - family
  - thorough review of all team physicians and trainer reports for preceding seasons
2. Examination
  - head
  - face
  - scalp
  - ears - external & drums
  - sinus
  - throat
  - eyes
    - pupils
    - reaction to movement and light
  - lungs
    - palpitation
  - chest
  - heart
  - visceral
    - hernia
  - rectal
    - hemorrhoid
    - fistula
  - gastric
  - any unusual body marks, i.e., scars, birthmark
  - height
  - weight
  - temperature
  - blood pressure
  - pulse
  - heart rate

#### ORTHOPEDIC EXAMINATION

Examination visually, including stress testing and range of motion for all of the following:

- neck and spine
- shoulder
- elbow
- wrist
- fingers
- hips
- knees
  - also knee jerk
- ankle
  - check Achilles tendon for abnormalities and by jerk test

#### FLEXIBILITY

Testing of hamstrings and neck.

#### EKG

Heart abnormalities.

**STRESS TESTING** (at physician's discretion)  
(Treadmill or bicycle) for cardiovascular.

#### BLOOD TESTING

Standard grid. Testing for (including but not limited to):

- Chemistry
- Calcium
- Phosphorus
- Glucose
- Uric Acid
- Cholesterol
- Iron
- Triglyceride
- Lipids
- Sodium
- Chlorides
- White Blood Count
- Red Blood Count
- Mono-Screen )
- Tay-Sachs ) Where applicable. If found,
- Sickle Cell ) individual counseling necessary.
- V.D.

#### URINALYSIS

Check for (including but not limited to):

- Protein
- Glucose
- PH Factor
- Diabetes
- Renal Failure
- Gout

## VISION TESTING

- peripheral vision
- standard eye test

## HEARING TEST

## DENTAL EXAMINATION

**CHEST X-RAY** (at appropriate intervals) (Only as recommended by AMA standard) Check for:

- Tumor
- T.B.
- Lesions

**X-RAY ALL PREVIOUSLY INJURED AREAS** - (at Physician's discretion)

BY: \_\_\_\_\_  
PHYSICIAN

## ACKNOWLEDGEMENT

I have reviewed the Medical History Report on the above form and affirm that it is true and correct to the best of my ability. The above-named Student consents to participation in \_\_\_\_\_ (SPORT)

which may include travel.

\_\_\_\_\_  
(LEGAL GUARDIAN[S] OR STUDENT)

We, the undersigned, grant permission for the school employees to secure medical services for \_\_\_\_\_ (STUDENT), if necessary.

It is understood that even though protective equipment is worn by the Athlete whenever needed, the possibility of an accident still remains. Neither \_\_\_\_\_ (SCHOOL) nor its

Trainers assume any responsibility in the event of an accident. In consideration of the above-named Student being permitted to participate in \_\_\_\_\_ (SPORT), I/We hereby release

the above-named institution, its employees and Trainers, together with all persons, assisting with any phase of such activities, from all liability and responsibility in connection with such activity. I/We further agree to indemnify and hold harmless said parties from all claims hereafter made and asserted by or on behalf of the above-named Student, his parents, guardian(s), heirs, executors or assigns.

I further authorize any physician to release confidential information concerning an athletic injury to the coaches or Sports Information Director.

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
PARENT/GUARDIAN

BY: \_\_\_\_\_  
STUDENT

### (Exhibit 2A)

## MEDICAL CONSENT FORM

I/We hereby grant permission to \_\_\_\_\_ (SCHOOL)

its physicians and/or Trainers to render aid, treatment, medical or surgical care deemed reasonably necessary to the health and well being of \_\_\_\_\_ (STUDENT)

I/We further authorize the Athletic Trainers at the above-named institution who are under the direction and guidance of \_\_\_\_\_

the team physician, to render any first aid or preventive, rehabilitative or emergency treatment deemed reasonably necessary to protect the health and well being of \_\_\_\_\_ (STUDENT)

I/We additionally grant, when necessary for protecting the health and well being of \_\_\_\_\_ (STUDENT), permission for hospitalization, treatment or surgery at a competent and/or accredited facility.

I/We further release \_\_\_\_\_ (SCHOOL), its Trainers, agents, servants, and employees from any liability for damage and injury to \_\_\_\_\_ (STUDENT) and hereby accept the full responsibility for any and all damages or injuries sustained as a result of participation in \_\_\_\_\_ (SPORT)

STUDENT \_\_\_\_\_ PARENT/GUARDIAN(S) \_\_\_\_\_  
DATE: \_\_\_\_\_

### (EXHIBIT 2B)

## MEDICAL CONSENT FORM

I/WE hereby grant permission to \_\_\_\_\_ (SCHOOL)

its physicians and/or Trainers to render aid, treatment, medical or surgical care deemed reasonably necessary to the health and well being of \_\_\_\_\_ (STUDENT)

I/WE further authorize the Athletic Trainers at the above-named institution who are under the direction and guidance of \_\_\_\_\_

the team physician, to render any first aid or preventive, rehabilitative or emergency treatment deemed reasonably necessary to protect the health and well being of \_\_\_\_\_ (STUDENT)

I/WE additionally grant, when necessary for protecting the health and well being of \_\_\_\_\_ (STUDENT),

permission for hospitalization, treatment or surgery at a competent and/or accredited facility.

STUDENT \_\_\_\_\_ PARENT/GUARDIAN(S) \_\_\_\_\_  
DATE: \_\_\_\_\_

### (EXHIBIT 3)

## ACKNOWLEDGEMENT OF INJURY

1. I have been informed by the team physician that I have the following physical condition(s): \_\_\_\_\_

2. I have received a full explanation from the team physician that to continue to play \_\_\_\_\_ may result in the deterioration or aggravation of such physical condition(s) rendering me physically unable to perform life's daily functions.

3. I fully understand the possible consequences of playing \_\_\_\_\_ with the physical condition(s) set forth in paragraph 1 above. Nevertheless, I desire to continue to play \_\_\_\_\_

and hereby assume all risks inherent in the sport of \_\_\_\_\_

4. Because I desire to play \_\_\_\_\_ for \_\_\_\_\_ I hereby waive and release \_\_\_\_\_

its agents, employees, physicians and trainers from any and all liability or responsibility in the event I become physically disabled as a result of this or any other injuries sustained while participating in \_\_\_\_\_ or as a result of a deterioration or aggravation of the physical condition(s) set forth in paragraph 1 above.

STUDENT AND GUARDIAN \_\_\_\_\_ WITNESS \_\_\_\_\_

DATE \_\_\_\_\_

### (Exhibit 4A)

## AUTHORIZATION FOR RELEASE OF INFORMATION

1. Name: \_\_\_\_\_
2. Sport(s): \_\_\_\_\_
3. Position: \_\_\_\_\_
4. Number (Jersey): \_\_\_\_\_
5. Height: \_\_\_\_\_ 6. Weight: \_\_\_\_\_
7. Birthdate: \_\_\_\_\_ Year At \_\_\_\_\_  
(Freshman, Sophomore, Junior, Senior) (School)
9. Junior College Transfer (Check): Yes \_\_\_\_\_ No \_\_\_\_\_
10. If "Yes" to #9 above, state Junior College: \_\_\_\_\_
11. High School: \_\_\_\_\_
12. Glasses (Check): Yes \_\_\_\_\_ No \_\_\_\_\_
13. Contact Lenses (Check): Yes \_\_\_\_\_ No \_\_\_\_\_
14. Injuries and/or problems about which information will be released: \_\_\_\_\_

I/We, \_\_\_\_\_ (PARENT/GUARDIAN(S)) give my consent for the team physician, athletic trainers, or other medical personnel at \_\_\_\_\_ (SCHOOL)

information regarding my medical history, record of injury or surgery, record of serious illness, and rehabilitation results as may be requested by the scout or representative of any professional or amateur athletic organization seeking such information. Said information shall include, but is not limited to, any and all information within their knowledge, or



contained in any records of treatment, hospitalization, examinations, x-rays, tests and otherwise rendered to me, and allow them to furnish to such persons or organizations copies of all such reports, records, tests and x-rays.

I/We understand that such scout or representative of the team has made representations to the team physician, athletic trainer or other medical personnel of \_\_\_\_\_, that the

(SCHOOL)

purpose of this request is to assist that organization in making a determination regarding future employment.

I/We understand that a record will be kept of all individuals requesting such information and the date of the request. The information above may under normal circumstances be confidential and except as provided in this release will not be otherwise released by the parties in charge of this information.

The \_\_\_\_\_, its officials, employees

(SCHOOL)

and trainers SHALL NOT BE LIABLE in any respect or under any theory whatsoever as a result of the information released pursuant to this authorization. I expressly waive any claim for any damages which may result as a result of the release of this information.

THIS RELEASE REMAINS VALID UNTIL REVOKED  
BY ME IN WRITING.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Address: \_\_\_\_\_  
TEMPORARY (SCHOOL) PHONE NUMBER

Address: \_\_\_\_\_  
PERMANENT PHONE NUMBER

Signature: \_\_\_\_\_  
(STUDENT AND GUARDIAN(S))

### (Exhibit 4B)

I/We \_\_\_\_\_, do not give

(PARENT/GUARDIAN(S))

my consent for the team physician, athletic trainers, or other medical personnel at \_\_\_\_\_ to release the above

(SCHOOL)

information regarding my medical history, record of injury or surgery, record of serious illness, and rehabilitation results as may be required by the scout or representative of any professional or amateur athletic organization seeking such information.

The \_\_\_\_\_, its officials, employees

(SCHOOL)

and trainers SHALL NOT BE LIABLE in any respect or under any theory whatsoever as a result of the failure to release said information pursuant to this authorization. I expressly waive any claim for any damages which may result of the failure to release the above information.

THIS RELEASE REMAINS VALID UNTIL  
REVOKED BY ME IN WRITING.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Address: \_\_\_\_\_  
TEMPORARY (SCHOOL) PHONE NUMBER

Address: \_\_\_\_\_  
PERMANENT PHONE NUMBER

Signature: \_\_\_\_\_  
(PARENT/GUARDIAN(S))

### (Exhibit 5)

#### REQUEST FOR CONFIDENTIAL INFORMATION

I hereby state that I am a scout for and/or representative of

and hereby request the athletic department, team physician and athletic trainers of \_\_\_\_\_

to release medical information relating to the health and physical fitness of the athlete listed below for the purpose of determining his or her suitability for possible competition in or employment by: \_\_\_\_\_.

I will keep said information confidential and will not release it except as is necessary to ascertain the employability or fitness for competition of \_\_\_\_\_. It is expressly understood

that the information obtained will not be released to nor published in any news media.

I hereby agree to indemnify, defend and hold harmless \_\_\_\_\_ in any action brought as the result of the release and utilization of said information.

(INDIVIDUALLY)

AS REPRESENTATIVE OF \_\_\_\_\_  
DATE: \_\_\_\_\_

### (Exhibit 6)

INFORMATION PROVIDED

(Name) \_\_\_\_\_

(Organization) \_\_\_\_\_

(Date) \_\_\_\_\_

### WANTED: ATHLETIC TRAINERS FOR SPECIAL OLYMPICS, from page 205

of the injury to the mentally retarded athlete is many times less, but remember, these athletes are experiencing trauma to the body. The athletic trainer should be knowledgeable of the special needs of these athletes due to a mental and/or physical disabling condition. These athletes take such a small portion of our time and they, as athletes, also need the medical attention of an athletic trainer who cares.

### References

1. Appenzeller H: *The Right to Participate*. Charlottesville, VA, The Michie Company, 1983.
2. Bedo AV, Demlow M, Moffit P, Kopke KW: Special Olympics athletes face special medical needs. *The Physician and Sportsmedicine* 4(9), 31-56, 1976.
3. Birrer RB: The Special Olympics: An injury overview. *The Physician and Sportsmedicine* 12(4), 95-97, 1984.
4. Cooke, RE: Atlantoaxial instability in individuals with Down's Syndrome. *Adapted Physical Activity Quarterly* 1, 194-196, 1984.
5. Grant HD, Murray RH, Bergeron JD: *Emergency Care* (3rd Ed.). Robert Brady Co., Bowie, MD, 1982.
6. Hage P: Winter sports challenge disabled athletes. *The Physician and Sportsmedicine* 10(1), 25, (1982).
7. Magalini S: *Dictionary of Medical Syndromes*. Lippincott, Philadelphia, PA, 1971.
8. Maxwell BM: The nursing role in the Special Olympic program. *Journal of School Health* 54(3), 131-133, 1984.
9. PL 93-112. The Rehabilitation Act, September 26, 1973.
10. PL 9-142. The Education for Handicapped Children Act Rules and Regulations. *Federal Register* 42, 163, August 23, 1977.
11. *Special Olympics Bulletin*. Participation by individuals with Down's Syndrome who suffer from the atlantoaxial dislocation condition, 1983.
12. Starek PJK: Athletic performance in children with cardiovascular problems. *The Physician and Sportsmedicine* 10(2), 78-86, 1982. ⊕

**The 1985  
Schering Symposium  
from San Antonio,  
"The Eyes of the  
Athletes Are Upon  
You",  
begins in this issue  
on page 195.**

# PROCEEDINGS of the BOARD OF DIRECTORS NATIONAL ATHLETIC TRAINERS' ASSOCIATION, INC.

June 5-10, 1985  
San Antonio, Marriott Hotel  
San Antonio, Texas

## SUMMARY OF ACTIONS NATA BOARD OF DIRECTORS

The following agenda items were considered and actions taken by the NATA Board of Directors at its meeting held at the San Antonio Marriott Hotel, San Antonio, Texas, commencing at eight-fifteen o'clock a.m., on Wednesday, June 5, 1985, and terminating at four-thirty p.m. on Monday, June 10, 1985, with Mr. Bobby Barton, President, presiding and with the following present:

Mr. Bobby Barton, President  
Mr. Otho Davis, Executive Director  
Mr. Jack Baynes, District 1  
Mr. Hal Biggs, District 2  
Mr. Andy Clawson, District 3  
Mr. Gordon Graham, District 4  
Mr. Denis Isrow, District 5  
Mr. Paul Zeek, District 6  
Mr. Dan Libera, District 7  
Ms. Janice Daniels, District 8  
Mr. Jerry Rhea, District 9  
Mr. Mark Smaha, District 10  
Mr. Bruce Melin, Parliamentarian

### I. APPROVAL OF MAIL ITEMS:

Moved by District 6, seconded by District 5 and carried 10-0 to approve all of the mail items previously approved, as follows:

1. Appointment of Gary Craner, Boise State University (District 10) to Ethics Committee.
2. Approval of Dr. James R. Andrews, Columbus, Georgia as recipient of the 1985 President's Challenge Award.
3. Approval of the 1985 Honorary Membership recipients

Robert E. Anderson, M.D.  
University of Michigan  
Ann Arbor, Michigan  
Karl D. Bowers, Jr., M.D.  
West Virginia University  
Morgantown, West Virginia  
R. W. "Red" Covington, M.D.  
Baylor University  
Waco, Texas  
Raymond F. Fagan  
Schering Corporation  
Kenilworth, New Jersey  
Michael W. Hakala, M.D.  
Richmond, Virginia  
Jack H. Henry, M.D.  
San Antonio, Texas  
Jerry D. Julian, M.D.  
University of Texas at Austin  
Austin, Texas  
G. Wilson "Willie" Myers, Jr.  
Somerset, Pennsylvania  
Gerald A. O'Connor, M.D.  
University of Michigan  
Ann Arbor, Michigan  
Charles A. Rockwood, Jr., M.D.  
San Antonio, Texas  
James W. Shuffield, M.D.  
Lamar University  
Beaumont, Texas  
V. James Viola  
Johnson & Johnson Products, Inc.

Southfield, Michigan

4. Approval of exhibitors retailing items at annual meeting.

5. Approval of Standards of Practice for Athletic Trainers as "Policy 21" of the Statement of Policies.

6. Resignation of Steve Antonopoulos, Denver Broncos (District 7) from the Licensure Committee.

7. Approval that Brooks McIntyre, NATA Accountant, and Otho Davis, NATA Executive Director review the budget prior to the Mid-Year Meeting of the Board of Directors and make additions or deletions as deemed necessary and present to the Board of Directors for final approval.

8. Resignation of Clint Thompson, Michigan State University (District 4) as Editor of *Athletic Training, The Journal of the National Athletic Trainers' Association, Inc.*

9. Appointment of Barrie E. Steele, Washington State University (District 10) to Journal Committee.

10. Approval of initial letter to Bill Schmidt, Director of Sports Development, The Quaker Oats Company, Chicago, Illinois from Otho Davis, NATA Executive Director in reference to Quaker Oats/Gatorade becoming the "First NATA Corporate Sponsor".

11. Appointment of Thomas E. Abdenour, Weber State College (District 7) to Licensure Committee.

12. Approval of the Harold W. Mundy Scholarship.

13. Approval that Dan Libera, University of Northern Colorado, and Steve Antonopoulos, Denver Broncos, represent the NATA at the National High School Coaches Association meeting in Denver, Colorado, June 1985.

14. Approval of the 1985 Twenty-Five Year Award recipients:

Dennis W. Aten, Eastern Illinois University (District 4)  
Ray C. Baldwin, Xavier University (District 4)  
William H. Chambers, Fullerton College (District 8)  
George H. Christman, Jr., Kenyon College (District 4)  
Gary D. Delforge, University of Arizona (District 7)  
Gordon L. Graham, Mankato State University (District 4)  
Bernard E. LaReau, University of Texas at San Antonio (District 6)  
Theodore C. Quedenfeld, Temple University (District 2)  
John F. "Jeff" Snedeker, Milwaukee Bucks Basketball Club (District 4)  
Richard E. Vandervoort, Houston Rockets Basketball Club (District 6)  
Fred J. Zamberletti, Minnesota Vikings Football Club (District 4)

15. Approval of the 1985 Hall of Fame recipients:

Lewis C. Crowl (District 8)  
Sacramento, California  
James E. Dodson (District 6)  
Midland High School  
Midland, Texas  
Larry L. Lohr (District 6)  
Weslaco High School  
Weslaco, Texas  
Wilford F. "Billy" Pickard, Jr. (District 6)  
Texas A & M University

College Station, Texas  
Jerry Rhea (District 9)  
Atlanta Falcons Football Club  
Suwannee, Georgia  
Paul J. Schneider (District 5)  
University of Nebraska  
Lincoln, Nebraska

16. Appointment to the Certification Committee:

William E. Battershall, Jr. (District 2)  
St. Peter's College, Jersey City, New Jersey  
Peter D. Carlon (District 6)  
University of Texas at Arlington  
Tom E. Koto (District 10)  
Boise, Idaho  
Susan R. Leeper (District 6)  
Bedford, Texas  
Terrance R. Lewis (District 3)  
University of South Carolina  
Gerald Allen MacFarland (District 2)  
Corapolis, Pennsylvania  
Richard M. O'Connor (District 8)  
Carlsbad, California  
Wayne F. Wagner (District 5)  
University of Nebraska at Omaha

### II. DEFINITION OF CERTIFIED ATHLETIC TRAINER:

Moved by District 6, seconded by District 8 and carried 10-0 that the following definition of a Certified Athletic Trainer be approved:

#### DEFINITION

#### ATHLETIC TRAINER, CERTIFIED

ATHLETIC TRAINER, CERTIFIED: An allied health professional who has successfully completed the college/university undergraduate degree, fulfilled the requirements for Certification as established by the Board of Certification of the National Athletic Trainers' Association, Inc., and has passed the NATA Certification Examination administered by the NATA Board of Certification. The six domains of Athletic Training from which specific tasks are measured in the examination are:

1. Prevention of Athletic Injuries
2. Recognition and Evaluation of Athletic Injuries
3. Management, Treatment and Disposition of Athletic Injuries
4. Rehabilitation of Athletic Injuries
5. Organization and Administration of Athletic Training Program
6. Education and Counseling of Athletes

The Certified Athletic Trainer works under the direction of a licensed physician in the practice of the art and science of athletic training.

### III. ACCEPTANCE OF INFORMATIONAL ITEMS:

Moved by District 10, seconded by District 1 and carried 10-0 to accept the following informational items.

Career Information and Services  
History and Archives  
Memorial Resolutions  
Placement  
Publications



American Academy of Family Physicians  
 American College Health Association  
 American College of Sports Medicine  
 American Corrective Therapy Association  
 National Association for Girls and Women in Sports  
 National Association of Intercollegiate Athletics  
 National Athletic Head and Injury Registry  
 National Federation of State High School Associations  
 National Football League Alumni  
 National Strength and Conditioning Association  
 Legal Counsel  
 "Who Speaks for Sports Medicine?"  
 Athletic Trainer of the Year  
 NCAA Injury Surveillance System  
 Sports Medicine Clinic Trainers and Therapists  
 American Medical Association Drug Abuse Committee

TO: Board of Directors, NATA  
 FROM: Charles Demers, Chairman  
 Career Information & Services Committee  
 SUBJECT: Annual Report  
 DATE: April 15, 1985

1. *Committee Function:* Publication of the Career Information Brochure. Providing a ready resource for career information.

2. *Committee Membership:*

Charles Demers, Chairman, Deerfield Academy, Deerfield, MA 01342, 413-770241, District I

Robert Behnke, Indiana State University, Terre Haute, IN 47802, 812-2326311, District IV

Fred Kelley, Dartmouth College, Hanover, NH 03755, 603-6462472, District I

3. *Committee Action:* During the time since last reporting, the committee has worked on the revision and updating of the brochure. Primary concern has been to rewrite the material pertaining to professional education and certification. Effort was made to make these segments accurately up to date. This task has been completed. In March, 10,000 of the new brochures were printed. These were delivered to the National Office for distribution.

*The American College Health Association (ACHA) report is as follows:*

TO: Otho Davis  
 FROM: Chris Patrick  
 RE: Liaison (April 15 Report)  
 DATE: March 29, 1985

The American College Health Association meets in Washington, D.C. at the Hyatt on Capitol Hill May 29, 30, 31, June 1, 1985. The Sports Medicine Section has its first meeting on May 30.

Joe Gieck of Virginia will be a speaker on the program.

J. J. Bush of Maryland will represent the NATA. J. J. has a copy of all the necessary information regarding contact, time, location, etc.

**MEMORANDUM** — April 23, 1985

TO: Executive Committee of ACHA regarding Liaison Activity with the NATA  
 FROM: Don Cooper, MD, Liaison Representative to the National Athletic Trainers Association  
 SUBJECT: Liaison Report for Year 1984 from National Athletic Trainers Association

The 35th Annual Meeting of the National Athletic Trainers Association was held at the Opryland Hotel in Nashville, Tennessee on 10, 11, 12, and 13 June, 1984. The total attendance was approximately 3000 people with 1500 registered members and their families as well as many student trainers. They also had 150 exhibitors. The total national membership of all classifications of the NATA is now 9207, 4474 of these are certified trainers. At this time approximately 67 schools in 32 states offer curriculums in athletic training. The NATA remains the primary national accrediting agency for the students who get their degrees in athletic training.

The NATA, as always, had excellent participation by its membership at their professional meetings. I would not hesitate to recommend to any members of ACHA that they try to attend these meetings if at all possible. There continues to be a problem in the area of job placement for both the student trainers and for the certified trainers because funding for jobs remains a very difficult problem for many school boards and athletic departments. A continuing trend is for more and more high schools to hire full time athletic trainers. There are now fifteen states (Georgia, Texas, Kentucky, North Dakota, Massachusetts, Oklahoma, Missouri, New Mexico, New Hampshire, New Jersey, Pennsylvania, South Carolina, South Dakota, Tennessee, and Rhode Island) that have licensure for athletic trainers. There are fifteen other states that are pending on getting a state licensure law for their respective states. As of 17 March, 1985, the NATA has employed a public relations firm out of Chicago, called Timothy Communications under a John LeGear, to

help sell the training profession to the public as well as to school systems throughout the country. Mr. Irv Cross is now a consumer member of the NATA Board of Certification.

The current president of NATA is Dr. Bobby Barton of Eastern Kentucky University, Richmond, Kentucky. Mr. Otho Davis of the Philadelphia Eagles continues as the Executive Director. Ms. Mary Edgerley remains in Greenville, North Carolina at the national headquarters as the full time Administrative Assistant for the organization.

The Journal of the NATA continues to furnish many excellent papers on sports medicine. It is always a very worthwhile experience to have the honor of being the liaison representative to the NATA from the ACHA. The next Annual Meeting of the NATA will be held on 8, 9, 10, and 11, June, 1985 in San Antonio, Texas. All ACHA members from that area or who are free at that time would be welcomed to attend and would enjoy the excellent programs.

*The American Corrective Therapy (ACTA) report is as follows:*

TO: National Athletic Trainers Association, Inc. Board of Directors  
 FROM: Jeff Fair, ACTA Liaison  
 SUBJECT: American Corrective Therapy Liaison Report

The 38th Annual Scientific and Clinical Conference of the American Corrective Therapy Association will be held on July 13-18, 1985 at the Penta Hotel in Manhattan, New York.

As per instructions from NATA President Bobby Barton, Don Lowe has agreed to attend the ACTA meeting and act as our liaison.

Roger Kalisiak's attendance at last year's meeting was very productive and it is recommended to the Board that we continue our liaison with the American Corrective Therapy Association for the benefit of both associations.

*The National Association for Girls & Women in Sport (NAGWS) report is as follows:*

TO: NAGWS Liaison Representatives  
 FROM: Carolyn B. Mitchell  
 NAGWS President  
 SUBJECT: NAGWS Board of Directors Meeting  
 April 17, 1985 - Atlanta, Georgia  
 DATE: February 6, 1985

As agreed at the fall NAGWS Board of Directors meeting, there will be an abbreviated spring Board meeting lasting only a few hours. Since the meeting has taken on this format, we are extending an invitation to our liaison representatives to submit only a report to our Board. We will distribute written reports received by March 5. If you have written materials you would like to have distributed, please mail 30 copies to Carol L. Thompson, NAGWS Executive Director, 1900 Association Drive, Reston, VA 22091.

On behalf of the NAGWS Board of Directors, I extend a personal invitation to join us in celebrating our 100th anniversary during the Atlanta Convention, April 17-21, 1985. I look forward to seeing you there.

*The National Association of Intercollegiate Athletics (NAIA) report is as follows:*

Business meeting of the NAIA Athletic Trainers Association and the Medical Aspects of Sports Committee

The NAIA-ATA and the Medical Aspects of Sports Committee met on March 17, 1985 at the Vista International Hotel in Kansas City, MO with the following members present:

Jerry Krummel  
 Lewis & Clark College  
 ATA President  
 Gary Smith  
 Central Wash. Univ.  
 ATA 1st Vice President  
 Phillip A. Pifer  
 Southern Oregon St.  
 ATA 2nd Vice President  
 Julie Bruns  
 Pittsburg State Univ.  
 ATA Secretary  
 Karl Klinksiek  
 Univ. of So. Colorado  
 ATA Past President  
 Steve Bellande  
 Western Wash. Univ.  
 ATA  
 Larry Gorchiek  
 Georgia Southwestern  
 ATA  
 John Baxter  
 Emporia State Univ.  
 ATA  
 Harry Olree  
 Harding University  
 Med. Asp. of Sp. Comm.

Herb Appenzeller  
 Guilford College  
 Med. Asp. of Sp. Comm.  
 Wally Schwartz  
 NAIA National Office Liaison

- I. The meeting was called to order at 2:45 p.m. and the NAIA-ATA officers were introduced.
- II. Minutes from the last meeting and financial report were approved.
- III. Old Business

A. Action of the NAIA Executive Committee on Recommendations:

Recommendation that a certified athletic trainer be included in the traveling party for NAIA championship events *disapproved*. The NAIA went on record to encourage member schools to include a certified athletic trainer in the travel party.

Wally Schwartz pointed out that the NAIA supports having a certified trainer on the bench at championship events, but they will not pay expenses for more than 14 persons per school for basketball.

Recommendation that a plaque be presented to the outgoing NAIA-ATA President each year *passed*.

It was agreed that this plaque would be similar to that given to the outgoing president of the Coaches Association.

B. Appointment of Nomination Committee for vacant seat on the NAIA-ATA executive council.

Jerry Krummel announced that there have been three nominations for the position of secretary for 1985-86. They are:

Steve Reisinger  
 Jeff McCibbin  
 Greg Voight

C. Preview of San Antonio Meeting, June 7-11.

It was agreed that the NAIA-ATA be a noon meeting either Sunday or Monday during the convention.

#### IV. New Business

A. The NAIA will award .6 CEU to those attending the NAIA-ATA workshop. Jerry Krummel emphasized the fact that the CEU form must be postmarked within 30 days.

B. Concern over stunts performed by cheerleaders at NAIA district, area, and national events.

Wally Schwartz discussed the recent injury to a cheerleader at Fort Hays State University and said that although cheerleading is not an NAIA recognized sport, the NAIA-ATA and the Medical Aspects of Sports Committee should voice their concern.

John Baxter explained the policy at Emporia State University.

#### RECOMMENDATION:

The NAIA-ATA and the Medical Aspects of Sports Committee recommend that pyramids or the stacking of bodies by cheerleaders be disallowed at NAIA district, area, or national events.

Motion made by Karl Klinksiek  
 Seconded by Phil Pifer  
 Motion passed unanimously.

#### RECOMMENDATION:

The NAIA-ATA and the Medical Aspects of Sports Committee recommend that no external force be used by cheerleaders to propel the body (example: trampoline, springboard, clasped hands) at NAIA district, area, or national events.

Motion made by Karl Klinksiek  
 Seconded by Phil Pifer  
 Motion passed unanimously.

C. Discussion of NACDA Drug Session Findings of NAIA informal testing at 1983-84 championship events

were reviewed. Don Spencer volunteered to look into Trans World Airlines drug testing procedures for its employees.

It was agreed that the NACDA session should be shortened next year and possibly be a joint session between the NAIA-ATA and the NAIA-Athletic Directors Association.

Wally thought that a joint session including other topics should be carefully considered so that they are of interest to both groups.

#### RECOMMENDATION:

The NAIA-ATA and the Medical Aspects of Sports Committee recommends that we contact the NAIA-ADA concerning a joint venture of providing a workshop in areas of mutual concern beginning with the 1986 NAIA Convention.

Motion made by Harry Olree  
Seconded by Herb Appenzeller  
Motion passed unanimously.

#### D. Topics to address at future workshops

President Jerry Krummel appointed a committee to plan next year's workshop consisting of the following:

The incoming secretary of the NAIA-ATA (chair)  
The outgoing secretary of the NAIA-ATA  
Ken Brown  
Larry Gurchiek  
Two additional volunteers chosen at the June meeting.

#### E. Discussion of services given by NAIA schools to visiting teams (water, ice, certified trainer present, etc.)

Wally suggested having Athletic Directors make provisions for these services in game contracts. Steve Bellande will submit a copy of a form used in District 1 asking what services are provided.

#### F. Discussion of acceptable standard of care.

Jerry Krummel pointed out that athletes are entitled to adequate medical care and that some guidelines should exist for NAIA schools for the provision of medical care.

It was agreed that this might be a good topic for a joint session with the NAIA-ADA next year. Further discussion will take place in San Antonio.

#### G. Discussion of items from the floor.

1. Don Spencer initiated discussion of asking the NAIA to require a physical for all athletes. His proposal is as follows:

"The NAIA-ATA and the medical aspects of Sports Committee recommend that all NAIA schools require pre-entrance physical examinations for all students participating in NAIA recognized sports. This examination must be performed by a licensed physician."

Karl Klinksiek motioned that the proposal be amended from "pre-entrance" to "preparticipation".

After further discussion about the wording of the proposal both the proposal and the amendment were withdrawn. President Jerry Krummel appointed a committee to study the matter and work on a proposal. Members of this committee are:

Julie Bruns - Chair  
Dr. Donald Spencer  
Karl Klinksiek

This committee will give a progress report at the June meeting.

2. The following NAIA athletic trainers are eligible for the 5 year award:

Patrick C. Baril  
Ben Davidson

Gary Nicholson  
Jay Bradley  
Alex Brown

Two Athletic Trainers, Karl Klinksiek and John Baxter are Hall of Fame eligible.

Motion for adjournment by Karl Klinksiek, seconded by Jerry Krummel.

#### V. Meeting Adjourned at 5:00 p.m.

Respectfully submitted,

Julie Bruns, Secretary

*The National Athletic Head and Injury Registry report is as follows:*

April 4, 1985  
Otho Davis, ATC  
Executive Director  
NATA  
c/o Philadelphia Eagles  
Veterans Stadium  
Philadelphia, PA 19148

RE: Liaison Report - National Athletic Head and Neck Injury Registry

Dear Otho:

Enclosed please find my completed Liaison Activity Report for the National Athletic Head and Neck Injury Registry.

The Registry has continued its annual survey for 1984. At this point in time the data is being compiled and analyzed. As you know, I will present a 14 year report at our upcoming Annual Meeting and Symposium in San Antonio.

This past year we have embarked on a new project involving transient cervical spinal neuropathia. We have recognized patterns of injuries from football that result in temporary paralysis or numbness involving both arms and/or legs. This type of injury is occurring with relative frequency.

Dr. Torg's address to the NATA membership will focus on this newly recognized injury. He will speak on the mechanism, pathology and incidence of these injuries.

We believe that our findings are a significant contribution to the body of knowledge necessary for appropriate injury prevention and management.

We would like to thank the members of the NATA for their assistance in this year's survey and we look forward to our participation in the 1985 program in San Antonio.

Sincerely yours,

Joseph J. Vegso, ATC  
Liaison Representative

#### MEMORANDUM

FROM: Joseph S. Torg, MD - Director  
University of Pennsylvania Sports Medicine Center

DATE: February 1, 1985  
SUBJECT: Athletic Head and Neck Injuries

The National Athletic Head and Neck Injury Registry was established in 1975 to document head and neck injuries in athletic activities. *The Registry is soliciting information regarding injuries to the head and/or neck that required hospitalization for more than 72 hours, surgical intervention, involved a fracture and/or dislocation, resulted in permanent paralysis or death.*

Information from the Registry has been presented to the NCAA Rules Committee and was instrumental in rules changes that preclude the use of the head as a battering ram. Subsequent to these rules changes, it has been encouraging to note that a dramatic decrease in the number of head and neck injuries has occurred in football. We believe, however, that the athletic head and neck injury problem is of significant magnitude to warrant the continued concern of all responsible individuals. Your cooperation in reporting these injuries will be most appreciated.

Please complete the enclosed reporting form, being as specific as possible. If you cannot complete the reporting form, please forward it to the individual who could best do so. All information will be held in the strictest of confidence and be used only for epidemiologic survey purposes.

All correspondence should be addressed to the National Athletic Head and Neck Injury Registry, University of Pennsylvania Sports Medicine Center, Weightman Hall, E-7, 235 S. 33rd Street, Philadelphia, PA 19104.

Thank you for your concern and cooperation.

#### INJURY REPORT

Thank you for supplying all of the information requested. It will be used for epidemiologic purposes only.

NAME (injured athlete): \_\_\_\_\_ SEX: M \_\_\_\_\_ F \_\_\_\_\_

ADDRESS: \_\_\_\_\_ AGE: \_\_\_\_\_

HEIGHT: \_\_\_\_\_

PHONE: \_\_\_\_\_ WEIGHT: \_\_\_\_\_

DATE OF INJURY: \_\_\_\_\_

INJURY OCCURRED (Circle):

GAME PRACTICE SCRIMMAGE DRILL

TYPE OF SURFACE: \_\_\_\_\_

WEATHER CONDITIONS: \_\_\_\_\_

SCHOOL/ORGANIZATION: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_

PRINCIPAL: \_\_\_\_\_

COACH: \_\_\_\_\_ TRAINER: \_\_\_\_\_

TREATING PHYSICIAN: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_

HOSPITAL: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_

PLEASE CIRCLE THE APPROPRIATE ITEM IN EACH OF THE AREAS BELOW:

1. Sport at the time of injury  
FB - Football  
GY - Gymnastics  
AQ - Aquatics  
WR - Wrestling  
BX - Boxing  
SK - Skiing  
MS - Motor Sports  
SO - Soccer/Rugby  
HK - Hockey  
BB - Baseball  
SB - Skateboarding/Bicycling  
TF - Track/Field  
BK - Basketball  
? - Other/Unknown
2. Position (if football)  
OB - Offensive Back  
QB - Quarterback  
OL - Offensive Line  
DB - Defensive Back  
DL - Defensive Line  
LB - Line Backer  
SP - Specialty Team  
? - Other/Unknown
3. Activity (if football)  
AT - Active Tackling  
PT - Tackled  
BK - Blocking  
CO - Collision/Pile-Up  
PB - Blocked  
MR - Machine Related  
? - Other/Unknown
4. Mechanism of Injury  
CMP - Compression (Axial Loading)  
HEX - Hyperextension  
HFX - Hyperflexion  
LFX - Lateral Flexion  
ROT - Rotation  
CFX - Compression-Flexion  
CFR - Compression-Flexion Rotation  
FXR - Flexion-Rotation  
? - Other/Unknown
5. Initial Neurological Status  
NR - Normal  
AM - Ambulatory  
QD - Quadriplegic  
TQ - Transient Quadriplegic  
UN - Unconscious  
AC - Anterior Cord Syndrome  
PC - Posterior Cord Syndrome  
CC - Central Cord Syndrome  
RD - Root Deficient  
DE - Death  
? - Other/Unknown
6. Current Neurological Status  
NR - Normal  
AM - Ambulatory  
QD - Quadriplegic  
TQ - Transient Quadriplegic  
UN - Unconscious  
AC - Anterior Cord Syndrome  
PC - Posterior Cord Syndrome  
CC - Central Cord Syndrome  
RD - Root Deficient



DE - Death  
? - Other/Unknown  
Disabled (Specify) \_\_\_\_\_

7. *Treatment*  
SG - Surgery  
TR - Traction  
CA - Cast  
CO - Collar  
BR - Brace  
NO - None  
? - Other/Unknown
8. *Anatomy*  
H - Head  
N - Neck (C1 2 3 4 5 6 7)  
? - Other/Unknown
9. *Pathology - Neck Injuries*  
Fx - WCM - Fracture (Wedge Compression)  
Fx - BUR - Fracture (Burst)  
Fx - POS - Fracture (Post. Element)  
Fx - JEF - Fracture (Jefferson)  
Fx - ODT - Fracture (Odontoid)  
Fx - HNG - Fracture (Hangman's)  
Fx - CLY - Fracture (Clayshoverler's)  
Fx - ? - \*Fracture - Unspecified  
SUBLX - Subluxation  
DL - AAX - Dislocation (Atlanto-Axial)  
DL - BLF - Dislocation (Bilateral Facet)  
DL - ULF - Dislocation (Unilateral Facet)  
DL - ? - \*Dislocation - Unspecified  
FS - ANT - Fx/Sublx (Ant. Element)  
FS - POS - Fx/Sublx (Post. Element)  
FS - COM - Fx/Sublx (Combined)  
FS - ? - \*Fx/Sublx - Unspecified  
FD - ANT - Fx/Disl (Ant. Element)  
FD - POS - Fx/Disl (Post. Element)  
FD - COM - Fx/Disl (Combined)  
FD - ? - \*Fx/Disl - Unspecified  
HEM - Hematoma/Hemorrhage  
CONCUS - Concussion  
CONTUS - Contusion  
SPRAIN - Sprain/Strain  
HERDIS - Herniated Disc  
? - Other/unknown
10. *Pathology - Head Injury*  
Fx - SKL - Skull Fracture  
HEM - EP - Hematoma (Epidural)  
HEM - SD - Hematoma (Subdural)  
HEM - SA - Hematoma (Subarachnoid)  
HEM - IC - Hematoma (Intracranial)  
HEM - ? - \*Hematoma - Unspecified  
CONCUS - Concussion  
CONTUS - Contusion  
EDEMA - Edema  
LACRTN - Laceration  
? - Other/Unknown
11. *Pathology - Other*  
CARDAR - Cardiac Arrest  
HEATSK - Heat Stroke  
SUDDTH - Sudden Death Syndrome  
? - Other/Unknown
12. *Helmet*  
Brand \_\_\_\_\_  
  
Model \_\_\_\_\_
13. Has the athlete ever had a similar injury previously?  
WHEN? \_\_\_\_\_

NAME (reporter): \_\_\_\_\_

PHONE: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

POSITION: \_\_\_\_\_

DATE: \_\_\_\_\_

FOR INTERNAL USE ONLY:

DATE ENTERED: \_\_\_\_\_

NAME: \_\_\_\_\_

COMPLETE: \_\_\_\_\_

INCOMPLETE: (specify) \_\_\_\_\_

The National Federation of State High School Associations report is as follows:

National Federation rejects proposal concerning exterior warning label

The **National Federation Football Rules Committee** has rejected a proposal both in 1984 and 1985 which would have required that each player's helmet must not only meet the "NOCSAE Standard," but must also have exterior warning label.

The NOCSAE Board of Directors at their meeting in Nashville on January 12-13 (following the football rules committee meeting) took action which made the exterior warning label a part of the standard for the football helmet and batting helmets. This means that if a rules committee mandates a helmet which meets the NOCSAE standard, the helmet must have an exterior warning label.

Since the Football Rules Committee met prior to NOCSAE's action, it does not affect the football rule for the 1985 season. However, the committee will need to be aware of this when they meet in 1986, and the baseball and softball rules committees will need to consider this at their meeting in June.

The National Federation has supported and encouraged the use of the exterior warning labels. In fact, a major effort was made in 1982 and 1983 to obtain and distribute huge quantities of these labels.

While the label will not be mandatory by rules in 1985 in football, schools are encouraged to use them. The exterior label is part of the educational effort in alerting players to the possibility of injury and the danger of using illegal techniques.

The Sporting Goods Manufacturers Association (SGMA) has stated that all football helmet manufacturers and all batting helmet manufacturers will provide free labels to the schools. Helmet reconditioners will also provide such labels to their customers. The sporting goods dealers and individual salesman, in most cases, will also supply them to the school clients.

Following is a list of football and baseball helmet manufacturers:

#### Football Helmet Manufacturers

Bike Athletic  
P.O. Box 666  
Knoxville, TN 37914  
(800) 251-9230

Nocona Athletic Goods Co.  
P.O. Box 329  
Nocona, TX 76255  
(817) 825-3326

Riddell - MacGregor  
P.O. Box 41697  
Chicago, IL 60641  
(312) 794-1994

Hutch Sporting Goods Co.  
1928 W. 8th Street  
Cincinnati, OH 45204  
(513) 251-4510

Rawlings Sporting Goods Co.  
2300 Delmar Boulevard  
St. Louis, MO 63166  
(314) 241-2900

Mac-Pro Helmet, Inc.  
P.O. Box 8580  
Waco, TX 76710  
(817) 777-5010

#### Baseball Batting and Helmet Manufacturers

American Baseball Cap, Inc.  
Station Road  
Media, PA 19063  
(215) 565-0945

MacGregor - Riddell  
P.O. Box 41697  
Chicago, IL 60641  
(312) 794-1944

George Frost Company  
Leominster Road  
Shirley, MA 01464  
(800) 225-0657

Nocona Athletic Goods Co.  
P.O. Box 329  
Nocona, TX 76255  
(817) 825-3326

Rawlings Sporting Goods Co.  
2300 Delmar Boulevard  
St. Louis, MO 63166  
(314) 241-2900

Mac-Pro Helmet, Inc.  
P.O. Box 8580  
Waco, TX 76710  
(817) 777-5010

Hutch Sporting Goods, Inc.  
1928 W. 8th Street

Cincinnati, OH 45204  
(513) 251-4510

April 2, 1985

Mr. Dick Schindler  
National Federation of  
State High School Associations  
Post Office Box 20626  
Kansas City, Missouri 64195

Dear Dick:

Would you please explain the headline on page 10, Volume 2, Number 7, March 1985, issue of *National Federation News* which stated "National Federation rejects proposal concerning exterior warning label."

Thank you for a classification of this meaning.

Sincerely,

Otho Davis, ATC  
Executive Director  
NATA, Inc.

April 9, 1985

Otho Davis  
Executive Director  
NATA, Inc.  
1001 East 4th Street  
Greenville, NC 27834

Dear Otho:

This letter is in regard to your question concerning the article in the National Federation NEWS.

The headline is misleading as far as what actually transpired. I will try to summarize as follows.

For the past two years, the National Federation Football Rules Committee has had on its agenda a proposal that would have mandated an exterior warning label on the football helmet. The Football Rules Committee did not approve this item in either of the last two rules committee meetings. However, following the National Federation's 1985 Football Rules Committee meeting, the NOCSAE committee subsequently met and made the warning label a part of the NOCSAE Standard. Since the Football Rules Committee had met prior to this action, the warning label is not a part of the National Federation Football Rules for the 1985 season. At the 1986 Football Rules Committee meeting, we will have to consider the language we use when referring to a "helmet which meets the NOCSAE Standard" since now the warning label is part of the Standard. If we keep the language the same, it would in fact mean that beginning in 1986 every football player would have to have a helmet that not only includes the NOCSAE seal, but has the visible exterior warning label.

I hope you didn't get the wrong idea from the headline. The National Federation has been the leader in promoting the use of the exterior warning label; and in fact, we are the first organization to dispense huge quantities (over one million, five hundred thousand) to our member schools in 1982 urging them to begin using the exterior warning label. It was upon the Federation's recommendation that the entire push toward the exterior helmet warning label has become a reality.

Thank you very much.

Sincerely,

Dick Schindler  
Assistant Director  
National Federation of  
State High School Associations

#### IV. AUDIOVISUAL AIDS:

Moved by District 9, seconded by District 10 and carried 10-0 to approve the April 15th report for informational purposes.

Moved by District 8, seconded by District 6 and carried 10-0 that Mr. Bill Prentice coordinate the use of the NATA special exhibit with the Audiovisual Aids Committee and that any excessive damage will be paid for by the district using the exhibit and that all freight charges not authorized by the Board of Directors will be paid by the user.

Moved by District 3, seconded by District 5 and carried 10-0 that Mr. Prentice be permitted to take this booth to the meetings of the American Association of School Administrators (AASA) and the National Association of School Boards (NASB).

The report is as follows:

TO: Board of Directors  
FROM: Jerry Nowesnick  
RE: Audiovisual Aids  
Committee Report

DATE: April 15, 1985

#### I. Committee Report

1. The Audio Visual Aids Media Review room will be coordinated by Allen Eggert of Rice University - District VI.
2. Viewing hours in the media room will be

Sunday, June 9th, 9-5 pm and Monday, June 10th, 8-5 pm in the Convention Center, Room #2.

3. A list of audio visual equipment to be used has been forwarded to Tim Kerin and Allen Eggert.
4. The annual AV committee will be on Monday, June 9th at 12 noon.
5. Copies of the audiovisual aids, audiocassettes and sportsmedicine text reference bibliographies will be available in the media review room.
6. We have had approximately twenty four requests for audio/visual materials in the past six months.
7. The audio visual aids column in the Athletic Training journal should appear in the fall edition after a bibliography update has been completed.

## II. Recommendations for Requested Board Action

1. Approval of committee members as submitted on 1985 committee roster.

## III. Committee Members

1. The 1985 AV Committee Roster:

### 1985 AUDIOVISUAL AIDS COMMITTEE

#### Chairman

Jerry Nowesnick  
College of DuPage C.C.  
22nd & Lambert Rds.  
Glen Ellyn, IL 60137

#### District I

Michael Rule  
Keaney Gymnasium  
University of Rhode Island  
Kingston, RI (02881)  
401-792-2051

#### District II

G. Patrick Connors  
Program Director  
The Institute For Medicine in Sports  
Hamilton Hospital  
P.O. Box 2621  
Trenton, NJ 08690  
609-586-7900 ext. 6677

#### District III

Terry O'Brien  
Athletic Dept.  
Towson State University  
Towson, MD 21204  
301-321-2737

#### District IV

Robert S. Gray, Jr.  
Sports Medical Clinic  
3187 West 21st Street  
Lorain, OH 44053  
218-282-6262

#### District V

Glenn John Meidl  
Tulsa Sports Med  
Suite 200  
Tulsa, OK 74135  
218-744-6521

#### District VI

Allen Eggert  
Rice University  
Athletic Dept.  
P.O. Box 1982  
Houston, TX 77251  
713-527-0942

#### District VII

Tom Abdenour  
Weber State College  
Box 2710  
Ogden, UT 84408  
801-626-6501

#### District VIII

Bob Smetanka  
Sport Health  
1455 Montego  
Walnut Creek, CA 94598  
415-945-7309

#### District IX

To be announced

#### District X

Dennis Murphy  
Athletic Treatment Center  
University of Montana  
Missoula, MT 59812  
406-243-6362

## V. DRUG EDUCATION:

Moved by District 3, seconded by District 2 and carried 10-0 to table the issue of drug testing indefinitely for consideration.

Moved by District 9, seconded by District 10 and carried 10-0 to table the issue of drug testing indefinitely for consideration.

The report is as follows:

### NATA DRUG EDUCATION COMMITTEE APRIL 13, 1985

1. In response to the second directed item in the February 11, 1985, communication from Bobby Barton, "attempt to secure information on the conclusions of the February 22, 23 meeting on drug testing held in Chicago."

This meeting was sponsored by Northwestern University. The keynote speaker was Carl Blyth of UNC-Chapel Hill. According to Carl:

- A. Not all speakers used prepared notes.
- B. No transcript was made of the meeting.
- C. It was his opinion that the real conclusions were made by the individual participants as they compared their individual notes after the session.

According to Carl Blyth, there was no new information presented at this meeting, but only a distribution of the information already available to the NATA Board of Directors from the Drug Education Committee.

2. John Wells was interviewed regarding drug testing by M. McNamara's "Sportstalk" show on KFRU Columbia, Missouri.
3. An up-date of the November 9, 1984 NATA Drug Education Committee Report shows that twenty-one schools have now responded to our request for drug screening procedures.

Of these twenty-one schools, nine use the Emit (Syva) equipment on-site, seven schools use independent laboratories (one of which used the Emit system), and five schools did not, or would not, indicate testing procedures.

The Athletic Trainer is responsible for drug screening at ten of the twenty-one schools. The seventeen schools that did, or would respond, indicated Drug Education as a part of their drug screening procedure.

The enforcement, or penalties assessed, still ranged from none ("the drug athlete will eventually eliminate himself from the team"), to immediate suspension (one week) for the first offense.

If the school has a "voluntary" drug screening program, and the athlete refuses to voluntarily comply with the testing, the athlete's coach is not compelled to play the athlete. Two Athletic Trainers stated that this was understood at their schools. One school uses failure to comply with testing as a basis for automatically assigning the athlete to their first offense category. Two schools tie compliance with drug testing to financial aid.

### LABORATORIES AVAILABLE FOR DRUG TESTING

3 M Drug Testing Clinical Laboratory Services  
Box 42  
Ventura, CA 93002

Check Point Laboratories  
Box 3510  
Manassas, VA 22110

The American Institute for Drug Detection  
838 Dodge Avenue  
Evanston, IL 60202

These laboratories indicate that they will handle schools on a national basis.

Based on the NCAA Drug Testing Survey, there are an additional forty-three schools doing drug screening. The Drug Education Committee is currently trying to receive copies of procedures from these schools.

TO: John Wells  
FROM: Scott Biron  
DATE: April 8, 1985

I am writing with regard to my recent telephone call with Mr. Eric Zemper, Research Coordinator for the NCAA. We discussed the meeting that occurred in Chicago on February 22 and 23. Eric stated that the meeting was held at Northwestern University and was not connected directly with the NCAA Drug Education Committee. The meeting was a Drug Testing Symposium held by the University. The NCAA was contacted in need of a liaison to speak at the workshop. Carl Blyth was the NCAA chosen representative.

As for the NCAA Drug Education Committee, Eric stated that the Committee is in the process of revising legislation and should be putting a Drug Education Program in front of the membership within the next several months. The program will describe a testing plan. The Committee has not yet had a chance to meet

because John Thompson of Georgetown University, one of the Committee members, has not yet finished with his basketball season. The Committee consists of only one technical staff member. The majority of the other members are administrators which include Jackie Sherrill.

The Drug Education Committee will meet early in May and attempt to find funding to produce several videos on Drug Education for the member institutions. This attempt has been going on for several years and due to loss of revenue from football television, this project is not foreseen as developing.

Presently, some matters are now being put together considering the legality of drug testing for the NCAA and the individual schools who are doing testing at this time. The University of Indiana is helping Eric out with the legality end. His office study done in December of 1983 consisted of 12-14 member institutions performing some type of drug education program. In November of 1984, the follow-up study estimates 84-87 schools involved.

Another interesting point to consider is that many of the field testing equipment utilized by each school has 2-8% problems. It was mentioned that the conformity procedures that the schools deal with after they have a positive test are not planned out well. Some of these procedures are repeating the test with the same field equipment. This would not stand up in a court of law.

Once again, I will make sure that Eric documents the figures to make sure they are reliable sources. He is overseeing several fairly sizeable committees and can only touch base with these committees from time to time. I feel that Carl Blyth would be the contact person as Eric does mention his name quite frequently. I will keep you informed of any additional information.

In closing, I have started my pursuit of cocaine information. I have contacted Senator Paula Hawkins, Chairperson of the Subcommittee on Alcohol and Drug Abuse. She will be contacting me. I have also looked at different cocaine articles in the library.

May 7, 1985

Mr. Otho Davis  
c/o Philadelphia Eagles  
Veterans Stadium  
Philadelphia, Pennsylvania

Dear Otho:

In response to your Memo of April 30th, I have reviewed the 1985 Drug Education Committee report. I commend John Wells and the Committee for a fine report which does an excellent job of covering all facets of the subject matter. While I believe the idea behind the report is a good one, I have several thoughts which should be considered by you and the Board:

1. You should consider deleting the word "model" as it refers to the guidelines and limit the report to "suggested" guidelines. The term "model" gives the user the impression of having a higher degree of credibility than perhaps the Board intends for it to have. I am sure neither the Board nor the Committee intends for what they are sending out to be definitive and run the risk of someone accusing the NATA of holding itself out as the ultimate authority on drug testing.

2. Although the report wisely points out the necessity of conferring with local counsel, this cannot be overstated. I think this point should be emphasized several more times because the potential for legal problems to arise out of this kind of thing is great for the organization or educational institution.

3. Whenever possible, the trainer should limit his involvement to assisting in collecting and packaging of specimens. Analyzing and providing the results for the test should be the responsibility of an independent lab. The use of an outside testing source would help to put the trainer in a more neutral situation and avoid problems which may further arise as discussed in #4 below.

4. The guidelines should remind the trainer that he should be alert for conflict of interest situations. The trainer may face pressure from the coach, athlete, or third parties who desire a particular result from the test.

5. It may be wise to have the results delivered to a particular designated individual, i.e., Athletic Director, who is relatively neutral and conflict free. This individual could then give the results to the person or persons designated in the guidelines.

I hope these suggestions are of some help to you and the Board in formulating an opinion as to what action to take as far as the drug testing policy will be.

Sincerely,

Laurence S. Graham  
Attorney at Law

## VI. GRANTS AND SCHOLARSHIPS:

It was moved by District 6, seconded by District 5 and carried 10-0 that this report be received for informational purposes.



The report is as follows:

TO: Bobby Barton  
Otho Davis  
NATA Board of Directors  
FROM: Frank George, Committee Chairman  
RE: Grants & Scholarship Committee Report  
DATE: April 1, 1985

#### Item 1

##### Committee Members and Duties

Bobby Barton - Ex-Officio  
Robert H. Gunn - Candidate Selection  
Lindsay McLean - Candidate Selection  
Charles Moss - Representative to Professional Baseball Trainers Fund  
Bob Reese - Representative to Professional Football Trainers Student Banquet  
Jerry Rhea - NFL Liaison  
Ron Sendre - Corporation Fund Raising  
Richard Vandervoort - Representative to Professional Basketball Trainers and Fund Raising

#### Item 2

##### Scholarship Selections for 1985

###### 1985 NATA Scholarship Winners

##### UNDERGRADUATE SCHOLARSHIP AWARD

Name: Kathleen Sue Hornickel  
School: Kearney State College  
Sponsor: National Football League Charities  
Name: Bradley A. Siebler  
School: University of Nebraska  
Sponsor: National Basketball Trainers' Association  
Name: Kirby T. Kauk  
School: Western Montana College  
Sponsor: Professional Football Athletic Trainers' Society

##### ROBERT H. GUNN SCHOLARSHIP AWARD

Name: Daniel Phillip Petra  
School: North Dakota State University  
Sponsor: National Athletic Trainers' Association, Inc.

##### SAYERS J. MILLER, JR. SCHOLARSHIP AWARD

Name: Phillip Gregory Bogle  
School: East Carolina University  
Sponsor: National Athletic Trainers' Association, Inc.

##### CHUCK CRAMER SCHOLARSHIP AWARD

Name: Dawn Anne Neff  
School: Ohio University  
Sponsor: Cramer Products, Inc.

##### FRANK CRAMER SCHOLARSHIP AWARD

Name: Susan Rose Roy  
School: Bridgewater State College  
Sponsor: Cramer Products, Inc.

##### WILLIAM F. X. LINSKEY SCHOLARSHIP AWARD

Name: Mary Kathleen O'Neil  
School: California State University at Fullerton  
Sponsor: Johnson & Johnson

##### WILLIAM E. NEWELL SCHOLARSHIP AWARD

Name: Scott James Belham  
School: University of Southern Mississippi  
Sponsor: Chattanooga Pharmaceutical Company

##### HAROLD MUNDY SCHOLARSHIP AWARD

Name: Janet R. Bristor  
School: Ithaca College

##### POSTGRADUATE SCHOLARSHIP AWARD

Name: Leslie Paul Sewall  
School: Northeastern University  
Sponsor: National Football League Charities

Name: Jody Carl Anderson  
School: Mankato State University  
Sponsor: National Basketball Trainers' Association

Name: Charles Michael Williamson  
School: University of Southern Mississippi  
Sponsor: Professional Football Athletic Trainers' Society

Name: Karen A. Baker  
School: East Carolina University  
Sponsor: American Orthopedic Society for Sports Medicine

Name: Paula Tomasovich  
School: University of Pittsburgh  
Sponsor: National Athletic Trainers' Association, Inc.

##### DEL C. HUMPHREY POSTGRADUATE SCHOLARSHIP AWARD

Name: Gregory Ray Kreitz  
School: California University at Long Beach  
Sponsor: Schutt Manufacturing Company

##### G. E. "MOOSE" DETTY POSTGRADUATE AWARD

Name: Christopher John Zang  
School: West Virginia University  
Sponsor: PRO Orthopedic Devices, Inc.

##### GOOD-SMITH POSTGRADUATE SCHOLARSHIP AWARD

Name: Richard Stephen Taddei  
School: Lock Haven State University  
Sponsor: School Health Supply Company

##### SCHERING-PLOUGH FOUNDATION POSTGRADUATE SCHOLARSHIP AWARD

Name: Russell Joe Hoff  
School: Ohio University  
Sponsor: Schering-Plough Foundation

##### POST GRADUATE SCHOLARSHIP AWARD

Name: Michael D. Ryan  
School: Central Connecticut State University  
Sponsor: Cybex Division of Lumex Corporation

Name: Michael Dee Green  
School: Brigham Young University  
Sponsor: Professional Baseball Athletic Trainers Society

#### Item 2B

##### Discussion of Criteria Established for Scholarship Applicants

There appears to be three or four criteria which have been questioned by a few members and which when adhered to ruled out some of the scholarship applicants.

- Some members (especially curriculum directors) feel that the one year membership requirement is an undue hardship and should be eliminated. The committee feels that this criteria, which was new this year, will not be a problem as we go into the second year of its enforcement and the curriculum directors are made more aware.
- One of the criteria in all scholarship categories is that the applicant intends to pursue a career in athletic training. This has been a criteria since the scholarships began. Two applicants were not considered because they stated they were pursuing other professions.

The committee feels strongly that this criteria should be maintained. The scholarships are given by NATA for students who wish to be athletic trainers.

- Students must have at least a 3.0 average to be considered for a scholarship. This is also a criteria which was established when the scholarships began.

There were five applicants this year who did not meet this criteria.

The committee feels that this criteria should be maintained. All of the applicants had glowing recommendations and a grade point average of 3.0 does not appear unreasonable for a scholarship award.

- In the nominating instructions it states that a certified athletic trainer may sponsor one scholarship applicant. There was some confusion and two members sponsored more than one applicant. This puts the committee in an awkward position if the "best" candidate is not selected (which was the case until a phone conversation cleared this matter).

There is no need for board action on these matters discussed. The committee would like the criteria established to remain unchanged for at least another year until we see if there are any real problems.

#### Item 3

##### Financial Statement

a. IDS - Cash Management Fund -	
3/25/85	\$23,846.78
b. IDS - Certificate of Deposit -	
1/28/85	70,326.67
c. Pawtucket Institution for Savings -	
4/1/85	12,964.28
d. Pawtucket Institution for Savings -	
4/1/85	3,000.00
NATA Athletic Trainers Benevolent Fund	
TOTAL	\$110,137.73

After the June, 1984 expenses and income were accounted for there was a balance of about \$93,000. This is when I took over as committee chairman.

After the June, 1985 expenses and income were accounted for I am hoping for an increase in the 1984 balance of about \$20,000.

#### Item 4

##### NATA, Inc. Athletic Trainers Benevolent Fund

After discussion with the Executive Director a separate fund was established by going through past

records to earmark donations to this fund. There is now \$3,000 in a certificate of deposit.

This fund is to be used for educational assistance of children of deceased members. The funding for the Benevolent Fund has been from a \$1,000.00 donation each year from G.E. "Moose" Dety, PRO Orthopedic Devices, Inc.

#### Item 5

##### Stamping of Checks

After April 1, 1985, all deposits will be made to Grants & Scholarships Accounts with an official stamp.

#### Item 6

##### Scholarship Awards - Monetary Portion

All scholarship winners will receive a letter notifying them of the award they have received and an invitation to the Student Banquet. They will also receive a form which must be filled in by the dean of their school stating that they are enrolled as a student in either the following summer, fall, winter or spring semester. If they should drop out of school they are eligible for the award when they enroll again. No checks will be distributed at the banquet. An appropriate plaque will be given to each student. When the form is received from the dean, the student will be mailed a check directly so that there will be no changes in the student's financial aid.

#### Item 7

Next year there will be a selection of candidates whose applications are received by 2/18/86. After this date, awards will be made as the applications are received until the twenty scholarships are awarded. Please notify your districts of this procedure. If the applications are received the way they were this year it will be on a first come basis and not on merit. This year the selections were made after April 1, 1985, and they were selected on merit. It is impossible to review each candidate's application and make the award selections on such short notice.

Please have all applications submitted prior to 2/1/86.

#### Item 8

A special thanks again to Susan Williams of the National Office. She has been a tremendous help.

#### Item 9

Help Us Raise Money - All Ideas, Leads, Assistance, etc., etc., will be greatly appreciated.

#### VII. INTERNATIONAL GAMES:

Moved by District 6, seconded by District 7 and carried 10-0 that the Board approve the suggested questionnaire and mail it back to the USOC for them to mail out if they so desire and with the NATA to provide the mailing labels.

#### VIII. NATA JOURNAL:

Moved by District 6, seconded by District 1 and carried 10-0 to thank Clint Thompson in an appropriate manner for his many years of service to the Journal Committee, with President Barton indicating that he would write this letter.

Moved by District 6, seconded by District 5 and carried 10-0 that the Journal Committee be instructed to put a wrapper on the Journal, this to begin as soon as possible.

Moved by District 5, seconded by District 4 and carried 10-0 that the report of the Journal Committee be accepted.

Moved by District 6, seconded by District 7 and carried 10-0 that Mr. Yates be given a mandate to complete the index concerning the Journal.

The report is as follows:

TO: Mr. Otho Davis, Executive Director  
FROM: C. Steven Yates, Chairman, Journal Committee, Editor-in-Chief

DATE: April 8, 1985

RE: Journal Committee Report to Board of Directors  
July 1984 - June, 1985

#### I. COMMITTEE REPORT

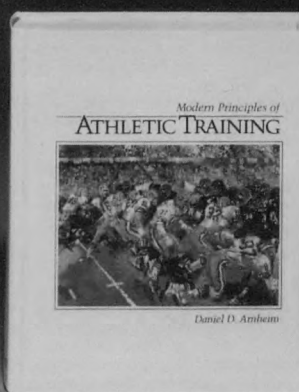
I would like to thank the Executive Director, President, and Board of Directors for the co-operation and support given the Journal during my two years as Editor-in-Chief.

Because the Journal is the primary vocal point for those engaged in the field of Sports Medicine, the standards of excellence must continue to improve and grow to meet the ever increasing academic demands placed upon our fellow colleagues.

We of the Journal Committee dedicate ourselves to this purpose through our publication.

#### A. IMPROVEMENTS JULY 1984 - JUNE 1985

1. Alter production schedule in order to



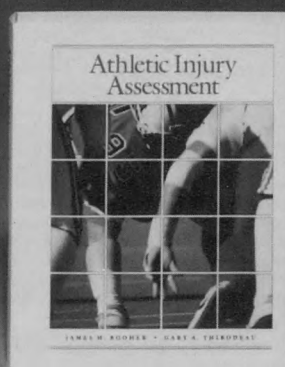
### New 6th Edition!

## MODERN PRINCIPLES OF ATHLETIC TRAINING

By Daniel D. Arnheim, D.P.E., A.T.C.

Continuing in the tradition of previous editions, Dr. Arnheim presents the latest in the field of athletic training and sports medicine. This edition includes recent advances in evaluation, management, and rehabilitation, as well as such new topics as computers, endorphins, enkephalin, and the effects of exercise on ligamentous structures. For quick reference, the general evaluation of injuries, concepts and principles of rehabilitation, and the emergency procedures sections are presented in a systematic way.

1985. 987 pages, with 1,038 illustrations. (2683-8) \$26.95



### NEW!

## ATHLETIC INJURY ASSESSMENT

By James M. Booher, Ph.D., A.T.C., R.P.T. and Gary A. Thibodeau, Ph.D.

### OUTLINE OF CONTENTS

Introduction and anatomic basis for athletic injury assessment

Athletic-related trauma

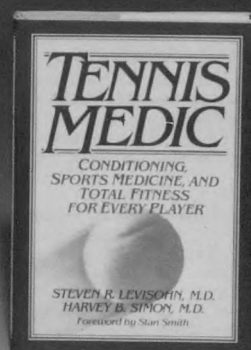
Athletic injury assessment process

Athletic injuries of the axial region

Athletic injuries of the lower extremities

Athletic injuries of the upper extremities

1985. 622 pages, 776 illustrations. (0711-6) \$25.95



### NEW!

## TENNIS MEDIC: Conditioning, Sports Medicine, and Total Fitness for Every Player

By Steven R. Levisohn, M.D. and Harvey B. Simon, M.D.

Here's a complete book on the recognition and treatment of the whole range of tennis ailments. It emphasizes treatment, active rehabilitation, and a rapid return to the sport.

- Conditioning for Tennis: How to Prevent Injuries and Improve Your Game
- Common Tennis Problems: Recognition, Treatment and Rehabilitation
- Tennis and Total Fitness

1984. 239 pages, 56 illustrations. (4669-3) \$14.95

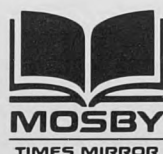
**Save time, call FREE:**

**1-800-345-8500, ext. 15.**

Our hotline is open 24 hours a day,  
7 days a week.

30-day approval good in U.S. and Canada. PRICES SLIGHTLY HIGHER OUTSIDE U.S. Outside U.S. and Canada, please pay by check or money order in dollar equivalent. ALL PRICES SUBJECT TO CHANGE. Add applicable sales tax.

Order 10 or more books and you automatically qualify for a 10% discount. Reward yourself and save money!



**AMS-403-999**

**YES! Please send me the books I've checked below on 30-day FREE office trial:**

- ☐ ARNHEIM (2683-8) \$26.95
- ☐ BOOHER-THIBODEAU (0711-6) \$25.95
- ☐ LEVISOHN-SIMON (4469-3) \$14.95
- ☐ WELSH-SHEPARD, CURRENT THERAPY IN SPORTS MEDICINE 1985-1986 (D-4598-0) Special introductory offer, \$42.00 (will be \$46.00)
- ☐ BIRD-CRIPE, PSYCHOLOGY AND SPORT BEHAVIOR (0600-4) About \$23.95

- ☐ Bill me, plus shipping charges    ☐ Payment enclosed
- ☐ MasterCard    ☐ VISA

Card # \_\_\_\_\_ Exp. date \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Bus. phone \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

☐ Add me to your mailing list. (No purchase necessary)

Specialty \_\_\_\_\_

To properly process Purchase Orders and for more personal service, mail this coupon to: Linda Anderson, The C.V. Mosby Company, 11830 Westline Industrial Dr., St. Louis, MO 63146

**AMS-403-999-03**



make deadlines and Journal delivery to the membership on time.

2. Implementation of abstract as lead-in to technical manuscripts.
3. New format with uninterrupted technical material, with majority of advertising in back according to member's request.
4. Subtle changes throughout to enhance clarity and ease of locating pertinent material (i.e.: Spring 1985, alphabetizing departments in Table of Contents, better identification of Journal personnel, updating mastheads)
5. Contacted various other paramedical organizations and periodicals regarding the NATA Convention and Journal, per direction from Nashville 1984 Board of Directors meeting.
  - a. American College of Sports Medicine
  - b. American Physical Therapy Association
  - c. Athletic Business
  - d. American Corrective Therapy Journal
  - e. American Medical Association
  - f. American School Health Association
  - g. Cramer First Aider
  - h. The Physician & Sportsmedicine
  - i. The Winning Edge
  - j. Sports Medicine Guide
  - k. Sportsmedicine Digest
  - l. Sports Medicine
  - m. American Orthopedic Society
  - n. American College Health Association
  - o. CYBEX — Division of Lumex
  - p. United States Sports Academy
  - q. Kendall Company
  - r. National Junior College Athletic Association
  - s. Professional Football Athletic Trainers Society
6. Receipt of highest revenue ever generated due to Journal advertising.

#### B. NEW BUSINESS

##### 1. Protective Cover

Yes, there are complaints from members pertaining to the condition of the Journal and its received condition. The cost to cover the Journal with a plastic cover would equal approximately the same as one color advertisement in the Journal (\$800.00-\$1,000.00 per issue).

##### 2. Index Update

This was brought to the Journal's attention in that the student membership lacks a research guide from the periodical that serves its best interest. It was last published in Spring 1981 with index articles from 1956-1979. This was done by Mr. Ed Christman free of charge. Athletic trainers searching for material and articles have found errors and a need for new categories and cross referencing.

This undertaking must be supervised by a person with a background in athletic training (not just any office person) and will take at least two people going through all the back Journals in Greenville to document this information.

A viable solution to retaining two individuals to do this index update would be to computerize this information for article reprint sales upon demand. This reprint information could be promoted through the Journal.

#### C. COMMITTEE MEMBERSHIP

All districts will be represented although some vacancies had to be replaced.

#### D. JOURNAL COMMITTEE MEETING

The Journal Committee is scheduled to meet from 1:00-5:00 p.m. in Salon B - Marriott Hotel Saturday, June 8, 1985 in San Antonio, Texas.

#### II. BUDGET REPORT

Per reported in February by Mr. Brooks McIntyre to the Board of Directors.

#### III. COMMITTEE MEMBERS

Attached page.

#### IV. SERVICE

I trust the Board of Directors will take time to thank Mr. Clint Thompson for his 15 years service to the NATA Journal as Editor. He has recently relinquished this position.

#### V. THANK YOU

Again, I wish to thank the Board of Directors, Mary Edgerley, Barbara Manning and Susan Piner for their continued support and desire to make the Journal a product for which all athletic trainers can be proud.

#### JOURNAL COMMITTEE

C. Steven Yates  
Committee Chairperson  
Editor-in-Chief  
District 3

- A. Selects a printer, with approval of the Board of Directors to produce and distribute *Athletic Training*
- B. Edits and selects copy appearing in each quarterly issue of *Athletic Training*

Head Athletic Trainer  
Sports Medicine Unit  
Wake Forest University  
Winston-Salem, NC 27109  
Phone: (919) 761-5620

Editor

(To be announced)

- A. Works with Editor-in-Chief, Director of Management to coordinate *Journal*
- B. Reviews all editorial material and rejects or submits editorials either for rejection or acceptance
- C. Works with Editorial Committee on upgrading articles submitted
- D. Handles all correspondence in reference to editorial matter
- E. Forwards accepted manuscripts to Editor-in-Chief for selection

Barbara Manning  
Business Manager; Proofreader; Copy Editor; Liaison

- A. All work (public relations, bookkeeping, correspondence, etc.) necessary to handle the approximately 800 outside (non-member) subscribers to the *Journal*
- B. Liaison with *Journal* advertisers and their agencies (billing, collection, correspondence and bookkeeping)
- C. Liaison with printer and layout department
- D. Handles all advertising sales and public relations with media and advertising work
- E. Makes last minute decisions with Editor-in-Chief such as deletions or additions to volume
- F. Orders volume of printing
- G. Liaison to Typesetting/Layout/Printer and with Caravan Graphics and Hunter Publishing Company
- H. Liaison with Editor-in-Chief working to develop *Journal* for publication
- I. Notes from the National Office

1001 East 4th Street  
Greenville, NC 27834  
Phone: (919) 752-1725  
Home: (919) 746-3523

Dennis Aten  
Potpourri Column  
District 4

- A. Prepare and submit material for Potpourri Column
- B. Assist Chairman or other Committee members

Athletic Trainer  
Eastern Illinois University  
Charleston, IL 61920  
Phone: (217) 581-5939

Deloss Brubaker  
Student Writing Contest  
District 9

- A. Mail information on preparing a journal manuscript to those student NATA members who request it
  1. Contest rules
  2. Common problems in previous years
  3. Reprint of "Writing Articles for the Journal" (*Athletic Training* 13: 196-198: 1978)
- B. Receive manuscripts from contestants
- C. Organize the judging of manuscripts
  1. Select judges
  2. Mail forms and manuscripts to judges
  3. Compile results from judges

- D. Inform Journal Committee Chairman of the winning entry

- E. Correct any problems with the winning manuscript and submit to the Editor-in-Chief for publication

#### Student Trainer Corner

- A. Receive and select material for articles for *Journal* publication

#### Editorial Board

- A. Evaluate and recommend submitted articles for publication
  1. Accept or reject submitted articles based on content and quality
  2. Assist the author in upgrading their format through grammar, restructuring use of visual aids, expansion, deletion, and other methods which may more effectively get the author's point to the reader

Athletic Trainer  
United States Sports Academy  
Mobile, AL 36608  
Phone: (205) 343-7700

Phil Callicutt  
Book Review Editor  
District 9

- A. Solicits new publications in sports medicine and examines them for possible review in the *Journal*
- B. Acceptable publications reviewed by editor or another certified trainer and submitted to the Editor-in-Chief for publication
- C. Edit all reviews before submitting them
- D. Send a copy of the review to the publisher

FLETC  
Glyncro, GA 31520  
Phone: (912) 267-2248

#### Current Literature Column (To be announced)

- A. Submit a list of recent articles related to the field of sports medicine and athletic training
- B. Choose the articles to be included on the list from members, periodicals or from library, (Readers Guide, Education Index, or Index Medicus)
- C. Submit subject and author indexes for all the articles in the *Journal* at the end of each year

Jeff Fair  
Calendar of Events Column  
District 5

- A. Compiles and periodically revises a mailing list of organizations who sponsor meetings of interest to athletic trainers - liaison with other publications
- B. Organizes and continually updates a filing system to keep athletic training events in chronological order
- C. Share lists of current events with other organizations who reciprocate by announcing NATA events in their publications
- D. Compiles a chronological list of current events for publication in each issue of the *Journal*
- E. Obtains district meeting information for publication

Athletic Trainer  
Oklahoma State University  
Stillwater, OK 74078  
Phone: (405) 624-5837

Donald Kaverman  
Schering Symposium Articles  
CEU Quizzes  
District 4

- A. Complete all details in getting authors' papers, permission, editing final draft
- B. Submits each paper to editor-in-chief so that there is a Schering paper in each issue
- C. Will make up questions from suitable manuscripts and develop into a quiz to be published with same article and offered to NATA membership for CEU credit
- D. Will develop an arrangement for accounting for money received, grading, and notifying NATA of CEU credit for those members who pass the quiz

Athletic Trainer  
Department of Athletic  
Ferris State College  
Big Rapids, MI 49307  
Phone: (616) 796-0461 Ext. 5512 or 5508

Phil Mateja  
Student Trainer Corner  
District 1

- A. Assist D. Brubaker in selection of articles for *Journal* publication

Athletic Department  
University of Maine  
Orono, ME 04469  
Phone: (207) 581-1072 (morning)  
(207) 581-1105 (afternoon)

Barrie Steele  
Tips From The Field  
District 10

- A. Receive, review and select material for publication

Athletic Trainer  
Washington State University  
Pullman, WA 99164  
Phone: (509) 335-0237

John Wells  
Abstract Column  
District 3

- A. Solicits pertinent articles from contributors  
B. Edits all abstracts  
C. Submit suitable abstracts to Editor-in-Chief

#### Drug Related Articles

- A. Writes and submits two drug related articles to editorial board annually for *Journal* publication

Sports Med/Athletic Dept.  
UNC-Asheville  
Asheville, NC 28804  
Phone: (704) 258-6459

David Yeo  
Association Activities  
District 2

- A. Compiles and edits district news, international news, individual accomplishments, historical flashbacks, member credits and awards  
B. Assisted by Mr. Mike O'Shea with Historical Flashbacks

Montgomery County Community College  
340 DeKalb Pike  
Blue Bell, PA 19422  
Phone: (215) 641-6510

#### EDITORIAL BOARD

Members evaluate and recommend submitted articles for publication and

1. Accept or reject submitted articles based on content and quality
2. Assist the authors in upgrading their format through grammar, restructuring, use of visual aids, expansion, deletion, and other methods which may more effectively get the author's point to the reader.

Ken Knight  
District 4  
Athletic Trainer  
Indiana State University  
Terre Haute, IN 47809  
Phone: (812) 232-6311

Dan Libera  
District 7  
Athletic Trainer  
University of North Colorado  
Greeley, CO 80639  
Phone: (303) 351-2282

Bob Moore  
District 8  
Athletic Trainer  
San Diego State University  
San Diego, CA 92182  
Phone: (714) 265-5551

Jim Rankin  
District 4  
Department of Health Promo and Human Performance  
University of Toledo  
Toledo, OH 43560  
Phone: ( )

Sue Halstead Shapiro  
District 4  
Queen City Sports Medicine  
2415 Alburn Avenue  
Cincinnati, OH  
Phone: (513) 621-3303

Mike Sherman  
District 6  
Human Performance Lab  
Texas A & M University  
Department of Health and Physical Education  
College Station, TX 77712  
Phone: ( )

#### IX. MEMBERSHIP:

Following a brief discussion concerning student membership and some of the difficulties being encountered in this regard, it was moved by District 8, seconded by District 5 and carried 10-0 to refer this matter back to Mr. Melin's committee for further study and report at a subsequent session of the Board.

Moved by District 4, seconded by District 10 and carried 10-0 to approve proposed changes in the NATA By-Laws to enable certain graduate students to pay dues of \$25 per year instead of \$75 per year as presented by the Membership Committee.

#### X. DISTRICT MATTERS:

The Board heard reports from the various Directors concerning matters of concern in their respective districts, it being indicated that many of these could be addressed and acted upon when various committee reports were presented.

Mr. Dan Libera, District 7, however, called attention to the concern of District 7 to the matter of dues, he then moving, at the request of his district, that dues be increased up to \$100 for certified members. There being no second, the motion was declared to have died for lack of a second.

#### XI. REPRESENTATION BY DISTRICT:

Mr. Gordon Graham, District 4, again brought up the concerns of his district concerning more equal representation. After brief discussion concerning some of the possible advantages and disadvantages, it was moved by District 9, seconded simultaneously by Districts 2 and 4, and carried 10-0 that a committee consisting of Past NATA Presidents, Bobby Gunn (District 6), Frank George (District 1), Bill Chambers (District 8) and with Bobby Barton as an ex-officio member, be appointed to study the present apportionment of representation by Districts and that this committee report to the Board of Directors with recommendations not later than the summer of 1986.

#### XII. LIAISON WITH CANADIAN ATHLETIC TRAINERS' ASSOCIATION:

Moved by District 10, seconded by District 6 and carried 10-0 that liaison be established with the Canadian Athletic Trainers' Association.

#### XIII. AMERICAN ALLIANCE OF HEALTH, PHYSICAL EDUCATION, RECREATION AND DANCE (AAHPERD)

Moved by District 10, seconded by District 5 and carried 10-0 to accept the report for information.

Moved by District 4, seconded by District 6 and carried 10-0 that further consideration of this addendum report be tabled to the Board's mid-winter meeting.

The report is as follows:

TO: Board of Directors, NATA, INC.  
FROM: Joe Godek, Liaison Representative to AAHPERD  
SUBJECT: Liaison Report

The National Council of Athletic Training (NCAT) of the American Alliance of Health, Physical Education, Recreation and Dance (AAHPERD) held its annual meeting in conjunction with the Centennial Convention of the Alliance in Atlanta, Georgia from April 17 thru April 21. Within the past year NCAT has made significant progress toward efficient and purposeful functioning as the single structure for athletic training within the Alliance.

Among significant decisions made by NCAT are the following which seem to be related to concerns of NATA.

1. Much discussion centered upon the development of position papers for presentation at the Alliance Delegate Assembly in Cincinnati in April of 1986. The following position papers will be developed:
  - a. NCAT will develop a position paper on the need for Athletic Trainers in secondary schools which sponsor interscholastic athletic programs.
  - b. NCAT would like to endorse, publish and disseminate the NATA position paper on drug abuse in sports.
2. Some thought was given to re-instituting the regional coaches workshops on care and prevention of athletic injuries. Should this activity be implemented it is hoped the NATA certified trainers will be of assistance to NCAT and serve as program presenters for these worthwhile professional endeavors.
3. Among the program topics which were decided upon for next year was a panel presentation on the need for certified athletic trainers in secondary schools. All agreed that school and athletic administrators should be the primary target group for this topic. Toward that end it was decided to offer this program in cooperation with the Athletic Directors' Council of NAGWS and NASPE.
4. Some discussion occurred relevant to a possible

liaison between NCAT and the Sports Medicine Section of the APTA. The liaison representative from NATA to NCAT stated that the NATA is the primary professional organization for matter related to the prevention and care of sports related injuries and the APTA plays only a minor role in such endeavors. No final decision was reached on this matter.

5. NCAT will lobby with the leadership and administration of AAHPERD to reach an agreement whereby athletic trainers who serve as speakers at AAHPERD meetings will not have to be members of the Alliance or pay the convention registration fee. This proposal was heartily endorsed by the liaison representative who again explained that the NATA is the primary professional organization for athletic trainers, and few are therefore interested in membership in AAHPERD. Historically the Alliance has enforced this regulation stringently and only a few professionals such as physicians and lawyers have been permitted to speak without holding membership and paying full registration fees. Positive action regarding this proposal will represent a significant step toward recognition of athletic training as a separate and unique profession.
6. Lengthy discussion took place regarding the role of NCAT. Council members were unanimous in the desire to be viewed as an organization that was designed to provide educational services to coaches and educators. It was agreed by council members that it would be inappropriate for the council to be viewed by anyone as a separate professional organization for athletic trainers. The liaison representative endorsed the position of NCAT members concerning the role of NCAT.

In view of the proceedings at the Atlanta Convention the liaison representative would like to make the following recommendations to the Board of Directors of NATA, Inc.:

1. That NATA continue to fund the liaison relationship with AAHPERD. Projected expenses for the representative to attend next year's Alliance Convention in Cincinnati, Ohio make it feasible that the \$500.00 expenditure recently being allotted for this professional activity would be adequate.
2. That the NATA allow NCAT to endorse, publish, and disseminate the NATA position paper on drug abuse in athletics. The potential for this valuable information reaching a significant number of educators, administrators and coaches will be greatly enhanced by positive action on this recommendation.

#### XIV. AMERICAN ORTHOPAEDIC SOCIETY FOR SPORTS MEDICINE (AOSSM):

Moved by District 6, seconded by District 7 and carried 10-0 to accept the report for information.

The report is as follows:

#### MEMORANDUM - March 4, 1985

TO: Board of Directors, NATA  
FROM: Joe Gieck, Liaison American Orthopaedic Society for Sports Medicine  
RE: 1985 Mid-Year Meeting AOSSM

The AOSSM met January 23 & 24, 1985 in Las Vegas with Dr. William C. Allen presiding. An excess of 1000 orthopedists and other allied health personnel were in attendance for a comprehensive program related to athletic performance, injury, surgery, and rehabilitation.

A meeting with Dr. James Andrews and the selection committee for the Distinguished Service Award for Athletic Training picked Warren Morris, ATC, University of Georgia as its recipient. Formal presentation will be in Sun Valley, Idaho, July, 1986. A \$2,000 contribution in his name will be made by the Society to the NATA Scholarship fund.

A meeting with Dr. Art Ellison and others indicated pleasure in the 1985 publication *Athletic Training and Sports Medicine*, joint venture between the AOSSM and NATA members.

A meeting with Dr. Fred Allman, liaison chairman, indicated a willingness on the part of the society to go on record as supporting athletic trainer state licensure. A formal request for this support should be forwarded by the NATA board to Dr. Allman.

Talking with some of the members of the society indicates a lack of current knowledge of the athletic trainer, NATA, and certification. I would strongly recommend that the NATA operate a booth at the AOSSM, 1985 annual meeting, Nashville, TN, June 30-July 3. With their continued support, I feel that this is a most important group to have current NATA education. The APTA's Sports Medicine Section had an effective booth in Los Angeles at the 1984 annual meeting.

Dr. Andrews, AOSSM liaison to the NATA, recommends that all NATA districts invite the AOSSM representative to their respective meetings, and if





possible include him on the academic program. An enclosure of district representatives is included.

Dr. Andrews is also in charge of the second annual AOSM Symposium to be presented at the annual NATA meeting in San Antonio. Also enclosed is a copy of the program.

#### AOSM LIAISON TO NATA DISTRICTS

**DISTRICT I:** Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, Quebec

District Director: Jack Baynes  
NW University, Boston, MA  
Liaison: Lyle J. Micheli, MD  
Boston, MA

**DISTRICT II:** Delaware, New Jersey, New York, Pennsylvania

District Director: E. Hal Biggs  
Bucknell  
Liaison: Joseph J. O'Connor, MD  
West Orange, NJ

**DISTRICT III:** Maryland, North Carolina, South Carolina, Virginia, West Virginia, District of Columbia

District Director: Andy Clawson  
The Citadel, Charleston, SC  
Liaison: Wayne Leadbetter, MD  
Rockville MD

**DISTRICT IV:** Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin, Manitoba, Ontario

District Director: Gordon Graham  
Mankato S. University, Mankato, MN  
Liaison: Michael Kolczun, MD  
Lorain, OH

**DISTRICT V:** Iowa, Kansas, Missouri, Nebraska, North Dakota, South Dakota, Oklahoma

District Director: Denis Isrow  
ND State U., Fargo, ND  
Liaison: Charles Mannis, MD  
St. Louis, MO

**DISTRICT VI:** Arkansas, Texas

District Director: Paul Zeek  
Lamar University  
Liaison: James Bowden, MD  
Waco, TX

**DISTRICT VII:** Arizona, Colorado, New Mexico, Utah, Wyoming

District Director: Dan Libera  
U. of Northern Colorado, Greeley, CO  
Liaison: George F. Hewson, MD  
Tucson, AZ

**DISTRICT VIII:** California, Nevada, Hawaii

District Director: Janice Daniels  
Sacramento, CA  
Liaison: Robert E. Cassidy, MD  
Huntington Beach, CA

**DISTRICT IX:** Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, Tennessee

District Director: Jerry Rhea  
Atlanta Falcons, Suwannee, GA  
Liaison: Raymond Shea, MD  
Louisville, KY

**DISTRICT X:** Alaska, Idaho, Montana, Oregon, Washington, Alberta, British Columbia, Saskatchewan

District Director: Mark Smaha  
Washington State University  
Liaison: Kenneth Singer, MD  
Eugene, OR

#### XV. AMERICAN PHYSICAL THERAPY ASSOCIATION (APTA):

Moved by District 9, seconded by District 8 and carried 10-0 to accept the report as information.

The report is as follows:

TO: Bobby Barton, NATA President  
FROM: Dennis Miller, Purdue University, NATA Liaison to the American Physical Therapy Association  
DATE: February 26, 1985

Just a quick note concerning the liaison position with the American Physical Therapy Association.

I was not able to attend the Physician/Therapist Conference held this year, however, from my conversations with their executives I don't know of anything new that they have proposed or anything that is urgent at this time. Their main concern still is the upgrading of the practice acts for physical therapy around the country.

#### XVI. NATIONAL ASSOCIATION OF COLLEGE DIRECTORS OF ATHLETICS (NACDA):

Moved by District 4, seconded by District 3 and carried to accept the report as information.

The report is as follows:

TO: Otho Davis, Executive Director  
National Athletic Trainers' Assoc.  
c/o Philadelphia Eagles-Veterans Stadium  
Philadelphia, PA 19148

FROM: Michael J. Cleary, Executive Director  
N.A.C.D.A.  
P.O. Box 16428  
Cleveland, OH 44116

DATE: February 14, 1985  
RE: Important Insurance Update

After reviewing medical policies made available by other associations as well as liability plans proposed by individuals, your NACDA insurance committee, comprised of Bud Jack, Cecil Coleman and Joe Kearney, recommended a total medical policy approach to the problem of offering lifetime benefits for the catastrophically injured athlete.

The super catastrophic insurance plan presented and approved by NACDA at our mid-winter meeting in San Diego was submitted by our current insurance company. This plan provides unlimited lifetime medical, rehabilitation and disability benefits for the student-athlete seriously injured while participating in intercollegiate athletics and related activities.

Additionally, our plan, nicknamed "Super Cat", offers the flexibility of direct coordination with NACDA's base coverage program. Those member schools needing insurance for standard athletic injuries will have the definite advantage of being able to purchase both basic and catastrophic insurance through the same company. Both programs will, of course, be handled by our insurance administration office in Salt Lake City.

The announcement packet on NACDA's super catastrophic insurance plan, including a benefit summary and premium figures, will be in your hands by the end of February.

We urge you to carefully study all aspects of the NACDA plan before you make a decision for 1985-86.

#### XVII. NCAA FOOTBALL RULES COMMITTEE:

Moved by District 10, seconded by District 1 and carried 10-0 to accept the report as information.

The report is as follows:

MEMO TO: Otho Davis  
Executive Director NATA  
FROM: Warren Morris  
Representative to NCAA Football Rules Committee  
SUBJECT: Justification Report

The N.C.A.A. Football Rules Committee is a group of dedicated hard working people that sincerely want the best rules for the game of football.

The principles that govern all rule changes are:

1. It must be safe for all playing the game.
2. It must be applicable to all institutions.
3. It must be a coachable rule.
4. It must be administrable by officials.
5. It must maintain the balance between offense and defense.
6. It must be interesting for the spectators.

The athletic trainer is invited by the chairman of the committee to report to the committee on anything that the NATA and its members have to report for the past year, concerning injuries or equipment.

There is one doctor from the AMA Medical Aspects, also invited to the committee. The doctor and athletic trainer are the conscience of the committee from time to time for safety reasons. The trainer is also on the equipment and injury sub committee which meets prior to the committee meeting and makes a report to the rules committee concerning any equipment or injuries that should be covered by the rules.

The athletic trianer has been well received by the committee and with accurate data the NATA can continue to help make rules like: No downfield blocking below the waist on kicks, no crack back blocks,  $\frac{1}{2}$ " cleats, mandatory mouthpiece, NOCSAE approved helmets for head safety, etc. to report accurately to the NCAA Football Rules Committee and the NATA Board.

I believe that the NATA should continue to have an NCAA Football Rules Representative and I believe that with close communication with the NATA Board, the NOCSAE Representative, the Injury and Research Committee of NATA, and the NCAA Injury Report, along with the doctor from AMA Medical Aspects of Sports, that progress will be continued for the NCAA Football Rules and National Athletic Trainers Association.

#### 1985 NCAA FOOTBALL RULES CHANGES

The NCAA Football Rules Committee liberalized blocking and use of the hand and arm rules and

abolished the 30-yard touchback provision on kickoffs that land beyond the end zone untouched by the receiving team.

The committee's action on offensive blocking and use of the hands and arms eliminated retreat block provisions from the rules. Teammates of a runner or passer now may legally block with the shoulder, hands, outer surface of the arm or any other part of the body provided the hands are in advance of the elbows, inside the frames of the blocker's and opponent's bodies and are at or below the shoulders of the player being blocked. Hands must be open with the palms facing the frame of the opponent and may be cupped or closed when not facing the opponent.

Previously, the hands and arms of offensive blockers had to be parallel to the ground and below the shoulders of the blocker and his opponent. Additionally, hands and arms had to be parallel to the ground and the arms could not be extended more than one-half of a full extension.

Touchback provisions on kickoffs will revert to the 1983 rule. The football will be placed on the 20-yard line on all touchbacks.

The committee adopted four rules changes in the interest of player safety.

An automatic first down was added to the penalty for flagrant facemask violations and for fouls out of bounds. Hurdling, previously defined as an attempt by a runner to jump with one or both feet or knees foremost over a player who still has his feet on the ground, now will apply to all players. Also, the exception for blocking below the waist on field goals and point after touchdown attempts was deleted.

Other major rules changes include moving the placement of the football at the beginning of tie-breakers from the 15- to the 20-yard line, allowing any offensive player who participated in the previous play to call a time-out and changing the basic enforcement spot on violations that occur behind the neutral zone on running plays to the previous spot (line of scrimmage).

\*Rule 1-2-1-d — To assist officials in determining catches, contrasting decorative colors in the end zone shall be no closer than four feet to the boundary or goal lines.

\*Rule 1-2-5 — To provide for better determination of successful field goals, uprights must extend to at least 29 feet above the crossbar by 1987.

\*Rule 1-4-2-b — Players no longer will need to report to the umpire before a scrimmage kick.

\*Rule 2-3-2 — Blocking below the waist will apply only when an opponent has one or two feet on the ground.

\*Rule 1-4-8 — Video equipment will be prohibited to all persons subject to the rules. No media audio devices will be allowed in the field of play.

\*Rule 3-3-2-j — Quarterbacks will have an unlimited amount of time to get a play off if crowd noise is too loud.

\*Rule 9-3-5 — No player may position himself with his feet on the back or shoulders of a teammate before the snap.

#### MEMO

TO: Homer Rice, Chairman  
NCAA Football Rules Committee  
FROM: Warren Morris, ATC  
National Athletic Trainers Association  
RE: January 21, 1985, Football Rules Committee Meeting

Safety of the players is paramount with the Athletic Trainers and we would like to comment on the following for the committee to consider. The National Athletic Trainers Association appreciates being included in the NCAA Rules Committee Questionnaire. Our survey is attached to this report.

It seems that all of the Athletic Trainers who responded to the questionnaire commented on the mandatory use of knee braces on all interior linemen and line backers. We would also like to recommend that no blocking below the waist be allowed. The chop block seems to still be in use and is not being called. This is the block that results in a career ending injury. We don't like the term "legal clipping zone." *Spearing, late hits, and piling on* are constantly given as complaints, and we as athletic trainers would like to encourage a stricter enforcement of the rules as they exist. Disqualification and missing the next game may help stop this serious use of his head and neck, not to say anything about his opponent or teammate. Some Trainers have even requested the mandatory use of neck rolls.

The on side kick is very exciting, but dangerous for all concerned. We have not seen any flags for interference spearing, piling on, etc. We would like to suggest that on this year's poster. (which could be black and white to save money) that it might show spearing, ramming, butting, head tackles, grasping the face mask, head slaps, etc., and show the danger of such action.



Officials need to help in the use of mandatory equipment. Some teams adhere to the mandatory equipment rules and then watch their opponents not wear his pants over his knees, nor wear hip or butt pads. The mouthpiece rules have saved many teeth as well as unknown number of concussions. The officials are the only ones on the field who can tell whether they are being used. Sideline and field safety must be mentioned as the players must play on the field which might have benches too close to the sideline. The goal post may or may not be padded along with fences and stakes to restrain the media with their tripods, TV cameras and sound equipment. The artificial surfaces are very abrasive and when you put thick paint on the field, the results are hazardous to the players. The media, TV personnel, etc., don't have any regulations concerning them in the team area. How can we penalize them? One official commented that they seem to do whatever they want.

We want to compliment this committee for its ongoing awareness of the safety of players. Injury prevention isn't easy, but it sure is better than rehabilitation.

#### **XVIII. NATIONAL OPERATING COMMITTEE ON STANDARDS FOR ATHLETIC EQUIPMENT (NOCSAE)**

Moved by District 4, seconded by District 1 and carried 10-0 to allow Mr. White \$500 per meeting of NOCSAE to represent the NATA, not to exceed two meetings per year.

SUBJECT: Report to NATA Directors  
FROM: R.C. White - Liaison to NOCSAE  
DATE: March 20, 1985

I think it is a professional embarrassment that most of the protective equipment that we as athletic trainers deal with does not have to meet any standards. Anybody can make anything they want and sell it for whatever purpose they want.

This ridiculous situation was recognized by us (NATA) and several other athletic-oriented organizations several years ago and their concern created the National Operating Committee on Standards for Athletic Equipment (NOCSAE). I am proud that NATA has had a history of having its liaison be consistently and actively involved in its actions (I am presently President). We (NATA and NOCSAE) need each other. Our mutual concern is athletics and the safety of those persons participating.

Enclosed please find the notes from the January 10, 11, 1985 meeting in Nashville.

I have enjoyed being the recent NATA liaison to NOCSAE and would be pleased to continue.

The projected budget of \$500.00 for total travel expenses is completely unrealistic. NOCSAE meets twice a year. Once in January at the time and location of the NCAA meeting, and the summer meeting will probably regularly be in Kansas City. These meetings are two day meetings necessitating travel to the site and room and lodging for two days. A fixed per diem may be realistic but the total expense must include the variable air travel expense.

Minutes of the National Operating Committee on Standards for Athletic Equipment (NOCSAE)

Board of Directors Meeting  
Opryland Hotel  
Nashville, Tennessee  
January 12-13, 1985

The meeting was called to order by President Robert White at 1:00 p.m. with the following Board members present: Ray C. Ball, National Federation (Vice President); Dick Schindler, National Federation (Secretary); Byron Goldman, NAERA (Treasurer); Don Gleisner, NAERA; Dick Lester, SGMA; John Axford, SGMA; Carl Blyth, NCAA; Eric Zemper, NCAA; Kermit Smith, NJCAA; John Miller, ACHA; Harry Olree, NAIA; Bill Kelly, AEMA; Dwight Hauff, Sports Foundation; Thomas Doyle, Sports Foundation.

Guest attending: Dr. Voigt Hodgson, Principal Investigator for NOCSAE; Sebastian DiCasoli, SGMA; Douglas Sherwin, Bike; Jim Van Deusen, Bike; Henry Cross, Bike; Larry Maddux, Bike; Allen Hager, Rawlings; Hal Mitchell, Rawlings; Dan Patterson, Rawlings attorney; Bob Humphrey, Schutt Manufacturing; Ken Nimmons, Schutt Manufacturing; Richard Ball, attorney; Red Dog Ettinger, Heads Up Football; Dave Nelson, NCAA Football.

Kermit Smith gave a welcome to the Board to the state of Tennessee. The first official order of business was to approve the Minutes of the previous meeting. Motion by Gleisner. Second by Hauff and carried.

President White stated that the selection of an Executive Director and Hodgson's report would be discussed during a closed session of the Board.

Also Dick Lester was accepted as SGMA representative for this meeting taking the place of Frank Gordon. Dick Schindler circulated a roster of the Board

membership for 1985 as submitted by the Directors of each of the organizations that are members of the NOCSAE Board.

Byron Goldman then gave the financial report of the Treasurer. All charges were paid as report showed \$18,444.54 in the bank and \$58,317.36 in the SGMA surcharge fund. A Motion by Doyle to approve. Second by Smith and carried. A copy of the financial report is attached.

Tom Doyle gave a report on the search for an Executive Director on behalf of the committee. The job description sheet was studied as well as the projected money commitment for either a part time for full time position. The Board suggested that President White be made a member of the committee. Motion by Gleisner to approve the guidelines as submitted and an expense budget not to exceed \$51,000 for an Executive Director, and that the committee is empowered to hire a Director for a 12-month period. Second by Goldman and carried.

Motion by Goldman that the warning label become a part of the NOCSAE Football Standard, and that each helmet shall have affixed to the exterior of the shell a clearly legible sticker which can be easily read without removal of any decal tape, other temporary material or permanent part and which contains language which effectively communicates to the purchaser and user the following information using the same or similar language:

#### **WARNING**

**NO HELMET CAN PREVENT ALL HEAD OR NECK INJURIES A PLAYER MIGHT RECEIVE WHILE PARTICIPATING IN FOOTBALL.**

Do not use this Helmet to butt, ram or spear an opposing player. This is in violation of the football rules and such use can result in severe head or neck injuries, paralysis or death to you and possible injury to your opponents.

Second by Doyle and carried on a show of hands 11-2 with one abstention.

The next item of business was discussion of new language of a warning statement developed by Bike. No action was taken.

The Board discussed whether warning statement forms should be read and signed, but no action was taken.

A progress report was made on the Pittsburgh litigation case. NOCSAE is still a part of the suit, but there is no progress or movement in the case. No further action was taken.

A letter from the Worth Sports Company attorney was read. President White also read a recent letter from Worth Sports Company. The company did cease using the NOCSAE name in advertising. No further action was taken.

The status of mandatory helmet recertification was discussed. An article Mr. Gleisner had written was circulated. No further action was taken.

Dick Schindler gave a report on the problem incurred with the batting helmet requirement for 1985, and the fact that after the National Federation had circulated a list of helmet models which met the Standard in July of 1982, schools had purchased helmets and then later found that they did not contain the embossed seal; so the National Federation put out a directive stating that if the helmets have the seal or if the school can determine that they were in fact manufactured after July 22, 1982 and met the Standard, that they did meet the intent of the rule.

Byron Goldman informed the Board that at the present there is an insurance coverage of a million dollars on the NOCSAE Board for \$841.00 and that a 3-million dollar coverage could be taken out for approximately \$1,580.00. After discussion there was a Motion by Goldman to increase the indemnity coverage to 5 million dollars. Second by Smith and carried.

Motion by Doyle that on an investigation if a \$5,000 deductible is in effect to reduce the deductible so that NOCSAE can handle it. Second by Axford and carried.

White reported on the California case and his deposition. Much discussion followed. Motion by Doyle that the President meet with legal counsel and develop a procedure to be used when a member is ordered to give a deposition. Second by Goldman and carried.

The Board then recessed until 8:00 a.m. on Sunday, January 13. The Board reconvened at that time.

Dr. Hodgson reported on the feasibility of establishing a recertification process for batting helmets. He informed the Board that it could be established. Motion by Gleisner and Second by Goldman that Dr. Hodgson continue his work to establish a batting helmet recertification procedure. Motion carried.

Dr. Hodgson reported on the face mask Standard. He felt that a Standard is not feasible at the present time because of the many different types and mounting mechanisms, and that he is not ready to recommend a Standard. He felt that perhaps the Standard should be two-fold in that the mask would be tested individually and then tested on a helmet.

The effect of aging on football helmets was discussed.

Much testing is done at present. In the past six months, the Investigator has tested many new football helmets. The purpose being to have data on the new ones to use later on to determine the effect of aging on helmets in the field.

Dr. Blyth then gave a preliminary report on injury research stating that there were 6 direct fatalities this past football season, 4 in high school, 1 in junior college and 1 in little league. In addition, there were 7 subdural injuries, 3 in high school and 4 in college. There were 5 indirect fatalities, 3 in high school and 2 in college. All as a result of heat problems. Also, there were 5 cervical injuries, 4 in high school and 1 in little league.

Voigt Hodgson then discussed the Heads Up issue and keeping the head up so that it does not get trapped. He stated that much work has been done and that additional study is required. Discussion followed, but no further action was taken.

The Board then discussed the consideration of a revision in the Impact Standard. The revision now reads:

Drop tests for initial certification shall be conducted on a separate helmet of each model is to be tested in each of the following sizes, 6%, 7 1/4 and 7%. All sizes must pass the test in order for model certification. Time interval between drops in a single location will be 75 seconds + or - 15.

Revised: Drop tests for certification shall be conducted on a separate helmet of each model in each size range in each shell size on the head model which is closest in size to being equal to or less than the maximum size specified by the manufacturer for that combination of shell and sizer. Time interval between drops in a single location will be 75 seconds + 15.

Section 6.2g (Recertification Procedures) now reads: Helmet selection should concentrate in those sizes which have the smallest space between the head and shell, i.e., 6%, 7 1/4 and 7 3/8, in most models.

Revised: Drop tests for recertification should select from those sizes in each size range in each shell size on the head model which is closest in size to being equal to or less than the maximum size specified by the manufacturer for that combination of shell and sizer.

Motion to adopt the revision by Gleisner. Second by Goldman and carried.

The President reported on letters which he had sent in regard to the \$10,000 he received from NFL Charities, and the \$5,000 NCAA grant. He also read a letter from the University of Texas Interscholastic League desiring an opinion regarding girls playing football. He was directed to indicate to the person that NOCSAE has only a helmet Standard and does not have any standards for any other football equipment.

The President notified the members that at the present time there would be no report on the batting helmet manufacturers regarding a surcharge, but to postpone this to the July meeting and to put it on the agenda for discussion at that time.

Byron Goldman advised the Board that he needs advice as to whether NAERA can assess a surcharge. It was suggested that he get an opinion from the NOCSAE attorney as well as the SGMA attorney.

The exterior warning label and the batting Standard was discussed and the question of whether the warning label should become a part of the Standard. Motion by Kelly to include it as part of the Standard; and that each helmet shall have affixed to the exterior of the shell a clearly legible sticker which can be easily read without removal of any decal tape, other temporary material or permanent part and which contains language which effectively communicates to the purchaser and user the following information using the same or similar language. Second by Axford and carried.

Baseball/softball batting helmet warning statement:

Do not use this helmet if the shell is cracked or deformed or if interior padding is deteriorated.

Severe head or neck injury, including paralysis or death, may occur to you despite using this helmet. No helmet can prevent all head injuries or any neck injuries a player might receive while participating in baseball or softball.

Motion by Axford that the NOCSAE seal on the batting helmets and the football helmets should have the wording "See warning inside" deleted from the seal. Second by Doyle and carried.

Motion by Gleisner that the Ad Hoc Face Mask Committee can be expanded by the wishes of the Principle Investigator. The membership of the Face Mask Committee are representatives from Schutt Manufacturing Company, Rawlings, Bike, Riddell, Nocona, Equipment Managers Association, President of NOCSAE and chaired by Dr. Hodgson. Second by Goldman and carried.

The SGMA will submit to the National Federation a list of football and batting helmet manufacturers who

will supply warning labels so that this information can be included in a memo which Dick Schindler will circulate to the state association calling attention to the fact that the warning labels are now part of the Standard. As the National Federation Football Rules Committee has already met, the rules adopted for the 1985 season do not include the mandatory use of the warning label. The National Federation will undoubtedly suggest to the state associations that they encourage all their member schools to acquire a supply of the warning labels from their dealers, manufacturers and reconditioners.

Dr. Hodgson then gave a summary of his research proposal for the period from February 1 through July 31, 1985 for the amount of \$65,000. Basically, he would continue present research; get helmet data to each firm; request for helmets to determine aging problem; conduct more study on shoulder pads, find out what happens when contact is made; also study on combination systems and study of rib protection devices. Face protector study to continue to develop a Standard; effect of recasting of face protectors; a neck injury study mixing studies using cadavers and also dummies; and a survey of batting helmets which are in the field. The proposal was discussed. Motion by Gleisner to accept the proposal. Second by Smith and carried.

The Board then agreed to put the question of NFL, Pro Baseball and USFL membership on the NOCSAE Board for consideration on the July agenda.

Eric Zemper gave a report on nominations for officers on behalf of Carl Blyth. The report was to keep all officers at their present duties. Motion by Smith to adopt the report. Second by Gleisner and carried.

The Board next discussed whether or not legal counsel should attend NOCSAE Board Meetings. Motion by Axford that a 3-man committee be established along with the Executive Director to select an appropriate legal counsel to attend NOCSAE Board meetings. A report is to be made at the July meeting. Second by Gleisner and carried. President White then appointed a committee consisting of Eric Zemper, John Axford and President White.

The Board next discussed meeting dates for July and determined that the next meeting of the NOCSAE Board would meet at the National Federation headquarters in Kansas City starting at noon on Wednesday, July 10th and all day on Thursday, July 11th. Upon Motion by Zemper and Second by Ball, the Executive Director and the President would determine which part of the meetings would be open and which part would be closed and also to prepare an appropriate agenda for each of those sessions. Motion carried.

Motion by Hauff and Second by Goldman to adjourn.

The Board was then notified that the committee working on the hiring of an Executive Director was going to meet with a potential candidate, and that the members of the Board could reconvene at 2:00 p.m. to see what action might have been taken. The Executive Director's committee met with Glen Meredith of Kansas City and offered the position to him at a salary of \$20,000 for a year's employment. Mr. Meredith accepted the position of Executive Director effective immediately. The Executive Director was then introduced to members of the Board who briefly met at 2:00 p.m. to visit with the newly hired Executive Director.

**NOTE:** In adding the figures of the proposed budget for the Executive Director as submitted and approved, it was found that the total should have been \$61,400 instead of \$51,000 as approved by the motion. The Committee felt the intent of the motion was to approve the budget as corrected and is therefore using the figure of \$61,000 for the Executive Director to work with. (A copy of the budget is attached).

Respectfully submitted,

Dick Schindler  
Recording Secretary

Following discussion, the NATA Board of Directors, being concerned with the present NOCSAE structure, composition and activities of this organization and the need for additional NATA representation on this group, it was moved by District 3, seconded by District 6 and carried 10-0 that this Board support the President's recommendation that Mr. Ned Ehrlich be the NATA official representative to NOCSAE.

#### **XIX. NOMINATIONS FOR OFFICE OF NATA PRESIDENT:**

The Board, acting as a Nominating Committee, considered the names and qualifications of various individuals submitted as nominees for election to the Office of NATA President and by secret ballot, elected the names of Jack Baynes (District 1) and Jerry Rhea (District 9) to be presented as candidates for election by the membership for this office.

#### **XX. ELECTION OF NATA VICE PRESIDENT:**

The Board elected Paul Zeek to serve in the Office of

Vice President for the ensuing year.

#### **XXI. EXECUTIVE DIRECTOR:**

Moved by District 6, seconded by District 2 and carried 10-0 to receive the report from Otho Davis concerning the resume of duties proposed relative to the employment of a future Executive Director and postpone any further action thereon to the Board's mid-winter meeting in order to give the Directors ample opportunity to study and digest this report at their leisure.

Moved by District 6, seconded by District 2 and carried 10-0 that Mr. Otho Davis be reappointed Executive Director for another year.

#### **XXII. SCHERING SYMPOSIUM:**

Moved by District 6, seconded by District 9 and carried 10-0 to accept this report for informational purposes.

#### **XXIII. PRESIDENT'S COUNCIL ON PHYSICAL FITNESS AND SPORTS:**

Moved by District 6, seconded by District 10 and carried 10-0 that further consideration of this report be postponed pending receipt of additional financial information. Following receipt of additional information, it was moved by District 6, seconded by District 1 and carried 10-0 that this report be accepted.

#### **XXIV. PUBLIC SPEAKERS BUREAU:**

By common consent, this item was eliminated from the agenda for any future consideration by reason of the fact that action taken in relation to an expanded public relations program would more than compensate for this bureau.

#### **XXV. NATIONAL HIGH SCHOOL COACHES ASSOCIATION:**

Moved by District 7, seconded by District 6 and carried 10-0 that the verbal report of Mr. Libera be accepted as information.

#### **XXVI. NATIONAL ACADEMY OF SPORTS VISION:**

Moved by District 2, seconded by District 6 and carried 10-0 that the NATA establish liaison with this organization.

#### **XXVII. ATHLETIC TRAINING SERVICES, INC.**

Moved by District 3, seconded by District 9 and carried 10-0 to accept this report for informational purposes.

#### **XXVIII. MERCHANDISING OF PRODUCTS:**

Moved by District 5, seconded by District 6 and carried that the NATA support the idea of merchandising of products as proposed by the Executive Director.

#### **XXIX. ACCIDENTAL DEATH INSURANCE:**

Moved by District 8, seconded by District 6 and carried 10-0 to accept the proposal from Otho Davis concerning accidental death insurance to include dues paying and retired members up to the age limits indicated with a final decision to implement such a plan upon findings by the Executive Director and if the plan is not a sound one it will be aborted by the Executive Director.

#### **XXX. PROFESSIONAL EDUCATION AND CERTIFICATION:**

Moved by District 2, seconded by District 3 and carried 9-0-1, with District 8 abstaining, that both of these committees look at the graduate programs and make a recommendation as to established guidelines that will permit Association graduate programs to become truly graduate programs in athletic training by no later than April 1, 1986.

Moved by District 10, seconded by District 3 and carried 10-0 that the P.E.C. in reporting to the Board with regard to removal of probationary status of institutions that these violations be explained to the Board through a brief statement in writing.

#### **XXXI. CONTINUING EDUCATION UNITS DELINQUENCIES**

Moved by District 3, seconded by District 10 and carried 10-0 to delete those members of the Association on the CEU Delinquency List for the period 1979-1981.

The report is as follows:

TO: NATA Board of Directors  
FROM: James B. Gallaspy  
Chairman  
Committee on Continuing Education  
RE: Report to Board  
DATE: April 15, 1985

1. On April 22, 1985, 990 certified members were notified they have been put on probation for deficiency in their Continuing Education requirements.
2. A list of each district's different members will be sent to each district director.

3. The Continuing Education Committee requests that a decision be made on those members who did not complete their Continuing Education requirement for the 1979-81 period and whose names were turned over to the membership committee in June, 1984.

#### **XXXII. AMERICAN RUNNING AND FITNESS ASSOCIATION:**

Moved by District 3, seconded by District 1 and carried 10-0 that the NATA establish liaison with this group with President Barton to write the necessary letters.

#### **XXXIII. FINANCIAL REPORT:**

Following presentation by Mr. McIntyre of his detailed financial report and presentation and answering of brief clarifying questions, it was moved by District 3, seconded by District 10 and carried 10-0 to accept the financial report as presented.

#### **XXXIV. NATA FOUNDATION:**

Following the presentation of a brief report by Mr. McIntyre concerning the financial condition of the Foundation, it was moved by District 10, seconded by District 6 and carried 10-0 that the report be accepted.

#### **XXXV. PROFESSIONAL EDUCATION COMMITTEE:**

Moved by District 4, seconded by District 6 and carried 10-0 that the following institutions be granted an additional five year approval of their education curriculums.

Bridgewater State University (Massachusetts)  
Canisius College (New York)  
William Paterson College of New Jersey  
West Virginia University  
Illinois State University (Graduate)  
Southern Illinois University  
University of Wisconsin (LaCrosse)  
North Dakota State University  
California State University (Northridge)  
East Carolina University (North Carolina)  
Eastern Kentucky University

Moved by District 2, seconded by District 5 and carried 10-0 that the probationary status of the following athletic training curriculums be removed effective June, 1985, due to demonstrated compliance with NATA Guidelines:

Appalachian State University (North Carolina)  
Ball State University (Indiana)  
University of North Dakota  
Slippery Rock University (Pennsylvania)  
University of Vermont

Moved by District 4, seconded by District 7 and carried 10-0 that the following schools be placed on probation for one year effective June, 1985, due to violations of the Guidelines as cited in the report:

Springfield College (Massachusetts)  
Lock Haven University (Pennsylvania)  
Brigham Young University (Utah)  
Toledo University (Ohio)

Moved by District 3, seconded by District 9 and carried 10-0 that initial NATA approval be granted to the athletic education training programs for a five-year period from June, 1985 to June, 1990, to:

Marshall University (West Virginia) (Undergraduate)  
California State University (Fresno) (Undergraduate)

Moved by District 2, seconded by District 10 and carried by a vote of 9-0-1, with District 6 abstaining, to table consideration of the State University of New York, Buffalo, being granted approval for an athletic training education program until additional information could be secured. Following the receipt of additional information, it was moved by District 4, seconded by District 2 and carried 8-0-2, with Districts 3 and 9 abstaining, that the University of New York, Buffalo, be granted approval for an athletic training education program as recommended by the Professional Education Committee.

Moved by District 6, seconded by District 2 and carried 10-0 that the following be reappointed to the Professional Education Committee for an additional one-year period, effective June, 1985; Gerald W. Bell; L. F. "Tow" Diehm; Dan Foster; Janet Guilfoyle; Peter Koechnecke; David Leigh; Ken Murray; Lou Osternig; David Perrin; Bill Prentice and Jack Redgren.

Moved by District 7, seconded by District 4 and carried 10-0 that the P.E.C. coordinate the distribution of the curriculum certificates; namely, that the name will be applied to the certificate at the P.E.C. office and that the P.E.C. office will send the certificate to the Program Director for distribution to his or her students.

The report is as follows:

National Athletic Trainers Association, Inc.



# Isoscan™ can.

We can make your Orthotron\* or Cybex\* finally come of age. The Computer Age, of course.



Isoscan improves your Cybex or Orthotron by adding the speed and accuracy of a personal computer

How does Isoscan do this? By joining forces with a computer to upgrade your Orthotron or

Cybex as a diagnostic tool for human performance testing and research.

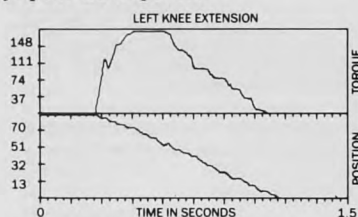
Use it for pre-season

and task screening, clinical testing and evaluation, even for reports submissible to physicians and insurance companies.

**COMPREHENSIVE ANALYSIS.** You can count on Isoscan's Comprehensive Analysis for complete data evaluation. Data collection includes biographical information as well as user-definable parameters for test duration, movement task and direction, body segment and speed setting. Your Analysis will include graph data; print data displaying positions, torques and times; along with a summary table print out. You will also be able to store and retrieve data and compare any two performances with the trial comparison feature.

**REPETITIONS AND MAXIMUM TORQUE.** Isoscan's Repetitions routine

Isoscan's comprehensive analysis includes graphs, summary reports and comparisons



NAME: JOHN STEVENS TEST DATE: 10/16/83  
WEIGHT: 173 INJURY DATE: 10/1/83  
HEIGHT: 72 SURGERY DATE:  
MOVEMENT: LEFT KNEE EXTENSION  
LEVER ARM: 1.2  
MAXIMUM TORQUE = 185.43 LBS-FT  
AVERAGE TORQUE = 117 LBS-FT  
MAX TORQUE/BODY WT = 1.07  
POSITION OF MAX TORQUE = 74.98 DEGREES  
RANGE OF MOTION = 97.5 DEGREES  
MAXIMUM FORCE = 154.52 LBS  
AVERAGE FORCE = 97.5 LBS  
ANGULAR WORK = 237.27 FT-LBS  
ANGULAR IMPULSE = 92.6 LBS-FT-SEC

collects data for any number of repetitive movements. It is used as a first step in testing. When abnormalities appear, you'll move on to Comprehensive Analysis.

With our Maximum Torque routine, you can investigate your patients' motivation as well as past performance. Real-time feedback and patient incentive are provided.

**NO LOST FILES.** Isoscan stores your files on a 5¼ inch floppy disk. To retrieve information, you just need to know the file number. A Directory is automatically created and updated as you add files through the Comprehensive Analysis and Repetitions routines.

**MONEY SAVER.** As you see on the accompanying graph, the cost of a retrofitted Orthotron—including the cost of a computer—is about half that of a Cybex system. Independent research indicates that with this combination you'll be able to gather data comparable to that from a Cybex.

If you have a Cybex, you can use Isoscan to expand it tremendously as a measurement tool. No other software program offers you more for the money than Isoscan.

Isoscan is designed to run on the Apple IIe, IBM PC and several other leading personal computers. Besides expanding your Orthotron or Cybex, these computers let you add time saving software for word processing, financial management, inventory control and many other functions.

Another money-saving plus: an experienced Cybex or Orthotron user—with no computer knowledge—can learn Isoscan in just a few hours.

**GUARANTEED ACCURACY.**

With Isoscan's System Utilities Functions you can count on guaranteed

accuracy of measurement values. *Speed Setting* allows you to establish degrees per second with the Orthotron for reliable and valid data. *Calibration* means your computer can calculate accurate position and torque values on your Cybex or Orthotron. And the *Diagnostics* function tells you if recalibration is necessary.

**SUPER SUPPORT.** You'll be glad to know, too, that you can count on the specialists at Isotechnologies, the developers of Isoscan, for dependable, ongoing support. We'll assist you with installation, any technical difficulties and everyday use. Periodic updates to the Isoscan program will be available to you at no cost.

**PLUS.** Isoscan is not the only Isotechnologies product you should know about.

Our Injury Records Program (IRP) combines four user-friendly programs to help you keep records of injuries and to produce accurate, useful reports within minutes.

Isotechnologies is also introducing computer-monitored Isostations. Setting

new standards in performance measurement for the back, shoulder, ankle, knee and neck, Isostations are the first machines that accommodate human motion naturally in three dimensions.

This is only an overview of all we can do for you—for less. Call us for complete information.



Isoscan runs on the IBM PC, the Apple IIe and other personal computers

Cybex with CDRC

Cybex with Isoscan and computer

Orthotron with Isoscan and computer



**ISOTECHNOLOGIES INC**

P.O. Box 640  
Carrboro, NC 27510  
919/929-7791

\*Orthotron and Cybex are registered trademarks of Lumex Corporation.

# For Less.

PROFESSIONAL EDUCATION COMMITTEE  
REPORT TO THE BOARD OF DIRECTORS  
April 15, 1985

Gary Delforge, Chairman

Information included herein should be considered as a progress report on Professional Education Committee (PEC) activities since February, 1985. An addendum report including PEC recommendations will be submitted in time for consideration at the June, 1985, Board of Directors meeting in San Antonio, Texas. No recommendations for Board action are included in this report.

PROFESSIONAL EDUCATION COMMITTEE  
ACTIVITIES

**Committee Membership.** No changes in committee membership or assignments have occurred since the last PEC report.

**Sub-Committee Meeting.** The second meeting of the Sub-Committee on Educational Planning was held on February 9-10, 1985 in San Antonio. Major issues discussed during this meeting included (1) formulation of policies governing the requirement that currently approved undergraduate programs (curriculum) be "in the process" of developing athletic training majors, or equivalent, by 1986. A draft of a questionnaire to be sent to all program directors and department heads in the Fall of 1985 was developed to facilitate verification of compliance with this requirement, (2) problems associated with approved curriculums simultaneously conducting athletic training internship programs, and (3) the need to formulate policies governing reporting of "unethical conduct" on the part of NATA members/athletic training educators observed during on-site visitation.

**Committee Budget Report.** As per policy established last year, Brooks McIntyre will submit the official 1984-85 PEC budget report to the Board of Directors. The PEC Chairman will provide Mr. McIntyre with a "breakdown" of PEC office expenditures covered by the University of Arizona service contract for the period ending April 30, 1985. NATA officers and board members may consult Mr. McIntyre for specific information regarding expenditures in this particular category of the 1984-85 PEC budget.

**Purchase of Memorywriter.** As approved by the Board of Directors at their February 1985 meeting, the PEC office has purchased a Xerox 640 Memorywriter. The memorywriter will remain the property of the NATA. Kanda Koehler, PEC Secretary, is most pleased and wishes to express her appreciation to the Board of Directors for their approval of this purchase.

ATHLETIC TRAINING EDUCATION PROGRAMS  
Graduate Education

**Program Evaluation.** Illinois State University was the only graduate athletic training education program to undergo a five-year evaluation this past year. A proposal for a new graduate program at SUNY - Buffalo was received by the October 1, 1984 deadline. The proposal was evaluated and an on-site visitation was conducted in March. Recommendations for Board action on these two programs will be presented at the June, 1985, meeting.

**Developing Programs.** As of April, 1985, three institutions have submitted official notices of implementation of graduate athletic training education programs. These include (1) University of Florida, (2) Temple University, and (3) the U.S. Sports Academy.

**Five-Year Program Evaluations.** On-site visitations to the following fourteen (14) undergraduate programs were conducted this past spring: (1) Bridgewater State College, (2) Springfield College, (3) Canisius College, (4) Lock Haven University, (5) William Paterson College, (6) East Carolina University, (7) West Virginia University, (8) Southern Illinois University, (9) Toledo University, (10) University of Wisconsin - LaCrosse, (11) North Dakota State University, (12) Brigham Young University, (13) California State University - Northridge, and (14) Eastern Kentucky University. SUNY - Cortland which was originally scheduled for a spring 1985 evaluation was granted a delay until the Fall of 1985 due to extensive personnel vacancies. Of the fourteen schools evaluated, eight programs were evaluated as athletic training majors, or equivalent, according to the 1983 Guidelines (Bridgewater State University, Springfield College, Canisius College, Lock Haven University, Southern Illinois University, Toledo University, North Dakota State University, and Brigham Young University). Recommendations for Board action on these fourteen programs will be presented in June.

**Program Proposals.** Proposals for new NATA approved Undergraduate programs were received from Fresno State University, Fresno, California, and New Mexico State University, Las Cruces, New Mexico, this past Fall. Following a review of written materials submitted, Fresno State University was approved for an on-site visitation which was conducted in April. A

review of the proposal from New Mexico State University indicated that their undergraduate program was not yet in full compliance with standards and criteria included in the 1983 undergraduate Guidelines. Thus, the on-site visitation was not approved. An initial on-site visitation to Marshall University, Huntington, West Virginia, in the Spring of 1984 revealed that their program was not in compliance with NATA Guidelines. Consequently, PEC action on their proposal was tabled in June, 1984 and, with mutual agreement of Marshall University and the PEC, a second on-site visitation was conducted this past spring.

Recommendations for Board action on undergraduate program proposals from Fresno State University and Marshall University will be presented at the June, 1985 meeting.

**Programs on Probation.** The following five (5) undergraduate programs were placed on one-year probation during the past year: (1) Appalachian State University, (2) University of Vermont, (3) Ball State University, (4) University of North Dakota, and (5) Slippery Rock University. Materials documenting steps taken to bring their programs into compliance with NATA Guidelines have been received from all schools. As of the date of this report, these materials are being reviewed by the Sub-Committee on Undergraduate Education. Recommendations for Board action on the probationary status of these five programs will be presented at the June, 1985 meeting.

**Developing Programs.** As of April, 1985, a total of eight institutions have submitted official notices of implementation of undergraduate athletic training education programs. These schools include: (1) Washburn University, (2) Valparaiso University, (3) Central Connecticut State University, (4) Kansas State University, (5) New Mexico State University, (6) St. John's University, (7) Temple University, and (8) California State University - Dominguez Hills. Correspondence has been received from approximately thirteen additional schools indicating a serious interest in developing undergraduate programs.

Education Program Projects

**Education Program Evaluation.** David H. Perrin, Project Director, has planned an informal evaluation team in-service training session from 6:00 - 8:00 p.m., Friday, June 7, 1985, in San Antonio in a continuing effort to keep evaluation team officers up-to-date on NATA Guidelines, visitation procedures, etc.

**Annual Reports.** Annual report forms for 1984-85 were sent to all undergraduate and graduate program directors on April 1st. The 1984-85 reports are due June 1, 1985.

**Program Graduates Placement.** The format for recording data regarding placement of education program graduates has been revised. Two new forms have been developed. The form "Undergraduate (Graduate) Placement Record Five-Year Period: 1983-1987" will provide a continuing summary of job placement for year-by-year comparisons, analysis of placement trends, etc. The form, "Program Graduates Placement Summary," represents an analysis and summary of job placement each particular year. As can be noted, job placement among graduates of undergraduate curriculums and graduate curriculums is now being presented separately.

The PEC is still attempting to determine how many of the total curriculum graduates each year actually complete NATA certification requirements, thus placing themselves in the job market. Hopefully, this information will be available in the future.

**Program Graduate Certification.** In cooperation with the Board of Certification, Janet Guilfoyle, Project Director, is continuing to make progress in development of a system for collecting data regarding certification examination results which will be of value to program directors in identification of possible curriculum strengths and weaknesses.

Internship Programs

**Internship Program Recommendations.** The newly developed manual, *Recommendations for Development and Implementation of Athletic Training Internship Programs*, is now in print and available for purchase through the National Office. The final copy incorporated those changes mandated by the Board of Directors at their February, 1985, meeting and was sent to Otho Davis and Bobby Barton for approval before final printing.

**Allied Clinical Setting Approval.** The policies and procedures for PEC approval of allied clinical settings (sports medicine clinics, etc.) have now been established. Jerry Bell, Project Director, will receive all applications and will forward proposals to a PEC sub-committee for evaluation. Jerry Bell, Bill Prentice, and Gary Delforge, will serve on this sub-committee.

SPECIAL PROJECTS

*Athletic Training Educators Workshop*

Pete Koehnke, Project Director, has finalized the program for the Athletic Training Educators Workshop to be held on Friday, June 7th, in San Antonio.

Honors and Awards

Ken Murray, Project Director, has received eight nominations for the 1985 Sayers "Bud" Miller Distinguished Athletic Training Educators Award. As of the date of this report, a PEC sub-committee is screening these nominations and will present their recommendation to the full committee for acceptance by May 1st. The award will be presented at the annual student trainer awards banquet in San Antonio.

NATA Professional Education Committee  
PROGRAM GRADUATES PLACEMENT SUMMARY  
Undergraduate Athletic Training Education Programs  
1984

PROGRAM/GRADUATES

A total of 60 of the 64 NATA approved undergraduate athletic training education programs submitted the program graduates report for 1984. These 60 programs reported a total of 348 graduates which represents an average of 5.8 graduates per school. Of the total number of graduates, 148 (43%) were men and 200 (57%) were women.

ATHLETIC TRAINING EMPLOYMENT

Of the total 348 graduates, 104 (30%) received employment in athletic training in colleges, high schools, professional sports, or related athletic training positions. Of the total 104 placements in athletic training, 53 (51%) were men and 51 (49%) were women. When placement among male and female graduates is considered separately, 53 (36%) of the total 148 male graduates and 51 (26%) of the total 200 female graduates were placed in athletic training positions.

**Type of Athletic Training Placement (Total).** When the specific type of placement among the total 104 graduates receiving athletic training employment is considered, 14 (13%) were placed in four-year colleges or junior/community colleges, 50 (48%) received employment in high schools, 4 (4%) were employed in professional sports organizations, 31 (30%) were placed in sports medicine or related clinics, and 5 (5%) received other types of athletic training employment.

**Type of Athletic Training Employment (Male vs. Female).** When the specific type of placement among the 53 male graduates receiving athletic training employment is considered separately 8 (15%) were placed in four-year colleges/universities or junior/community colleges, 28 (53%) received employment in high schools, 4 (8%) were employed in professional sports organizations, 12 (23%) were placed in sports medicine or related clinics, and 1 (2%) received other types of athletic training employment.

When the specific type of placement among the 51 female graduates receiving athletic training employment is considered separately, 6 (13%) were placed in four-year colleges/universities or junior/community colleges, 22 (43%) received employment in high schools, 0 (0%) were employed in professional sports organizations, 19 (37%) were placed in sports medicine or related clinics, and 4 (7%) received other types of athletic training employment.

OTHER PLACEMENT/EMPLOYMENT

Of the total 348 graduates, 244 (70%) continued their education at the graduate level, were employed in jobs other than athletic training, were unemployed at the time program graduate reports were submitted (October) or had not reported their employment status to their program director. Of the total 244 graduates who did not receive employment in athletic training, 158 (65%) entered into post-graduate study, 42 (17%) were employed in jobs other than athletic training, 8 (3%) were unemployed. The employment status of the remaining 36 (15%) was unknown.

NATA Professional Education Committee  
PROGRAM GRADUATES PLACEMENT SUMMARY  
Graduate Athletic Training Education Programs  
1984

PROGRAM/GRADUATES

A total of 7 of the 9 NATA approved graduate athletic training education programs submitted the program graduates report for 1984. These 7 programs reported a total of 81 graduates which represents an average 11.57 graduates per school. Of the total number of graduates, 41 (51%) were men and 40 (49%) were women.

ATHLETIC TRAINING EMPLOYMENT

Of the total 81 graduates, 65 (80%) received employment in athletic training in colleges, high schools, professional sports, or related athletic training positions. Of the total 65 placements in athletic training, 35 (54%) were men and 30 (46%) were women. When placement among male and female graduates is considered separately, 35 (85%) of the total 41 male



graduates and 30 (75%) of the total 40 female graduates were placed in athletic training positions.

*Type of Athletic Training Placement (Total).* When the specific type of placement among the total 65 graduates receiving athletic training employment is considered, 29 (45%) were placed in four-year colleges or junior/community colleges, 21 (32%) received employment in high schools, 2 (3%) were employed in professional sports organizations, 13 (20%) were placed in sports medicine or related clinics, and 0 (0%) received other types of athletic training employment.

*Type of Athletic Training Employment (Male vs. Female).* When the specific type of placement among the 35 male graduates receiving athletic training employment is considered separately 13 (37%) were placed in four-year colleges/universities or junior/community colleges, 12 (35%) received employment in high schools, 2 (5%) were employed in professional sports organizations, 8 (23%) were placed in sports medicine or related clinics, and 0 (0%) received other types of athletic training employment.

When the specific type of placement among the 30 female graduates receiving athletic training employment is considered separately 16 (53%) were placed in four-year colleges/universities or junior/community colleges, 9 (30%) received employment in high schools, 0 (0%) were employed in professional sports organizations, 5 (17%) were placed in sports medicine or related clinics, and 0 (0%) received other types of athletic training employment.

#### OTHER PLACEMENT/EMPLOYMENT

Of the total 81 graduates, 16 (19%) continued their education at the graduate level, were employed in jobs other than athletic training, were unemployed at the time program graduates reports were submitted (October) or had not reported their employment status to their program director. Of the total 16 graduates who did not receive employment in athletic training, 2 (12%) entered into post-graduate study, 51 (7%) were employed in jobs other than athletic training, 7 (44%) were unemployed. The employment status of the remaining 6 (37%) was unknown.

#### XXXVI. HONORS AWARDS:

Moved by District 5, seconded by District 6 and carried 10-0 that the report as presented by this committee be approved.

#### XXXVII. LICENSURE:

Following the presentation of two definitions of a certified athletic trainer recommended for use in various state lobbying activities concerning licensure, it was moved by District 8, seconded by District 7 and carried that the Licensure Committee is directed to include the two definitions as recommended by it, plus the definition previously adopted for insertion in the Guidelines as definitions to be used in any proposed model legislation.

#### XXXVIII. RESEARCH AND INJURY:

Attention was called to the previously submitted report and additional comments made by the Committee Chairman concerning a proposed research study. Following brief clarification as to the proposed procedure concerning the proposed study, it was moved by District 6, seconded by District 7 that the Board approve the research study, involving one sport, that of football, starting in 1986, in the amount of \$30,000, with no more than half of this amount to be spent in the first six months, with a report to be submitted back to the Board at its mid-year meeting. The motion was amended, seconded by District 8 and carried 10-0 that the motion be amended to also include a woman's sport to be selected by the Research and Injury Committee. A further amendment was presented by District 1, seconded by District 10 and carried 10-0 that it be at the discretion of the Executive Director to approve the final allotments. The original motion, together with the two amendments, was then voted upon and carried.

December 6, 1984

Mr. Otho Davis  
Philadelphia Eagles  
Veterans Stadium  
Philadelphia, PA 19148

Dear Otho:

Here we go again. Jack's question regarding a longitudinal study of injury rate and athletic exposure is a worthwhile one. To some degree the old NAIRS high school records could be used to establish a ballpark pattern of risk in selected sports. The only national level study, at least recently, is the "HEW Survey of Athletic Injuries and Death 1975-1976." These two data sets could be used to obtain some perspective on the problem. Obviously a quite limited perspective.

On an up-note I will offer suggestions to continue discussions on this issue. We have been able to develop

the old NAIRS Software Programs so that they will operate from an IBM desk top computer. The new software allows on-screen entry, disk storage and a variety of printing options. In essence, the same kinds of options offered in the NFL system. If we could isolate enough secondary schools using IBM equipment that would be willing to install our basic software, we could simply have them send us disks of data for national comparison. As with any system of this nature there will be a specific set of costs associated with the full operation. Unlike the old NAIRS system the new approach has a whole new area for creative financing of the overall project. For example, the central sponsor would support the national data base and its activities, while the individual school could purchase the software from the sponsor so that they would then have the opportunity to contribute nationally but still maintain supervision over their own information. In fact, as I am writing, my mind is creating and reviewing a wide variety of operations that could lead to a sound national longitudinal study. The critical factor to the operation is a sponsor who is willing to provide an underwriting function over time as well as the initial start-up funds.

Speaking for myself and I think for my Committee, I would like to see the NATA take on the responsibility for such a survey. Not that all of the funds come from the NATA budget, but that the NATA through its contacts throughout sports muster the sponsorship support from a variety of groups. If the Board's decision were to pursue this avenue I would like to coordinate the actual design and operation of this system.

I know you are in a tight time frame for the Mid-Winter meeting, but if you would like I will think more critically about the issue and prepare a more detailed perspective before February. Please let me know your thoughts. I will be in Philadelphia on January 13, 14, and 15, 1985 with basketball. If you would like I will find the time to meet with you regarding further details.

Best wishes for a Happy Holiday Season.

Yours in sport,

John W. Powell  
Chairman  
Research and Injury

April 5, 1985

Mr. Hal Biggs  
Athletic Trainer  
Bucknell University  
Lewisburg, PA 17837

Dear Hal:

Enclosed you will find a copy of the basic proposal for an NATA sponsored injury surveillance project. I designed the proposal to capture the best data, the most utility with the least effort. Because of the new computer technology, I have the capability of running an injury surveillance system similar to the NFL from a desk top computer. This proposal is based on modifying existing computer software to meet the needs of the NATA's final project. The fact that I will be moving to San Diego should not affect the ability of our Committee to accomplish the project.

The problem of collecting data may be addressed by several techniques. A survey sent to all relevant individuals asking questions based on "their best memory" would be very inexpensive and provide broad data set with questionable accuracy. To organize a system with the detail of a NAIRS-I (included injury, participant, exposure, equipment and personnel consideration) would be relatively simple from the computer standpoint but very expensive administratively. A model more like the NAIRS-II (includes injury and exposure data) would be more desirable. The software is adaptable and the administration costs are considerably less.

As you can see the exact nature of the design, quality of output and time frame of the project dictates the amount of money necessary to support the project. Multiple sport programs are most costly. The less that has to be done to become operational, the less the overall project will cost.

As I mentioned to you on the phone, it may be desirable to use the positive reputation of the NATA to develop a cadre of sponsors who would contribute small amounts of capital through annual pledges. This money would be used directly to support the high school program. The pledge could be limited to a 5 year commitment or allowed to fluctuate over time. It would be the task of the Research and Injury Committee to operate this capital campaign. I think our reputation as a professional is such that this worthwhile project can become a reality. Our Committee is willing to work diligently toward the accomplishment of this task.

Hal, I'm confident that an NATA sponsored program of high school injury surveillance can be designed and implemented for a reasonable financial commitment.

A cooperative effort between the Board of Directors and our Research and Injury Committee can demonstrate to the public the commitment to sports safety, particularly at the high school level, that is the part of grass roots philosophy of the athletic training profession and its individual members. I look forward to the challenge of the project.

Thank you for your consideration in this matter. If the Board requires additional information, please contact me immediately. I would hope to be placed on the agenda in June to more fully discuss this project with the Board.

Yours in sport,

John W. Powell  
Chairman  
Research and Injury

JWP: bg

Enclosure

cc: O. Davis  
B. Barton

#### NATA High School Injury Surveillance Project

##### Research Proposal

In recent years amateur athletics, particularly the sport of football, have been under attack regarding the number and severity of injuries which occur as a result of participation. High school, college, and professional programs have been indicted as dangerous activities. In order to fully interpret the risk of injury in sports, representative information regarding the injury patterns that exist in the real world must be accumulated. Who collects the necessary data and by what mechanism are critical issues to the utility of findings for decision-makers.

The National Athletic Injury/Illness Reporting System (NAIRS) was a program designed to collect information sufficient to establish injury patterns for a variety of competitive levels and for various sports. In fact, NAIRS accumulated data for over 30 sports in 8 years in high school and college sports. During those years the major contributors to the data base were NCAA colleges and universities with a small sample of volunteer high schools. In 1980, the National Football League adopted a customized NAIRS model for use among its member clubs in order to develop decision oriented injury data. In 1982, the NCAA Research Office developed its own injury surveillance tool for its member schools. With the development of the NCAA program, many of the volunteer colleges who had participated in NAIRS felt they could not support two programs and they dropped participation in the volunteer program. During the 1982-1983 year, NAIRS was unable to produce sufficient external operating funds to continue its broad base of operation. Therefore, The Pennsylvania State University chose not to continue internal funding and NAIRS ceased to operate at the end of the 1982-1983 school year.

Currently the NFL model and the NCAA model are operating. The need for an in-depth injury surveillance program at the high school level is great. This large athletic participation population has available to its decision makers no sound data regarding the risks of participation. The NFSA has neither the funds nor the motivation to sponsor such a study. The opportunity for the National Athletic Trainers Association to pick up the ball and fill this void is exciting. It offers the NATA the ability to take its rightful leadership role in the health and welfare of young athletes.

The most efficient and least expensive approach to the design of such a system is to develop a customized storage and retrieval model using existing computer software. To establish, from the beginning, new computer software would be very expensive and time consuming. Therefore the Research and Injury Committee proposes that the NATA sponsor the development and operation of an injury surveillance project for the secondary school program. The design of this model would be easily adopted from existing software available to the committee. Given early up-front money, such a system could be designed, tested, and implemented before August, 1985. If the program is not to be implemented for the 1985-86 school year, the design and implementation phase could be easily accomplished during that academic year and ready for start-up in 1986. Since longitudinal studies require more than a short term momentary commitment, the committee proposes the development of a fund raising campaign of small pledges to the NATA for specific support of this project for a specific time period. These pledges could come from manufacturers, agencies or individuals.

##### Design Characteristics

The actual design of the project can range from the very simple one-time recall survey to an in depth mechanism of injury surveillance. The cost of operating the project is dependent on the nature and the quality of the design. A good example of the outcome of

# ECONOLINE PRODUCTS, INC.

BOX 26774, CHARLOTTE, N.C. 28213

DIRECT LINE TO SALES (704) 333-5330

- 16 YRS. SER. TO PROS. & COLS.
- ORDERS SHIPPED SAME DAY
- BUDGET SAVING PRICES
- BUY DIRECT & SAVE
- **QUANTITY PRICE BREAKS**  
**ON ALL PRODUCTS**

## FOAMS AND SHOCK ABSORBING MATERIALS

### AMERICAN FOAM

	UNIT PRICE
NO. 1014 1/2" THICK	12.05
NO. 1015 1/2" THICK	21.65
NO. 1016 1" THICK	41.60
NO. 1017 1/4" WITH ADHESIVE	18.45
NO. 1018 1/2" WITH ADHESIVE	28.55
NO. 1021 1" WITH ADHESIVE	48.50
NO. 1019 AMERICAN FOAM KIT	8.85
NO. 1020 AMERICAN FOAM KIT W/PSA	12.25

### SUPER FOAM

	\$20-\$50	\$51 & Up
NO. 1030 1/2" THICK	4.80/ft <sup>2</sup>	4.00/ft <sup>2</sup>
NO. 1031 3/8" THICK	3.60/ft <sup>2</sup>	2.90/ft <sup>2</sup>
NO. 1032 1/4" THICK	2.80/ft <sup>2</sup>	2.20/ft <sup>2</sup>
NO. 1035 1/8" THICK	1.75/ft <sup>2</sup>	1.40/ft <sup>2</sup>
NO. 1034 SUPER FOAM ASSORTMENT		25.00
NO. 1035 SUPER FOAM ASSORTMENT W/PSA		30.00

### ECONOLITE ASSORTMENT

NO. 1040 ECONOLITE ASSORTMENT	18.50
NO. 1041 ECONOLITE ASSORTMENT W/PSA	22.50

### MEMORY FOAM

NO. 1050 MEMORY FOAM, COLOR _____	10.00
NO. 1051 MEMORY FOAM, COLOR _____ W/PSA	12.50

### ANKLE HORSE SHOES MADE WITH DIE CUT SUPER FOAM

NO. 0126 1/2", 12/BAG	15.00
NO. 0127 3/8", 16/BAG	15.00
NO. 0128 1/4", 20/BAG	15.00
NO. 1029 HEEL LIFT	15.00
NO. 1030 HEEL WEDGE	15.00

### FOAM ASSORTMENT

NO. 1025 25 PIECES	16.00
--------------------	-------

### VINYL FOAM ASSORTMENT

NO. 1124 2 DEN., 16 SQ. FT.	25.00
NO. 1125 2 DEN., W/PSA	30.00

### SCISSORS

NO. V5-304 4 1/2" IRIS, STR.	6.00
NO. V5-306 4 1/2" IRIS, CVD	6.50
NO. V5-500SS 3 1/2" LISTER	3.50
NO. V5-502CH 4 1/2" LISTER	3.70
NO. V5-502SS 4 1/2" LISTER	4.20
NO. V5-504CH 5 1/2" LISTER	4.30
NO. V5-504SS 5 1/2" LISTER	4.80
NO. V5-506CH 7 1/4" LISTER	6.60
NO. V5-506SS 7 1/4" LISTER	8.30
NO. V5-532 5 1/2" LISTER W/CLIP	5.30
NO. V5-549 5 1/2" LISTER, LARGE FINGER	4.70
NO. V5-560 5 1/2" KNOWLES	5.40
NO. V5-182 7" CVD METZEN BAUM	9.50
NO. V5-180 5" CVD METZEN BAUM	7.80
NO. MX5-996 EMER MED., 5 1/2"	7.60
NO. MX-1000 EMER MED., 8"	7.92
NO. MX 33-140 7" RING CUTTER	31.11
NO. MX 33-142 BLADE FOR ABOVE	6.29
NO. MX 33-230 FINGERNAIL DRILL	29.68
NO. MX 33-234 3 BITS FOR ABOVE	11.50
NO. MX 2-20 MAUNDER ORAL SCREW	6.00

### ECONOLINE TRAINERS TAPE\*

NO. 0032 1"x15 YARDS, 48 ROLLS				
6 TO 24	30 TO 48	50 TO 100	101 TO 200	201 & UP
29.42	28.36	27.56	27.03	26.77
NO. 0033 1 1/2"x15 YARDS, 32 ROLLS				
6 TO 24	30 TO 48	50 TO 100	101 TO 200	201 & UP
29.15	28.09	27.30	26.77	26.50
NO. 0034 2"x15 YARDS, 24 ROLLS				
6 TO 24	30 TO 48	50 TO 100	101 TO 200	201 & UP
29.15	28.09	27.30	26.77	26.50

\*PLUS FREIGHT ON ALL QUANTITIES.  
LESS THAN 50 CASES MUST BE ORDERED IN INCREMENTS OF 6 CASES.

## REGULAR PRODUCTS

	UNIT PRICE
NO. 6200 2"x2" COTTON FILLED SPONGES, 100	1.98
NO. 6300 3"x3" COTTON FILLED SPONGES, 100	3.57
NO. 6500 4"x4" COTTON FILLED SPONGES, 100	5.70
NO. 2200 2"x2" GAUZE SPONGES, 12 PLY, 100	2.01
NO. 2300 3"x3" GAUZE SPONGES, 12 PLY, 100	3.63
NO. 2900 4"x4" GAUZE SPONGES, 12 PLY, 100	6.03
NO. 2302 3"x3" STERILE GAUZE PADS, 12 PLY, 100	7.92
NO. 2502 4"x4" STERILE GAUZE PADS, 12 PLY, 100	9.35
NO. 4100 ONE POUND ABSORBENT COTTON ROLL	4.07
NO. 6100 MEDIUM COTTON BALLS, 2000/BAG	11.11
NO. 0046 ECONOWRAP, REGULAR-3"x30 YARDS, 50 ROLLS	30.00
NO. 0047 ECONOWRAP II, 2 3/4"x30 YARDS, 48 ROLLS	25.00
NO. 0048 ECONO HEEL & LACE PADS-3"x4"-1000/CSE.	16.00
NO. 0049 COTTON ANKLE STRAPPING-2"x72 YARDS	16.00
NO. 0050 POLYESTER ANKLE STRAPPING-2"x72 YARDS	18.25
NO. 0051 POLYETHYLENE HEEL & LACE PADS 2000, 3"x3"	15.00
NO. 0052 ECONOROL, MULTI-PLY GREASE RES. PAD-10"x50"	10.00
NO. 0053 DISPOSABLE ICE BAGS-8"x16"	15.00
NO. 0054 AIR FLITE HEEL CUPS-12/CSE. LARGE OR MEDIUM	10.00
NO. 0055 ALOE VERA OINTMENT	8.00
NO. 0056 ALOE GEL 1 PINT	8.00
NO. 0057 ALOE GEL 1 QUART	15.00
NO. 0058 ALOE GEL 1 GALLON	35.00
NO. 0059 ECONOGESIC	7.00
NO. 0111 DC 3110 COMPOUND, ONE POUND	23.33
NO. 0110 DC 3110 COMPOUND, TEN POUND CAN	155.55
NO. 0112 DC RTV-J COMPOUND, ONE POUND	18.50

### AMERICAN WHITE CROSS SHEER STRIPS

NO. 1305 3/4"x3", INDUSTRIAL PACK, 1500/BOX	40.00
NO. 1315 1"x3", INDUSTRIAL PACK, 1500/BOX	46.00
NO. 1275 3/4"x3", 100/BOX	3.12
NO. 1290 1"x3", 100/BOX	3.10
NO. 1298 3/8"x1 1/2", 100/BOX	2.10
NO. 1308 1 1/2"x1 1/2" PATCH, 100/BOX	4.10
NO. 1303 7/8" SPOTS, 100/BOX	3.10
NO. 1070 EXTRA LARGE, 50/BOX	4.07

### AMERICAN WHITE CROSS SUPER BANDAIDS, FABRIC

NO. 1580 3/4"x3", 100/BOX	3.40
NO. 1595 1"x3", 100/BOX	3.75
NO. 1602 1 1/2"x3", KNUCKLE, 100/BOX	6.10
NO. 1607 1 3/4"x2" FINGERTIP, 100/BOX	5.70
NO. 1612 1 3/4"x3" FINGERTIP, 50/BOX	6.00
NO. 1617 2"x3" PATCH, 100/BOX	8.00
NO. 1622 3"x3", 4 WING, 50/BOX	8.50

### NEW PRODUCTS

NO. 0060 INSOLES, 1 PAIR	15.00
NO. 0061 ALOE SOUND GEL	7.50
NO. 0062 MASSAGE CREAM W/ALOE	7.50
NO. 0063 32 OZ. LG. MOUTH SQUEEZE BOTTLES - 6 BOTTLES	16.00
NO. 0064 6 COMPARTMENT WIRE BASKET	9.00

### MISSION PHARMACAL PRODUCTS

#### BEIERSDORF MEDICAL (PLUS FREIGHT)

COVERLETS	BOX	CASE
BM 0230 3/4 IN. x 3 IN., 100/BOX, CASE 12	\$ 3.70	\$ 44.00
BM 0231 1 IN. x 3 IN., 100/BOX, CASE 12	\$ 4.25	\$ 50.00
BM 0303 1 1/4 IN. SPOT, OVAL, 100/BOX, CASE 12	\$ 4.40	\$ 52.00
BM 0340 2 IN. x 3 IN. PATCH, 100/BOX, CASE 12	\$ 9.40	\$ 74.91
BM 1361 EYE OCCLUSOR, REG., 20/BOX, CASE 36	\$ 3.15	\$112.00
BM 1390 KNUCKLE 1 1/2 IN. x 3 IN., 100/BOX, CASE 12	\$ 7.00	\$ 84.00
BM 0801 TOE SHIELD 2 1/2 IN. x 1 3/4 IN., 100/BOX, CASE 12	\$ 6.55	\$ 72.00
BM 1307 DIGITS, LG., 50/BOX, 12/CASE	\$ 7.00	\$ 82.00
BM 0385 4 WING, 3 IN. x 3 IN., 50/BOX, CASE 12	\$ 9.65	\$114.00
BM 2240 6 DRAWER CHEST, 10 IN. x 10 IN. x 8 IN. 1/CASE	\$45.00	\$ 45.00

### ELASTOPLAST

BM 4410 1 IN. x 5 YDS., 32 ROLLS/CASE	\$33.50	—
BM 4412 2 IN. x 5 YDS., 24 ROLLS/CASE	\$46.00	—
BM 4413 3 IN. x 5 YDS., 16 ROLLS/CASE	\$46.00	—
BM 4414 4 IN. x 5 YDS., 16 ROLLS/CASE	\$62.00	—

### GELCAST

BM 1053 4 IN. x 10 YDS., 12/CASE	\$ 6.25 EA.	\$ 75.00
BM 1052 3 IN. x 10 YDS., 12/CASE	\$ 5.50 EA.	\$ 66.00



a one-time recall survey form can be found in the HEW Survey of Athletic Injuries and Deaths 1975-1976. While this study produced a good representation of the national participation in sports, the injury part was so clouded with ambiguity, that the data had little utility for decision making. On the other hand, the NAIRS program was an example of an in depth longitudinal study of injury risk pattern. The NAIRS data, because of the specific definition used to collect the data and the conscientiousness of the athletic trainers who volunteered to participate, have been used several times to answer a variety of professional ad hoc questions. The multiple sport approach used by NAIRS was ideal, but may be too much for the NATA project to tackle at first.

The most important part of the design of an NATA project would be to make the recording instrument such that the maximum amount of data could be accumulated with the minimum amount of effort on the part of the recorder. The overall goal is to develop a data set with a high degree of accuracy so the interpretation of findings will be useful to decision maker relevant to safety issues in athletics. The Research and Injury Committee recommends a project whose design learn for the simplicity of the HEW Survey and the complexity of NAIRS and produce a superior program to both. From all of the possible variables which could be recorded, it would be the committee's task to select the most appropriate.

#### Recorded Variables

Abstracted from a variety of past studies, the following variables should be addressed in a surveillance project in order to maximize the utility of the data for decision makers.

- I. Characteristics of persons on athletic squads whether injured or not:
  - Age
  - Height
  - Weight
  - Experience in Sport
  - Education Level (Freshman, Sophomore, etc.)
- II. Characteristics of Injuries
  - Site and Degree of Anatomical and Functional Damage
  - Source of Diagnosis (Physician, Athletic Trainer, etc.)
  - Severity (Minor, Moderate, Major, Severe), Defined Formally as Increasing Duration of Absenteeism for Practice or Game
  - Primary Mechanism (Torsion, Stretch, Direct Impact, Impingement, etc.)
  - Protection of Injured Body Part at Time of Injury (Emphasis on Prevention)
  - Nature of Injury (New, Recurrent, Complications From This or Other Sport, etc.)
- III. Characteristics of Treatment
  - Action Taken
  - Principal Management (Superficial Debridement, Surgery, Immobilization, Therapeutic Modalities, Prescription on Non-prescription Drugs Used, Rest, etc.)
- IV. Characteristics of Environments
  - Time of Day/Season
  - Exposure (Games, Practice, and Squad Size)
  - Playing Surface
  - Occasion (Non-Sport-Related, Varsity or Sub-varsity, Competition, Practice, etc.)
  - Position, Activity and Situation when Stricken (Defensive End Involved in a Block Below the Waist on a Rushing Play Outside Tackle)

#### Interpretive Methods

The measurements of accident experience generally accepted for use in injury surveillance programs are epidemiological rates or ratios, where the numerator is usually the number of injuries of a specific type. The denominator, or amount of exposure of the individuals "at risk," is an assessment of opportunities for injury. It is not enough to know how many injuries occur in a specific population. It is imperative that these frequencies be related to the opportunity for injury. Sound decisions regarding risk must use a measure of the amount of times the injury could have occurred relative to the actual occurrence.

To illustrate the importance of the exposure concept, examine a *Case Rate* where individuals comprise the denominator and the frequency of injury is the numerator. For example, for a season of athletic participation, we may have:

- (1)  $\text{Case Rate} = \frac{\text{Total reported injuries}}{\text{Total number of athletes participating}}$
- (2)  $\text{Proportion of Athletes Injured} = \frac{\text{Total number of athletes injured}}{\text{Total number of athletes participating}}$

In general, (2) yields a lower rate than (1) because some athletes are injured only once, (1) may be an

indication of the degree to which individual athletes are suffering repeated injuries.

Other important measures which provide a more precise statement of the opportunity for injury involves the concepts of an *athlete-exposure*. Here, the exposure (a particular game or practice) is multiplied by the number of athletes participating in that session. For example, 50 athletes at 5 practices equal 250 athlete-exposures in practices. In each case, the number of injuries is the numerator and the opportunity for injury is the denominator. This method yields evidence on the relative risk of injury under selected playing conditions.

#### Research Objective

There are a variety of legitimate concerns regarding sport injury frequencies that can be addressed by the implementation of systematic data collection programs. The question of relative risk among teams at this level of play is the most obvious model for interpretation.

The establishment of risk patterns in the real world of high school sports can be realized within the financial constraints associated with this proposal. The benefit derived from an injury surveillance program at the high school level will effect a positive return in the area of risk management and injury prevention for administrators and clinicians.

The main objective of the proposed investigation would be to design and implement a program to generate an adequate data base for the high school level athletic programs. Such a data base would enable appropriate monitoring and analysis of risk patterns in high school programs which have participation in football. The lack of an adequate data base is forcing decision-makers in the high school setting to make decisions on rule changes, equipment, etc., based on college or professional data. In many cases this practice is ill-advised because of the fundamental differences in the nature of the games at these levels, i.e., size, experience, and intensity.

Another objective would be the promotion of a unified, standardized recordkeeping mechanism for participating high school programs. This would be a most appropriate practice in today's legal climate. The leadership in offering a standardized recordkeeping system that would benefit the high school programs is well within the scope of the professional goals of the NATA.

There would be several ancillary objectives that could be realized:

1. Resource for justification of proper medical supervision within high school sports medicine programs.
2. Jumpoff point for a truly national injury recording device.
3. Continuing professional leadership by the NATA for sports related safety.

#### Implementation

To maximize a short term start up, the Research and Injury Committee recommends the initial year be limited to football. With a year to plan, the project could be designed to include more sports. The implementation of this project for the 1985-86 school year can be divided into two time frames: those activities that should be accomplished between May 1 and July 1; and those activities between July 2 and August 15. The initial system would be designed for football and expanded to other sports as needed.

#### May 1-July 1

1. Recruitment of as many high schools as possible for the 1985 season.
2. Recruitment of schools based on a definitive selection criteria; geographic location and institution size.
3. Printing of books and forms necessary to operate a data base of 100 high school teams.
4. Mailing of books and practice forms in order to prepare records well in advance of the 1985 season.
5. Contact recorders individually by telephone (first of three calls).
6. Evaluate sample forms from recorders to clarify recording interpretations and provide feedback regarding corrections.
7. Employ one individual for full-time maintenance of this program. All of these tasks must be completed before the current school year ends in late May.

#### July 2-August 15

1. Two follow-up telephone calls for clarification of interpretations and explanations of medical coding.
2. Mailing of all forms and materials for the 1985 recording season.
3. Computerize mailing addresses for ease of contact with individual schools.
4. Computer software customized to meet the needs of the new system.
5. Update jobstream to current year for compatibility with other systems.

Based on this time schedule, it would be possible to initiate such a larger number of schools with a minimum of complications. It should be noted that most of the active recruiting must occur while the recorders are still in school and can be contacted for the educational aspect of this project. This will help insure quality input and generate quality output for analysis.

#### Proposed Budget

The enclosed budget for this project has been prepared to include all appropriate costs necessary to completely develop, implement, and operate a high school football data base of 100 programs on a year-to-year basis at no cost to the institution. Most of the cost is based on one staff member to coordinate this entire project and the services of a secretary/editor to maintain records, correspondence, and data entry. Because the high school project would be able to utilize existing computer software, designed for the NFL by NAIRS, charges in this area are for computer maintenance and trouble-shooting. Within the proposal's budget, individual school-related services include: communication with each of the schools, monthly reports to the schools and the ability for the schools to make ad hoc inquiries. Funds will also be allocated to the project director for development of recorder workshops and standardized yearly reports to the NATA and other designed agents.

In order to develop fully relevant and meaningful patterns of risk a minimum of five years is essential. Because of the nature of this project, reevaluation of the program will take place and subsequent proposals for the continuation of the project will be presented in January to the Board on each of the five years. With initial start-up cost being present in only the first year, the overall budget would be reduced in subsequent years. Beyond that point, the continuance of the project would depend on the institution's willingness to continue and the availability of funds. The project emphasis is to collect, process, store, and retrieve pertinent injury information for each of the participating schools as well as developing a national data base as a resource of information for decision makers.

The NATA as a sponsor for such a program can produce a very positive impact in the profession in regard to its concern for the young athlete. If the NATA is willing to underwrite the cost of a five-year study based on the attached budget, it is also conceivable that the Research and Injury Committee could develop a cadre of sponsors to defer some of the NATA cost. The up-front money for the first year is required in order to demonstrate the commitment of the NATA to this type of professional endeavor.

#### XXXIX. STUDENT TRAINER AND COACHES ATHLETIC TRAINING WORKSHOPS:

Moved by District 6, seconded by District 8 and carried 10-0 that the Chairman continue to devote his efforts to workshops for the membership and to present a report to the Board at an appropriate time.

#### XL. ETHICS

Moved by District 10, seconded by District 7 and carried that the President be directed to form an Ad Hoc Committee of Paul Grace, Gary Delforge, Chris Patrick and with the Executive Director and/or President to meet with them whenever possible, this committee to be Chaired by Ned Ehrlich, to discuss and study the Code of Ethics as it may need revising.

Moved by District 1, seconded by District 4 and carried 10-0 that the Ethics Committee report be accepted for informational purposes.

#### XLI. PLACEMENT COMMITTEE:

Moved by District 6, seconded by District 8 and carried, with Mr. Rhea being absent, that this report be accepted for informational purposes.

#### XLII. AMERICAN ACADEMY OF PODIATRIC SPORTS MEDICINE:

Moved by District 3, seconded by District 2 and carried, with Mr. Rhea being absent, that this correspondence be accepted for informational purposes.

#### XLIII. AMERICAN ACADEMY OF PEDIATRICS:

Moved by District 10, seconded by District 4 and carried 10-0 to accept the addendum report submitted by Mr. Malacrea concerning NATA liaison with the Committee on Sports Medicine of this organization.

TO: Dr. Robert Barton, President  
FROM: Richard F. Malacrea  
RE: NATA liaison with the Committee on Sports Medicine of the American Academy of Pediatrics

Annual Report for  
1984-85

There is little to add to the mid-year report for, indeed, the Committee will hold the spring meeting in Alexandria, Virginia shortly after the close of the reporting period.

### Checklist

As previously reported, question 9 on page 4 of the *Self Appraisal Checklist for Health Supervisors of Scholastic Athletic Programs* was reworded to address the NATA concerns expressed by President Barton. In its original form the question read;

9. Non-certified staff personnel in the sports program have had approved first-aid training and continue to attend courses and workshops to better prepare them for their duties.

The revised question will read;

9. Aides to the certified staff personnel in the sports program have had training in first-aid, basic life support, and CPR.

This new language eliminates any implication or suggestion that the certified personnel should be anything other than an athletic trainer certified by the NATA. This, then, through inference creates four specific citations of the NATA certified athletic trainer. (see also question 1 page 2, question 3 page 2, and question 8 page 4.)

Follow-up notes on the *Checklist* are that the Committee will seek AAHPERD endorsement for the instrument and that the plan to promote and distribute the *Checklist* is targeted for September 1985. The planned distribution is through the state level AAHPERD members, as well as through the Chapter Chairmen's Forum (AAP). The schedule calls for 10,000 copies in the first printing.

### Liaison

The Committee has determined that continued liaison with Canadian Pediatric Society and the American College of Sports Medicine was unnecessary in that these organizations were already in alternate positions. Therefore, these Committee seats were eliminated. The Committee continues to accept a formal liaison from the AAHPERD and, as originally reported, the President's Council on Physical Fitness.

### Boxing

A copy of the Committee's statement on boxing was attached to the mid-year report. The Committee has, as suggested, taken an even stronger stand on this issue and will join the AMA in opposing boxing "in any form". The Committee recognizes that a major obstacle is the elevated status of the United States Olympic Team. The Committee, however, anticipates that the AAP position will encourage Chapter Chairmen and the state medical societies to stimulate state legislation against boxing.

### Athletic Training in Albuquerque

An addendum to the report at mid-year regarding the program of athletic training established at the secondary schools in Albuquerque, New Mexico. Dr. Mike Nelson, one of the prime movers in this program, will generate an article for the AAP journal *Pediatrics* describing this program. The issue identification will be presented as publication draws near.

### Sports Medicine: Health Care For The Young Athlete

The target date to begin the rewrite for the 2nd edition of the *Sports Medicine* manual will begin in January 1986. The first edition was distributed to all members of the Academy and offered for sale to non-members. Your liaison representative suggests that any input on Chapter 16, The Athletic Trainer, be submitted promptly so that it may be considered well before rewrite time.

An addendum to this report will be filed prior to the June meeting of the NATA Board of Directors on actions taken at the spring meeting of the Committee on Sports Medicine of the American Academy of Pediatrics.

TO: Dr. Robert Barton, President  
FROM: Richard F. Malacrea  
RE: NATA liaison with the Committee on Sports Medicine of the American Academy of Pediatrics

Addendum  
Annual Report  
1984-85

### Liaison

It seems that more than one deliberating body has the problem of hasty action and pulled the trigger before the gun leaves the holster. (That can lead to an embarrassing as well as painful consequence.)

After consultation and deliberation since the last meeting, the Committee recalled the previous actions and restored liaison with the Canadian Pediatric Society and the American College of Sports Medicine.

### Boxing

There was more than one round in the cylinder of that revolver.

Dr. Fritz Dreifuss, President of the Epilepsy Foundation of America, appeared before the Committee to Support the Foundation's position (markedly different from that taken by the Committee) on boxing. His

approach is more of a positive approach to be able to exert a pressure from within rather than a flat prohibition from without. It seems that the Committee's position might shift to one of 1) education of the inherent dangers in boxing, 2) examinations to test for abnormality, and 3) to discourage promotion of boxing.

Dr. Ross Merrick of the AAHPERD agreed with that approach and stated that his organization cannot put forth a resolution unless it is accompanied by an implementation plan.

### Hormones

The Committee discussed at length the concern over the use and availability of drugs to the athletic population. There was special concern regarding the apparent ease of access to even the growth hormones. Mail order sheets were distributed to point out this ease of acquisition, including the growth hormones. (Recent information is that all growth hormones have been recalled because of contaminated lots. Four cases of Kretzfeld-Jacob's disease have been reported as a result of using human pituitary manufactured in Scandinavia.) Dr. Jack Murray (Burlington, Vermont) has been assigned the task of formulating a statement on the use of hormones.

A spin-off of this is that your liaison representative received a telephone call from the Pacific Institute of Research to aid in recruiting interested persons in Portland, Oregon; Lincoln, Nebraska; Atlanta, Georgia; Dallas, Texas; and Cleveland, Ohio. The Institute has been funded by the Drug Enforcement Agency to develop programs, in cooperation with the National Association of High School Coaches, at the local level to combat the use of drugs in athletics.

### Checklist

Dr. Gene Luckstead (Des Moines, Iowa) introduced a short slide presentation that will be used to promote the use of the checklist at the secondary school level. This showing was for Dr. Ross Merrick (AAHPERD) and Dr. Ash Hayes (Presidents Council on Physical Fitness). Dr. Merrick offered to use the presentation at the meeting of the National Association of High School Directors of Athletics. He also indicated that the original plan to print 10,000 copies would be far too few. 24,000 copies would be needed to reach all of the member schools. The AAHPERD will aid in the promotion and will provide the mailing labels for distribution. Dr. Ash Hayes offered the promotional support of the PCPF.

### Youth Physical Fitness

Dr. Ash Hayes presented an overview of the functions of the PCPF. There was concern on the part of members of the Committee that the testing did not really address the issues of cardio-vascular fitness, lifelong physical activity, and obesity. The discussion revolved around the issue of an apparent decrease in the level of youth fitness. Dr. Mike Nelson (Albuquerque, New Mexico) expressed grave concern over the small P.E. requirement of the schools in New Mexico. All agreed that the question of youth fitness and obesity needed to be addressed, however, no action was taken at this time.

### Joint Commission

Dr. Paul Dymont, Chairman of the Committee, will attend the meeting of the Joint Commission in San Antonio, Texas.

### YMCA

An older pool . . . a new diving board . . . the divers projected beyond the area of the "diving well" by the new board . . . two quads in one week.

### USOC

Dr. Murray reports that the position occupied by Dr. Dardik has been abolished.

### XLIV. NATIONAL LEADERSHIP INSTITUTE:

Following an explanation by Mr. Dennis Sealey concerning the health care program being expounded upon by Dr. Rice from the organization and a brief discussion as to its infringement on the education and certification program of the NATA, it was moved by District 8, seconded by District 3 and carried 10-0 that a letter be drafted and sent to Dr. Rice by Mr. Barton expressing the concerns of the NATA about the inadequacies of a high school student attempting to fulfill the role of an athletic trainer. Upon her suggestion, Ms. Daniels, at the suggestion of Mr. Barton, was appointed to draft this letter for Mr. Barton's signature.

### XLV. NATA LOGO:

Moved by District 3, seconded by District 10 and carried 9-0-1, with District 8 abstaining, that Board permission to use the NATA Logo in endeavors related to corporate sponsorship be at the discretion of the Executive Director and the President.

### XLVI. NATA SPONSORSHIP OF EDUCATIONAL TV PRODUCTIONS:

Mr. Bill Chambers, Mr. Leon Skeie and Mr. Gilbert

Wald, Concepts for Industry, Inc., called attention to a proposed series of educational TV presentations concerning athletic training to be formulated for presentation to the public, requesting permission to be able, at the end of these presentations, to include the words "Produced with the assistance and cooperation of the NATA." Following extended discussion concerning financial implications, rights of release and script approval, it was moved by District 4, seconded by District 8 and carried 10-0 that in view of the shortage of time presently available for a thorough discussion of this issue that the matter be tabled for further presentation at the Board's mid-winter meeting.

### XLVII. ADJOURNMENT:

The business as called for on the agenda having been completed, the Board of Directors, on Monday, June 10, 1985 at the hour of four-thirty p.m., adjourned.

⊕

## 37th Annual Meeting

## Las Vegas Nevada

Copies of articles  
from this publication  
are now available  
from the UMI Article  
Clearinghouse.

Yes! I would like to know more about UMI Article Clearinghouse. I am interested in electronic ordering through the following system(s):

☐ DIALOG/Dialorder ☐ ITT Dialcom  
☐ OnTyme ☐ OCLC ILL Subsystem

☐ Other (please specify) \_\_\_\_\_

☐ I am interested in sending my order by mail.

☐ Please send me your current catalog and user instructions for the system(s) I checked above.

Name \_\_\_\_\_

Title \_\_\_\_\_

Institution/Company \_\_\_\_\_

Department \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone (\_\_\_\_) \_\_\_\_\_

UMI Article  
Clearinghouse

Mail to: University Microfilms International  
300 North Zeeb Road, Box 91 Ann Arbor, MI 48106



# BEST KEPT SECRET!

Winners at all levels of competition have been using these Mission products to generate superior, problem free performance gains in their programs.



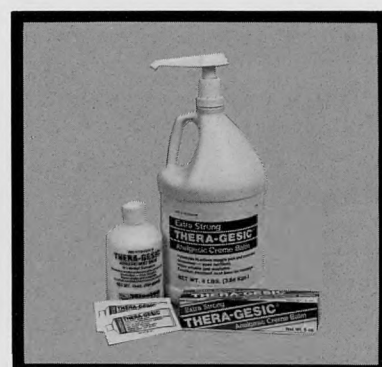
## SLO-SALT-K®

The first line of defense against heat fatigue, and hot weather loss of performance. In addition to containing sodium and chloride, SLO-SALT-K releases slowly, it means continuous replacement of salt, without upset. One SLO-SALT-K tablet is equal to approximately 1 quart of most electrolyte drinks.



## FOSFREE®

FOSFREE® stops leg and major muscle cramping in cramp prone athletes. In addition to calcium, FOSFREE® provides a comprehensive vitamin format. FOSFREE® tablets used one hour before practice and game times should stop troublesome leg and muscle cramping.



## THERA-GESIC®

Penetrates rapidly, providing counterirritant and analgesic effect to soothe sore muscles, joints and tendon sheaths. THERA-GESIC® is greaseless, water washable, and does not stain uniforms or equipment.

Perhaps you should try these products in your program.  
For additional information and trial samples call Toll free  
1-800-531-3333 or in Texas 1-800-292-7364.

### Authorized Distributors

#### Alert Services, Inc.

P.O. Box 1088  
San Marcos, TX 78666  
(512) 392-6676

#### Econoline Products, Inc.

P.O. Box 26774  
Charlotte, NC 28213  
(704) 333-5330

#### Stan Kotska Sporting Goods

606 Main Ave.  
Fargo, ND 58103  
(701) 293-7193

#### Micro Bio-Medics, Inc.

717 South 3rd Ave.  
Mt. Vernon, NY 10550  
1 (800) 431-2743

#### Jerry's Sport Shops

Truman Corners  
Grandview, MO 64030  
(816) 761-6700

#### School Health Supply Co.

Box 409  
Addison, IL 60101  
(312) 543-9216

#### Medco Supply Co., Inc.

705 South Nichols  
Muncie, IN 47303  
(317) 282-6112

#### Boege's Sporting Goods

U8W Commonwealth  
Fullerton, CA 92632  
(714) 879-9210

#### NFA, Inc.

P.O. Box 7285  
Hampton, VA 23666  
(804) 380-6066

#### Professional First Aid Services

P.O. Box 99483  
San Diego, CA 92109  
(619) 456-1277  
DISTRIBUTOR/DEALER



**Mission**  
PHARMACAL COMPANY  
P.O. Box 1676 San Antonio, Texas 78296  
ATHLETIC PRODUCTS DIVISION

## BUSINESS MEETING, from page 192

The first is the Denver Broncos, for the sponsorship of that great party we had Friday night. When you look back in history and you have a great event like we experienced on Friday night, it certainly sets the tempo for our Annual Meeting and Clinical Symposium.

Of course, there was also the party by Mission Pharmacal Company at the Lone Star Brewery and then also our transportation by the Seattle Seahawks. Thank you all so very, very much.

Also, I would like to thank the National Football League for the cocktail party that we will be having this evening. Likewise, the COCA COLA Company has helped us with our program and then we will, on Monday evening, have our Awards Banquet, preceded by the Johnson and Johnson party as well as the Presidential Reception hosted by Professional Medical Products, Inc.

To all of our sponsors of these events this year, a great big "thank you" and a warm appreciation from all of us. (Applause)

At this time, there are two individuals I must recognize because a year from today one of them is going to be your new leader.

Let me say that we had some excellent candidates for the Office of President of the NATA. Your Board of Directors, after careful consideration and study, has selected Mr. Jack Baynes, Northeastern University at Boston and Mr. Jerry Rhea from the Atlanta Falcons, as the two candidates to be submitted to you, the membership, to be voted upon as the next President of the NATA. (Applause)

I would like to have Mr. Jack Baynes come forward to receive a plaque as outgoing Vice President of the NATA.

... Presentation of plaque to Mr. Baynes and applause ensued ...

MR. DAVIS: We next proceed to our outgoing District Directors. There are four and, uniquely, all were reappointed by their respective districts and so you will be seeing these faces around for another term of office.

I would like to present these plaques to Andy Clawson of District 3, Paul Zeek of District 6, Jerry Rhea of District 9, and Mark Smaha of District 10.

I would like to have them come forward and receive their plaques for the work they have done during their past term of office.

... Presentation of plaques to these individuals and applause ensued ...

MR. DAVIS: Without the voluntary help that goes into this Association, things would not function very well. I am sure all of you are well aware of this.

Therefore, at this time, we would like to recognize some of our various committee members who so willingly and voluntarily have given of their time in the past and now will be devoting time to other ventures.

... Whereupon, plaques were presented to Bruce Kola, Board of Certification; Al Green, Certification Committee; Dave Burton, Journal Committee; Paul Concaldi, Journal Committee; Steve Antonopoulos, Licensure Committee; Jerry Lewis, Licensure Committee; John Sciera, Licensure Committee and James Madaleno, Audio-visual Aids Committee ... (Applause)

MR. DAVIS: I would like to recognize another individual who has devoted a great deal of time to the Journal.

You know, some years ago, our Journal was just another piece of paper but with the new leadership of Clint Thompson as Editor of the Journal, it soon took on a new look and he has brought it on through the years, until this past year, when he tendered his resignation as the Editor of the Journal.

Clint had planned to be here but I have not seen him.

Well, I understand he is not here and so we will see that his award is presented to him. However, will those of you who will be seeing him please express our appreciation to him for all of his efforts regarding the Journal. (Applause)

In relation to the District/Local Annual Meeting Committee, I would like to recognize Paul Zeek, Henry Birdwell, Bernie LaReau, Bobby Patton and John Zerr and present them with these plaques for their efforts.

... Whereupon, plaque presentations to these individuals ensued ... (Applause)

MR. DAVIS: Let me say that these individuals have done one tremendous job. Also, they just did not start yesterday. They have been working on this meeting for two years.

MR. ZEEK: Let me say, Otho, that the Local Group Committee members did all of the work and so I will just accept this plaque for District 6. (Applause)

MR. DAVIS: No matter what you are doing, when you are putting on a program of this type, you likewise have some lieutenants working with you and so at this time I would like to recognize these people.

... Whereupon, the following individuals were

recognized: George Young, Rex Hartwig, Mary Zerr, Tim Kirschner, Larry Lohr, Al Wilson, Ray Ramierz, Becky Bludeau-Marshall, Cathy Poerner, James Dodson, John Young, Eddie Day, John Anderson, Spanky Stephens, Wayne Witt, Juan Leal, Kevin Palamerchuck and Charles Doyle ... (Applause)

PRESIDENT BARTON: Thanks to all of you that participated in arranging this year's meeting.

I might further add that the Board had an opportunity to meet here during our mid-winter meeting and, as has been said, this group has really done a great job of organizing and planning for this meeting and we are indebted to each of you.

At this time, I would like to ask, is there any new business to be addressed?

If not, thank you.

I would like to say that we anticipated a great meeting in San Antonio and we certainly have not been disappointed.

This is one of the few times that the Board of Directors has been able to go out, go to restaurants, attend a couple of lectures, etc., and I think the reason is that our Association is coming together in a spirit of cooperation that has followed down through the Board. It certainly makes it much easier and I know that Jack and Jerry would appreciate that continuing for a while.

I would also like to say that it has been very fascinating for me to turn on the television and watch the different programs that we are having and see how the state of Texas understands what the athletic trainer's role is, much better, for example, than the rest of the country. I certainly hope that our public education program can allow our other states, including Kentucky, to catch up with what you have done for your profession in this state.

Also, at this point, I would remind you of your district meetings this afternoon.

Let me say that Mr. Davis and I will again attempt to make them all but please be aware of the fact that we do not move as fast as we used to and that we may not be able to get to all of them. However, we did ask the Board this morning if there were any particular requests and we certainly intend to fulfill those.

At this time, I would like to entertain a motion to adjourn this Annual Business Meeting.

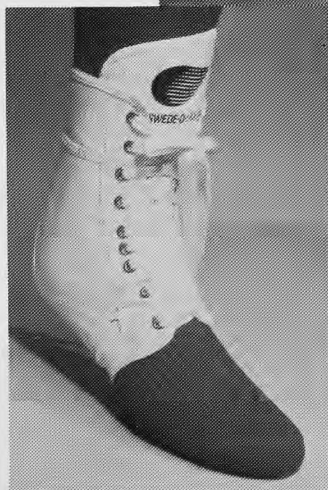
... Whereupon, in accordance with regular motion duly made, seconded and carried, the business meeting was, at twelve-thirty o'clock p.m., declared to be adjourned. ⊕

## SWEDE•O•UNIVERSAL®

# A Winner for All Seasons!

Swede-O Universal® Ankle Supports offer more medial and lateral support than tape or any other ankle supports. Keep your players winning with Swede-O Universal® Ankle Supports ... and save money at the same time.

Guaranteed one full sports season, Swede-O Universal® Ankle Supports are patented and the state-of-the-art in ankle supports. They offer flexibility, strength and support all in one, and can be used for preventive programs as well as rehab/therapy.



**SWEDE•O•UNIVERSAL®**  
SPORT SUPPORTS

North Branch, MN 55056 • 612/674-4900



## INTRODUCING ATHLETIC TRAINING TO THE AMERICAN PUBLIC, from page 194

community. The well-rounded educational background of NATA certified athletic trainers is outlined in the audio-visual presentation. It emphasizes injury prevention, an often underestimated aspect of health care where athletic trainers are particularly valuable to athletes of all ages.

Since its production, "Athletic Training: In the Public Interest" has been presented to a variety of audiences, including school boards, parent groups, state legislators and others interested in learning more about the importance of this allied health care profession.

The new sound/slide presentation is available to NATA members for the cost of its reproduction, handling and postage. It may be ordered in one of three video formats: three-quarter inch, VHS or Beta Two (please note which format). All NATA members who interact with the public are encouraged to send a check or money order with the order form for \$30 to the NATA, 1001 East Fourth Street, Greenville, NC 27834. Allow three to four weeks for delivery.

### Athletic Training: In the Public Interest

Please indicate quantity and format: \_\_\_\_\_ VHS (½ inch)

\_\_\_\_\_ Beta Two (½ inch)

\_\_\_\_\_ ¾ inch

Enclose \$30 per videotape requested. Allow four weeks for delivery. Thank you.

Name \_\_\_\_\_  
(please print)

Title \_\_\_\_\_

School/Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

## Patronize Athletic Training Advertisers

### Brochure Requests

Requests for the brochure entitled "Careers in Athletic Training" should be sent to the National Office at 1001 East 4th Street, Greenville, N.C. 27834. Single brochures are supplied upon request at no charge. NATA officers and committees, schools having an approved athletic training curriculum, and those having an apprenticeship program are furnished multiple copies of the brochure at no charge.

# Which Knee Brace? Why?

Which knee braces provide medial or lateral support? Why do some allow for easier mobility than others? What scientific evidence supports claims made for these braces? How much do competing brands cost?

These questions and more are examined in a new publication now available from the American Academy of Orthopaedic Surgeons. This first-of-its-kind text reviews and comments upon the design, effectiveness, clinical applications, and limitations of 17 knee braces currently on the market.

The report is based on the discussions and presentations at a seminar conducted by the Academy's Committee on Sports Medicine involving physicians, bioengineers, manufacturers, and consultants.

The 96-page book examines prophylactic, rehabilitative, and functional knee braces, focusing on the goals and objectives of each brace as well as providing observations on the engineering, biomechanical, and clinical aspects.

The cost of the book is just \$15. At that low price you can buy a copy for every member of your athletic training team and still spend less than you generally would spend for a single brace. To place your order, complete the form below.



The American Academy of Orthopaedic Surgeons  
P.O. Box 7195, Chicago, IL 60680

Here is my order for \_\_\_\_\_ copy(s) of Knee Braces:  
Seminar Report at \$15 per copy.

☐ Purchase Order      ☐ Credit Card:  
☐ Check/      ☐ VISA  
Money Order      ☐ MASTERCARD  
enclosed      ☐ AMERICAN EXPRESS

Card # \_\_\_\_\_ Exp. Date: \_\_\_\_\_

Signature \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_

Allow 3-6 weeks delivery from receipt of your order at AAOS.

Source Code: 0001

OFFICE USE ONLY  
Batch # \_\_\_\_\_  
4000050

# Advertisers

American Academy of Orthopaedic Surgeons .....	281
Athletic Training Services .....	218
Athletic Training Specialists .....	247
Champion Sports Nutrition .....	269
Cramer Products, Inc. ....	Cover 4
Cybex .....	184
Dakon Manufacturing Company .....	282
DePuy .....	239
Drackett Company/Nutrament .....	223
Eagle Fitness Systems .....	227
Econoline Products, Inc. ....	276
Electro-Med Health Industries .....	245
Gatorade .....	231, 232, 233, 234
Isotechnologies .....	273
Lenox Hill .....	236, 237
McDavid Knee Guard .....	283
Mettler Electronics Corp. ....	219, 225
Mission Pharmacal Company .....	249, 279
C. V. Mosby .....	266
Mueller Sports Medicine, Inc. ....	282
Multiaxial .....	244
Nemectron Medical Inc. ....	243
Pro-Orthopedic Devices .....	Cover 2
Swede-O-Universal .....	280
Universal Gym Equipment .....	228, 229

**Wrap  
60 more  
ankles\*...**

**...with M-Wrap™ from Mueller.**

The big foam underwrap in big bold colors.

It's wider than J-Wrap\*\*. A full three inches wide. That means you can wrap more ankles with a case of M-Wrap than you can with a case of J-Wrap. About 60 more. That's a lot.

And with M-Wrap, you can wrap in living color. Big Red, Big Green, Big Gold, Big Black, Big Blue, Big Orange or Natural. Team colors. Colors that win.

Wrap more ankles in big bold color with M-Wrap foam underwrap.

**Demand Mueller.**

Contact your Mueller representative. Or phone 1-800-356-9522 toll free.

\*Depends on surface area covered and trainer's technique.

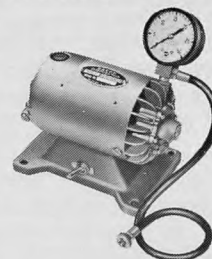
\*\*Registered trademark of Mueller Sports Medicine, Prairie du Sac, WI 53578

\*\*Registered trademark of Johnson & Johnson, Inc.

**Mueller**

## DAKON ATHLETIC EQUIPMENT

FOR 48 YEARS THE BEST FRIEND A COACH EVER HAD



### "THE AIR EASE" ELECTRIC INFLATOR

Use it most anywhere — operates on 110VAC or DC. More than 100,000 in use! Features heavy duty motor, UL listed cord and plug. Base pre-drilled for screws. Tapered nozzle adapter available for plastics.

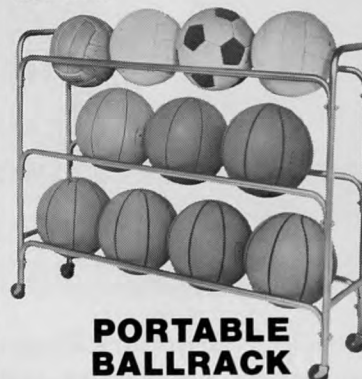
MODEL 2E



### "THE SPORTSMAN" INFLATOR

More than 400,000 in use today. A handy, all-steel helper that clamps anywhere. Complete with gauge & hose — all parts replaceable. For tougher jobs use our electric inflators.

MODEL 1P



### PORTABLE BALLRACK

Holds and transports everything from basketballs to medicine balls. Rugged cantilever construction. Heavy-duty chrome plated tubing. Plus reinforced sides & non-mar swivel casters.

MODEL 1000 — 3 TIER  
MODEL 1600 SUPER — 4 TIER

**DAKON**

Dakon Manufacturing Company, Inc.  
1836 Gifford Avenue, New Hyde Park, N.Y. 11040  
Tel: (516) 775-5527



# Weigh the alternatives



**8 oz. of prevention**



**25 lbs. of cure**

## **The McDavid Knee Guard: The one brace with a proven record of protection.**

About the only people left these days who'd even think of playing football without a helmet are people who have already played too much football without a helmet.

In the near future, it is safe to bet that most people will feel as strongly about preventive knee braces.

We at McDavid Knee Guard sincerely hope so—and not simply because we're the leading manufacturer of preventive braces.

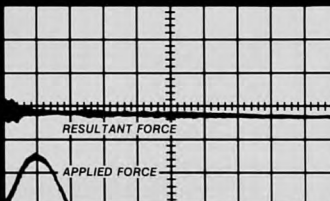
Fact is, laboratory tests conducted by independent teams of doctors and engineers have demonstrated that the McDavid Knee Guard can reduce the chance of knee injuries by reducing both ligament stress and impact forces common to football and other high risk sports.

No other brace on the market today can legitimately claim the same proven effectiveness. But then, no other brace can match our design...or our materials... or our fifteen years of continuous research and development.

We'd like to send you more information about the McDavid Knee Guard. For your free brochure and test reports, please write

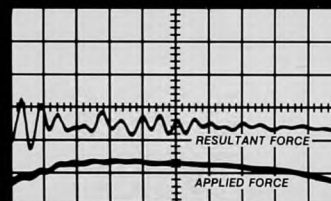
to us at the address below or contact your local team dealer.

And this year, worry about running the plays—rather than running the risks.



### **McDAVID KNEE GUARD**

Typical oscilloscope pattern of the impact test run on the McDavid Knee Guard shows very little energy absorbed into the system. The brace is acting as a resilient spring and efficiently managing the energy.



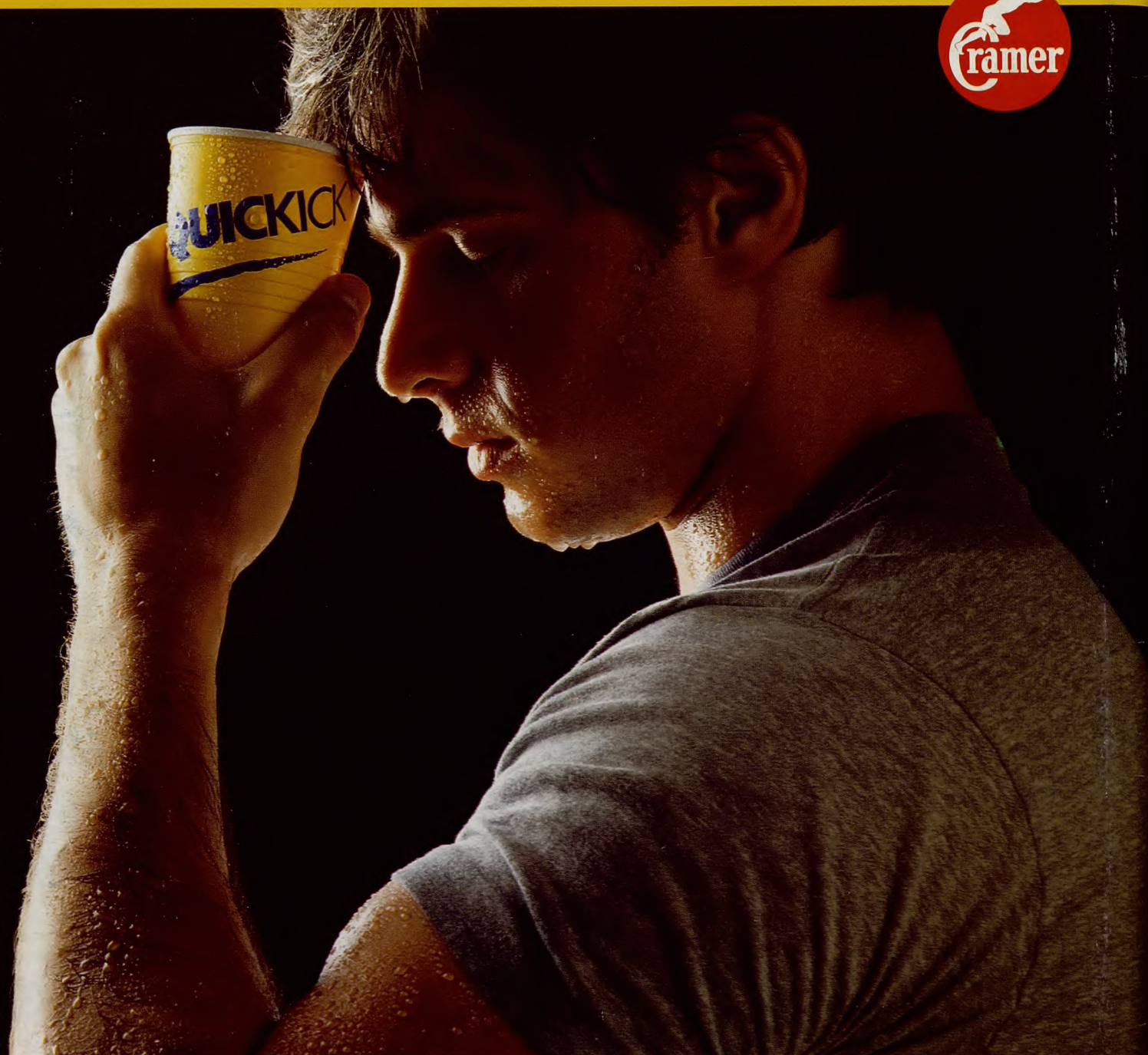
### **METAL BRACE**

Same test run on a competitive metal brace. Pattern shows a high level of energy being transferred directly to the leg. The brace is not acting as a resilient spring, but is instead magnifying the negative effect of the impact force.

# **MKG**

**McDAVID KNEE GUARD, INC.**  
P.O. Box 9 • Clarendon Hills, IL 60514  
312-969-1280





## QUICKICK. THE CHOICE OF WINNERS

In the field of electrolyte thirst quenchers, Quickkick stands alone as the original sports drink, combining a winning taste with proven effectiveness.

### TIME-TESTED

Developed over 25 years ago, Quickkick is now being used by thousands of athletic teams.

Quickkick helps reduce heat-related problems, including cotton mouth, muscle spasms and heat cramps.



## FIVE FLAVORS THAT TASTE GREAT

No electrolyte solution can be effective unless the athletes drink it. They prefer fluids that taste good, and that gives Quickkick an advantage. Quickkick comes in five great flavors: Punch, Orange, Lemon-Lime, Grape and new Lemonade. Quickkick's great taste helps insure that athletes will drink it in sufficient amounts to rehydrate the body while replacing essential sodium, potassium and chloride electrolytes.

### COSTS LESS

Coaches and trainers must prevent dangerous heat stress from striking their athletes.

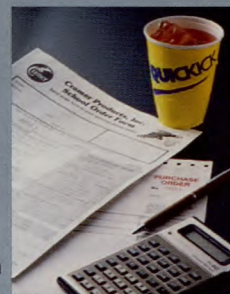
Quickkick helps



meet this responsibility at less cost.

Compared with any of its major competitors, Quickkick is less expensive — an important consideration in these times when budgets are tight.

Specify Quickkick when ordering from your local sporting goods dealer.



# QUICKICK

A product of CRAMER PRODUCTS, INC.  
P.O. Box 1001, Gardner, Kansas 66030