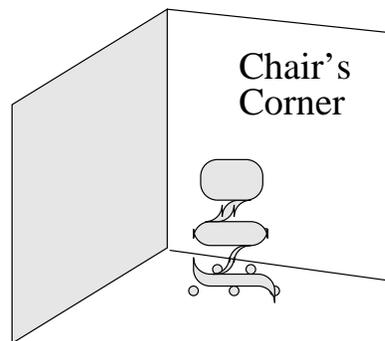# GREETINGS!

A warm hello to all alumni of the Department of Mathematical Sciences at Northern Illinois University! Once again it is our pleasure to send you news from the past year—including notes you submitted to us concerning your whereabouts and doings. We invite your comments on this issue along with notes on your activities. And we wish you well in all your endeavors.

Chair's
Corner

by Professor William Blair

It is hard to believe that another year has passed so quickly.

This year our department has much to celebrate. Two of our faculty members received the greatest recognition that the university has to offer. Professor Jindrich Necas was named a Presidential Research Professor, and Professor John Beachy was named a Presidential Teaching Professor. Professor Necas joins Professor Anton Zettl as our department's second PRP, and Professor Beachy joins Professors Linda Sons and Robert Wheeler as our third PTP. Professor Necas, a native of Prague, joined our faculty in 1991. He enjoys an international reputation for his incisive work in the theory of partial differential equations. Professor Beachy, who has been at Northern since 1969, is an abstract algebraist who has a superb teaching record at all levels from beginning algebra for freshmen through advanced topics courses for graduate students.

Professor Henry Leonard retired this past June. Professor Leonard has had an outstanding career as a teacher and scholar. He is well known for his work on representation theory of finite groups. Professor Leonard received the University's Excellence in Undergraduate Teaching Award in 1994,

and he has served with distinction as Director of Graduate Studies for the last four years. He is highly regarded for his generosity and helpfulness to students. He will be greatly missed as a teacher and colleague. Henry and his wife, Eva, plan to continue to make DeKalb their home, and we look forward to seeing Henry often in the department as he continues work on his group theory book. Professor Greg Ammar will assume the position of Director of Graduate Studies beginning in July.
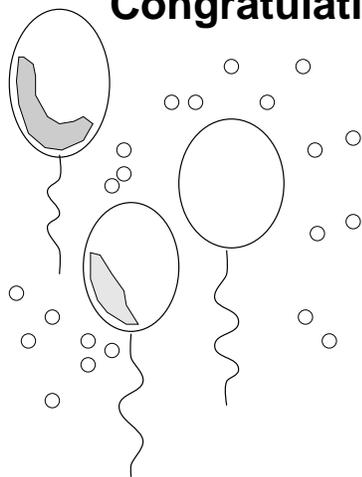
There is sad news to report as well. Professor Ken Duzan, who retired from our faculty in 1973, died on January 31, 1997, at the age of 91. Professor Duzan's wry sense of humor will be greatly missed by all his friends. Professor Donald Herrick passed away on May 16, 1997, at the age of 71. After retiring from full-time teaching in 1987, Professor Herrick continued to supervise student teachers until last December. The quality of mathematics teaching in Illinois will be better for years to come because of Don's outstanding work. He devoted his life to helping people learn mathematics. Our department extends its deepest condolences to Ken's and Don's families.

Paul Erdös, one of the giants of 20th century mathematics, passed away on September 20, 1997. Professor Erdös was a frequent visitor to our department. He collaborated with Professor Emeritus John Selfridge for 40 years. Northern hosted a conference in honor of Paul's 80th birthday in May 1993.

As I usually do at this time I wish to invite you to stop by and say hello whenever you are in the DeKalb area. I also wish to remind you that all of us who enjoy reading this newsletter like to read about what one another are doing. Please take a few minutes to drop us a note about yourself for inclusion in next year's issue. Finally I would like to thank our editor, Professor Linda Sons, for her usual fine job editing our annual newsletter.

William Blair

Congratulations!

Congratulations to the New Doctoral Recipients

Since the summer of 1996, the department has three students who have completed their dissertation defenses. They are: David Klanderman, who wrote on "Preservice Teachers' Levels of Understanding Variables and Functions within Multiple Representation Modes" under the direction of Professor Helen Khoury; Shiaohong Ran, who wrote on "Choosing Smoothing Parameters in Nonparametric Curve Fitting Using Kernel Contrasts" under the direction of Professor I. Ahmad; and Gregory Manning, who wrote on "The m(4) Problem of Erdös and Hajnal" under the direction of Emeritus Professor John Selfridge with the co-direction of Professor Richard Blecksmith.

The May 1997
Departmental Awards

The D. R. Ostberg Award is given for academic achievement to a continuing student. Esther Billings was the winner.

The Stelford Prize is awarded to the graduating senior with the highest GPA in mathematics courses. This year's award went to Tara Marie Considine.

The Gail Masters Gallagher Memorial Scholarship is awarded to an outstanding student majoring in Mathematical Sciences who will have junior class rank during the next academic year. It is based on academic achievement. This year's went to Christine M. Leroux and Adam J. Slagell.

The Dean's Award is given for academic excellence and service to a graduating senior. The winners were Tara Marie Considine graduating with a general mathematics emphasis and Linda Jean Velazquez graduating with an emphasis in probability and statistics.

The (Departmental) Chair's Award based on academic achievement and service to the department went to John Paul Marotto, while the Director's Award for students with academic achievement and service to the Division of Statistics went to Brock Les Trautvetter.

Certificates of Merit are based on academic achievement and went to:

Rick Alan Cazzato	Melinda Sue Connon
Erica Tiffany Elford	Mary Kathryn Keller
Margaret Susan Lakin	Jennifer Lynn Schmitt

Honorable Mention Awards are based on academic achievement and the winners were

Holly Beth Deal	Jean Diehl
Geoffrey P. Durian	Julie Christine Leston
Nicola Jacqui Meier	Elizabeth Anne Powell
Amy Christine Seccombe	Beatrice D. Shaftman
Richard Todd Simeone	Dawn Marie Traub

The recipients of the **Merlyn Behr Research Award** were Melinda Sue Connon and Ellen Hines. This award honors the contributions Professor Behr made to the department and recognizes excellence in research in mathematics education by a graduate student.

The **Margariete Montague Wheeler Awards**, honoring the contributions of Professor Wheeler in mathematics education, consist of Teaching Awards and a scholarship.

Recipients of the **M. M. Wheeler Scholarship** were Allyson Barron and Aimee Naatz.

Recipients of the **M. M. Wheeler Teaching Awards** were Laure Foerster, Annette Marie Reehfus, and Angela Rio.

Those securing **Honorable Mention for the M. M. Wheeler Teaching Award** were Robert Bond and Maysoon Mousa.

Among the advanced graduate students, **Certificates of Teaching Excellence** went to teaching assistants Esther Billings, HyungKoo Park, Jason Thrun, and Andrew Woods.

MAA (Math. Association of America) Membership Awards went to Ryan K. Conter, Bethany L. Fenton, John Narofsky, and Jerome C. Shippy.

Good News

Congratulations to Special Faculty

Four of the faculty in the department were promoted to associate professor and tenured effective August 15, 1997 (a banner year!). New to these ranks are Professor Harald Ellers, who specializes in finite group theory, Professor Jeffrey Thunder, who specializes in number theory, Professor Hongyou Wu, who specializes in differential geometry, and Professor Zhuan Ye, who specializes in complex analysis.

Mathematical Sciences on the WEB!

We're on the web, and we expect to have much more at our web site in the near future. Our new director of graduate studies, Greg Ammar, expects to have more on our graduate activities soon. Some faculty members are just putting together home pages, and some already have exciting viewing complete with pictures taken with our digital camera. Take a peek! The location is *http://www.math.niu.edu/*

On Leave of Absence

A large number of faculty were able to secure sabbatical leaves for part of the academic year 1996-97. In addition, two members of the faculty took personal leaves. Those away for at least part of 1996-97 were Professor I. Ahmad, Professor Fred Bloom, Professor Y.C. Kwong, Professor Anders Linner, Professor Jindrich Necas, Professor Tom O'Gorman, and Professor Yining Xia.

Conferences in Statistics

The Division of Statistics scheduled some 90 speakers to come to DeKalb in the fall of 1996 for a conference celebrating the tenth anniversary of the formation of their division. The conference was a big success with about 250 participants.

Together with statisticians at George Washington University, statisticians at Northern are organizing an International Conference in Reliability and Survival Analysis to be held in DeKalb on May 21-24, 1998. For more information, consult the statistics division section of the department web site (http://www.math.niu.edu/StatDiv/).

Statistical Consulting Laboratory

In addition to being an instructor in the Division of Statistics, Carrie Helmig is the coordinator of the Statistical Consulting Laboratory. In this capacity she is responsible for the day-to-day operation of the laboratory and for conducting the initial screening meeting with clients.

Statistics Club

The academic year 1996-97 was the first year of operation for the Statistics Club. Professor Alan Polansky served as faculty adviser. The club had several informative and entertaining meetings covering topics such as internships and career development and employment opportunities in the actuarial field sponsored by the CNA. Information on future activities of the organization will be available in the statistics division section of the department web site (http://www.math.niu.edu/StatDiv/).

<div align="center">

Manipulatives Workshop

Make-it Take-it Workshop

Calculator Workshop Three

</div>

For the third year the mathematics education faculty at Northern have set up special workshops for students in the teacher education programs. The Manipulatives Workshop and Make-it Take-it Workshop have been primarily for those students intending to teach at the elementary level, but this past year a manipulative kit was organized for the secondary level of instruction as well! The third workshop on calculator use included sessions for both elementary education students and for those at the secondary level. Through the hard work of the mathematics education faculty and graduate students in mathematics education, these workshops form a valuable part of the education for preservice teachers at Northern.

Professional Day is a Big Success

On June 20, 1997, a number of graduates who have had one or at most two years of teaching at the secondary level assembled for a day of reflection and growth. Invited by the mathematics education faculty at Northern, they got to compare notes with each other and gather a number of new ideas for their teaching days ahead. Included in the day were three sessions led by Dennis Filliman, Leona Mirza, and two graduates.

Dennis Filliman, who regularly is part of Northern's instructional staff, discussed the role of professional organizations in a novice teacher's development. Leona Mirza, who is on the staff at North Park College, offered ideas on using the Web in instruction. Graduates Sheila Yochum and Julie Ladwig shared projects they used in the classroom.

Ably led by Professors Victoria LaBerge and Diana Steele, the conference made it possible for both organizers and participants to gain new insights in the current status of the teaching profession for recent graduates. Hopefully, the event will become an annual workshop.

Instruction at the Hoffman Estates Campus

Professor Donald Porzio offered a course each semester of the 1996-97 academic year in the Hoffman Estates area. These courses relating the use of technology in teaching mathematics were great growth opportunities for those enrolled. Plans are to continue to offer some classes off campus each semester as long as there is sufficient demand to merit it. Upcoming in the fall is a course on topics for junior high/middle school teachers to be taught by Dennis Filliman.

$\pi\mu\epsilon$ Members (by year of induction)

1996	1997 Spring
Ryan K. Conter	Jill Suzanne DeBold
Mandi Cottrell	Keri Hasbrouck
Holly Beth Deal	Jamie S. Lipitz
Bethany Lee Fenton	Jeremy M. Samuelson
Daniel Meyer	
Catherine E. Mulvey	
Elizabeth A. Powell	
Nicola Wethall	

Math Club Activities 1996-1997

There was a high level of student involvement in the math club this year. Four different students – Scott Craver, Christine Leroux, Josh Norten, and Dan Meyer – gave talks at various math club meetings. Scott and Christine also presented talks at the ISMAA meeting at Rockford College in March. Others who attended the ISMAA meeting, and participated in the annual math contest there, were Ryan Conter, Bethany Fenton, Dan Meyer, Mike Timm, and Adam Slagell. Christine and Ryan organized a "Problem of the Month" contest at NIU, which by the end of the spring term was enjoying great participation.

Program meetings featured talks by guest lecturers Professor Donald Crowe of the University of Wisconsin at Madison ("Symmetries of Culture: Geometric Periodic Patterns and Archaeology"), Professor Bruce Reznick of the University of Illinois at Urbana-Champaign ("What Does > Really Mean?") and our own Professor Bob Wheeler ("Some Measures I Have Known"). There were also two video programs, "Mathematical Mystery Tour," and the eternal "Donald Duck in Math Magic Land." A joint meeting with the Stat Club was the setting for a presentation by NIU alumnus Ronnie Rowton (CNA Insurance) on "The Field of Actuary Science."

Last August, the Math Club participated for the second time in the Friday Fest of student organizations, and drew many entries for its "How Many Ways Can You Cut a Pizza?" contest. The annual Used Book Sale was held again last February, and again was very successful. Seven students took a tour of the Mathematical Sciences Division of Argonne National Laboratory on April 1 where we saw numerical solutions made visible in a virtual reality chamber (no fooling).

A few Math Club T-shirts remain available. If you would like one of our black lettering on red XL shirts, which display the probably unique slogan

$$\log(\cos nu + i \sin nu) = niu,$$

and which cost $10 each, contact H. Blau or Z. Ye at the Department of Math. Sci.

Our officers during fall 1996 were Scott Craver, president; Wendy Parker, vice president; Christine Leroux, secretary; and Andrew Harris, treasurer. Our current (1997) officers are Christine Leroux,

president; Ryan Conter, vice president; Bethany Fenton, secretary; and Adam Slagell, treasurer. Faculty advisers are Professors Harvey Blau, Harald Ellers, and Zhuan Ye.

The Mathematical Modeling Contest

Once again Northern Illinois University was represented in the national modeling contest. A team of three students spent one long weekend devising a plan for the practical problem of dividing up corporate board members into discussion groups for seven sessions of a board meeting–subject, of course, to some additional side conditions. Team members Holly Deal, Mary Keller, and Christine Leroux not only had an enjoyable time coming up with a solution to the problem posed, but their efforts were rewarded by receiving an "honorable mention" designation for that solution. Congratulations for a paper well done!

The 1996 Putnam Exam

Three undergraduates participated in the 1996 William Lowell Putnam Mathematics competition. This nationwide exam, held every December, lasts for six hours, and emphasizes problem-solving ability. Representing NIU were Ryan Conter, Christine Leroux, and Adam Slagell.

Departmental Mathematics Contest Winners

Ryan Conter, a senior mathematical sciences major, took first place and an award of $75 in the 12th annual Competitive Mathematics Exam held on April 2. Jamie Lipitz, a junior mathematical sciences major, won second place and a $50 prize, while Adam Slagell, a sophomore mathematical sciences major, finished third to earn $25.

As in previous years, the exam was open to all full-time undergraduate students at NIU. Each participant turned in solutions to a choice of seven out of 15 problems. Underclass students had fewer restrictions on their choice than did upperclass students.

Problems on the exam included: (1) Find the shortest distance between the line $y = x$ and the graph of $y = \log x$. (2) Let N and T be linear transformations on a 2-dimensional real vector space such that $N^2 = 0$ and $TN = NT$. Prove that there exists some scalar r and a nonzero vector v such that $T(v) = rv$. (3) A wolf, unable to swim, is on the shore of a circular pond. A duck is swimming in the center of the pond. The wolf runs four times as fast as the duck swims. But once the duck reaches the edge of the pond, he can fly. Can the duck escape the wolf?

TI Graphing Calculator Workshop at NIU

For the third consecutive year the Department of Mathematical Sciences hosted a short course in technology for university, college, community college, and secondary instructors of mathematics.

Connected with the Ohio State University College Short Course program, the workshop "Enhancing the Teaching and Learning of Calculus Using the TI-92" was run June 9-13, 1997. Pronounced "excellent" by program participants, the workshop was coordinated by Professor Donald Porzio. Dr. Joe Fiedler from Cal State University Bakersfield served as instructor.

"Measuring Up: A Middle School Experience"

Funded by an Eisenhower Grant from the State Board of Education, a teacher enhancement project for middle school teachers saw deep involvement from practicing professionals. Ably led by Professor Helen Khoury, the project included interactive sessions held during March, April, and May during the teaching year and continued with three all-day sessions held in the mathematics education laboratory at the university in June. The primary purpose of the project was to increase the teachers' understanding of alternative methods of learning and teaching mathematics so as to improve their abilities to make effective instructional decisions. Participants reported the experience to be challenging and worthwhile. Teacher educators involved in addition to Professor Khoury also found the sessions to be stimulating and instructive.

The High School Math. Contest

As in previous years, our department was again the host of another successful ICTM Regional High School Mathematics Contest on Saturday February 22nd, 1997.

The contest consists of written competitions, individually and in teams, in high school math subjects (Algebra I, Algebra II, Geometry and Pre-Calculus), a calculating competition, oral competitions, and team competitions. Prizes are awarded to winning individuals and schools. Winners also advance to the State Contest.

A wonderful team of faculty members, mathematics office staff, graduate students, and undergraduate students supported our efforts.

A total of about 300 secondary school students, along with their teachers, and coaches, from 10 highly competitive high schools in northern Illinois, were on campus:

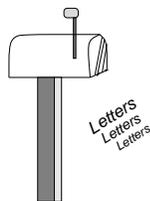| School	Coach
West Aurora	Kathy Dawson
Barrington	Carolyn Wahl
Cary-Grove	Laurie Bender*
Conant	Pam Sullivan
Illinois Math/Science Academy (IMSA)	George Milauskas
Libertyville	Wanda Gongol
Naperville Central	Terry Hooten
Naperville North	Craig Morse*
Niles West	Kate Fahey
Schaumburg High	R. James Breunlin*
* NIU Mathematical Sciences graduate	

As the chair of the High School Math Contest Committee, I would like to acknowledge, and extend our appreciation, to all those who helped to make the ICTM math contest, here at NIU, an organized, rewarding, and successful event.

Peter Waterman

Alumni Gatherings!

Will you be at the October meeting of the Illinois Council of Teachers of Mathematics? If you will, look for notices indicating a gathering of alumni from Northern. We'd like to have those who attend meet each other as well as current faculty from Northern. Watch for us...we'll be looking for you!

The News According to You

Dale Braig Barnhart ('71) is married to Sharon Knight Barnhart ('70). Craig is a functional analyst for the Boeing Company in Seattle, Washington.

Edward R. Brogly ('53) writes that he retired on May 30, 1995 from the position of professor of counselor education at Northeastern Illinois University having served there for 24 years. He currently works part time in the Department of Counseling and Human Services at Roosevelt University. In '58-'59 he served as an instructor in the mathematics department at Northern.

Patricia Carlson ('73) writes that after a first career in Corporate Computer Systems Development, and a second career teaching high school economics and computer science, she was enrolled as a second year medical student at Northwestern University Medical School with the intent of going into family practice residency.

Bob Cherry ('73) notes that he is the mathematics department chairman at Wheaton Warrenville South High School, Wheaton, IL. Besides teaching pre- calculus and calculus, he coaches the boys' varsity tennis team and recently earned his 100th career dual meet victory!!

Kim Christensen ('86) has been a mathematics instructor for the Metropolitan Community Colleges in Kansas City, MO, since 1990. She started at the Penn Valley campus and will be transfering to the Maple Woods campus in Fall 1997.

Sheri Cocciemiglio and Gene Blome (both '92) married in April 1994 and proudly announce their first child, Abigail Josephine, born March 3, 1996. Gene is employed as Production Manager at Sign-A-Rama in Buffalo Grove (been there over three years), and Sheri works as an accounting assistant at Liqui-Flo, Inc. in Addison. They make their home in Hoffman Estates, IL.

Ken Goodheart ('79) notes that he continues as a Senior Manager at the CPA firm of Friedman, Goldberg, and Mirtz, LLC, in Deerfield, IL. Ken specializes in mergers and acquisitions, bankruptcy, and general audit work.

Larry Johansen ('59 and '62) writes of his retirment as Associate Vice President at Kishwaukee College, completing 38 years in education. He taught mathematics for 10 years in Oregon, IL, one year at Eastern Illinois University, and 27 years at the community college in Malta, IL.

James Kelly ('66) reports conducting training programs for secondary teachers in the Philippines and providing advice on the five-year national program for teacher training at the secondary level used in Thailand in the early 1970's. In the United States he set up a company Mathematics Information Systems-MathIS which developed an indexing system which catalogued the content of K through 12th grade mathematics textbooks. More recently he has worked as a Data Security Systems Analyst for Wells Fargo Bank. Currently, he reports residing in Pittsburg, CA.

James Little ('92) looked us up on the web page and would like to know if others would be interested in a directory of alumni e-mail addresses by year of graduation which could be linked to the NIU web page. Anyone interested???

Diane Sly Tielbur ('89) resides in Grayslake, IL, and works for Kraft Foods, Cheese Division, as a Brand Research Manager.

ALUMNI of 25 Years

Congratulations on the 25th anniversary of the Class of 1972. Here's a class listing of the Class of 1972 and their current home towns. If you can update some of the information, we would appreciate your help.

Mary K. Adzima, Pickerington, Ohio
Ralph C. Anderson, Downers Grove, Illinois
Johar Craig Beckman, Belvidere, Illinois
Ronald C. Biggers, Kennesaw, Georgia
Daniel Charles Boyd, Naperville, Illinois

Sandra Lee Burt
Gregory A. Bush, Moline, Illinois
Jerry Lee Coan, North Aurora, Illinois
Mark William Collins, Palos Hills, Illinois
James Philip Conro, St. Charles, Illinois

Mark D. Dattoli, Elmhurst, Illinois
Jane Louise Davis, Oak Park, Illinois
Janice E. Degroot, Mount Prospect, Illinois
James R. Deichstetter, San Jose, California
Martin James Donnelly, DeKalb, Illinois

James E. Duckworth
Sharon Lee Eckhoff
Fred G. Emry
Judith Ann Ferrone
Patricia Ann Fresso, Algonquin, Illinois

Walter T. Gavette
William Joseph Halley, LaGrange Park, Illinois
Karen Sue Hendricks
Jeanne Louise Hoffman, Wheaton, Illinois
Harry C. Hutchins, DeKalb, Illinois

Paul William Johnson, Naperville, Illinois
Laura Ellen Kaplan, Glenview, Illinois
James J. Kleinedler, Jr., Chaska, Minnesota
Ronald Roman Krol, Dyer, Indiana
Steven John Kutnick, Aurora, Illinois

Janet P. Leresche, Long Beach, California
Lee Allen Levin, Munster, Indiana
Lorraine Kay Linnerud, Chicago, Illinois
Thomas Carey Lively, Brentwood, Tennessee
Jeannette Kay Long

Jacqueline A. Madigan
Irene Elaine Mast, Palatine, Illinois
Magda Mazanek
James Reid McCall, Tacoma, Washington
Susan M. McCartney, Glendale Heights, Illinois

Patrick D. McGowan, Aurora, Illinois
Kathlene Faye McMahon, Naperville, Illinois
John Michalos
Diane Marie Milauskas, St. Charles, Illinois
Robert Joseph Mislevy, Lawrenceville, New Jersey

Linda G. Mudge, Peru, Illinois
Edward M. Mulcrone, Downers Grove, Illinois
Karl David Myer, Cherry Valley, Illinois
Theodore L. Nikodem, Grand Rapids, Michigan
Frederick Leon Nordai, Shippensburg, Pennsylvania

Carol Ann Orthal, Schaumburg, Illinois
Robert Vincent Peck, Carol Stream, Illinois
Mark C. Perelman, Evanston, Illinois
Deborah Ann Person, Naperville, Illinois
Robert R. Pottinger, Newark, Illinois

Gary L. Prellwitz, DeKalb, Illinois
Jerry Lee Rhodes, Parker, Colorado
John E. Riegsecker, Tacoma, Washington
Gary Curtis Rippie, Burnsville, Minnesota
Michael John Roche, Aurora, Illinois

Susan J. Russell, Farmington, Minnesota
Janet Marie Scherman, Waukegan, Illinois
Mary Ann Schneider, Peotone, Illinois
Charles I. Schaffner
Joel L. Shank, Park Forest, Illinois

Jeffrey Sienkiewicz, Dundee, Illinois
Robert T. Slattery, Mount Prospect, Illinois
Dennis James Smagacz, Libertyville, Illinois
Judy Kathleen Snow, Barrington, Illinois
Joan A. Stanczyk, Chicago, Illinois

Robert Glenn Stewart, Schaumburg, Illinois
Michael Adams Stueben, Annandale, Virginia
Renee Carol Suchter, Arcadia, California
Bernard Jean Tallman, DeKalb, Illinois
Norman Seek Tchun, Lisle, Illinois

Linda Carol Techter, Lake Zurich, Illinois
Valerie Teipel, Lindenhurst, Illinois
M. Tesauro-Osmundson, Portland, Texas
Steve Edward Todd, Batavia, Illinois
Curtiss M. Trout, Roseville, Minnesota

Rosemary Eileen Turk, Waukegan, Illinois
Corliss Beth Vanetten, Normal, Illinois
Georgia K. Weller, Bloomfield HL., Michigan
Daniel R. Wells, Jr., Urbana, Illinois
Clark Allen Witmer, Metamora, Illinois

David Alan Wood
Randall Alan Wunder, Libertyville, Illinois
August Joseph Zarcone, Downers Grove, Illinois