

Vol. 13 No. 8

Minnesota Apple Computer User's Group, Inc.

# AUGUST 9

Calendar of **Events** 

| М   | Т   | W  | T   | F  |
|---|---|--|---|----|
|   |   | Apple // Main Meeting 1 Washburn Community Library, 5244 Lyndale Ave. S – 7:00pm Subject: ProSel Tom Ostertag 488-9979   | Mac Main Meeting 2 Hennepin Southdale Library 6:30 / 7:00 pm - Mike Carlson 866-3441, David Stovall 474-8015  Apple II DTP SIG 7:00 PM Tom Ostertag 488-9979 Murray Jr. High School, St. Paul | 3  |
| 6   | Northwest Branch CIG 7 NO MEETING DISCONTINUED Jerry Kaufman 535-6745   | Dakota County SIG 8 Mac, Apple II, Apple IIGS Metcalf Junior High Intersection Cedar Ave & County Rd. 30, Burnsville - 7:00 pm Subject: Futures Tom Michals 452-5667 | Board Meeting Lexington Branch Library University & Lexington Aves. St. Paul, MN - 7:00 pm David Laden 488-6774   | 10 |
| Mac Computer Art 13<br>& Design SIG<br>Electronic Easel, 729 Grand<br>Ave. – St. Paul – 6:45 pm<br>Subject:- Studio Tour<br>Computer Viruses - Bob Grant<br>Bring a Disk<br>Joy Kopp 440-5436 | 14  | Apple IIGS SIG 15 No Meeting Mark Evans 377-9000  New Richmond Mac CIG Wisc. Indianhead Technical Coll. John Hackbarth 715-246-6561                                  | Microsoft® Works™ SIG 16  Date Change Ken Edd 631-3679  North Shore Mac CIG Bethlehem Lutheran Church Grand Marais -7:00 pm Jim Ringquist (218)387-2234                                       | 17 |
| Fourth Dimension™ 20<br>SIG<br>Hennepin Southdale Library<br>Ian Abel 824-8602  | Mac Programmer SIG 21 lan Abel 824-8602 Hennepin Southdale Library -7:00  MacCAD/E SIG - Bill Langer 937-9240 Heath/Zenith Computer Hopkins - 7:00 pm | Mac Desktop 22 Publishing SIG First Tech , 2640 Hennepin, Mpls TIME CHANGE: 6:00 pm Subject: All Adobe Products Speaker: Phil Oenning Bob Grant - 228-9637           | AppleWorks®SIG 23 Murray Jr. High, 2200 Buford St. Paul - 7:00 pm Subject: Macro Development Dick Marchiafava - 572-9305  | 24 |
| HyperCard™ SIG 27 Hagen Office Equipment -7:00 pm Mike Carlson 866-3441  Mac Novice User SIG Tom Lufkin 698-6523 NO MEETING   | 28  | 29   | 30  | 31 |

Notes:

CIG - Community Interest Group SIG - Special Interest Group

THE CALENDAR FOR SEPTEMBER IS ON PAGE 4

Coordinators - Please Call Dick Aura (941-1198) by the 1st Friday in order to have your meeting listed correctly.



### The Minnesota Apple Computer Users' Group, Inc.

P.O. Box 796, Hopkins, MN 55343

#### **Board Members:**

| Officers       |                          |          |
|----------------|--------------------------|----------|
| President      | David E. Laden           | 488-6774 |
|                | 675 West Wheelock Pkwy,  |          |
|                | St. Paul, MN 55117       |          |
| Past-President | Dick Marchiafava         | 572-9305 |
|                | 7099 N. E. Hickory Drive |          |
|                | Fridley, MN 55432        |          |
| Vice-President | Tom Lufkin               | 698-6523 |
|                | 2078 Highland Parkway    |          |
|                | St. Paul, MN 55116       |          |
| Secretary      | Randy Dop                | 452-0425 |
|                | 4128 Meadowlark Lane     |          |
|                | Eagan, MN 55122          |          |
| Treasurer      | J. Edward Wheeler        | 881-5928 |
|                | P.O. Box 796             |          |
|                | Hopkins, MN 55343        |          |

| Directors             |               |          |
|-----------------------|---------------|----------|
| Publications          | Dave Undlin   | 432-0913 |
| Software              | Tom Gates     | 789-1713 |
| Operations & Resource | Dick Peterson | 473-5846 |
| SIG: Macs             | Jim Horswill  | 379-7624 |
| SIG: Apples           | Tom Michals   | 452-5667 |
| Membership            | Jason Mooney  | 627-0956 |

|       | ordinators            | _                    |          |
|-------|-----------------------|----------------------|----------|
|       | ginners' Consultant   | Earl Benser          | 884-2148 |
| Sho   | ws & Conventions      | Open                 |          |
| Dal   | cota County           | Tom Michals          | 452-5667 |
| No    | thwest Branch         | Jere Kauffman        | 535-6745 |
|       | Apple II Users        | Tom Ostertag         | 488-9979 |
| ¢     | Apple IIGS SIG        | Dick Peterson        | 473-5846 |
| ¢     | AppleWorks SIG        | Dick Marchiafava     | 572-9305 |
| œ .   | Apple II DTP          | Tom Ostertag         | 488-9979 |
| •     | Beginner's Basic SIG  | Tom Alexander        | 698-8633 |
| •     | Languages/Tech SIG    | Wesley Johnson       | 636-1826 |
| •     | Tech. Adviser (hdwre) | Roger Flint          | 771-2868 |
| 8     | Mac Users             | David Stovall (eves) | 474-8015 |
|       |                       | Mike Carlson (days)  | 866-3441 |
|       | Excel SIG             | M. Nightingale       | 545-9380 |
|       | Mac Programming SIG   |                      | 824-8602 |
|       | HyperCard SIG         | Mike Carlson         | 866-3441 |
|       | CAD & Engin. SIG      | Bill Langer          | 937-9240 |
| 00000 | 4th Dimension SIG     | Ian Abel             | 824-8602 |
|       | Mac Novice SIG        | Tom Lufkin           | 698-6523 |
|       | Smalltalk SIG         | Martin McClure       | 227-9348 |
|       | DeskTop Pub. SIG      | Bob Grant            | 228-9637 |

| Software Director's Staff                          |                            |          |  |
|--|----------------------------|----------|--|
| Apple // DOM Editor<br>MaceDOM Editor/Prod<br>CP/M | Tom Gates Bob Fellows Open | 789-1713 |  |

631-3679

(218) 387-2234

(715) 246-6561

MicroSoft Works SIG Ken Edd

North Shore Mac Users Jim Ringquist

New Richmond Mac U. John Hackbarth

| (Contact with non-Min | i`app`les SIGs)            |
|-----------------------|----------------------------|
| Melvyn Magree         | 559-1108                   |
| Stewart Haight        | 644-1838                   |
| Jim Rosenow           | (414) 261-2536             |
| Dan Berks             | 827-2966                   |
|                       | Stewart Haight Jim Rosenow |

This is the Newsletter of Mini'app'les, the Minnesota Apple Computer Users' Group, Inc., a Minnesota non-profit club. The whole newsletter is copyrighted © by Mini'app'les. Articles may be reproduced in other non-profit User Groups' publications except where specifically copyrighted by the author. (Permission to reproduce these articles must be given by the author.) Please include the source when reprinting.

**Questions** — Please direct questions to an appropriate board member. Technical questions should be directed to the Technical Director.

Membership — Mini'app'les attn: Membership Coordinator PO Box 796 Hopkins MN 55343

All members receive a subscription to the newsletter and all club benefits. New members receive a package of member lists and software catalogs.

| eDOMs        |                        | At<br>Meetings | Mail<br>Order |
|--------------|------------------------|----------------|---------------|
| Members:     | 5 1/4" eDOMs           | \$3.00         | Add           |
|              | 5 1/4" System          | \$1.00         | \$1           |
|              | 3 1/2" Apple/Mac eDOMs | \$5.00         | per           |
|              | 3 1/2" System          | \$3.00         | disk,         |
| Non-Members: | 5 1/4" eDOMs           | \$6.00         | Max           |
|              | 3 1/2" Apple/Mac eDOMs | \$10.00        | \$4.00        |

Make checks payable to: Mini'app'les

Mail to Mini'app'les: Attn: eDOM Sales

PO Box 796, Hopkins, MN 55343

**Dealers** — Mini app'les does not endorse specific dealers. The club promotes distribution of information which may help members identify best buys and service. The club itself does not participate in bulk purchases of media, software, hardware and publications. Members may organize such activities on behalf of other members.

Newsletter Contributions — Please send contributions directly to the Newsletter Editor, Linda Bryan, 1752 Gulden Place, Maplewood, MN 55109. You can also reach Linda at 777-7037 after 4:00 pm.

Deadline for publication for August newsletter only is July 7th. An article will be printed when space permits and if, in the opinion of the Newsletter Editor, it constitutes suitable material for publication.

Meeting Dates - Please phone calendar announcements to: Dick Aura 941-1198.

Many thanks to John Hansen for all his help in the past.

Mini'app'les BBS - 892-3317 8 data 1 stop 0 parity 24 hours

Mini'app'les - 627-0956 (Receive info on upcoming meetings and leave messages) - 24 hours. Thanks to Tom Gates.

Advertising - Direct inquiries to: Sharon Gondek

Mini'app'les Advertising Coordinator PO Box 796

Hopkins, MN 55343

#### **Newsletter Publication Staff**

|                              | #11411 <b>414</b> 11 |          |
|------------------------------|----------------------|----------|
| <b>Publications Director</b> | Dave Undlin          | 432-0913 |
| Editor                       | Linda Bryan          | 777-7037 |
| Graphics Consultant          | Nancy McClure        | 227-9348 |
| Calendar                     | Dick Aura            | 941-1198 |
| Assistant Editor             | Tom Lufkin           | 698-6523 |
| Contributing Editor          | Tom Gates            | 789-1713 |
| Contributing Editor          | Steve George         | 935-5775 |
| Contributing Editor          | Jim Horswill         | 379-7624 |
| Contributing Editor          | Chris Gibson         | 591-0032 |
| Production Manager           | Cindy Reever         | 934-7500 |
| Business Manager             | J. Edward Wheeler    | 881-5928 |

Circulation this issue: 1000

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#### The Fine Print

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| Mes | )   | •    | •  |       |
|-----|-----|------|----|-------|
|     | 7'd | like | to | join! |

| Ple | ease accept my –   |   |  |  |  |
|-----|--|---|--|--|--|
| mi  | ni'app'les MEMBERSHIP /  | APPLICATION.                                |  |  |  |
| Ple | ease Print or Type:  |   |  |  |  |
| 1.  | Name   |   |  |  |  |
|     | Address  |   |  |  |  |
|     | City   | _StateZip                                   |  |  |  |
|     | Res. phone   | Bus   |  |  |  |
|     | Renew ID#  | _ Exp. Date                                 |  |  |  |
| 2.  | Please enroll me as a mi   | ni'app'les member.                          |  |  |  |
|     | ☐ Regular [1st year]       \$20.00         ☐ Renew [one year]       \$15.00         ☐ Foreign       \$30.00         ☐ Sustaining       \$25.00 | ☐ Corporate \$100.00                        |  |  |  |
| 3.  | Please tell us your special interests:   |   |  |  |  |
|     | Which personal computer do you use?  | Area of Interest?   Business Application    |  |  |  |
|     | ☐ Apple II   | ☐ Home Application                          |  |  |  |
|     | ☐ Apple II +   | <ul> <li>Educational Application</li> </ul> |  |  |  |
|     | ☐ Apple IIe  | ☐ Desktop Publishing                        |  |  |  |
|     | <ul><li>□ Apple IIc</li><li>□ Apple IIGS</li></ul>   | □ Other                                     |  |  |  |
|     | ☐ Macintosh Plus   | Do you own or use?                          |  |  |  |
|     | ☐ Macintosh SE   | ☐ Printer                                   |  |  |  |
|     | ☐ Macintosh II   | ☐ Laser Printer                             |  |  |  |
|     | ☐ Macintosh SE/30  | ☐ Modem                                     |  |  |  |
|     | <ul><li>☐ Macintosh Ilcx/Ilci</li><li>☐ Laser - Other</li></ul>  | □ Other                                     |  |  |  |
|     | Sponsored by:  |   |  |  |  |
|     | Check if interested in voluntee<br>Special Area  | er opportunities.                           |  |  |  |
|     | Check if you do not wish to re mailings.   | ceive non-club promotional                  |  |  |  |

You'll receive your new member's kit in 3 to 6 weeks. Make checks payable & mail to:

> mini'app'les PO Box 796 Hopkins, MN 55343

## SEPTEMBER 1990

| Apple // Main Meeting                     | Wed. September 5   | North Regional Library - Beginner's Night - Earl Bense                 | r Note 11                       |
|---|--|--|---------------------------------|
| Apple II DTP SIG                          | Thur. September 5  | Note 11  |                                 |
| Mac Main Meeting                          | Thur. September 6  | Murray Jr. High School, St. Paul<br>Hennepin County Library, Southdale | Notes 4 & 14                    |
| Northwest Branch CIG                      | The second secon | DISCONTINUED   | Note 6                          |
| Mac Computer Art & Design SIG             | Mon. September 10  | Electric Studio, 6800 France Ave., Edina - 927-9747                    | Note 7                          |
| Dakota County SIG                         |  | Metcalf Jr. High, Cedar Ave. & County Rd. 30 Burnsvil                  | le Note 16                      |
| Board Meeting                             |  | Lexington Branch Library, St. Paul                                     | Members welcome - Note 1        |
| Microsoft® Works™ SIG                     | ???????  | Date will be announced   | Note 13                         |
| Fourth Dimension™ SIG                     | Mon. September 17  | Hennepin Southdale Library   | Note 2                          |
| MacCAD/E SIG                              | Tues. September 18   | Heath/Zenith Computers, Hopkins  | Note 8                          |
| Macintosh Programmer SIG                  | Tues. September 18   | Hennepin Southdale Library   | Note 2                          |
| Apple IIGS SIG                            | Wed. September 19  | First Tech Computer, 2640 Hennepin                                     | Note 12                         |
| New Richmond CIG                          | Wed. September 19  | Wisconsin Indianhead Technical College                                 | Note 17                         |
| North Shore CIG                           | Thur. September 20   | Bethlehem Lutheran Church, Grand Marais                                | Note 15                         |
| HyperCard™ SIG                            |  | Hagen Office Equipment   | Note 4                          |
| Mac Novice SIG                            |  | Highland Branch Library, St. Paul - Mike Fraase                        | Note 9                          |
| Mac Desktop Publishing SIG                |  | First Tech Computer, 2640 Hennepin                                     | Note 3                          |
| AppleWorks® SIG                           | Thur. September 27   | Murray Jr. High, 2200 Buford, St. Paul                                 | Note 10                         |
| 1. Dave Laden 488-6774                    | 5. Wesley Johnson  | 636-1826 9. Tom Lufkin 698-6523 1                                      | 3. Ken Edd 631-3679             |
| 2. lan Abel 824-8602                      | <ol><li>Jere Kauffman</li></ol>  | 535-6745 10. Dick Marchiafava 572-9305                                 | 4. David Stovall 474-8015       |
| 3. Bob Grant 228-9637                     | 7. Joy Kopp  |  | 5. Jim Ringquist (218) 387-2234 |
| <ol> <li>Mike Carlson 866-3441</li> </ol> | <ol><li>Bill Langer</li></ol>  | 937-9240 12. Mark Evans 377-9000 1                                     | 6. Tom Michals 452-5667         |

Coordinators - Please Call Dick Aura (941-1198) by the 1st Friday of the month preceding the issue month in order to have your meeting listed correctly. Many thanks to John Hansen for all his help in the past.

## **Members Helping Members**

Need Help? Have a question the manual doesn't answer? Members Helping Members is a group of volunteers who have generously agreed to help. They are just a phone call away. Please: only call if you are a Member, own the software in question, and only within the specified days/hours listed at the bottom.

17. John Hackbarth

Richard Becker

19. Timothy Kunau

870-0659

737-4957 D

(715) 246-6561

| Apple II                       | Key                  | TO SideSpread        | 1              | PaintWorks Plus/Gold | 15           | Microsoft Excel        | 5,6,17,18    |
|--------------------------------|----------------------|----------------------|----------------|----------------------|--------------|------------------------|--------------|
| Applewriter                    | 2                    | TO QuickSpell        | 1              | Prosel               | 2            | Microsoft Word         | 4,5,6,14,17  |
| AppleWorks                     | 1,2,9                | TO SpreadTools       | 1              | TML Basic            | 3            | Microsoft Works        | 11,17        |
| Ascii Express                  | 3                    | TO Thesaurus         | 1              | TML Pascal           | 3            | Networking             | 5,6,13,19    |
| BASIC                          | 5                    | WordPerfect          |                | Writer's Choice      | 15           | OverVue                |              |
| Beagle Buddy                   | 9                    |                      |                |                      |              | PageMaker              | 4,6,17       |
| BPI Programs                   |                      | Apple IIGS           | Key            | Macintosh            | Key          | PostScript             | 8            |
| Datalink 1200                  | 1                    | 816 Paint            |                | 4th Dimension        |              | Power Point            | 5            |
| Dollars & \$ense               | 1                    | AppleWorksGS         | 15             | Adobe Illustrator    |              | QuickBasic             | 5,6          |
| DB Master                      | 7                    | APW                  |                | Beginners            | 13,14        | ReadySetGo             |              |
| Epson LX80                     | 1                    | DeluxePaint II       |                | Canvas               | 5            | Telecommunications     | : 19         |
| Hard & software                | 9                    | General              | 3,10           | FileMaker II         | 17           | WordPerfect            |              |
| Home Acc'n't                   |                      | Graphic Writer II/II | ll 15          | General              | 14,17,18     |                        |              |
| Laser 3.5 drives               | 1                    | Graphics Studio      |                | Helix                | 16           |                        |              |
| MPublishIt!                    |                      | GS/OS                | 3              | HyperCard            | 6,19         | Many thanks to Lloy    | d Nelson for |
| ProTERM                        | 1                    | Merlin 16+           | 15             | MacDraft             | 5            | all his help. Please p |              |
| Talk Is Cheap                  | 3                    | Mousetalk            | 15             | MacDraw              | 5            | correspondence to      |              |
| TimeOut                        | 9,2                  | MultiScribe          |                | MacPaint             | 5            | on the BBS or call ti  |              |
| TO Graph                       | 2                    | Music Studio         |                | Mac OS               | 4            | number - 627-0956.     |              |
| Lloyd Nelson                   | 423-3112             | E 6. Da              | an Buchler     | 435-3075 E           | 12. Timothy  | Shea 739-3764          | E            |
| <ol><li>Tom Ostertag</li></ol> | 488-9979             |                      | n Bell         | 544-4505 E           | 13. John Ha  |                        | D            |
| 3. Tom Gates                   | 789-1713             |                      | itz Lott       | 377-3032 E           | 14. Jim Hor  |                        |              |
| <ol><li>Tom Edwards</li></ol>  | 478-2300             |                      | ck Marchiafava | 572-9305 DE          | 15. Tom Mid  |                        |              |
| 5. Earl Benser                 | 927-6790<br>884-2148 |                      | andy Dop       | 452-0425 EW          | 16. Arnie Kr |                        |              |
| J. Lan Densel                  | 004-2140             | EW 11. Ed            | Spitler        | 432-0103 D           | 17. Michael  | Foote 507-645-6710     |              |

D-days (generally 9a-5p), E-evenings (gen. 5p-9p), W-weekends (gen. 1p-9p).

in any case, call at reasonable hours and ask if this is a convenient time for them. We appreciate your cooperation.

## Minutes of the Board Meeting

June 14, 1990

St. Paul Public Library - Lexington Branch



#### oard Members in attendance:

David Laden, Tom Lufkin, Randy Dop, J.E. Wheeler, Tom Gates, Dick Peterson, Jim Horswill, Tom Michals, Jason Mooney. Excused: David Undlin, Unexcused: Dick Marchiafava.

#### Members in attendance:

Steve George, David Kloempken, Tom Ostertag.

The meeting was called to order by President Laden at 7:06 P.M. The meeting agenda was distributed and reviewed. Motion by Lufkin to accept agenda. Second by Horswill. Carried.

The minutes of the May 10 Board Meeting were submitted

Motion by Lufkin to approve May 10 minutes. Second by Marchiafava. Carried.

#### Agenda Item 2.1 - President's Report

David Laden provided a written report that included accomplishments from this last year and goals for this year. Some of the accomplishments listed were improvement in the content and layout of the newsletter, improvements on Mini'info'net in ease of use and level of activity, better leadership and organization of board agendas and meetings. Some of the goals listed for the upcoming year are: increase membership, continue improvements in the newsletter, and getting more members involved in Mini'app'les.

#### Agenda Item 2.2 - Vice President's Report

#### Agenda Item 2.3 - Secretary's Report

Randy Dop distributed name tags and business cards to the new board members. Randy reported that he is currently catching up on free eDOM coupons for newsletter articles from the November 1989 issue to current.

#### Agenda Item 2.4 - Treasurer's Report

Membership Dues

Report for April 1990 submitted by Wheeler. INCOME

| Savings Account Interest |
|--------------------------|
| eDOM Sales               |
| Newsletter Advertising   |
| EXPENSES                 |
| eDOM Cost of Goods Sol   |
| Telephone                |
| Printing, publications   |

| Newsletter Advertising    | 20.00  | 1142.93 |
|---------------------------|--------|---------|
| EXPENSES                  |        |         |
| eDOM Cost of Goods Sold   | 62.77  |         |
| Telephone                 | 27.50  |         |
| Printing, publications    | 693.29 |         |
| Equipment purchases       | 707.53 |         |
| Petty Cash, miscellaneous | 72.77  | 1563.86 |
| MONTH LOSS                |        | 420.93  |
| Checking Account Balance  |        | 2797.54 |

725.00

17.93

3122.47

380.00

#### Agenda Item 2.5 - Membership Director's Report

Jason Mooney reported that the membership database has been completely updated. Jason provided the president and secretary a copy of the database on diskette and hard copy listings to other board members who requested a copy.

#### Agenda Item 2.6 - Executive Committee Report

Randy Dop provided minutes from the Executive Committee Meeting held June 12.

#### Agenda Item 2.7 - Publications Committee Report

David Undlin provided a written report to David Laden. He announced the following changes in the newsletter staff: Dick Aura will be responsible for the calendar, Linda Bryan and Nancy McClure are working on the calendar design, Cindy Reever is responsible for the front pages except for the calendar and will deliver the finished newsletter to the printer, Sharon Gondek will be setting up the advertising pages.

#### Agenda Item 2.8 - Software Director Report

Tom Gates has been keeping on top of the CD-ROM player from Apple. There was a comment from Jason Mooney that Apple currently has a two-month backorder on CD-ROM players.

#### Agenda Item 2.9 - Resource Director Report

Dick Peterson has been reviewing the calls made to the BBS. Over the last 3,000 calls, 10% have been from non-members.

#### Agenda Item 2.10 - Interest Group Directors Reports

Jim Horswill reported that he has contacted most of the Mac SIG leaders or have left a message for them. All Mac SIGs seem to be going along well.

Tom Michals reported that Ray Douglas of TCCN gave a presentation at the general Apple II meeting. Tom said that there have been a number of new members that have joined at Apple meetings over the last month.

Motion by Wheeler to accept the Directors reports. Second by Horswill. Carried.

#### OLD BUSINESS

### Agenda Item 3.1 - Status of IRS Penalties

No new information this month

#### Agenda Item 3.2 - Purchase of CD ROM Drive

Tom Gates reported that the CD-ROM drive paperwork is ordered and he is waiting for delivery.

#### Agenda Item 3.3 - Status on New Member Kits

Jason Mooney reported that there will be a new membership packet stuffing party at his home on June 16, 1990.

Board Minutes GOTO next page

TCF Inv Mgt Acct



#### Board Minutes continued from previous page

#### Agenda Item 3.4 - Name Tags

Randy Dop distributed name tags to the new board members.

#### Agenda Item 3.5 - Business Cards

Randy Dop distributed business cards to new board members.

#### Agenda Item 3.6 - Board of Directors Directory

David Laden provided a directory of board member address and telephone numbers to all board members for their use.

## Agenda Item 3.7 - Committee Assignments and Appointment of Staff

President

No staff requested

Vice President

No staff requested

Secretary

Steve George - Mail pick-up and delivery

Treasurer

Jim Smith - Monthly budget spreadsheets

**Publications** 

Linda Bryan - Newsletter Editor

Nancy McClure - Graphics Consultant

Dick Aura - Calendar

Cindy Reever - Production Manager

J. E. Wheeler - Business Manager

#### Software

Bob Fellows - Mac eDOM Coordinator

Gervaise Kimm - Mac eDOM Assistant

#### Operations

Chuck Theisfeld - Housing of Mini'app'les BBS

Tom Edwards - Housing of Mini'app'les Macintosh

Membership Will provide next month

#### Macintosh SIGs

David Stovall - Mac Users

Mike Carlson - Mac Users, HyperCard SIG

M. Nightingale - Excel SIG

Ian Able - Mac Programming, 4th Dimension SIG

Bill Langer - CAD & Engineering SIG

Tom Lufkin - Mac Novice SIG

Martin McClure - Smalltalk SIG

Bob Grant - Mac DTP SIG

Ken Edd - Microsoft Works SIG

Jim Ringquist - North Shore Mac Users

John Hackbarth - New Richmond Mac Users

#### Apple SIGs

Tom Ostertag - Apple II Users & Apple DTP

Mark Evans - Apple II GS Users

Dick Marchiafava - AppleWorks Users

Tom Alexander - Beginner's Basic SIG

Wesley Johnson - Languages SIG

Roger Flint - Technical Hardware Advisor Motion by Wheeler to accept staff assignments as presented. Second by Dop. Carried.

## Agenda Item 3.8 - General Membership Meeting - February 1991

Tom Lufkin requested input from the board in the areas of: how many members to expect, which day of the week it should be held, and a preferred meeting location. There was discussion by the board concerning these three issues.

#### **NEW BUSINESS**

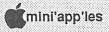
Agenda Item 4.1 - Formation of Nominating Committee Recommendation for board approval: WHEREAS Mini'app'les bylaws paragraph D8a states "Nominations [for election of officers] will be made by nominating committee," THEREFORE BE IT RESOLVED that a nominating committee be formed to consist of 5 members (minimum of 3) not to include board members. The Past President will serve as an Ex Officio (non-voting) member and be the liaison to the Board of Directors. The Past President will convene the first meeting of the Nominating Committee at which time a chair shall be elected. The nominating committee will normally begin its work in the Fall. The committee will be prepared to make its presentation at the February general membership meeting. In the event a board member resigns, the nominating committee may be called upon to make recommendations to the president concerning the vacant position. Carried. David Laden asked each board member to bring one name for possible appointment to the Nominating committee.

#### Agenda Item 4.2 - Membership Database

Recommendation for board approval: WHEREAS the Board of Directors has an interest in proper maintenance of the user group membership database, its general availability for authorized activities, and that there is a sufficient back-up/recovery process; THEREFORE BEITRESOLVED that the Mini'app'les membership database be maintained using AppleWorks or Microsoft Works programs. Motion by Lufkin to amend the motion by adding the phrase "or Claris File-Maker" to the end of the motion. Second by Peterson. Defeated. Motion by Lufkin to amend the motion by adding the phrase "or other program approved by the board of directors." Second by Wheeler. Carried. Motion as amended carried.

#### Agenda Item 4.3 - Mini'app'les Swap Meet

Recommendation for board approval: Swap meets be scheduled for July 1990 and December 1990 and June and December every year thereafter. Motion by Dop to amend the motion by replacing "July 1990" with "August 1990". Second by



## CHCHCHCHCHCHCHCHC

Wheeler. Carried. Motion as amended carried. [Editor note: See page 8 for late-breaking news about the swap meet. Swap meet tentatively rescheduled for October.]

## Agenda Item 4.4 - Renewal of Apple System Software License

Motion by Tom Gates to renew Apple System Software Apple II license for \$75.00 and Macintosh license for \$75.00 for a total of \$150.00. Second by Dop. Carried.

#### Agenda Item 4.5 - Mini'app'les Calendar

Randy Dop provided a copy of the Mini'app'les Calendar for review. Changes to the calendar were provided by board members.

#### Agenda Item 4.6 - New Membership Kits

Recommendation for board approval: The new membership kit consist of the following items:

- 1) Welcome Letter
- 2) Copy of bylaws
- 3) Membership information page including:

membership blank

change of address instructions

description of various membership categories

- 4) Membership card
- 5) Membership roster
- 6) eDOM catalogs
- Newsletter (if available) Carried.

#### Agenda Item 4.7 - Mini'app'les Renewal Cards

Recommendation for board approval: Mini'app'les purchase 5000 membership renewal cards as follows: Post card size, continuous feed, P.O. Box address on front, membership information on back. It is recommended that the membership information be in a format that is consistent with other membership materials. Carried.

#### Agenda Item 4.8 - Mini'app'les Membership Blanks

Recommendation for board approval: Mini'app'les purchase 5000 membership blanks (i.e. gatefold information brochures) with the addition of the Mini'info'line (voice mail) phone number. Carried.

#### Agenda Item 4.9 - Mini'app'les Membership Roster

Recommendation for board approval: The membership roster be published at least once per year in the Mini'app'le newsletter. It is suggested that it be published in the July or August newsletter at the discretion of the newsletter editor. The format of the membership roster will consist of name, phone number, and zip code. Carried.

The meeting adjourned at 9:00 P.M.

Respectfully submitted by Randy L. Dop June 14, 1990

## Letter from the Editor

I've had a number of phone calls this month. The Mac section editor of a California computer user group made a point of phoning me (from our airport while he was changing planes) to tell me that he likes and uses our newsletter and please, please, please don't drop him from our mailing list! A local member called me to say that to him the *Newsletter* is the best part of Mini'app'les membership. Although I dispute his assertion, it was flattering to hear it. Other callers have also praised different features of the Newsletter, especially the front calendar.

### **Giving Thanks**

I must give a few strokes to others in return. Thanks to *Dick Aura* for volunteering to replace retiring calendar liaison *John Hansen*. Thanks to *Dave Undlin* for representing the interests of the *Newsletter* on the Board. Thanks to *Sharon Gondek* for jumping right into the Advertising Manager spot so ably. Thanks to *Cindy Reever* for being so flexibile in doing layout out the frontmatter. Thanks to our *advertisers*—old and new—for supporting us.

We have a few particularly faithful contributors who need some acknowledgement so that we don't take them for granted. Dick Marchiafava is so knowledgeable and so reliable that we have come to think of him as Mr. AppleWorks. Jim Horswill has such a way with words that his Mac articles are charming, and he aways has the Mac beginner's perspective in his sight. Steve George is a particularly faithful contributing editor. That means that he locates and retypes many articles for us, particularly Apple II ones, from the newsletters that we receive in our user group newsletter exchange. Randy Dop translates his notes into highly readable Board Minutes each month, and he is reliable!

Thanks also to our other contributors. Please keep submitting material! The *Newsletter* will only be as good as the contributions that fill it.

### A few procedural matters—submissions

- "Captured keystrokes" is the name of the game. If possible, submit your material by modem or on disk. If by modem, I prefer downloading articles from the BBS.
   Phone me if you need help the first time through. Mac users, please stuff your BBS files if you know how to use StuffIt.
- If you can't get me a computer file of some sort, of course I will accept your material on paper. Verbal stuff is the hardest for me to work with—even if you're a lousy writer and want me to rework the submission, I

Editor GOTO page 9

## 

## **Announcements**



#### issing: eDOM Catalog Master

The club needs its master copy on disk of the eDOM catalog. Do you have it? Please con-

tact a Board member with this good news.

## Swap Meet Rescheduled to October

The swap meet will be rescheduled from August to October.

The Board apologizes for the change in plans, but it had to be made, because of insufficient publicity for the August date and because analysis proved the rental/janitorial costs of meeting space at that time were not prudent. We will attempt to find a site (perhaps a public school) that is less costly. The new date will be announced in the next *Newsletter*.

Keep on boxing up your castoff hardware, software, books, and other supplies to sell. You'll have a chance to unload them soon.

Any member can sell at the swap meet. You only need to show evidence of membership (membership card or *Newsletter* mailing label). Other vendors can purchase space at the swap meet by contacting Tom Lufkin 698-6523 after 4:00 pm.

Invite your friends, family, and colleagues to come buy from fellow members.

## Apple II Upcoming Meetings

by Tom Ostertag

ProSel Utility Programs by Glen Bredon

All right all of you out there that have hard drives, RAM drives or 3.5" drives on your Apple //e or GS. Listen up now. Tom Ostertag (groan...) will talk about ProSel. It's a program selector for large storage devices. Well, it's not just a program selector, it's a whole collection of utility programs that are very useful for anyone, not just large memory users. If you want to find all about it, come to the meeting on 1 August. The meeting will be at 7:00 pm at

Washburn Public Library 5244 Lyndale Avenue South Minneapolis, MN 55419

Come on down and get in on the newest information on one of the greatest utility programs in Apple history. (ProSel 16 is IIGS specific, ProSel 8 will run on any ProDOS machine.)

BTW, the September meeting will be at the North Regional Library, 1315 Lowry Avenue No. in Minneapolis. *Earl Benser* will hold "Beginner's Night Out."

October 3: John Hyde will gather some of the best educational software together and bring it to this meeting. We've seen lots of great stuff in years past and this year should prove no exception!

November 7: Lee Reynolds will talk about the "Art and Magic of Word Processing" and will show several word processors. Come and watch her put that truculent text through its paces.

December 5: Fred Evens will present the perennial favorite at this time of the year: Games, Games, Games....Come and see what great games have been developed for the Apple II platform this year.

See you there...Tom Ostertag

## **AppleWorks SIG Announcements**

by Dick Marchiafava

The meeting topics for April and May were ProDOS and the AppleWorks user and Using AppleWorks Integration.

Having presented these topics three times before, I noted that both of these areas of AppleWorks operations are a lot simpler and easier to use in AppleWorks version 3.0.

AW users attending the July meet explored the mysteries of using memory as a RAM disk.

Schedule for Future AppleWorksMeetings

August 23: Macro Development. An examination of the process of creating and using macro commands developed with TimeOut UltraMacros from Beagle Bros.

September 27: AppleWorks & Printers

October 25: TeleComm, TO Dialer, working with ASCII files November 29: (5th Thursday) Using Mail Merge

December 20: (3rd Thursday) Spreadsheet Template Development

January 24: ReportWriter; Using AppleWorks relationally

SIG meetings are the Fourth Thursday of each month (exceptions noted) starting at 7 pm. Meetings are at Murray Jr High School, 2200 Buford, St. Paul. Enter the school on the west side which is on Grantham Avenue. Call me if you need information on meetings. 612-572-9305, Dick.

### Apple II GS SIG

No Apple II GS meeting in August.

## Mac Computer Art and Design SIG

by Joy Kopp

Meetings start at 6:45 p.m.

Location unless otherwise noted:

Minneapolis College of Art & Design

Computer Lab, Room 325

26th and Stevens, Minneapolis

(August and September meetings are exceptions—see sites listed below.)

August 13—Studio Tour and Discussion of Computer Viruses



## SESECE POPOPOPOPOPOPO

Hosted by The Electronic Easel, a public access Macintosh studio 729 Grand Avenue, St. Paul 227-0096.

Presentation on viruses by *Bob Grant*. Bring a floppy along and take home some Shareware virus protection software. Tour the Easel's facility and discover all their wonderful equipment. Access to this studio is easy and inexpensive.

September 10—Studio Tour and Discussion of Computer Animation

Hosted by The Electric Studio, a computer animation production house, 6800 France Avenue, Suite 190 or 750 (they may be moving) Edina 927-9747. Presentation will be by *Kevin George* and the staff. Subject: is their work in 3D computer animation. They use Silicon Graphics hardware, Wavefront software, IBM ATs with TIPS and RIO. Mac IIs are interfaced into the system through Ethernet. The final product is mastered onto 1" videotape.

#### Mac DTP SIG

August 22—Bob Grant has booked a really big honcho this month: *Phil Oenning* from Adobe. (And *Rick Borstein* of Quark may be there.) Note: Special 6:00 start! Topic: All Adobe Products, including Illustrator III!

The Mac DTP SIG meets on the fourth Wednesday at First Tech, 2640 Hennepin, 7:00 pm. (Note this month's special starting time. Also note that there are five Wednesdays in August and this meeting is on the fourth Wednesday, not

the last Wednesday!)

### Microsoft Works SIG

Note change to 16th of the month because of a conflict for the facility.

The MSWorks SIG has no formal topic for its meetings. Topics are posed by those who attend the meeting. Bring your questions and be prepared to learn from the experts!

### MacNovice SIG

by Tom Lufkin

The June meeting of the Mac Novice Users, featured Chuck Bjorgen, SYSOP of the DTP Exchange BBS (Desk Top Publishing Exchange Bulletin Board System). Chuck talked about what a BBS is and about some of the things you can find on one. (For a sample of postings from Chuck Bjorgen's BBS, see the article "One Space or Two Spaces?" in this issue.)

The August 27 meeting features local author Mike Fraase to discuss HyperCard. Non-novice members are invited as well. Mike wrote *Macintosh Hypermedia*, *Vol. 1* as well as a number of software and hardware commentaries, and is proprietor of Arts and Farces Video and Information Services of St. Paul.

Meetings are fourth Monday of the month, 7:00 pm, Highland Park Library, St. Paul.

### Editor continued from page 7

need your wording on paper if possible. Then I am more likely to be accurate with the spellings and number sequences, and I will be less likely to lose the material because it won't be jotted on the back of a grocery receipt.

- Be sure to give me as much information as you can. I can
  cut down the size of an article, but I can't fill in blanks
  when there is an omission.
- Sign your article in the article itself, and give me a phone number if I have to verify something.
- Run your article through a spelling checker. Twice. Then
  have a person who is a stranger to the article proofread it.
  (Yes, I know that articles with programming in them are
  hard to proofread and that spelling checkers are of little
  help. That's why so much of the burden is on the author
  here.)
- Use tabs to separate columnar material, not spacebar spaces.
- When discussing commercial software, please give as much information as possible about the publisher and price. See Jim Horswill's article in the May 90 Newsletter for more review guidelines.

# 'puters



 Something is better than nothing. Please don't avoid submitting because you think you can't fulfill all the above criteria. I won't bite you. (I've made some marvelous friendships because of members' submission.)

If you send to the Club post office box, I won't receive the material very quickly. Send it to me at my home. My address is listed in the next paragraph.

#### So What Do You Want?

As we approach R-Month (Redesign of the Newsletter) I need to know a few things. What do you want your Newsletter to be like? I hope to put a questionnaire on the BBS (send to #65, Linda Bryan), but you can also write me to me at 1752 Gulden Place, Maplewood, MN 55109. Please do not phone. Linda

August 1990



## NAUGC90, Part II

by Tom Lufkin



n June, I rote about the experience of going to NAUGC90, the National Apple User Group Conference. This page will cover the workshops, those sessions devoted to practical ideas for user groups. Some of the topics were:

GEM•CD (GEM = Generous Efforts of Many)
Better Meetings, Parts I and II
Membership Growth
Canadian Issues
BBSs
Troublesome People
Newsletters
Public or Community Relations

#### GEM-CD

Not really a workshop, the GEM•CD is the outgrowth of a tradition of having PD and shareware for the Apple II and Mac available to the user groups attending NAUGC. By 1989 the collection had grown to almost 100 disks, a headache to copy and distribute. Apple's CD–ROM technology came to the rescue. Because one 4 3/4 inch CD–ROM can hold as much as 650 megabytes—as text that's about 250,000 pages—they may be the best way to store or transfer large amounts of data. Prices for CD drives have been coming down since Apple has competition. Mini'app'les took advantage of special NAUGC90 pricing to buy the GEM•CD for only \$40. We have, at this writing, an order with Apple for their CD player.

Details on the PD and shareware will be announced after we survey the 17,500 files on the Mac disk alone. Some of the highlights of the Mac disc are the 106 MB of art, graphics, and fonts; 20 MB of business and work tools; 150 files of icons; over 38 MB devoted to Learning/Enrichment; and 44 MB, some 699 files, of "UserGroupWare."

### Better Meetings, I and II,

Better Meetings, I and II, explored what made the best meetings, what made the worst, and what are techniques for improving any meeting. One suggestion that merits thought is to to have one or more meetings on the weekend to accommodate students and night workers. All participants agreed a question and answer session was a "must" right at the beginning of a meeting. Members and visitors need their requests for help addressed right away.

#### Membership Growth

Membership growth is an area where there were both lots of problems and lots of ideas. Human contact is important. People come because they're curious. They return because they feel welcome. One club has a mentor program for new members. Another club does multiple follow-up mailing to lapsed mem-

bers, claiming the second mailing brings up to a 50% return.

#### Canadian Issues

Canada was represented by several clubs. They had all of our problems plus some unique ones. High telecom costs were a important gripe. America On-Line hits them with a \$0.20 per minute surcharge—that's \$12 per hour plus standard non-prime time rates! Of possible general interest is MacWorld Toronto in October, 1990.

#### BBS

BBSing came up with some surprises. First, a local BBS may not be the best way for members of smaller clubs to communicate. A national service may be more cost effective than the purchase of a computer, modem, software, and monthly phone charges. Second, "blue" boxes (IBMs) are cheap and have better BBS software so a lot of Apple user groups use them instead of either Apples or Macs. Getting members involved with the BBS is every bit as hard as getting them to write for the newsletter.

#### Troublesome People

Dealing with Troublesome People was a workshop with good ideas for anyone in a volunteer organization. Tips included specific ways to defuse the antagonistic, channel the overenthusiastic, deal with disruption, and guard against anyone laying claim to private "turf," thereby discouraging other volunteers from working in that area. The main goal in coping with personality conflict is to present a "win-win" situation to those involved.

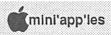
#### Newsletters

Newsletters need volunteers! Every group that puts out some sort of newsletter expressed a need for more club members to contribute articles, letters, short notes, and announcements to the newsletter. Better looking and wider ranging newsletters are expected now with the release of PageMaker 4.0 and low—cost CD—ROM drives. The most heard advice was to avoid burnout by spreading the work of producing a newsletter as widely as possible

#### Public or Community Relations

The Public/Community Relations workshop looked at getting better visibility for user groups within their community. Local media, the press, TV, and radio all appreciate stories on local organizations. Keep them up to date with regular news releases. We should not forget the local "shopper" newspaper or its equivalent. Developing community outreach to schools and nonprofit organizations to aid with their computer-related projects can help boost club membership.







## The AppleWorks Advisor

### A Column For Users Of AppleWorks

by Dick Marchiafava Copyright 1990. Publication by permission only.





## pple Computer Pulls Back Claris

The trade press recently had reports on Apple Computer's "surprising and controversial turnabout" in the action taken bring the \$75

million software subsidiary, Claris, back under the Apple corporate umbrella.

Explanation given for this action is to expedite the development of system software (7.0) and to coordinate system, application and connectivity software development with Apple hardware planning.

Claris stock is 80% owned by Apple Computer, the balance being held by Claris employees. It was expected this closely held subsidiary was to be spun off in a public offering. Instead, Apple will buy back the shares of Claris.

It is too early to tell what this unexpected move will mean to users. In typical Apple fashion, reports of this move do not acknowledge that the software produced and marketed by Claris is for two computer families, Macintosh and Apple // systems. Well, Apple never minded the milk from the cash cow, regardless of how homely it was.

#### Learning With MacroEase

A recent inquiry seeking a method for redefining keys within AppleWorks, in the manner of the SUB function of AutoWorks, set me searching. Finally, someone pointed out a macro described in the MacroEase manual. This product is so new, that I had not been able to get into it.

The Trapping Keys macro will trap keystrokes. The macro also stated "it even lets you redefine keys." Sounds made to order! I searched the disks looking for it, but could not find it.

A closer look in the back of the manual, which shows the files listings for the 5.25" and the 3.5" disk versions of this product, revealed that the 800K disk contains more macro files than the other set. It happens that Beagle sent me the 5.25" disks, so I could not test this macro.

#### **Duplicate Record Delete Macro**

One macro I did find and test is the **Delete Macro**, which searches for and deletes duplicate data base records. I found it just in time.

I recently created a data base using the TimeOut File Librarian, which reads the contents of disks into AppleWorks data base files. For this application, I used a data base with fifteen categories, which is more than the categories needed by File Librarian. The extra categories are used for notation which I add later. This is a useful way for me to get an index of the disk being assembled.

My problem was that I created the data base and annotated it before the disk was complete. More files were added to the disk later. I can read the disk into the data base file again, to pick up the added files, but then I will have duplicate records of all the files already in the data base.

If I did that, it would be necessary to go through the data base record by record, to determine which records were duplicates, and delete the proper one. In this case, it would be the most recently added record, without annotation.

I loaded up the Delete Macro file and used the **UltraMacro** Compiler to activate it. In operation, the user selects a category to Arrange on, then invokes the macro. It verifies which category is to be used in looking for duplicates.

The macro reads each entry in the selected category, then reads and compares it to the next entry. If they match, the user is prompted to confirm the deletion. In short order, my data base was purged of duplicate records.

My initial concern, which the limited documentation with the macro did not address, was how to tell if the duplicate record being offered for deletion was the right one? The screen did not show enough categories to the right to pick out the duplicate records without annotation.

AppleWorks itself came to the rescue on this point. Records in which there are categories containing data, other then the sort category, were always placed ahead of records where the soft category is similar, but the categories are empty. In this case, the undesired duplicate record was always the second one on the screen. The macro expects to delete duplicates other than the first record.

### **Complex Macros Complicate Operation**

Working with complex macros is a bit different than using a default set of broadly utilized macro commands. These macros may use numerous macro tokens for keys which may already be assigned, thereby causing conflict when an attempt is made to integrate them into an existing command set.

It is probably best if macros which run to dozens or even hundreds of lines be run as task files, or called to the desktop and compiled. After execution, the default macro set is reinstalled. Some complex macros I examined contain commands to do that when you want to exit them.

### **AppleWorks Outliner**

I have a pre-release (version .9) copy of the AppleWorks word processor outliner Outline 3.0 being written by Randy Brandt. I have no experience with outliners, so I am looking forward to checking this out.

Appeworks Advisor GOTO next page

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## Finding Your Way Around the Mini'app'les Bulletin Board

(second of three articles on telecommunicating) by Gary Kjellberg

Mini'info'net BBS 892-3317 8N1

Welcome to the wonderful world of BBSing. Now that you have the needed equipment to call a BBS, it is time you give Mini'info'net BBS at call at 892-3317.

The following is a sample logon as you would see it the first time that you called Mini'info'net. My thanks to Dick Peterson, the sysop of Mini'info'net, for his assistance in providing me with this example.

Note: Comments in italics are not really displayed on screen during a BBS session. They are inserted here for your understanding, Material printed in Helvetica (plain) type is material from the BBS. Material in bold Helvetica is the response of the BBS user. Between-line spaces have been omitted for Newsletter space considerations.

### Sample logon

**CONNECT 2400** Connect at [2400] baud!

You must press two carriage returns at this point. (\*> Welcome to MINI'INFO'NET <\*)

New users type "NEW" Guests type "GUEST"

Account Number

-NEW

Enter the following info as it appears on the newsletter label and your membership application

Enter your real full name [25 chars max] :John A. Doe

Zip Code [5 chars] :55555

Your Mini'info'net Membership Number :555

Home phone number [Form: ###-###] :555-555-5555

We have the following. Name John A. Doe Zipcode 55555 Membership# 555

Home phone 555-555-5555

Is this correct (Y/[N]) ? Y If the data you entered is bad, the following is displayed: This information is not on file. Check your membership card.

Try again (Y/[N])?

any other key to logon as guest Y This is the end of the Bad Data display. If you respond with proper data, the following appears, varying with your personal

Date 8910 expired 9912

Finding your account.

Checking 100 user files...[001]

What type of computer are you using to call this system?

Would you like to leave the Sysop a Message (Y/[N]) ? The user types a N. Please enter a password [5-8 Characters] PASS101.

Your account number will be #101 Password will be :PASS101

Please write them down because you will need them next the time you call.

Press < CR> to enter MINI'INFO'NET The user types a carriage return (CR). Last Read Message 0

Good morning John A. Doe, It's 08:00:00 AM on 10/11/89 You were last on 10/11/89 Time left today: 29 mins.

Welcome Sysop ->DICK

Main Bulletins from 1 to 90 There are 2599 new bulletins [ Mailing welcome letter...Sent]

Now please logon to BBS Your account# 101 password PASS101

Account Number ->101

Enter Password

->XXXXXXX (Your number will appear as x's as you type)

Verifying Account... Last Read Message 0 Good morning John A. Doe, lt's 08:01:00 AM on 10/11/89 You were last on 10/11/89 Time left today: 28 mins.

Ctrl-S Stop/Start Spacebar to Exit

[ System News ]



Usually there is a message shown here, but it has been deleted to save space

Welcome Sysop ->DICK

Main Bulletins from 1 to 90 There are 2599 new bulletins

[ You have electronic mail! ]
[ Do you wish to read your mail now ([Y]/N) ? ] User types in Y. ###YES]

01 - [From - Mini'info'net][Subject - Welcome]

[ Date: 10/11/89 Time: 08:00:00 AM ][ Length 1000 bytes ]

[ Read Main \ 027][ 1 - 1 ][ Command (R,#,Q): . ] User types in R. ###READ ALL ]

[ From : Mini'info'net / Subject : Welcome ]

[ Date: 10/11/89 Time: 08:00:00 AM / Length: 1000 Bytes ]

#### WELCOME !!!

We look forward to your participation in the goings-on here. There are

several areas on this BBS. Some are machine-specific and others are general in nature.

| "Board" number & name:               | Who has access:     | Activity:            |
|--------------------------------------|---------------------|----------------------|
| About Mini'info'net                  | Gen. public + membe | rs general club info |
| 2. Chit Chat                         | Gen. public + membe | rs gen. info.        |
| 3. General/Misc. Board               | Club members        | misc.                |
| 4. Talk.Bizarre                      | Club members        | jokes/puns/?         |
| 5. System News/Suggestion Box        | Club members        | BBS news             |
| 6. Apple II People                   | Club members        | Apple2 Q&A           |
| 7. Mac People                        | Club members        | Mac Q&A              |
| 8. Newsletter                        | Club members        | NL discussion        |
| 9. Apple II GS Users                 | Club members        | Apple 2GS Q&A        |
| <ol><li>Market Place</li></ol>       | Club members        | forsale/wanted       |
| <ol><li>AppleWorks Q&amp;A</li></ol> | Club members        | AW Q&A               |
| 12. eDOM Q&A                         | Club members        | Club software Q&A    |
| 13. Apple II Novice                  | Club members        | A2 Beginner Q&A      |
| 14. Mac Novice                       | Club members        | Mac Beginner Q&A     |
| 15. Microsoft Works                  | Club members        | MSWorks Q&A          |
| 16. Fun 'n Games                     | Club members        | chess/WOF/riddles/?  |
| 17. Agenda                           | Board of Directors  | Club business        |

As you can see, you members can read messages and write them to most of the boards. (Those areas listed as having general public access mean that anyone who owns a modem can read, but not write, in those areas.)

You can send messages two ways: In a Mail posting or in a Board post. On the Boards, anything that you write ("post," in BBS parlance) in an area can be read by all others who have access

even though you can specify a specific name in the message header ("To:"). To send messages to a specific individual, you must use the Mail function (from the Main Level of the BBS) or respond Yes when asked if your entry should be private when posting on the Boards.

After you log on, you will be at the Main Level prompt where you issue main level commands or go directly to the Boards listed above. To see the main level commands hit? (question mark) at the prompt. To go to the message boards type B. At a system prompt, you can jump from one board to another by entering Jx where x is a valid board number. To read all new messages since your last call, enter a Q (Quickscan) from the Main Level. This command will read each board in sequence (the *easy* way to keep up on the latest messages!)

#### The BBS in outline form

Here is a diagram of the organization of the BBS.

|                 |             | Logon            |                |
|-----------------|-------------|------------------|----------------|
| (Type a ? for I | Help)       | Section          |                |
| (-)[            |             | 1                |                |
| Type an M       |             | Main Level       | Type an X      |
| 1               | 1           | 1                |                |
| 1 7             | Гуре а В to | Join Message See | ction          |
| 1               | Type a Q to | Scan new messa   | ges            |
| 1               | 1           | ı                |                |
| Mail-Check      | Me          | ssage Boards     | File Transfer  |
| Section to:     |             | Section to:      | Section to:    |
| 1               | 1           | Ĭ                |                |
| Read Mail       | Rea         | ad Messages      | Upload Files   |
| 1               | 1           | I                |                |
| Compose Mail    | Po          | st Messages      | Download Files |
| 1               | 1           | ı                |                |
| Send Mail       | Private r   | eply to Message  | Send Articles  |
| 1               | 1           | .,               | for Newsletter |
| 1               | 1           | 1                |                |
| Type Q to       | T           | ype Q to         | Type Q to      |
| Return to Main  |             | tum to Main      | Return to Main |

#### The Main Menu

Here is what the actual Main Menu looks like on the BBS.

```
List of Supported Commands

((B)) Goto the Bulletin Boards

H -> Read and send soil E -> Examine your system status
1 -> Read System Information F -> Feedback to the Sysop
0 -> General files menu H -> See the detailed help file
$ -> Read the latest System Nees 0 -> Other BBS numbers
T -> Terminate connection (Logoff)

REF -> Find message by its REFe U -> See list of users on system
0 -> Quick scan of bulletin boards D -> Define system display parms
P -> Change / Update your password U -> Vote on your computer equipt
L -> Log of todays callers X -> Goto the file transfer area

[541[Hain Level] Option (?=Help):U
```

BBS GOTO page 19

## **CCCC**

## **ProDOS Pathnames**

by Danny Haynes from the Southern New Hampshire Apple Core **SNAC TIME** #116

he mention of the word *pathname* in software documentation is enough to make some computer users cringe. Some frustrated users simply put the application on the shelf. I hope this short article on ProDOS pathnames will help those users.

Understanding the term "pathname" requires the understanding of a few other terms. Many times an experienced computer user will use terms that seem simple. These seemly simple terms often are only vaguely understood or even misunderstood by the beginning user.

To understand pathnames, we must first understand the terms *Disk*, *Volume Name*, *File*, *and Subdirectory*. Only after grasping these terms, is one able to understand pathnames. Too often, just when a term starts to become clear, something or someone muddies the water. That someone is usually Apple Computer<sup>TM</sup>. Apple Computer has the habit of changing names when updating their software or hardware. This has led to great confusion among new users but hardly is noticed by the more seasoned user.

Let's start with the term *disk*. A disk is a physical thing. It most usually is made from a coating material that can hold a magnetic charge, just like a cassette tape. Some disks are completely electronic in nature, consisting of transistors on a silicon chip. There are many types of disks. There are 5.25" floppies, 3.5" floppies, ramdisks, hard disks, and CD ROM disks to mention a few. Are these all the same? As far as pathnames are concerned, the answer is Yes. Even though these various disks are physically made of various materials, holding differing amounts of data, run at different speeds; they all have one thing in common. That one thing is a "volume name." All ProDOS disks *must* have a volume name.

A volume name is a name that is given to each disk when it is created. Like people, the disks can have different names or the same name. When kids are born, we give them names. When disks are born (formatted) we give them names. It's a rule—every ProDOS disk *must* have a volume name. Because all disks must have a volume name, sometimes disks are referred to as volumes. Ah ha! one source of confusion is identified: *volumes and disks are the same thing*.

Utilities that format disks (volumes) require that you supply a name before the formatting is complete. Unlike people, volumes (disks) are very choosy about their names. Certain rules must be followed in naming a disk (volume).

The rules are few but no deviation is allowed. First, the volume (disk) name *must* be preceded by a slash (/) mark. Second, the volume name itself *must* start with a letter. This letter can be any of the twenty-six letters of the alphabet. The letters are all capitals. The first letter of the name can then be followed by other letters, numbers (1,2,3...) or the period (.) symbol. The third and last rule says that volume names can be any length up to fifteen characters long (not including the preceding slash).

Some examples of volume names:

/G /GEORGE /GEORGE.DISK /GEORGE.DISK3

Some examples of illegal (bad) volume names:

/3.DISKS (doesn't start with a letter)
/PERSONAL.FINANCES (too long)
/HOW.TO.DO? (illegal ? character)

So far we know that disks are devices to store data and that all ProDOS disks must have a volume name. The volume name must follow certain rules. The terms *volume* and *disk* are interchangeable. A disk is a volume and a volume is a disk.

Now that we have a disk (volume) with a legal ProDOS volume name, we are ready to put some data on that disk. In order for the computer to save (record) data on a disk, a name will have to be given to that data.

A computer keeps track of the data by the use of this name. This is called a file or filename. ProDOS filenames follow the very same rules as volume names. Filenames must 1) start with a letter, 2) only contain letters, numbers and period (.) symbol and 3) cannot exceed 15 characters. This data can now be recalled by the use of this filename and the volume name. This is the "pathname" of that file.

Given a disk with the volume name of /PERSONAL and a file containing a letter by the name of JUDY, the complete ProDOS pathname of the file is /PERSONAL/JUDY and a letter saved to the file DAVE on the same disk would have the pathname of /PERSONAL/DAVE.

Now we can add more and more files to the disk by choosing different filenames to keep track of them and to keep them separate. As we add more and more files to the disk, it gets harder and harder to distinguish the files from their filenames. We tend to forget just what each file contains. ProDOS provides a way to simplify this problem. There is a special file called a subdirectory.

Subdirectory filenames follow the very same rules as volume and regular filenames. A subdirectory is a special file because it contains other files. Subdirectories are created by the use of a ProDOS utility such as the System Disk that came with your Apple Computer. There are many commercial utilities to help you create subdirectories and format disks, such as Copy II Plus or ProSEL. The beauty of this special file, a subdirectory, is that it contains other files.

With a subdirectory called LETTERS on a disk with a volume name of /PERSONAL, we can now separate our letter files from our bill files. By saving (recording) the files JUDY and DAVE to a subdirectory called LETTERS on a disk with the name of /PERSONAL, the complete pathnames become:

/PERSONAL/LETTERS/JUDY /PERSONAL/LETTERS/DAVE

We could also create other subdirectories on the disk, such as BILLS. Then we could use this to hold files such as



## \*\*\*\*

TAXES and CAR.PYMTS. Now things will make a little more sense. /PERSONAL/LETTERS contains letters and / PERSONAL/BILLS contains your bill files. The complete pathnames of the bill files become:

/PERSONAL/BILLS/TAXES
/PERSONAL/BILLS/CAR.PYMTS

Of course, you can use any volume names, filenames, or subdirectory names that make sense to you. Just remember that all volume, file and subdirectory names must follow the rules on ProDOS filenames.

As mentioned earlier, the terminology sometimes gets changed about. Just as a sack is a poke is a bag, a subdirectory is a sub-volume is a folder. All these terms refer to the same thing. Subdirectory, sub-volume, folder, all mean the same thing.

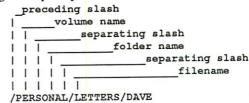
There are two other terms used in connection with directories: *Root Directory* and *Main Directory*. These two terms are interchangeable with volume name or disk. So a Disk is a Volume is a Main Directory is a Root Directory.

What is the difference between a volume (main directory, root directory, disk) and a subdirectory (sub-volume, folder)? A volume name is not contained in any other folder. That is to say, the volume (main, root, disk) name is the first name in the pathname. A subdirectory (sub-volume, folder) is always contained in a volume or another folder. And finally a file is a name given to some data that contains no other files.

- All disks have names referred to as the volume, main directory, root directory or disk name.
- · Volumes can contain files.
- A special file called a subdirectory, sub-volume, or folder

is a file that contains other files.

- All filenames, volumes, folders, etc., must follow certain rules in their naming.
- A complete ProDOS pathname is the volume name followed by the folder name (if used, may be more than one) followed by the actual filename itself.
- The volume name is preceded by a "/" slash and the subsequent files are separated by "/" slashes when specifying a complete pathname.



[As was previously stated, just as things start to clear up, something muddies the waters. Well, Apple has just stirred the cauldron. With regard to GS/OS for the Apple IIgs, there are a few changes to the above. But they are additions, so it shouldn't be too difficult to learn. Starting with GSOS 3.0 (System Disk 5.0) all names (volume, folder, file) are case-sensitive and not limited to 15 characters. So, IDISK/ExtraordinaryStuff/item1 is not the same as IDISK/ExTrAoRdInArYSTUFF/ITEM1. Also, starting with GSOS 3.0, the colon(:) may be used as a separator when specifying pathnames. These additions are for GS/OS only, so if you are using ProDOS8 on your IIgs, things remain the same. Whew!—C.Ed.]

via the Apple-Dillo (Dallas) 9-10/89 via Steve George, Mini' app' les Contributing Editor



## AppleWorks Advisor continued from page 11

The following is a news release from Randy:
The AppleWorks 3.0/TimeOut combination does everything an
AppleWorks user could want, right? Almost. Randy Brandt
(programmer of PathFinder, TimeOut UltraMacros) has written an integrated outliner/thought processor for the word
processor to fill the biggest remaining gap in the AppleWorks
lineup.

Outlines aren't just for magazine columnists and students. They can be used to more easily manipulate anything stored in a word processor file. Brainstorming and planning become easy with an outliner's ability to manipulate topics by changing priority levels, grouping, sorting, etc.

Outline 3.0 is not a TimeOut application; just press Open Apple + in the word processor and you are in outlining mode, ready to zoom into a desired level, add new topics or just browse. You can use standard or legal numbering conversions, or create a custom numbering scheme of your own.

Outlines become part of word processor files. Because all topics have unlimited body text, the outline can remain

part of a file until a project is completed. You then have the option of removing the outline and leaving your final text in a "normal" word processor file.

Outline 3.0 costs \$44.95 + \$3.5 s/h from JEM Software, PO Box 20920, El Cajon CA 92021

Randy expects to have this program completed about the end of July. Look for more comments here after I get into it.

### Spreadsheet Rounding

In a letter from a user at Makora College, Masterton New Zealand, I picked up this comment. "The AW 3.0 spreadsheet appears to have a strange rule for rounding when Value, Fixed, 0 Decimal places is set. Try 1.5 2.5 3.5 4.5 5.5 ..."

The rounding is odd with this setup. In some cases, it rounds up, in others it rounds down. I just would not use 0 decimal places if data was to be entered in other than whole numbers!

AppleWorks questions and tips are welcome. Send to: 7099 Hickory Drive N.E., Fridley, MN 55432. Include address and phone number. Or call 612-572-9305, no collect calls. Dick



## **((())**

## **Applesoft BASIC: Error Traps**

By Tom Alexander

don't think that the term Error Trap is an officially sanctioned computer term but I'll use it anyway because it describes the process of catching a mistake beforethe computer does. Besides, it sounds kind of slick.

The computer is a very precise piece of equipment. If you don't give it exactly what it expects it can cause you a ton of grief.

"But doesn't Apple have error handling routines built right into the computer?" spake Hamlet the Hacker.

Yes. But we're talking about two different subjects. Apple's error handling routines are built around seventeen programming errors that are common to writing programs. These are primarily intended for the programmer in testing the program during its development. Apple has made common errors such as using a RETURN statement without a corresponding GOSUB statement detectable. If that error is encountered the computer will stop executing the program, clear the screen and display "RETURN WITHOUT GOSUB ERROR INLINE 540", for example. This is useful information for debugging a program but might mean nothing to the end user. The Error Traps used in this article are meant for the operator. For a full discussion of Error Handling refer to the book *Applesoft BASIC Programmer's Reference Manual*, published by Addison Wesley.

This article will refer to errors made by the user when responding to INPUT statements in Applesoft BASIC. The INPUT statement is one where the computer is told to suspend execution of the program until the operator types a response to the prompt and hits the carriage return key. This is fine but can result in a CRASH if the wrong response is given. Observe the following line of code:

450 INPUT"What is your age: ";A

Nothing wrong with this. Oh, yeah? The variable A is a numeric variable and will only accept a numeric response (0-9). What if the operator types in "THIRTY THREE". You guessed it. Crash! The computer hangs up (stops executing the program) and you have to restart the program from the beginning. There's an easy way to avoid this: Use an Alpha-Numeric variable (A\$) for the response. The alpha-numeric variable will accept anything typed in from the keyboard. The big advantage of using an A-N variable is that the response can be tested in many different ways. If you need a numeric value the A-N variable can be converted quite simply: A = VAL (A\$).

This should raise some eyebrows. How can you convert THIRTY THREE into 33? Not very easily. In this case it

would probably be best to return to the INPUT statement and try again. One of the ways to guard against erroneous responses is to give an example of what the reply should look like. Using a date as an example it could be shown as:

500 INPUT "Date of birth (mm/dd/yy): ";A\$

Trapping errors becomes a mechanical process that can become quite exhaustive. It also requires the knowledge of the LEFT\$, RIGHT\$ and MID\$ functions; the LEN, ASC, VAL and STR\$ functions; Boolean logic: < > <> = ; the ASCII code and the use of CALLs. Don't forget the really important one: Common sense. Only common sense will tell you that sometimes a person will hit the carriage return key without entering any response.

Here we go. Number one: All response variables should be Alpha-Numeric (e.g. C\$). Number two: It is probably best to return to the INPUT line for another try. Let's see a short example and I'll walk you through it.

600 INPUT"Enter one whole number (1-9): ";A\$
620 IF LEN (A\$) <> 1 THEN CALL-198: CALL-998:
CALL-958: GOTO 600
640 IF ASC (A\$) < 49 OR ASC (A\$) > 57 THEN CALL-

198: CALL-998: CALL-958: GOTO 600 660 REM \* Next program instruction

Line 600 asks you to enter one number and gives you an example. The response is stored in an Alpha-Numeric variable (A\$). Line 620 tests to see if the response was either a carriage return (null string) or if there was more than one

character entered. If either is true the fun begins. You'll next

see a series of CALLs.

A CALL is a function of the computer itself. The CALL will tell the computer to go to a specific memory cell, execute the routine that begins at that memory location then return to the next instruction in the program. When the folks at Apple made the machine they programmed certain routines permanently in the Read Only Memory (ROM) portion of memory. These are machine language routines and operate at that speed - fast. You will notice that all of the CALLs above are negative numbers (e.g. -998). To find the exact memory location subtract the negative number (998) from 65,536 and you'll get the memory location: 65,536 - 998 = 64,338 (decimal) or FC1A (hexidecimal).

IF A\$ is indeed a carriage return or more than one character was entered THEN the program will execute the next instruction which is a CALL. CALL -198 is a machine language routine that rings the bell (beep). The next instructions on the same line number separated by colons (:) will then be executed. CALL -998 will move the cursor up one line. This is done once to position the cursor on the INPUT line. CALL

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| Flister, Stephan P.    | 55127 | 612-429-6735 | Harmon, Hubert N.      | 55112 | 612-636-5716 | Jennings, Wayne                  | 55117          | 612-489-8937 |
| Foote, Michael H.      | 55057 | 507-645-6710 | Harmon, Richard C.     | 55391 | 612-473-8598 | Jensen, Jean M.                  | 55337          | 612-890-6520 |
| Foreman, William T.    | 55420 | 612-888-2710 | Hart, Greg             | 55404 | 612-728-5288 | Job, Bill                        | 55421          | 612-572-0828 |
| Foss, Ken M.           | 55117 | 612-774-7772 | Hatula, Leo            | 55441 | 612-545-8225 | Johnson, Mike A.                 | 55126          | 612-490-9457 |
| Frantz, Jr, Ivan D.    | 55108 | 612-646-5523 | Hauge, Duane S.        | 55068 | 612-432-7855 | Johnson, Reese C.                | 55401          | 612-339-5119 |
| Franzie, Scott D.      | 55408 |              | Hegg, Donald H.        | 55420 | 612-881-3742 | Johnson, Stephen K.              | 55419          | 612-869-3447 |
| French, Robert L.      | 55112 | 612-633-7945 | Heid, Roger S.         | 55337 | 612-432-6206 | Johnson, Stevin F.               | 55014          | 612-786-3028 |
| Frymire, Jane          | 55417 | 612-824-0456 | Heisick, John R.       | 55427 | 612-593-9166 | Johnson, Roberta & Gary          |                | 612-770-5931 |
| Frys, Russell N.       | 55435 | 612-896-1177 | Hellzen, Sue           | 55122 | 612-454-6495 | Johnson, Roger A.                | 55434          | 612-786-7867 |
| Fuller II, Raymond A.  | 55075 | 612-451-8109 | Helmers, John I.       | 55976 | 507-533-8265 | Johnson, David S.                | 27705          | 612-827-0708 |
| Fulwood, James         | 55124 | 612-725-4282 | Henke, James A.        | 55423 | 612-452-5911 | Johnson, Kim V.                  | 55122          | 612-452-6906 |
| Fundingsland, Roger E. | 55369 | 612-420-4158 | Hensel, Robert         | 55016 | 612-459-6902 | Johnson, Wesley D.               | 55112          | 612-636-1826 |
| Gammell, John          | 56379 | 612-253-9377 | Herrmann, Barbara Ann  | 55115 | 612-770-6719 | Johnson, Mark                    | 55417          | 612-822-9638 |
| Gasterland, Hans       | 55420 | 612-827-4854 | Hess, Don              | 55391 | 612-473-5710 | Johnson, Dale                    | 55340          | 612-478-6878 |
| Gates, Thomas A.       | 55418 | 612-789-1713 | Hillier, Fran          | 55102 | 612-227-5128 | Johnson, David A.                | 55350          | 612-587-9839 |
| Gawarecki, Chris       | 55345 | 612-937-8646 | Hilpisch, William P    | 55110 | 612-429-4937 | Johnston, John A.                | 55391          | 612-473-4467 |
| Gebhard, Timothy J.    | 55076 | 612-452-3186 | Hinderlie, Diane S     | 55416 | 612-929-6156 | Jones, C. R. (Bob)               | 55425          | 612-888-5623 |
| Gedell, Karla R.       | 55411 | 612-784-1842 | Hoag, Steven W.        | 55414 | 612-331-3166 | Jones, Rick                      | 56379          | 612-253-8933 |
| George, Stephen T.     | 55343 | 612-935-5775 | Hockin, Robert         | 55108 | 612-642-1930 | Joseph, Katherine &              |                |              |
| Gerdeen, Joel          | 55432 | 612-572-0148 | Hodgdon, Douglas P.    | 55416 | 612-926-7164 | Charles                          | 55166          | 612-699-5684 |
| Gersich, James J.      | 55428 | 612-535-7613 | Hoffman, Chuck         | 55410 | 612-927-8669 | Joyce, Peter M.                  | 55409          | 612-823-3568 |
| Getsug, Ray            | 55116 | 612-690-2974 | Hofman, Joe            | 55406 | 612-722-2871 | Juhl, Chas W.                    | 55409          | 612-825-0567 |
| Gfrerer, Michael       | 55126 | 612-484-4357 | Hognander, Jr., Joe    | 55436 | 612-929-6003 | Kagan, Alan                      | 55118          | 612-457-6586 |
| Gibson, Chris W.       | 55033 | 612-591-0032 | Holdridge, Earl        | 55424 | 612-922-7311 | Kasper, Lee                      | 55301          | 612-497-2413 |
| Gilberstadt, David     | 55454 | 612-339-6348 | Hollenbeck, Gary A.    | 55441 | 612-545-1535 | Kauffman, Jere F.                | 55428          | 612-535-6745 |
| Gilbertson, Roger W.   | 55113 | 612-644-9182 | Hollenbeck, John       | 55082 | 612-430-9313 | Keiper, Eleanor                  | 55408          | 612-474-6077 |
| Gillies, C. Greg       | 55337 | 612-890-4127 | Holman, Kenneth        | 55422 | 612-924-3773 | Kenfield, Dick                   | 55343          | 612-938-4382 |
| Goepfrich, R. F.       | 55410 | 612-927-8363 | Holmberg, Raymond A.   | 55407 | 612-724-3807 | Kimm, Gervaise                   | 55414          | 612-379-1836 |
| Goldhirsch, Ralph S.   | 55422 | 612-544-5988 | Holmberg, Berten A.    | 55119 | 612-738-2232 | Kistner, Joan C.                 | 55437          | 612-835-0641 |
| Gomsrud, Robert        | 55442 | 612-559-1234 | Holmen, Ted            | 55901 | 507-282-9103 | Kjellberg, Gary                  | 55016          | 612-459-1493 |
| Gondek, Sister Sharon  | 55104 |              | Holmquist, Michael W.  | 55337 | 612-890-5617 | Klemann, David                   | 55106          | 612-771-3676 |
| Goodrich, Philip R.    | 55112 | 612-633-5517 | Holterman, Eric F.     | 55409 | 612-822-8528 | Klingener, Alice                 | 55403          | 612-870-1720 |
| Gosselin, Greg         | 55128 | 612-731-3309 | Holzemer, David        | 55406 | 612-722-2035 | Kloempken, David                 | 55410          | 612-922-0459 |
| Gottschalk, Larry      | 55419 | 612-861-4087 | Hom, Edwin S.          | 55122 |              | Knaeble, Peter                   | 55343          | 612-542-1974 |
| Grant, Bob             | 55105 | 612-228-9637 | Homce, Barbara         | 55406 | 612-724-1772 | Knoff, William S.                | 55432          | 612-571-1938 |
| Grant, Jr, Dr. D. C.   | 56171 | 612-764-5691 | Hooper, Stanley B.     | 55055 |              | Koenig, Hans J.                  | 55436          | 612-926-9226 |
| Gray, Todd Alan        | 55126 | 612-490-1864 | Horswell, James        | 55414 | 612-379-7624 | Kolbinger, Nannette M.           | 55113          | 040 404 0040 |
| Green, Mark S.         | 55110 | 612-429-5851 | Hoye, Almon C.         | 55436 | 612-920-6803 | Kopischke, Greg                  | 55124          |              |
| Greenheck, Twila       |       | 612-483-1214 | Hsiao, R. Eckstram/b.  | 55344 |              | Kopp, Robert                     | 55104          |              |
| Grider, David B.       | 55418 | 612-781-3586 | Hsiao, Hoyt M.         | 55121 |              | Kopren, Terry                    | 55345          |              |
| Gruen, Bruce & Joanne  | 55435 | 612-920-2319 | Huck, William          | 55110 |              | Korlath, Bill                    | 55346          | 612-561-0859 |
| Gudahl, Gladys E.      | 55436 | 612-922-8304 | Hultine, Ronald        | 55124 |              | Kosky, Bob                       | 55426          | 612-929-6868 |
| Gudden, Ben            | 55076 | 612-455-3474 | Hum, Vilma A.          | 55122 |              | Kosse, Charles                   | 55102          |              |
| Gunkle, Gloria         | 55033 |              | Hurley, Patrick        | 55364 |              | Kraft, Edward J.                 | 55114          |              |
| Gutenkauf, Joseph J.   | 55124 |              | Imbertson, Jack        | 55108 | 612-646-5635 | Krause, James W.                 | 55416          |              |
| Hackbarth, John        | 54017 |              | Indian Head Lib. Syst. | 54701 | 010 011 0001 | Kroll, Arnold                    | 55025          | 612-433-3517 |
| Haggerty, James J.     | 55425 |              | Ingulsrud, Joel        | 55025 |              | Kronk, David                     | 55346          | 612-937-0389 |
| Hale IV, Henry E.      | 55345 |              | Irragang, Barb         | 55343 |              | Kuhn, Steven A.                  | 55343          |              |
| Hall, Nancy J.         | 55435 |              | Iverson, Bruce J.      | 55068 |              | Kunau, Timothy M.                | 55407          | 612-729-8175 |
| Hallanger, Earling C.  | 55113 |              | Jacobs, Robert S.      | 55369 |              | Kurtz, Mary C                    | 55435          |              |
| Hamerston, Marlow      | 55126 | 612-484-4615 | Jacobson, James L.     | 55425 |              | Kushmar, Jean<br>Laberee, Jon E. | 55331<br>55420 |              |
| Hamilton, Jeff         | 33422 | 612-420-7275 | Jacoby, James W.       | 55420 | 612-888-5888 | Laveled, JUII C.                 | 33420          | 012-000-0213 |

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|-----------------------|-------|--------------|------------------------|-------|--------------|----------------------|-------|--------------|
| Laine, Lawrence       | 55104 | 612-647-0445 | McGuinn, Frank         | 55439 | 612-935-7653 | Olson, Otis          | 56050 | 507-931-4514 |
| Lamb, Michael J.      | 55431 |              | McGinnis, Cliff        | 55109 | 612-483-3660 | Olson, John          | 55408 | 612-823-9000 |
| Lampe, Fred R.        | 27514 | 919-942-2735 | McIntosh, Ross         | 80303 | 303-494-6541 | Olson, Keith D.      | 55101 | 612-452-9478 |
| Lange, Robert G.      | 55432 | 612-571-1551 | McLafferty, Gregory T. | 55014 |              | Ostertag, Thomas     | 55108 | 612-488-9979 |
| Lange, Joan           | 55391 | 612-473-9768 | Mehle, Thomas          | 55412 | 612-529-6774 | Ostrom, Judith A.    | 55112 | 612-633-9594 |
| Langer, William J.    | 55346 | 612-937-9240 | Meisner, Kendall       | 55044 | 612-892-3982 | Ostrov, Dr. C. S.    | 55421 | 612-544-6459 |
| Larson, Virgil        | 55108 | 612-644-4562 | Melon, Jean            | 55407 | 612-729-1174 | Overby, Kathy        | 55117 | 612-776-3022 |
| Laudon, Robert T.     | 55414 | 612-331-2710 | Melpomene Institute    | 55104 |              | Owen, Linda          | 55113 | 612-483-5094 |
| Lawson, Chris D.      | 55345 | 612-931-0965 | Meyer, Dennis          | 55364 | 612-472-5023 | Palmer, John Ivan    | 55416 | 612-922-8557 |
| Lechtman, Suzanne R.  | 55116 | 612-699-2251 | Meyer, Sara            | 55301 | 612-497-2800 | Pancratz, Gregory    | 55343 | 612-936-9567 |
| Lee, Gordon           | 55437 | 612-831-6979 | Michals, Tom           | 55122 | 612-452-5667 | Parker, Jason        | 55423 | 612-861-1595 |
| Lee, Cathy            | 55102 | 612-224-5790 | Mille Lacs Co Area     |       |              | Pashibin, Paul       | 55437 | 612-780-9896 |
| Lee, P.a., Curtis     | 55391 | 612-473-5099 | DAC Inc                | 56353 | 612-983-2162 | Pauley, Chuck        | 56201 | 612-235-9585 |
| Leerhoff, Vic         | 55429 | 612-537-4791 | Miller, Jackie         | 55337 | 612-890-2071 | Paulson, Jerry       | 55337 | 612-435-7676 |
| Leir, Jo Ann          | 54025 | 715-247-5108 | Miller, Anthony D.     | 55405 | 612-871-2508 | Paulson, Dennis      | 55408 | 612-825-6358 |
| Leisman, Wayne M.     | 55063 | 612-629-2873 | Miller, Robert M.      | 55076 | 612-450-0091 | Pearson, Dale G.     | 55101 | 612-772-2285 |
| Lenling, Camille      | 55372 | 612-447-8213 | Miner, James F.        | 55406 | 612-721-7791 | Peck, Ben            | 55409 | 612-823-0776 |
| Lerschen, Barbara     | 55372 | 612-447-6498 | Minumin, Andrew        | 55438 | 612-944-6360 | Peitz, Paul J.       | 55429 | 612-560-9370 |
| Levandowski, Kathy    | 55435 | 612-831-9002 | Miranda, Rocky V.      | 55455 | 612-489-2078 | Peploe, Ella Jean    | 55427 | 612-546-4605 |
| Level, Eric           | 54022 | 715-425-6567 | Mitchell, Joseph H.    | 55423 | 612-861-2346 | Peregoy, Betsy       | 55409 | 612-827-9057 |
| Lewey, Lance          | 55426 | 612-936-9562 | Mizuno, Nancy K.       | 55912 | 507-437-7505 | Perry, Richard J.    | 55347 | 612-829-7377 |
| Lewis, Patrick        | 55431 | 612-888-3216 | Moen, Marilyn/ron      | 55364 | 612-921-2355 | Peterson, Richard H. | 55356 | 612-473-5846 |
| Lex, Mark G.          | 55337 | 612-894-1522 | Molitor, Bradley       | 55369 | 612-425-1778 | Peterson, Charles H. | 55364 |              |
| Lindeen, Charles      | 55104 | 612-489-5596 | Moloney, Jamie         | 55344 |              | Peterson, Steven     | 55436 | 612-922-9212 |
| Litton, Stephen F.    | 55427 | 612-544-1554 | Momoi, Katsuhiko       | 55413 | 612-379-2490 | Peterson, Norman C.  | 55113 | 612-484-3410 |
| Lock, Peter           | 55408 | 612-871-8159 | Montgomery, Herb       | 55436 | 612-922-0724 | Peterson, Randy      | 55419 | 612-920-9349 |
| Lodge, Bearskin       | 55604 | 218-388-2292 | Moon, Greg             | 55435 | 612-929-3811 | Peterson, Gin        | 55051 | 612-679-2161 |
| Lomker, Michael H.    | 55422 | 612-535-0415 | Mooney, Jason          | 55337 | 612-894-3778 | Pfaff, Robert J.     | 55123 | 612-452-2541 |
| Londeen, Dave         | 55437 | 612-881-0597 | Moore, Terry           | 55011 | 612-753-1823 | Pfister, Joel W.     | 55422 | 612-522-8518 |
| Loomis, Jerry         | 55344 | 612-944-9591 | Moran, Jack            | 55424 | 612-920-0558 | Phenow, Larry H.     | 55419 | 612-420-8875 |
| Lorenz, Lee           | 55330 | 612-441-5074 | Morehead, Marc         | 55444 | 612-560-7132 | Phillips, Brad       | 55437 | 612-884-0745 |
| Lott, Fritz           | 55422 | 612-377-3032 | Morrison, James W.     | 55414 | 612-623-3141 | Piepho, Dale A.      | 55109 | 612-770-6079 |
| Lovrien, Joan         | 55125 | 612-739-6958 | Moulin, Donald D.      | 55102 |              | Pihl, Leif O.        | 55406 | 612-729-8277 |
| Lowe, Bob             | 55345 | 612-933-0464 | Mueller, M. E.         | 55364 | 612-472-1104 | Pipp, Andrew J.      | 55443 | 612-561-1722 |
| Lozito, Bill          | 55431 | 612-888-0313 | Munson, Philip         | 55337 | 612-431-0824 | Plain, Robert M.     | 55343 | 612-933-1837 |
| Lucas, Steve          | 55124 | 612-431-1740 | Murray, Gladys         | 55113 | 612-490-6402 | Popov, Victoria      | 55001 | 612-436-1194 |
| Ludwig, Art           | 55343 | 612-935-8675 | Nelson, Lloyd A.       | 55068 | 612-423-3112 | Potter, Dean S.      | 55123 | 612-454-8827 |
| Lufkin, Thomas M.     | 55116 | 612-698-6523 | Nelson, Bryan G.       | 55406 | 612-724-3430 | Potter, Richard A.   | 55417 | 612-822-6430 |
| Luger, John           | 55092 | 612-464-5233 | Nelson, Rolf T.        | 55429 | 612-420-3076 | Prentice, Nancy      | 55411 | 612-522-3988 |
| Lunderborg, Kayleen   | 55431 | 612-888-9586 | Nelson, Clarence W.    | 55124 | 612-454-3314 | Prison, Program      | 55414 |              |
| Lundin, C. David      | 54009 | 715-483-3776 | Nestrud, Jr, Lloyd W.  | 55432 | 612-784-2875 | Przybelski, Lisa     | 55116 | 612-698-7942 |
| Madsen, Timothy       | 56001 | 507-278-3657 | Neuman, Pat            | 55105 | 612-690-4999 | Puncochar, Glenn     | 55418 | 612-781-7101 |
| Magree, Melvyn D.     | 55442 | 612-559-1108 | Newmark, Richard A.    | 55119 | 612-735-4541 | Pyzdrowski, Mike     | 55343 | 612-935-5454 |
| Maier, Mark           | 55426 | 612-544-8240 | Nguyen, Hi Ngoc        | 55112 | 612-785-1506 | Qualey, Terry K.     | 55110 | 612-777-6915 |
| Mansfield, Colin      | 55407 | 612-823-8762 | Nielsen, Donald G.     | 55441 | 612-559-5942 | Radinecki, Regene    | 55409 | 612-824-2959 |
| Marchiafava, Richard  | 55432 | 612-572-9305 | Nielsen, David J.      | 55369 | 612-424-4191 | Ramler, Don          | 55016 | 612-459-3481 |
| Maroushek, Dale R.    | 55128 | 612-777-5309 | Noonan, Joseph F.      | 55127 | 612-484-8678 | Rao, Prakash         | 55435 | 612-560-1116 |
| Marsh, Wayne          | 55409 | 612-827-3369 | Norback, Judy          | 55435 | 612-927-5537 | Rasmussen, Gerry     | 55115 | 612-426-2371 |
| Martin, Paul John     | 55317 | 612-445-0966 | Norman, Ben            | 55089 | 612-258-4507 | Ratliff, Jerry L.    | 55104 | 612-647-0783 |
| Martin, Gerald R.     | 55423 | 612-861-7993 | Notarnicola, Lisa      | 55405 | 612-377-8403 | Ray, Richard S       | 55408 | 612-569-4079 |
| Martinson, Carol Lynn | 55112 | 612-636-6746 | O'neil, Bob            |       | 6120475-9094 | Reed, Thomas         | 56302 | 612-255-9137 |
| Martinson, Reid A.    | 55120 | 612-492-8706 | Oakley, Joe F.         | 55406 | 612-729-6107 | Reever, Cindy        | 55344 | 612-934-7500 |
| Mass, Gregory         | 56401 | 218-829-8436 | Ogland, Peggy          | 55356 | 612-476-0604 | Reich, Ronald R.     | 55420 | 612-888-7813 |
| Maxwell, Stephen L.   | 55104 | 612-222-7600 | Ogren, Lynn            | 55411 | 612-588-7939 | Reid, Tom R.         | 55105 | 612-698-9584 |
| May, Ted              | 55403 |              | Ohnstein, Tom R.       | 55113 | 612-636-4595 | Reinke, Joseph F.    | 55112 | 612-780-8498 |
| Mazyck, Michael       |       | 612-861-7501 | Olejnicak, Scott       | 55407 | 612-724-7068 | Reinken, Jim         | 55372 | 612-440-5436 |
| Mc Cann, James J.     | 55112 | 612-636-0565 | Olesen, C. J.          | 55343 |              | Remer, Teena         | 55426 | 612-933-1876 |
| Mc Clure, Martin R.   | 55105 | 612-227-9348 | Olson, Scott T.        | 55110 | 612-777-6425 | Renner, Tom          | 55347 | 612-937-2391 |
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| Rough   Reynolds   Les   |  |       |              |  |       |              |                        |       |              |
|--|--|-------|--------------|--|-------|--------------|------------------------|-------|--------------|
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| Filos, Bruce A   | Reynolds, Lee  | 55407 | 612-722-7577 |  |       |              |                        |       |              |
| Risseslman, Robert A.   53331   612-470-1969   Smith, Richard A.   55126   612-484-63273   Lindlin, David   55204   612-884-7273   Smith, Wayne E.   55426   612-862-3233   Valentine, Richard   55426   612-828-8284   Valentine, Richard   55426   612-828-885   Smith, James A.   55426   612-828-888   Smith, James A.   55426   612-828-888   Valentine, Richard   55436   612-828-888   Valentine, Richard   Val |  | 55126 | 612-484-5519 | Suzanne  | 55123 | 612-829-7012 |                        |       | 612-729-3550 |
| Ringsmuth, David   55402   612-281-726.   Smith, Mayne E.   55426   612-286-2669.   Smith, James C.   55426   612-286-267.   Smith, James C.   55426   Smith |  | 55102 | 612-451-9639 | Slingsby, Ken  | 55089 | 507-263-3715 | Twito, Paul            | 55404 | 612-872-9763 |
| Ringsmuth, Paul   55497   612-891-73265   Smith, James A   55426   612-896-5664   James III   Smith Paul W   55415   612-893-2688   Smith, Lance T   55426   612-435-6167   Van Guilder, Gerald   5519   612-778-7829   Smith, Maxine   5510   612-778-7829   Smith, Lance T   5512   612-455-0167   Van Guilder, Gerald   Variety   |  |       | 612-470-0196 | Smith, Richard A.  | 55126 | 612-484-6377 | Undlin, David          | 55124 | 612-432-0913 |
| Ringsmuth, David   55420   612-884-1771   Smith, Paul W   55415   612-339-2868   Variety   American   Smith   Smith  |  |       |              |  | 55426 | 612-546-2303 | Vader, Peter B.        |       |              |
| Rivard, Duane J.   55113   612-484-8896   Smith, Lance T.   5512   612-456-1016   Van Gulider, Gerald   55119   612-787-8797   Robins, Slanford   55104   612-787-8797   Smith, Maxine   55104   612-456-1018   Varevice, Ed   55128   612-533-3722   Smith, Maxine   55104   612-65104   Varevice, Ed   55149   612-787-8891   Sommerfield, Susan   5537   612-632-2030   Valer, Sleven C.   55112   612-632-886   Smith, Lance T.   55126   612-632-886   Smith, Maxine   55104   612-632-886   Smith, Lance T.   55126   612-632-886   Smith, Maxine   55104   612-632-886   Smith, Lance T.   55113   612-631-2164   Varevice, Ed   55149   612-825-886   Smith, Maxine   55140   612-632-886   Smith, Lance T.   55140   612-788-8811   Sommerfield, Susan   5537   612-632-2030   Valer, Sleven C.   55112   612-631-882   Smith, Maxine   55140   612-235-2030   Valer, Sleven C.   55112   612-631-882   Smith, Maxine   55140   612-235-2030   Valer, Sleven C.   55112   612-631-882   Smith, Maxine   55140   612-235-2030   Valer, Sleven C.   55112   612-631-882   Smith, Maxine   55140   612-235-073   Valer, Sleven C.   55112   612-631-882   Smith, Maxine   55140   612-235-073   Valer, Sleven C.   55112   612-631-882   Smith, Maxine   55140   612-235-073   Valer, Sleven C.   55112   612-631-882   Smith, Maxine   55140   612-235-073   Valer, Sleven C.   55112   612-631-882   Smith, Maxine   55140   612-235-073   Valer, Sleven C.   55112   612-631-882   Smith, Maxine   55140   612-235-073   Valer, Sleven C.   55112   612-631-882   Smith, Maxine   55140   612-235-073   Valer, Sleven C.   55112   612-631-882   Smith, Maxine   55140   612-235-073   Valer, Sleven C.   55112   612-631-882   Smith, Maxine   55140   612-235-073   Valer, Sleven C.   55112   612-631-882   Smith, Maxine   55140   612-235-073   Valer, Sleven C.   55112   612-631-882   Valer, S |  |       |              |  | 55423 | 612-866-5664 | Valentine, Richard     | 55436 | 612-922-2885 |
| Roberts, Cloria P.   |  |       |              |  |       | 612-339-2868 | Van Alstine, Frank     | 55337 | 612-894-5076 |
| Robots   R |  |       |              |  |       |              |                        |       |              |
| Rocd   |  |       |              |  |       |              |                        |       |              |
| Roenden, Dough S.   65416   612-929-1888   Sorell, Jan   5537   612-925-9309   Vetter, Sleven C.   5512   612-831-8329   Ropper, Dear R.   55127   612-429-2901   Sorenson, Gary   58108   701-235-0073   Vidinar, David L.   55710   218-749-980   Vidinar, David L.   55710   Vidinar, |  |       |              |  |       | 612-631-2164 |                        |       |              |
| Romport, James G.   55418   612-788-8311   Sorens, Bill   5337   612-891-5622   Classor, Bill   Sorens, Cary   Sorenson, Ca | The state of the s |       |              |  |       |              |                        |       |              |
| Rooper, Doarn N.   55176   612-428-2901   Sorenson, Cary   Serior O.   S5404   612-870-7386   Vimra, David L.   S5710   218-749-2990   Rooper, Doarn N.   S5729   612-455-749   Sorenson, Carry O.   S5403   612-481-1524   Vimra, David L.   S5414   Vimra, David L.   Vimra, David |  |       |              |  |       |              |                        |       |              |
| Rose, Milliam C.   5549   612-454-4798   Sorenson, Leröy D.   55404   612-870-7366   Vincent, Paul J.   55414   Vincent, Paul J.   55416   612-454-1461   Nosen, Curt   55177   612-490-0629   Spatz, Mark J.   55406   612-333-5446   Vincent, Paul J.   55409   612-839-8936   Nosen, Curt   55416   612-537-9305   Spatz, Mark J.   55406   612-333-5446   Vincent, Paul J.   55409   612-839-8936   Nosen, Thomas   55416   612-521-5155   Spatz, Mark J.   55609   612-439-5688   Nosen, Thomas   55412   612-521-5155   Spatz, Mark J.   55609   612-439-5688   Nosen, Thomas   55412   612-521-5155   Spatz, Mark J.   55609   612-439-5688   Nosen, Thomas   55412   612-432-103   Nosen, Cart J.    |  |       |              |  |       |              |                        |       |              |
| Rosen, Curl  |  |       |              |  |       |              |                        |       |              |
| Rosenberg, Robert M.   55116   612-490-0629   Spartz, Mank J.   55406   612-333-5446   Vogel, David G.   55406   512-839-8936   Rosenberg, Robert M.   55414   612-837-4300   Spackman, Phill   55082   612-439-5588   Walde, Nancy L.   55105   612-889-8936   Rossin, Thomas   S5412   612-521-5155   Spiller, Faul   S5082   612-439-5588   Walde, Ira   S5343   612-593-936   Rossin, Thomas   S5412   612-521-5155   Spiller, Faul   S5082   612-439-5588   Walde, Ira   S5343   612-593-6936   Rossin, Thomas   S5412   612-521-5155   Spiller, Faul   S5082   612-432-1013   Walde, Ira   S5441   612-564-6836   Rossin, Thomas   S5422   612-529-8039   Stein, Rick   S5421   612-935-7304   Walker, Stephen J.   S5102   612-224-4318   Walker, Stephen J.   S5102   612-234-6138   Walker, Stephen J.   Walker, S |  |       |              |  |       |              |                        |       | 612-454-1461 |
| Ross Fieri A.   55416   612-377-4300   Speckman, Phil   55431   612-489-6205   Walda, Nancy L   55105   612-789-6904   Ross, Thomas   55412   612-521-5155   Spliseth, Paul   5502   612-439-5588   Spliseth, Paul   5502   612-439-5588   Spliseth, Paul   5502   612-439-5089   Spliseth, Paul   5502   612-439-5089   Spliseth, Paul   5502   612-439-5089   Spliseth, Paul   5502   612-439-5089   Spliseth, Paul   5502   612-377-4212   Wald, Eugene   55016   612-458-2005   Wald, Eugene   55016   612-458-2005   Stanislawa, James O.   55403   612-646-6295   Walds, Eugene   55016   612-458-2005   Stanislawa, James O.   55403   612-646-6295   Walds, Eugene   55016   612-458-2005   Stanislawa, James O.   55040   612-789-7304   Walds, Robert F.   5502   612-221-0831   Stanislawa, James O.   55040   612-789-8094   Stanislawa, James O.   55040   612-89-8 |  |       |              |  |       |              |                        |       |              |
| Rossin, Thomas   S5414   612-593-9085   Spiller, Paul   S502   612-493-5568   Wakefield, Brad   S5353   612-479-1656   Rossin, Thomas   S5417   612-542-8588   Spiller, Ed   S5124   612-347-4121   Wald, Irag   S5441   612-546-4635   Rourke, Mary Joan   Rougles, Carolyn M. S162   612-483-1228   Spotted-Eagle, Chris   S5456   612-347-4121   Wald, Eugene   S516   612-483-1228   Spotted-Eagle, Chris   S5456   612-347-4121   Wald, Eugene   S516   612-483-1228   Spotted-Eagle, Chris   S5456   612-347-4121   Walder, Brighten J. S5102   612-291-0831   Walder, Brighten J. S5102   612-291-0831   Walder, Brighten J. S5102   612-291-0831   Walder, Brighten J. S5104   612-291-0831   Walder, Brighten J. S5104   612-291-0831   Maler, Brighten J. S5105   612-244-318   Walder, Brighten J. S5105   612-244-318   Walder, Brighten J. S5105   612-291-0831   612-474-717   Walder, Brighten J. S5105   612-244-318   Walder, Brighten J. S5107   612-291-0831   612-474-717   Walder, Brighten J. S5107   612-291-0831   Wal |  |       |              |  |       |              |                        |       |              |
| Rossin, Thomas   55412   612-521-5155   Spiller, Ed   55142   612-482-0103   Wald, Ira   55441   612-546-4635   Rourke, Mary Joan   55173   612-483-1228   Stanislaw, James O.   55403   612-346-2534   Walker, Stephen J.   55016   612-291-0831   Ruggles, Carolyn M.   55166   612-489-1228   Stanislaw, James O.   55403   612-395-7304   Walker, Stephen J.   5502   612-291-0831   Ruggles, Carolyn M.   55166   612-489-1238   Stanislaw, James O.   55403   612-395-7304   Walker, Stephen J.   5502   612-291-0831   Ruggles, Carolyn M.   55166   612-489-0339   Stain, Rick   55421   612-818-4848   Ward, Vic   55101   612-699-0649   Stachs II, Samuel   Samusleon, Tim   55422   612-391-5134   Stenborg, Carol   Stenberg, David   55376   612-391-9047   Wardhol, Pele   55331   612-447-1717   Stenberg, David   55347   612-393-9049   Wardhol, Pele   55331   612-447-1717   Stantage, Pele   Stanta |  |       |              |  |       |              |                        |       |              |
| Rost, David   Sch27   612-542-6588   Spotted-Eagle, Chris   S5405   612-377-4212   Wald, Eugene   S5016   612-459-2005   Rourke, Mary Joan   S5112   612-483-1228   Stanislaw, James O.   S5405   612-293-5704   Walker, Brian K.   S5347   612-293-5708   Walker, Brian K.   S5347   612-293-5708   Walker, Brian K.   S5347   612-293-5708   Walker, Brian K.   S5347   612-292-4318   Ward, Vic   S5101   612-249-318   Ward, Vic   S5101   612-249-318   Ward, Vic   S5101   612-269-0649   Ward, Nobert F.   S5412   612-374-5114   Stenborg, Carol   S5113   Stenborg, Carol   S5113   Stenborg, Carol   S5112   612-374-5145   Stenborg, Carol   S5113   Stenborg, Carol   S5112   612-636-686   Stewart, Annalee   S5414   612-378-0778   Stenborg, Carol   S5112   612-436-6580   Stewart, Annalee   S5414   612-378-0778   Ward, Vic   S5101   612-249-4318   Ward, Vic   S5101   612-269-0649   Ward, Vic   S5101   612-269-0649   Ward, Vic   S5101   612-699-0649   Ward, Vic   Ward, Vic   S5101   612-699-0649   Ward, Vic   Ward, Vic   Ward, Vic   Ward, Vic   Ward, Vic   Ward, Vic   S5101   612-699-0649   Ward, Vic    |  |       |              |  |       |              |                        |       |              |
| Rougles, Carolyn M.   55113   612-483-1228   Stanislaw, James O.   5502   612-293-7930   Walker, Brian K.   55102   612-293-0831   Ruggles, Carolyn M.   55126   612-484-6135   Stapp, Hugh   63021   612-935-7904   Walker, Brian K.   55347   612-226-6975   Walker, Brian K.   55102   612-293-6975   Walker, Brian K.   55103   612-293-6975   Ward, Vic   55101   612-699-0649   Ward, Vic   55101   612-699-0649   Ward, Vic   55101   612-699-0649   Ward, Vic   55101   612-699-0649   Warner, Dr. Bill   55108   612-474-7177   Warner, Dr. Bill   55108   612-474-7177   Warner, Dr. Bill   55108   612-474-7177   Warner, Dr. Bill   55108   612-474-6185   Warner, Dr. Bill   Warner, D | Control of the Contro |       |              |  |       |              |                        |       |              |
| Ruggles, Carolyn M.   55126   612-484-6135   Stapp, Hugh   63021   612-935-7304   Walker, Brian K.   55347   612-722-6975   Rurynor, Robynne   55422   612-529-0339   Stein, Rick   55424   612-781-4306   Walker, Brian K.   55105   612-224-4318   Ward, Vic   S5101   612-699-0619   Steinberg, David   55337   612-931-9047   Ward, Vic   55101   612-699-0619   Steinberg, David   55345   612-931-9047   Ward, Vic   55101   612-699-0619   Steinberg, David   55345   612-931-9047   Ward, Vic   55101   612-699-0619   Steinberg, David   55345   612-931-9047   Ward, Vic   55101   612-644-0658   Ward, Vic   Ward |  |       |              |  |       |              |                        |       |              |
| Rydell Md, Robert E.   5542   612-529-0339   Stein, Rick   5542   612-781-4306   Walsh, Robert F.   55105   612-224-4318   Rydell Md, Robert E.   55345   612-933-1019   Steinberg, David   55347   612-934-8342   Ward, Vic   55101   612-699-0649   Steinbicker, Bill   55436   612-931-9047   Warhol, Pete   55331   612-474-7177   Warner, Dr. Bill   55108   612-646-058   Walsh, Robert F.   55108   612-640-058   Ward, Vic   55101   612-699-0649   Ward, Vic   S5101   612-699-0649   Ward, Vic   Ward, Vic  |  |       |              |  |       |              |                        |       |              |
| Pydell Md, Robert E.   55345   512-933-1019   Sleinberg, David   55337   612-894-8342   Ward, Vic   55101   612-699-0649   Sachs II, Samuel   48203   Steinborg, Carol   55113   Steinborg, Carol   55114   Steinborg, Carol   55115   Steinborg, Carol   55115   Steinborg, Carol   55115   Steinborg, Carol   55115   Steinborg, Carol   55114   Steinborg, Carol   55115   Steinborg, Carol   55114   Steinborg, Carol   55115   Steinborg, Carol   55114   Steinborg, Carol   55114   Steinborg, Carol   55115   Steinborg, Carol   55114   Steinborg, Carol   55115   Steinborg, Carol   55114   Steinborg, Carol   55116   Steinborg, Carol   55114   Stei |  |       |              |  |       |              |                        |       |              |
| Saches II, Samuel         48203         Steinbicker, Bill         55345         612-931-9047         Warhol, Pete         55331         612-474-7177           Saeks, Allen I.         5542         612-786-5690         Stevens, David         55347         612-934-4094         Warner, Dr. Bill         55108         612-436-6366           Samuleson, Joanne         55112         612-636-7686         Stewart, Annalee         55414         612-378-0778         Wasmund, William         55409         612-835-8366           Sandven, Dorothy & Roger         55420         612-845-20179         Studi, Gorge D.         55420         612-452-0179         Stout, Gary         55414         612-914-0195         Webb, Uswan         55108         715-549-6382           Savitt, Gregg         55426         612-452-0179         Stoud, Gary         55414         612-941-0195         Webb, Lewis F.         54016         612-958-46382           Schal, Thomas W.         55113         612-482-9033         Strath, Irere         55347         612-724-2833         Webb, Lewis F.         54016         612-939-9463           Schlicher, David W.         55423         612-869-8262         Strath, Jerre         55419         612-278-9816         Westrich, Brian         55426         612-869-8262         Stuck, Liz         55414  |  |       |              |  |       |              |                        |       |              |
| Saeks, Allen I.         55426         612-374-5134         Stenborg, Carol         55113         Warner, Dr. Bill         55108         612-684-0658           Samulstoen, Tim         55434         612-786-5690         Stevens, David         55347         612-934-4304         Warmer, Dr. Bill         55108         612-644-0658           Samuleson, Joanne         55112         612-636-7686         Stewart, Annalee         55414         612-378-94470         Wasbunn, Fritz         55337         612-828-5866           Sauri, Thad         55122         612-546-6189         Stordi, Goott         55109         612-653-0832         Webb, Lewis F.         54016         715-549-6382           Schill, Thomas W.         55113         612-482-9033         Storal, Joan         55347         55414         612-724-2813         Webb, Lewis F.         54016         715-549-6382           Schiller, Russell         55419         612-36-6189         Storal, Irere         55347         612-724-2833         Webb, Lewis F.         54016         715-549-6382           Schiller, Russell         55419         612-371-4972         Strating, Jeff         55419         612-724-2833         Webe, Lewis F.         54016         715-549-6382           Schild, Leonard         55423         612-89-8262         Stuck, Liz <td></td> <td></td> <td>612-933-1019</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>  |  |       | 612-933-1019 |  |       |              |                        |       |              |
| Samlsteen, Tim         55434         612-786-5690         Stevens, David         55347         612-934-4304         Washburn, Fritz         55337         612-435-6346         63436-6346         Mashunleson, Joanne         55112         612-636-7666         Stewart, Annalee         55414         612-378-0778         Wasmund, William         55409         612-825-3886         612-378-3646         Mashon, Harold J.         55414         612-378-9461         Wasmund, William         55409         612-825-3886         612-378-9461         612-378-9461         Wasmund, William         55409         612-8278-3861         612-378-94632         Webb., Launcelot J.         55410         612-378-94632         Webb, Lewis F.         54016         715-549-6382         612-926-6382         Vebb, Lewis F.         54016         715-549-6382         612-926-6382         612-926-4512         612-926-4512         612-926-4512         612-926-4512         612-926-4512         612-92-926-4513         612-474-8015         Webb, Lewis F.         54016         715-549-6382         612-92-926-4513         715-549-6382         612-92-926-4513         84016         715-549-6382         84016         715-549-6382         84016         715-549-6382         84016         715-549-6382         84016         715-549-6382         84016         715-549-6382         84016         715-549-6382         84016  |  |       | 640 074 5404 |  |       | 612-931-9047 |                        |       |              |
| Samuelson, Joanne         55112         612-636-7686         Stewart, Annalee         5544         612-378-0778         Wasmund, William         55409         612-82-3666           Sander, Dorothy & Roger         55420         612-884-5841         Storla, Scott         55109         612-630-0832         Waston, Harold J.         55416         612-378-9461           Sauer, Thad         55122         612-452-0179         Stord, Gary         5544         612-941-0195         Webb, Lewis F.         54016         715-549-6382           Savitt, Gregg         55426         612-546-6189         Storual, David         55347         612-474-8015         Webb, Lewis F.         54016         612-926-4543           Schellenberg, Steve         55110         612-482-9033         Strand, Itere         55347         612-724-2833         Weber, Launcelot G.         55426         612-926-4512         612-929-8453           Schiller, Russell         55419         612-292-8452         Strand, Itere         55417         612-724-2833         Westp, Solveig         55342         612-928-8453           Schloff, Leonard         55116         612-2869-8262         Stuck, Liz         55417         612-623-7828         Westpy, Solveig         55343         612-938-9463           Schussler, Larry         5518  |  |       |              |  |       | 010 001 1001 |                        |       |              |
| Sandven, Dorothy & Roger   S5420   612-884-5841   Stilley, George D.   S5427   612-544-4767   Watson, Harold J.   S5414   612-378-9461   Stour, Roger   S5420   612-482-0179   Stour, Gary   S5415   612-492-0179   Stour, Gary   S5416   612-941-0195   Webb, Susan   S5108   715-549-6382   Stour, Gregg   S5426   612-546-6189   Stovall, David   S5331   612-474-8015   Weber, Lillian M.   S5424   612-926-4533   Schai, Thomas W.   S5113   612-482-9033   Strand, Irere   S5347   Weber, Launcelot G.   S5424   612-926-4533   Schiller, Russell   S5419   612-926-5412   Strating, Jeff   S5419   612-378-3082   Westhy, Solveig   S5343   612-938-9463   Schlicher, David W.   S5428   612-869-8262   Stuck, Liz   S5414   612-378-3082   Westhy, Solveig   S5343   612-893-9463   Schussler, Larry   S5346   612-491-9294   Stueven, David   S5109   612-777-8683   Wheeler, J. Edward   S5403   612-874-4993   Stueven, David   S5109   612-777-8683   Wheeler, J. Edward   S5403   612-887-898   Sullivan, Steve B.   S5410   612-928-8492   Wister, David W.   S5431   612-485-5222   Surine, Susan G.   S5117   612-777-8683   Wheeler, J. Edward   S5403   612-892-8641   Susskind, Ronald   S5109   612-645-2730   White, Garry C.   S5404   S6108   Solient, Laura   S5402   Sulvian, Steve B.   S5410   612-888-7159   Taylor, Edward N.   S603   612-892-8949   Solient, Laura   S5402   S4008   S6108    |  |       |              |  |       |              |                        |       |              |
| Sauer, Thad   S5122   612-82-90179   Storta, Scott   S5109   S5109   S5108-90822   Webb, Susan   S5108   715-549-6382   Savitt, Gregg   S5426   612-546-8189   Stovall, David   S5331   612-478-8015   Webc, Lelina M.   S5424   612-926-4533   Schai, Thomas W.   S5113   612-482-9033   Strand, Irere   S5347   Schellenberg, Steve   S5106   612-731-4972   Strating, Jeff   S5419   612-926-4512   Strating, Jeff   S5429   Str |  | 33112 | 012-030-7000 |  |       |              |                        |       |              |
| Sauer, Thad   55122   612-452-0179   Stout, Gary   55414   612-941-0195   Webb, Lewis F.   54016   715-549-6382   Savitt, Gregg   55426   612-546-6189   Stovall, David   55331   612-474-8015   Weber, Lallian M.   55424   612-926-4533   Schai, Thomas W.   55113   612-482-9033   Strand, Irere   55347   Weber, Lallian M.   55424   612-926-45152   Schellenberg, Steve   55106   612-731-4972   Strathman, Larry   55417   612-724-2833   Westby, Solveig   55442   612-926-45152   Stratling, Jeff   55419   612-623-7828   Westby, Solveig   55343   612-938-9463   Schlicher, David W.   55426   612-898-8262   Stuck, Liz   55414   612-9378-3082   Westby, Solveig   55343   612-938-9463   Stuck, Liz   55414   612-9378-3082   Westby, Solveig   55343   612-938-9463   Stuck, Liz   55414   612-9378-3082   Westby, Solveig   55343   612-872-4993   Stuck, Liz   55414   612-920-8463   Westby, Solveig   55343   612-872-4993   Westby, Solveig   55343   612-872-4993   Wheeler, J. Edward   55402   612-471-9294   Stueven, David   55109   612-777-8683   White, Garry C.   Solvein, Bohard   Solvein, Bohard  |  | 55420 | 612-884-5841 |  |       |              |                        |       |              |
| Savitt, Gregg         55426         612-546-6189         Stovall, David         55331         612-474-8015         Weber, Lillian M.         55424         612-926-4533           Schali, Thomas W.         55113         612-482-9033         Strand, Irere         55347         Weber, Launcelot G.         55424         612-926-4152           Schellenberg, Steve         5516         612-731-4972         Strathman, Larry         55417         612-623-7828         Welch, Gene P.         55424         612-938-9463           Schliler, Russell         5549         612-926-5412         Strathman, Larry         55417         612-623-7828         Westby, Solveig         55343         612-938-9463           Schlicher, David W.         5543         612-869-8262         Stuck, Liz         55414         612-623-7828         Westby, Solveig         55343         612-872-4938-9463           Schloff, Leonard         55116         612-692-2113         Stueven, David         55109         612-777-8683         Wheler, J. Edward         55423         612-881-5928           Schwendeman, Peg &         Schwendeman, Peg &         Schwendeman, Peg &         Sursikind, Ronald         55104         612-822-8492         Wider, Ronald H. &         Milen, Agen Melle K.         55113         612-898-756         612-898-756         612-898-756 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>   |  |       |              |  |       |              |                        |       |              |
| Schai, Thomas W.         55113         612-482-9033         Strand, Irere         55347         Weber, Launcelot G.         55424         612-926-4152           Schellenberg, Steve         55106         612-731-4972         Strahman, Larry         55417         612-724-2833         Welch, Gene P.         55424         612-559-1166           Schiller, Russell         55419         612-926-5412         Strating, Jeff         55419         612-623-7828         Westby, Solveig         55343         612-938-9463           Schlicher, David W.         55424         612-690-2113         Strating, Jeff         55419         612-623-7828         Westby, Solveig         55343         612-938-9463           Schloff, Leonard         55116         612-690-2113         Struck, Liz         55414         612-777-8683         Wheeler, J. Edward         55423         612-881-5928           Schussler, Larry         55348         612-471-9294         Sullivan, Steve B.         55410         612-920-8463         White, Garry C.         55944         507-634-4090           Schwendeman, Peg & Mike         5501         507-263-3801         Swater, Jack         55117         612-774-2224         Widmer, Ronald H. &         612-922-5998         612-645-2730         Milen, Joel         55337         612-892-3801         612-646-2730   |  |       |              |  |       |              |                        |       |              |
| Schellenberg, Steve Schiller, Russell         55106         612-731-4972         Strathman, Larry         55417         612-724-2833         Welch, Gene P.         55442         612-559-1166           Schiller, Russell         55419         612-926-5412         Strating, Jeff         55419         612-623-7828         Westby, Solveig         55343         612-938-9463           Schloff, Leonard         55116         612-690-2113         Stuck, Liz         55414         612-378-3082         Westby, Solveig         55343         612-938-9463           Schusler, Larry         55348         612-471-9294         Sullivan, Steve B.         55410         612-920-8463         White, Garry C.         55944         502-881-5928           Schwartz, Terry         55118         612-455-5222         Sulrivan, Steve B.         55410         612-920-8463         White, Garry C.         55944         507-634-4090           Schwartz, Terry         55118         612-455-5222         Sulrivan, Steve B.         55410         612-922-8463         Wilder, Ronald H. &         40elle K.         55113         Adelle K.         55113         40elle K.         55113         4   |  |       |              |  |       | 012-474-6015 |                        |       |              |
| Schiller, Russell         55419         612-926-5412         Strating, Jeff         55419         612-623-7828         Westby, Solveig         5543         612-938-9463           Schlicher, David W.         55423         612-869-8262         Stuck, Liz         55414         612-378-3082         Westbrich, Brian         55403         612-872-4993           Schlosff, Leonard Schussler, Larry         55346         612-690-2113         Stueven, David         55109         612-777-8683         Wheeler, J. Edward         55423         612-881-5928           Schwartz, Terry         55118         612-471-9294         Sullivan, Steve B.         55410         612-920-8463         White, Garry C.         55944         507-634-4090           Schwendeman, Peg & Mike         55031         507-263-3801         Swatez, Jack         55104         612-645-2730         Widmer, Ronald H. & Adelle K.         Adelle K.         55113         612-929-6261           Segar, Thomas W. Schvik, Rick         55413         612-378-3816         1612-888-7159         Taylor-Sharp, Keith         55104         612-922-8492         Wilken, David         Wilkening, Keith E.         55337         612-890-9067           Selvik, Rick         55413         612-378-3816         Telke, Terry         55123         612-454-0501         Wilkening, Keith E.         5534  |  |       |              | •  |       | 612.724.2022 |                        |       |              |
| Schlicher, David W.         55423         612-869-8262         Stuck, Liz         55444         612-378-3082         Westrich, Brian         55403         612-872-4993           Schloff, Leonard         55116         612-690-2113         Stueven, David         55109         612-777-8683         Wheeler, J. Edward         55423         612-881-5928           Schwartz, Terry         55384         612-471-9294         Sullivan, Steve B.         55410         612-920-8463         White, Garry C.         55944         507-634-4090           Schwartz, Terry         55118         612-455-5222         Surine, Susan G.         55117         612-774-2224         Widmer, Ronald H. &         55113         507-634-4090           Schwendeman, Peg & Mike         55031         507-263-3801         Swatez, Jack         55416         612-922-8492         Widmer, Ronald H. &         55113         612-992-6261           Segar, Thomas W.         55431         612-888-7159         Taylor, Edward N.         56303         612-253-7283         Wigand, Richard         51104         612-922-8998           Selvik, Rick         55413         612-378-3816         Telke, Terry         55123         612-454-0501         Wilkening, Keith E.         55437         612-890-9067           Severin, Deb         55411         612-588-750  |  |       |              |  |       |              |                        |       |              |
| Schloff, Leonard 55116 612-690-2113 Stueven, David 55109 612-777-8683 Wheeler, J. Edward 55423 612-881-5928 Schussler, Larry 55384 612-471-9294 Sullivan, Steve B. 55410 612-920-8463 White, Garry C. 55944 507-634-4090 Schwartz, Terry 55118 612-455-5222 Surine, Susan G. 55117 612-774-2224 Widmer, Ronald H. & Schwendeman, Peg & Milke 55031 507-263-3801 Swatez, Jack 55416 612-922-8492 Wigse, Dick W. 55436 612-929-6261 Segar, Thomas W. 55431 612-888-7159 Taylor, Edward N. 56303 612-253-7283 Wigand, Richard 55402 Taylor-Sharp, Keith 55104 612-645-760 Wilkening, Keith E. 55337 612-890-9067 Selvik, Rick 55413 612-378-3816 Telke, Terry 55123 612-454-0501 Wilkening, Keith E. 55437 612-831-8356 Seng, Richard C. 55401 612-333-5840 Tenney, Quentin E. 55337 612-890-7886 Wilkening, Reith E. 55437 612-891-7047 Severin, Deb 55411 612-588-7506 Thiesen, Craig 55402 Thiesen, Craig 55402 Thiesen, Craig 55402 Thiesen, Craig 55402 Thompson, Barbara L. 55104 612-259-8806 Wilken, Robert S. 55345 612-474-9353 Thompson, Barbara L. 55104 612-222-7039 Wood, Randy 55408 612-872-4206 Wilken, Richard S. 55446 612-560-8103 Thompson, David J. 55345 612-222-7039 Wood, Randy 55408 612-294-8909 Sienko, Richard A. 55422 612-542-8741 Thorp, Will 55421 612-639-0468 Wyde, John 55408 612-994-8909  |  |       |              |  |       |              |                        |       |              |
| Schussler, Larry         55384         612-471-9294         Sullivan, Steve B.         55410         612-920-8463         White, Garry C.         55944         507-634-4090           Schwartz, Terry         55118         612-455-5222         Surine, Susan G.         55117         612-774-2224         Widmer, Ronald H. &         55944         507-634-4090           Schwendeman, Peg & Mike         55031         507-263-3801         Swatez, Jack         55416         612-922-8492         Widmer, Ronald H. &         Adelle K.         55113         Adelle K.         55113         Adelle K.         55113         Mike         55104         612-922-8492         Widmer, Ronald H. &         55406         612-929-6261         55416         612-922-8492         Widmer, Ronald H. &         55416         612-922-8492         Widmer, Ronald H. &         40elle K.         55113         40elle K.         55104         612-922-8492         Wilelm, Inclead         55416         612-922-8492         Wilelm, Inclead         55416         612-922-8492         Willelm, Joel         55236         612-922-5998         612-922-5998 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>  |  |       |              |  |       |              |                        |       |              |
| Schwartz, Terry         55118         612-455-5222         Surine, Susan G.         55117         612-774-2224         Widmer, Ronald H. &           Schwendeman, Peg & Mike         55031         507-263-3801         Swatez, Jack         55416         612-922-8492         Wiese, Dick W.         55436         612-922-5998           Segar, Thomas W.         55431         612-888-7159         Taylor, Edward N.         56303         612-253-7283         Wigand, Richard         51104         612-922-5998           Selvik, Rick         55413         612-378-3816         Taylor-Sharp, Keith         55104         612-646-4576         Wilhelm, Joel         55337         612-890-9067           Selvik, Rick         55413         612-378-3816         Telke, Terry         55123         612-454-0501         Wilkening, Keith E.         55437         612-891-836           Severin, Deb         55401         612-388-7506         Thiesen, Craig         55401         612-332-3028         Willembring, Pat         55105         612-698-7047           Sherperd, Beverly         54022         Thoffen, David         54023         715-749-3407         Willson, Robert S.         55345         612-434-9338           Shervey, Paul         55409         Thompson, Roy L.         55113         612-255-8860         Wilson, Robert S.  |  |       |              |  |       |              |                        |       |              |
| Schwendeman, Peg & Mike   S5031   S07-263-3801   Swatez, Jack   S5416   612-922-8492   Wiese, Dick W.   S5436   612-929-6261   Segar, Thomas W.   S5431   612-888-7159   Taylor, Edward N.   S6303   612-253-7283   Wigand, Richard   S1104   612-922-5998   Seifert, Laura   S5402   Taylor-Sharp, Keith   S5104   612-646-4576   Wilhelm, Joel   S5337   612-890-9067   Selvik, Rick   S5413   612-378-3816   Telke, Terry   S5123   612-454-0501   Wilkening, Keith E.   S5437   612-831-8356   Seng, Richard C.   S5401   612-333-5840   Tenney, Quentin E.   S5337   612-890-7886   Willenbring, Pat   S5105   612-698-7047   Severin, Deb   S5411   612-588-7506   Thiesen, Craig   S5401   612-332-3028   Williams, Lindy   S5438   612-944-0333   Sharpsteen, Jerry L.   S5337   612-890-5068   Thiesfeld, Chuck W.   S5044   612-891-5636   Wilson, William R. (Bill)   S5426   612-548-8368   Thomes, Jay   S5401   612-559-8806   S102-690-0827   Shields, Jim & Wendy   S5303   612-423-4638   Thompson, Roy L.   S5113   Swatez, Jack   S5402   Siber, Rand & Leslie   S5444   612-68-8103   Thompson, David J.   S5426   612-639-0468   Siber, Rand & Leslie   S5444   612-56-8103   Thompson, David J.   S5426   612-639-0468   Thompson, Fancine Creme   S5127   S6438   612-944-8909   S6428   S6428-874-8909   S6428-874-8909   S6428   S6428-874-8909   S6428-874-8909   S6428   S6428-874-8909   S642 |  |       |              | The second secon |       |              |                        | 33344 | 307-034-4090 |
| Mike         55031         507-263-3801         Swatez, Jack         55416         612-922-8492         Wiese, Dick W.         55436         612-929-6261           Segar, Thomas W.         55431         612-888-7159         Taylor, Edward N.         56303         612-253-7283         Wigand, Richard         51104         612-922-5998           Seifert, Laura         55402         Taylor-Sharp, Keith         55104         612-646-4576         Wilhelm, Joel         55337         612-890-9067           Selvik, Rick         55413         612-378-3816         Telke, Terry         55123         612-454-0501         Wilkening, Keith E.         55437         612-891-836           Seng, Richard C.         55401         612-333-5840         Tenney, Quentin E.         55337         612-890-7886         Willenbring, Reith E.         55105         612-698-7047           Severin, Deb         55411         612-588-7506         Thiesen, Craig         55401         612-332-3028         Williams, Lindy         55438         612-944-0333           Sharpsteen, Jerry L.         55337         612-890-5068         Thiesen, Craig         55401         612-891-5636         Williams, Lindy         55436         612-474-9333           Shervey, Paul         55402         55402         Thompson, Roy L.         55113 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>55113</td> <td></td>   |  |       |              |  |       |              |                        | 55113 |              |
| Segar, Thomas W.         55431         612-888-7159         Taylor, Edward N.         56303         612-253-7283         Wigand, Richard         51104         612-922-5998           Seifert, Laura         55402         Taylor-Sharp, Keith         55104         612-646-4576         Wilhelm, Joel         55337         612-890-9067           Selvik, Rick         55413         612-378-3816         Telke, Terry         55123         612-454-0501         Wilkening, Keith E.         55437         612-891-836           Seng, Richard C.         55401         612-333-5840         Tenney, Quentin E.         55337         612-890-7886         Willenbring, Pat         55105         612-698-7047           Severin, Deb         55411         612-588-7506         Thiesen, Craig         55401         612-332-3028         Willenbring, Pat         55105         612-698-7047           Shepherd, Beverly         54022         Thoffern, David         54023         715-749-3407         Wilson, Robert S.         55345         612-474-9353           Shervey, Paul         55304         612-434-9836         Thompson, Roy L.         55113         612-636-3419         Wiltenberg, Jill M.         55345         612-474-9353           Shrewsbury, Carolyn M.         56001         507-625-3264         Thompson, Barbara L.         551  |  | 55031 | 507-263-3801 |  |       |              |                        |       | 612-929-6261 |
| Seifert, Laura         55402         Taylor-Sharp, Keith         55104         612-646-4576         Wilhelm, Joel         55337         612-890-9067           Selvik, Rick         55413         612-378-3816         Telke, Terry         55123         612-454-0501         Wilkening, Keith E.         55337         612-831-8356           Seng, Richard C.         55401         612-333-5840         Tenney, Quentin E.         55337         612-890-7886         Willembring, Pat         55105         612-698-7047           Severin, Deb         55411         612-588-7506         Thiesen, Craig         55401         612-332-3028         Willembring, Pat         55105         612-698-7047           Sherpsteen, Jerry L.         55337         612-890-5068         Thiesen, Craig         55401         612-332-3028         Willembring, Pat         55105         612-698-7047           Sherpsteen, Jerry L.         55337         612-890-5068         Thiesen, Craig         55401         612-332-3028         Williams, Lindy         55436         612-944-0333           Sherpsteen, Jerry L.         55337         612-890-5068         Thiesfeld, Chuck W.         55044         612-891-5636         Wilson, Robert S.         55345         612-474-9353           Shervey, Paul         55304         612-434-9836         Thomas, J  |  |       |              |  |       |              |                        |       |              |
| Selvik, Rick         55413         612-378-3816         Telke, Terry         55123         612-454-0501         Wilkening, Keith E.         55437         612-831-8356           Seng, Richard C.         55401         612-333-5840         Tenney, Quentin E.         55337         612-890-7886         Willenbring, Pat         55105         612-698-7047           Severin, Deb         55411         612-588-7506         Thiesen, Craig         55401         612-332-3028         Willenbring, Pat         55105         612-698-7047           Sharpsteen, Jerry L.         55337         612-890-5068         Thiesen, Craig         55401         612-332-3028         Willams, Lindy         55436         612-944-0333           Shepherd, Beverly         54022         Thofern, David         54023         715-749-3407         Wilson, Robert S.         55345         612-474-9353           Shervey, Paul         55304         612-434-9836         Thompson, Roy L.         55113         612-636-3419         Wilson, Robert S.         55345         612-872-4206           Shrewsbury, Carolyn M.         56001         507-625-3264         Thompson, Edward B.         55042         612-777-7660         Wittenberg, Jill M.         55344         612-422-1645           Shuckhart, Harold         55303         612-422-1645         Thom  |  |       |              |  |       |              |                        |       |              |
| Seng, Richard C.         55401         612-333-5840         Tenney, Quentin E.         55337         612-890-7886         Willenbring, Pat         55105         612-698-7047           Severin, Deb         55411         612-588-7506         Thiesen, Craig         55401         612-332-3028         Willenbring, Pat         55105         612-698-7047           Sharpsteen, Jerry L.         55337         612-890-5068         Thiesen, Craig         55404         612-891-5636         Wilson, Robert S.         55426         612-545-8368           Shepherd, Beverly         54022         Thofern, David         54023         715-749-3407         Wilson, Robert S.         55345         612-474-9353           Shervey, Paul         55409         Thompson, Roy L.         55113         612-636-3419         Wilson, Ben         55105         612-897-4206           Shrewsbury, Carolyn M.         56001         507-625-3264         Thompson, Edward B.         55042         612-777-7660         Wittenberg, Jill M.         55344         612-422-1645           Sibet, Rand & Leslie         55444         612-560-8103         Thompson, David J.         55345         612-222-7039         Woodward, Frederick B.         55115         612-426-4060           Sienko, Richard A.         55033         612-825-8126         Thuston, Francine C   |  |       | 612-378-3816 |  |       |              |                        |       |              |
| Severin, Deb 55411 612-588-7506 Thiesen, Craig 55401 612-332-3028 Williams, Lindy 55438 612-944-0333 Sharpsteen, Jerry L. 55337 612-890-5068 Thieseld, Chuck W. 55044 612-891-5636 Wilson, Williams, Lindy 55426 612-545-8368 Shepherd, Beverly 54022 Thofern, David 54023 715-749-3407 Wilson, Robert S. 55345 612-474-9353 Shervey, Paul 55409 Thompson, Roy L. 55113 612-636-3419 Wilson, Ben 55105 612-690-0827 Shields, Jim & Wendy 55304 612-434-9836 Thompson, Roy L. 55113 612-636-3419 Wittenberg, Jill M. 55345 612-422-4206 Shrewsbury, Carolyn M. 56001 507-625-3264 Thompson, Edward B. 55042 612-777-7660 Wittjes, Linda 55344 612-423-3638 Thompson, Barbara L. 55102 612-222-7039 Wood, Randy 55068 612-423-3752 Sibet, Rand & Leslie 55444 612-560-8103 Thompson, David J. 55345 612-973-9230 Woodward, Frederick B. 55115 612-426-4060 Sienko, Richard A. 55422 612-542-8741 Thorp, Will 55421 612-639-0468 Wyde, John 55408 612-944-8909  |  |       |              |  |       |              |                        |       |              |
| Sharpsteen, Jerry L. 55337 612-890-5068 Thiesfeld, Chuck W. 55044 612-891-5636 Shepherd, Beverly 54022 Thofern, David 54023 715-749-3407 Wilson, Robert S. 55345 612-474-9353 Shervey, Paul 55409 Thomas, Jay 55441 612-559-8806 Wilson, Ben 55105 612-690-0827 Shields, Jim & Wendy 55304 612-434-9836 Thompson, Roy L. 55113 612-636-3419 Wittenberg, Jill M. 55345 612-422-4206 Shrewsbury, Carolyn M. 56001 507-625-3264 Thompson, Edward B. 55042 612-777-7660 Wittjes, Linda 55344 612-423-3638 Shuckhart, Harold 55303 612-422-1645 Thompson, Barbara L. 55102 612-222-7039 Wood, Randy 55068 612-423-3752 Sibet, Rand & Leslie 55444 612-560-8103 Thompson, David J. 55345 612-973-9230 Woodward, Frederick B. 55115 612-426-4060 Sienko, Richard A. 55422 612-542-8741 Thorp, Will 55421 612-639-0468 Wyde, John 55406 612-729-4262 Silberberg, Sarah 55033 612-825-8126 Thuston, Francine Creme 55127 Young, Alwin C. H. 55438 612-944-8909  |  | 55411 |              |  |       |              |                        |       |              |
| Shepherd, Beverly         54022         Thofern, David         54023         715-749-3407         Wilson, Robert S.         55345         612-474-9353           Shervey, Paul         55409         Thomas, Jay         55441         612-559-8806         Wilson, Ben         55105         612-690-0827           Shields, Jim & Wendy         55304         612-434-9836         Thompson, Roy L.         55113         612-636-3419         Wittenberg, Jill M.         55345         612-872-4206           Shrewsbury, Carolyn M.         56001         507-625-3264         Thompson, Edward B.         55042         612-777-7660         Wittjes, Linda         55344         612-423-3638           Shuckhart, Harold         55303         612-422-1645         Thompson, Barbara L.         55102         612-222-7039         Wood, Randy         55068         612-423-3752           Sibet, Rand & Leslie         55444         612-560-8103         Thompson, David J.         55345         612-973-9230         Woodward, Frederick B.         55115         612-426-4060           Silberberg, Sarah         55033         612-825-8126         Thuston, Francine Creme         55127         Wyde, John         55438         612-944-8909  | Sharpsteen, Jerry L.   |       | 612-890-5068 |  |       |              |                        |       |              |
| Shervey, Paul         55409         Thomas, Jay         55441         612-559-8806         Wilson, Ben         55105         612-690-0827           Shields, Jim & Wendy         55304         612-434-9836         Thompson, Roy L.         55113         612-636-3419         Wittenberg, Jill M.         55345         612-872-4206           Shrewsbury, Carolyn M.         56001         507-625-3264         Thompson, Edward B.         55042         612-777-7660         Wittjes, Linda         55344         612-423-3638           Shuckhart, Harold         55303         612-422-1645         Thompson, Barbara L.         55102         612-222-7039         Wood, Randy         55068         612-423-3752           Sibet, Rand & Leslie         55444         612-560-8103         Thompson, David J.         55345         612-973-9230         Woodward, Frederick B.         55115         612-426-4060           Silberberg, Sarah         55033         612-825-8126         Thuston, Francine Creme         55127         Wyde, John         55438         612-944-8909   | Shepherd, Beverly  | 54022 |              |  | 54023 |              |                        |       |              |
| Shields, Jim & Wendy         55304         612-434-9836         Thompson, Roy L.         55113         612-636-3419         Wittenberg, Jill M.         55345         612-872-4206           Shrewsbury, Carolyn M.         56001         507-625-3264         Thompson, Edward B.         55042         612-777-7660         Wittjes, Linda         55344         612-423-3638           Shuckhart, Harold         55303         612-422-1645         Thompson, Barbara L.         55102         612-222-7039         Wood, Randy         55068         612-423-3752           Sibet, Rand & Leslie         55444         612-560-8103         Thompson, David J.         55345         612-973-9230         Woodward, Frederick B.         55115         612-426-4060           Silberberg, Sarah         55033         612-825-8126         Thuston, Francine Creme         55127         Wyde, John         55438         612-944-8909   | Shervey, Paul  | 55409 |              | Thomas, Jay  | 55441 | 612-559-8806 |                        | 55105 | 612-690-0827 |
| Shrewsbury, Carolyn M.         56001         507-625-3264         Thompson, Edward B.         55042         612-777-7660         Wittjes, Linda         55344         612-423-3638           Shuckhart, Harold         55303         612-422-1645         Thompson, Barbara L.         55102         612-222-7039         Wood, Randy         55068         612-423-3752           Sibet, Rand & Leslie         55444         612-560-8103         Thompson, David J.         55345         612-973-9230         Woodward, Frederick B.         55115         612-426-4060           Silberberg, Sarah         55033         612-825-8126         Thuston, Francine Creme         55127         Wyde, John         55438         612-944-8909  |  |       | 612-434-9836 | Thompson, Roy L.   |       |              |                        |       |              |
| Shuckhart, Harold         55303         612-422-1645         Thompson, Barbara L.         55102         612-222-7039         Wood, Randy         55068         612-423-3752           Sibet, Rand & Leslie         55444         612-560-8103         Thompson, David J.         55345         612-973-9230         Woodward, Frederick B.         55115         612-426-4060           Sienko, Richard A.         55422         612-542-8741         Thorp, Will         55421         612-639-0468         Wyde, John         55406         612-729-4262           Silberberg, Sarah         55033         612-825-8126         Thuston, Francine Creme         55127         Young, Alwin C. H.         55438         612-944-8909  | STATE OF THE PROPERTY OF THE P |       | 507-625-3264 | Thompson, Edward B.  | 55042 | 612-777-7660 |                        |       |              |
| Sibet, Rand & Leslie       55444       612-560-8103       Thompson, David J.       55345       612-973-9230       Woodward, Frederick B.       55115       612-426-4060         Sienko, Richard A.       55422       612-542-8741       Thorp, Will       55421       612-639-0468       Wyde, John       55406       612-729-4262         Silberberg, Sarah       55033       612-825-8126       Thuston, Francine Creme       55127       Young, Alwin C. H.       55438       612-944-8909  |  |       |              |  | 55102 | 612-222-7039 | Wood, Randy            |       |              |
| Sienko, Richard A.       55422       612-542-8741       Thorp, Will       55421       612-639-0468       Wyde, John       55406       612-729-4262         Silberberg, Sarah       55033       612-825-8126       Thuston, Francine Creme 55127       Young, Alwin C. H.       55438       612-944-8909  |  |       |              |  |       | 612-973-9230 | Woodward, Frederick B. | 55115 |              |
|  |  |       |              |  |       | 612-639-0468 |                        | 55406 |              |
| Silberman, Sheldon 55422 612-377-0272 Totten, William M. 55105 612-699-1220 Ziemer, Edward L. 55936 507-754-5020   |  |       |              |  |       |              |                        |       |              |
|  | Silberman, Sheldon   | 55422 | 612-377-0272 | lotten, William M.   | 55105 | 612-699-1220 | Ziemer, Edward L.      | 55936 | 507-754-5020 |

-958 will clear the screen from the cursor to the bottom of the screen. Line 600, the INPUT line, is printed on the screen again. It's important to note that all of the functions (CALLs, etc.) are on the same line number and will be executed if the condition tested for is TRUE (1). If the condition is FALSE (0), the program will fall through to the next line number.

IF A\$ is not a carriage return and just one character was entered then the next line number (640) will execute. This line tests if the character entered is between 1 and 9. For this we use the ASC function. In the above example we test to see if the character entered is between 49 (1) and 57 (9) in the ASCII code. If the response is correct (one number between 1 and 9 is entered) the program will execute the instructions on the next line number, 660.

This is fine for a one digit number but what about a number of more than one digit say, 1234. Each character in the string must be tested to see if it falls within the range of the ASCII codes for the numbers 0-9 (48 to 57). For this we use the loop. Here's how that would look:

```
600 INPUT"Enter a whole number: ";A$
620 IF LEN (A$) < 1 THEN GOTO 680
640 FOR X = 1 TO LEN (A$)
660 IF ASC (MID$ (A$,X,1)) => 48 AND ASC (MID$ (A$,X,1)) =< 57 THEN GOTO 700
680 CALL-198: CALL-998: CALL-958: GOTO 600
700 NEXT X
720 REM * Program resumes
```

Line 620 tests for a null string (carriage return only). Line 660 tests each character of the string to see if its ASCII value is between 48 an 57 (0 through 9). If it's not, the test fails and the GOTO is not executed. The program falls through to the next line number (680) and the series of CALLs brings you back to the INPUT statement for another try.

You can add an error message to line 620 to make your program more professional looking. Here's how line 620 would look:

```
620 IF LEN(A$) < 1 THEN CALL-198: PRINT:
HTAB(10): INVERSE: PRINT" ENTER AGAIN PLEASE ":
FOR Y = 1 TO 4000: NEXT Y: NORMAL: CALL-998:
CALL-998: CALL-998: CALL-958: GOTO 600
```

If a null string is encountered, line 620 will now ring the bell, drop one row down and print the message - ENTER AGAIN PLEASE - on an inverse background. A delay loop is written so that the error message can be read. Two more CALL-998s have to be added because the error message prints two rows down. Try to avoid smart-alec remarks in messages. They only serve to aggravate.

For the last example let's use a more extensive verification method to check to see if a date has been entered correctly. Once again, an example is included in the INPUT statement.

```
400 REM * Initialize variables
420 M2 = 0: C = 0: C$ = ""
440 B$ = "": B1$ = "": B2$ = ""
460 M$ = "": M1$ = "": M2$ = ""
480 REM * Verify INPUT routine
500 INPUT"Date of birth (mm/dd/yy): ";B$
520 IF LEN (B$) < 6 OR LEN (B$) > 8 THEN GOTO 800
540 B1$ = RIGHT$ (B$,3): B2$ = LEFT$ (B1$,1)
560 IF MID$ (B$,2,1) <> "/" AND MID$ (B$,3,1) <>
"/" OR B2$ <> "/" THEN GOTO 800
580 IF MID$ (B1\$,2,1) = "/" OR MID\$ (B1\$,3,1) =
"/" THEN GOTO 800
660 L = LEN (B$): L1 = L - 3: M$ = LEFT$ (B$,L1):
M1$ = RIGHT$ (M$,3)
680 IF MID$ (M1$,1,1) = "/" THEN M2$ = RIGHT$
(M1$,2): GOTO 740
700 IF MID$ (M1$,2,1) = "/" THEN M2$ = RIGHT$
(M1$,1): GOTO 740
720 IF MID$ (M1$,2,1) <> "/" THEN GOTO 800
740 C$ = LEFT$ (B$,2): C = VAL (C$): IF C < 1 OR
C > 12 THEN GOTO 800
760 M2 = VAL (M2\$): IF M2 < 1 OR M2 > 31 THEN
GOTO 800
780 GOTO 820
800 CALL-198: PRINT: HTAB(10): INVERSE: PRINT"
ENTER AGAIN PLEASE ": FOR X = 1 TO 4000: NEXT X:
NORMAL: CALL-998: CALL-998: CALL-958:
GOTO 400
820 REM * Resume program
```

The error trapping routine begins at line 400. It is in the next three lines that all variables used in the routine are set to zero or a null string. This is important because if an error is detected the variables must be cleared for the next attempt. Line 500, the INPUT line, gives the example of how the date should be entered. Line 520 checks if the string is less than six characters or more than eight. This line will also take care of null strings. If either is true the program will GOTO line 800, the error attention line. Lines 540, 560 and 580 are intended to isolate the first and second backslash of the date and put this character (/) into B2\$. Line 560 tests to see if both the left and right backslashes are where they're supposed to be. Line 580 will determine if the last two characters of the date are backslashes. Lines 660 through 720 isolate the number of days entered and line 760 determines if that number is less than 1 OR more than 31. (Admittedly, this will not cover all months.) Line 740 will determine if less than 1 OR more than 12 has been entered in the month section.

If the date has been entered correctly the tests above will all fail so line 780 must be there to jump over the error attention line, 800. Line 800 prints an error message and through a series of calls goes back to line 400 to initialize the variables and reprints the INPUT line, 500, for another try. Finally, line 820 continues the program.

BASIC GOTO page 8

## 

## **Little Computer People**

by Activision

Review by Al Lancaster, T.A.S.I.E 8/87

oes your computer have a personality? Does it smile when fed or petted? Does it enjoy music and television? Does it write notes to you?

If the answer to any of these questions is

yes, perhaps you have already discovered Activision's Little Computer People. Actually, to be faithful to the construct of the program, its not the computer itself that displays these traits, it is a little computer person who moves into the house in your computer and makes it his home. Each software package has just one LCP and presumably, each of these computerized buggers is a different individual with a different, randomly assigned name. In the case of the package I used, the fellow's name was Buck.

We first meet Buck when he walked into a previously empty house, graphically rendered on the computer screen (I haven't tried this on a monochrome monitor but I suspect color is a big plus). After looking the place over, he decided that the place suited him and made it his own. Then it became the computer user's responsibility to keep Buck happy. This involved using Control Key commands to provide food (for Buck and his dog), water, an occasional new album for his stereo, and some direct physical petting. The petting consisted

#### BASIC continued from previous page

Anything missing? The operator could enter - 8/12/XX and get away with it. Better you should check for illegal characters as was shown in an example above with the addition of the backslash (/) which is ASCII code number 47: 600 FOR X = 1 TO LEN (B\$)

620 IF ASC (MID\$ (B\$,X,1)) < 47 OR ASC (MID\$ (B\$,X,1)) > 57 THEN GOTO 800

The above examples are but a few of the error traps you can use. You can have fun making up your own. What I'd suggest is designing a program that just consists of error traps then use this as a reference for future programs you write. You could also have a program for each error trap. Then using a HOLD and MERGE utility like APA on the ProDOS BASIC disk you can incorporate the routine directly into your program. You might have to renumber the program so it will be accepted. No sense reinventing the wheel every time.

CALLs can really make programming a lot more versatile and more fun. Most programs will begin by clearing the screen using the familiar Applesoft keyword, HOME. Impress you friends, relatives and loan officer using this nifty statement:

100 CALL -936

It's the same as HOME but the uninformed will think you're some kind of genius!

**a** 

of pats on the head provided by a remotely controlled mechanical arm located next to Buck's chair.

In addition to these built-in commands, it is possible to type notes to Buck asking him to do things. These actions are the payoff for taking good care of Buck and keeping him happy. Good manners are a plus. Buck is much more likely to respond to requests prefaced by the word 'please'. By this method Buck can be persuaded, when the idea suits him, to play his piano or brush his teeth, or do any number of other things. It is important to note that Buck is no robot, slavishly obeying commands. He has a mind of his own and conforms to requests if and when they suit him. He can also make suggestions of his own, as when he pulls out the cards for an interactive game of poker.

If all of this strikes Big Computer Users as mildly amusing, something you might like to see once, that's probably an accurate appraisal. For one thing when you are sitting before the screen waiting for Buck to carry out a specific action, it can be pretty boring if he decided to sit and read his newspaper instead. Its a neat idea but not much fun to watch. I found, though, that for primary school aged children, Little Computer Users, Buck is fascinating. For kindergartners, not yet able to type in complete sentences, it was amazing to be able to type in one-letter directions and then see those actions carried out onscreen.

I used Little Computer People in a special setting and probably in a fairly special way. I had small groups of children in an instructional situation in which we were lucky enough to have more computers than kids. Because of this we were able to boot up LCP and just leave it running all day. The kids were able to just stop by Buck's computer from time to time to see what he was up to. What was really remarkable was that we might be on the other side of the room involved in something altogether different when we would hear Buck at his piano or talking on his phone or even outside his house mowing his lawn. Then we'd all turn our heads for a moment to see what was new before we turned back to our task at hand. The children became comfortable and familiar with Buck. He was like a member of our group. And as such he was a great asset to our activities. I'm not sure this program would be as valuable or as satisfying in a more customary situation with one person sitting down to one computer for a twenty or thirty minute session. The LCU needs a chance to spread out and go about his business in a more natural way. That naturalness is a considerable part of the charm of this package. Whether or not I would recommend this program depends on the use to be made of it. But regardless of that, this is a clever and entertaining concept, well worth looking at.

via Steve George, Mini' app' les Contributing Editor





## **Dear Appey**

By Tom Alexander

- Dear Appey—My husband wants to get me an Apple IIe enhancement kit for our Silver Anniversary. I had my heart set on a 40 meg hard drive. What should I do? Signed—Mrs. Scrooge
- Dear Mrs.—Compromise is always best. Insist on a 40 meg hard drive and a new Apple IIGS. Cheapo will then pop for the hard drive.
- Dear Appey—My doctor told me to loose weight. He said too many pounds are bad. Since getting my Apple IIc I've accumulated 3,430 disks. Is this bad for my IIc? Signed—Big Daddy
- Dear Big—Only if you try to boot them all at the same time.
- Dear Appey—My grandfather told me to keep my nose to the grindstone. Does my Apple IIe have a grindstone? Signed—Pinnochio
- Dear Pinnochio—Your grandfather, although well meaning, is outdated. Today we say, "Keep your nose to the drive." This is done by putting your nose in Drive One and turning on the power.
- Dear Appey—ProDOS has added a few new commands and frankly I'm stumped. My plumber hooked up water to my Apple IIGS and I've tried and tried to flush it but nothing works! Signed—Roto Rooter
- Dear Roto -How much did he charge?
- Dear Appey—I'm a veteran. Most government jobs have veteran's preference. Will learning Applesoft BASIC recognize my status? Signed—Major Major
- Dear Major—Yes. The veteran's version of the language will allow you to use the keyword HALT instead of STOP.
- Dear Appey—Most of my friends use Copy II+. Can I use it to copy a Kaypro disk to one of my 5.25 inch disks? Signed—Zee Rocks
- Dear Zee—Sure. But you can only use it on a Kaypro. Apple doesn't speak that kind of language. It's too foul.
- Dear Appey—My daughter said she wanted a mouse for her birthday. I thought girls were supposed to be afraid of mice. Where do I get one? Signed—Sylvester
- Dear Sylvester—Try a local computer store. If they don't have one, try the Humane Society.
- Dear Appey—My niece was on the diving team in high school. She took second place in the swan dive. Will this help her to get a job as a programmer at Springboard Software? Signed—Aunt Bessy
- Dear Bessy—Yes, if she will build them a pool.
- Dear Appey—I'm into heavy metal, man. Can I get a program that will play heavy metal on my IIGS. Signed—Lobo

- Dear Lobo—No. The Apple IIgs is a traditional machine. It refuses to get one of those funny haircuts.
- Dear Appey—I'm an inventor. My latest project will read a little disk-like thingy, retrieve the stuff that's written on it then print it all on a screen. Think the public is ready for something like this? Signed—T. Edidaughter
- Dear T—Probably not. Why don't you try something more current like a row boat?

BBS continued from page 13

Deleting old mail

[ Read Menu / 027 ][ Command ([D],S,A,F,Q): .. ] User types in D.

####DELETE]

[ Read Main \ 027][ 1 - 1 ][ Command (R,#,Q): . ] *User types in Q* ###**QUIT**]

[ You have marked 1 piece(s) of mail for deletion ]
[ Do you wish to delete them now ([Y]/N) ? ] User types in Y.
###YES ]

Quitting the BBS

[26][Main Level] Option (?=Help):T Terminate Connection Are you sure (Y/[N]) ?Y Goodbye John A. Doe, you were caller #1810 Thank you for calling MINI'INFO'NET Connected 4 mins, 0 secs

To log off (quit) you enter T (terminate) at any system prompt. Confirm your desire to terminate with a Y (Yes).

### See you on the BBS

Now that you have seen just how easy it is to log on, you don't have any excuse for not giving it a try. Please, don't be intimidated by what you see when you first call. Some do feel that way the first time that they give it a try but once you have done it a couple of times, it will be second nature to you. Remember, we all had to make that first call.

Next we will take a closer look at the help files on the system. Many thanks to *Dick Peterson* for his help in this article. Dick did a great job with this sample logon. As you can see, he did all the work and I get to do the easy things.

Have fun on the BBS and (P)ost often. If you have any trouble let us know in the General Board (#3) and we'll try to help.

Gary Kjellberg, ID# 4516, BBS User #184



## One Space or Two Spaces? Desktop Publishers Discuss Spaces after Periods

by Tom Lufkin



ere is a string of related messages from Chuck Bjorgen's DTP Exchange BBS, edited for clarity, about one little problem posed by the change from typing toword processing. It's helpful in itself, and shows how you can get good infor-

mation and fun from telecommunications:

Paul: Has anyone else had a dickens of a time breaking themselves of the period-space-space habit from the "old days" of typewriters? I've not typed a paper or letter on a typewriter since my junior year in high hchool (eight years now), but I still do the double space thing after my periods. Almost enough to make a body install that "OneSpace" INIT to strip that extra nasty! Unless, of course, it's really not that important.

Chuck: Yup, the typesetters will always say the rule is one space after a period that ends a sentence. Oddly enough, many of the grammar checking programs will default to flagging that one space as an error unless you can change it as an exception in the grammar program.

Doug: What? You mean you're *not* supposed to put two spaces after a period any more?

Why? When did this happen? (Why do I sound like Calvin getting excited?) No, really, what's the story?

Michael: Single spaces after periods and colons were the hardest part of orienting myself toward typeset material from the typewriter. Took me a couple of months, but it's second nature now.

Harold: I had trouble with My Favorite Tech Writer about a month ago on this very issue. I thought I disabused him of the two-space notion two years ago. Anyway, I found in one of the books or magazines (*Publish*, I think) a reference to two spaces being appropriate for typewritten material, but one space for typeset material. The same sort of thing happens with two hyphens for an em-dash on a typewriter, and the notorious feet and inch marks doing duty as typeset quote marks.

One thing I have found more and more, which sane humans wouldn't notice, is the extra spaces that show up on DTP materials, like a lot of ads and magazine articles (even *MacWeek* and *MacUser*). You'd read along and suddenly there are two spaces between a pair of words instead of one. And that's not from justification. Sort of like leaving scaffolding around the church's stained glass windows.

Jim: Personal Publishing, May 1990, had an article entitled, "Crimes Of The Art." On page 24 the author writes, "Typists use two spaces after a period to prevent sentences from running together. Page layout programs, however, automatically add extra spaces after sentences. Typing spaces after a sentence, therefore, will result in an ugly gap in your copy. Use only one space." I don't know about the fact that PageMaker puts an extra space after a sentence, but this is not the first article that I've read that has stated this fact. My wife happens to be notorious for two spacing! It drives me crazy, and as hard as I try to convince her to do otherwise, old habits die hard. Also, Spellswell does "encourage" the use of double spaces after sentences (which I don't particularly like).

Linda: Layout programs use the period as a place to space between words when justifying text. Add more spaces and the gap becomes annoying because it adds space to your two spaces.

Paul: Ditto, everybody. It is difficult to break the habit of spaces. after. periods. I tend to write in a word processor and layout in Pagemaker. I always do a global search and replace of double spaces before I import the file into PageMaker. No matter how hard I try to remember, I always do a few. Sometimes many more than a few. Note the double spaces in this post. It's just second nature. So rather than worrying about it as I go, I fix it when I'm done. That, after all, is what search and replace is for!

Jacque: The idea of replacing all double spaces after periods is good, and I've tried many times to do that with Word 4.0. However, the results are inconsistent. Sometimes it's able to find the spaces perfectly, and other times it doesn't. I'm using ^s^s in the search and replace box, which is supposed to be the right code for this. I have the same problem looking for double paragraph marks when I try to clean up some captured BBS text. Looking for ^p^p rarely produces any changes at all, even though I can see with my eyes that there is an extra paragraph mark between each text paragraph. It is sometimes a hassle to go to McSink when the document is already open in Word, though I do this. Anyone else had this trouble?

Michael: I just enter two spaces in Word's search field and a single space in the replace field. Then I run it over and over again until it stops reporting "hits." I have a really bad habit of entering a bunch of spaces between thoughts in the early stages of my writing process. I do the same thing for return characters (for the same reason) and set the spacing between paragraphs from within the style sheets. That way there's always only a single carriage return between paragraphs, figures, captions, etc. I'm starting to fool around with Word's ability to use embedded PostScript. I got it to do crop marks after only about three days trying. Anyone else doing nifty things with PostScript in Word?

Spaces GOTO page 8



## SESECTOR COCCOCCO

## Gloom and Doom

by Emmeline Grangerford



#### Gripes: Low attendance

I know it's summer, folks, but your club goes marching along. I had a call from a SIG director recently. He says that the SIG had a fantastic meeting, but only ten people showed up.

I talked to another SIG director who says, "Who cares if people show up? Some of my best meetings are when only two people shows up!"

#### Mac HDBackup

A member reports a problem with the Mac system software HDBackup—If one of your floppies fails in the middle of a RESTORE, you can't restore past it to finish the job.

#### Spaces continued from previous page

Almost makes me want to run out and buy the PostScript books. Almost.

Linda: Using AutoMac, can you macro the search for double spaces, uncurled quotes, uncurled apostrophes, spaces before returns, tabs? Each time I load AutoMac onto the System with intentions of "learning this thing at last," I find something more important to do and I leave a half-baked set of experimental macros behind me.

I'd love a macro set for editorial cleanup, one that someone else has set up for me and is infallible.

Chuck: Typesetters like to make a clear distinction between just typing on a typewriter in a monospaced font and *real* typesetting, and sometimes it seems these distinction get a bit picky. I agree with this one, however, and continuously have to process copy that is sent to me by typists who insist on using the double space after a period to start a new sentence. The extra spacing between sentences can create a condition called "rivers," which are crawling white spaces down a column of type that will attract your eye away from the type itself. Most DTP references and magazines usually show examples of the condition. There really is an art and craft to this field that separates the pros from the amateurs (I'm still learning too).

Don: Paul, when I was taught writing, the double spaces were mandatory, and many of the places I worked for insisted on that as well. Lately it seems that the double space has fallen out of favor among magazine editors and I've quit using it (usually) in online writing—sometimes a double space just looks ridiculously huge in some online text formats. In 40-column videotex stuff the double space is ugly beyond belief <Grin>. I believe the use of both single and double spaces is acceptable; it all depends on who you're working for...

#### Gripes: Software Documentation Writers

According to a fellow member, some documentation writers haven't caught on that longtime users don't need to be held by the hand in an upgraded version, but they need essential information. He says that the **AppleWriter** manual was consistently rewritten, but never included the essential chapter "Changes since last version."

Most recently, PageMaker (Mac) came out with revision 4.0. The authors took the right tack when assembling the manual: They give credence to the users who already know the program by telling them which sections of the manual to read and which ones they can skip. There are full listings of the changes so that minor as well as major ones are itemized.

An example of PageMaker 4.0 manual's handling of a minor change is the one that says that opening 3.02 or earlier documents in the new 4.0 version will cause minor text placement changes because the formulas that compute line and type sizes are more accurate now. *There* is something that is essential to know but sure wouldn't be listed in a headline in the PageMaker ad.

Just to make the point for non-readers of the PageMaker manual, good Alert! screens will tell you to take a look at the just-loaded document because it may not be exactly the same as the original. And there is a self-guiding tape/tutorial just for experienced users.

Another user has a gripe with the folksiness that some doc writers choose to adopt. She cites a program in which "The cartoon drawings and gee-wow language turned off a lot of potential buyers. I know that the company was trying to overcome an overly technical previous version of the manual, but they overreacted."

#### Storm Season

A number of local users report computer damage from the July thunderstorm that downed so many trees. Many have found that their modems still work but the internal settings have reverted to defaults. Some have much more serious damage to the electronics on their systems.

A strong power irregularity will get past most surge suppressors and go straight to your chips. And no power protector can prevent a lightning strike from getting through.

A reminder from NSP—"irregular power works on your computer like rust on your car." (Bob Grant taught me the term "bruise the chips," which gives you an idea of what summer storm and brownout pummeling may do to your computer's internals.) Damage from any particular event may not show up immediately. The result is cumulative.

Gloom GOTO page 24

August 1990

## Mac Beginners: What is the Font/DA Mover?

by James Horswill © 1990

houghts while shaving: How did the Macintosh Font/DA Mover get its name? It doesn't really move anything. When you use it to transfer a DA from a suitcase to the system file, the DA is still in the suitcase when you finish. Perhaps we should call it the "Font/DA Copier." It doesn't just copy either, however. It installs the font or DA in the system file, (or another

These musings may have led you to conclude that I'm a man with way too much free time, but the fact remains that many people are confused abut what the Font/DA Mover does and how to use it. Let us reason together, then, and all will be made clear.

suitcase). Perhaps it should be called the "Font/DA Installer."

One of the great attractions of the original 128 K Mac was its ability to manipulate a variety of typefaces, and as designers recognized the elegance and power implicit in this capability, they produced a profusion of fonts for the Macintosh. A mechanism was needed that would allow the user to install selected fonts in the system file. There was also a need for a means of installing and removing Desk Accessories, which were created as a way of granting access to what might be called "mini-programs," without forcing the user to quit the current application.

The Font/DA Mover was originally created, then, as a means of installing fonts and DAs in, and removing them from, the System file. Today, with the enormous success of Suitcase and Font/DA Juggler, many users employ this Apple utility primarily in the creation of suitcase files, placing relatively few fonts and DAs in the System itself. Let's assume for now, however, that you use neither Suitcase nor Juggler, and wish to install fonts and DAs in your System file.

Fonts and DAs are different from most of the Mac software with which you're familiar, because they can't exist in isolation. You can find them in suitcase files and in the System file, but you will never see them outside those two environments. In fact, the so called "suitcase" file is nothing more than a repository for fonts or DAs. The icon for a font suitcase looks

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like this:

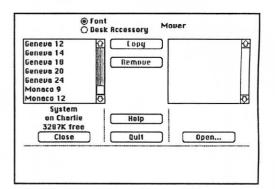
/

while that for a DA looks like this:



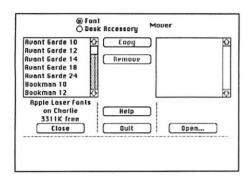
One look at these icons will tell you why they are called "suitcase" files, and this term leads some novices to think that you must have the application Suitcase or Suitcase II to use them. Please note that suitcase files were around well before the application Suitcase appeared, and you do not need it to utilize them. You do need Font/DA Mover, however. You'll find it on the system disks that came with your Macintosh. Be sure to use the version that was included with the System and Finder you are currently using.

You can open Font/DA Mover in two different ways, with two different results, and this can lead to a good deal of confusion. First, it can be opened by double clicking on its icon, and if you do so, you will see a window like this:



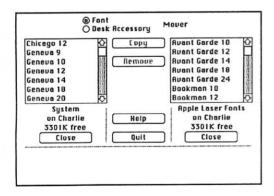
Note that the scrolling field on the left lists the fonts in the System file (my startup disk happens to be named Charlie). If you click on the radio button labeled "Desk Accessory" it will display the DAs installed there, and if you hold down the option key while launching Font/DA Mover, it will open in DA mode.

There is another way of opening this utility, however. Most applications can be opened by clicking on a document which they created. For example, you can open MacWrite by double clicking on a document created by that application. Since a suitcase file is essentially a "document" created by Font/DA Mover, double clicking on it will open that application. If you do so, you will see a window like this:



Note that this time the left scrolling field lists the fonts in the suitcase I opened, and *not* the fonts in the system file. Many novices expect to see the System fonts listed on the left side of the screen every time they open Font/DA Mover. Don't let this minor variation confuse you.

In order to install fonts into the system file you must have two files open—the System and the suitcase which contains the fonts you wish to install. You open the second file on the right side of the window—that's what the "Open" button is for. Click on it and you will be greeted with a Macintosh open dialogue. Find the file you wish to open and double click on it or click the open button. You will then see a window like this:



Remember: the fonts in the System file may be listed on either the left or the right, depending upon whether you started by opening a font file or the Font/DA Mover itself.

To copy fonts from the suitcase to the System file, select the fonts you wish to install. You can shift-click in order to select more than one at a time. Arrows will appear on the "Copy" button, indicating the direction of the transfer. Click the button and the installation will proceed. You can also copy in the opposite direction by selecting fonts in the System file, and clicking on the "Copy" button. To remove fonts from the

System or a suitcase, simply select the fonts you wish to eliminate and click the "Remove" button. Bear in mind, however, that the fonts are completely obliterated; they are *not* transferred to the file on the opposite side of the window.

Many Mac users are unaware of the fact that it is possible to create a new suitcase and copy fonts into it. First, click the open button on one side of the window—it may be necessary to close a file to do so. Click on the "New" button in the window that appears. You will be shown a Macintosh save dialogue. Name your file and specify where it is to be placed, just as you would if you were saving an ordinary file. Then click "Create." You will be returned to the Font/DA Mover window, where you can proceed to install fonts into the newly created file. Use this technique when you wish to create files for Suitcase or Font/DA Juggler.

The procedure for copying or removing DAs is exactly the same as that for fonts, except that the Font/DA Mover must be in DA mode. Check the radio buttons at the top of the window and change them if necessary. Bear in mind that you may only install fifteen DAs in the System file, and that there are limitations on the number of fonts and font families you can install, as well. If you find these restrictions confining, you may want to consider purchasing Suitcase or Font/DA Juggler.

In sum: to copy fonts or DAs from one file to another, open Font/DA Mover and be sure that the file *from* which you wish to copy and that *to* which you wish to copy are both open. Select the files or DAs you wish to install and click the "Copy" button. To remove fonts or DAs, select the ones you wish to eliminate and click "Remove."

This may sound terribly confusing, and there are many topics, such as the installation of fonts in applications, which I haven't even touched on. If you will experiment a bit, though, creating new suitcases and moving fonts and DAs into and out of them, you'll get the hang of it quickly. Just relax and take your time. You'll never learn to manipulate fonts and DA/s by sitting in your recliner and reading this article, however, so get off your macintush and give it a try!



# Have you backed up your data lately?

### Gloom continued from page 21

Be good to your equipment: Unplug it from the wall when you are not using it. And unplug it from peripherals such as modems and printers. Otherwise the maverick current will find its way into the computer and cook its expensive innerds. Either by quick frying them or by a slow simmer, the result is the same in the long run.

### Another sad story, folks.

I knew I'd hear sad stories when I asked you for them. This one deals with a friend of mine who's an upstanding citizen, a great Girl Scout, and a fine mother and wife. Let's call her Judy. She deserves a vacation on the beach. Instead, she gets mechanical trouble from her servant, her computer system.

She called me with her tale of woe: Laser printing hassles.

I admire anyone who has the guts to put out a magazine from her basement, and that's what she does: Copyediting, soliciting articles, soliciting ads, laying out the pages, working with subscribers, and writing articles to fill the inevitable holes in the layout. She taught herself Macintosh desktop publishing because she needed to do desktop publishing. She is absolutely intrepid.

This time it's the printer that went.

So why did her beloved NEC Silentwriter let her down right before the deadline for the August issue to be output from it? If she knew she'd tell you. Maybe next month she'll tell me. She says the printer has been wonderful, reliable, faithful, but suddenly it began to print blotchy, crummy output. A different blotch pattern on each page. She tried consulting the owner's manual. Then phoning a dealer, then the technical support hotline, then a number of bulletin board users. No, it wasn't the toner or the this or the that. Not one suggestion worked. And the manuscript had to be delivered to the printer in a few hours.

### Coping with multiple fonts

Well, I could keep on with the story, but what's the point? Between editorial changes, resetting the printer and redownloading the fonts, plus Judy's computer-induced temper, that document almost never saw the light of day.

They finally found a way to work within the measly memory of the LaserWriter Plus by downloading the two most used fonts—Janson text and Janson italic—into the printer via a download utility, then letting the less-used nonresident fonts load whenever they were called for in the text. They also found, after numerous nasty surprises, that they couldn't request that more than a couple pages be printed at a time. There were no more newspapers read that day.

### Macintosh Download Hint

Tom Lufkin

The people that run the comerical BBS services do answer questions. Plaugued by drop outs while doing downloads, I got this advice from the head programmer at American Online (AO).

From: Mage Steve To: ThomasL34

Chances are your screen saver functions by running its own internal event loop without ever returning control to AO until the user does something. Because AO can never get any CPU power back, it cannot access the serial port when the host sends it messages (like simple heartbeat message that are sent every so often to make sure the Mac is still there). Since the Mac cannot respond, the host thinks it is locked up and disconnects. Similar problems occur with other programs (printer, network access, background processing) when using a screen saver that uses this method. A good rule of thumb for screen savers is to use one that allows any programs running under MultiFinder to still have background processing.

Hope this helps,

Steve

## **Lund's Gives Computers Away**

As the "Computers for Kids" promotion comes to a close at the end of May, Lund's Food Stores is pleased to salute the schools who have earned Apple computers. "We are happy to have donated 131 computers to seventy area schools," says Frank Gleeson, Lund's president. "It just goes to show a little community spirit can go a long way."

Family and community members pulled together to collect \$100,000 worth of Lund's receipts in order to receive a computer through Lund's year-long program. Many schools were able to collect enough receipts to receive multiple computers.

via Steve George, via Lund's Chronicle

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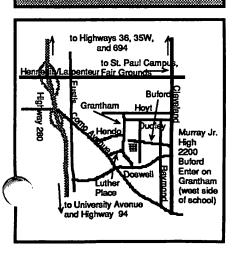
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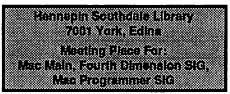
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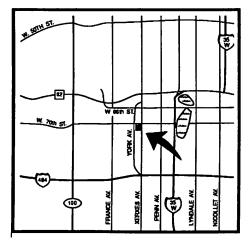
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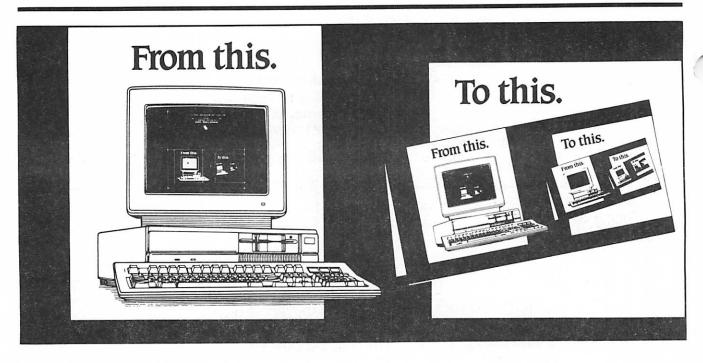
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