

PASCAL USER'S GROUP

Pascal News

(FORMERLY PASCAL NEWSLETTER)

NUMBERS 9 AND 10 (COMBINED ISSUE)

COMMUNICATIONS ABOUT THE PROGRAMMING LANGUAGE PASCAL BY PASCALERS

SEPTEMBER, 1977

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POLICY: PASCAL NEWS (77/09/01)

- * Pascal News is the official but informal publication of the User's Group.

Pascal News contains all we (the editors) know about Pascal; we use it as the vehicle to answer all inquiries because our physical energy and resources for answering individual requests are finite. As PUG grows, we unfortunately succumb to the reality of (1) having to insist that people who need to know "about Pascal" join PUG and read Pascal News - that is why we spend time to produce it! and (2) refusing to return phone calls or answer letters full of questions - we will pass the questions on to the readership of Pascal News. Please understand what the collective effect of individual inquiries has at the "concentrators" (our phones and mailboxes). We are trying honestly to say: "we cannot promise more than we can do."

- * An attempt is made to produce Pascal News 4 times during an academic year from July 1 to June 30; usually September, November, February, and May.
- * ALL THE NEWS THAT FITS, WE PRINT. Please send written material for Pascal News single spaced and in camera-ready form. Use lines 18.5 cm wide!
- * Remember: ALL LETTERS TO US WILL BE PRINTED UNLESS THEY CONTAIN A REQUEST TO THE CONTRARY.
- * Pascal News is divided into flexible sections:

POLICY - tries to explain the way we do things (ALL PURPOSE COUPON, etc.).

EDITOR'S CONTRIBUTION - passes along the opinion and point of view of the editor together with changes in the mechanics of PUG operation, etc.

HERE AND THERE WITH PASCAL - presents news from people, conference announcements and reports, new books and articles (including reviews), notices of Pascal applications, history, membership rosters, etc.

ARTICLES - contains formal, submitted contributions (such as Pascal philosophy, use of Pascal as a teaching tool, use of Pascal at different computer installations, how to promote Pascal, etc.

OPEN FORUM FOR MEMBERS - contains short, informal correspondence among members which is of interest to the readership of Pascal News.

IMPLEMENTATION NOTES - reports news of Pascal implementations: contacts for maintainers, implementors, distributors, and documentors of various implementations as well as where to send bug reports. Qualitative and quantitative descriptions and comparisons of various implementations are publicized. Sections contain information about Software Writing Tools for a Pascal environment, Portable Pascals, Pascal Variants, Feature Implementation Notes, Machine Dependent Implementations, etc.

- * Volunteer editors are:

Andy Mickel - editor
Tim Bonham and Jim Miner - Implementation Notes editors
Sara Graffunder - Here and There editor
John Strait and John Easton - Tasks editors
David Barron and Rich Stevens - Books and Articles editors
Rich Cichelli - Software Tools and Applications editor
George Richmond - past editor (issues 1 through 4)

USER'S

GROUP

ALL PURPOSE COUPON

(77/09/01) •

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University of Minnesota
Minneapolis, MN 55455 USA

+ Clip, photocopy, or
+
+ reproduce, etc. and
+
+ mail to this address.

// Please enter me as a new member of the PASCAL USER'S GROUP for ___ Academic year(s) ending June 30 _____. I shall receive all 4 issues of Pascal News for each year. Enclosed please find _____ (\$4.00 for each year). (* When joining from overseas, check the Pascal News POLICY section on the reverse side for a PUG "regional representative." *)

// Please renew my membership in PASCAL USER'S GROUP for ___ Academic year(s) ending June 30 _____. Enclosed please find _____ (\$4.00 for each year).

// Please send a copy of Pascal News Number(s) _____. (* See the Pascal News POLICY section on the reverse side for prices and issues available. *)

// My new address phone is printed below. Please use it from now on. I'll enclose an old mailing label if I can find one.

// You messed up my address phone. See below.

// Enclosed please find a contribution (such as what we are doing with Pascal at our computer installation), idea, article, or opinion which I wish to submit for publication in the next issue of Pascal News. (* Please send bug reports to the maintainer of the appropriate implementation listed in the Pascal News IMPLEMENTATION NOTES section. *)

// None of the above. _____

Other comments: From: name _____
mailing address _____

phone _____
computer system(s) _____
date _____

(* Your phone number aids communication with other PUG members. *)

JOINING PASCAL USER'S GROUP?

- membership is open to anyone: particularly the Pascal user, teacher, maintainer, implementor, distributor, or just plain fan. Memberships from libraries are also encouraged.
- please enclose the proper prepayment - we will not bill you.
- please do not send us purchase orders - we cannot endure the paper work! (if you are trying to get your organization to pay for your membership, think of the cost of paperwork involved for such a small sum as a PUG membership).
- when you join PUG anytime within an academic year: July 1 to June 30, you will receive all issues of Pascal News for that year unless you request otherwise. You will receive a membership receipt.
- please remember that PUG is run by volunteers who don't consider themselves in the "publishing business." We consider production of Pascal News as simply a means toward the end of promoting Pascal and communicating news of events surrounding Pascal to persons interested in Pascal. We are simply interested in the news ourselves and prefer to share it through Pascal News (rather than having to answer individually every letter and phone call). We desire to keep paperwork to a minimum because we have other work to do.

JOINING THROUGH "REGIONAL REPRESENTATIVES" ?

- anyone can join through PUG(USA) - address on reverse side. International telephone: 1-612-376-7290. PUG(USA) produces Pascal News and keeps all mailing addresses on a common list. Regional representatives collect memberships as a service and reprint and distribute Pascal News using mailing labels sent from PUG(USA) which speeds up delivery overseas.

European Region (Europe, North Africa, Middle and Near East):
send £2.50 to: Pascal Users' Group (UK)
c/o Computer Studies Group
Mathematics Department
The University
Southampton SO9 5NH
United Kingdom
telephone: 44-703-559122 x700

Australasian Region (Australia, New Zealand, Indonesia, Malaysia):
send \$A10 to: Pascal Users Group (AUS)
c/o Arthur Sale
Dept. of Information Science
University of Tasmania
GPO Box 252C
Hobart, Tasmania 7001
Australia
telephone: 23 0561

RENEWING?

- please renew early (before August) and please write us a line or two to tell us what you are doing with Pascal, and tell us what you think of PUG and Pascal News to help keep us honest. To save PUG postage, we do not send receipts when you renew.

ORDERING BACKISSUES OR EXTRA ISSUES?

Our unusual policy of automatically sending all issues of Pascal News to anyone who joins within an academic year (July 1 to June 30) means that we eliminate many requests for backissues ahead of time, and we don't have to reprint important information in every issue - especially about Pascal implementations!

- Issues 1, 2, 3, and 4 (January, 1974 - August, 1976) are out of print.
- Issues 5, 6, 7, and 8 (September, 1976 - May, 1977):
Less than 40 copies each remain at PUG(USA) available for \$2 each.
Less than 20 copies each remain at PUG(UK) available for £1 each or £2.50 for 6,7,8.
None available at PUG(AUS): write to PUG(USA) or PUG(UK).
- Extra single copies of new issues are \$2 each - PUG(USA); £1 each - PUG(UK); and \$A3 each - PUG(AUS).

SENDING MATERIAL FOR PUBLICATION?

(such as ideas, queries, articles, letters, opinions, notices, news, implementation information, conference announcements and reports, etc.) "ALL THE NEWS THAT FITS, WE PRINT." Please send written material for Pascal News single spaced and in camera-ready form. Use lines 18.5 cm wide! Remember: ALL LETTERS TO US WILL BE PRINTED UNLESS THEY CONTAIN A REQUEST TO THE CONTRARY.

MISCELLANEOUS INQUIRIES? Please remember we will use Pascal News as the vehicle to answer all inquiries and regret to be unable to answer individual requests.



UNIVERSITY OF MINNESOTA
TWIN CITIES

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Here is another potpourri of topics:

Pascal Newsletter #8

"Green on green" was not our idea (neither was the thick paper - it destroyed our poverty image!). It was a giant disappointment to have worked so hard on #8 and see it come out this way. We agree with the 20 or so people who gently suggested that "we say it in black and white." We were faced with wasting paper and making the newsletter 3 weeks late if we reprinted, or sending it out. We sent it out and were reimbursed by the printer for the extra postage and heavy paper costs. PUGN 8 from the UK was over 2 months late due to circumstances beyond their control, but it was black on white!

Pascal Jobs

Who says you can't get a job "in the real world" using Pascal? Herb Rubenstein, the first research assistant to work for us at the University Computer Center who learned Pascal before he learned FORTRAN, picked Colorado as a place to live when he graduated with a B. Sci. in Computer Science from the University of Minnesota and then he began job hunting. In 2 months he landed a job with a rapidly growing engineering peripherals firm, AutoTrol, and is working almost exclusively with Pascal.

Also see the OPEN FORUM section for a letter from Neil Barta.

New Australasian Distribution Center for PUG

To solve problems with slow mail to Australia (as well as currency exchange), Arthur Sale, prolific PUGN contributor at the University of Tasmania, has kindly set up a distribution center this summer (winter) much like Judy Mullins and David Barron did for Europe a year ago.

The area served is Australia, New Zealand, Indonesia, and Malaysia. We at PUG(USA) are confused about why the price is so high; apparently we were to receive a letter from Arthur over 2 months ago with the details, but it was lost in the mail. Other details are on the reverse side of the ALL PURPOSE COUPON.

Computer Companies Using Pascal

It is past time to print a list we've been keeping of computer companies who are seriously using Pascal. This is so we all can argue back that "Pascal is being used for serious real world work" when accused otherwise!

Total conversion internally to the company:

Texas Instruments, January, 1977 ("from micros to super computers")

Harris Data Communications, March, 1977 ("Pascal is our language - replacing FORTRAN and COBOL" - Tom Spurrier.)

Companies Using Pascal for future software systems:

Cray Research (CRAY-2)

Control Data Corporation (Cyber 270 series)(They have already been using it for the 2550 and the Cyber 18)

DATA 100 Corporation (model 78)

Companies marketing Pascal as a user product:

Honeywell; Computer Automation; Four Phase Systems; Varian Data Machines (Sperry Univac).

New Developments - Micro/Personal Computers

Several PUG members took my request seriously to write to several of the personal computing journals to promote Pascal over BASIC (see Editor's Contribution PUGN 8). David Mundie, George Cohn, and Tim Bonham have written letters. At Frank Brewster's and Rich Cichelli's urging, I sent personal letters and a free copy of #8 (the only free copies we had given) to the editors of 14 computing journals. We received warm responses from half a dozen. Also we've been getting new members from their readership, some who are so curious to know about Pascal that they are dying to get this issue of PUGN! I'm really encouraged at these developments because these computers represent the future and we have an early start (unlike on the current dinosaur systems).

See the OPEN FORUM section.

Pascal News

We changed the name to avoid confusion by people who think a newsletter is 4 pages long. This issue is a combined one because it contains so much material - and it is also late. We had to revise nearly everything: the cover, the coupon, policy, and do a summary for the implementation notes! This has good side effects because PUGN 8 was late in Europe, and renewals have been slow to come in. Next issue will be in February. Deadline for material is the last day in December: (77/12/31).

New Policies

Look at all the new editors! Please read the revised policy pages on the inside covers (front and back). The major change is that we are declaring that we are tired of processing purchase orders and answering requests for information "about Pascal" from people who won't join PUG and read Pascal News. It may sound strange, but we print everything we know about Pascal in Pascal News.

Back Issues

It is really difficult to plan ahead on backissues with a growing membership. Nevertheless we made it through last year with some extra copies of each issue. But we incurred some tremendous distribution problems which caused unjustified delays in sending back issues to people who joined PUG after mid-February. I apologize, and hope that we have learned enough from our mistakes to do better this year.

Membership

We began collecting PUG memberships on 76/03/03. Here are some interesting membership totals: 317 on 76/08/13 (#5 to press); 368 on 76/09/09 (#5 mailed); 516 on 76/11/14 (#6 to press); 560 on 76/12/10 (#6 mailed); 598 on 76/12/29 (#7 to press); 644 on 77/01/13 (#7 mailed); 943 on 77/04/26 (#8 to press); 984 on 77/05/12 (#8 mailed); 1095 on 77/06/30 (end of year); 1306 on 77/09/07 as I write this (759 active). We have 211 new members and 560 renewals since 77/07/01 with renewals still rolling in.

PUG Finances

I last printed information in PUGN 6. Last year (our first) we promised and delivered 4 issues of PUG Newsletter. What we did not know was how popular PUG was going to be. We also delivered a few things we did not promise: 230 copies of backissue #4, mass mailings to get to new and old people, letters to implementors to get compiler information and unfortunately, slow service to late joiners (sorry, but we wish you had joined earlier).

See the HERE AND THERE section for details under "PUG Finances". We show a small loss - almost exactly 1% - and our crude accounting knowledge doesn't account for all the back issues produced with 76-77 money and sold in 77-78 (since July 1, we have sold 243 at PUG(USA) alone. So I claim we did okay.

Andy - 77/09/07.

Editor's Contribution

Here and There With Pascal

(* Here are extracts from almost all of PUG's mail. To reiterate what we've said elsewhere, many of the inquiries we get are answered in previous issues. If you are a member, please try to find answers to your questions from Pascal News before you write to us. If you aren't a member and you want information that's in an issue that's already out, we'll tell you to join rather than to answer each inquiry with a personal letter. *)

Attn: Production Automation Project, Univ. of Rochester Dept. of Elec. Engr., Rochester, NY 14627 (Aristides Requicha): "I also would appreciate any information you might have on the existence and availability of reliable and efficient Pascal compilers for the PDP-11/40. We normally use the RT-11 operating system." (* 77/6/28 *)

Attn: Centro Ciencias de la Computacion, Universidad Catolica de Chile, Casilla 114 D, Santiago, Chile: "Is there any FULL PASCAL implementation for the IBM 370?" (* 77/6/7 *)

Bill Barabash, Dept. of Computer Sci., State Univ. of NY, Stony Brook, NY 11794: "Yes. I want to be the first one on my block to RENEW my membership in the Pascal User's Group. I enclose a check for \$4.00 which entitles me to issues 9-12 of the newsletter plus a Captain Pascal secret decoder ring which glows in the dark. . . ." (* 77/6/8 *)

Philip N. Bergstresser, 128 Jackson Ave., Madison, AL 35758: "TRW has a PASCAL program on the CDC 7600 and TI-ASC with 40000 statements and 1100 procedures, REVS, the Requirements Engineering and Validation System, supporting interactive color graphics, CALCOMP plotting, and a relational data base. We have implemented a complete 7600 PASCAL system." (* 77/8/22 *)

Gus Bjorklund, 2250 Coppersmith Square, Reston, VA 22091: "I am presently working on a Pascal compiler for the IBM Series 1, and should be finished in September 1977." (* 77/6/22 *)

Kenneth Bowles, P.O. Box 1123, Rancho Santa Fe, CA 92067: "Looks like we will be working with CONDUIT on getting a (Standard) ANSI BASIC running under our PASCAL system. Object: entice basic users over to PASCAL by making a switch very convenient. This will be the only truly portable BASIC we know of." (* 77/6/22 *)

Bill Brennan, 39 Jody Drive, Norristown, PA 19401: "I am presently engaged in implementing PASCAL for Sperry-Univac 9000 computers. (This activity is for my education mostly, not for release.) I certainly could use the information your newsletter will provide. For your information, I heard of the PASCAL user's group from a notice in 'Creative Computing.'" (* 77/9/1 *)

Arthur A. Brown, 1101 New Hampshire Ave. NW, Washington, DC 20037: "I am a professional translator of Russian mathematics, and will be glad to abstract the Proceedings of the All-Union Symposium on Implementation Techniques for New Programming Languages. (* We sent them off right away, but just received word from Arthur Brown that an English translation has been published as Vol. 47 of Springer-Verlag's Lecture Notes in Computer Science. *) (* 77/6/10 *)

Thomas W. Burnett, Computer Center, Dickinson College, Carlisle, PA 17013: "What PASCAL is available for a PDP-11 running RSTS?" (* 77/6/30 *)

Edwin J. Calda, Dept. E152, AAI Corp., P.O. Box 6767, Baltimore, MD 21204: "Would appreciate information concerning the availability of Pascal for the SEL 8000 series or SEL 32." (* 77/7/19 *)

Patrick Chevaux, DEC, Quai Ernest Ansermet 20, B.P. 23, CH-1211 - Geneva 8, Switzerland: "I am urgently looking for a PASCAL compiler running on PDP-11 under RSX-11M operating system, and I wonder if you know about such a product. If so, could you please give me a few indications about it, as well as the person to contact and perhaps how to obtain it." (* 77/7/11 *)

D. Michael Clarkson, DBMS Research and Development, California Software Products, 525 N. Cabrillo Park Dr., Suite 300, Santa Ana, CA 92701: "My company is currently involved in implementing a lot of high-level transportable system software using PASCAL." (* 77/6/27 *)

Kurt Cockrum, 3398 Utah, Riverside, CA 92507: "R. A. Lovestedt should get in touch with Tom Payne, Math Dept., University of California at Riverside, Riverside, CA 92507 for information on HP-3000 implementations of Pascal. I believe that John Hayward of UCR has written a P-code interpreter that runs on the 3000. "Are there any HOBBYISTS doing anything with Pascal? Most of us can't handle tapes (except paper) and some of us are poor." (* 77/6/6 *)

John Collins, 3M Co., Bldg. 235-F247, St. Paul, MN 55101: "We are considering using PASCAL as a Systems Implementation Language for microprocessor based systems, using a PDP11 as a host for cross-compilation and system monitoring." (* 77/6/13 *)

Larry Crane, EDS, 1200 Locust, Des Moines, IA 50309: "Thanks for sending us the PUG newsletters, hopefully we'll be able to get ahold of something good. If not we'll just have to develop it. With luck we'll have an operating system in Pascal. To the bit bucket with Fortran, even COBOL will be overcome. Long Live the Computocracy." (* 77/5/16 *)

(* Response to Andy's letters to personal computing publications has been heartening, if somewhat humorous at times. In Creative Computing, for example, the "Pasacal" User's Group was mentioned, but the address got lost in the press. Nonetheless, high school student Steven Trapp, 5020 Mulcare Drive, Columbia Heights, MN 55421, deduced the address from Andy's name and the name of the building and wrote to ask for an all-purpose coupon. *)

Jack Crone, Systems Analyst, USC School of Medicine, Hoffman Res. Ctr., Rm. 805, 2025 Zonal Ave., Los Angeles, CA 90033: (* From his letter which we saw in Byte, May 1977. *) "At present, supporting a full blown high level language compiler is quite an achievement for a personal computer; supporting several is out of the question. For this reason it is important to make the best possible selection and to select some obscure educational vernacular such as PASCAL because it is esthetically more pleasing, and [sic] would leave personal computing where it is right now: a lot of hardware with very little software."

Kenneth A. Dickey, 1662 Stromberg, Arcata, CA 95521: "I am especially interested in [Pascal] applications dealing with environmental modeling, approximations, simultaneous equations, and text editing." (* 77/7/11 *)

John Dickinson, Dept. of Elec. Engr., Univ. of Idaho, Moscow, ID 83843: "I would also like to ask your help in locating a good implementation of PASCAL for a IBM 370 machine. I understand there are many such implementations and my question for you is which is best for a student environment. I plan to use PASCAL in a beginning computer science class and so I would like a version that is easy to use and one that has clear error messages." (* 77/6/30 *)

Jim Elam, 150 Lombard, No. 601, San Francisco, CA 94111: "I would be interested in information on usage in a production environment and efficiency of generated code on 370 gear?" (* 77/6/2 *)

Gary Feierbach, Advanced Studies Dept., Inst. for Advanced Computation, P.O. Box 9071, Sunnyvale, CA 94086: "We currently have Pascal upon our KI-10 and plan to put it up on several other machines including a version on the ILLIAC IV." (* 77/6/24 *)

Charles N. Fisher, Academic Computing Center, Univ. of Wisconsin, 1210 West Dayton Street, Madison, WI 53706: "We may have a proposal for PL/1 - like varying length strings for you in the next few months - it appears to extend PASCAL fixed length strings rather nicely. Also, I'll be in Minneapolis for a Univac User's Meeting in mid-October. If its convenient, I may be able to stop by and talk some PASCAL with you (I'll be heading a PASCAL "birds of a feather" session at the meeting). (* 77/8/30 *)

Dan Fylstra, 22 Weitz St. C, Boston, MA 02134 (* To put this letter in context: Dan is an editor/consultant for Byte *): "Initially I plan to write an article explaining the

