



NEWS

Vol 3

North Texas IBM Personal Computer Users Group

No. 3

Thanks

Thanks are in order to the volunteers who responded to the Program Chairman's plea for help last month. Charles Shultz and Mark Wright have offered to assist Charles (K) in organizing programs for the meetings, and in setting up equipment for special presentations. Jane Hughson offered to help with membership.

I think we can use a few more volunteers...
...how about you?

Agenda

For the March meeting we have scheduled the following presentations:

Carol Staten of VisiCorp will give a presentation and demo on VisiOn, VisiOn Calc, VisiOn Graph, and VisiOn Word.

Norma Beck of MicroPro will give a presentation on Wordstar and other MicroPro products.

Special Interest Group room assignments are listed on page 2.

Charles

Special Interest Programs

Programmers

The March meeting of the Programmer's Special Interest Group will be dedicated to general discussion among the membership. Observations from SOFTCON attendees can be expected. SOFTCON, held in a 27-story domed building in New Orleans on February 21-23, was the first international software trade show. Local observers indicate that SOFTCON participation indicated a continuation of the explosion of the software industry, rather than the beginning of a shakeout among smaller software manufacturers as had been rumored in some quarters.

A Pascal cross-reference generator program was presented at the February meeting by Jill David. This program is especially useful with the IBM Pascal package, which includes no programmer's tools. Jill plans to publish this program within about three months, and information on it is available from her at 234-1420. Topic and program suggestions for future meetings are invited. Call group chairman Neil Bennett at 238-7650.

!PC! (PROFITABLE COMPUTING)
Dick Gall

Business Applications

A presentation of META-FILE, an advanced applications development system will be given by Sharlene Talbott of Sensor-Based Systems. The software allows programmers to rapidly construct large applications that incorporate relational database, spreadsheet, and a variety of report generation functions.

Sharlene and Ricky Burke have graciously volunteered to co-chair the Business Applications SIG in the coming months.

Dick Barr

Next Meeting March 10, 1984

Jesuit College Preparatory School
12345 Inwood Road, Dallas, Texas

(See map on page 3)

9:30 to 12:00



North Texas PC NEWS

Published monthly by members of North Texas IBM Personal Computer Users Group for their use. Members each receive a free subscription; for others, price of the NEWS is \$1.00 per copy. Advertising is accepted; contact Editor for rates. Members are requested to notify the editorial staff in writing of address changes. Send all editorial correspondence to the Editor, PC NEWS, 2025 Rockcreek Dr. Arlington, TX 76010.

Editor John Pribyl (817)275-4109
 Programming Editor Tom Prickett (214)690-9087
 Circulation Manager Vilma Ungerson (214)526-5888

Copyright (c) by North Texas PC NEWS, 1984.
 All rights reserved.

Deadlines:

All material for publication in PC NEWS (articles and ads) must be received by the NEWS staff no later than the fourth Friday of the month prior to publication.

Articles:

Column width is 56 characters. Article submission is preferred by modem or SSDD disk (ASCII format). Type-written copy is acceptable.

North Texas IBM Personal Computer Users Group

A non-profit, independent group, not associated with IBM Corporation. The Group meets on the second Saturday of each month. See page 1 for meeting time and place.

Officials:

President Alan Elliott (214)941-8475
 President Elect Chris Morgan (214)739-5895
 Program Chairman Charles Kroboth (214)739-5895
 Treasurer Bill Hood (214)739-5895
 Secretary Charles Kroboth (214)739-5895

Special Interest Groups:

Beginners Mike Durbin (214)271-8779
 Business Applic. Sharlene Talbott (214)373-0533
 & Ricky Burke (214)276-5003
 Disk of the Month Doug Windham (214)271-5727
 Programmers Neil Bennett (214)238-7650
 BASIC Applications (open)
 Comm & Networking (open)

Telephone (during business hours) (214)361-0304
 Bulletin Board SYSOP: Mark Collard (214)223-0983
 (24 hrs, download & upload, messages, 300/1200)

Dues: Professional Membership - \$36.00 year
 Regular Membership - \$24.00 year
 Student membership - \$12.00 year

Payable in January. Dues are prorated for balance of year when applicant joins after January. Mail dues to: Treasurer, NT IBM PC UG, 10400 N. Central Expwy #210, Dallas, TX 75231

SIG Notes:

BASIC Applications and Communications & Networking Groups are looking for leaders. If you're interested in heading up, or in co-chairing, one of these SIGs, contact Alan Elliott for details.

PC NEWS Financial Report

7 February 1984

July through December 1983 Issues*

INCOME:

Balance from June \$ 324.09
 Adv, Labels, Misc 846.55
 Cash from Treasury 1315.00

Total Income \$2485.64

EXPENSES:

Office Supplies \$ 113.55
 Misc Copies 22.30
 Print, Dist & Mail 2137.29
 Art Supplies 10.88
 Telephone Calls 34.39

Total Expenses \$2318.41

BALANCE 15 Dec 1983: 167.23

\$2485.64

* Includes one issue of Bylaws

Room Assignments

9:30am - 11:00am

Auditorium General Meeting

11:00am - 12 Noon

Room 105 Beginners Group
 Room 106 Advanced Programmers
 Room 107 BASIC Applications
 Room 111 Business Applications

12 Noon - 1:00pm

Room 111 Engr & Scientific
 (w/Apple)

1:00pm - 2:00pm

Room 107 Ham Radio/Modem/Comm
 (w/Apple)



DISK OF THE MONTH

by Doug Windham

MARCH HIGHLIGHTS

GAMES, GAMES, GAMES AND MORE GAMES for the young at heart in the club. This is a good collection of games for all ages.

HOPPER is a "Frogger" type arcade game.

MONOPOLY is a text version of the famous board game for up to ten players.

TRON A one player chase game like Atari Surround.

SPACEP Space protector - Invaders are bombing the city. It is your job to shoot them down.

SUBMARIN Torpedo the submarine before he sinks your battleship. A one player game.

WORMDUEL two player game chasing numbers for points.

BACKGAMN A two player version of the classic board game.

STARLANE An interstellar trading game of wheeling and dealing for two to four players.

ZYLGIS Manuver your ship around the blockades to squash the aliens.

ADVEN A text adventure game.

ADVEN2 Another text adventure game.

KILLER-P Try to destroy a fleet of enemy space ships before you run out of rockets.

ASTER2 Plot a path through the asteroid belt with only the shift key to control your ship.

LEM2 Guide your lunar lander thru a safe descent.

DISK DETAILS

Price: \$5.00 Available at the meeting, in the cafeteria at a specially marked table, before and after the general meetings. Media: SSDD 5 1/4" diskettes formatted without DOS (160k). Public domain software only, standard full disclaimers. Call disk of the month chairman Doug Windham at 271-5727 evenings before 9pm to submit material and programs for future Disk of the Month issues. All back issues will be available at the meeting.

Doug

SOFTCOM New Orleans

by Charles Kroboth

The first major software trade show was held in New Orleans, 21 - 23 February. The show included software vendors, distributors, and hardware manufacturers with labeled software. The audience was small but qualified. It included corporate buyers, retailers, and others with a vested interest in software. A lot of software was shown, including some that probably shouldn't have been.

Lotus Corp showed off "Symphony" which features their spreadsheet with word processing capabilities. Ovation showed a package which allows calculation, text edit and graphics on one screen.

One of the more significant products shown was Dr. Bennett's "Professional Basic" being published by Morgan Computing Company. Professional Basic can access the full memory of the IBM PC, uses the 8087 math coprocessor and over 12 trace windows showing execution of the code.

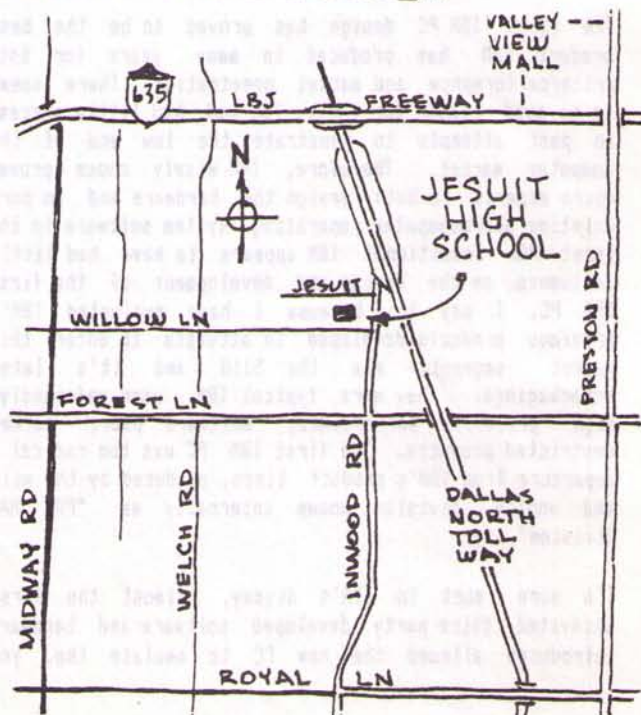
Next year there will be two SOFTCOMs. Obviously the promoters considered this one a success...

SOFTCOM Spring will be in New Orleans.

SOFTCOM Fall will be in Los Angeles.

Charles

Next Meeting:



M o r e J r .

by Fred Williams

PCjr Found to be Mentally Deficient

I have always enjoyed reading someone's well intended forecast of the future of the computer industry or some portion thereof. Those predictions always miss by at least a mile, especially the negative ones. You know the ones like, "IBM will never build an innovative product that would seriously impact an existing IBM market." Well, this is one of those basically negative reviews and possible predictions on the future of a segment of the computer market, and more specifically, the future of the newest "mover and shaker" in that segment, IBM's personal computer division. I'm doing this for two reasons, personal disappointment and wishful thinking. The disappointment I feel over IBM's newest PC product, and the fact that all negative computer industry predictions are historically destined to failure.

The common (mis?) perception of IBM product planning of those outside the great grey walls always says IBM will not do anything to disturb an established IBM product market. PCjr, IBM's latest addition to the low end of IBM's computer product line seems to have design features that might be interpreted to confirm this not too unbelievable perception. Since the first rumors began about the first IBM PC, everyone who claims to be an IBM expert said IBM's biggest problem was how to least affect IBM's then current product line, especially the 3270 CRT market.

The first IBM PC design has proved to be the best product IBM has produced in many years for both price/performance and market penetration. There seems to be good reason for this. IBM had had little success in past attempts to penetrate the low end of the computer market. Therefore, IBM wisely chose proven micro experts to both design the hardware and to port existing microcomputer operating system software to the first PC. Traditional IBM appears to have had little influence on the design and development of the first IBM PC. I say this because I have evaluated IBM's previous products developed in attempts to enter this market segment, ala the 5110 and it's later repackagings. They were typical IBM, user unfriendly, high price/low performance, software poor, market restricted products. The first IBM PC was too radical a departure from IBM's product lines, produced by the wild and woolly division known internally as "PAC MAN Division".

I'm sure much to IBM's dismay, almost the first uninvited third party developed software and hardware introduced allowed the new PC to emulate the, you

guessed it, IBM 3270 CRT. Once the market responded, IBM quickly released their own version of emulation software. If IBM had planned to encourage the PC as an IBM 3270 substitute, they would have brought the 3270 emulation software and a synchronous communications adaptor card to the market when the PC was introduced and not as a reaction to outside market pressure.

I believe traditional IBM thought is beginning to gain control of the "PAC MAN" division. "PAC MAN" will never again produce an innovative and dangerous product. PCjr is the messenger bearing this sad news. How would you handle this scenario? You've got the hottest product in the recent history of your industry, but it turned out to be too expensive for, and totally missed, the market you aimed it for. You also have a huge installed base of high price/low performance CRT workstations that are nothing more powerful than the world's dumbest CRT. Now design a product that will be inexpensive enough to hit the high end of the market you originally aimed at, but don't disturb your established CRT market. IBM has attempted just that with the PCjr design. The PCjr is nothing more than a strategically planned mentally deficient version of his big brother. The PCjr will be used by small business, although it is being touted as the IBM "home computer". But, by internal design, it will probably never be a serious threat to IBM's CRT and PC in the medium/big business market.

Well now, let's see if I can offer some possible proof for all this dissent. I'll try by pointing out all the strange and especially uncalled for design aberrations buried in PCjr. In other words, "How to make a perfectly intelligent design perform like a complete idiot." The whole weakness of the PCjr design is directly related to how the "magic" keyboard is interfaced to the PCjr. The keyboard interface design was either done by an incredibly stupid team or by a highly intelligent one who wished to protect their own self-interests. I leave that to you to decide.

Now we all know that even the fastest typists can drive a computer keyboard roughly between 150 and 200 baud. Considering the physical design of the PCjr's keyboard, 150 baud is probably optimistic. No offense intended but, the operator is always the slowest part of any computer system, no matter how small the system is. Now, some more seemingly pointless information. Every good microprocessor design includes a form of "Non-Maskable Interrupt". To the layman this means that no matter how important what the microprocessor is doing, if we put a signal on the Non-Maskable Interrupt line, (NMI) for short, we will get the microprocessor's complete and undivided attention and it will stop what it is doing immediately. NMI's were designed for catastrophic, unplanned events, like power loss and such. For instance in PCjr's big brother, the NMI is used to report memory parity errors. Parity errors indicate that for some unknown reason the data being accessed in the computer memory is physically stored incorrectly. A very serious

▷

More Jr.

(continued)

system problem indeed! Now that we possess these profound facts of microsystem and human design, let's examine the keyboard to PCjr interface design closely.

Normally when design engineers are establishing a link between an external serial device such as a printer, keyboard, communications modem, etc. and a microsystem, they use a rather inexpensive logic chip known as a UART, (Universal Asynchronous Receiver Transmitter). What a UART does is receive the stream of data bits that is coming from the connected serial device. The UART saves the incoming bits internally until a complete 8 bit byte has been received. If a byte must be transmitted to the connected serial device, the UART does the reverse by sending each bit of the byte one after the other over the connecting wire. Through the use of interrupt techniques the engineer, when using a UART, need only disturb the microprocessor to let it know that a byte is available to read, a byte has been sent, or that an error related to the serial connection has occurred. What the UART does is take the time consuming burdensome load of handling the details of serial communications off of the host microprocessor. This allows the microprocessor time to do the more important system functions it was intended for.

Now, if the serial device that is to be connected to the microcomputer is a keyboard, the design engineer will normally assign the keyboard's UART a standard priority Input/Output, (I/O) interrupt. After all, the keyboard is the input device for the slowest microcomputer system component, the operator. A good engineer won't waste an important interrupt on the keyboard. At 150 to 200 baud it won't need immediate attention anyway because of the buffering effect of the keyboard UART. That way more time critical system activities will not be needlessly interrupted. A good example of clean keyboard interface design is contained in the big IBM PC. The keyboard is connected to the system with a UART type of logic device and the keyboard logic uses a normal I/O interrupt line to signal the 8088 microprocessor only when necessary.

If for some reason a design engineer wanted to waste a lot of the microprocessor's valuable time to save a very small amount of money, he could make the microprocessor do the work of a UART. If the microprocessor has to work like a UART, it must be available immediately to process and save each bit of an incoming byte. This would require the use of the microprocessor's highest level interrupt signal. A terrible price to pay if you are concerned with overall micro system performance, because you end up with an extremely intelligent UART that does part time computer system processing. Everything connected to the micro system would be less important



PAWS FOR APPLAUSE

WE PAY ATTENTION TO DE TAIL



HARDWARE

	Retail Price	Wildcat Price
STB 64K Super R I O	419.00	315.00
Smartmodem 1200B	599.00	499.00
STB Graphix Plus		
Color Card	495.00	371.00
CDC 320K Drive	585.00	285.00
Brother HR-25 Printer	995.00	850.00
Printer Cable	55.00	40.00
Kraft Joystick	69.95	52.00
Princeton Graphics		
RGB Monitor	589.00	522.00

Now authorized dealers for Tecmar and Tallgrass. OEM inquiries invited.

SUPPLIES

Elephant DS DD (Box of 10)	27.00
Verbatim DS DD (Box of 10)	40.00
1000 One-Up Labels	6.95
1000 Sheets Fanfold Paper	11.25
FX-80 Dust Cover	9.95
IBM Dust Cover Set	15.00

We carry a complete line of computerized accounting forms, letterhead on tractor forms, storage boxes, furniture, and paper.



GAMES

Witness	49.95	37.46
Andromeda Conquest	23.00	17.25
Space Guardian	29.95	22.46
Flight Simulator	49.95	37.46

UTILITIES

Apple/IBM Connection	195.00	160.00
Norton Utilities	80.00	68.00
Copy II PC	40.00	30.00



COMMUNICATIONS

Crosstalk	195.00	145.00
Smartcom II	119.00	89.25
Datapture	120.00	90.00

BUSINESS

Multimate	495.00	371.25
FCM	124.95	93.71
PFS Write	140.00	105.00
Multiplan	275.00	200.00
Pyxel Visuals	98.00	79.95
Financier	195.00	156.00
TK Solver	299.00	224.25
The Accountant	199.00	169.15

Price and availability subject to change without notice.



Wildcat Computing, Inc.
PC 2-84
1830 Avenue K
Plano, Texas 75074
(214) 424-3582

WILDCAT COMPUTING, INC.

More Jr.

(continued)

than the serial device using the microprocessor as a UART. The system performance trade offs are simply not worth it.

I would guess by now you have figured out that for some unknown reason the IBM PCjr's keyboard uses the 8088 as a UART, and uses the highest level interrupt, NMI, to insure a keyboard bit is not missed. One Heck of a price to pay to save probably \$20.00 worth of manufacturing cost, if that is really why it was done. I would doubt price/performance entered the decision, as additional cost was incurred in establishing the marginally useful advantage of a cordless keyboard connection.

Now what does all this mean to the person using a PCjr? Well if they are using it to play "PAC MAN", not much. But if they are actually planning to use it as anything other than a toy, good luck! Business would be wise to steer clear of jr. It will be nearly impossible for third party vendors to add any real business value to the PCjr, as they have for the big IBM PC. IBM has probably met their design goals. This is apparent from the statements on pages 2-125 and 2-126 of the IBM "Technical Reference Personal Computer - PCjr". One statement reads, "Asynchronous receive operations cannot overlap diskette operations since all but the Diskette Interrupt are masked "off" during diskette operations.". The masking of interrupts is required because of two reasons. The diskette is not connected with DMA capabilities, and it has to mask the NMI interrupt to insure no disturbance from the trusty old keyboard. The second statement reads, "If Async receive operations are going to be overlapped with keyboard receive operations, the Async Receiver rate cannot exceed 1200 baud.". This means anything connected to the PCjr's I/O bus is going to have a very difficult time exceeding this 1200 baud restriction.

Due to operational requirements, CRT emulator software and hardware must, to offer the user any reasonable level of performance, be able to service any communications connection to the host computer at a speed greater than the maximum allowed by the design of the PCjr. Also the CRT emulator design must allow for truly interactive communications with the micro system operator. Pressing a key on the keyboard at any time must be expected, and cannot be allowed to have adverse effects on the communications link between the micro

system and the host computer. Now isn't it amazing how the jr. design turned out the way it did!

Oh, by the way, you can probably forget any serial devices that run faster than 120 characters per second, digitalizing pads, communications devices, badge readers, wand scanners, and etc. Parallel devices are going to suffer the same restrictions since their interrupts are lower in priority than those of both the keyboard and the diskette. Especially, future Local Area Network (LAN) connections will not be possible. Hopefully, I'll eat those words.

Some other design deficiencies worth pointing out are: 1) lack of parity checking memory at a manufacturing cost savings of probably \$15.00 per 64k of RAM memory; 2) power supply with "mickey mouse" external transformer. IBM may have bought these from Coleco, and 3) extra cost internal modem adaptor with maximum, hum, speed of 300 boring baud.

Ah, what a safe new product! IBM will sell millions of them. "PAC MAN" you're starting to do what you were told to do the first time. I was looking forward to the "PAC MAN" announcements of the rumored IBM PC's big brother and Local Area Networking. After the PCjr I've kind of lost interest though. Just imagine what the wrong kind of machine could do to all those IBM attempts at the minicomputer market. You know, the System 34's, 36's, 38's, and that lovable little Series One. You know the one that never really had an operating system that anybody wanted or understood.

Fred Ed

(Fred Williams, a fifteen-year veteran of the computer industry, is a member of North Texas IBM PC User's Group. He owns a computer software development and marketing firm that specializes in computer communications software products for the IBM PC, other micro systems, and minicomputers. Ed.)

Visi - Seminars

Carol Staten will give additional seminars on the Visi-series products at the Westin Galleria (Hotel), LBJ & Dallas Parkway, on March 20. The two seminars will begin at 9 AM and 11 PM, and will each last about 2 hours. They're free --- bring a friend!

PC-Internal Modem

by Will Janoschka

s w a p  s h o p

At the last meeting I asked about interest in a club buy of internal modems for the PC. About 25 club members indicated interest, so I started checking. The internal modems eliminate the external box, RS-232 card, and connecting cable.

Larry Jordan's article in the November 1983 issue of PC WORLD is a good review of available modems for the PC. I got other information from dealers, product information sheets, and calls to manufacturers.

Techmar and Racal-Vadic (the maker of the TI internal modem) plan to have internal modems for the PC this year, but neither indicated that they would have Hays compatible commands. AST, Bytcom, U.S. Robotics, and Universal Data Systems do not have plans for internal modems.

Bizcomp, Hays, Qubie', and Rixon sell the internal modems. Each uses Hays Smartmodem commands so that the popular Comm software like PC-talk and Crosstalk will work without modification. Although Qubie' has the lowest price some club members have experienced trouble with this modem, and the warranty is for 30 days. The other units all have 2 year warranties. The Hays has a built in speaker but is too wide to fit correctly in the XT slots. The Rixon has no speaker, will fit the XT, and has an additional RS-232 port on the card. The Bizcomp has a small speaker and will fit the XT.

For a comparison of prices I talked to both distributors and manufacturers reps for quantity 24 prices. Micro-America would sell the CLUB Hays modems for \$395 including software, but cash only (the club doesn't have \$10,000). The local Rixon rep Paul Rothchild will sell the CLUB units for \$398 plus \$35 if you want Rixon software. Rixon will also give the club 30 days to pay for the modems. In both cases the club would have to collect and pay sales tax on the units. A local Bizcomp dealer, ENTRE' Computer Center will sell the club members the Bizcomp internal modem with Bizcomp software for \$397 plus tax. In addition ENTRE' will install the units (if you want) at no cost, and provide a store warranty in addition to that from Bizcomp. The club only has to collect names and tell ENTRE' how many modems to order.

As for opinions (mine)-- I still like the Rixon modem best. I have used it and never having had a modem with a speaker don't miss it. It is the only one with programmable port addresses so that your PC can have lots of comm devices. I looked at the Bizcomp modem and can see no real problems. It has the feature of a telephone handset jack and can switch between voice and data modes (with another Bizcomp modem) without dropping the line. The Bizcomp is jumper selectable between Comm-1 and Comm-2. I have an XT so I wouldn't buy the

(Four lines free each month to members, otherwise cost is 15 cents per word. Ads will run three consecutive months unless notified earlier to cancel. Ads must be renewed after three months if continuation is desired. Mail ads to the Editor.)

Consultants Directory Listings in DALLAS COMPUTES. Microsystem Consultants Agency, 561 W. Campbell Rd. No. 303, Richardson, TX 75080, phone 680-9420. Next deadline: April 27. Ads also available.

FOR SALE: PRINTER-Olivetti 221. Full featured Electronic typewriter & versatile computer printer in single unit. 16K buffer, selection of print wheels. Cabled for serial and parallel, stated compatibles include Apple, TRS80, Commodore, +. Being used with IBM PC. 1 yr.+ old. 349-2367

FOR SALE: Great Lakes/Pegasus hard disk drives for the IBM PC and compatibles. 10 MB Internal Drive \$1200, External 10 MB Drive \$1400. Complete with cable and controller card. Standard 90-day warranty Streaming tape drives and hard disks up to 100 MB available. This is the best bargain on the market in a hard disk drive. See the Great Lakes/Pegasus full page ads in PC and PC Tech Journal for more details. James Hickman 578-8091.

Hays. From the club standpoint, the problems of distributing 10-15 thousand dollars of equipment would be a mess, so I recommend the ENTRE' offer.

If you would like to get the Bizcomp modem please fill out the order form below and return it to me at the March meeting. If enough of you want the Rixon modem I will collect names and try that deal also.

Will

Modem Order FORM N.T.P.C.U.G.

() ea. Bizcomp PC: IntelliModem
w PC: IntelliCom software @ \$397 ea. -----

Name -----

Address -----

Phone -----

ENTRE' Computer Center 6757 Arapaho Rd. Ph.392-1400

North Texas PC News

Ad Prices:

	1 col (3 1/4" W)	2 col (7" W)
1/16 page	\$10.00	1 1/8" H
1/8 page	15.00	2 1/4" H
1/4 page	25.00	4 1/2" H
1/2 page	40.00	9" H
full page	60.00	-



Shop & Swap Prices

\$ 0.15 per word
(approximately 8 words per line)

Deadlines:

All advertising copy must be received by the NEWS staff no later than the fourth Friday of the month.

For further information ...

Call J. P. Pribyl at 817-275-4109.



North Texas PC News
2025 Rockcreek Drive
Arlington, TX 76010



FIRST CLASS

~~_____~~
~~_____~~
~~_____ TX 76010~~