

Basic-2C[®] Connection

News and Information from the Basic-2C Community

Volume II, Issue 3

March 1991

Niakwa Commits to Microsoft Windows

Mundelein, IL - Niakwa Management Services is pleased to announce its decision to provide a Microsoft Windows 3.0 compatible version of Basic-2C. After conducting significant technical and market research, Niakwa has determined a need for a Windows compatible version of Basic-2C.

Dick Drew, Niakwa's General Manager, states, "Our market research shows Microsoft has done an excellent job of convincing end-users they need Microsoft Windows — to the point where Microsoft Windows has already become a request for proposal (RFP) checkoff for some government and financial institution bids. We expect the end-user demand for Microsoft Windows applications to grow at an accelerated pace in the months to come. By porting Basic-2C to Windows now, Basic-2C Resellers will have a headstart on their competition by being prepared for the Windows demand."

Windows was first introduced five years ago to bring a consistent graphical user interface to the PC environment. But, the limitations of the PC based hardware and the standards at that time held back Windows as a product. Release 3.0 of Windows changed all this. Windows 3.0 provides a "powerful, productive, and cooperative graphical environment that takes full advantage of today's PCs while remaining compatible with existing DOS applications". The future of this environment is further assured by the host of major software developers now rushing to develop Windows based applications (i.e., WordPerfect, Ashton Tate, Borland, etc.) and the growing number of government and corporate specifications that require applications to be Windows compatible.

Microsoft Windows provides an interactive, graphics-oriented, user interface; multi-tasking capability; and breaks the 640K memory limitations of DOS. This is all provided in an operating environment that sits on top of the host DOS operating system.



Windows comes with applications that manage files and directories, switch between running applications, provide on-line help, manage the printer, and control all devices. Several accessory programs are also provided. These include a clock, appointment calendar, calculator, notepad, card file, and macro recorder. Several Windows applications are also included for basic word processing, drawing, and communication (including a VT-100 terminal emulator). Two games are provided for amusement: Solitaire and Reversi. Windows also provides an easy interface to Novell Netware 2.10 or greater, which provides for Basic-2C networking support.

Features

The specifics of the Windows compatible version of Basic-2C have yet to be released. However, this product will offer *true* Windows compatibilities and

not just be able to run under Windows. This means the Basic-2C Windows version will support:

- Extended memory support beyond 640K.
- Multiple tasks — Basic-2C or other applications.
- Multi-user capabilities (unique terminal identification and \$OPEN/\$CLOSE).

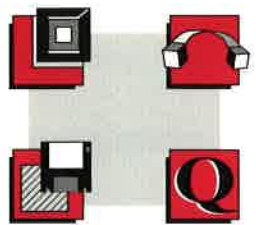
All of these benefits will be available for your Basic-2C application on the huge installed base of 286 and 386 PC based systems.

The Windows version of Basic-2C will also provide an interface to the Microsoft Windows Resource Manager. This feature will allow developers to take advantage of many Windows specific features by making the appropriate source code modifications. However, these calls *will be* Windows specific and will not be portable to other Basic-2C platforms.

(continued on page 15 — see Windows)

Inside...

Basic-2C
Rocks
at MTV...



Niakwa – A Year in Review

Basic-2C Connection

News and Information from the Basic-2C Community

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Basic-2C Connection invites Basic-2C users to submit articles for publication regarding commercial successes, technical successes, technical tips, new product releases, and/or other subjects of interest to the Basic-2C community. Niakwa reserves the right to edit or not print articles submitted. Articles contributed to the Basic-2C Connection may contain information on hardware or software products not necessarily tested or endorsed by Niakwa.

Comments, questions, and suggestions can be directed to the Editor, Basic-2C Connection, Niakwa.

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Mundelein, IL - 1990 was another banner year for Niakwa and Basic-2C Resellers. It was a year that saw a significant increase in new Basic-2C development, in part because of the power of Basic-2C Release III. It was a year where several major contracts were won by Niakwa and Basic-2C Resellers including Wang Laboratories selection of Basic-2C as the standard Basic-2 language for its UNIX based Dynamix series, and selection by the German Government of a Basic-2C based application written by GTS for their national court system.

1990, a year that was financially stressful for many companies in the computer industry, was financially successful for Niakwa. We achieved our revenue and profit goals and once again captured an impressive share of the Basic-2 marketplace with an estimated 85% share. (See chart 1)

A contributing factor to our strong sales year is the upward trend in multi-user RunTime sales. Multi-user RunTime sales represented 53% of Niakwa's revenue source during 1990. (See chart 2) One reason for the increase in multi-user RunTime sales is the growing popularity of Novell, XENIX/UNIX, and SuperDOS operating systems. During 1990, Novell, XENIX/UNIX, and

1990 Unit Sales

Basic-2 Marketplace

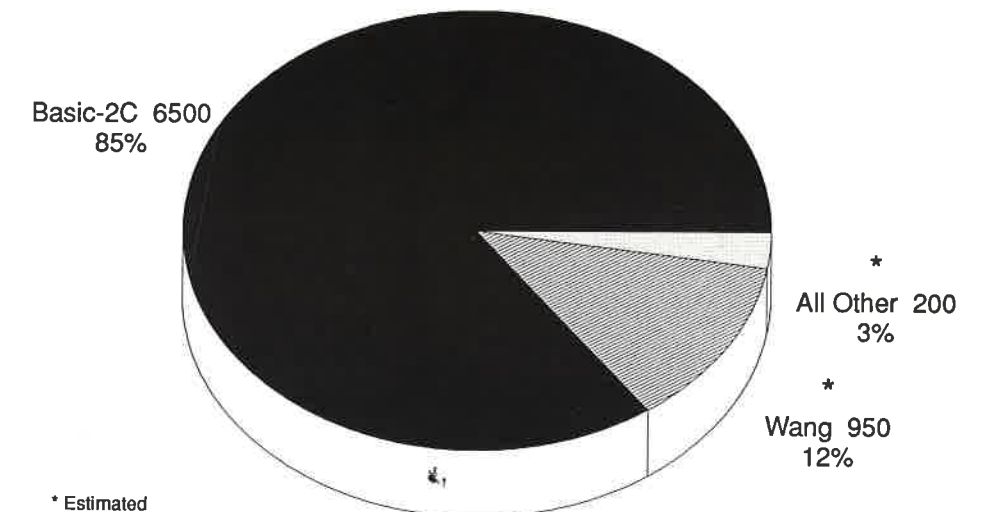


Chart 1 – Niakwa controls 85% of the Basic-2 marketplace.

SuperDOS RunTimes represented 85% of the multi-user RunTimes sold. (See chart 3)

Life-to-date, over 40,000 Basic-2C RunTime Packages have been sold, representing an estimated 80,000 Basic-2C users worldwide!

To be sure we remain financially healthy, Niakwa concentrates on future plans. During 1990, we were extremely busy putting the finishing touches on a very aggressive business and product development strategy that will take Niakwa and its resellers into the '90s.

We spent countless hours meeting, corresponding, and questioning our resellers through VAR Advisory Council

Meetings, surveys, and phone conversations to determine what they needed from Basic-2C. With this information, we developed a strong and aggressive business strategy built around a well defined Mission Statement and strategic objectives that will guide our day-to-day activities.

On the technical side we developed an aggressive product agenda that will include Niakwa's Development Tools, Basic-2C release IV and a "C" version of Basic-2C.

4GL Development Tools

Our research indicated Basic-2C Resellers wanted 4GL capabilities while

(continued on page 15 – see Review)

“Niakwa will provide technically advanced, high quality, high performance, highly portable application development software and services marketed to application developers worldwide who target small to medium sized companies or departments.”



Bullets

- **North Yorkshire, U.K.** – Alliance Business Computers, a Wang Systems House, recently installed their largest Basic-2C installation on an IBM 95 with Wang PC Color Screens. The Novell Network was installed at Smith Self-Drive (the largest contract hire company in the U.K.) with 17 active terminals, and 9 remote sites. Originally a Wang 2200 site, a report that was taking 14 hours to complete is now done in 40 minutes!
- **Channel Island, U.K.** – Computer Patent Annuities, Patent, Design, Trademark Renewals Worldwide, recently sold an MS-DOS RTP to a Japanese client who has been successfully trying Computer Patent Annuities' PC Comus System using one of Niakwa's Demo diskettes - running under a Japanese version of DOS (ver. J4.0).
- **Pasadena, CA** – Dream Quest Images, a motion picture visual effects and commercial production company, has selected Jaguar Consulting's Touchdown system to automate their business. Jaguar develops entertainment industry software under Basic-2C. Touchdown was chosen for its power and flexibility. Some of Dream Quest's special effects can be seen in *Total Recall*, *Scrooged*, *Exorcist II*, and *Big Business*. Dream Quest has also received an Academy Award for their work on *The Abyss*.
- **Harare, Zimbabwe** – Bold Technology, whose application software targets printing and related industries, recently received Niakwa's first NCR Tower RTP for use at an NCR subsidiary in Zimbabwe!

Basic-2C and A.M.I.S. Make it to MTV

New York, N.Y. - A.M.I.S., Inc., Archive Management Information Systems, Inc. of New York, N.Y., proudly announces an installed Altos 5000 with the A.M.I.S. software package, running under Basic-2C at MTV Network! There are currently 57 users at multiple locations, with plans to expand to 100+ Users in the near future. In fact, the full MTV Network which includes Nickelodeon, VH1 and HA will all become Basic-2C users in 1991.

The A.M.I.S. system is a very unique and sophisticated Archive Management Information System. At MTV, this package is being used to track video tapes by the use of bar codes. This system has Free Text Search Capability so that tapes can be located across divisions by content. Detailed record tracking can show where a particular video tape was sent and when it is due back ... the list of functions goes on and on.

The A.M.I.S. system was originally written by Konrad Dienst of D & D Ing. - GmbH, Germany, on a Wang 2200. The system is currently available in five

languages: English, French, German, Icelandic and Swedish, with plans for an Italian version in the near future.

David Reich, President of A.M.I.S., Inc., USA is responsible for all product development, installation and marketing of the A.M.I.S. software in the USA. Three years ago, David installed an Altos 2000 at TIME WARNER, INC., for the tracking of 17 million images in their picture collection, which is utilized by all their publications, i.e., *Time Magazine*, *People*, *Life*, *Sports Illustrated*, and others. This installation is still going strong. D & D continues to sell the package in Europe, with a notable installation of SIPA Press in Paris, France, which is one of the leading Photo/News Agencies. There are currently 176 users at SIPA Press which represents one of the largest Altos 5000 installations in the world. The next development stage for A.M.I.S., Inc., and D & D will be the integration of Visual Imaging within their retrieval capability in the system. Stay tuned for more exciting installations in 1991! BC

Hydratec – Helping to Put Out Fires

Windham, NH - The Seneca College of Applied Arts and Technology in North York, Ontario is beginning a course in Fire Protection System Design using Hydratec's HydraCAD software.

HydraCAD is a software system written specifically to customize AutoCad for the design of Fire Protection Sprinkler Systems. Most of this software package is written in Basic-2C. With the help of Niakwa, the school is set up to provide workstations for up to 15 students.

This course will be part of the day school's program for students in the Fire

Protection Engineering Technology degree program.

Selected for its flexibility, Hydratec is pleased to be a part of the learning process early in the designer's career. Sponsored by the Ministry of Skills Development, this training program should provide the Sprinkler Industry with pre-trained system designers.

We thank the people at Niakwa for recognizing the potential benefits to everyone in providing a "real-life" system for student training. BC



FASTECH Feeds Texas A&M University

Lafayette, NY - System Design Group is pleased to announce the installation of its FASTECH Hospitality Management software at Texas A & M University.

Texas A & M, with an enrollment of 50,000+ students is reputedly the largest college run feeding program in the United States.

System Design Group's FASTECH

Software will be operating on two separate Bull Worldwide Information Systems computers.

One of the systems, an XPS 100 with a Basic-2C 16-user license, manages foodservice control functions. Purchasing, foodservice unit ordering, picking, and shipping for the commissary are done as an integrated process. For student dining halls, recurring menu

cycles, order projections and inventory analysis are included. Retail sales analysis for cafeteria polls the point of sale system and analyzes costs with two year history. Commissary inventory is automatically transferred to the foodservice unit when the order is shipped. These functions are complimented with full accounting, Banquet and Catering management, and Payroll.

The second system, a DPX/2 320 running an unlimited Basic-2C RunTime, is an on-line system with all dining and cafeteria facilities around campus. The system maintains records for student meal plans (Texas A & M currently offers more than ten separate

Total Systems Announces Task Switch-Immediate

Carmel, IN - Total Systems, Inc., a Niakwa licensee and Novell Gold Reseller, has announced the release of a dynamic new product, Task Switch-Immediate ("TSI"). Task Switch-Immediate runs under a Novell local area network using Version 3.0+ of the Niakwa RunTime Compiler. It allows any network user logged onto the network and using the Niakwa compiler to switch tasks from one task to another with a keystroke.

Simply, by the press of a key a user can go from one session to another.

Users can now be in order entry and task switch to inventory control immediately to review stock items, run reports, perform additional transaction entries or to do inquiries into various products. Users can even run multiple applications on the same workstation at the same time, provided disk and program conflicts are resolved. Hence, there is no need to return to a menu then run down the key sequence to another application selection and then return to the same

place. Simply, by the press of a key a user can go from one session to another. Data and screens are left intact. Multiple sessions can support multiple sorts and data entry "wait time" for program loading, menu switching and extra keystrokes. With Task Switch-Immediate users simply switch from one session to another, as if these sessions were originally designed to be in the system from the start. No reprogramming is necessary under the Niakwa compiler. Simply install Task Switch-Immediate on the workstations needing multiple sessions and change the logon procedure. Presto! You're ready to go.

Task Switch-Immediate is licensed from Total Systems, Inc., to authorized Niakwa Resellers and end-users. Pricing is based on the total number of concurrent sessions needed. Product availability was February 15, 1991.

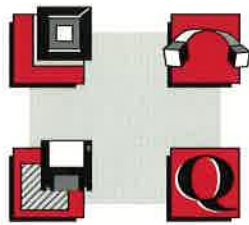
Task Switch-Immediate is an easy to use product. Once installed the user can logon to any number of sessions, independent of the other sessions, up to the number allowed using the Niakwa compiler.

For more information, contact Total Systems, Inc., at (317) 843-5100 or write at 701 Congressional Blvd., Suite 350, Carmel, Indiana 46032. BC

The comprehensive system is currently the only UNIX based foodservice system available for college foodservice management.

plans for its 50,000 students), and for student debit card balances. As the student's ID is magnetically swiped at the dining hall or cafeteria, the FASTECH system verifies the student's participation in a plan, checks for plan abuse (too many meals in day/week), and handles student debit card balance and transaction acceptance/denial. The decision was recently made to extend the debit card system to the college bookstore, and additional devices are being brought on line to handle balances there.

The comprehensive system, using Basic-2C and the SPEED I Database tool, is currently the only UNIX based foodservice system available for college foodservice management. BC



GTS Wins German Government Contract

Wiesbaden, Germany - GTS, an International Distributor of Basic-2C software since 1987, has spent the past year doing a large number of Basic-2C installations in the German Federal Government, over 200 systems so far, primarily single-user, with a few Novell and UNIX systems mixed in.

This four year contract was actually won in November, 1989, but the actual installations of GTS software and Basic-2C have been slower to materialize than expected. This is not a negative

Basic-2C allows them to freely decide which operating system to choose.

indication. The delays seem to center around the fact that each of the ten West German States is making its own decision as to what hardware and operating system to choose, since each has its separate needs, goals, and software vision in mind.

The main choice under consideration is whether to use UNIX machines, or Local Area Networks (Novell). Since Basic-2C allows them to freely decide which operating system to choose, they can take the opportunity to evaluate the longer range implications of the systems decisions they will make.

An irony of this contract is that initially GTS and Niakwa worked closely together making Basic-2C fully portable on the Bull DPX/2 machines, which was a critical criteria of obtaining this contract. It now appears that not even one installation may actually take place on a Bull DPX/2 under this contract, simply due to the changing desires of the various German States. Nevertheless, the option is still available to them.

The GTS software performs a multitude of functions revolving around building planning, including: heating,

ventilation, air-conditioning, sanitation, plumbing, and the associated technical equipment required. The software itself is menu driven, with window technology for all data accesses. There is complete integration of all logically connected building environmental processes, such



Just one of the many beautiful sights in Wiesbaden, this is a Russian cathedral, built for a man's loving wife.

as the heating load versus the cooling load. These processes utilize calculation methods based on DIN-Standards (German Industrial Standards) and are regularly kept up-to-date by GTS whenever these standards change. These same standards are also used in many neighboring countries such as Luxembourg, Belgium, The Netherlands, and the now reunited Germany, giving GTS many expansion opportunities in this market.

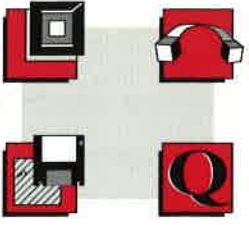
As part of the governmental agreement, GTS provides each installation with an in-depth two week

training course to a key contact, referred to as a "Master Teacher", and keeps in regular contact with this individual. The Master Teacher then takes charge of the individual training needed at their location. GTS sees a possible future lasting 10 years working with the Federal Government as more and more computerization needs are realized and developed. One of the key development projects, Rainer Hirschberg, the President of GTS, is researching is the integration of engineering and Computer Aided Design (CAD) software packages, which he sees as the future of his field. This is a very complex area, and he is using every resource available to him including visits to Berkeley University and Silicon Graphics in Southern California.

The building will actually become a real-life demonstration facility.

Besides the government contract, GTS has 100 Radiator Distributors. Also, Mercedes-Benz and Asea-Brown-Boveri, (a large power plant manufacturer) have been GTS customers for several years. With the Federal Government contract as a reference, GTS is in an excellent position for acquiring new business. The positive effects have been realized already.

GTS has been at their present site for over 10 years and has outgrown the size with their increasing staff. A new building is planned in the city of Wiesbaden in 1991. This will not only be a new building, but a new project employing all of the environmental technologies GTS has learned and enhanced. The building will actually become a real-life demonstration facility. BC



You Can Teach Old Software New Tricks

Cincinnati, Ohio - Ficke & Associates, Inc., a Niakwa Reseller since 1986 and a Wang associate for almost two decades, are once again finding the Niakwa/Wang combination an excellent solution for their customers. Their first

Today, they are introducing Wang's new Dynamix product line to many of their faithful 2200 clients.

introduction to Basic-2C involved Wang's PC Classic. Today, they are introducing Wang's new Dynamix product line to many of their faithful 2200 clients. "This UNIX platform offers tremendous performance enhancements at an extremely competitive price,"

noted Ficke & Associates, Inc., president Bruce Ficke.

Ficke & Associates first DX installation to King Container Services in Cincinnati, Ohio, replaced a twelve-year-old 2200 MVP with eight workstations. The cost per workstation reportedly came in at half the cost of a PC network running Novell. King's end-users did not require access to single user DOS applications. The Wyse workstations currently offered by Wang provided an environment identical to the previous Wang 2200 workstations. Installation of Basic-2C and porting of the applications took place in one day.

Bruce Ficke left off on this note, "We are seeing great interest in the DX/100, DX/200, and DX/2000 as replacement alternatives for 2200 systems." BC

Speed I and Basic-2C Together

Tukwila, WA - Northwest Source Group (NSG) and Niakwa entered into a six month agreement where NSG will distribute an IBM single-user Basic-2C RunTime with the TOM Accounting Modules at a greatly reduced price.

Kevin Brownell, Niakwa's Sales Manager states, "In the past the price for a single-user TOM accounting system normally priced TOM resellers out of that market. The bundling of Basic-2C and TOM at a greatly reduced price should stimulate the sales of single-user TOM systems, and, if history stands, the

customers will eventually upgrade to a multi-user system."

The TOM accounting system is an extremely powerful and flexible environment. By reducing the price for a single-user installation, TOM will be very competitive in a market full of inflexible 'CANNED' packages."

The TOM/Basic-2C bundle contains a Niakwa Basic-2C RunTime, TOM Speed I, and the TOM GL, AP, AR, and MD modules.

Contact Northwest Source Group for further details, pricing and delivery. BC

Basic-2C Available for NCR System 3000

Mundelein, IL - Niakwa is pleased to announce the availability of Basic-2C, Release III, for the NCR System 3000 family of computers operating under UNIX System V.4 (NCR's OEM version of AT&T UNIX).

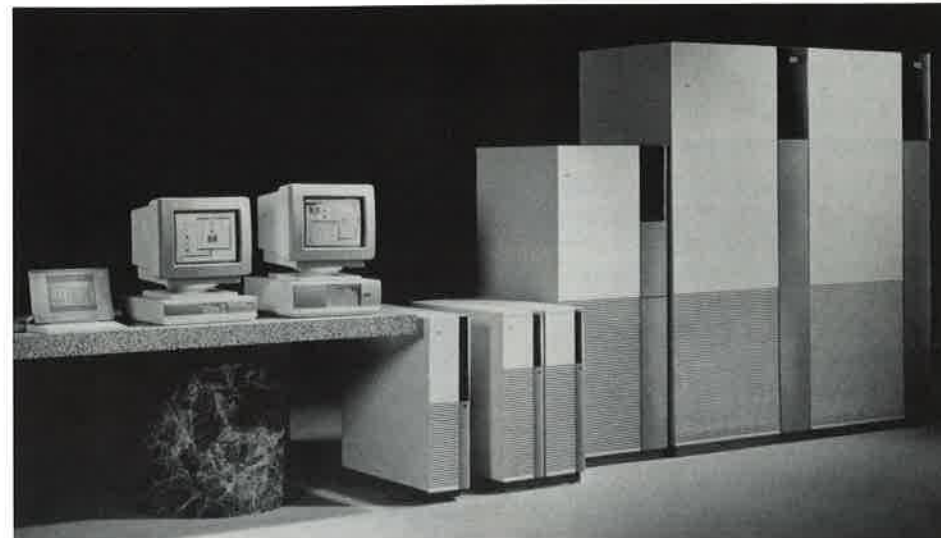
The NCR System 3000 is a seven-level family of microprocessor-based systems that provides scalable performance for computing at all levels. The family includes three uniprocessor levels and four multiprocessor levels.

This broad new family of computer systems has been described by NCR as the most significant product offering in its 106-year history. Some highlights:

- The NCR System 3000 is a broad range of fully-compatible, scalable computer systems spanning a power range of 7.5 MIPS to more than 100,000 MIPS and designed to address any computing level in business applications. The systems are based on Intel microprocessors and support the industry-standard operating systems (UNIX V.4, SCO UNIX, OS/2 and MS DOS).
- NCR UNIX System V.4, reportedly the most powerful and feature-rich operating system in NCR's history, is the strategic operating system for the NCR System 3000.
- More than 35,000 software packages, including application programs, tools and database products are available for use on the NCR System 3000 under supported operating systems.
- The NCR System 3000's new high performance mass storage subsystems are based on leading-edge, Redundant Array of Inexpensive Disks (RAID) technology.

For more detailed information about Basic-2C for the NCR System 3000 please contact Niakwa.

For more information about the NCR System 3000 line of computers contact your local NCR sales office. BC



The NCR System 3000 Family of Scalable Processors. From left to right is the 3100, 3200, 3300, 3400, 3500, 3600, 3700.

NCR System 3000	3320	3340	3345	3445
Internal Disk Options	1.44HH	1.44HH	1.44HH	1.44HH
Flex Drive (MB)	44HH/100HH	100HH/200HH	100HH/200HH/300HH	327FH/670FH
Fixed Drive (MB)	28/25	25/14		
Access time in ms	SCSI	SCSI	SCSI II	SCSI II
Controller Type	N/A	N/A	N/A	600MB SCSI
CD-ROM	4.6 GB	4.6 GB	4.6 GB	4.6 GB
External Fixed Disk (max.)	150 MB, 525 MB, 2.3 GB (8mm)	150 MB, 525 MB, 2.3 GB (8mm)	150 MB, 525 MB, 2.3 GB (8mm)	150 MB, 525 MB, 2.3 GB (8mm)
External Tape				
Expanded Connectivity				
LAN (Token-Ring/Ethernet)	Up to 4	Up to 4	Up to 4	Up to 4
WAN (Lines)	Up to 4	Up to 4	Up to 4	Up to 4
TTY - Direct	Up to 16	Up to 32	Up to 32	Up to 48
- LAN Based Terminal Server		Up to 32	Up to 64	Up to 128

Novell Picked as Top Stock - Microsoft and Intel in Top Ten

Washington D.C. - In its annual investment guide for the upcoming year, *U.S. News & World Report* ranked Novell, Inc. as the number one stock for 1991.

Each year the publication lists the 100 highest quality stocks that can be relied upon to weather difficult times, such as the current bear market and prosper in a bull market. The list is not a list of stock market bargains but rather a list of high quality stocks that already shine. Investment criteria used in compiling the list are company size (minimum \$750M), earning momentum, and stock strength over the last 12 months.

In making Novell its top pick, *U.S. News & World Report* cited Novell's 60% market share of the network market and its software growth, which has increased 15 times since 1985. Novell's sales are projected to hit One Billion USD by 1995.

Microsoft was ranked number four on the list on the strength of its leadership position in the PC software business and its plans to expand into the \$4.8 B market for PC network products.

Intel was ranked number ten due, in part, to its stable of new products to be released during the next two years and projections for 19% annual earnings growth through 1995.

Other industry stocks making the list were:

- (2) Common Peripherals, Inc. - a leading disk drive maker
- (21) Autodesk Inc. - the desktop software manufacturer
- (29) Compaq Computer Corporation
- (44) Amdahl Corporation
- (70) Policy Management Systems - a vertical market software author to the insurance industry.

The entire list of stocks and mutual funds was published in the December 17, 1990 edition of *U.S. News & World Report*. BC

Platform Update - Multi-User

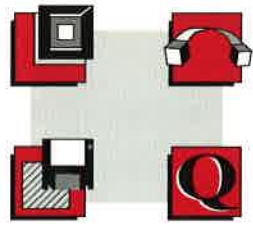
Shared Logic Systems

Computer	Operating System
ALTOS 686, 886, 1086, 2086, 3086	XENIX 3
ALTOS SERIES 2000	XENIX V
ALTOS 500, 600, 1000, 2000, 5000	SYSTEM V
BLUEBIRD SL/DH/TW SERIES	SUPERDOS
BULL XPS 100	UNIX V
BULL DPX/2 200	BOS
BULL DPX/2 300	BOS
BULL MICRAL 600/ix	BOS 386
DEC MICROVAX II	VMS
DEC VAX SERIES	VMS
IBM AT & IND. STANDARD 286	SCO XENIX V 286
IBM, PC, XT, AT	SUPERDOS
IBM PS/2 SERIES	SUPERDOS
IBM PS/2 SERIES	SCO XENIX V
INDUSTRY STANDARD 386, 486	SCO UNIX V/386, 486
INDUSTRY STANDARD 386, 486	INTERACTIVE 386/ix UNIX
NCR SYSTEM 3000 SERIES*	AT&T UNIX (NCR)
NCR TOWER 32	SCO UNIX V
NEC ASTRA-XL SERIES	ASTR-IX
WANG 280	SCO XENIX V 286
WANG 380	SCO XENIX V 386 AT
WANG APC	XENIX 3.0
WANG APC	XENIX V
WANG DX 2000 (DYNAMIX)	SCO UNIX V/386
WANG PC 300/33C SERIES	SCO UNIX V/386
WANG PC 480/25C	SCO UNIX V/386
WYSE PC 286 SERIES	SUPERDOS
WYSE PC 386 SERIES	SUPERDOS
WYSE 5000	AT&T UNIX (WYSE)

Distributed Logic Systems (Networking)

IBM & ALL APPROVED COMPATIBLES	NOVELL ELS I
	NOVELL ELS II
	NOVELL ADVANCED NETWORK
(SEE SINGLE-USER MS-DOS)	NOVELL E/TI NETWORKING
	SPERRY USERNET

*Intel 386 and 486 based systems



Platform Update - Single User MS-DOS

Basic-2C has been tested on the following computers

- | | | |
|--|--|--|
| <ul style="list-style-type: none"> AMSTRAD PC1512 • ARCHE/RIVAL 286 + AST PREMIUM 286 AT&T 6300, 6300 PLUS BLUEBIRD,SL/DH/TW SERIES COMMODORE PC-10, PC-20 COMPAQ DESKPRO COMPAQ PLUS COMPAQ PORTABLE • COMPAQ PORTABLE III • COMPAQ 286 DESKPRO • COMPAQ 386 PORTABLE • COMPAQ 386 DESKPRO • COMPAQ 386/S DESKPRO • COMPAQ 386/20E DESKPRO • COMPAQ 386/25 DESKPRO • COMPAQ LAPTOP SLT/286 COMPUTERLAND PC DEC VAXMATE DELL SYSTEM 220/286 EPSON EQUITY I, II, III | <ul style="list-style-type: none"> HONEYWELL PC AP HP VECTRA HYUNDAI SUPER 286C + IBM PC, XT, AT • IBM PC, XT, 286 + IBM PS/2 MODELS 30,50,60,70,80 30/286, 50S, 70Z/386 ITT XTRA XP • KAYPRO 1610 • KAYPRO 16/E • KAYPRO PC, PC10, PC30 • KAYPRO 286i • KAYPRO 386+ • KAYPRO 2000+ LEADING EDGE PC (D) MAI/BASIC 4 PC • MULTITECH LAN 500 (ACER) + MULTITECH 700, 710 (ACER) + MULTITECH 900, 910 (ACER) • MULTITECH 1100 (ACER) NCR PC6 | <ul style="list-style-type: none"> NEC APC IV SPERRY PC/IT TANDY 3000 TELEVIDEO TELE-PC TELEVIDEO TELE-XT TI BUSINESS PRO • TOSHIBA T3100, T3200 TULIP COMPACT UNISYS PW2/500-12 • UNISYS PW2-500 UNISYS PW2-800 + WANG PC, APC + WANG PC280 + WANG PC380, 382 + WYSE PC, PC286, 2108, 2200 3216, 3225 XEROX 6060PC XEROX 6065 ZENITH 150 SERIES ZENITH 248 SERIES • ZENITH SUPER SPORT/286 |
|--|--|--|

- Tested and passed for 2.01. To date no previously approved compatible has failed the 2.01 compatibility testing.
- + Tested and passed for Release 3.00. To date no previously approved compatible has failed the 3.00 compatibility testing.

Basic-2C is currently operating on the following computers*

- | | | | |
|--|---|---|---|
| <ul style="list-style-type: none"> AMAX 286 AMSTRAD PC1640 AMSTRAD PC2086 APRICOT 660I ARCHE TECHNOLOGIES AST PREMIUM 386 AT&T 6386 BITAC CDS AT CLUB AT 210 | <ul style="list-style-type: none"> COMMODORE PC 30, 40, 50 COMPUADD 286 CORDATA AT DTK 286-12 DTK 286-16 EPSON PC/AX2 EVEREX STEP SYSTEMS G2 GATEWAY 2000 INTEL 386 | <ul style="list-style-type: none"> LASER MITAC MISTATION 35 MITSUBISHI 286 NEC POWERMATE NEC POWERMATE 286+ NIMBUS NOVELL 386 NETWARE OLIVETTI 386 SX OLIVETTI PCS 286 PACKARD BELL 286 | <ul style="list-style-type: none"> PARTNER AT PARTNER PC XT PHILIPS NMS TOSHIBA T5100 VOLLEMAN 3.XX WANG LAPTOP WANG PC240 WANG PC250 WANG PC260 WANG PC350 |
|--|---|---|---|

* It has been reported to Niakwa that Basic-2C operates properly on the following computers. Be advised that Niakwa has not tested Basic-2C on these machines and therefore cannot be responsible for incompatibilities or other problems that may arise when using Basic-2C on these computers.

Niakwa asks Basic-2C users to supply information about known compatible and noncompatible PCs running with Basic-2C that are not on the Platform Update Status chart.

Announcements

Niakwa Data Management System (NDMS)

The Niakwa Data Management System (NDMS) will be the first group of products in a new product line being developed by Niakwa (refer to *Niakwa Committed to Development Tools* in the November 1990 *Basic-2C Connection*).

The NDMS products will allow Basic-2C applications to utilize state of the art native ISAM products to store data while retaining full portability. Although modifications to the application are required to utilize these features, the NDMS product is being designed to minimize these modifications.

Product Concepts

The NDMS products will be based on the external call feature of Basic-2C Release III. For each hardware/operating system platform supported by Basic-2C, an interface to one or more native ISAM products (selected by Niakwa) will be provided. An Application Program Interface (API) designed by Niakwa will be provided. This API will consist of a set of subroutines that can be called by the application program by use of simple GOSUB' statements. The API will provide the same interface to the application regardless of the native ISAM or platform in use, thus insuring portability of the application.

The interface to the native ISAM and the API will be provided as a pre-compiled, pre-linked external library in order to avoid variable and line-number conflicts with existing applications. Application developers will not need to compile or link any routines and will require no knowledge of any language other than Basic-2C.

Product Organization

An NDMS product will be available via a phased delivery schedule for each platform supported by Basic-2C Release III. Each platform specific product will consist of an NDMS Development

Package and an NDMS RunTime. The NDMS RunTime package is required for every end user site.

For each platform, the NDMS Development Package will contain:

- Documentation of the API.
- Platform specific and ISAM specific installation and operation documentation.
- A set of utilities intended to aid in the conversion of existing application program code and data.
- A set of utilities to allow for creation and maintenance of data dictionary files.
- A modified BESDK package that will allow developers who utilize their own external routines to integrate those routines with the Niakwa NDMS package.

For each platform, the NDMS RunTime Package will contain:

- An external library containing the Niakwa API and an interface to a supported native ISAM.
- End user level installation instructions.

Native ISAMs to be supported

Niakwa will support only sophisticated state-of-the-art native ISAM products. For IBM MS-DOS and Novell, Btrieve by Novell will be supported. For SuperDOS, SDtrieve by Bluebird (functionally similar to Btrieve) will be supported. For XENIX/UNIX a final decision has not been made. Products under consideration are C-Isam by Informix and DB-Vista by Raima Corporation.

(continued on page 12 - see NDMS)

Marketing Bulletin

North American

13 December 3, 1990
New Advertising Campaign

14 December 7, 1990
New Basic-2C for NCR Systems

15 January 3, 1991
Channels of Opportunity
Conference

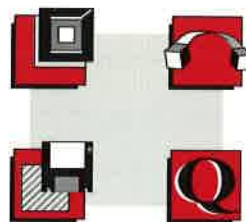
International

12 December 3, 1990
New Advertising Campaign

13 December 7, 1990
New Basic-2C for NCR Systems

14 January 3, 1991
Channels of Opportunity
Conference

Marketing Bulletins are mailed to Resellers of Basic-2C. If you are not a Reseller of Basic-2C, but would like to receive a specific Marketing Bulletin, please contact an authorized Niakwa Reseller, or Niakwa directly.



NDMS

(continued from page 11)

API Features

■ Multiple Indices

Each key may contain up to 8 segments.

Up to a total of 24 key segments per file may be defined.

■ File locking and record locking will both be supported.

■ All data is stored in stand alone native files. These files are expandable.

■ SEEK functions to search for specified key values will support =, >, <, >=, <=, start-of-file, end-of-file specification.

■ POSITION by physical record number.

■ Transaction Start, End, Abort. These features allow operations to be logically grouped into transactions so that partially completed transactions can be backed out of the data base in the event of an error or hardware failure.

■ Data conversion functions will be provided to allow easy conversion between Basic-2C field types and field types supported by the native ISAM. Utilization of these functions is not required but is recommended to ensure that data is accessible by various third party products.

■ A series of data dictionary files can be utilized by the application if desired.

Product Benefits

■ Significant improvements in functionality for most applications.

■ Significant performance improvements. Performance will be

improved over typical existing applications in several ways:

A. Elimination of the \$OPEN bottleneck. Since each data file is now a stand alone file, the fact that one user has one file locked does not prevent a second user from accessing other files. In addition, with support for record locking, applications may be able to reduce or eliminate the need for file locking, thus allowing multiple users to update data in the same file concurrently.

B. Buffering and caching performed by the native ISAM will typically improve performance significantly.

C. Applications may be able to improve performance significantly by utilization of improved ISAM capabilities.

■ Data independence. Data stored using the Niakwa API will be accessible to any other Basic-2C application that utilizes the API. In addition, the data will be directly accessible by any third party product that supports the native ISAM in use.

■ Application development and maintenance will be greatly simplified since the application no longer needs to be concerned with data management routines.

Product Status

Beta test versions of the NDMS for MS-DOS and Novell utilizing Btrieve were available in January. SuperDOS utilizing SDtrieve is scheduled to follow in March and others on a phased release schedule. If you are interested in being a beta site for these products, please contact your Niakwa sales representative. BC

New Look for Niakwa

Some of you may have noticed our recent ad layouts in the *Basic-2 Report* and other publications. The "swoosh" used in these advertisements will soon become part of a series of dynamic visual changes designed to give Niakwa a new "high visibility" look. These changes are in anticipation of Release IV, which is slated for the not too distant future and will begin appearing with some of the soon to be released Niakwa Development Tools.

The documentation associated with these products will also be getting a face lift with the use of a combination of WordPerfect and Xerox's Ventura Publisher. These changes will also provide better referenced documentation as indices and inter-chapter referencing become part of the new manuals.

Our goal is to create a better looking and easier to use product.

The first products to utilize this "new look" will be the Niakwa Data Management System and Intelligent Query products slated for release in the second quarter of 1991. BC

Welcome...



Paul Brown joined Niakwa this past November as a Product Analyst.

A life long resident of the Chicago area, Paul graduated from the

University of Illinois in Champaign/Urbana in 1982.

Before Niakwa, his previous position was with Tandy/Radio Shack as a Computer Department Manager.

Paul's responsibilities at Niakwa will include telephone support, documentation, and other special projects.

Getting married this June, Paul is learning the art of compromise. He looks forward to a challenging and interesting future at Niakwa and in general. BC

Tech Corner

Ask Andy

? How can I copy my files from a Wang 2200 to my new Basic-2C system?

A. Porting of files between Basic-2C and the Wang 2200 can be accomplished in several ways. Although the most common method is file transfer to a PC via communications software, diskette based file transfers still remain a popular alternative.

The Niakwa utilities (2CBCPK 2CRCVR and 2CCOPY) are excellent programs for moving your program and data files to and from a Wang 2200. In order to utilize these programs, you must first move these programs from your system to the Wang 2200. In order to do this, the programs must first be de-compiled into 2200 format on diskette, after which the diskette may be accessed directly on the 2200.

To accomplish this, perform the following steps:

1. Install the Basic-2C Development and RunTime package on your system.
2. Change into the \BASIC2C directory on your system.
3. Insert a pre-formatted 320k diskette in your systems diskette drive.
4. Enter the following command from the command line:

```
b2c /SRCLOC \BASIC2C\UTILITY.BS2
/OBJLOC \dev\null /LSTLOC A:
/LSTFORMAT 2200 2CBCPK 2CRCVR
2CCOPY
```

The above command line will create the transfer utility programs on A: in 2200 atomized code, which may

be used directly on the Wang 2200.

Once on the Wang 2200, these programs can be used interchangeably for transferring your program and data files to and from the 2200.

NOTE: The above command line assumes an MS-DOS operating environment and may vary from one operating system to the next.

If you are on a system that doesn't have a diskette drive, then as an alternative, you may want to consider using any of the Wang 2x36 terminal emulation products on the market, and transfer your files via communications directly to or from the Wang 2200. In most cases, file transfer using these programs is easily accomplished.

For a complete discussion of porting programs and data or using the Niakwa file transfer utilities, refer to the Basic-2C Technical Reference Guide - Operations Manual for details.

? How much of SCO XENIX/UNIX operating system is needed for Basic-2C to run properly?

A. To execute the Basic-2C RunTime (rti or rtp) only the basic operating system is needed. If the use of external calls is required, then the SCO XENIX/UNIX Development System Packages are also needed on the machine where the external routines are to be linked to the RunTime.

Local Printing Support for the BULL HDS Terminal

With the original release of Basic-2C on the Bull XPS-100, full support was provided for the Bull HDS 1 and HDS 3 terminals. Our testing on a newer model of the HDS 3, the HDS 3A, revealed that this new terminal did not support local printing. All other functions of this terminal worked correctly.

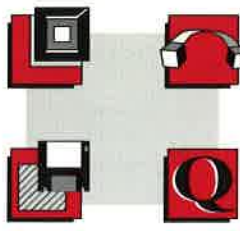
Bull has acknowledged the problem exists on the HDS 3A terminals with a firmware revision of 1.81. This firmware revision can be displayed by depressing **SHIFT + SETUP**.

This problem has since been corrected by Bull in firmware revision 1.82, which is presently shipping on Bull's current model of this terminal, the BDS 3. BC

Technical Notes

- 08 November 1, 1990
Basic-2C and SCO UNIX ramdisk
- 09 November 1, 1990
Performance Issue on UNIX
- 10 November 1, 1990
Wang 2x36 DE/DW Terminal Support
- 11 November 1, 1990
Problem Installing Security on MS-DOS/Novell
- 12 November 1, 1990
Basic-2C RunTime Security on Novell 386
- 13 November 1, 1990
Intel 286/386 XENIX/UNIX Update

Technical Notes are mailed to Resellers of Basic-2C. If you are not a Reseller of Basic-2C, but would like to receive a specific Technical Notes, please contact an authorized Niakwa Reseller, or Niakwa directly.



Security Diagnostics for XENIX/UNIX

The Basic-2C XENIX/UNIX Update Release 3.01 contains not only a series of problem corrections (documented in Bug Report #4 dated December 1, 1990), but also improved security diagnostics.

A series of error codes were added to the Basic-2C security program and issued during security checks. These checks will result in error messages and/or error codes being displayed if a problem is encountered. Each error code has a specific number that will be displayed on the top left corner of the screen.

These new diagnostics will help you determine what specifically is wrong with the Basic-2C security. For example:

- Trying to pass security from a Gold Key diskette with a serial number different from the software copied on the hard drive.
- Attempting to pass security from the hard drive when the security file is damaged or missing.
- Damaged diskettes or a floppy drive hardware problem.

In addition, Niakwa has also added a new utility, hexdump, on the RunTime diskettes. This utility will help Niakwa's Technical Support staff to check the security files, while the Gold Key is still at the user's site. Details on the use of the hexdump utility and specific error codes and their significance are included in the Update Installation Instructions for Niakwa Basic-2C XENIX/UNIX Revision 3.01.07.00, dated December 1, 1990. BC

Technical Notes Summary

On April 1, 1990, Niakwa's Technical Support staff published its first Technical Note. This is one of Niakwa's new methods of communication which announces technical notices, such as new products running with Basic-2C, patch files, recent technical developments, and pertinent hardware/software developments relating to Basic-2C.

Recently, five new Tech Notes have been published. Tech Note No. 8 discussed how to use a ramdisk on SCO UNIX. This article gives instructions on how to set up a ramdisk, and then how to access the ramdisk from within Basic-2C. One advantage of using ramdisk is to possibly improve performance.

Tech Note No. 9 discussed performance problems when first porting an application to UNIX. Prior to Revision 3.01, when \$BREAK was encountered, the RunTime would attempt to release the number of \$BREAK units specified. As of Revision 3.01, byte 36 of \$OPTIONS was implemented to indicate how many \$BREAK units the RunTime needs to accumulate before a timeslice is release. This Tech Note discusses, in depth, how \$BREAK units and byte 36 of \$OPTIONS work hand-in-hand to improve performance on Intel UNIX systems.

Tech Note No. 10 listed the operating systems and hardware configurations that best support the Wang 2x36 DE/DW Terminal. These are:

- SuperDOS
- Altos 1000 running Altos System V/UNIX (only on the Altos Series 386/1000 SIO board)

■ Wang Dynamics running SCO UNIX

Tech Note No. 11 discussed possible problems installing security on MS-DOS or Novell if the floppy disk drive is cached.

Tech Note No. 12 discussed the problem of losing the installed security on Novell Netware 386.

Tech Note No. 13 announced the availability of an update to Basic-2C Revision 3.01 for Intel XENIX/UNIX, which is available now. This update corrects bugs discovered since April 1, 1990. If you are currently using the 3.01 Intel XENIX/UNIX release, you should have received this update. BC

The Back Page

Windows

(continued from page 1)

Some of these features may include:

- Dynamic Data Exchange with other applications.
- Graphic User Interface capabilities: scroll bars, icons, dialogue boxes, mouse support, child windows, etc.

Availability

No firm schedule has yet been set for this Basic-2C product. Additional information, such as ordering, pricing, and configuration requirements, will be forthcoming in Niakwa's Marketing Bulletins, Niakwa's Basic-2C Connection, and the Basic-2 Report.

¹ PC Magazine, September 11, 1990. Volume 9, Number 15. "Windows 3.0 Under the Spotlight," page 182 by William S. Hall. BC

Review

(continued from page 3)

retaining the core of their applications. Niakwa found a way to add 4GL capabilities to the Basic-2C language, but maintain Basic-2C as the underlying engine! This provides our resellers with the capabilities they needed but would retain the core application, provide good performance, and cost less than a full blown 4GL product.

Release IV

We have been discussing Release IV with our customers for some time, almost

from the day Release III was published. We have already determined Release IV must include structured programming capabilities, variables, and if possible long variable names.

C Version

Although Basic-2C is one of the world's most portable languages, Niakwa is never satisfied. We see RISC processors making their mark, and new, faster chip technologies on the horizon.

In 1990 we continued our work on the

implementation of a "C" version of Basic-2C so Niakwa Resellers may continue to enjoy the portability advantage they have now.

At Niakwa we understand that financial success is directly related to performance. That's why we will not reflect on 1990 for very long. We must continue to strive for excellence in products and services in 1991 and beyond. BC

Fiscal Year 1990

Revenue Sources

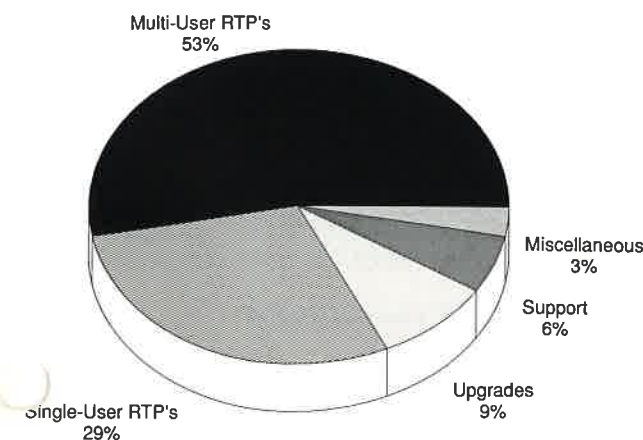


Chart 2 - Basic-2C Multi-user RunTime Packages increase to 53% of revenue.

Fiscal Year 1990

Multi-User - Units

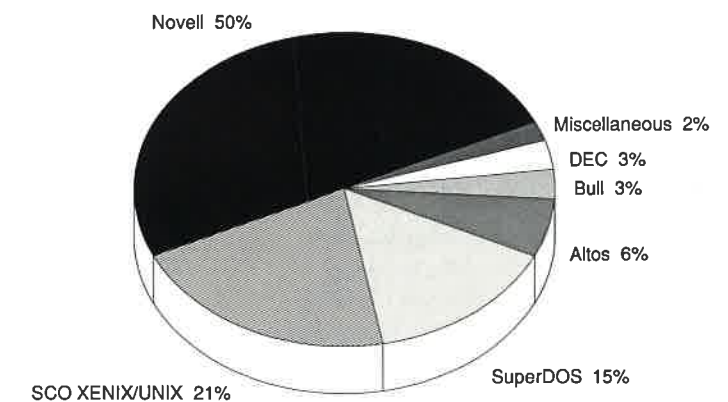


Chart 3 - Novell, XENIX/UNIX, and SuperDOS represent 85% of Multi-user market.

Profile

I.A.F.C.

Informatique Assistance Formation Conseil

Introducing I.A.F.C.

I.A.F.C., located in Bordeaux, France, was founded by D. Prieur De Perray in 1981 to give support to the customers of the Wang France Agency in Bordeaux. In 1982, I.A.F.C. became a Wang Reseller, principally for the Wang 2200 and OIS systems. They discovered Niakwa's Basic-2C in late 1988 through their Master Distributor, SCIA France (Paris, France).

The company name was chosen as a "credo" due to I.A.F.C.'s goal to offer a full range of services to its customers. I.A.F.C. does offer all hardware and software related services to over 200 customers located throughout France.

The Hardware Perspective

In the past, most of the hardware sold was for the Wang 2200 and PC solutions. I.A.F.C. now also sells the full Altos series with Niakwa's Basic-2C product, as well as PCs from various manufacturers such as Compaq, Epson, IBM and Wang. Most of their Basic-2C installations have been under MS-DOS, SCO Xenix/UNIX and Altos UNIX.

In fact, I.A.F.C. has had very good experience in porting its application from the Wang 2200 to any of the platforms compatible with Basic-2C. For this reason, they did not hesitate to propose a new system and support agreement to their long time customer, Remy Martin, yes ... the makers of Cognac. The proposed DEC machine running Basic-2C under VMS, will allow for increased performance and users while maintaining the software which has been custom fit for their business since its original installation in 1981.

Remy Martin may also add I.A.F.C.'s Basic-2C Cash-Register software to operate on two new Wang PC's with

color screens.

These will be used in their "Visit Circuit" which guides international tourists on a mini-railroad through the "chais" (special storehouses) where Cognac has been produced for ages.



An employee of I.A.F.C. programming in Basic-2C.

The Software Story

I.A.F.C. is known in France as experts in Basic-2C, DATA 3500, Word Processing, and Telecommunications. Software packages developed in Basic-2C by I.A.F.C. include:

- A complete software package designed for supermarkets. Functions range from the emulation of a cash-register on a terminal or PC to automatic ordering via telex, fax, or other connections, and all associated accounting.
- "Messagerie 2000" (Message 2000) - this software integrated with DATA 3500, allows for the automatic sending of messages on any network such as telex, telecopier, AITAS400, Swift, etc.
- "Telephon Call" (Telephone Call) - instead of a printer connected to a

private telephonic central, I.A.F.C. plugs in a PC. A "C" language program records all the data received and a Basic-2C software program controls and analyzes information which can be sorted by type of service, phone number, date, price, etc. It can also produce invoices if desired.

Success Stories

One of I.A.F.C.'s customers is a small insurance company who originally had two Wang 2200 machines and 7 terminals, multiplexed on a 180 MB DS. The customer wanted the user memory expanded to over 56K, which could not be accomplished with their existing system. However, under Basic-2C Release III, the memory could be expanded to whatever was needed. This system was successfully replaced in less than 2 days with an Altos 2000, running 20 terminals and 760 MB.

Another recent installations was a company located in Brive, a supplier of mushrooms all over the world. They have a very time-dependent market, such that the company Director had to spend half a day every Sunday sending his proposals by fax and telex. Now he takes only one hour each Friday to prepare different proposals, then utilizes a multi-addressing program to automatically send the faxes and telexes at the time he specifies for Sunday night (or any night). His system is an Altos 1000, 10 terminals, running I.A.F.C.'s "Messagerie 2000" under Basic-2C.

A Toast from I.A.F.C.

"Préparer l'Avenir, Investir le Présent.
(Prepare for the Future, Invest in the Present.) BC