



NIAD
P O BOX 1114
LISLE, IL 60532
CIS 72255,47
(312-961-3529)

ISSUE # 7 JULY, 1985
SINGLE COPY: \$3.00
12 ISSUES : \$18.00 US 3RD CLS
\$24.00 US 1ST CLS; \$24.00 CANADA
EDITOR: LYLE MARSCHAND



HOPE EVERYONE OF YOU ARE HAVING A WONDERFUL SUMMER, ENJOY IT WHILE IT LASTS !
TO CONTINUE OUR STUDY OF THE BOOK OF EPHESIANS LETS READ ON TO VERSES 5 THROUGH 8:
" HE DESTINED US IN LOVE TO BE HIS SONS THROUGH JESUS CHRIST, ACCORDING TO THE PURPOSE OF HIS WILL, ⁶ TO THE PRAISE OF HIS GLORIOUS GRACE WHICH HE FREELY BESTOVED ON US IN THE BELOVED. ⁷ IN HIM WE HAVE REDEMPTION THROUGH HIS BLOOD, THE FORGIVENESS OF OUR TRESPASSES, ACCORDING TO THE RICHES OF HIS GRACE ⁸ WHICH HE LAVISHED UPON US." (RSV)
THESE FEW VERSES SO BEAUTIFULLY SUMMARIZE THE PLAN OF GOD TO GIVE US ETERNAL LIFE AND SALVATION. GOD DESTINED US TO BE HIS SONS - THIS STATES THAT AS SONS WE ARE HEIRS TO ALL GOD HAS, ALL THE SPIRITUAL BLESSINGS IN HEAVENLY PLACES. IT IS STATED THAT THIS IS ACCOMPLISHED THROUGH JESUS CHRIST. YOU SEE, JESUS IS THE ONLY BEGOTTEN SON OF GOD WHO HAS BEEN WITH GOD THE FATHER FOR ETERNITY. WE ARE CREATED SONS OF GOD, FOR THE PURPOSE OF FELLOWSHIPING WITH GOD AND RECEIVING HIS BLESSINGS. WHEN ADAM AND EVE DISOBEYED GOD THEY BROKE THIS FELLOWSHIP (RELATIONSHIP) AND JESUS WAS SENT BY THE FATHER TO RECONCILE US BACK TO GOD SO WE COULD RECEIVE THESE SPIRITUAL BLESSINGS AND TO AVOID THE PUNISHMENT FOR SIN WHICH IS DEATH. THIS SPEAKS OF GOD'S GRACE, WHICH MEANS THAT HE GAVE US THE "GIFT" OF THESE BLESSINGS AND ETERNAL LIFE FOR NO REASON OTHER THEN HE LOVED US I.E, WE DON'T HAVE TO DO SOMETHING TO DESERVE THIS GIFT. I NEVER REALLY UNDERSTOOD THE PLACE OR PURPOSE OF JESUS, NOW I SEE THAT IT IS THROUGH HIM THAT GOD THE FATHER BLESSES US AND AS VERSE 7 TELLS US, IT IS THROUGH HIS SACRIFICE (SHEDDING OF HIS BLOOD) THAT OUR SINS ARE FORGIVEN. THIS IS GOD'S GRACE, THAT HE WOULD SACRIFICE HIS ONLY BEGGOTEN SON AND INFLICT THE PUNISHMENT OF SUFFERING AND DEATH ON HIM, IN ORDER THAT WE COULD BE SAVED. ALL WE HAVE TO DO IS ACCEPT THIS FACT, THAT JESUS BORE OUR SINS UPON HIMSELF AND WE CAN HAVE ETERNAL LIFE. THIS IS BEST EXPLAINED AS AN EXCHANGE - WHEN JESUS WENT TO THE CROSS, HE TOOK OUR SINS UPON HIMSELF ALTHOUGH HE DID NOT DESERVE THEM BECAUSE HE HAD NEVER SINNED; HE LOWERED HIMSELF FROM HIS PLACE IN HEAVEN

THROUGH OBEDIENCE TO THE FATHER AND TOOK THIS PUNISHMENT UPON HIMSELF. JESUS GAVE US WHAT HE HAD - ETERNAL LIFE, SPIRITUAL BLESSINGS AND A RELATIONSHIP WITH GOD THE FATHER. WHAT A DEAL WE HAVE ! THIS IS HOW GOD WORKS - HE LAVISHES US WITH HIS GRACE AND MERCY.
GOD BLESS YOU ALL.

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CONTRIBUTORS

- W. MOTEL
- B. WALLIS
- C. KOLANDER
- K. HAMMOND
- B. LENNES
- D. ZIMMERMAN



THE
war cry



THE SALVATION ARMY
Easter 1985

NIAD NEWS

. THANKS TO V. HAUGE FOR POINTING OUT THAT THE JUNE AND JULY ISSUES OF CONSUMER REPORTS CONTAIN REVIEWS OF VIDEO MONITORS AND DOT MATRIX PRINTERS. GOD MUST OF BEEN HELPING ME SELECT MY PRODUCTS LAST MONTH BECAUSE THE THE TWO VIDEO MONITORS NIAD NOW CARRIES (AMDEK COLOR 300 AND PANASONIC) AND THE PANASONIC 1091 PRINTER NIAD NOW CARRIES WERE RATED TOPS BY CONSUMER REPORTS !!

. WE WILL BE CARRYING SOME COMMERCIAL CPM SOFTWARE PRODUCTS STARTING NEXT MONTH.

. NIAD NOW CARRIES DUST COVERS FOR THE ADAM. THREE ARE PROVIDED - KEYBOARD, CONSOLE AND PRINTER. THESE ARE THE BROWN VINYL THAT ARE MADE BY CLASSIC COVER.

. WE NOW CARRY THE TRACTOR FEED FOR THE ADAM PRINTER AS WELL AS THE PRINTER STAND FROM DATA BACKUP. WE WILL HAVE A FULL REVIEW IN THE NEXT ISSUE.

. NIAD WILL BE WORKING CLOSELY WITH EVE ELECTRONICS ON DEVELOPING ADDITIONAL SOFTWARE FOR USE IN INTERFACING THE ADAM TO OTHER PRINTERS AS WELL AS TESTING OUT EVE'S FUTURE PRODUCTS.

. THE RESPONSE TO THE NIAD PUBLIC DOMAIN LIBRARY PURCHASE PROGRAM IS OVERWHELMING TO SAY THE LEAST ! THERE IS OBVIOUSLY A REAL HUNGER OUT THERE FOR PD SOFTWARE. WE ARE ADDING MORE ALL THE TIME - SEE THE SOFTWARE EXCHANGE SECTION FOR LISTINGS.

. WE HAVE ADDED A NICE PROGRAM DONE BY E & T SOFTWARE - SEE REVIEW THIS ISSUE.

. I HAVE ADDED THE STAR PRINTER TO OUR PRODUCT LIST - IT OFFERS THE SAME ENHANCED PRINT FUNCTIONS OF THE EPSON AND PANASONIC 1091, WITH THE ADDITION OF SOME SPECIAL FEATURES - SEE REVIEW IN THIS ISSUE.

. SOME OF YOU HAVE NOT BEEN SENDING A "STAMPED" SELF ADDRESSED MAILER WHEN YOU SEND IN A PROGRAM TO THE SOFTWARE EXCHANGE LIBRARY. PLEASE INCLUDE THE RETURN POSTAGE.

. NOTE THAT YOU MAY UPGRADE TO 1ST CLASS MAILING FOR THE MONTHLY NEWSLETTER BY SENDING IN \$.50 FOR EACH MONTH REMAINING IN YOUR SUBSCRIPTION (THE LAST MONTH OF YOUR SUBSCRIPTION IS THE FIRST 4 DIGITS OF YOUR MEMBER NUMBER AS SHOWN ON YOUR MAILING LABEL).

NIAD BASICS

. NEW MEMBERS SUBSCRIPTIONS ARE STARTED WITH THE LAST ISSUE PUBLISHED.

. BACK ISSUES OF THE NIAD NEWSLETTER ARE AVAILABLE FOR \$3.00 EACH AND I WOULD RECOMMEND YOU PURCHASE THEM FOR THE REVIEWS AND WORKSHOP INFORMATION.

. TELEPHONE CALL INS ARE TAKEN SATURDAY AM'S FROM 8:00 TO 11:00, CHICAGO TIME.

. REGARDING PRODUCT ORDERING -

SEND A MONEY ORDER OR CHARGECARD NUMBER IF YOU WANT TO EXPEDITE YOUR ORDER ON ALL FIRST TIME ORDERS (NOTE: ESTABLISHED MEMBERS MAY PAY BY CHECK WITHOUT THE 10 DAY DELAY).

IF YOU ORDER ITEMS THAT ARE SHOWN AS NOT YET AVAILABLE AT THE SAME TIME YOU ORDER OTHER ITEMS, YOU WILL BE CHARGED TWO SHIPPING CHARGES UNLESS YOU SPECIFY THAT I SHOULD HOLD YOUR ORDER UNTIL ALL ITEMS ARE AVAILABLE.

. IF YOU WANT ME TO SHIP TO A POST OFFICE BOX, INCLUDE THE SHIPPING CHARGE FOR US MAIL SINCE UPS DOES NOT SHIP TO PO BOXES.

. PLEASE CALL ME BEFORE RETURNING ANY MERCHANDISE.

. IF I AM BACKORDERED ON AN ITEM THAT IS NOT SHOWN AS "NOT YET AVAILABLE", I WILL FILL THE REST OF YOUR ORDER AND SEND THE BACKORDERED ITEM WHEN RECEIVED (WITH NO ADDITIONAL SHIPPING CHARGE).

ADAM'S FUTURE

THE RECENT INTRODUCTION OF THE SP-1 RS232 INTERFACE AND THE NEAR FUTURE RELEASE OF THE 80 COLUMN VIDEO CARD, VOICE SYNTHESIZER, POWER SUPPLY AND DISK CONTROLLER HAVE GIVEN THE ADAM A REAL "SHOT IN THE ARM". THESE INTERFACE PERIPHERALS WILL ALLOW THE ADAM TO UTILIZE ALMOST ANY HIGH SPEED PRINTER, EVEN THE NEW INK JET PRINTERS. THE ACCESS TO THE NEW DOT MATRIX PRINTERS WILL ALLOW THE ADAM (ONCE THE APPROPRIATE SOFTWARE IS WRITTEN - SEE PRINTERS REVIEW THIS ISSUE) TO GENERATE SOME FANCY LOOKING DOCUMENTS INCLUDING GRAPHICS !

THE 80 COLUMN CARD WILL ALLOW US TO USE BOTH THE CPM PUBLIC DOMAIN AND COMMERCIAL SOFTWARE THAT REQUIRES 80 COLUMN VIDEO DISPLAY. THE DISK CONTROLLER WILL ALLOW THE ATTACHMENT OF OTHER NON-COLECO DISK DRIVES, INCLUDING HARD DISKS AND 3 1/4 DISK DRIVES !

BOY, THE FACT THAT COLECO RELEASED CPM 2.2 FOR THE ADAM BEFORE THEY ANNOUNCED THEY WERE DROPPING IT, COULD TURN OUT TO BE THE OUR SALVATION AND MAKE THE ADAM A VIABLE SYSTEM FOR YEARS TO COME.

YOU KNOW, NIAD MEMBERS, IT KEEPS COMING BACK TO THE FACT THAT THE ADAM IS A GREAT SYSTEM THAT WAS POORLY MARKETED BY COLECO. THE POTENTIAL OF THE ADAM IS UNLIMITED AS LONG AS WE HAVE PEOPLE THAT ARE WILLING TO WORK AND DEVELOP NEW SOFTWARE AND HARDWARE. I WAS TALKING TO WES RUDY OF DATA BACKUP AND HE INDICATED THAT IT WAS THE POTENTIAL OF THE ADAM THAT RESULTED IN HIM MAKING A FINANCIAL COMMITMENT TO SUPPORTING IT - THE RESULT IS THE ADAM PRINTER TRACTOR FEED THAT MANY OF YOU HAVE BEEN WAITING FOR. THIS IS HOW IT SHOULD WORK, PEOPLE WHO BELIEVE IN THE ADAM AND TAKING THAT LEAP OF FAITH TO SUPPORT IT. IT IS THEN UP TO YOU ADAM OWNERS TO RESPOND.

. COLECO HAS JUST RELEASED FAMILY FEUD (FINALLY) - SEE REVIEW IN THIS ISSUE. JEOPARDY WILL BE RELEASED SHORTLY WITH 2010: TEXT ADVENTURE AND THE BEST OF ELECTRONIC ARTS: HARD HAT MACK/ PINBALL CONSTRUCTION SET TO BE RELEASED IN AUGUST.

. NO NEWS YET ON THE POSSIBILITY OF RELEASING SMARTBASIC 2.0. HOWEVER, NIAD IS REVIEWING A VERSION OF BASIC THAT WILL RUN UNDER CPM 2.2. THIS VERSION IS VERY SIMILAR TO THE POPULAR MICROSOFT BASIC WHICH WILL OPEN UP THE ADAM TO MANY CPM PUBLIC DOMAIN AND COMMERCIAL BASIC PROGRAMS.

. COLECO HAS SOLD OUT ALL OF THE # 7830 MONITOR CABLE AND WILL NOT BE MANUFACTURING ANY MORE. HOWEVER, NOT TO WORRY, NIAD IS WORKING TO FIND AN ALTERNATIVE SUPPLIER AND SHOULD HAVE SOME STOCK BY MID-AUGUST.

. THE LAS VEGAS ADAM CLUB HAS PRODUCED A SET OF SMARTBASIC PROGRAMS FOR COMMERCIAL SALE - SEE REVIEW THIS ISSUE.

. THE 80 COLUMN VIDEO CARD WILL BE RELEASED BY EVE ELECTRONICS IN AUGUST. NIAD WILL BE REVIEWING IT FOR YOU, HOPEFULLY IN THE AUGUST ISSUE.

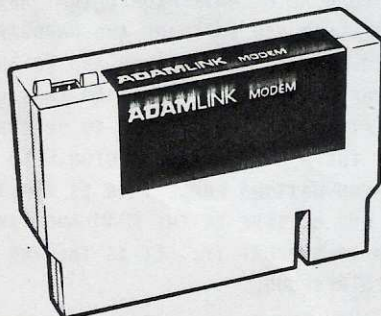
. EVE IS PLANNING TO PRODUCE A 64K EXPANDER CARD THAT WILL PERFORM JUST LIKE THE ONE PRODUCED BY COLECO AT A LOWER PRICE (APPROXIMATELY \$79.95) !!

. FOR YOU SP-1 RS232 INTERFACE PURCHASERS, EVE OFFERS A SERVICE TO PROVIDE YOU WITH SPECIAL SOFTWARE THAT WILL INTERFACE THE ADAM TO YOUR SPECIFIC PRINTER AND PROVIDE THE ABILITY TO UTILIZE ANY SPECIAL PRINT FUNCTIONS SUCH AS UNDERLINE, BOLD PRINT, DIFFERENT TYPE STYLES, GRAPHICS, ETC.. NIAD IS WORKING WITH EVE TO PROVIDE THIS SOFTWARE FOR THE PRINTERS WE SELL.

. WESTICO, THE COMPANY THAT WAS PROVIDING COMMERCIAL ADAM CPM 2.2 SOFTWARE HAS GONE OUT OF BUSINESS. HOWEVER, EVE ELECTRONICS IS NOW PICKING UP THE SLACK AND CONVERTING AND SELLING ADAM CPM 2.2 SOFTWARE. NIAD WILL ALSO BE SELLING SOME OF THIS CPM SOFTWARE - CALL FOR INFORMATION.

. E & T SOFTWARE HAS RELEASED SOFTPACK I, A CHECKBOOK MANAGEMENT PROGRAM - SEE REVIEW THIS ISSUE.

. YES, THE ADAM PRINTER TRACTOR FEED IS NOW AVAILABLE ! IT IS MANUFACTURED BY DATA BACKUP BASED ON THE COLECO SPECIFICATIONS.



I WAS ON COMPUSERVE THE OTHER DAY AND THE DATA LIBRARY OF ADAM SOFTWARE HAS REALLY GROWN. THERE HAVE BEEN SOME QUESTIONS AS TO HOW TO GET PROGRAMS OFF OF THAT LIBRARY VIA THE ADAMLINK MODEM. PLEASE NOTE THAT YOU MUST HAVE THE ADAMLINK II TELECOMMUNICATIONS SOFTWARE IN ORDER TO DOWNLOAD PROGRAMS FROM COMPUSERVE TO YOUR ADAM. ADAMLINK II IS ONLY AVAILABLE BY SENDING IN THE COUPON THAT IS IN THE ADAMLINK MODEM BOX TO COLECO WITH \$9.00. COLECO WILL NOT PROVIDE ADAMLINK II WHEN YOU PURCHASE YOUR MODEM, YOU MUST SEND IN FOR IT. TO OBTAIN PROGRAMS FROM COMPUSERVE YOU NEED TO GET TO THE FAMILY COMPUTING FORUM BY ENTERING "GO FAM-200". NOTE THAT US ADAMITES ARE NOW USING TWO PERSONAL COMPUTING FORUMS ON COMPUSERVE - FAMILY COMPUTING AND CREATIVE COMPUTING (GO CRE-8). ALL THE ADAM CPM USERS USE CRE FOR INFORMATION EXCHANGE AND UP/DOWNLOADING OF PROGRAMS, WHILE FAM-200 IS USED FOR ALL OTHER ADAM INFORMATION EXCHANGE AND THE STORAGE OF BASIC, LOGO AND OTHER PROGRAMS.

ONCE YOU ARE IN EITHER FAM OR CRE YOU MUST ENTER THE DATA LIBRARY. ON FAM IT IS "DL6". THERE ARE TWO INSTRUCTIONS FILES THERE THAT DEFINE THE DOWNLOAD PROCEDURE - TO VIEW THEM ON THE ADAM SCREEN (NOTE: VIA ADAMLINK YOU MAY PRINT THE INFORMATION ON YOUR PRINTER AS IT IS DISPLAYED ON THE SCREEN - SEE YOUR ADAMLINK INSTRUCTION MANUAL) DO THE FOLLOWING:

1. HIT "CONTROL - O" (HOLD DOWN THE CONTROL KEY AND HIT O AT THE SAME TIME).
2. ENTER "R UPLOAD.HLP" AND PRESS THE RETURN KEY. THE INSTRUCTIONS WILL NOW BE DISPLAYED. DO THE SAME FOR THE OTHER INSTRUCTION FILE - MOREDO.HLP. YOU MAY LIST (PRINT ON YOUR ADAM PRINTER AT THE SAME TIME) THE LISTING OF ALL THE PROGRAMS ON DL6 BY JUST ENTERING "DIR".

HERE IS THE LIST OF ALL THE ADAM BULLEEN BOARD SYSTEMS I AM AWARE OF ; PLEASE SEND ME ANY OTHERS:

1. COMPUSERVE - VARIOUS LOCAL NUMBERS
2. ADAM INFO EXCHANGE - (404)445-8785
3. ADAM-X-CHANGE - (315)594-9372
4. WEBER STATE COLLEGE - (801)626-7906
5. PLANET EARTH - (415)968-7728
6. DETROIT COOP - (313)342-3019
7. CITADEL - (916)338-2352

THERE HAVE BEEN SOME QUESTIONS ON USING THE SP-1 RS232 INTERFACE TO CONNECT TO A DIFFERENT MODEM. THIS CAN BE DONE, BUT ONLY UNDER CPM 2.2 AND WHATEVER MODEM SOFTWARE PACKAGE YOU WOULD USE WOULD HAVE TO BE MODIFIED TO USE THE SP-1 - SEE THE CPM 2.2 WORKSHOP THIS MONTH FOR MORE INFORMATION ON THIS.

UTILITIES WORKSHOP

BLOCKS FREE CALCULATION PROBLEMS BY W. MOTEL

JVOLUME: FIRST DIR

```
A 1 CHECKML
A 1 TRYD4
A 1 READD4
A 9 UTILDMP
A 9 UTILDUMP
A 13 UTILDUMP > FROM CATALOG
A 15 UDREDOC
A 6 UTILCOPY
A 7 UTILCOPY
A 14 UDREDOB
```

39 BLOCKS FREE

FROM UTILDUMP FORMATTED DIRECTORY LIST:

J
VOLUME: FIRST DIR ON DISK CREATE: 0 0 0 VSIZE: 160...

#	ENT	FILE NAME	SC	T	BEG	END	ALC	USE...	D
1	1	BOOT			0	0	1	1	
2	2	DIRECTORY			1	1	1	1	
3	3	CHECKML		A	2	2	1	1	
4	4	TRYD4		A	10	10	1	1	
5	5	READD4		A	18	18	1	1	
6	6	UTILCOPY		A	26	29	4	4	Y
7	7	UTILDMP		A	35	43	9	9	
8	8	UTILDUMP		A	44	52	9	9	
9	9	UDREDOA		A	53	64	12	12	Y
10	10	UTILDUMP		A	65	77	13	13	
11	11	UDREDOC		A	78	92	15	15	
12	12	UDREDOB		A	101	117	17	17	Y
13	13	UTILCOPY		A	127	132	6	6	
14	14	UTILCOPY		A	133	139	7	7	
15	15	UDREDOB		A	140	153	14	14	
16	16	BLOCKS LEFT			154	159	6	0	

NOTE: THE ABOVE IS ONLY A PARTIAL REPRODUCTION OF THE OUTPUT OF THE UTILDUMP DIRECTORY LIST. SEE THE JUNE ISSUE FOR A COMPLETE PRINTOUT OF THE DIRECTORY UTILITY.

LOOKING AT THE CATALOG COMMAND OUTPUT, YOU THINK YOU HAVE 39 FREE BLOCKS. YOU TRY SAVING A FILE THAT IS 18 OR MORE BLOCKS AND YOU GET THE MESSAGE NO MORE ROOM. WHY ?

THE DISK CATALOGED DOES NOT REALLY HAVE 39 CONTIGUOUS BLOCKS LEFT ON IT. THE CATALOG COMMAND CALCULATES 39 BLOCKS LEFT AS THE SUM OF (LOOKING AT THE UTILDUMP DIRECTORY OUTPUT):

```
. BLOCKS LEFT - 6
. FILE # 6 - 4 (IS ACTUALLY A DELETED FILE "DL")
. FILE # 9 -12 "
. FILE #12 -17 "
39 BLOCKS
```

THE 3 DELETED FILES DO NOT SHOW UP ON THE CATALOG COMMAND. THE SPACE EXISTS AND CAN BE REUSED, THE FILE NAME OCCUPIES A DIRECTORY SLOT. WHEN A NEW FILE IS ATTEMPTED TO BE SAVED, THE SYSTEM:

1. TRIES TO REUSE THE DELETED SPACE FIRST. THE 18 BLOCK NEW FILE WILL NOT FIT IN THE SPACE "LEFT" BY EITHER FILE #6, 9 OR 12 BECAUSE NO SINGLE FILE HAS ENOUGH SPACE FOR THE NEW FILE OF 18 BLOCKS.
 2. TRIES TO USE THE "BLOCKS LEFT" SPACE AT THE END, BUT THIS IS NOT ENOUGH EITHER (ONLY 6 BLOCKS).
- THUS, THE "NO MORE ROOM" MESSAGE.

THE ABOVE LOGIC ALSO EXPLAINS WHY A SAVED FILE SHOWS ON THE CATALOG AS MORE BLOCKS THEN WE KNOW IT REALLY IS. ASSUME WE HAVE A 1 BLOCK FILE TO SAVE ON THIS DISK. IT WOULD OCCUPY THE SPACE OF THE FIRST DELETED FILE (#6) WHICH IS 4 BLOCKS. HENCE, A 1 BLOCK FILE IS ALLOCATED 4 BLOCKS, WASTING 3 BLOCKS.

THIS IS A PROBLEM WITH THE CATALOG COMMAND, AS IT DOES NOT GIVE YOU A TRUE PICTURE OF THE ACTUAL DISK/ TAPE DIRECTORY. IT DOES NOT SHOW THE HIDDEN DELETED FILES, WHICH ARE THE ONES OCCUPYING SPACE THAT CAN ONLY BE USED IF THE NEW FILE IS SMALL ENOUGH TO FIT IN THE SPACE OCCUPIED BY THE FORMER FILE.

THE UTILDUMP DIRECTORY FORMAT UTILITY IS ON NIAD PD SOFTWARE LIBRARY # UNDAI.

SPRITES BY W. MOTEL

I'VE INCLUDED THE SPRITE DEMO PORTION OF UTILDUMP THIS MONTH AS AN EXAMPLE OF USING SPRITES. THE PROGRAM USES 8 SPRITES, EACH DEPICTING A LETTER IN THE WORD UTILDUMP. THE SPRITES ARE IN THE 16 X 16 BIT REPRESENTATION AND ARE AT DOUBLE MAGNIFICATION. THIS IS THE LARGEST SIZE ON THE ADAM. THE 8 SPRITES ARE NUMBERED 0 - 8, AND REPRESENT THE LETTERS P-M-U-D-L-I-T-U. THE LOWER THE SPRITE NUMBER, THE HIGHER THE PRIORITY. THIS CAUSES THE LETTERS U-T-I-L TO DISAPPEAR, AS D-U-M-P COMES ON THE SCREEN INITIALLY, SINCE ONLY 4 SPRITES CAN BE ON THE SAME HORIZONTAL PLANE. AS D-U-M-P DROPS DOWN, U-T-I-L THEN COMES BACK INTO VIEW.

EACH 16 X 16 SPRITE IS REPRESENTED BY 4 - 8 BYTE VALUES. EACH 8 BYTE VALUE OCCUPIES AN 8 BIT X 8 BIT AREA. THIS 8 BIT X 8 BIT QUADRANT CAN BE THOUGHT OF AS AN 8 LINE, 8 BITS PER LINE PATTERN. THE 8 BITS FOR EACH LINE HAVE THE PLACE VALUES (LEFT TO RIGHT) OF 128-64-32-16-8-4-2-1. THE 1ST VALUE IS THE 8 BITS FOR LINE 1, THE 2ND VALUE FOR LINE 2, AND SO ON. SINCE WE ARE WORKING WITH A 16 X 16 SPRITE, WE NEED 4 OF THESE 8 BYTE VALUES. EACH OF THE 8 BYTE VALUES REPRESENT A QUADRANT. THESE QUADRANTS ARE ARRANGED AS FOLLOWS 1ST 8 BYTES ARE TOP LEFT, 2ND 8 BYTES ARE BOTTOM LEFT, 3RD 8 BYTES ARE TOP RIGHT, AND 4TH 8 BYTES BOTTOM RIGHT.

TO CODE OR DECODE THESE SPRITES, TAKE A PIECE OF GRAPH PAPER, OR MAKE ONE WITH A SQUARE MADE UP OF 16 X 16 POSITIONS. SUBDIVIDE THIS INTO 4 PARTS, EACH AS 8 X 8. WITHIN EACH OF THE 8 X 8 QUADRANTS, GIVE THE 8 POSITIONS THE VALUES (LEFT TO RIGHT) OF 128-64-32-16-8-4-2-1. USING PROGRAM LINES 9001 - 9004, PLOT THE VALUES NEEDED TO ADD UP TO EACH VALUE (I.E. 9001 DATA 255,255,193,96,96,96,48,63 WILL BE THE UPPER LEFT QUADRANT, 255 THE VALUE FOR THE FIRST AND SECOND ROW, 193 THE THIRD ROW VALUE, THRU THE 63 VALUE FOR THE EIGHTH ROW. YOU THEN DO THE BOTTOM LEFT QUADRANT WITH LINE 9002, THE TOP RIGHT WITH LINE 9003, AND THE BOTTOM RIGHT WITH LINE 9004). WHEN YOU HAVE PLOTTED ALL THE VALUES, YOU SHOULD SEE MY SLANTED LETTER P DESIGN. LINES 9001 - 9039 (EACH IN GROUPS OF 4 - 8 BYTE VALUES) ARE THE 8 LETTER/SPRITE DESIGNS.

SO FAR WE'VE ONLY DESIGNED THE SPRITE PATTERN. WE ALSO NEED TO DESCRIBE THE SPRITE ATTRIBUTES, SUCH AS THE LOCATION ON THE SCREEN (BOTH X AND Y POSITION -UP/DOWN AND LEFT/RIGHT) AND THE COLOR CODE (SAME AS THAT USED BY THE TI VDP CHIP - THIS WAS DESCRIBED AND USED IN MY BTCOLOR PROGRAM). THE ATTRIBUTES FOR MY SPRITE EXAMPLE DEMO ARE INITIALLY DEFINED BY DATA LINES 9050 - 9056.

THE SCREEN (LIKE HIRES) IS MADE UP OF 192 (U/D) BY 256 (L/R) POSITIONS. THE ATTRIBUTE AREA USES 4 BYTES FOR EACH SPRITE. THE FIRST BYTE GIVES THE UP/DOWN LOCATION AND THE SECOND BYTE THE LEFT/RIGHT POSITION. SETTING THE UP/DOWN LOCATION TO 200 MAKES IT "INVISIBLE" (BY DISPLAYING IT OFF THE SCREEN). THE POSITIONS ARE NUMBERED 0,0 (UPPER LEFT) AND INCREASE TO THE RIGHT AND DOWN ON THEIR RESPECTIVE AXIS. THE THIRD VALUE IS THE SPRITE DESIGNATOR (TELLS WHICH SPRITE THESE 4 BYTES REPRESENT). THIS IS REALLY A DISPLACEMENT VALUE. SINCE EACH OF OUR 16 X 16 SPRITES TAKE UP 4 GROUPS OF 8 BYTE VALUES IN OUR SPRITE PATTERN AREA, WE SHOW THE VALUE AS THE SPRITE # TIMES 4. FOR EXAMPLE, THE FIRST SPRITE ATTRIBUTE IS (AT LINE 9050) 200,195,0,2. THIS SAYS LOCATE IT AT POSITION 200 (U/D) AND 195 (R/L). THE 0 SAYS TAKE THE SPRITE AT LOCATION 0 IN THE SPRITE PATTERN AREA. THIS IS THE FIRST SPRITE (SPRITE # 0). THE NEXT ATTRIBUTE VALUES (STILL AT LINE 9050) ARE 200,170,4,4. THIS SHOWS LOCATIONS AS 200 (U/D) AND 170 (R/L) WITH A SPRITE # OF 4 AND COLOR CODE OF 4. THE SPRITE # OF 4 IS REALLY A DISPLACEMENT OF 4 INTO THE SPRITE PATTERN AREA. WHY? REMEMBER, WE ARE USING 16 X 16 SPRITES (4 GROUPS OF 8 BYTES VALUES), THEREFORE THE SPRITE # X 4. THIS POINTS TO OUR LETTER M.

THE FOURTH BYTE IS THE COLOR CODE. AS I SAID BEFORE, THIS IS NOT THE LORES OR HIRES BASIC COLORS, BUT THE TI VDP CHIP COLORS.

THE MACHINE LANGUAGE ROUTINES ARE DESCRIBED BY DATA LINES 9060 - 9079. THESE TRANSFER OUR PATTERN AND ATTRIBUTE DATA INTO THE SYSTEM VRAM AREAS.

ONE LAST THING, MY PROGRAM IS USING 16 X 16 SPRITES, WHICH USES 4 GROUPS OF 8 BYTES TO DESCRIBE EACH SPRITE PATTERN. THE OTHER SPRITE IS AN 8 X 8, WHICH USES 1 GROUP OF 8 BYTES FOR ITS SPRITE PATTERN. WHEN USING THESE, THE DISPLACEMENT (THIRD ATTRIBUTE BYTE) IS THE ACTUAL SPRITE # (SPRITE # X 1). ONLY THE 16 X 16 SPRITES USE THE MULTIPLES OF 4.

NEXT MONTH, WE WILL CONTINUE WITH OUR EXPLANATION. UNTIL THEN, TYPE THE PROGRAM IN AND RUN IT (OR USE AN EXCERPT FROM UTILDUMP WITH LINE 101 ADDED). EXPERIMENT WITH CHANGING THE INITIALLY DEFINED VALUES FOR THE SPRITE PATTERNS (LINE 9001 - 9039). REMEMBER THAT EACH SPRITE IS DEFINED BY 4 GROUPS OF 8 BYTES. ALSO TRY CHANGING THE INITIAL SPRITE LOCATIONS OR COLOR CODES AND SEE WHAT HAPPENS. SEE IF YOU CAN FIGURE OUT WHAT THE REST OF THE PROGRAM IS DOING.

```

10REM UTILDUMP BY W. MOTEL
15REM SPRITE EXAMPLE
20POKE 16149, 255;POKE 16150, 255
100GOSUB 9000
101END
9000 s2=PEEK(17115): s3=PEEK(17126):POKE 17115,
240:POKE 17126, 15:TEXT
9001DATA 255,255,193,96,96,96,48,63
9002DATA 63,24,24,24,28,12,15,15
9003DATA 0,128,128,192,192,192,192,224
9004DATA 128,0,0,0,0,0,0,0
9006DATA 255,255,193,98,99,99,51,48
9007DATA 48,24,24,24,28,12,12,12
9008DATA 224,240,48,24,24,24,12,12
9009DATA 12,6,6,6,6,3,3,3
9011DATA 193,193,193,96,96,96,48,48
9012DATA 48,24,24,24,28,12,15,15
9013DATA 0,128,128,192,192,192,192,96
9014DATA 96,96,48,48,48,24,248,248
9016DATA 255,255,193,96,96,96,48,48
9017DATA 48,24,24,24,28,12,15,15
9018DATA 0,128,128,192,192,192,192,96
9019DATA 96,96,48,48,48,24,248,240
9021DATA 192,192,192,96,96,96,48,48
9022DATA 48,24,24,24,28,12,15,15
9023DATA 0,0,0,0,0,0,0,0
9024DATA 0,0,0,0,0,0,248,248
9026DATA 255,255,28,12,12,6,6,6
9027DATA 3,3,3,1,1,1,7,7
9028DATA 128,128,0,0,0,0,0,0
9029DATA 0,0,128,128,128,192,248,248
9031DATA 255,255,28,12,12,6,6,6
9032DATA 3,3,3,1,1,1,0,0
9033DATA 128,128,0,0,0,0,0,0
9034DATA 0,0,128,128,128,192,192,192
9036DATA 193,193,193,96,96,96,48,48
9037DATA 48,24,24,24,28,12,15,15
9038DATA 0,128,128,192,192,192,192,96
9039DATA 96,96,48,48,48,24,248,248
9050DATA 200,195,0,2,200,170,4,4
9052DATA 200,145,8,6,200,120,12,10
9054DATA 10,95,16,13, 10,70,20,3
9056DATA 10,45,24,9, 10,20,28,11
9060DATA 14,226,6,1,205,32,253
9061DATA 58,24,252,253,33,32,0
9063DATA 33,0,218,17,0,0,205,44,253
9070DATA 58,23,252,253,33,8,0
9071DATA 33,0,219,17,0,0,205,44,253
9079DATA 201
9100DIM SP(3): SP(0)=55808: SP(1)=56064: SP(2)=56100:

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```

SP(3)=56123
9110FOR SA=SP(0) TO SP(0)+255:READ SV:POKE SA, SV:NEXT
SA
9111FOR SA=SP(1) TO SP(1)+31:READ SV:POKE SA, SV:NEXT
SA
9112FOR SA=SP(2) TO SP(2)+39:READ SV:POKE SA, SV:NEXT
SA
9113CALL SP(2)
9115FOR X=0 TO 500:NEXT X
9120FOR X=0 TO 7
9122POKE SP(1)+(X*4), 10
9123CALL SP(3)
9125FOR Z=0 TO 300:NEXT Z
9129NEXT X
9130FOR X=0 TO 3
9132 Y%=PEEK(SP(1)+(X*4))
9133POKE SP(1)+(X*4), (4-X)*25+Y%
9134CALL SP(3)
9135FOR Z=0 TO 900:NEXT Z
9138NEXT X
9139VTAB 20:HTAB 3:? "BY W. MOTEL":VTAB 23:HTAB 1
9140 C0=2:FOR Z=0 TO 100
9142FOR X=0 TO 7:POKE SP(1)+(X*4)+3, C0: C0=C0+1:IF
C0=15 THEN C0=2
9144NEXT X
9145CALL SP(3)
9149NEXT Z
9150RETURN
65535REM END PROGRAM

```

SMARTBASIC WORKSHOP

THE ADAM PROGRAMMER'S TOOLBOX

BY BOB LENNES

THIS MONTH YOU WILL LEARN ABOUT MORE PEEKS, POKES AND CALLS IN SMARTBASIC AND ALSO SOME VERY HANDY MACHINE LANGUAGE SUBROUTINES YOU CAN USE.

CURRENT STORAGE DEVICE

THE LOCATION 16821 CONTAINS THE VALUE OF YOUR CURRENT DRIVE:

```

4 = DISK DRIVE 1 (d5)
5 = DISK DRIVE 2 (d6)
8 = DATA PACK 1 (d1)
24= DATA PACK 2 (d2)

```

CURRENT SCREEN MARGINS

THESE FOLLOWING ADDRESSES CONTAIN YOUR CURRENT SCREEN MARGINS AND CAN BE CHANGED AT ANY TIME:

```

16956- LEFT MARGIN- DEFAULT VALUE=1
16957- RIGHT MARGIN- DEFAULT VALUE=31
16958- TOP MARGIN- DEFAULT VALUE=0 IN TEXT MODE, IN
THE GR AND HGR MODES THE DEFAULT VALUE IS 20. TRY
CHANGING THIS VALUE TO 16 IN THE HGR OR GR MODES. YOU
WILL HAVE FOUR EXTRA LINES OF TEXT AND STILL BE ABLE
TO HAVE GRAPHICS UNDERNEATH!

```

16959- BOTTOM MARGIN (DEFAULT VALUE=23)

THESE LOCATIONS WILL CHANGE TO THEIR DEFAULT VALUES WHENEVER THE TEXT COMMAND IS USED. CHANGING THESE VALUES IS SIMILIAR TO USING THE SETWIDTH AND SETTEXT COMMANDS IN SMARTLOGO.

THE 'HOME' WINDOW

BESIDES THE VALUES SMARTBASIC HAS FOR ITS TEXT WINDOW, IT ALSO HAS A SPECIAL SET OF VALUES FOR THE WINDOW IT CLEARS WHEN THE HOME COMMAND IS USED:

16995- TOP MARGIN TO CLEAR AFTER- THE DEFAULT VALUE IS 0 (ZERO). THIS ALSO IS THE VALUE OF THE LINE THE CURSOR WILL JUMP TO WHEN THE HOME KEY IS PRESSED.

16993- HOW MANY LINES TO CLEAR- DEFAULT=24 IN TEXT MODE, DEFAULT VALUE=4 IN HGR OR GR MODE.

16996- LEFT MARGIN TO CLEAR AFTER (DEFAULT=1)

BY POKING VALUES INTO THESE ADDRESSES IN YOUR PROGRAMS, YOU CAN USE THE HOME COMMAND TO CLEAR ONLY CERTAIN PARTS OF THE SCREEN.

WHEN YOU USE THE HOME COMMAND, ADAM PRINTS THE BLANK SPACE CHARACTER (ASCII=32) IN THE ENTIRE 'HOME' WINDOW. YOU CHANGE THE BLANK SPACE CHARACTER TO ANY CHARACTER BY POKING ANY NUMBER INTO THE LOCATION 16954.

CURSOR VALUES

THE LOCATION 17001 CONTAINS VALUE OF THE VERTICAL POSITION OF THE CURSOR (IT'S THE SAME AS VPOS(1)). THE LOCATION 17002 CONTAINS THE HORIZONTAL POSITION OF THE CURSOR (SAME AS POS(1)).

THE LOCATION 16953 IS THE VALUE OF THE CHARACTER OF THE CURSOR IS (DEFAULT=95).

TEXT COLOR

YOU COULD CHANGE THE CHARACTER COLOR IN EACH OF THE TEXT/GRAPHIC MODES WITH THE FOLLOWING ADDRESSES. THE DEFAULT VALUE OF THESE LOCATIONS IS 240.

```

18711- TEXT COLOR IN GR MODE
25568- TEXT COLOR IN HGR MODE
17115- TEXT COLOR IN TEXT MODE

```

IN ORDER TO CHANGE THE COLOR YOU WOULD HAVE TO USE THE GR, HGR, OR TEXT COMMANDS, RESPECTIVELY. BUT YOU CAN IMMEDIATELY CHANGE THE COLOR WITHOUT CLEARING THE TEXT SCREEN WITH A MACHINE LANGUAGE SUBROUTINE, AS SHOWN IN THE FOLLOWING PROGRAM:

```

10REM ML- CHANGE TEXTCOLOR
20LOMEM: 28000
30FOR A=27900 TO 27910
40READ v:POKE A,v:NEXT
50col=240:POKE 27901,col
60CALL 27900
90DATA 62,240,17,16,0,33,0,32,205,38,253

```

OR YOU CAN CHANGE THE BACKGROUND COLOR BY CHANGING LINE 90 TO:

```
90DATA 1,0,7,205,32,253,201,0,0,0,0
```

COPYING SMARTBASIC TO DISK

IF YOU HAVE A DISK DRIVE, YOU PROBABLY WOULD WANT TO COPY SMARTBASIC TO DISK SO IT WILL LOAD FASTER. THIS IS EASILY DONE WITH ANY COPY PROGRAM. THERE IS ONE PROBLEM, THOUGH. WHEN YOU BOOT THE BASIC, IT DOES NOT SEARCH FOR THE HELLO FILE ON THE DISK, BUT IN THE TAPE DRIVE. THAT'S BECAUSE THE INITIAL DEFAULT DRIVE WAS PROGRAMMED TO BE D1. YOU CAN CHANGE THIS BY CHANGING THE VALUE OF THE LOCATION FROM 8, WHICH IS FOR TAPE 1, TO 4, WHICH IS FOR DISK DRIVE 1.

THE FOLLOWING PROGRAM WILL ALLOW YOU TO WRITE THIS CHANGE TO THE ACTUAL SMARTBASIC PROGRAM.

THE SMARTBASIC MODIFIER PROGRAM

WITH THIS PROGRAM, YOU CAN MAKE ANY CHANGES TO SMARTBASIC THAT YOU WISH. IT AUTOMATICALLY MAKES SURE THAT THE TAPE OR DISK HAS SMARTBASIC ON IT. YOU CAN USE IT AS EXPLAINED ABOVE OR TO CHANGE COLORS, ETC.

```

5POKE 16150, 255
10REM *BASIC MODIFIER*
15REM BY BOB LENNES
20LOMEM :29025
29REM ML-BLOCK READ
30FOR SA=27645 TO 27665:READ SV:POKE SA, SV:NEXT
31DATA
205,138,252,62,0,33,96,109,1,0,0,17,0,0,205,243,252,50,
95,109,201
33REM CLR KEYBRD BUFFER
34POKE 64885, 0
50REM ML-BLOCK WRITE
53FOR SA=27774 TO 27791:READ SV:POKE SA, SV:NEXT
55DATA
62,0,33,96,109,1,0,0,17,0,0,205,246,252,50,95,109,201
100TEXT:VTAB 3:HTAB 7:? "SMARTBASIC MODIFIER"
110VTAB 18:? " SELECT DEVICE:"?:? " 1= TAPE 1":? " 2=
DISK 1":VTAB 18
120HTAB 16:GET A$: A=VAL(A$)
130IF A=0 OR A>2 THEN ? A$: :GOTO 120
140IF A=1 THEN D$="TAPE": D=8:GOTO 160
150 D$="DISK": D=4
160VTAB 17:? CHR$(24)
170? " INSERT "; D$: " AND PUSH RETURN":? " OR
ESCAPE/WP TO END"

```

```

180GET A$:IF A$=CHR$(27) THEN TEXT:END
190IF A$=CHR$(13) THEN 200
195? CHR$(7): :GOTO 180
200VTAB 17:? CHR$(24)
210? " ONE MOMENT..."
220 B=0:GOSUB 1000
230FOR N=28003 TO 28007
240IF ASC(MID$("BASIC", N-28002, 1))<>PEEK(N) THEN
VTAB 17:? CHR$(24):? " NOT SMARTBASIC "; D$:END
250NEXT
260VTAB 17:? CHR$(24)
300INPUT "ENTER SMARTBASIC ADDRESS:"; A$: A=VAL(A$)
310IF A=0 OR A>27406 THEN ? CHR$(7): :GOTO 260
320 B=INT((2048+A)/1024)
330GOSUB 1000
340 C=(A-256)-((B-2)*1024)
350VTAB 17:? CHR$(24)
360? " DEFAULT VALUE OF "; A: " IS "; PEEK(C+28000)
370VTAB 19:? " WOULD YOU LIKE TO CHANGE ":? " IT?
Y/N":GET A$
380IF A$="Y" OR A$="y" THEN 400
390GOTO 300
400REM CHANGE VALUE
410VTAB 18:INPUT "TYPE IN VALUE (0 TO 255): "; :A$
420 A=VAL(A$):IF (A=0 AND ASC(A$) >< 48) OR A>255 THEN
HTAB 1:GOTO 400
425 VTAB17: ? CHR$(24)
430POKE C+28000, A:? " ONE MOMENT..WRITING TO ";
D$:GOSUB 2000:GOTO 300
999END
1000REM READ
1010POKE 27649, D:POKE 27657, B:POKE 27999, 0:CALL
27645
1020IF PEEK(27999)=22 THEN 3000
1030RETURN
2000REM WRITE
2010POKE 27775, D:POKE 27783, B:POKE 27999, 0:CALL
27774
2020IF PEEK(27999)=22 THEN 3000
2030RETURN
3000REM ERROR
3010VTAB 17:? CHR$(24):? " "; D$: " ERROR":END

```

A FINAL NOTE

AS FAR AS I KNOW, ALL VERSIONS OF SMARTBASIC ARE THE SAME AND THEREFORE ALL OF THESE PEEKS, POKES AND CALLS WILL WORK. IF YOU HAVE A DIFFERENT VERSION, PLEASE WRITE TO US.

"NOW WHEN THE QUEEN OF SHEBA HEARD ABOUT THE FAME OF SOLOMON CONCERNING THE NAME OF THE LORD, SHE CAME TO TEST HIM WITH DIFFICULT QUESTIONS."

- I KINGS 10:1

THIS MONTH I WOULD LIKE TO TAKE SOME TIME TO ANSWER SOME OFTEN ASKED QUESTIONS ABOUT SMARTLOGO.

Q. SOME OF MY GRAPHICS PROCEDURES WOULD BENEFIT FROM BEING DRAWN QUICKER. WHAT COULD I DO TO SPEED THEM UP?

A. ONE THING YOU COULD DO WOULD BE TO HIDE THE TURTLE WITH THE HT COMMAND. A SIMPLE RULE TO REMEMBER IS: "THE FEWER THINGS A COMPUTER HAS TO DO THE FASTER IT CAN DO THEM." IF THE COMPUTER HAS TO KEEP DISPLAYING THE TURTLE THIS IS JUST ANOTHER THING THAT WILL SLOW IT DOWN. ALSO, IF YOU ARE USING MULTIPLE TURTLES, THE FEWER YOU SHOW THE FASTER THE REST WILL GO.

Q. NOW THAT I HAVE SPEEDED MY GRAPHICS UP, I NOTICE THAT EVERY SO OFTEN THEY STOP FOR A SECOND OR TWO. WHY DO THEY DO THIS AND HOW CAN I AVOID IT?

A. THE SLOWING DOWN HAS TO DO WITH THE WAY SMARTLOGO STORES ITS INFORMATION IN ADAM'S MEMORY. ALL INFORMATION IN SMARTLOGO IS STORED IN NODES. THESE NODES ARE DYNAMIC (THEY GET USED AND REUSED). THE PROBLEM IS IF SMARTLOGO SPENT ITS TIME REUSING A NODE AS SOON AS IT WASN'T NEEDED IT WOULDN'T HAVE MUCH TIME LEFT OVER FOR UPDATING THE SCREEN. IT IS MUCH FASTER FOR SMARTLOGO TO WAIT UNTIL ALL THE NODES ARE USED UP AND THEN TAKE THE TIME ALL AT ONCE TO LINK THE UNUSED NODES BACK INTO A LIST. NOW, IF YOU LET SMARTLOGO DO THIS WHENEVER IT WANTS TO IT WILL INVARIABLY PICK THE MOST INOPPORTUNE TIMES. IF YOU CAN TELL IT WHEN TO REUSE ALL UNUSED NODES, YOU CAN AVOID THE SLOWDOWN. THE WORD THAT DOES THIS IS RECYCLE. THE BEST PLACE TO PUT THIS WORD IS JUST AFTER ACCEPTED INPUT FROM THE USER. IF YOUR ROUTINE DOESN'T ACCEPT INPUT ON A REGULAR BASIS THEN YOU SHOULD PUT IT AT A PLACE WHERE A SLIGHT SLOWDOWN IS ACCEPTABLE. YOU CAN EXPERIMENT BECAUSE RECYCLE IS A WORD THAT DOESN'T

AFFECT ANY OF THE VARIABLES IN YOUR PROGRAM. BY THE WAY, THE PROCESS OF REUSING NODES IS CALLED GARBAGE COLLECTION AND YOU CAN READ ABOUT IN APPENDIX D OF THE SMARTLOGO MANUAL.

Q. DO YOU HAVE ANY HINTS FOR WRITING MENU DRIVEN SMARTLOGO PROCEDURES?

A. THE BEST THING TO DO WHEN USING MENU DRIVEN PROCEDURES IS HAVE A DISK DRIVE AND A PROGRAM YOU CAN USE TO COPY SMARTLOGO AVAILABLE (THE DISK DRIVE IS NOT A NECESSITY, BUT IT HELPS). FIRST, COPY THE SMARTLOGO PROGRAM TO YOUR DISK. SECOND, PUT A STARTUP FILE WITH A STARTUP PROCEDURE ON THE DISK (SEE APPENDIX C OF THE SMARTLOGO MANUAL). FINALLY, ADD AN OPTION TO YOUR MENU CALLED DONE. WRITE THE CODE FOR THE DONE OPTION SO IT DOES ANY NEEDED CLEANUP (E.G., SAVING FILES) AND THEN EXECUTES THE FOLLOWING TWO WORDS: ".CALL 64743". THIS WILL BOOT SMARTWRITER JUST AS IF YOU HAD PULLED THE RESET SWITCH. PUT YOUR DISK IN DRIVE 1 AND PULL THE RESET SWITCH. YOU WILL NOW HAVE A MENU DRIVEN PROGRAM WHICH (IF IT DOESN'T BOMB) THE PERSON RUNNING IT WILL NEVER KNOW IT WAS WRITTEN USING SMARTLOGO.

ALPHABET BY KIP HAMMOND

THIS IS A LOGO PROGRAM FOR THE DATA LIBRARY. IT CONTAINS A GRAPHIC PROCEDURE FOR EVERY LETTER OF THE ALPHABET AND NUMBERS 1-9 AND PERIOD AND SPACE. THERE IS ALSO A DEMO PROCEDURE IN THIS PROGRAM WHICH WILL AUTOMATICALLY RUN WHEN THE PROGRAM IS LOADED THEN DELETE ITSELF. IF YOU WANT TO SAVE THE DEMO PROCEDURE IN THE WORKSPACE, YOU HAVE TO PRESS ESCAPE WHILE IT IS RUNNING. TO USE THE ALPHABET PROGRAM, EACH LETTER REQUIRES TWO INPUTS: VERTICAL SIZE AND COLOR. FOR EXAMPLE: A 50 6 WILL MAKE A LETTER A THAT IS 50 UNITS HIGH AND RED (COLOR 6) IN COLOR. AFTER EACH PROCEDURE, THE TURTLE IS ALWAYS LEFT IN POSITION FOR THE NEXT LETTER IN A WORD.

```
TO #4 :S :C
  SETPC :C SETX XCOR + :S / 2
  PD FD :S RT 90
  SETPOS SE XCOR - :S / 2 YCOR - :S / 2
  FD :S * 3 / 4 LT 90 PU BK :S / 2
  SETX XCOR + 3 * :S / 8
END
```

```
TO #3 :S :C
  SETPC :C PD RT 90
  FD :S / 2 LT 90 FD :S / 2 LT 90
  FD :S / 3 BK :S / 3 RT 90 FD :S / 2
  LT 90 FD :S / 2 RT 90 PU BK :S
  SETX XCOR + 7 * :S / 8
END
```

TO #2 :S :C
SETPC :C PD RT 90
FD :S / 2 BK :S / 2 LT 90
FD :S / 4
SETPOS SE XCOR + :S / 2 YCOR + :S / 2 FD :S / 4
LT 90 FD :S / 2 RT 90 BK :S / 8 FD :S / 8 PU
BK :S SETX XCOR + 7 * :S / 8
END

TO #1 :S :C
SETPC :C PD RT 90
FD :S / 2 BK :S / 4 LT 90
FD :S RT 45 BK :S / 4 FD :S / 4 LT 45
PU BK :S SETX XCOR + 5 * :S / 8
END

TO Z :S :C
SETPC :C PD RT 90
FD :S / 2 BK :S / 2 LT 180
SETPOS SE XCOR + :S / 2 YCOR + :S
FD :S / 2 RT 90 PU BK :S
SETX XCOR + 7 * :S / 8
END

TO X :S :C
SETPC :C PD
SETPOS SE XCOR + :S / 2 YCOR + :S
PU BK :S PD
SETPOS SE XCOR - :S / 2 YCOR + :S
PU BK :S SETX XCOR + 7 * :S / 8
END

TO W :S :C
SETPC :C FD :S PD
SETPOS SE XCOR + :S / 4 YCOR - :S
SETPOS SE XCOR + :S / 4 YCOR + :S / 2
SETPOS SE XCOR + :S / 4 YCOR - :S / 2
SETPOS SE XCOR + :S / 4 YCOR + :S
PU BK :S SETX XCOR + 3 * :S / 8
END

TO V :S :C
SETPC :C
SETX XCOR + :S / 4 PD
SETPOS SE XCOR - :S / 4 YCOR + :S
PU BK :S RT 90 FD :S / 4 LT 90 PD
SETPOS SE XCOR + :S / 4 YCOR + :S
PU BK :S SETX XCOR + 3 * :S / 8
END

TO U :S :C
SETPC :C PD
FD :S BK :S RT 90 FD :S / 2 LT 90 FD :S BK :S PU
SETX XCOR + 3 * :S / 8
END

TO Q :S :C
SETPC :C PD
REPEAT 2 [FD :S RT 90 FD :S / 2 RT 90]
RT 45 FD :S / 8 BK :S / 4 FD :S / 8 LT 45
PU SETX XCOR + 7 * :S / 8
END

TO J :S :C
SETPC :C PD
FD :S / 4 BK :S / 4 RT 90 FD :S / 2
LT 90 FD :S BK :S PU
SETX XCOR + 3 * :S / 8
END

TO F :S :C
SETPC :C PD
FD :S / 2 RT 90 FD :S / 3 BK :S / 3 LT 90 FD :S / 2 RT
90 FD :S / 2 BK :S / 2 LT 90 BK :S
PU SETX XCOR + 7 * :S / 8
END

TO #5 :S :C
SETPC :C PD
FD :S / 4 BK :S / 4 RT 90
FD :S / 2 LT 90 FD :S / 2 LT 90
FD :S / 2 RT 90 FD :S / 2 RT 90
FD :S / 2 LT 90 PU BK :S
SETX XCOR + 3 * :S / 8
END

TO #6 :S :C
SETPC :C PD
REPEAT 4 [FD :S / 2 RT 90]
FD :S RT 90 FD :S / 2 LT 90
PU BK :S SETX XCOR + 3 * :S / 8
END

TO #7 :S :C
SETPC :C PU
SETX XCOR + :S / 4 PD
SETPOS SE XCOR + :S / 4 YCOR + :S
LT 90 FD :S / 2 LT 90 FD :S / 4
BK :S / 4 RT 90 BK :S / 2 RT 90
PU BK :S SETX XCOR + 3 * :S / 8
END

TO #8 :S :C
SETPC :C PD
REPEAT 4 [FD :S / 2 RT 90]
FD :S / 2
REPEAT 3 [FD :S / 2 RT 90]
RT 90 BK :S / 2
PU SETX XCOR + 3 * :S / 8
END

TO #9 :S :C
SETPC :C PU
RT 90 FD :S / 2 LT 90
PD FD :S / 2
REPEAT 4 [FD :S / 2 LT 90]
BK :S / 2 PU SETX XCOR + 3 * :S / 8
END

TO C :S :C
SETPC :C PD
RT 90 FD :S / 2 BK :S / 2
LT 90 FD :S RT 90 FD :S / 2
PU BK :S / 2 LT 90 BK :S
SETX XCOR + 7 * :S / 8
END

TO S :S :C
SETPC :C PD
RT 90 FD :S / 2 LT 90 FD :S / 2 LT 90 FD :S / 2 RT 90
FD :S / 2 RT 90 FD :S / 2 PU LT 90 BK :S
SETX XCOR + 3 * :S / 8
END

TO D :S :C
PD SETPC :C
FD :S RT 90 FD :S / 4 RT 90
SETPOS SE XCOR + :S / 4 YCOR - :S / 4
FD :S / 2 RT 90
SETPOS SE XCOR - :S / 4 YCOR - :S / 4
FD :S / 4 PU RT 90
SETX XCOR + 7 * :S / 8
END

TO PERIOD :S :C
SETPC :C PD
REPEAT :S / 8 [FD :S / 8 BK :S / 8 SETX XCOR + 1]
PE FD 1 BK 1 PU SETX XCOR + :S / 2
END

TO I :S :C
SETPC :C PD
RT 90 FD :S / 2 BK :S / 4 LT 90
FD :S RT 90 FD :S / 4 BK :S / 2
PU LT 90 BK :S
SETX XCOR + 7 * :S / 8
END

TO M :S :C
SETPC :C PD
FD :S
SETPOS SE XCOR + :S / 3 YCOR - :S / 2
SETPOS SE XCOR + :S / 3 YCOR + :S / 2
BK :S PU SETX XCOR + 3 * :S / 8
END

TO R :S :C
SETPC :C PD
FD :S / 2 REPEAT 4 [FD :S / 2 RT 90]
SETPOS SE XCOR + :S / 2 YCOR - :S / 2 PU
SETX XCOR + 3 * :S / 8
END

TO SPACE :S
PU SETX XCOR + :S / 2
END

TO T :S :C
SETPC :C
SETX XCOR + :S / 4 PD
FD :S RT 90 BK :S / 4 FD :S / 2 PU
LT 90 BK :S SETX XCOR + 3 * :S / 8
END

TO E :S :C
SETPC :C PD
RT 90 FD :S / 2 BK :S / 2
LT 90 FD :S / 2 RT 90 FD :S / 3
BK :S / 3 LT 90 FD :S / 2 RT 90
FD :S / 2 BK :S / 2 LT 90
BK :S PU SETX XCOR + 7 * :S / 8
END

TO B :S :C
SETPC :C PD
FD :S RT 90 FD 1 * :S / 4
RT 90 SETPOS SE XCOR + :S / 4 YCOR - :S / 6
FD :S / 6
SETPOS SE XCOR - :S / 4 YCOR - :S / 6
RT 90 FD 1 * :S / 4 BK 1 * :S / 4 LT 90
SETPOS SE XCOR + :S / 4 YCOR - :S / 6
FD :S / 6
RT 90 SETPOS SE XCOR - :S / 4 YCOR - :S / 6
FD :S * 1 / 4 RT 90 PU
SETX XCOR + 7 * :S / 8
END

TO H :S :C
SETPC :C PD
FD :S BK :S / 2 SETX XCOR + :S / 2 FD :S / 2 BK :S PU
SETX XCOR + 3 * :S / 8
END

TO P :S :C
SETPC :C PD
FD :S / 2 REPEAT 4 [FD :S / 2 RT 90]
BK :S / 2 PU SETX XCOR + 7 * :S / 8
END

TO G :S :C
SETPC :C PD
PD FD :S RT 90 FD :S / 2 LT 90
PU BK :S PD RT 90 BK :S / 2 FD :S / 2
LT 90 FD :S / 2 LT 90 FD :S / 4
BK :S / 4 PU RT 90 BK :S / 2
SETX XCOR + :S * 3 / 8
END

TO O :S :C
SETPC :C
PD REPEAT 2 [FD :S RT 90 FD :S / 2 RT 90]
PU SETX XCOR + 7 * :S / 8
END

SMARTFILER WORKSHOP

TO L :S :C
 SETPC :C PD
 FD :S BK :S RT 90 FD :S / 2 LT 90 PU SETX XCOR + 3 *
 :S / 8
 END

TO DEMO
 PU CS HT SETBG 1 SETPOS [-65 40]
 REPEAT 8 [L 40 10 0 40 4 G 40 6 0 40 12 SETPOS SE XCOR
 - 139 YCOR - 1]
 SETPOS [-105 0]
 A 15 13 L 15 13 P 15 13 H 15 13 A 15 13 B 15 13 E 15
 13 T 15 13
 SPACE 30 P 15 13 R 15 13 O 15 13 G 15 13 R 15 13 A 15
 13 M 15 13
 SETPOS [-7 -30]
 B 10 15 Y 10 15
 SETPOS [-115 -80]
 K 20 10 I 20 10 P 20 10 SPACE 20 H 20 10 PERIOD 20 10
 SPACE 20 H 20 10 A 20 10 M 20 10 N 20 10 O 20 10 N 20
 10 D 20 10
 WAIT 600
 CS SETBG 5 ST ER "DEMO"
 END

TO N :S :C
 SETPC :C PD
 FD :S SETPOS SE XCOR + :S / 2 YCOR - :S FD :S BK :S PU
 SETX XCOR + 3 * :S / 8
 END

TO Y :S :C
 SETPC :C SETX XCOR + :S / 4
 PD FD :S / 2
 SETPOS SE XCOR - :S / 4 YCOR + :S / 2
 PU BK :S / 2 SETX XCOR + :S / 4
 PD SETPOS SE XCOR + :S / 4 YCOR + :S / 2
 PU BK :S SETX XCOR + 3 * :S / 8
 END

TO K :S :C
 SETPC :C PD
 FD :S BK :S / 2
 SETPOS SE XCOR + :S / 2 YCOR + :S / 2
 SETPOS SE XCOR - :S / 2 YCOR - :S / 2
 SETPOS SE XCOR + :S / 2 YCOR - :S / 2
 PU SETX XCOR + 3 * :S / 8
 END

TO A :S :C
 SETPC :C PD
 FD :S RT 90 FD :S / 2 RT 90
 FD :S BK :S / 2 RT 90 FD :S / 2
 PU RT 90 BK :S / 2
 SETX XCOR + 7 * :S / 8
 END

MAKE "STARTUP [DEMO]

IN MY OPINION THE ONLY DEFICIENCIES OF SMARTFILER ARE THE PRINTING FUNCTION AND THE FACT THAT YOU CAN'T CREATE A FILE OF YOUR FILER RECORDS THAT CAN THEN BE EDITED IN SMARTWRITER OR MANIPULATED BY A SMARTBASIC PROGRAM FOR OTHER PURPOSES.

FIRST THE PRINT PROBLEMS. FILER HAS A LIMITED BUILT-IN CAPABILITY TO PRINT RECORDS OUT IN A SPECIFIED FORMAT. YOU MAY ENTER STANDARD TEXT (OR CALL IN A FILE FROM ANOTHER DDP OR DISK) AND RECORD HOW YOU WANT TO PRINT YOUR FILER RECORDS - E.G.:
 DEAR [FIRST NAME] [LAST.NAME],
 [STREET ADDRESS]
 [CITY, STATE] [ZIP]

YOUR SUBSCRIPTION TO OUR MAGAZINE WILL EXPIRE WITH THIS ISSUE. IF YOU WANT TO CONTINUE RECEIVING OUR WONDERFUL MAGAZINE PLEASE REMIT....

THE ITEMS IN BRACKETS [] ARE THE NAMES OF THE FIELDS THAT WILL BE CALLED IN FROM THE FILER DATABASE AND PRINTED FOR EACH OCCURENCE OF THE RECORDS SELECTED I.E. THERE MAY BE 25 RECORDS OF PEOPLE THAT YOU WANT THIS LETTER TO GO TO.

THE PROBLEMS WITH THIS ARE THAT FILER DOESN'T STOP AFTER THE PRINTING OF EACH RECORD, WHICH IS WHAT YOU WOULD WANT IT TO DO FOR DOING FORM LETTERS LIKE THIS. FILER ONLY STOPS AFTER A WHOLE PAGE IS PRINTED, AT LEAST THIS HAS BEEN MY EXPERIENCE, IF ANY OF YOU HAVE FOUND A WAY AROUND THIS LET ME KNOW. ONE OF THE OTHER USES OF FILER WOULD BE THE PRINTING OF ADDRESS LABELS - THIS CAN'T BE DONE BECAUSE OF THE "CREEPING 1/2 CARRIAGE RETURN" PROBLEM. NOW, IF YOU WANT TO JUST PRINT OUT A SEQUENTIAL LIST OF ALL RECORDS OR ONLY A SELECT LIST BASED ON SEARCH CRITERIA, THE PRINT WORKS FINE. HOWEVER, BY NOT BEING ABLE TO FORMAT PRINTED RECORDS, THE UTILITY OF FILER IS SEVERELY LIMITED. THESE PROBLEMS COULD BE CORRECTED EITHER BY ADDING MORE COMPREHENSIVE WORD PROCESSING FUNCTIONS TO FILER (SUCH AS PROVIDED UNDER SMARTWRITER). ADDITIONALLY, IF A METHOD COULD BE FOUND FOR OUTPUTTING THE FILER LIST OF DATABASE RECORDS TO A SEPARATE DATAFILE (INSTEAD OF JUST OUTPUTTING THE RECORDS TO THE PRINTER AS IS NOW THE CASE). I FEEL THAT THESE TYPES OF ENHANCEMENTS COULD REALLY ENHANCE THE UTILITY OF FILER.

NTAD IS NOW WORKING ON THESE PROBLEMS AND WAYNE MOTEL WILL HAVE SOME GOOD STUFF FOR YOU NEXT MONTH !

THERE IS A LOT OF ACTIVITY IN THE CPM ARENA NOW AS MORE AND MORE ADAM COMPATIBLE SOFTWARE IS COMING AVAILABLE. ALTHOUGH WESTICO HAS APPARENTLY GONE OUT OF BUSINESS, I DON'T THINK THIS WILL NEGATIVELY IMPACT THE AVAILABILITY OF ADAM CPM SOFTWARE.

WITH THE ADVENT OF THE SP-1 RS232 INTERFACE CARD (SEE REVIEW IN THE JUNE ISSUE) AND THE NEAR FUTURE RELEASE OF THE 80 COLUMN CARD, ADAM CPM SOFTWARE WILL BE EVEN MORE USEFUL AND HENCE MORE WILL BECOME AVAILABLE. ADDITIONALLY, EVE ELECTRONICS AND ELLIAM ASSOCIATES ARE CONVERTING AND CARRYING SOME OF THE MORE POPULAR CPM SOFTWARE FOR THE ADAM E.G. WORDSTAR, DBASE II, ETC..

NIAD IS CURRENTLY REVIEWING A CPM BASIC FOR POSSIBLE CONVERSION TO ADAM. THIS VERSION OF BASIC IS VERY SIMILAR TO MICROSOFT BASIC AND WOULD OPEN UP A WEALTH OF BASIC PROGRAMS TO US TO RUN UNDER CPM 2.2. WE NOW HAVE FOUR VOLUMES OF CPM SOFTWARE IN THE NIAD SOFTWARE EXCHANGE LIBRARY (SEE SOFTWARE EXCHANGE SECTION) WITH MORE ON THE WAY.

THIS MONTH I'D LIKE TO EXPLAIN A FILE STORAGE CONCEPT THAT WE WILL BE USING ON SOME OF THE CPM PUBLIC DOMAIN LIBRARY VOLUMES. THIS CONCEPT IS CALLED "LIBRARY" AND THE SPECIFIC PROGRAMS TO CREATE AND MANIPULATE THESE "LIBRARIES" ARE ON THE NIAD CPM LIBRARY NUMBER CNDV3. BASICALLY, THIS CONCEPT IS THAT MULTIPLE CPM FILES CAN BE "COMBINED" TOGETHER TO FORM A SINGLE LIBRARY FILE AND STORED ON DISK OR DDP IN MUCH LESS PHYSICAL SPACE THAN THE SUM OF THE SPACE NEEDED BY THE INDIVIDUAL FILES. THIS TECHNIQUE IS USEFUL FOR STORING FILES THAT "GO TOGETHER" SUCH AS A .COM, .DOC AND .ASM FILE FOR THE SAME PROGRAM. IT ALSO IS A BIG HELP IN TRANSFERRING FILES VIA MODEM, TO AND FROM BULLETIN BOARD SERVICES BECAUSE THERE ARE FEWER PHYSICAL FILES TO TRANSFER. THE SAVING OF SPACE ON YOUR DISKS IS A GREAT AID ALSO, ESPECIALLY WHEN COMBINED WITH THE "SQZ" (SQUEEZE) PROGRAM. THIS PROGRAM (ITS ON # CNDVI) IS A UTILITY THAT REDUCES THE SIZE OF AN INDIVIDUAL FILE BY TAKING OUT SUCH THINGS AS SPACES, OFTEN USED CHARACTERS AND REPLACING THEM WITH SPECIAL CONTROL CHARACTERS THAT ARE USED BY THE SISTER PROGRAM "USQ" (UNSQUEEZE) TO PUT THE FILE BACK IN ITS NORMAL STATE. THESE "SQUEEZE" UTILITIES ARE REALLY USEFUL IN REDUCING THE SIZE OF LARGE .DOC OR .ASM FILES. THEY SHOULD NOT BE USED ON .COM FILES OR ANY SMALL FILES, SINCE NO OR VERY LITTLE SPACE WILL BE SAVED. WHEN YOU USE BOTH THE "SQUEEZE" AND "LIBRARY" UTILITIES IN COMBINATION, YOU CAN REALLY REDUCE THE SIZE OF SOME OF YOUR CPM PROGRAMS FOR PURPOSES OF MODEM TRANSFER OR BACKUP. AS MENTIONED ABOVE, WE WILL BE USING THESE UTILITIES ON THE NIAD PD LIBRARIES TO GET MORE FILES ON EACH DDP FOR YOU.

BACK TO THE "LIBRARY" UTILITIES A MINUTE - PLEASE MAKE SURE YOU READ THE .DOC FILES ON THESE PROGRAMS BEFORE YOU BEGIN USING THEM. THE FIRST ONE OF THE "LIBRARY" UTILITIES YOU WILL NEED TO WORK WITH IS "DE-LBR" WHICH TAKES A .LBR FILE AND BREAKS IT UP INTO ITS CONSTITUENT INDIVIDUAL FILES.

SOME OF YOU HAVE ASKED ABOUT USING OTHER MODEMS WITH THE SP-1 RS232 INTERFACE CARD. THE SERIAL PORT ON THE SP-1 CAN BE USED TO CONNECT TO ANOTHER MODEM UNDER CPM 2.2. YOUR MODEM SOFTWARE MUST BE MODIFIED TO ACCESS THE SP-1 SERIAL PORT (AS IT WAS TO MODIFY THE ADAMLINK MODEM). IF YOU CURRENTLY HAVE A CPM MODEM PROGRAM SUCH AS ASCOM, YOU CAN HAVE EVE ELECTRONICS MODIFY IT TO ACCESS AND USE THE SP-1 FOR A SPECIFIC MODEM. IF YOU HAVE A PD CPM MODEM PROGRAM YOU CAN WAIT UNTIL SOME HACKER CREATES AN SP-1 OVERLAY OR HAVE EVE DO IT FOR YOU. THE OTHER OPTION IS TO PURCHASE A MODEM COMMUNICATIONS PACKAGE ALREADY CONFIGURED FOR THE SP-1. THE NIAD BUYING SERVICE NOW CARRIES ASCOM AND MITE FOR THE ADAM. THESE PROGRAMS CAN BE USED WITH EITHER THE ADAMLINK MODEM OR OTHER MODEMS VIA THE SP-1 INTERFACE CARD.

EVE ELECTRONICS NOW OFFERS TWO IMPORTANT SERVICES TO YOU CPM 2.2 ADAMITES: 1) CONVERSION OF CPM PROGRAMS ON STANDARD CPM 8" DISKS TO ADAM DISKS AND 2) MODIFICATION OF CPM PROGRAMS TO RUN ON THE ADAM. PLEASE WRITE FOR MORE INFORMATION ON THESE NEW SERVICES.

REVIEWS

FAMILY FEUD BY W. MOTEL

THE LONG MENTIONED (BACK TO THE 1984 SUMMER CES) GAME HAS FINALLY ARRIVED FROM COLECO ELECTRONICS. THE GAME FAITHFULLY FOLLOWS THE TV VERSION PITTING TWO FAMILIES AGAINST ONE ANOTHER TO SEE WHO CAN GET 300 POINTS FIRST AND ON TO THE FAST MONEY ROUND. IF YOU'RE NOT FAMILIAR WITH THE TV GAME, A ROUND BASICALLY CONSISTS OF ANSWERING A QUESTION GIVEN TO 100 PEOPLE. YOUR ANSWER IS THEN COMPARED TO THE SAMPLE GROUP AND YOU ARE AWARDED POINTS BASED ON THE SAMPLING. I.E. YOUR ANSWER IS THE SAME AS 60 PEOPLE IN THE SAMPLE GROUP, YOU ARE AWARDED 60 POINTS. ACTUALLY, A ROUND CONSISTS OF TRYING TO GET AS MANY OF THE ANSWERS IN 3 TRIES. IF YOU DON'T GET ALL THE ANSWERS, THE OTHER FAMILY GETS ONE TRY TO GET AN ANSWER. IF THEY ARE CORRECT, THEY GET ALL THE POINTS, OTHERWISE YOUR FAMILY DOES. THE FAMILY WHO GOES FIRST IN A ROUND IS DETERMINED BY WHO ANSWERS FIRST WITH THE HIGHEST POINT VALUE ANSWER. THAT FAMILY GETS TO PICK WHETHER TO PLAY OR PASS THE ROUND. THE GAME CONSISTS OF THE NORMAL ROUNDS, PLUS THE DOUBLE/TRIPLE POINT ROUNDS. THE BONUS ROUND IS CALLED FAST MONEY. A FAMILY IS REALLY A PLAYER OR PLAYERS. YOU CAN PLAY ONE FAMILY AGAINST THE COMPUTER, ALTHOUGH THIS ISN'T MUCH FUN. ANSWERS ARE TYPED IN VIA THE KEYBOARD. THEY BUILT SOME CHECKING IN FOR SIMILAR MEANINGS INTO THE ANSWER ROUTINES, AS GROOM A HORSE WAS ACCEPTED FOR BRUSH A HORSE. YOU ARE ABLE TO STORE THE CHAMPION FAMILY NAMES ON A SCOREBOARD.

THEY HAVE APPARENTLY BUILT IN THE OPTION FOR ADDITIONAL QUESTION PACKS, BUT IT IS NOT KNOWN WHETHER THEY WILL COME OUT OR NOT - IT WILL DEPEND ON HOW WELL THE GAME SELLS. I'M SURE. I DON'T KNOW HOW MANY QUESTION ARE ON THIS PACK BUT IN 5 GAMES I DIDN'T SEE ANY DUPLICATION.

THE GRAPHICS ARE VERY WELL DONE, WITH LITTLE THINGS BUILT IN, SUCH AS THE 4 OTHER FAMILY MEMBERS ON THE SCREEN TURNING TO LOOK AT THE MEMBER WHO IS ANSWERING. WHEN A FAMILY MEMBER GETS A CORRECT ANSWER THEY OCCASIONALLY RAISE THEIR HANDS OVER THEIR HEADS. THE "GRAPHIC" PEOPLE ARE VERY WELL DONE - THE DRAWINGS I'VE INCLUDED DON'T DO THEM JUSTICE. THE ANSWERS ARE TIMED, BUT YOU CAN CHEAT AND USE A PAUSE FACILITY. YOU MAY ALSO LOOK BACK AT PREVIOUS ANSWERS. A FAMILY CAN BE ANY NUMBER OF PEOPLE, EACH TAKING TURNS. TWO PLAYERS CAN PLAY, EACH REPRESENTING AN ENTIRE FAMILY OR A WHOLE GROUP CAN PLAY, EACH ONE BEING A SPECIFIC FAMILY MEMBER. THIS WOULD BE A GREAT PARTY GAME FOR MULTIPLE PLAYERS.

OVERALL THIS GAME IS VERY WELL DONE AND YOU WILL REALLY ENJOY IT, ESPECIALLY IF YOU ARE A FAN OF THE TV GAME. RUNNING OUT OF QUESTIONS IS THE ONLY PROBLEM I COULD POSSIBLY SEE.

RATING - A

COLECO ENTERTAINMENT SOFTWARE

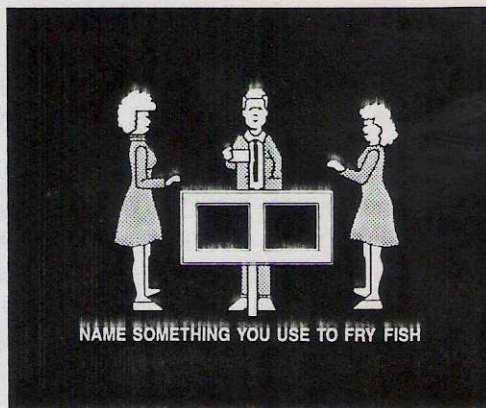
"FAMILY FEUD"

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Good Answer! Good Answer!



SOFTPACK I BY L. MARSCHAND

SOFTPACK I IS A SERIES OF FOUR SMARTBASIC PROGRAMS WRITTEN BY E. & T. SOFTWARE OF DALLAS, TEXAS. THREE OF THE PROGRAMS ARE FOR CHECKBOOK RECORDING AND BALANCING AND THE FOURTH IS AN ENVELOPE ADDRESSING UTILITY.

A FEW COMMENTS ABOUT ALL THE PROGRAMS - IT'S NICE TO SEE THE ADAM USED AS IT SHOULD FOR A CHANGE. E & T DOES A NICE JOB OF SCREEN DESIGN, UTILIZING A MEDIUM BLUE BACKGROUND WITH WHITE ENTRY FIELDS AND BLACK LETTERS. MENU SCREENS ARE USED REQUIRING THE ENTRY OF ONE NUMBER. ALL THE PROGRAMS ARE VERY FORGIVING IN THAT THEY ALLOW YOU A FINAL REVIEW OF YOUR ENTRIES AND A CHANCE TO CORRECT ERRORS BEFORE YOU MOVE ON. OVERALL THE DEVELOPERS DID A NICE JOB OF THE PROGRAMMING - IT LOOKS PROFESSIONAL AND OBVIOUSLY HAS BEEN WELL TESTED.

SOFTCHECK

THIS PROGRAM ALLOWS THE ENTRY OF UP TO 150 CHECKS, CHECK FEES, DEPOSITS, ATM CHARGES, MISC CHARGES AND INTEREST ENTRIES IN A SINGLE FILE. FOR EACH CHECK ENTERED THE DATE, AMOUNT, PAYEE, PAYMENT CATEGORY AND TAX DEDUCTIBLE FLAG ARE ENTERED. ONCE ENTERED, ALL ENTRIES ARE REDISPLAYED FOR REVIEW. AS YOU ENTER THE CHECKS, DEPOSITS, ETC. A RUNNING ACCOUNT BALANCE AND THE LAST ENTRY IS KEPT ON EACH SCREEN WHICH IS A NICE FEATURE. ONCE YOU HAVE ENTERED ALL ITEMS FOR YOUR BALANCING PERIOD, YOU MAY REVIEW THEM ON THE SCREEN OR PRINTER AND THEN GO INTO AN EDIT MODE FOR ANY MISTAKES. THE EDIT MODE IS NICE BECAUSE YOU CAN JUST CHANGE THE FIELD IN ERROR. ONCE YOUR CHECK FILE IS COMPLETE YOU STORE IT ON TAPE/DISK FOR LATER USE.

CHECKBOOK TOTALIZER

THIS PROGRAM IS FOR ANALYZING THE FILES CREATED BY SOFTCHECK. YOU CAN TOTAL ALL CHECKS WITHIN A SPECIFIC MONTH OR FOR A FILE BY THE PAYMENT CATEGORY YOU ENTERED FOR EACH CHECK E.G. FOOD, DOCTOR, ETC. YOU MAY ALSO TOTAL ALL THOSE ITEMS YOU FLAGGED AS TAX DEDUCTIBLE FOR TAX TIME.

CHECKBOOK RECONCILER

THIS IS THE "BALANCING" PROGRAM THAT TAKES YOUR FILE OF CHECKS CREATED VIA SOFTCHECK AND COMPARES IT TO YOUR BANK STATEMENT INFORMATION. YOU HAVE TO INPUT THE BANK ENDING BALANCE AND ALL OUTSTANDING CHECKS, DEPOSITS AND CHARGES. IF A CHECK IS OUTSTANDING FROM A PREVIOUS MONTH AND IS NOT ON THE CURRENT CHECK FILE YOU ARE USING, YOU ENTER IT AS WELL. YOU THEN INDICATE WHETHER YOU WANT THE OUTPUT OF THE RECONCILIATION TO GO TO THE PRINTER OR SCREEN. YOU ARE TOLD IF YOU BALANCE OR NOT, THE TOTAL AMOUNT OF CHECKS, DEPOSITS AND CHARGES FOR THE PERIOD. IF YOU DON'T BALANCE THE CORRECTION FOR YOUR CHECKBOOK IS GIVEN.

OVERALL, I FOUND THESE PROGRAMS TO BE WELL DONE AND COMPLETE. AS MENTIONED THE ENTRY PROCESS IS NICELY DONE WITH ERROR CORRECTION OPTIONS. THE ONLY POTENTIAL PROBLEM IS THE LIMITATION OF 150 ENTRIES PER EACH CHECK FILE, WHICH MAY REQUIRE ADDITIONAL ENTRIES AT RECONCILIATION TIME FOR ANY OUTSTANDING CHECKS THAT ARE NOT ON THE CHECK FILE. ON THE OTHER HAND, THIS LIMITATION ALLOWS ALL CHECK FILE ENTRIES TO BE RESIDENT IN MEMORY AND HENCE MAKES FOR INSTANTANEOUS RETRIEVAL OF THEM FOR EDITTING AND THE RECONCILIATION PROCESS. A TEXT INSTRUCTION FILE IS PROVIDED FOR EACH PROGRAM AS WELL.

THE REAL ISSUE YOU AS USERS NEED TO DECIDE IS WHETHER YOU WOULD TAKE THE TIME TO ENTER YOUR CHECKS, ETC. INTO ADAM. I WOULD GUESS THAT SOME OF YOU DON'T EVEN BALANCE YOUR CHECKBOOK MANUALLY, MUCH LESS VIA A COMPUTER. FOR THOSE OF YOU WHO ARE INCLINED TO USE A COMPUTER FOR THIS FUNCTION, I WOULD DEFINITELY RECOMMEND THIS SERIES OF PROGRAMS. THEY ARE THE BEST I'VE SEEN FOR THE AUTOMATED CHECKBOOK FUNCTION.

SOFTMAILER

THIS PROGRAM ALLOWS THE ENTRY AND MAINTENANCE OF NAMES AND ADDRESSES. UP TO 150 MAY BE ENTERED IN EACH OF MULTIPLE FILES. YOU MAY ALSO CATEGORIZE EACH NAME/ADDRESS RECORD FOR LATER RETRIEVAL - I.E. CHRISTMAS CARD, BILLS, ETC. THIS CATEGORIZATION WILL ALLOW YOU TO SELECT TO PRINT ONLY THOSE NAME/ADDRESSES FOR A PARTICULAR CATEGORY.

YOU ALSO HAVE THE OPTION OF PRINTING YOUR RETURN ADDRESS - THIS IS ENTERED VIA DATA STATEMENTS DIRECTLY IN THE PROGRAM.

THREE LINES OF ADDRESS ARE PROVIDED WHICH IS NICE BUT NO COMMAS CAN BE ENTERED (IF YOU DO THE REST OF THE RECORD IS IGNORED !). ONCE YOUR NAME/ADDRESS RECORDS ARE ENTERED YOU MAY REVIEW THEM AND EDIT THEM AFTER WHICH YOU SAVE THE FILE TO DDP OR DISK.

THE PRINT OPTIONS ARE: SMALL OR LARGE ENVELOPES (WITH OR WITHOUT RETURN ADDRESS), MAILING LABEL OR REGULAR PAPER.

THIS PROGRAM OFFERS A NICE FACILITY FOR MAINTAINING NAMES AND ADDRESSES AND THE PRINT OPTIONS ARE GREAT. YOU MAY SELECT RECORDS BASED ON CATEGORY, FIRST NAME, LAST NAME OR ZIP CODE WHICH IS VERY VERSATILE.

OVERALL I LIKED THIS PROGRAM. IT PERFORMS THE SAME FUNCTIONS THAT SMARTFILER DOES RELATIVE TO RECORD CREATION AND RETRIEVAL BUT OFFERS MUCH IMPROVED PRINT

OPTIONS.

I THINK THIS SET OF FOUR PROGRAMS ARE WELL WORTH THE PRICE OF \$ 18.95.

RATING - A

BASIC GAME LIBRARY BY D. ZIMMERMAN

THIS IS A SERIES OF 15 BASIC PROGRAMS BY DAVASAN SOFTWARE:

BOWLING
STAR TREK
HI-Q
COMPUTER STORIES
ESCAPE
TANK ATTACK
EMPIRE
CHECKERS
GOLF
BLACKJACK
LEMANS ROAD RACE
LUNAR LANDER
RUSSIAN ROULETTE
FOOTBALL
POKER

NONE OF THESE GAMES USES HIGH OR LOW RESOLUTION GRAPHICS BUT RATHER THEY ASSIGN "X" AND "O'S" TO THE TEXT SCREEN. IF ONE WERE TO TAKE THE TIME TO ADD COLOR TO THESE PROGRAMS BY USING THE BTCOLOR POKES THE GRAPHICS WOULD LOOK VERY NICE. MOST OF THE GAMES WILL ASK TEXT QUESTIONS SUCH AS "A TANK IS APPROACHING AT 145 YARDS; WHAT IS THE ANGLE OF YOUR FIRE ?" AND RESPOND WITH SOMETHING LIKE "YOU MISSED BY 50 YARDS; WHAT IS YOUR ANGLE OF FIRE ?". THE FOOTBALL GAME HAS A NICE "GRAPHIC" SCREEN AND YOU HAVE MANY PLAYS THAT YOU CAN CHOSSE FROM. I RATE THE BASIC GAME LIBRARY A "C" BECAUSE I USUALLY DON'T PLAY COMPUTER GAMES BUT AT \$1.77 PER GAME THSE PROGRAMS ARE A WORTHWHILE ADDITION TO YOUR LIBRARY AND ARE A MUST IF YOU ENJOY PLAYING AGAINST ADAM.

RATING - C

HOUSEHOLD II LIBRARY BY D. ZIMMERMAN

THIS IS A COLLECTION OF 15 MISCELLANEOUS PROGRAM FROM DAVASAN:

SIGN PRINTER
DIAMONDS
DIET MINDER
YOUR BIRTHDAY
CHECK WRITER
DAY OF THE WEEK
DAYS BETWEEN DATES

LIQUIDITY RATIO
FUTURE PROJECTIONS
SORT-A-LIST
ENVELOPE ADDRESSOR
PROGRAM MERGE
EARNED INTEREST TABLE
GRAPHICS PLOTTER (FOR GRAPHS NOT GRAPHICS)
FEDERAL WITHHOLDING TAXES

IT DEPENDS ON WHAT YOU USE YOUR ADAM FOR WHICH WILL DETERMINE HOW YOU WOULD RATE EACH OF DAVASON'S TAPES. THERE IS ENOUGH ON EACH OF THESE TWO TAPES TO MAKE THEM WORTHWHILE FOR MOST ADAM USERS. I FIND HOUSEHOLD II FITS MY NEEDS MORE THAN BASIC GAMES AND WOULD RATE IT HIGHER BASED ON MY OWN NEEDS. I LIKE THE SIGN PRINTER BECAUSE IT PRINTS THE SIGNS LENGTHWISE ON THE PAPER AND WILL PRODUCE LARGE SIGNS. IT IS SLOW BECAUSE THE PRINTER PRINTS IN ONE DIRECTION ONLY. THE CHECK PRINTER AND THE ENVELOPE ADDRESSOR HAVE PROVISIONS FOR USER MODIFICATIONS AND HAVE A REAL NICE FEATURE THAT WILL CENTER THE PRINthead TO MAKE IT EASY TO PUT THE CHECK OR ENVELOPE IN THE PRINTER.

THE PROGRAM MERGE IS A NICE UTILITY PROGRAM THAT ALLOWS UP TO TEN PROGRAMS TO BE MERGED AND ALLOWS THE DEVICE TO BE SELECTED FOR EACH MERGING PROGRAM. THE PROGRAMS TO BE MERGED MUST HAVE DIFFERENT LINE NUMBERS. THIS MUST BE DONE FIRST USING EBU OR SOME OTHER RENUMBERING UTILITY PROGRAM. SOME OF THE HOUSEHOLD II PROGRAMS ARE AMUSING AND MOST ARE USEFUL. I MUST RATE IT AN "A" CONSIDERING THE NUMBER OF PROGRAMS AND THE PRICE OF \$26.63.

WHILE IT IS MY OPINION THAT NEITHER OF THESE TAPES ARE WORTH THE \$39.95 CHARGED BY THEMSELVES THEY ARE WORTHWHILE WHEN ONE CONSIDERS THEY OFFER A THIRD FREE TAPE WITH THE PURCHASE OF TWO. THIS BRINGS THE COST OF EACH TAPE DOWN TO \$ 26.63 EACH. WHEN YOU FIGURE THERE ARE 15 PROGRAMS ON EACH TAPE THIS COMES DOWN TO A PRICE OF \$ 1.77 PER PROGRAM.

RATING - A

LAS VEGAS ADAM CLUB ARCHIVES #1 By L. MARSCHAND

THIS IS A SERIES OF 10 SMARTBASIC PROGRAMS PUT OUT BY THE LAS VEGAS ADAM CLUB. I WANT TO BOTH CONGRATULATE AND ENCOURAGE THIS GROUP OF ADAMITES FOR THE FINE WORK THEY HAVE DONE ON THIS SERIES OF PROGRAMS. IT'S VERY ENCOURAGING TO SEE A GROUP OF ADAM OWNERS GET TOGETHER AND WORK TO PRODUCE A QUALITY PRODUCT FOR THEIR FELLOW ADAMITES - WELL DONE FOLKS !

ALL THE PROGRAMS AND THE MENUS USE COLOR VERY NICELY, AS IT SHOULD BE USED FOR ALL BASIC PROGRAM. THE 10 PROGRAMS ARE CONTAINED ON A MENU SO THEIR IS NO ENTERING OF THE SPECIFIC PROGRAM NAME. THERE IS EVEN AN INSTRUCTION FILE THAT CONTAINS HINTS FOR EACH OF THE 10 PROGRAMS WHICH CAN BE PRINTED FOR LATER REFERENCE. ALL THIS IS DONE FROM THE MENU. A GOOD QUESTIONNAIRE IS INCLUDED (YOU ANSWER THE QUESTIONS ON THE SYSTEM AND IT PRINTS OUT THE ANSWERS AND EVEN THE ENVELOPE !) WHICH ASKS FOR INPUT AS TO WHAT KIND OF SOFTWARE PRODUCTS THE USER WOULD LIKE TO SEE IN THE FUTURE FOR THE ADAM.

TWO UTILITY PROGRAMS ARE PROVIDED:
COLOR POKES

DEMONSTRATES THE VARIOUS COLOR OPTIONS AVAILABLE FOR BACKGROUND, TEXT AND FIELD. YOU SELECT THE COLORS YOU LIKE AND THE POKE LOCATIONS ARE GIVEN TO YOU, WHICH YOU CAN THEN PRINT OUT BY JUST HITTING THE 'PRINT' KEY.

CATALOG P/O

ALLOWS YOU TO PRINT OUT THE CATALOG OF ANY SMARTBASIC DISK. THIS WOULD BE USEFUL FOR PRINTING OUT THE CATALOGS FOR ALL YOUR DISKS FOR REFERENCE.

THERE ARE 7 GAMES INCLUDED, ALL OF WHICH MAKE GOOD USE OF COLOR:

MATCH EM

THIS GAME 'HIDES' A SERIES OF CHARACTERS BEHIND A 'BOARD'. YOU ENTER THE ROW AND COLUMN OF THE SQUARE YOU WANT TO REVEAL WITH THE GOAL OF MATCHING TWO OF THE SAME ITEM (JEOPARDY).

LETTER MATCH

YOU MUST GUESS THE CORRECT LETTER COMBINATION PICKED BY ADAM. IF YOU GUESS ONE OF THE LETTERS, BUT NOT THE CORRECT LOCATION YOU ARE TOLD. THERE ARE 3 DIFFICULTY LEVELS.

SNAKE EYES

GRAPHIC GAME OF DICE WHERE YOU TRY TO GET TO 100 POINTS WITHOUT GETTING TO MANY SNAKE EYES.

CARD TRICK

YOU PICK A CARD AND ADAM GUESSES IT. SEVERAL CARDS ARE GRAPHICALLY DISPLAYED AND YOU ENTER WHICH ROW YOUR PICK IS IN - I REMEMBER THIS ONE !

MORSE CODE

TEACHES MORSE CODE TO THE BEGINNER.

TRIVIA MAKER

YOU CAN CONSTRUCT A FILE OF TRIVIA QUESTIONS WITH MULTIPLE CHOICE ANSWERS IN DIFFERENT CATEGORIES FOR USE BY -

TRIV.GAME

YOU ANSWER QUESTIONS CREATED BY TRIVIA MAKER AND YOUR SCORE IS ACCUMULATED. THIS IS BASIC VERSION OF FLASHCARD MAKER !

THE LAST PROGRAM STANDS IN A CATEGORY BY ITSELF - I.Q. TEST

THIS IS A REAL LIFE IQ TEST ON THE ADAM WHICH EVEN INCLUDES THOSE CRAZY FIGURES WITH THE QUESTIONS... "WHICH OF THE FOLLOWING DOESN'T BELONG WITH THE OTHERS ?" REMEMBER THOSE ? THIS IS AN EXCELLENT PROGRAM WITH GOOD GRAPHICS AND OBVIOUSLY TOOK SOME ONE ALOT TO TIME TO CONSTRUCT AND TEST. I GIVE THE LVAC ALOT OF CREDIT FOR THIS ONE. MY 11 YEAR OLD SON TOOK THE TEST WHICH CONSISTED OF 60 QUESTIONS (I DON'T KNOW IF THE TEST GEARS ITSELF FOR DIFFERENT AGE GROUPS). HIS IQ WAS COMPUTED ALONG WITH THE NUMBER OF CORRECT ANSWERS. I TRIED TO GET MY WIFE TO TAKE IT BUT SHE REFUSED (I THINK SHE WAS AFRAID SHE WOULD SCORE LESS THEN MY SON !! - OF COURSE I AM TOO BUSY TO TAKE IT !!!).

OVERALL, I AM IMPRESSED WITH THIS SERIES OF PROGRAMS, THEY ARE PROFESSIONALLY DONE, WELL TESTED AND PROVIDE SOME GOOD SOFTWARE FOR ADAM OWNERS. THE ONLY COMPLAINT I HAVE IS THAT IN SOME OF THE GAMES YOU CAN'T GET OUT OF THE GAME UNTIL YO FINISH A ROUND -

"CONTROL-C" IS DISABLED. THIS IS FRUSTRATING ON GAMES LIKE LETTER MATCH WHICH CAN TAKE SOME TIME. THE FACT THAT THERE ARE TEN PROGRAMS WITH GOOD DOCUMENTATION MAKES THIS A CUT ABOVE THE PUBLIC DOMAIN CATEGORY - FOR THE PRICE OF \$20.00 I THINK THIS IS A REAL BARGAIN.

RATING - A
ORDER FROM:
L.V.A.C.
P.O. Box 81146
LAS VEGAS, NV 89103

PRINTER ALTERNATIVES BY L. MARSCHAND

I DECIDED TO CONTINUE THE DISCUSSION ON PRINTERS I STARTED IN THE LAST ISSUE DUE TO THE FACT THAT THIS SUBJECT IS SO COMPLEX AND POTENTIALLY CONFUSING.

FIRST SOME BASICS:

- . YOU NEED THE SP-1 RS232 INTERFACE (SEE REVIEW LAST ISSUE) TO INTERFACE THE ADAM TO ANY OTHER PRINTER.
- . THE PRINTER YOU BUY NEEDS TO HAVE WHAT IS CALLED A "CENTRONICS 8 BIT PARALLEL" INTERFACE TO CONNECT TO THE SP-1 - ALMOST ALL PRINTERS COME STANDARD WITH THIS INTERFACE.
- . YOU WILL NEED A PARALLEL INTERFACE CABLE TO CONNECT THE SP-1 TO YOUR PRINTER. THESE CAN BE PURCHASED AT ANY RADIO SCHACK STORE.
- . THERE IS DISK SOFTWARE SUPPLIED WITH THE SP-1 WHICH ALLOWS YOU TO PRINT FROM SMARTBASIC AND CPM.
- . AT THIS POINT YOU CAN'T PRINT VIA THE SP-1 TO ANOTHER PRINTER DIRECTLY FROM SMARTWRITER DUE TO SOFTWARE INCOMPATIBILITY PROBLEMS. YOU CAN, HOWEVER, PRINT FILES CREATED BY SMARTWRITER FROM BASIC. THIS IS ONLY WORTHWHILE FOR PRINTING DRAFT COPIES OF LARGE FILES SINCE YOU HAVE TO GET OUT OF SMARTWRITER, LOAD BASIC, AND PRINT THE FILE. ADDITIONALLY, YOU CAN NOT USE ANY OF THE SMARTWRITER SPECIAL FUNCTIONS SUCH AS UNDERLINE, SUPER/SUB SCRIPT, ETC BECAUSE WHATEVER PRINTER YOU BUY WILL NEED SPECIAL CODES VIA THE INTERFACE SOFTWARE TO CONTROL THESE SPECIAL FUNCTIONS. WE ARE CURRENTLY WORKING ON PROGRAMS THAT WILL PROVIDE THE ABILITY TO USE THESE SPECIAL FUNCTIONS FOR THE PRINTERS NIAD SELLS.

- . THE CAPABILITY TO PRINT GRAPHICS EXISTS ON MANY DOT MATRIX PRINTERS. THE MOST SOPHISTICATED GRAPHICS ARE CALLED "BIT MAPPED OR BIT IMAGE" GRAPHICS WHICH REQUIRE SOFTWARE THAT CONTROLS THE STRIKING OF EACH INDIVIDUAL PIN OF THE PRINTERS PRINTHEAD. WITH THIS YOU CAN GENERATE UNLIMITED GRAPHICS WITH RESOLUTIONS OF UP TO 240 DOTS PER INCH. NOW, THE DOWNSIDE OF THIS IS THAT YOU NEED SOPHISTICATED SOFTWARE TO DO THIS, WHICH IS CURRENTLY NOT AVAILABLE FOR THE ADAM. THE SECOND TYPE OF GRAPHICS IS KNOWN AS "BLOCK GRAPHICS" WHICH ARE ESSENTIALLY SPECIAL GRAPHIC CHARACTERS THAT ARE STORED IN THE PRINTER MUCH AS A REGULAR CHARACTER IS STORED. THESE GRAPHIC CHARACTERS CAN BE GENERATED BY THE SENDING OF A SPECIFIC CODE TO THE PRINTER. MOST OF THE CURRENT PRINTERS HAVE STANDARDIZED ON IBM BLOCK GRAPHICS, WHICH CONSIST OF ABOUT 132 DIFFERENT GRAPHICS CHARACTERS WHICH CAN BE USED TO PRINT FIGURES, PICTURES, ETC.
- . MOST OF THE PRINTERS NOW HAVE THE ABILITY FOR CUSTOM

GRAPHIC CHARACTERS THAT CAN BE CREATED AND STORED FOR LATER PRINTING.

- . SPEED IS THE OTHER REASON ONE WOULD WANT TO PURCHASE ANOTHER PRINTER. THE ADAM PRINTER PRINTS AT ABOUT 8 CHARACTERS PER SECOND WHEREAS MOST DOT MATRIX PRINTERS PRINT IN THE 80 TO 120 CPS RANGE - THAT IS A BIG DIFFERENCE.
- . ANOTHER REASON TO USE A DOT MATRIX PRINTER WOULD BE THE ABILITY TO MIX TYPE STYLES AND SIZES IN THE SAME DOCUMENT. SEND A SASE AND REQUEST SAMPLE PRINTS TO SEE PRINT SAMPLES OF THE CAPABILITIES OF THESE PRINTERS

IN LAST MONTHS ISSUE I TALKED ABOUT WHAT FUNCTIONS YOU SHOULD LOOK FOR IN A DOT MATRIX PRINTER. FROM MY ANALYSIS THE PANASONIC 1091 OFFERS THE BEST FUNCTION FOR THE MONEY AND WITH PANASONICS NEW 2 YEAR LIMITED WARRANTY, IT IS HARD TO BEAT.

THE STAR 10G IS ALSO A GOOD BUY. IT HAS EVERYTHING THE PANASONIC DOES (EXCEPT THE 2 YEAR WARRANTY) AND IN ADDITION OFFERS THE ABILITY TO STORE 140 CUSTOM DESIGNED CHARACTERS (THE PANASONIC HANDLES 40). THIS SHOULD ONLY MAKE A DIFFERENCE TO YOU IF YOU HAVE BIG PLANS FOR CUSTOM CHARACTERS - IT DOESN'T DO MUCH FOR ME, HOWEVER. THE STAR 10G IS A LITTLE CHEAPER THEN THE PANASONIC 1091.

I'M NOT TOO IMPRESSED WITH THE EPSON LX-80 AND HENCE I'VE DECIDED TO NOT CARRY IT ANY LONGER.

WITH THE RECENT RELEASE OF THE TRACTOR FEED, YOU NEED TO REALLY THINK ABOUT WHETHER YOU NEED A NEW PRINTER OR JUST NEED TO ADD THE TRACTOR FEED TO THE CURRENT ADAM PRINTER TO ALLEVIATE THE PROBLEMS OF MIS-ALIGNED PAPER. SPEED AND GRAPHICS ARE THE ONLY REAL REASON TO ADD A SECOND PRINTER. I HOPE THIS HAS HELPED YOU IN MAKING YOUR DECISION RELATIVE TO PRINTERS.

MEMBER COMMENTS/

QUESTIONS & ANSWERS

I WOULD LIKE TO THANK YOU FOR PROVIDING THE NIAD USERS GROUP. I FIND OUR NEWSLETTER TO BE VERY INFORMATIVE (ALTHOUGH A LOT OF THE INFORMATION IS "ABOVE MY HEAD" AS A NEW ADAM OWNER AND COMPUTER ROOKIE). I ALSO FIND THAT THE PRICES YOU HAVE ON YOUR PRODUCTS ARE VERY COMPETITIVE WITH SOME OF THE LARGER ADAM HARDWARE/SOFTWARE DEALERS. I AM EXTREMELY PLEASED THAT YOU ARE MARKETING THE RS232 INTERFACE FROM EVE AND HAVE COMPATIBLE PRINTERS FOR SALE. FOR THAT REASON I AM INCLUDING AN ORDER FOR SOME OF YOUR MERCHANDISE INCLUDING THE INTERFACE.

FIRST OF ALL I HAVE A COUPLE OF QUESTIONS TO ASK YOU. MY PRINTER HAS A BAD HABIT OF CUTTING PART OF THE CHARACTER OFF WHEN IT IS PRINTING. ALSO, MY PRINTER SEEMS TO CONSTANTLY PRINT ITS CHARACTERS RATHER LIGHTLY/FAINTLY INSTEAD OF GOOD, SHARP, AND DARK. THIS HAPPENED WITH THE FIRST RIBBON I HAD AND IS CONTINUING

WITH A NEW RIBBON. IT PRINTS AS IF THE RIBBON IS ALMOST OUT OF INK EVEN THOUGH IT IS NEW. IS IT THE RIBBON AND IF SO CAN I GET OTHER RIBBONS THAT WILL PRINT DARKER CHARACTERS ?

DALE DECKER

THANK YOU, DALE FOR THE FEEDBACK. RELATIVE TO YOUR PRINTER PROBLEMS. DEPENDING ON WHEN YOU BOUGHT YOUR ADAM, THE TROUBLESHOOTING GUIDE SHOULD HAVE INFORMATION ON ADJUSTING THE PRINT HEAD IF THE CHARACTERS ARE BEING CUT OFF - I HAVE SENT YOU COPIES, HOWEVER. THE LIGHTNESS OF THE CHARACTERS MAY ALSO BE AN ADJUSTMENT PROBLEM IF THE PRINTHEAD IS NOT STRIKING THE DAISYWHEEL CORRECTLY - THE COPIES I SENT ALSO COVER THIS. HOWEVER, IF THIS IS NOT IT I WOULD SUGGEST A TRIP TO HONEYWELL SINCE I DOUBT IT IS A RIBBON PROBLEM, ASSUMING YOU HAVE PURCHASED THE STANDARD ADAM RIBBONS.

. THERE IS A PROBLEM WITH THE ADAM LOCKING UP WHEN YOU CLEAR THE WORKSPACE IN SMARTWRITER MODE. I HAVE FOUND THAT THIS ONLY HAPPENS IF YOU HIT THE CLEAR KEYS TOO QUICKLY, WHEN I HIT THEM SLOWLY (JUST ALLOW A SECOND IN BETWEEN EACH KEYSTROKE) IT NEVER OCCURS.

. MOST OF YOU ARE AWARE OF THIS PROBLEM, BUT FOR YOU NEW ADAM OWNERS THERE IS A PROBLEM KNOWN AS THE "CREEPING 1/2 CARRIAGE RETURN". THIS IS A VERY UNFORTUNATE PROBLEM IN THAT IT PREVENTS THE CORRECT PRINTING OF ADDRESS LABELS AND USE OF FANFOLD PAPER. WHAT THE ADAM DOES (I'M NOT SURE IF IT'S A SOFTWARE PROBLEM OR THE ADAM PRINTER) IS TO ADD AN ADDITIONAL 1/2 CARRIAGE RETURN TO EVERY CARRIAGE RETURN THAT IS ON A LINE BY ITSELF. THIS CAUSES YOUR SPACING TO GET ALL MESSED UP AND TO MY KNOWLEDGE THERE IS NO KNOWN FIX.

. I JUST RECEIVED MY FIRST COPY OF YOUR MONTHLY NEWSLETTER, AND I MUST SAY I'M IMPRESSED. COULD YOU PLEASE LET ME KNOW WHAT BACK ISSUES ARE AVAILABLE IN ORDER THAT I MIGHT CATCH UP ON WHAT I'VE MISSED. THANKS FOR YOUR HELP. YOU ARE TO BE COMMENDED FOR PUBLISHING SUCH A HELPFUL NEWSLETTER. WE ADAMITES APPRECIATE IT.

EDDIE CLARK

THANK YOU EDDIE FOR THE NICE COMMENTS - PLEASE RECOGNIZE THAT THE THE NIAD NEWSLETTER IS WHAT IT IS BECAUSE OF THE FINE CONTRIBUTIONS OF W. MOTEL, B. WALLIS, K. HAMMOND, C. KOLANDER, B. LENNES AND MANY OTHERS WHO HAVE SUBMITTED ARTICLES. YES, BACK ISSUES ARE AVAILABLE BEGINNING WITH JANUARY, 85 FOR \$3.00 EACH.

. AS SOME OF YOU HAVE POINTED OUT I FORGOT TO PUT FUTUREVISIONS ADDRESS IN THE LAST ISSUE. IT IS - PO Box 34; N. BILLERICA, MA 01862; (617) 663-8591. AUTOATD'S COST IS \$29.95.

. I AM GLAD TO SEE THAT DUE TO YOUR AND OTHER NEWSLETTERS, AND THEIR CONTRIBUTORS, THAT ADAM IS BEING RESURRECTED. I WAS UNDER THE (PERHAPS MISTAKEN) IMPRESSION THAT SINCE COLECO AND MANY COMPUTER MAGAZINES HAVE DELETED THE "ADAM", THAT IT WAS "DEAD". IT APPEARS I WAS WRONG.

A NUMBER OF PEOPLE SEEM TO HAVE ADD ON BOARDS FOR THE ADAM SO I'D LIKE TO GIVE THIS HINT. IF YOU SUSPECT A BOARD OF CAUSING INTERMITTENT PROBLEMS, THEN CLEAN IT'S CONTACTS FIRST WITH AN ERASER AND THEN WITH A PIECE OF COTTON SOAKED IN ALCOHOL.

WILLIAM E. OLSEN

YES, WILLIAM I THINK WE ALL AGREE THAT THE ADAM IS FAR FROM DEAD !!

THANKS FOR THE HINT FOR CONNECTIONS TO THE ADAM.

. BASED ON THE LAST NIAD NEWSLETTER, IT SEEMS THAT WE NEED A DISK DRIVE TO USE THE RS232. I DON'T HAVE A DISK DRIVE AND DON'T FEEL I NEED ONE. IS THERE A WAY TO USE THE RS232 WITH A TAPE DRIVE ?

D. ETTER

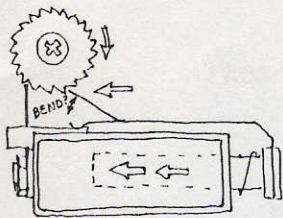
THE SP-1 RS232 INTERFACE CARD SOFTWARE COMES ON A DISKETTE AND IS WRITTEN TO RUN FROM DISK, NOT TAPE. I DON'T SEE ANY REASON WHY IT COULDN'T RUN FROM TAPE, HOWEVER. IF A NUMBER OF YOU ARE INTERESTED IN THIS PLEASE WRITE ME AND I AM SURE I CAN GET EVE TO PRODUCE A TAPE VERSION.

. NOW: PRINTER REPAIR TIME. IN MY RECENT JOB SEARCH, I MADE EXTENSIVE USE OF THE PRINTER IN GENERATING RESUMES AND COVER LETTERS. OVER A LENGTH OF TIME, A PROBLEM BEGAN TO DEVELOP WITH THE RIBBON ADVANCE. IT WOULD SEEM TO "JAM". AT FIRST, OCCASIONALLY; LATER, ALL THE TIME. THINKING MY RIBBON WAS THE PROBLEM, I REPLACED IT TO NO AVAIL. I NOTED THAT THIS "JAMMING" OCCURED ONCE EVERY ROTATION OF THAT LITTLE DRIVE WHEEL IN THE RIBBON CARTRIDGE ... AND GUESSING THAT THE DRIVE SYSTEM WAS AT FAULT (AND KNOWING THAT MY WARRANTY WAS EXPIRED), I ATTACKED. POWER OFF, OF COURSE.

WITH THE RIBBON REMOVED, YOU'LL NOTICE A SOLENOID, AND FIVE SCREWS, WHICH ANCHOR THE PLASTIC RIBBON CARRYING "TRAY". THIS IS EASILY DETACHED...BUT NOTE THAT IT HOLDS THE RIBBON CLIP IN LOCATION. BE SURE THIS IS CORRECTLY IN PLACE WHEN RE-ASSEMBLING. UNDER THIS TRAY, THE PROBLEM WAS EVIDENT.

THE SOLENOID IS ACTIVATED AT EACH KEYSTROKE. IT IS CONNECTED TO A THIN METAL STRIP WHICH ENGAGES A RATCHET "WHEEL". (SEE DIAGRAM) AT THE CENTER OF THIS WHEEL IS THE CROSSHAIR PLUG WHICH PULLS THE RIBBON THROUGH THE CARTRIDGE.

THE ADJUSTMENT OF THE THIN METAL STRIP IS CRITICAL. IF IT DOESN'T MAKE GOOD ENOUGH CONTACT, AS WAS THE CASE WITH MY PRINTER, IT WILL SIMPLY SLIDE BY A SLIGHTLY WORN "TOOTH". IF OVER ADJUSTED IN THE OTHER DIRECTION, THE WORKING GEOMETRY IS THROWN OFF, AND THE WHEEL WILL NOT ADVANCE AT ALL.



IF YOU'VE EXPERIENCED ANY SIMILAR DIFFICULTY, LOOSEN THE FIVE SCREWS, REMOVE THE CARTRIDGE TRAY, AND MOVE THE SOLENOID BY HAND...OBSERVING THE QUALITY OF CONTACT. IF A PROBLEM IS NOTED, GENTLY BEND THE METAL STRIP IN THE APPROPRIATE DIRECTION, A SMALL AMOUNT, AND TEST AGAIN.

WHEN ALL IS WORKING SMOOTHLY, REASSEMBLE, NOTING THAT: 1) THE RIBBON CLIP IS LOCATED IN PLACE, AND 2) THE COIL-WRAPPED WIRES AT THE BACK OF THE CARTRIDGE ARE SECURELY TUCKED IN.

D. FAUST

THANK YOU VERY MUCH DAVID FOR THE ADVICE !

I HAVE A CONFESSION TO MAKE, I HAVE BEEN BORROWING MY BUDDY'S COPIES OF YOUR NEWSLETTER, AND THEN COPYING THEM OFF FOR MY OWN CONVENIENCE, AND I STARTED FEELING GUILTY, BECAUSE I WASN'T CONTRIBUTING ANYTHING TO KEEPING ADAM ALIVE. ALTHOUGH I DID HAVE MY BUDDY ORDER A DISK DRIVE AND TEN DATA PACKS FROM YOU, I AM NOW SENDING IN MY MEMBERSHIP FEE ALONG WITH THIS LETTER.

THANK YOU FOR YOUR HONESTY - GOD WILL BLESS YOU FOR IT.

SOFTWARE EXCHANGE

NIAD SUPPORTS A SOFTWARE EXCHANGE FOR ALL MEMBERS IN ORDER TO SUPPLY PUBLIC DOMAIN AND NON-COPYRIGHTED PROGRAMS. "LIBRARIES" WILL BE MAINTAINED FOR EACH OF THE MAJOR SOFTWARE PRODUCTS BY A NIAD MEMBER. CURRENT LIBRARIES ARE:

SMARTBASIC	>>>>>>>>	B. LENNES 14637 ATLANTIC DOLTON, IL 60419
SMARTLOGO	>>>>>>>>	BARRY WALLIS 2140 BESSANT ST SAN BERNADINO, CA 92404
ADAMCALC	>>>>>>>>	GREG VAN VALKENBURG 701 POND VIEW DR AUDUBON, PA 19403
UTILITIES	>>>>>>>>	L. MARSCHAND
CPM 2.2	>>>>>>>>>>>>	C. KOLANDER 1295 A PEARL AVE GLENDALE HTS, IL 60139

SOFTWARE EXCHANGE RULES:

NOTE: WE ARE CHANGING AND WILL ONLY PROVIDE LIBRARIES ON DDP, NOT DISK.

ADDITIONALLY, YOU HAVE THE OPTION TO PURCHASE A SPECIFIC LIBRARY FOR A SMALL FEE FROM THE NIAD PRODUCT LIST IF YOU DO NOT HAVE A PROGRAM TO EXCHANGE.

IN ORDER TO RECEIVE ALL THE LIBRARY PROGRAMS IN A SPECIFIC LIBRARY SEND A ** DDP ONLY ** WITH ONE PROGRAM FOR THE LIBRARY (ALL PROGRAMS SHOULD BE TESTED AND WELL DOCUMENTED VIA A SEPARATE "README" FILE) TO THE LIBRARIAN. INCLUDE A SELF ADDRESSED AND STAMPED RETURN MAILER. THE LIBRARIAN WILL COPY THE ENTIRE LIBRARY ON YOUR DDP AND RETURN IT TO YOU.

NOTE: I HAVE HAD SOME COMPLAINTS ABOUT THE REQUIREMENT OF SUBMITTING ONE PROGRAM TO GET THE SOFTWARE LIBRARY. PLEASE BE ADVISED THAT THESE PROGRAMS DON'T HAVE TO BE WRITTEN BY YOURSELF. THEY CAN BE ANY NON-COPYRIGHTED PROGRAM THAT YOU MAY GET FROM A BOOK OR MAGAZINE. YOU NON-PROGRAMMERS CAN DO US ALL A GREAT SERVICE BY TYPING IN THESE PROGRAMS, RUNNING THEM TO MAKE SURE THEY WORK AND SENDING THEM IN. I DON'T THINK THIS IS TOO MUCH TO ASK FOR WHAT YOU WILL RECEIVE.

EVERYONE, PLEASE SUBMIT YOUR PROGRAMS TO CREATE AN EXPANSIVE LIBRARY FOR NIAD.

LIBRARY INDEX AS OF 7/20/85:

SMARTBASIC VOLUME 1 # BNDVT:

- . BLOCKS - GRAPHIC 3D BLOCKS
- . CANON3 - PLAYS A THREE VOICE CANON (MUSIC)
- . DRUMDEMO - PLAYS THE DRUMS
- . CONVERT - NUMBERS FROM VARIOUS BASES TO OTHERS
- . BARGRAPH - SUBROUTINE TO DRAW BARGRAPHS
- . NOISEMAKER - SOUND GENERATOR
- . MATH - ADD, SUBTRACT, MULT/DIVIDE FOR DRILL FOR KIDS
- . HANGMAN - GRAPHICS/ WORD GAME
- . ICECREAM - GRAPHICS OF A CONE
- . LIBERTY BELL - GRAPHIC BELL
- . MUSICAL DEPARTURE - KEYBOARD GAME
- . BANNER - PRINTS OUT MESSAGE ON PRINTER
- . ZODIAC
- . CONCENTRATION - MULTI PLAYER MATCHING GAME
- . TICTACTOE
- . TICTACADAM
- . SPRITEEDIT
- . CRAYONS

SMARTBASIC VOLUME 2 # BNDV2

NOTE: WE DON'T QUITE HAVE ENOUGH TO MAKE OUR SECOND VOLUME YET. WHEN WE GET ABOUT 100K WORTH WE'LL RELEASE IT.

SMARTLOGO VOLUME 1 # LNDVT:

- . COMPILER - A SET OF PROCEDURES TO TRANSFORM ALL PROCEDURES IN MEMORY INTO A DISK FILE WHICH WHEN LOADED WILL NOT DISPLAY THE DEFINING... SYSTEM MESSAGE.
- . MENU - A SET OF PROCEDURES TO DISPLAY MENUS AND ACCEPT ANSWERS.
- . ROCKET - A GAME (THE OPENING SCREEN IS A GOOD EXAMPLE OF LOGO ANIMATION).

- . BOMB - A NIFTY SOUND EFFECTS PROGRAM.
- . KEYBOARD -A PROGRAM TO PLAY MUSIC ON YOUR KEYBOARD.
- . LOGOTITLES - A SAMPLE OF SOME FANCY TITLING USING LOGO.
- . TURTLEHOP - A GAME LIKE FROGGER
- . ONE ARMED BANDIT - SLOT MACHINE GAME
- . EGGTIMER - GRAPHIC TIMER
- . ALPHABET - ALL THE LETTERS AND NUMBERS W/ DEMO PROGRAM

ADAMCALC VOLUME I # ANDVI:

- . MONTHLY BUDGET
- . TAXFORM
- . CIS LOG - KEEPS TRACK OF YOUR TIME ON COMPUSERVE
- . INVENTORY - SMALL BUSINESS INVENTORY

UTILITIES VOLUME I # UNDOI:

- . UTILDUMP-SOPHISTICATED BLOCK READ (FROM DDP OR DISK), MEMORY DUMP ON PRINTER/SCREEN, EXPANDED DIRECTORY LIST
- . UTILCOPY - DISK/TAPE COPY PROGRAM
- . FONTEDIT - CREATE YOUR OWN FONTS FOR PRINTER, FATFONT INCLUDED
- . BKCOLOR - SET COLOR OF SCREEN, CHARACTERS
- . TOOLKIT - READ/WRITE, VIEW, SCAN/POKE IN MEMORY
- . KBEXAMPLE - SCANS FOR KEYS PRESSED, LOWRES DRAWING PGM INCLUDED

CPM 2.2 VOLUME I # CNDVI

- . ADMBOOT.ASM/.COM
- . I.COM
- . CREATE3.ASM/.COM
- . DISPLAY.COM/.DOC
- . HALLEY.COM/.DOC
- . MARKET.COM
- . MODEM7.DOC
- . MODEM7MM.COM/.DOC
- . SD.COM/.DOC
- . SOZ.COM
- . USQ.COM
- . SDDU.ASM/.COM
- . UNERA19.COM
- . ADAMFIL.COM
- . INVENTY.COM

CPM 2.2 VOLUME 2 # CNDV2

- . ADAMTE.ASM
- . BASEBALL.COM
- . CATPAGE.COM
- . COMMON.COM
- . FIND.COM
- . FHAP.COM
- . TOMAP.COM
- . LRUN20.COM
- . LU300.DOC
- . LU310.COM
- . M7ADAM-1.ASM
- . M7FNK.COM/.DOC
- . M7LIB.COM/.DOC
- . MDM740.COM
- . READ.ME
- . SECURE.COM
- . SPLIT.COM

UCAT.COM
CPM 2.2 VOLUME 3 # CNDV3

- . CPMUTIL.COM
- . DDTX3A.COM
- . DIRR.COM/.DOC
- . EBASIC.LBR
- . EDIT.COM/.DOC
- . LASM.LBR
- . MAKESUB2.COM
- . MULTCOPY.COM
- . NSWP.COM/.DOC
- . NU11LU.COM
- . PRINTSQ.COM/.DOC
- . SLOAD.COM
- . SORT.COM
- . SQ110.COM/.DOC
- . USQ120.COM

PERIPHERAL'S DESCRIPTION

*** PRINTERS ***

PANASONIC KX-1090

- . TYPE: 9x9 DOT MATRIX
- . SPEED: DRAFT MODE -80CPS (PICA); 96 CPS ELITE
- . PRINT CHAR:BI-DIRECTIONAL; 96 CHAR W/ASCII DEC'S
NORMAL, ELONGATED,CONDENSED,SOME GRAPHICS
- . MEDIA HNDL:ADJ TRACTOR FEED, FRICTION FEED
4" to 10" PAPER
- . INTERFACE: CENTRONICS 8 BIT PARALLEL
- . BUFFER: 1K STANDARD - 4K ADD'L OPTIONAL
- . SIZE: 4.5"x15.9"x11.3"; WEIGHT 15.5 LBS
- . FEATURES: 2 YEAR LIMITED WARRANTY

PANASONIC KX-1091

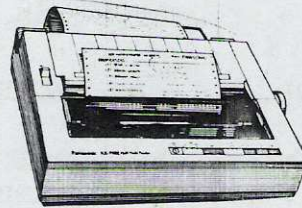
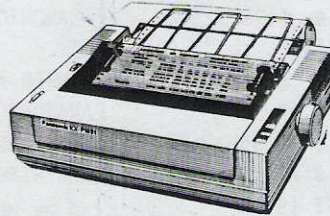
- . TYPE: 9x9 DOT MATRIX
- . SPEED: DRAFT MODE -120 CPS (PICA & ELITE);
NEAR LTR QUAL - 22 CPS; PROPRTIONL -75
- . PRINT CHAR:BI-DIRECTIONAL; 96 CHAR W/ASCII DEC'S
NORMAL, ELONGATED,CONDENSED,IBM GRAPHICS
ITALICS, IBM SPECIAL CHAR'S
- . MEDIA HNDL:ADJ TRACTOR FEED, FRICTION FEED
4" to 10" PAPER
- . INTERFACE: CENTRONICS 8 BIT PARALLEL
- . BUFFER: 1K STANDARD - 4K ADD'L OPTIONAL
- . SIZE: 4.5"x15.9"x11.3"; WEIGHT 14.6 LBS
- . FEATURES: 2 YEAR LIMITED WARRANTY

PANASONIC KX-1092

- . TYPE: 9x9 DOT MATRIX
- . SPEED: DRAFT MODE -180 CPS (PICA & ELITE);
NEAR LTR QUAL - 33 CPS; PROPRTIONL -112
- . PRINT CHAR:BI-DIRECTIONAL; 96 CHAR W/ASCII DEC'S
NORMAL, ELONGATED,CONDENSED,IBM GRAPHICS
ITALICS, IBM SPECIAL CHAR'S
- . MEDIA HNDL:ADJ TRACTOR FEED, FRICTION FEED
4" to 10" PAPER
- . INTERFACE: CENTRONICS 8 BIT PARALLEL
- . BUFFER: 7K STANDARD - 4K ADD'L OPTIONAL
- . SIZE: 5.4"x16.3"x13.8"; WEIGHT 19.6 LBS
- . FEATURES: 2 YEAR LIMITED WARRANTY

STAR 10G

- . TYPE: 9x9 DOT MATRIX
- . SPEED: DRAFT MODE - 120 CPS; NLQ -30 CPS
- . PRINT CHAR:BI-DIRECTIONAL, NORMAL,ELONGATED, CONDSD
ITALICS, IBM GRAPHICS/ SPECIAL CHAR"S
- . MEDIA HNDL:ADJ TRACTOR FEED,FRICTION FEED
4" TO 8 1/2 "
- . INTERFACE :CENTRONICS 8 BIT PARALLEL
- . BUFFER: 2K STANDARD
- . FEATURES: 140 DOWNLOADABLE CUSTOM CHARACTERS



** MONITORS **

AMDEK COLOR 300 COMPOSITE

- . CRT TYPE: 13" 90 DEG INLINE DARK; P22
- . DOT PITCH: .63 MM
- . RESOLUTION: 260 HOR x 300 VERTICAL
- . SIZE: 14.3 x 12.4 x 15.7 "
- . AUDIO: YES
- . OPTIONS: TILT SWIVEL STAND

PANASONIC S101 COMPOSITE

- . CRT TYPE: 10" 90 DEG INLINE DARK; P22
- . DOT PITCH: .63 MM
- . RESOLUTION: 250 HOR x 300 VERTICAL
- . SIZE: 10.3 x 11.2 x 13.4 "
- . AUDIO: YES
- . FEATURES: TILT SWIVEL STAND; BLK & WHITE DISPLAY

PRODUCT LIST

**** NIAD BUYING SERVICE PRODUCT LIST ****

<u>HARDWARE/ ACC'S</u>	<u>PRICE</u>	<u>NEW ADAM PERTIPHERALS</u>
ADAM DISK DRIVE 7817	\$195.00	SP- 1 SERIAL/PARALLELL
ADD'L DATA DRIVE 2409	\$135.00	INTERFACE CARD \$139.95
MODEM 7818	\$ 69.95	PANASONIC 1090 PRINTER \$239.95
COMPUSERVE STARTER KIT	\$ 25.95	PANASONIC 1091 PRINTER \$299.95
ADDRESS BOOK/AUTO		PANASONIC 1092 PRINTER \$399.95
DIALER 7815	\$ 31.95	
64k EXPANDER 2562	\$130.00	STAR 10 G PRINTER \$279.95
COLECO DATA PACKS 2564	\$ 4.75 n	
COLECO DATA PACKS (10)	\$ 39.95	
FAST FORWARD DDPS	\$ 3.55 n	
FAST FORWARD DDPS (10)	\$ 29.95	AMDEK300 COLOR MONITOR \$259.95
RIBBONS 7806	\$ 4.95	AMDEK TILT/SWIV STAND \$ 39.95
PRINTER WHEELS (Qume)	\$ 5.55	PANASONIC COLOR MON \$219.95
SPECIFY FONT DESIRED		
MONITOR CABLE 7830	\$ 8.95	PRINTER ACC'S:
TDK DISKETTES (Box of 10)	\$ 17.95	PANASONIC RIBBONS P110 \$ 9.95
<u>NEW</u> DUST COVERS -3 PIECES	\$ 18.95	PANASONIC 4K BUFFER EXP \$ 69.95
<u>NEW</u> TRACTOR FEED FOR ADAM	\$ 79.95	STAR RIBBONS \$ 2.95
<u>NEW</u> PRINTER STAND/FRONT ON/OFF	\$ 18.95	STAR 4K BUFFER EXP \$109.95

SOFTWARE (DDP UNLESS NOTED)

CARTRIDGE SOFTWARE

SMART LOGO 7600	\$ 51.95
EXPERTYPE 7602;9610 DSK	\$ 31.95
SMART FILER 7813;9656 DSK	\$ 15.95
RECIPE FILE 7814;9657 DSK	\$ 15.95
SMART LTRS/FORMS	
7805;9613 DSK	\$ 20.95
FLASHCARD MAKER 7662	\$ 20.95
FLASHFACTS (TRIVIA 2902,	
HISTORY 2901,VOCAB 2900)	\$ 11.95 n
ADAMCALC 7831	\$ 31.95
R. SCARRY'S WORDBOOK 7658	\$ 20.95
DRAGONS LAIR 2683	\$ 24.95
WACKY WORD GAME 7834	\$ 15.95
CPM 2.2 & ASSEMBLER	
7832	\$ 49.95
SUPER ZAXXON 2623	\$ 24.95
BEST OF BRODERBUND: AE &	
CHOPLIFTER 7850	\$ 24.95
<u>NEW</u> HOME SFTWARE LIBRARY 7826	\$ 54.95
*2010: TEXT ADVENTURE	
GAME BY MGM/UA 7849	\$ 20.95
<u>NEW</u> FAMILY FEUD 7710	\$ 20.95
*JEOPARDY 7716	\$ 20.95
*BEST OF ELECTRONIC ARTS:	
HARD HAT MACK & PINBALL	
CONSTRUCTION SET 7852	\$ 20.95

<u>OTHER SOFTWARE - SPECIFY DDP OR DISK</u>	
DAMBUSTERS 2686	\$18.95
ILLUSIONS 2621	\$18.95
BC II: GROG'S	
REVENGE 2620	\$18.95
SPYHUNTER 2617	\$18.95
TAPPER 2616	\$18.95
BOUNTY HUNTER VS4048	\$19.95
ADVENTURE PK I VS4011	\$19.95
ADVENTURE PK II VS4015	\$19.95
TREK VS5004	\$19.95
SAVINGS & LOAN VS5051	\$19.95
VIDEOTUNES (DDP ONLY)	\$26.95
(FUTUREVISION)	
RIB I/ II (DDP ONLY)	\$26.95
EXT BASIC UTILITIES	\$18.95
<u>NEW</u> FANTASY GAMER (DDP)	\$29.95
BASIC BONANZA	\$29.95
DIABLO	\$19.95
STRATEGY PACK I	\$16.95
GAMES PACK I	\$16.95
<u>NEW</u> SOFTPACK I	\$18.95

NIAD PUBLIC DOMAIN SOFTWARE

SMARTBASIC	
VOLUME I #BNDVI	\$ 6.00
SMARTLogo	
VOLUME I #LNDVI	\$ 6.00
ADAMCALC	
VOLUME I #ANDVI	\$ 6.00
UTILITIES	
VOLUME I #UNDVI	\$ 6.00
CPM 2.2	
VOLUME I #CNDVI	\$ 6.00
VOLUME 2 #CNDV2	\$ 6.00
VOLUME 3 #CNDV3	\$ 6.00

This is an example of Gothic 12 # 89750, a Qume Superstrike print wheel.

This is an example of WP Script 12 # 82181. Note these special characters: @¶™

This is an example of Elite 12 # 89753, a Qume Superstrike print wheel.

THIS IS AN EXAMPLE OF ORATOR 90 # 89757, A QUME SUPERSTRIKE PRINT WHEEL.

This is an example of Courier 72 # 89761, a Qume Superstrike print wheel.

PRICES VALID 7/22 TO 8/22/85

*ITEMS NOT YET AVAILABLE