

80 Column monitor has also been included. Finally, ABP12 provides support for the large RAM Disks (128K/256K/512K) manufactured by OrphanWare. Systems patched with ABP12 automatically adjust for the larger RAM Disks so there is no need to repatch the system if a larger memory expander is purchased at a later date. Also, the size of the standard 64K RAM Disk has been increased from 56K to 61K. Once installed, the new system will allow the contents of the RAM Disk to remain intact through a computer reset, though not through a power-down. DIR will now report the correct directory whenever disks are changed. CP/M's random write function will now work correctly under all circumstances. The original ADAM bios had an error that sometimes caused damage to the disk directory which has now been fixed. Now that I have my 256K RAM Disk & super-charged new system installed, I feel that ADAM has taken up a new lease on life! I am very impressed with the powerful enhancements provided by Tony Morehen & recommend that every serious ADAM user take advantage of both OrphanWare's very reasonably priced RAM Disks (especially with the recent price reductions announced only a few days after I made my purchase!) & Tony's sophisticated utilities. Several software developers are planning exciting new software projects to take advantage of these new RAM Disks so bigger & better things are yet to come! I recently spoke to Tony who is presently working on a new commercial program which promises to be a best-seller! And he confirmed to me that his innovative enhancements/fixes to the CP/M system were (believe it or not) developed on his ADAM. Computer world take note!

PATCHES CORNER

The following is a dot matrix printer patch for the MICROWORKS PROGRAM from Strategic Software. Note: This basic program must be run with the printer TURNED ON. It enables the printer, then run MICROWORKS:

```

10 POKE 16149, 255: POKE 16150, 255
20 DATA 126,254,3,200,245,219,64,203,71,40,250,241
30 DATA 211,64,35,24,239
40 FOR x = 62741 TO 62757: READ mc: POKE x, mc: NE
XT
41 DATA 27,51,18,10,3
43 FOR x = 0 TO 4: READ mc: POKE 56730+x, mc: NEXT
45 DATA 33,154,221,205,99,252,201
47 FOR x = 57000 TO 57006: READ mc: POKE x, mc: NE
XT
49 CALL 57000
50 TEXT: PRINT " PATCH ENABLED ....": PRINT: PRIN

```

NEWSMAKER PATCH

This patch, supplied by Digital Express allows the NEWSMAKER program (reviewed in this issue) to print on a dot matrix printer. These 9 lines must be added to the HELLO program, that runs NEWSMAKER. The easiest way is to rename the existing HELLO program to hello with a utility program and then add the nine lines. Save it back as HELLO if you always want to use the dot matrix printer. DEI also has a patch to allow NW to be saved and "brunne". Send in a SASE if you would like these instructions.

```

] 1 DATA 126,254,3,200,245,219,64,203,71,40,250,24
1
2 DATA 211,64,35,24,239
3 FOR x = 63089 TO 63105: READ mc: POKE x, mc: NE
XT
4 DATA 27,51,18,10,3
5 HOME: HTAB 8: VTAB 5: PRINT "N e w s M A K E R"
6 FOR x = 0 TO 4: READ mc: POKE 56320+x, mc: NEXT
7 DATA 33,0,220,205,99,252,201
8 FOR x = 57000 TO 57006: READ mc: POKE x, mc: NE
XT
9 CALL 57000: VTAB 1: HTAB 8: PRINT "dot matrix s
etup"

```

GAMES By Jim Goebel

Well, another big hello from us over here at the NIAD game central. This month, I am going to describe & give some valuable playing hints for SUPER SUBROC, and also let you in on an interesting little diversion known as PHOTON.

The planet has been invaded! Your mission in this game is to shoot them down. Sounds alot like Space Invaders doesn't it? Let me tell you, that it is VERY different. There are two different types of screens in this game, underwater, and the skies. The game is in a first person perspective, and is very interesting graphically. I have some hints to share with you, but if you have any, send them in.

When I first recieved a copy of Subroc, I had much trouble playing the game. Through patience, and determination, I had gotten some pretty good scores. So the biggest tip that I can give anyone that applies to all games, is to experiment and keep track of what you find! Hint #1, Avoiding the net: Right after you select the skill level, push and hold the joystick forward. Your sub will move up and surface without interference from that blasted net. Hint #2, avoiding missiles: If a missile appears at the left or right of the screen, move the opposite direction, or position the missile in your crosshairs and blast it. Hint #3,

Destroying ships on the horizon: Position your crosshairs so that the bottom line just touches the horizon and blast away. This also destroys things just below the horizon. Remember that the aircraft carrier takes approx. 4 its. Hint #4: Stay above water as much as possible for bigger points. Underwater for a safer passage. Hint #5: When you see the word 'sensors' on the message board, DIVE DIVE DIVE!

Those are all the hints that I have found. If you

have any for any ADAM game, send them in.

System update. New games now out: SEGA: Enduro Racer, Out Run, Zaxxon 3-D, Zillion, Golf, Soccer, Volleyball. Nintendo: Mike Tyson's Punch Out, 3-D Rad Racer, Legend of Zelda 2: Adventures of Link, Super Pitfall, Breakthru, Karnov, Karate Kid, Top Gun, Jaws the Revenge, Goonies 2. No info on Atari's systems.

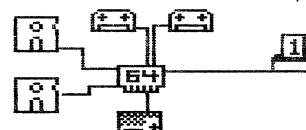
Send hints & things of the like to : Games c/o Jim Goebel Jr. 2904 Kellogg st. Joliet, IL 60435.

PRODUCT REVIEWS

POWERPAINT By Digital Express

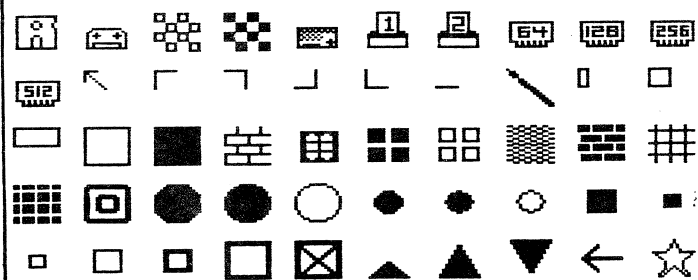
REVIEW PART I By W. Motel

The advanced graphics package
for the ADAM computer.



This is the latest in a series of graphics software from Solomon Swift of Digital Express. It is an excellent, professional 80K machine code program that gives you HI-RES graphics capabilities and features equal to those available on other home computers. We've just received this, so this will be an abbreviated review. I'll go into a more in-depth discussion next month as I work with it more, BUT I SURE LIKE WHAT I SEE SO FAR.

You can stamp out any of the 64 sprites included or create your own with SpritePOWER.



error messages. You can use up to 2 data drives and/or 1 or 2 disk drives (160K, 320K, or 720K).

Due to the ADAM color bleeding problem, Powerpaint lets you work around it by having most features using at least 8 pixels, but you can design in BOTH the foreground and background. You can also draw in 1 pixel thickness. Everything's Smartkey driven, with main and sub options available. Control can be via keyboard or the keypad. Full color selection is available for both foreground and background. Graphics are drawn in graphic CELLS (similar to SmartPAINT, PaintMASTER RLE, GraphixPRINT screen). Each cell is 240 pixels across by 160 down. What's different is that your graphics WORKSPACE (total printable area) is a combination of cells. With the normal 64K expander, you get 4 cells, 2 across and 2 down.

This will print roughly 8 inches across by 4 1/2 inches down (1 half page). With the larger expander, you get 8 cells or a full printable page. Most design is in 1 screen CELL, but scroll options allow you to scroll thru the workspace in all directions. Although it does not contain a word-processor, it can definitely be used as a primitive, but effective page design program.

All of the graphics on this and the next page were done with POWERPAINT. Powerpaint does require at least the 64K memory expander, but you can use the Orphanware 128K, 256K, or 512K board. This will let you use more features, specifically a larger graphic workspace. If you wish to print the graphics, you'll also need the Centronics parallel interface, such as the Orphanware PIA 2 or EVE's SP-1 or SP-1P. This is to connect the EPSON FX or IBM 5152 compatible printer (Panasonic 1080 or 1091 is OK). It even supports the EVE Speech synthesizer if you have it, by having spoken