

## ASTROCADE'S UNDERGROUND

by Danny Goodman

You can't really call the group an "underground," because it operates openly, almost vocally. But few of the millions of Atari, Mattel, **Odyssey and Coleco players are** aware that an entire cottage industry has grown around the highly rated, but rarely seen, **Astrocade Professional Arcade** system. To gain appreciation for the third-party support out there, consider that almost 400 individual programs are currently available for the Astrocade — more than for the Atari 2600 and Mattel Intellivision combined.



In conversations, correspondence and meetings with several members of the group, I found a common thread of intense dedication to keeping the Professional Arcade alive. Despite the up-and-down activities of the system's producers over the years, the Arcade guerrillas are keeping the faith.

The Astrocade system started on the hilly home game road back in 1977 as the Bally Professional Arcade, a programmable home game from the people that brought us blockbuster arcade video games of the 1970's like Gunfight and Checkmate. After meeting with minimal success in the home market (many of the Arcade guerrillas maintain it was a half-hearted attempt anyway), Bally in 1980 sold off the Professional Arcade to a newly formed company called Astrovision. To confuse the matter even more. Astrovision later changed its name-and the name of the system - to Astrocade to prevent mix ups with the popular cartridge maker, Activision.

Since the early part of this year, however, Astrocade has been operating under Chapter 11 of the federal bankruptcy laws as they try to extricate themselves from financial difficulty. Product shipments and planned introduction of new cartridges has been irregular, and no one is quite sure what the fate of the Professional Arcade will be. But this turn of events has not deterred the Astrocade guerrillas in the slightest.

Three features about the Professional Arcade attracted early advocates.

Foremost was the system's combined graphics and sound capability. which was very advanced for 1977 and has only recently been surpassed by the likes of the Atari 5200 and Colecovision. Second, a plug-in cartridge at first an accessory, later included with the console at no extra charge-let the user create computer games and other applications using the console's calculator-like keyboard for program entry and a cassette recorder for program storage. That cartridge was the Bally BASIC programming cartridge (later upgraded under the Astrocade BASIC name). With the cartridge and the well-written Astro BASIC tutorial manual, anyone with the time and inclination could become a game designer within the confines of the system's 1.8K memory and the speed of the BASIC language.

Third, there was a promise from Bally, and carried over by Astrocade, that a keyboard addunder would turn the Professional Arcade into a powerful graphicsoriented computer. The most recent incarnation of the add-under, called the Z-Grass 100, has not yet made it to market, but rumors are circulating that another company will have the Z-Grass ready this year.

But, while users patiently awaited the Z-Grass, they were busy writing programs with the BASIC cartridge. Some designed programs just for fun, but others, like professional musician Mike Peace, eventually turned game design into a thriving business.

Mike's company, Wavemakers (Box 94801, Schaumburg, IL 60193). now offers 18 different cassette tapes that load directly into the BASIC cartridge. In addition to featuring some very original games, his catalog also includes a unique guitar course that uses the Arcade's tone generator to tune a guitar. Combined with graphics, the musical program teaches you fingering of chords and chord progressions for folk, blues, etc.

Tom McConnell, who originally bought his Arcade because he liked the invaders-type cartridge, learned that programming in BASIC isn't all that difficult. He now runs also a singularly pleasant Tiny Arcade (Box 1043, Cuyahoga Falls, OH 44223) which produces many titles. Omega Valley, although not as graphically appealing as you see on other home systems, is nonetheless a game with three simultaneous waves of space ships to fight off on three different screens.

One of the most complex maze games on any home game system is L&M Software's (8599 Framewood Dr., Newburgh, IN 47630) Secret of Pellucitar. In this contest, you must guide a miniscule cursor through obscenely narrow channels without touching any of the walls. The steadier your hand and the faster you are, the better your score and rating at the end.

And, what is a first for the Arcade, Spectre Systems (Box 1741, Dearborn, MI 48121) is producing a third-party plug-in cartridge, called Treasure

Cove. Aimed primarily at the younger set (although it is no piece of cake, by any means), the game features a diver which you must guide down to the bottom of the sea to recover treasures oneby-one and return them to the ship above. Hassling you every glub of the way are numerous sea creatures, any one of which will spell an end to your diver's life. And you can't dally, either, because you have limited oxygen with which to retrieve each treasure.

Treasure Cove departs from the Arcade tradition of presenting a menu screen at the beginning. Instead, a colorful title screen appears. There is musical backdrop to the entire cartridge, with a series of three different nautical tunes playing at all times (disengageable, too). The score was produced by Arcade musical expert George Moses. who offers several tapes of his realizations of all types of music for the Arcade, plus a music development system (P.O. Box 686, Brighton, MI 48116).

Software isn't the only part of the Arcade receiving attention from the guerrilla forces. Memory expansions and more sophisticated development tools help bring homebrewed programs very close to the level of the plug-in cartridges available from Astrocade.

Memory suppliers include: R&L Enterprises (2901 Willens Dr., Suite 6, Northlake, IL 60164) with their 64K RAM board: Alternative Engineering Corporation (P.O. box 128. Gardiner, ME 04345) whose full line of Arcade accessories include Viper memory boards, a keyboard for easier programming, RS-232 interface and others; and Perkins Engineering (1004 Pleasant Ave., Boyne City, MI 49712) whose offerings include Blue Ram memory, printer interface and BSR lighting/appliance controller interface.

Mike Peace at Wavemakers has also developed a number of his games in Blue Ram versions. Additional memory allows him to create the game screens in four colors, instead of the regular BASIC's twocolor limits. Particularly impressive are his renderings of Dungeons of Dracula, Flying Ace, and his newest creation, The Gate Escape, which has rotating gates similar to the ones in the arcade game/Colecovision adaptation Lady Bug.

Mike demonstrated some of the graphics development tools he has designed for both Astro and Blue Ram BASIC. Inside of three minutes right before my eyes, he issued a few commands that generated girder-like constructions for a Donkey Kong type of screen background. It made some of the big computerized development systems I've seen at the giant cartridge makers look primitive.

For those with a little bit of Z-80 microprocessor programming experience, or at least the desire to learn, The Bit Fiddlers (P.O. Box 11023, San Diego, CA 92111) makes a Machine Language Manager (MLM) cartridge that helps you design machine language subroutines for faster and smoother character action than is possible with BASIC alone. Andy Guevara of The Bit Fiddlers developed the MLM because he found the standard BASIC language to be too slow for the games he has envisioned. Thus, you will see Andy's imprint on many of the better games developed by other Arcade game makers.

The extent to which the Arcade is supported by third-party suppliers is well-documented in Richard Houser's semiannual Sourcebook, a listing of every program and related product available. Lest you think this is just a skimpy newsletter, the book is 114 pages, complete with many detailed advertisements for the products listed. If you have an Astrocade, you can't be without the latest edition (RMH Enterprises, 635) Los Alamos Ave., Livermore, CA 94550).

Of course, the followers of the Arcade didn't always have it so easy. In fact, much of the credit for keeping the Arcade alive over the years can be attributed to one gentleman. "Bob Fabris in particular is largely responsible for saving the Astrocade system. His monthly ARCADIAN newsletter kept users informed and interested during the 'long dry spell' between Bally's decision to give up and Astrocade's purchase of the system," writes Guy McLimore, Jr., of ABC Hobbycraft, a major Arcade hardware and software dealer (2155 E. Morgan Ave., Evansville, IN 47711).

Bob Fabris is still the editor of the ARCADIAN. Each issue of the ARCA-DIAN contains a wealth of information. In addition to the latest gossip about the future of Astrocade. there are loads of BASIC program listings, reviews, and frequent programming tutorials for BASIC and Assembly Language. Further information is available from Bob at 3626 Morrie Drive, San Jose, CA 95127-9990.

As you may have noticed from the addresses of most of the suppliers. there seems to be a pocket of intense interest in the midwest, particularly Michigan and Ohio. There is little wonder. then, that one of the strongest local user's groups is the Michigan Astrobugs User's Group (59400 Nine Mile, South Lyon, MI 48178). The group has been known to draw a hundred Arcade followers to its meetings.

As a group and as individuals, the Arcade guerrillas are a dedicated lotmore so than any player's group following the other home systems. Remember that these Arcade followers are doing more than simply massaging a joystick to the rhythm of a

professional game designer's beat; they are taking an active role, doing the actual designing, production and marketing of the products themselves.

In all my years of writing about video games and computers, never have I run across a group so willing to help with information and examples of their work. It certainly can't be easy for them to sustain interest and enthusiasm for a system that never seems to catch on with the masses. Yet the frustration, if there is any, is not evident. On the contrary, the disappointment in Bally's and Astrocade's ability to get "The Word" across to the home game buying public almost seems to link these survivors more closely together. They continue to explore the capabilities of a wonderful system and stretch their knowledge about its inner workings to new limits. They are forever sharing tidbits they unearth about the system.

Brett Bilbrey, who started publishing his BASIC games in the ARCADIAN a few years ago and has graduated to the design of the Treasure Cove cartridge, speaks for every Astrocade guerrilla when he resolutely states, "We're not going to give up on the Astrocade system."