## Astrovision plans multi-segment marketing thrust for new Zgrass-32 computer system

by George Moses

Astrovision, the video game oriented computer manufacturer from Columbus, Ohio has recently announced that their new Zgrass-32 computer keyboard is nearing the prototype production and consumer testing stage. The Zgrass-32 is the long awaited "add-on" component to the Bally Professional Arcade, a Z-80 based video game machine introduced by Bally Manufacturing in 1978. Astrovision purchased the consumer division of Bally in August of 1980 and is aggressively pursuing the objective of expanding what had been an extremely sophisticated video arcade into what promises to become the most powerful micro-computer available within three times of its \$898.00 price tag.

The big attraction of the Zgrass-32 is its language, Zgrass. Written by Professor Tom DeFanti of the University of Chicago, Zgrass permits the user to accomplish complicated video graphics easily by prompting the programmer with its built-in self teaching routines. A powerful 24K of ROM containing a graphics assembler, the Zgrass language, a math package suitable for scientific and business calculations and many other features make this the first home computer in history to feature a true graphics language. The power of Zgrass in the marketplace promises to be even more diverse than the applications of the computer from the time of its introduction to the present day.

The Computer Hobbyist

The first market the Zgrass-32 will be aimed at will be the current owners of the Bally Arcade which contains the Z-80 microprocesser and screen RAM that the Zgrass-32 plugs into. These are extremely creative computer hobbyists who have been waiting over two years for this development and in the meantime have had to content themselves with programming in BALLY BASIC, a 1.8K BASIC that plugs into the Arcade in cartridge form and allows the user to access all the graphic effects, sounds and colors built into the Arcade. Offering a Zgrass-32 to one of these hobbyists will be akin to giving a five pound sword to someone who's been practicing for two years with one that weighs forty pounds! The software that they will be able to create will come forth in an unbelievable volume, and will attract professional programmers into the Zgrass group because of its growing appeal among enthusiasts.

Hobbyists in Related Areas

The Zgrass-32 is the only system with a keyboard that is fully compatible with video equipment. The Bally Arcade has been used by cable TV networks for printing messages on the screen over the local origination channels, using graphics routines between messages and making a very pleasant impression with its extremely accurate color generator. Again, the power of the Z-grass graphics language with its 32K of RAM will allow the video hobbyist to do titling and video animation to an extent previously impossible without the expense of thousands of dollars for professional video equipment. The potential of this market is certainly as great as that of the computer hobbyist simply because of the larger number

of participants in this group. Astrovision's plans to cater to their needs is evidenced by the full page ad they placed in the February, 1981 issue of Video, a magazine serving the home video afficionado.

The Computer Consumer

From the beginning programmer who wants to become computer-literate to the business oriented person who wants to dial into database networks Zgrass will allow the programming of picture data for the first time. Astrovision offers a machine with superb graphics at a much lower price than computers that are still programmed in the text-oriented BASIC. Through an interface the Zgrass-32 can decode and mix videodisc signals to make excellent animated graphics on the screen. This is an exclusive ability to retrieve coded information and make it move as well! Thus, the vast consumer market is waiting to be tapped with a powerful machine at a bargain price.

The Education Market

While BASIC is limited to trivial computer-assisted instruction remaining at the conceptual complexity of flash cards, Zgrass has the text and picture handling capabilities to teach in sophisticated ways because it was designed to give educators and artists complete control over the video medium. Not just text, not just lines and boxes, but complete interactive programming using an interlacing of graphics, text and logic to give courseware developers a machine that is infinitely applicable to their work.

The Third Party Software Market

Third party software authors heretofore have had to depend on disc systems and audiotape to deliver their software which makes it easy to copy and leads to much infringement on copyrights. With the Zgrass-32 Astrovision can offer the third party software developer the protection of the cartridge form of delivery, (very difficult to copy!). A special package is being put together to accelerate the development of programming expertise in Zgrass. Encouraging the growth in number of Zgrass programmers will lead to a proliferation of software vendors and extend the applications of this machine, to more users in all occupations.