# neak Peek: The Iron Helix

by Jon A. Blum

NOTE: Screen shots and information presented in this article are based on a pre-release version of The Iron Helix and are therefore are subject to change. This article is not a review.

It seems as if CD-ROM titles have been appearing in droves over the past few months, with titles such a Spaceship Warlock, Virtual Valerie, The Journeyman Project, and Cosmic Osmo, just to name a few. The wonderful, high capacity medium of CD-ROM has opened up whole new worlds — literally. By storing hundreds of megabytes of images and sounds on a single CD, games that could hardly be imagined several years ago are now becoming commonplace. The emerging Interactive Adventure genre seems to be the game of choice for those fortunate enough to own a CD-ROM drive. And developers of these epic adventures are almost invariably artists with skills ranging from music to state-of-the-art 3D modeling and animation.

The latest entry into the world of Interactive Adventure is Iron Helix, a science fiction thriller with over 1500 separate animated sequences totalling over 500 megabytes with sound. Although not yet released, the Macintosh version of Helix is expected to be shipping by late spring ‘93 with a DOS-based version to follow. Helix will be published through Spectrum HoloByte and is being developed by Drew Pictures, a small San Francisco, California based multimedia post-production house.

Drew Pictures. Drew Pictures is a five-man startup founded by Drew Huffman. Prior to forming Drew Pictures, Huffman was involved in freelance work as a computer animator with clients such as Apple Computer and CNN. In 1992, together with the help of Vincent Carrella, Huffman set out to form Drew Pictures and assemble the Iron Helix team. Huffman was responsible for the conception and overall design of Iron Helix as well as being the lead modeler and animator. Carrella helped form the company and is acting as assistant producer for Iron Helix. His main responsibilities include marketing, public relations, and production assistance. Carrella was formerly a product manager and marketing manager at Paracomp/Macromedia, publishers of multimedia software.

When asked what the inspiration for Helix was, Carrella replied: “Many things inspired us, including QuickTime from Apple (which inspired the interface and animation playback design). In terms of movies and games, we were inspired by Blade Runner, Alien, Star Wars, 2001, PacMan, Spaceship Warlock, and Star Trek (and many other science fiction titles).”

Rounding out the staff at Drew Pictures are Rich Cohen and J. A. Nelson. Cohen is creative director and is responsible for rendering, animation, lighting, and design. Cohen was formerly with Industrial Light and Magic, the Marin, California, based special effects house formed by George Lucas. While working for ILM, Cohen was one of the technical directors for effects in films such as Terminator II and Death Becomes Her. Cohen was involved with a number of Academy Award-winning special effects teams including Total Recall. Needless to say, we can expect to see some incredible graphics!

J. A. Nelson is the programmer and interactive designer for Iron Helix. Nelson was formerly with Eclipse and Animatrix, where he programed many interactive projects for clients such as Apple Computer. Nelson is an expert with Macromedia Director and Lingo. Lingo is a programming language similar in syntax to Hypercard. Put simply, it's the heart of the game, making it interactive by activating animated sequences based on the players' inputs.

he Plot. Iron Helix is set far into the future, and the earth is in a state of Cold War with an alien race known only as the Thanatosians.

Somewhere in a highly classified sector of space, a powerful ship carrying a Doomsday weapon is participating in war-game maneuvers. The ship is a Cerberus Class destroyer named SS Jeremiah Obrian, and it contains a payload so secret that even the crew is ignorant of its exact nature. But of course you know it's carrying a new weapon—the H-Bomb of its era—which is armed and ready for deployment against the Thanatosians in the event of war.

The war game is extremely realistic—perhaps too realistic—for the Obrian's own computers, which takes control of the ship and initiates an attack plan for Calliopé, a small, Earth-like Thanatosian planet. The ship's crew and captain attempt to override the computer, but the computer fails to recognize the captain's DNA access code and ignores all attempts to abort. Unbeknownst to the crew, the weapon they're carrying contains a deadly virus that quickly attacks the cells of an organism, mutating the DNA and rendering the body unable to carry out vital metabolic functions. Within hours, an infected organism dies, deprived of its ability to manufacture necessary metabolic proteins. Unable to resist the virus or interface with the computers, the crew dies off one by one. The ship heads towards Calliopé carrying a weapon that will start a war that could end all life in the galaxy.

Meanwhile, back at the ranch, only a few high-ranking officials are aware of the ship's cargo and programmed target. Precious time elapses before word reaches military HQ, but by then the Cerberus Obrian is all but unstoppable, programmed to deliver its virulent payload swiftly and with deadly precision. A high-priority emergency beacon is broadcast in the slim hope that someone, somewhere, might intercept the ship.

Someone does receive that beacon, and that someone is you. There you are on board the Science Ship Indiana. It has a spotty crew and is weaponless, but it does have a powerful tractor beam. It could latch onto the Orbrian and tow you along while you figure out a way to stop it. Your ship may be slow, but what it lacks in speed it makes up for in navigational accuracy. You're able to plot a course and proceed to the intercept coordinates.

With a potentially deadly virus on board, you have to send in a probe and hope it can get past whatever defenses the ship might have. If the ship can be destroyed, or the weapons somehow disarmed, the probe is your only hope of doing it. With just six hours before the Obrian penetrates Thanatosian space, you have little time to spare.

The Zoological Probe you carry can only observe and gather micro-samples of organic life. It cannot attack or even defend itself, but it can interface with the computers, and that just might be enough for you to sabotage and avert a holocaust.

Game Play. The entire game revolves around the necessity to either disarm or destroy the SS Jeremiah Obrian. The action takes place at the remote controls of your Zoological Probe and you have just six hours to complete the task.

Helix, like other titles, uses a relatively small viewport for displaying the game graphics. This is necessary due to the relatively poor performance of current CD-ROM drives, and so that the hundreds of graphic frames will all fit onto one CD. Given the current state of technology in terms of storage requirements and performance, full screen animation is still future tense.

To compensate for this relatively small animation window, Drew Pictures has constructed a clever control panel motif to fill the rest of the screen real estate. And fortunately, it's not all dead space. In addition to the main view screen, the probe's control panel houses navigation controls and two secondary information display monitors. These secondary displays are used to view the ship's computer, your current location, etc. In addition, there are buttons for routine game options such as saving, help, and audio settings. The control panel takes on the look of a dilapidated piece of rusting used equipment and is stunningly realistic in its design.

At the helm of the remote probe, you journey throughout the ship trying to gain access to

the many rooms aboard the maze-like spacecraft. Secured areas and computer terminals require a DNA access code, and it's up to you to find samples of the dead crew member's DNA in order to gain entry. There are hundreds of pieces of useless organic material and you have to use your probe's sensors to sift out all the useless material from the eight or so pertinent samples. The various computer terminals throughout the ship will provide information such as crew member video logs and diaries that supply vital information necessary to complete the game.

You've only got one problem...there's an armed sentry probe on board programmed to destroy all intruders. It's linked to the ship's computer and has extensive knowledge of the ship's layout. Using this knowledge and various sensors, the sentry is able to locate your position every time you open a door, access a computer terminal, or activate your on board sensors. Using artificial intelligence, it looks for a way to cut you off, then proceeds in short order to your probe's location in an attempt to fry its circuits. You have roughly 30 seconds after accessing a terminal, doorway or your on-board sensors to clear the area before the sentry arrives. If a line of sight between your probe and the sentry probe is established, you're dead meat. You must maneuver through the rooms and corridors without making visual contact.

Since you have no weapons other than your own ingenuity, you'll have to compromise by making use of the ship's computer and your probe's navigation and scanning equipment to combat the sentry. Even if you manage to destroy the probe, a new one is launched within a few minutes.

Performance Matters. Strangely enough, Helix does not make use of Apple's QuickTime. Instead, PACo was used in conjunction with Macromedia Director to complete all of the 1300 animation sequences. Files are organized sequentially on the CD which minimizes seek times. According to Drew Pictures' Vincent Carrella, QuickTime was the original target playback method, but they found PACo to be more reliable, faster, and loss-less. Attaining an overall performance of 6 frames per second streaming off the CD, Iron Helix is expected to set new performance standards for CD-based interactive adventures.

System requirements are modest, requiring only 4 MB of RAM and a 12" or larger color monitor. Iron Helix will run on any color Macintosh including the Color Classic. According to Drew Pictures, Anything beyond 8 MB of RAM will not yield any added benefits. Iron Helix will perform slightly better on faster machines, but not significantly.

When asked what set Iron Helix apart, Carrella explained: "First, it is the first CD without load-times or delays. There is no click-and-wait. The action is fast-paced and arcade-like. Second, the entire game is played within a virtual-reality like 3D environment-a huge realistic space ship that contains dozens of rooms and corridors. Thirdly, the graphics in Iron Helix are truly cinematic in style. They are the most realistic of any game ever created. This is the first CD that takes full advantage of the mediums ability to store huge volumes of information. There is no less than 500Mbs' of graphics, including over 1300 movies and more than 15,000 frames of animation. It is the next generation of CD-ROM people have been waiting for."

Graphics. Approximately 95 percent of Helix's models were created in Swivel 3D Professional, with the remaining five percent created in MacroModel. Color and bump maps were created in Adobe PhotoShop. Models were then imported into the Electric Image Animation System, where the maps were applied and finally lighting, rendering, and animation were done. All tolled, Helix took over 15 months and tens of thousands of human-hours to complete.

Summary. Iron Helix contains six levels and a total of 30 rooms as well as a branching plot that allows no less than six different ways to win (and many more ways to lose). The very thought of having a killing machine on your tail for the entire game should be enough to get anyone's adrenaline pumping. The 3D graphics throughout are incredibly realistic, and the meticulous attention to detail will not go unnoticed. Perhaps most important of all, the game should perform very well in terms of speed, which I'm sure anyone who has ever played a CD game will appreciate. In cleverly combating technological restraints such as storage and speed requirements, Drew Pictures has successfully managed to turn them into design elements. I for one look forward to Iron Helix with great enthusiasm. On behalf of IMG, I'd like to wish all the best to the creative folks at Drew Pictures for bringing us this little (or should I say BIG) gem.