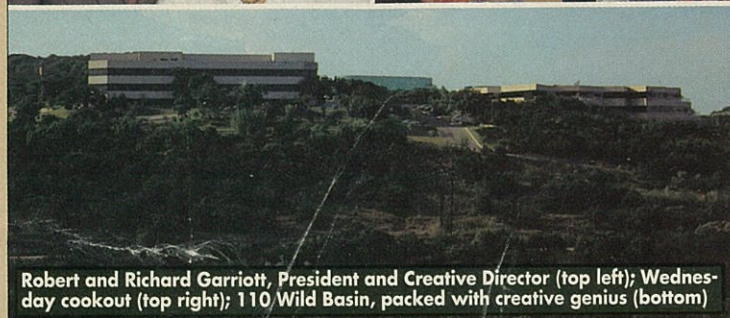
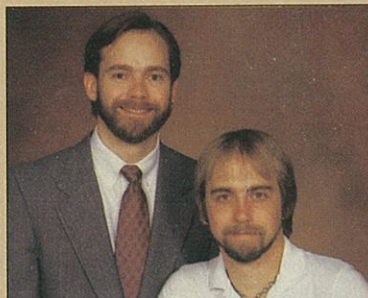




RIGIN's SOFTWARE ENTERTAINMENT TECHNOLOGY REPORT



Robert and Richard Garriott, President and Creative Director (top left); Wednesday cookout (top right); 110 Wild Basin, packed with creative genius (bottom)

LIFE IN THE FAST LANE A Brief History of ORIGIN

It is impressive to consider what ORIGIN has accomplished in just nine years. The whole software industry has taken note of this company's meteoric rise, particularly over the past two years. *Soft-letter 100*, a leading software industry publication, ranked ORIGIN the 55th largest U.S. software publisher for 1990, rising from the 75th spot in 1989. The tenth fastest growing independent U.S.-based software company, ORIGIN is rising even higher this year.

Beginnings

From 1983 until two years ago, ORIGIN games were primarily generated by freelancers and for initial release on the Apple II. The largest games during these seven years took just over a mega-

byte each.

In 1990, ORIGIN completed its first major MS-DOS product, *Ultima VI*. It shipped on seven low density disks and occupied four megabytes on a hard drive. Three other games followed in the same year, including *Wing Commander*, which set new industry standards for action/combat simulators.

Now, late in 1991

The ORIGIN team has once more doubled in size over the last twelve months. It has added an audio department that is incorporating sound, music and speech into all products in a new and dynamic manner, unparalleled in this industry.

This year, ORIGIN is producing

Continued on page 2

ULTIMA Worlds of Challenge

When Richard Garriott embarks on a new *Ultima*, his primary goal is not to design a game, or even to tell a story. It is to create an entire world for his players to explore.

... a philosophy based upon the ideals of Truth, Love and Courage.

That world is the medieval realm of Britannia, filled with hundreds of unique characters, creatures and objects. As players move through this world, they are constantly challenged with new situations and items, each requiring experimentation and ingenuity.

But Garriott challenges his players

Continued on page 2

WING COMMANDER

When Chris Roberts first conceived *Wing Commander*, he envisioned the most engaging flight simulator ever. He planned to use the novel approach of bit-mapped graphics to enhance realistic detail. But just as important as realism, he wanted *Wing Commander* to be fun—easy to learn and exciting to play.

To bring the story to life, Roberts told it in computer gaming's most cinematic presentation. He deliberately patterned the flow of the game after motion pictures. The hero of the story appears in scenes that advance the plot, receiving his orders and chatting with his fellow pilots, while the player sits back to enjoy the flow of the narrative.

The *Commander* series offers complete characters, clearly depicting their

Continued on page 2

THE ELECTRONIC GAMES REVOLUTION

A Glance at the Past and a Glimpse of the Future

The Past

In the beginning, there was *Pong*. Each player controlled a paddle on a TV-like screen, moving it up and down the screen in order to hit the small image of a ball moving toward them.

Soon thereafter came video games. An electronic device connected to your home TV and, like magic, there was *Pong*, and other similar games, ready to be played anytime you desired.

Then, from the dark recesses of hacker garages, came home computers. And the first things to become widely available for these new machines were computer games.

The Present

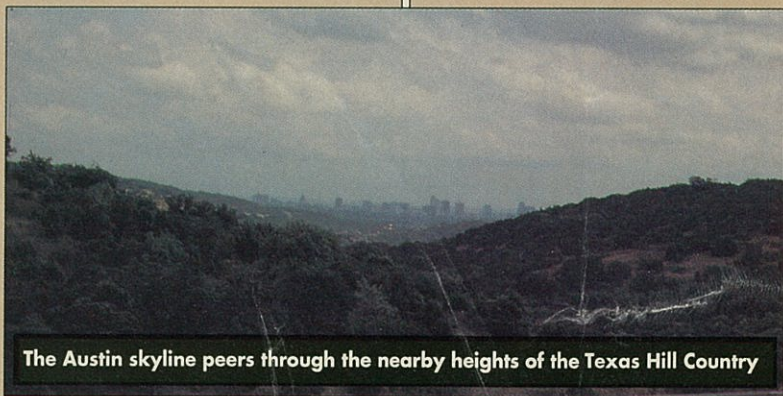
Gone are the days when a single programmer can sit in his room and create all of the design, code, artwork, sound and testing required to complete a product. Today's typical state-of-the-art product requires a team of 15 to 25 specialists working for 12 to 18 months.

Each year designers grow increasingly excited about the new technological tools that are becoming available. Within this next year we could see CD technology improve to the point where original CD-based games are available and replacing the multitude of high density floppy disks required today. CDs will allow the creation of products that are 650 megabytes, or more, in size. It will be easy to fill all this space. Digitized video, speech, sound and music require tremendous amounts of memory.

The Future

As computer speed continues to rise, as computer memory continues to grow, and as consumer tastes continue to mature, interactive entertainment will require the efforts of even more specialists with highly technical studios, operating on budgets that meet or exceed the budgets of today's top box-office movies. These products will have the same visual and audio quality of today's movies. The big difference is that they will also be interactive—you determine the sequence of events.

What of the more distant future? What about virtual reality and sense-surround technology? One day the tools will be at hand to create a complete perceptual experience. We're not there yet. But game developers wouldn't be the kind of innovative and creative people they are if they didn't take a few moments, now and then, to daydream...about what they could do if they just had a faster machine, or virtual memory, or direct perceptual feedback, or . . . ■



The Austin skyline peers through the nearby heights of the Texas Hill Country

Life in the Fast Lane (continued from page 1)

another five major MS-DOS products—*ULTIMA: Martian Dreams*, *Wing Commander II*, *Ultima VII*, *Strike Commander* and *ULTIMA Underworld: The Stygian Abyss*. You can find more information on these products elsewhere in this report. Each fully occupies the energies of twenty dedicated designers, programmers, writers, artists, musicians and playtesters. None will take longer than 10 months to create, yet ORIGIN's investment in each is over 20 man-years. All this is planned, while simultaneously developing both the English and Japanese versions of *Ultima Warriors of Destiny* for NES and *Ultima Runes of Virtue* for Game Boy.

Meanwhile, ORIGIN is also gearing up for more Japanese, French and German translations, as well as Super Nintendo and Sega Genesis conversions and its first game for the FM Towns CD computer, complete with digitized speech. ■

Wing Commander (cont. from pg. 1) appearance and personality. Players care deeply about their gaming alter-egos, and the other fighter pilots come to life just as vividly through the conversations and missions they share with the hero. In fact, soon after *Wing Commander's* release, fans began swapping war stories on the national computer networks.

The combination of flight simulator—with its fast action, ease of use and unprecedented graphic detail—and cinematic storytelling was more powerful than even Roberts himself had imagined. ■

Ultima (continued from page 1)

with the exploration of more than just the physical world—they are presented with the opportunity to investigate morality, ethics and philosophy as well. Each game in the first trilogy of the Avatar's adventures—*Ultimas IV, V and VI*—focuses on the Way of the Avatar, a philosophy based upon the ideals of Truth, Love and Courage.

Worlds of Discovery

Of course, every *Ultima* is an exciting, challenging game, and every one tells an intriguing, engrossing story. But to Garriott, the story an *Ultima* tells is most importantly the road map he gives his players to guide their adventure of inward and outward discovery in ever-new, imaginative worlds.

Ultima VII will present the Avatar with yet another ethical dilemma, allowing players a new opportunity to explore the inner man as well as the outer world. ■

ORIGIN'S TWO TOP VISIONARIES: A Study in Contrast

Richard Garriott and Chris Roberts. Born in the other's homeland. Each maintaining very different lifestyles. Having contrary and passionate views on just about everything. Their common bond: a life-long commitment to creating the best possible games that computer technology will allow. Approaching game design from opposite perspectives, they listen to, learn from, and influence each other continuously. The result is a steady stream of top quality ORIGIN games, certain to deliver the best that these two powerhouse talents have to offer.

RICHARD GARRIOTT

Cambridge (U.K.)-born and Houston-raised, *Ultima* creator Richard Garriott began designing and programming computer games in his early teens, working on the mainframe terminal in his high school math department. He developed dozens of fantasy roleplaying games on the mainframe before starting

"A great game should have a profound storyline and be richly detailed."

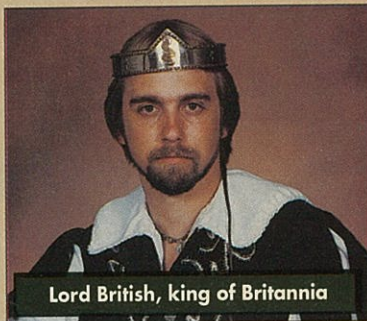
Richard Garriott

work on his first Apple II home computer. Not long thereafter, he completed *Akalabeth*, precursor to the *Ultima* series. Its disks were duplicated one at a time and packaged in zip-lock baggies with a photocopied cover-and-instruc-

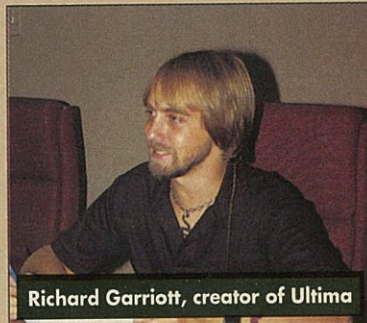
tions sheet.

Today in *Ultima* development-team meetings, Garriott sounds more like a football coach giving a half-time talk than a programmer discussing code. Though the coordination of such a large team places a heavy demand on his time, he works directly with each member of his team to ensure that every *Ultima* game remains true to his personal vision.

Outside the office, Garriott is an avid amateur astronomer and collector of antique scientific equipment. On weekends, he can often be found participating in one of his favorite action sports, which include sky-diving, dirt-biking, spelunking and paint-gun wargames. He's recently begun lessons as a glider-plane pilot. And to break up the long hours that come at the end of every software project, Garriott often leads his team through the halls of ORIGIN in a rousing game of laser tag! ■



Lord British, king of Britannia



Richard Garriott, creator of *Ultima*

CHRIS ROBERTS



Chris Roberts, the Commander's commander

Although Chris Roberts was born in California, he grew up in Manchester, England. He began working on the BBC Microcomputer, a British-made machine, at the age of thirteen, and was soon hooked. Within a year, he had sold his first computer game, programmed in BASIC, to the British magazine, *Micro User*. In 1983, Roberts switched to As-

sembly language, and wrote three games, each of which were released separately. Of these, both *Wizardor* and *Stryker's Run* reached number one on the British charts.

"A great game should be an interactive audiovisual feast that draws you into another world."

Chris Roberts

Roberts debuted for ORIGIN and the American market with the medieval fantasy *Times of Lore*, in 1988, and *Bad Blood*, a post-holocaust roleplaying game, in 1990. Roberts' next project, *Wing Commander*, skyrocketed to the top of the charts in late 1990, and has

stayed there for a full year. *Wing Commander*, *Secret Missions* and *Secret Missions 2: Crusade* continue to hold three places in Software Publishers Association's "Top 25 MS-DOS Games" hit list. With *Wing Commander II* recently released and *Strike Commander* debuting this winter, we can look forward to Roberts' continued domination of the action/simulator field.

Often, Chris and his team work into the early hours of the morning, head home for a quick shower and a few hours' sleep, then come straight back to work. When the time comes for Roberts and his team to blow off some steam, they can often be found at the lake, ripping up the water on jet skis, or standing in line for the latest blockbuster motion picture. Roberts derives much of his inspiration from movies, and pays close attention to film industry trends to guide his own work. ■

CINEMATIC GAME DESIGN

ORIGIN has borrowed its structured approach to game design from the film industry. Just like a motion picture, an ORIGIN game goes through three major phases on the road to completion.

Producer



As in the motion picture industry, the producer is the top executive on the project development team, with final authority over both business and creative issues. Once the core design team has generated a complete design document, the producer creates a production plan for the project.

He or she tracks expenditures, budgets and resource allocation, to be sure that the project follows the specifications set down in the design document.

The producer also coordinates the packaging and documentation for the product, and works with the marketing department to prepare publicity for the game. By the release date, the producer has orchestrated the efforts of up to 30 people to present the consumer with a complete entertainment software package.

Director



The director provides the guiding vision that shapes a game.

During production, the director is the one person who is aware of all production pieces simultaneously, and is responsible for seeing that the work of everyone on the project remains consistent with the original vision and compatible with the work of the rest of the team.

As the release date nears, the director is the link between the Quality Assurance team, who find the bugs, and the project development team, who fix them.

PHASE I Pre-Production

Pre-Production can take from one to three months and begins when a game concept is handed over to a producer and a director for development into a project outline. This outline includes preliminary budget estimates, personnel requirements and projected marketability. Once a project outline is approved, a lead programmer, art director and head writer are assigned.

These five work together for several weeks to prepare a design document. This spells out all aspects of the project, and should anticipate every task necessary to create the game.

From the design document, the producer and director figure a schedule and budget. A typical ORIGIN game schedule, created with project flow-charting software, now covers an entire 8 x 15-foot wall; a typical budget easily totals a half-million dollars or more. Finally, as the last step in the Pre-Production phase, the rest of the development team is assigned, and the project moves into Production.

PHASE II Production

With their respective teams in place, the lead programmer, art director and head writer begin the actual work of creating the game. The director serves as overall supervisor and coordinator, making sure that the vision expressed in the design document is realized, while the producer tracks the schedule and budget.

Programmers typically begin with the "core" code—the actual engine that will drive the game.

Artists begin with the core graphics, followed by special animations and one-shot graphics. In *Strike Commander*, the first artwork created were the airplanes and terrain pieces, followed by cinematic sequences and

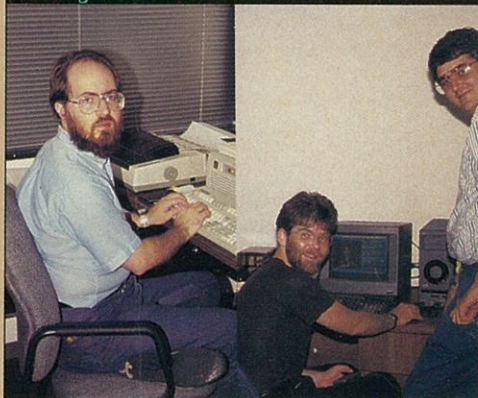
character close-ups. For *Ultima VII*, the artists began with the terrain and animated human figures, then moved on to objects and character portraits.

Writers typically follow the game's plot straight through. Doing so allows them to see the conversations and characters they have created in their proper context, to make sure they both work and "feel" right.

Audio production for the game follows two tracks—one for music, the other for sound effects. The musical composer usually begins by creating the game's main theme, which will set the tone for the rest of the soundtrack. This is followed by pieces that will play in specific locations or circumstances. The sound effects engineer begins with the sound effects that will be heard most frequently. Meanwhile, if there is to be any digitized speech in the game, actors must be recorded performing their lines.

Once all the code, graphics, text and sound have been prepared, the programmers assemble them into the first prototype of the game. Four to twelve months after Production began, the project moves into Post-Production.

Programmer



Even though the modern development team includes a wide variety of specialists, programmers remain at the center of the action. They must know what is possible on

SOFTWARE ENTERTAINMENT TECHNOLOGY REPORT

Quality Assurance

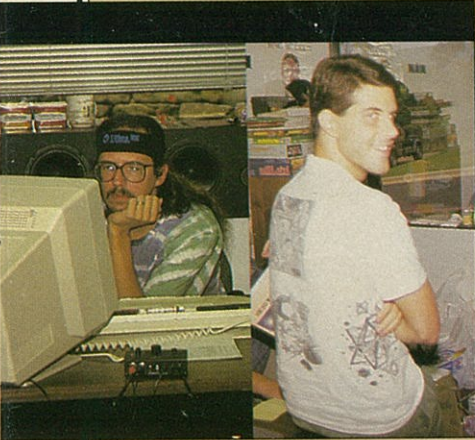


Most of us **enjoy** playing the final, commercially-released version of a computer game. The Quality Assurance Technician doesn't have that luxury—he **has** to play a game all day, every day for many weeks, before it's in working condition.

If time allows, the QA team is brought in before Post-Production, to give the development team feedback on gameplay, balance, ease-of-interface and overall fun. Even if this is not possible, the QA team's suggestions during Post-Production playtest are usually implemented to improve overall game quality.

PHASE III Post-Production

In Post-Production—which lasts another two or three months—the entire product is brought together. The game enters rigorous playtesting by Quality Assurance, who fine-tune it for play-balance and fun, and track down its bugs. Playtesting is one of the most intense periods in a game's creation,



a computer, and make it happen in the game. Programmers must remain abreast of all industry developments to be sure their games take fullest advantage of the latest technology.

Audio Specialist



Composers are responsible for the rich musical scores that set the mood in each ORIGIN game. ORIGIN's action-sensitive soundtrack demands that the game's music be written in small pieces, ranging from a few seconds to a couple of minutes in length. These pieces must link together smoothly, to match the player's decisions, whatever he may decide.

ORIGIN's sound effects engineers have a very different challenge. They must manipulate computer-generated sound waves to duplicate the "real-world" sounds being represented.

requiring close cooperation between the rest of the development team and QA.

When the game is nearly bug-free, it is subjected to a strict sign-off procedure in which the game is played from start to finish on a wide variety of computer configurations. When the game has passed the sign-off procedure without a single bug detected, master disks are sent to the duplicators for mass production.

Concurrent with software Post-Production, the packaging and documentation and other support materials are being prepared. The producer supervises the writing and editing of the manual, reference card and any other documentation or support materials, in conjunction with the marketing department. The documentation is reviewed by QA along with the game, to verify its accuracy and completeness.

Finally, the package is assembled and shipped to retailers for its official debut (and the entire ORIGIN staff celebrates its completion!). After anywhere from eight to eighteen months, the game is finally released to the world, where thousands of long-time ORIGIN fans are eagerly awaiting it. ■

Artist



Artists are called upon to perform a wide variety of tasks, ranging from the top-down map graphics of an Ultima and the 3-D modeling used to create the planes in Strike Commander, to the full-screen character close-ups and digitized paintings that distinguish the cinematic sequences in all ORIGIN games.

Writer



Computer game writers must be more than just skilled prose stylists—they must adapt to the unique conditions of entertainment software. Most of what they write will be interactive conversations, which are very different than the dialogue produced for films or books.

Technical Design Assistant



A TDA is the jack-of-all-trades of the development team, handling tasks ranging from research to data implementation.

When the core code and graphics are up and running, the TDA crew begins to create the game world, laying out the maps and placing the terrain and objects. As the graphics and text reach completion, TDAs import them into the game.

Once the game moves into Post-Production, TDAs maintain bookkeeping for the bug-fixing process.

Ultima VII

THE BLACK GATE™

Taking a bag from the chest

Items contained in chests, bags, and backpacks are conveniently displayed within the larger item. Inventory and status screens are done the same way, showing outlines of the Avatar and party members with appropriate slots for weapons, armor, and clothing. Signs and scrolls are displayed in gumps as well.



At the armorer's

Every character in *ULTIMA VII* has his or her own life and schedule. Most have jobs, will wake up and do their "routine" before going to work. They put in a full day, then go home or to the pub for dinner. At night, they pull back the covers, climb in and go to sleep.



A stroll in the park

ULTIMA VII's new display format gives the player a full-screen view of Britannia. Everything is much larger than before. The three-dimensionality of the world is apparent as the Avatar passes through this grove. He can move in, around and behind the trees with no difficulty.



A fascinated horse

Animals and creatures are more life-like than ever before. They are more realistically proportionately, designed and animated. Not only are there horses, cows, chickens, dogs, cats, mice, birds and foxes, but also snakes, rabbits, bats and sheep. Monsters are plentiful: dragons (including a 3-headed one!), drakes, cyclops, ghosts, gazers, trolls, giant bees, giant spiders, giant centipedes and other, more mysterious creatures.



Iolo greets you

ULTIMA VII's new interface is totally mouse-driven—you can talk to characters without typing a single word. A double click on a character brings up his portrait and whatever he might have to say. Another click brings up a selection of key words with which to address the character.



What do you want to reply?

The game remembers what you learn and adds pertinent key words to your choices as you acquire them. For example, a mage might tell you to speak to a blacksmith about iron ore. The phrase "iron ore" shows up as a possible selection with the blacksmith only after the mage mentions it to you.

Producer/Director Richard Garriott

Writers Richard Garriott, Raymond Benson, Andrew Morris, Jack Herman, Beth Miller

Software Engineers Tony Bratton, Philip Brogden, Ken Demarest, Mike McShaffry, Paul Meyer, Herman Miller, Zack Simpson, Jeff Wilson, Tony Zurovec

Artists Jeff Dee, Bob Cook, Karl Dolgener, Glen Johnson, Denis Loubet, Micael Priest, Gary Washington

Technical Design Assistants Bruce Adams, Eric Brown, John Watson

Audio Director Martin Galway **Composer** Dana Glover

Sound Effects Engineers Marc Schaeffgen, Nenad Vugrinec **"The Guardian"** Bill Johnson

Quality Assurance Jeff Shelton, Scott Hazle, Ben Potter, Kevin Potter, Scott Shelton, Mark Vittek

Development Services Manager Sherry Cain **Box Design and Graphics** Craig Miller, Cheryl Neeld

Associate Producer Alan Gardner **Executive Producer** Dallas Snell

FADE TO BLACK

You, the Avatar, receive a mysterious and taunting message from another dimension. The sender is a malevolent entity whose entire threat to Britannia is unclear. But one thing is certain—this being possesses enormous power and malicious intent.

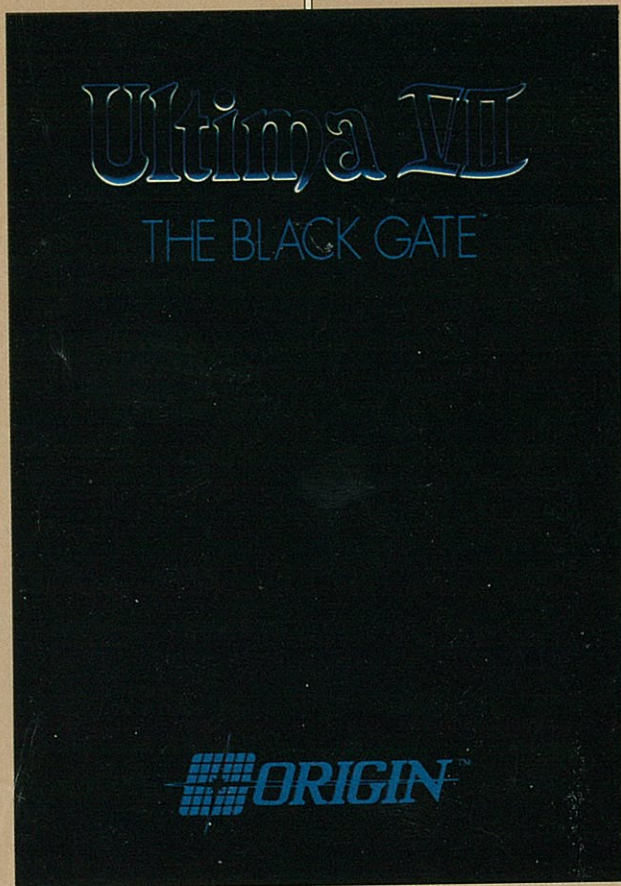
For the first time, *ULTIMA VII The Black Gate* combines the familiar and popular sword-and-sorcery elements of previous adventures with those of murder mysteries and horror thrillers. In addition to your combat and exploration expertise, you will need to master the arts of investigation and detection—or you will never uncover the secret of... *The Black Gate!* ■

BEHIND THE SCENES

An Interview with Lord British

Q: *How does Ultima VII differ technologically from its predecessors?*

A: Ultima VII takes several leaps forward. Keep in mind that our Ultima VI development team had approximately ten times the computational power at our disposal than for previous Ultima projects, since it was developed for the MS-DOS platform from the start. We learned a lot from that experience, so in Ultima VII we get to really strut our stuff, so to speak. Among the new features is a world that is no longer built in small (what we called) tiles. Now it is constructed with a new technology that allows more realistic and close-in views of the landscape of your environment. This, combined with a full screen viewport into Britannia, puts you right there like never before. The interface of *Ultima VII* is also improved over *VI*. There is no longer any need for two-stroke commands. The new structure is an intuitive, mouse-controlled, immediate input system. It is far easier to use than ever before. ORIGIN's new sound technologies, part of the ORIGIN FX package, will further draw the player into the world of Britannia.



Q: *ULTIMA VII The Black Gate is the first ORIGIN product to be labeled "MP-13, for Mature Players." What is behind the decision to take this direction, and what in the game qualifies it to be labeled as such?*

A: Generating emotional reactions, in any story, is always desirable. Though the *ULTIMA* series will still continue story lines that are socially responsible and have a high ethical quality, we are giving the *Ultima VII* plot a little more bite. Toward this end, story developments that disparage things dear to the player generate strong emotional reactions. In this particular game, we felt responsible to voluntarily rate it MP-13 because of imagery associated with the evil perpetrations of The Guardian's followers. Graphically represented pain and death will help the player to empa-

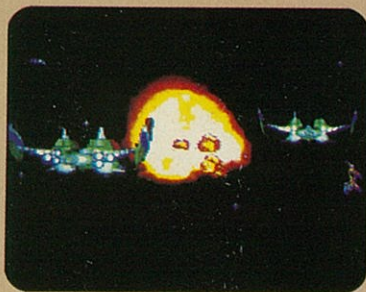
thize with the victims' plight. It is never desirable to include gratuitous violence in any story, but the scariest foes are those whose evil is most thoroughly perceived.

Q: *What has happened with the "You can star in Ultima VII" promotion that was advertised in Ultima VI?*

A: Well, we have been completely overwhelmed by the response we have received. Entries have poured in from the far corners of the world. Over the summer, we selected the thirteen lucky winners of the contest and wrote their characters into the game. The winners will actually be able to see and talk with their alter egos. As far as I know, this is the first time that any company in the software entertainment industry has actually solicited character ideas from its fans! ■

SOFTWARE ENTERTAINMENT TECHNOLOGY REPORT

Two *Drakhri* fighters harry you and your wingman as you complete your torpedo run against a *Ralatha* capital ship. With the new phase-shield technology, only ship-killer torpedoes can destroy a capital ship, and only if you can run through the deadly gauntlet of heavy flak and enemy fighters to lock the torpedo on target. *Wing Commander II* adds even more pilots to the roster of wingmen who accompany you on missions.



Broadswords destroy a Kilrathi capital ship



Broadsword turret gunner

Prince Thrakhath has sworn to destroy you and the Terran Confederation. If you can survive against the finest of the enemy pilots, you'll face the heir to Kilrah in single combat. Are you up to the challenge?

You can *bear* his threats and those of his Kilrathi warriors if you have a Sound Blaster speech board and add the optional *Speech Accessory Pack*. The *SAP* replaces the on-screen text of your wingmen's responses and your enemies' taunts with digitized speech. It also digitizes a few key midgame sequences, bringing the *Wing Commander* experience even more fully to life.

WING COMMANDER™ *Vengeance of the Kilrathi™*

A *Broadsword* gunner holds off a wing of enemy ships while his pilot maneuvers for a torpedo run. The *Broadsword* has three turrets, one to each side and one to the rear, all equipped with cannons and tractor beams. The *Broadsword* gunner will use his turret's tractor beam later in this mission to retrieve a courier's ejected data capsule. In addition to torpedoes, turrets and tractor beams, *Wing Commander II* expands your possibilities with tailgunners, ECM, chaff and flight recordings that allow you to replay your mission from any camera angle, reviewing your own tactics and those of your Kilrathi opponents.



Prince Thrakhath



Sabre fighter in close combat with Jalkehi

The *Sabre* is the best of the *Concordia's* fighters, armed with a deadly combination of guns and missiles. But is that good enough when you're flying against three *Jalkehi* heavy fighters? Rookie pilots and experienced space jockeys will find their skills matched by the Kilrathi opponents' Dynamic Intelligence, a revolutionary system that automatically adjusts to the combat situation and each player's skill.

Director Stephen Beeman **Assistant Director** Ellen Guon

Software Engineers Bill Baldwin, Stephen Beeman, Charles Cafrelli, Reinaldo Castro, Richard Haley, Steve Muchow, Brent A. Thale

Story Stephen Beeman, Ellen Guon **Script** G.P. Austin, Jeff George, Ellen Guon, Paul Arden Lidberg, Brian Martin

Art Jeff Dee, Daniel Bourbonnais, Larry Dixon, Chris Douglas, Glen Johnson, Bruce Lemons,

Denis Loubet, Jake Rodgers, Gary Washington, John Watson

Technical Design Assistant Brian Martin **Sound Editor** Martin Galway **Sound Effects Engineer** Marc Schaeffen

Music Dana Glover, "The Fat Man" (George Alistair Sanger), Dave Govett, Martin Galway, Nenad Vugrinec

Quality Assurance Leaders Jeff Shelton, Kirk Winterrowd **Quality Assurance** Scott Shelton, Kevin Potter,

Scott Hazle, Mark Vittek, Joel Manners, Ben Manners, Ben Potter

Development Services Manager Sherry Cain **Documentation** Paul Arden Lidberg, Warren Spector

Documentation Design and Graphics David Ladyman, Craig Miller, Deborah A. Nettingham, Warren Spector, Gary Washington

Box Design and Graphics Craig Miller, Cheryl Needl

Production Manager Virgil Buell **Executive Producer** Dallas Snell **Producer** Chris Roberts

TAKING COMMAND

excerpt from
**Wing Commander I and II:
The Ultimate Strategy Manual, by
Mike Harrison**

"We worked hard on this game in the hope that it would be a fantastic hit."

Recently I spoke to Chris Roberts and posed the question, "When did you realize *Wing Commander* was a hit game?" His reply:

"The first indication was at the Consumer Electronic Show in Chicago, 1990. We set up a large screen monitor with stereo speakers and had the game running on a 386 computer. After the first day, I saw that people in the industry were being blown away. Developers and designers from other companies were bringing people over to see the demo. The booth was mobbed all day long. Our sales staff and marketing people were all grins. What made the furor even greater was that no one really expected it from ORIGIN. We weren't known for simulations. I wasn't known for simulations.

"The next point was when we went to playtest. When people who play games all the time stop and say, 'Wow!' you know you've hit the mark. People around the office, even people working on other projects, were playing the game in their spare time. That added to our confidence in the game.

"Once the game was released, we kept checking the game forums on the commercial, online bulletin boards. When we saw the reaction, I felt it was a bona fide hit. From that point on, it was just a matter of when the honeymoon would stop. It hasn't yet."

WING COMMANDER

The starfighter pilots of the TCS *Tiger's Claw* fight against overwhelming odds, leading the Confederation forces to victory in the Vega Sector campaign. But one successful campaign isn't the end of

the war, as any veteran starfighter pilot well knows full well...

The Secret Missions 1 & 2

After the Confederation victory in the Vega Sector, the *Tiger's Claw* is ordered to report immediately to Deneb where the Goddard Colony is under attack by Kiltrathi forces. But before the *Tiger's Claw* can enter the fray, the enemy uses a devastating secret weapon to destroy the colony.

Soon after, the Kiltrathi declare a holy war. A huge Kiltrathi fleet maneuvers toward an isolated star system and a planet of peaceful, primitive natives. After a Kiltrathi renegade defects, you fly a Kiltrathi ship in a series of "undercover" missions. You must discover the secret reason for the holy war and save the Firekkan race before the enemy destroys you and the *Tiger's Claw*...

WING COMMANDER II

Throughout the Terran-Kiltrathi war, are constantly improving their warfare technology and techniques. These new features include tailgunners, flight recorders, tractor beams, chaff pods, ECM, torpedoes, new wingmen, digitized speech and backgrounds, dynamic intelligence that automatically adjusts to the combat situation and your skill, and possibly even Kiltrathi stealth technology!

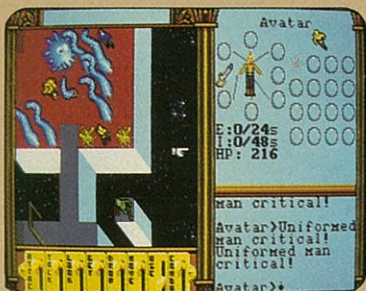
But even more deadly than your Kiltrathi opponents, the Confederation fleet has been infiltrated by human traitors dedicated to the defeat of the Confederation forces. Now, in addition to flying dangerous missions against human pirates and the Kiltrathi, you must uncover the traitor who threatens to destroy you and the Confederation fleet in *Wing Commander II*.



MARTIAN DREAMS™



Monsters attack your barge



A deadly leviathan in the Dreamworld



Buffalo Bill

You feel as though you've been transported through time to the Victorian era. The world of Mars is recreated as the Victorians imagined it. This is a world of bizarre and often dangerous "plantimals," of creatures living in beautiful crystal palaces, of gargantuan machines of steel and steam. It is a world of Victorian grace and gentility as well as timeless danger and excitement.

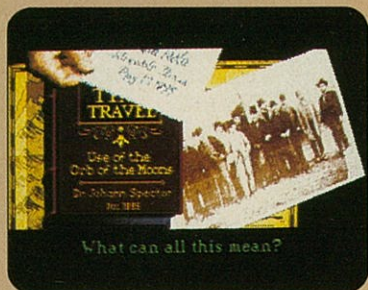
But your greatest challenge awaits you in the Dreamworld. In that bizarre world, you'll face your darkest fears and creatures from your own imagination, as strange twists of reality await you at every turn! You'll wander through Mars' past, discovering what you can do to resolve the problems facing Martians and humans, past and present.

Martian Dreams isn't just a game—it's "edutainment," a combination of entertainment and education. During your travels, you'll meet fascinating, unusual and sometimes dangerous historical characters from the turn of the century, including Lenin, Buffalo Bill Cody, Samuel Clemens (Mark Twain) and many others. Each of these historical characters will either help or hinder you in your quest to solve the mysteries of Mars.



Dream Machine

Stunning 256 color VGA/EGA graphics provide the breathtaking visual experience that is the hallmark of the *Ultima Worlds of Adventure* series. The geography of Mars is portrayed in a surprisingly realistic manner.



Relics of the past

The Book of the orb, a faded map and a hundred-year-old photograph of yourself...these are the clues that lure you into a dangerous adventure back into time and through the void of space to the Red Planet!

Director Jeff George **Creative Director** Richard Garriott

Programming Mike McShaffry, Paul Meyer, Bob Quinlan

Ultima Game System Cheryl Chen, John Miles, Herman Miller, Gary Scott Smith **World Building** Philip Brogden

Dialogue Beth Miller, Raymond Benson, Steve Cantrell, Manda Dee, Paul Meyer

Computer Art Jeff Dee, Keith Berdak, Daniel Bourbonnais, Manda Dee, Karl Dolgener

Musical Score "The Fat Man" (George Alistair Sanger), Dana Glover, Tom Hollingshead

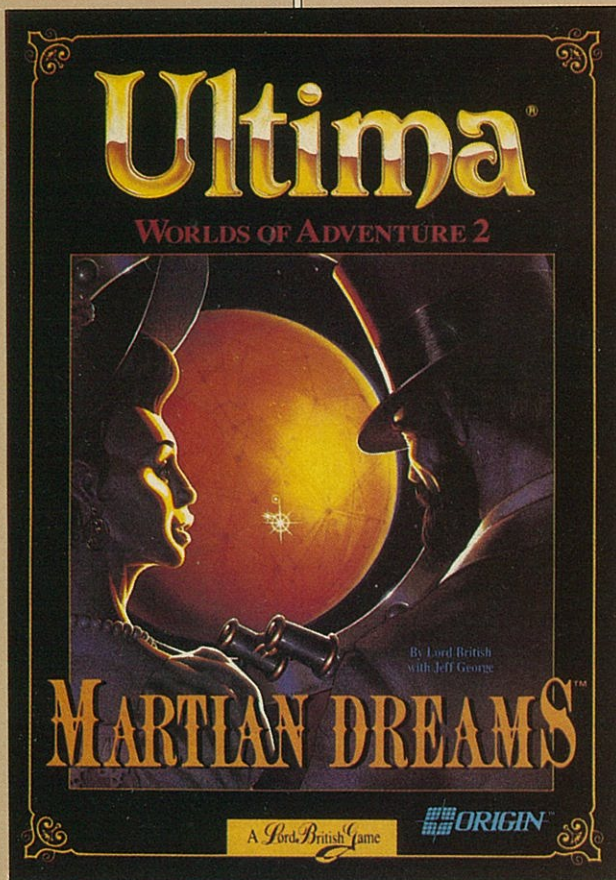
Sound Effects Marc Schaeffgen **Quality Assurance** Scott Shelton, Scott Hazle, Lyle Mackey, Ben Potter, Kevin Potter, Bob Shelton, Jeff Shelton, Mark Vittek

Cover Painting Denis Loubet **Manuals** Warren Spector **Manual Art** Jeff Dee, Karl Dolgener, Manda Dee

Reference Card and Install Guide Andrew Morris **Map Art** Jeff Dee, Keith Berdak

Package and Manual Design Cheryl Neeld, Craig Miller

Executive Producer Dallas Snell **Producer** Warren Spector



A BULLET WITH YOUR NAME ON IT

Martian Dreams takes you, the Avatar, on a thrilling journey inspired by the works of Jules Verne, H. G. Wells, and other futurists of the late 19th century. Hurtled back to the 1890s, to the era of steam power and gaslight, you voyage to Mars in a space bullet fired by a colossal cannon.

Upon arrival, you learn that the Martian canals really do exist, and that the plains of Mars are dotted with towns and villages of stone and glass. But the plant-like Martians who built these crystal palaces appear to have been dead for centuries. Mars is a harsh, cold planet barely capable of supporting human life.

During your adventures on Mars, you learn that the Martians, trapped in a world of dreams, possessed human hosts in order to escape their imprisonment. While seeking a way to free the possessed humans, you will face challenging puzzles, meet colorful characters and unravel dark secrets of the evil Rasputin and his Martian allies.

Do you dare enter the bizarre Dreamworld, where reality and fantasy intermingle? Can you find and rescue the historical characters who have been trapped on Mars? *Martian Dreams* engages you in an epic journey through time and space, offering the very finest in roleplaying entertainment. ■

WHERE FANTASY AND REALITY UNITE

Players interact with many of the era's most fascinating and influential people. These real-life people have been researched and brought to the computer screen in a manner that preserves their historical accuracy as much as possible:

- **Sarah Bernhardt**, the most renowned actress of her day.
- **Nellie Bly**, investigative reporter who beat the "record" set in Jules Verne's novel, *Around the World in Eighty Days*.
- **Andrew Carnegie**, railroad tycoon, steel magnate and philanthropist.
- **George Washington Carver**, renowned botanist and chemist.
- **Buffalo Bill Cody**, Western folk hero and organizer of a series of phenomenally successful Wild West shows.
- **Marie Curie**, physicist who discovered radium and polonium.
- **Wyatt Earp**, frontier lawman best known for his participation in the gunfight at the OK Corral.
- **Thomas Edison**, prolific inventor and first great entrepreneurial scientist.
- **Sigmund Freud**, the father of modern psychoanalysis.
- **Vladimir Ilych Lenin**, revolutionary and founder of the Bolshevik party.
- **Percival Lowell**, astronomer who theorized that the Martian canals were clear evidence of intelligent life.
- **Admiral Robert Peary**, explorer best known for his trek to the North Pole.
- **Rasputin**, Russia's wandering holy man and mystic renowned for his mystical powers of persuasion, particularly over Alexandra, wife of Tsar Nicholas II.
- **Theodore Roosevelt**, American war hero and president.
- **Nikola Tesla**, unsung genius and eccentric, whose greatest achievement was the AC induction motor.
- **H. G. Wells**, renowned British writer whose work included *The Time Machine* and *The War of the Worlds*. ■



Your F16 cockpit

As in real life, you must look down to read all of your instruments. Most flight simulators jam the entire instrument panel onto the screen, limiting your outside view, which typically consist of flat green plains, pyramids and cubes. In *Strike Commander*, light ripples across the realistically shaded hills as you pass, suggesting a physical reality unlike anything seen on a PC before.



The view outside your jet

You can cut outside the cockpit, watching your jet fly by snow-capped mountains that recede into the mist. *Strike Commander* uses fractal generation to simulate the chaos of natural formations, producing uneven coastlines, greenbelts and irregular strips of land peeking through blankets of snow, instead of rigid and artificial geometric shapes.

STRIKE COMMANDER™

Two MiGs in full pursuit

For the first time ever, you are truly inside the cockpit. When you scan the skies for enemies, the cockpit moves around you in 3-D. Meanwhile, waves roll beneath you, and the land hazes out in the distance. Virtual Reality, watch out!



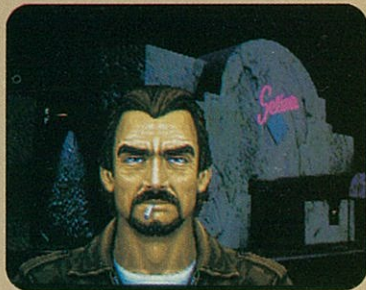
A MiG 29 suffers a fatal strike

In addition to realistic gameplay, *Strike Commander* also offers fully animated cinematic sequences to heighten the drama of the story line. These sequences occur at key moments in play, dramatizing crucial developments and transforming *Strike Commander* from a simple game into an interactive movie.



Carson, your character

The artistic team on *Strike Commander* is striving for an overall feel of photorealism. Character faces are capable of subtle expression, their features more smoothly shaded than ever before. Backgrounds, even when not fractally-generated or gouraud-shaded, are carefully painted to suggest more natural surroundings.



Selim's, the mercenary hotspot

Standing in front of Selim's is Jean-Paul Prideaux, leader of the Jackals, deadly competitors in a cut-throat world. Selim's Bar, like most of the buildings in the game, is a 3-D modeled set, a virtual construct that can be used exactly like any set on a Hollywood soundstage. Shots can be taken from any angle around 3-D buildings, lit in any conceivable manner.

Producer/Director Chris Roberts

Software Engineers Bill Baldwin, Thomas Blom, Rey Castro, Todd Hartmann, Paul Isaac, Frank Savage, John Taylor, Jason Templeman **Screenplay** G. P. Austin

Artists Chris Douglas, Danny Garrett, Craig Halverson, Bruce Lemons, Denis Loubet, Jake Rodgers

Technical Design Assistants Joel Manners, Erin Roberts, Kirk Winterrowd

Audio Director Martin Galway **Composers** Dana Glover, Nenad Vugrinec

Sound Effects Engineer Nenad Vugrinec **Audio Editing** Marc Schaeffgen

Quality Assurance Jeff Shelton, Scott Hazle, Ben Potter, Kevin Potter, Scott Shelton, Mark Vittek

Development Services Manager Sherry Cain **Box Design and Graphics** Craig Miller, Cheryl Neeld

Associate Producer Alan Gardner **Executive Producer** Dallas Snell

TOMORROW'S TECHNOLOGY, TODAY

Most of today's flight simulators render simplistic geometric representations of terrain and man-made landmarks. This results in low-quality graphics because any screen object must be very simple. Since the computer is rendering the object in real time, it can't be processed quickly enough to realize any degree of detail. Aircraft in such programs are usually flat-shaded and look like flying triangles, and the terrain resembles a patchwork quilt of blandly colored cloth triangles.

Textures

Chris Roberts made this method obsolete with the release of the *Wing Commander* series, providing gamers with unparalleled detail. Graphics are bit-mapped as 3-D objects, and then the computer essentially shoots pictures around them from every angle. During play, the appropriate images are called up, based on the player's ever-changing perspective. The advantage of this process is that detail can be incredibly rich. Fully texture-mapped ships with 90,000 polygons are possible, making them look more like studio-built special effect models than computer graphics.

Fractal Tessellations

To generate terrain, *Strike Commander* resorts to the polygonal approach of traditional flight simulators. Its difference lies in the refinement of the polygonal system itself.

The terrain in *Strike Commander* is tessellated and fractally generated. The fractals, reproducing the chaos inherent in natural formations, make the terrain look exceptionally realistic, while each vertex of the triangles forming the tessellated terrain has its own shade level. The end result of this innovative process is that, while flying over the rolling hillside, the player can't see any triangles! Amazing detail is possible in the RealSpace system, but what completes the illusion of an alternate reality is the addition of texture-mapped terrain details, such as jagged coastlines, snow peaks and ocean waves, atmospheric hazing to complete the effect.

Bit-Maps

Strike Commander uses bit-mapping to generate realistic objects. Objects such as panelling, fighter planes and burnmarks are all executed with texture-mapping.

The results are polygonal objects as rich and detailed as hand-drawn images.

Their Integration

Roberts sums up the process enthusiastically: "Using a combination of 3-D bit-mapping, texture-mapped gouraud terrain and polygonal objects, we create a three dimensional world that is far more realistic than anything ever seen on a PC before! When you're flying in 3-D, you feel like you're *there*." ■

WILDCAT SQUADRON

Your role in *Strike Commander* is that of a crack mercenary pilot in Stern's Wildcats. You must rely on your wits and guts and on the skills of your fellow Wildcats to survive in a merciless world.

The Wildcats fly a fine line between right and wrong, profit and loss. You must determine the viability of missions from a logistical and moral standpoint. Other characters in the game will advise you, but ultimately the fate of the Wildcats is in your hands. The outcome of the scenario will be determined not only by your skill in battle, but by your wisdom as well. ■





A Fireball Strikes

The Stygian Abyss sports a fully featured magic system with over forty spells at your disposal. Compose spells from your stash of rune stones, displayed at the right side of this screen. For instance, combining the Por ("motion") and Flam ("fire") runes here has resulted in the death of one more evil creature.



Character Generation

Select your character's background from eight *Ultima* professions; pick skills like swordsmanship, appraisal and magic power; then choose the portrait that most suits your image of your new self.

Ultima®

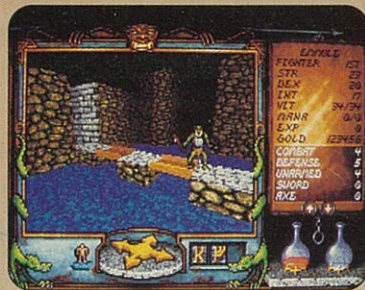
UNDERWORLD

The Stygian Abyss™



Ghost and Mist

Translucent creatures and mist make an appearance in *The Stygian Abyss*. There is nothing so disquieting as seeing through a ghost...



A Bridge Too Far

The *Stygian Abyss* is a rich underworld environment, replete with plunging chasms, subterranean rivers and lava pools. You can even dive into the water here and swim to the far shore, if a deep lurker doesn't pull you under first... (Note the character panel, with all of your vital statistics.)



The Stygian Abyss removes the chore of mapping, by constantly updating where you have explored. You can write notes directly on the parchment map with your quill.

Designer and Director Paul Neurath

Programming Jonathan Arnold, Doug Church, Jon Maiara, Dan Schmidt, Carlos Smith

World Building Doug Church, Paul Neurath

Writing Brad Freeman **Computer Art** Carol Angell, Doug Wike

Musical Score "The Fat Man" (George Alistair Sanger), Dan Schmidt **Sound Effects** Dan Schmidt

Quality Assurance Scott Hazle, Ben Potter, Kevin Potter, Jeff Shelton, Scott Shelton, Mark Vittek

Package and Manual Design Craig Miller, Cheryl Needl

Technical Consulting Chris Green, John Miles, Ed Nelson, Matt Toschlog

Creative Consultant Richard Garriott

Executive Producer Dallas Snell **Producer** Warren Spector

The Stygian Abyss™

Into the Abyss

As in times past, you are called to the land of Britannia by great need. Stepping through a moon gate, you arrive to witness the abduction of the baron's young daughter from her bedchamber. Before you can intercede, the abductor and daughter vanish. Finding you alone in the chamber, the baron's guards assume that you took part in the evil deed. Judgment is passed. You are to be thrown into the Stygian Abyss, the most dread dungeon in all of Britannia.

Locked into a world of darkness, you must find a way to survive. With luck and courage you will learn to thrive. But this is just the beginning of your journey, for in the labyrinthine pits below a hidden destiny awaits you.

ULTIMA UNDERWORLD: *The Stygian Abyss* marks a new vision for the classic *Ultima* series. Now you can view the world from a 3-D, first person perspective, up close and personal. Using cutting edge VR technology, you can walk and turn smoothly, leap across a chasm, dive into a subterranean pool and swim across, trade axe blows with a troll—all in fluid 3-D perspective. It's an intense experience that brings the fantastic world of *Ultima* to life. ■

Behind the Scenes

(We tracked down Paul Neurath, founder of Blue Sky Productions, to ask him about the project.)

Q: Why use 3-D dungeons for an *Ultima*?

A: Actually, the first five *Ultimas* all featured simple 3-D dungeons. With *Ultima VI*, Richard [Garriott] decided to show dungeons with an overhead view, to match its above-ground scenes. This was done to keep the game visually consistent and because, at the time, 3-D technology on PCs was too primitive to adequately depict the richness of an



Underworld Creatures

The Stygian Abyss is inhabited by an assortment of monsters: acid slugs, gazers and many others. Some, like goblins, are fiendishly clever, stalking you, unlocking doors and even setting traps. Others might talk to you, possibly shedding light on the mysteries of the abyss.



Death of a Lizardman

Pick an attack—chop, swing or thrust—and watch the sword in your hand strike out at your opponent. During combat, your attack type, weapon, skill, opponent's skill, force and speed of blow and luck all help determine the result of each strike.

Ultima world. Nevertheless, since the release of *Ultima VI* Richard has missed 3-D dungeons. That's where we came in.

Q: What is the Blue Sky connection?

A: Two years ago we wrote *Space Rogue* for ORIGIN. In the process we became familiar with the *Ultima* design crew, and they with our 3-D technologies. Richard saw at once the possibility of doing a "3-D *Ultima*," and that's how the project got started.

Q: How similar is *The Stygian Abyss* to the classic *Ultima* series?

A: *Ultima* fans should feel right at home. *The Stygian Abyss* takes place in a dungeon made infamous in earlier *Ultimas*. You'll fight *Ultima* creatures, cast *Ultima* spells and talk with the descendents of characters from *Ultima VI*. You'll also follow a serpentine plot rich in the tradition of past *Ultimas*. *The Stygian Abyss* is faster paced than a traditional *Ultima*, with real time sword dueling, leaps across chasms and other heroic deeds. The scale of the game is tighter, too. You won't be traversing continents in *The Stygian Abyss*, but with over 24 miles of corridors and rooms to explore, there's still a lot to see. ■

Virtual Reality in a Fantasy World

The Stygian Abyss achieves its compelling look and feel through Virtual Reality (VR) modeling of a fantasy dungeon. A key technology is the texture mapped, light shaded surfaces that allow us to project bitmapped artwork into three space. Gorgeous, hand drawn images of chiseled granite blocks, peeling stucco or any other surface can be pasted onto dungeon walls and floors. The player can then walk smoothly around the 3-D dungeon, viewing it from any perspective.

The creatures that inhabit *The Stygian Abyss* are built from 3-D animation models on a CAD system. Artists then add fine details. For some creatures, over 70 animation frames show them running, jumping, swinging an axe and performing other actions in three space.

The game's VR modeling runs deeper than its visuals. When you round a corner, your traction and weight shift determine how tightly you turn. Arrows arc in flight. Oil flasks smash against the wall and burst into flame. Even the sword in your hand cuts and thrusts in 3-D arcs. This is as real as fantasy games get. ■



Customer Service to the Rescue! CALLS FROM BEYOND



ORIGIN Customer Service is ready and willing to answer all questions and problems, eight hours a day, five days a week. Most are of the normal "How do you do this?" or "Where do I get that?" variety, but a few rise above the daily routine of problem solving. For instance:

- One woman wrote to describe an unusual benefit of our games. Concerned about her daughter's persistent lying and stealing, she consulted a psychiatrist. He prescribed the *Ultima* Avatar series for the girl! The mother was pleased with the therapeutic results and her daughter really enjoyed the games.
- ORIGIN games have more than their share of disabled players. These players call often for hints and to say that these games significantly help them with their hand and coordination skills. One paraplegic noted that he loved *Wing*

Commander because of the mouse interface. *Wing Commander* is one of the few flight simulators that support play with a mouse. News of this sort reinforces ORIGIN's commitment to helping the disabled whenever possible.

- Telephone operators occasionally act as confused intermediaries between players and Customer Service. One hesitantly asked, "Do you create worlds?" We told her we did, but through entertainment software. It turns out that an angry mother had called her to find out what exactly ORIGIN was and why her young son had run up the phone bill in calling it so often.
- Another operator, relaying a teletyped conversation to a Customer Service rep, grew more and more bewildered as she transferred questions and replies about dungeons, gargoyles and hidden trea-

sure. Unable to restrain her curiosity any longer, she finally blurted out in the middle of a reply, "What is this dungeons and deamons stuff?" Her confusion turned to amazement when ORIGIN's games were described.

- Like most entertainments, ORIGIN's games can be either a help or a hindrance to family life, depending on how they are used. One man finished *Ultima V*, but his wife left him because he spent too much time playing the game. Another was late to his own wedding because he was playing *Wing Commander*. There is no repeatable comment on record from his prospective wife. On the other hand, another couple spent their honeymoon playing *Wing Commander* and both enjoyed every minute of it! Here's hoping they plan an extended vacation together with *Wing Commander II*. ■

ORIGIN™ PRODUCTS

ULTIMA Series

- ULTIMA Trilogy*
- ULTIMA IV Quest of the Avatar*
- ULTIMA V Warriors of Destiny*
- ULTIMA VI The False Prophet*
- ULTIMA VII The Black Gate **
- ULTIMA WORLDS OF ADVENTURE:*
- Savage Empire*
- ULTIMA WORLDS OF ADVENTURE:*
- Martian Dreams*
- ULTIMA UNDERWORLD:*
- The Stygian Abyss **

COMMANDER Series

- WING COMMANDER*
- WING COMMANDER*
- THE SECRET MISSIONS*
- WING COMMANDER*
- THE SECRET MISSIONS 2: Crusade*
- WING COMMANDER II*
- SPEECH ACCESSORY PACK*
- STRIKE COMMANDER **

Other Computer Games

- Knights of Legend*
- Omega*
- Space Rogue*
- Windwalker*

Nintendo Games

- Ultima: Exodus (NES)*
- Ultima: Quest of the Avatar (NES)*
- Ultima: Warriors of Destiny (NES)*
- Ultima: Runes of Virtue (Game Boy)*
- (All published by FCI)

BOOKS

- Ultima III Clue Book: Secrets of Sosaria*
- Ultima IV Clue Book: The Way of the Avatar*
- Ultima V Clue Book: Paths of Destiny*
- Ultima VI Clue Book: The Book of Prophecy*
- Ultima VII Clue Book: The Black Gate **
- Savage Empire Clue Book*
- Malone's Guide to the World of Eodon*

BOOKS CONT'D

- Martian Dreams Clue Book:*
- The Lost Notebooks of Nellie Bly*
- Ultima: Exodus Nintendo Clue Book (FCI)*
- Ultima: The Avatar Adventures (ORIGIN / Prima)*
- The Official Book of Ultima (Compute Books)*
- Wing Commander I & II:*
- The Ultimate Strategy Manual (ORIGIN / Prima)*
- Quest for Clues II*
- Quest for Clues III*
- Quest for Clues IV*

* Available late 1991



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