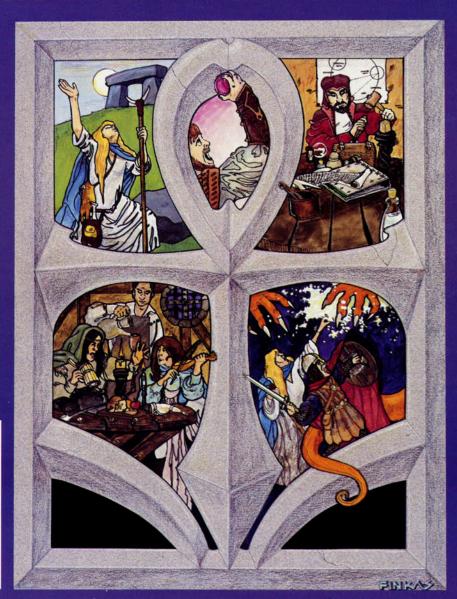
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NO. 26

# 

THE JOURNAL OF COMPUTER GAMING





inside Itima IV

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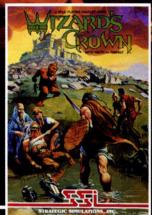


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### TAKING A PEEK

Accolade 20863 Stevens Creek Blvd Cupertino, CA 95014 408-446-5757

FIGHT NIGHT: Arcade style boxing game. A choice of six different contenders to battle for the heavyweight crown. The player has the option of using the supplied boxers or creating his own challenger. Joystick, one or two players. C-64, Apple. (\$29.95 & \$34.95). Circle #3

THE DAM BUSTERS: Hi-res graphics arcade game. The concept is the actual Ruhr dam raid of May, 1943 (Operation Chastise). You must pilot your Lancaster bomber through ME-110 fighters, flak, barrage balloons, etc. You also have responsibility as pilot, gunner, engineer, navigator and bombadier. Destruction of the dam

is rewarded with an excellent graphics sequence. Joystick. One player. C-64, IBM. (\$29.95 & \$39.95). Circle Reader Service #4

Activision 2350 Bayshore Frontage Road Mountain View, CA 94043 800-227-9759

HACKER: An adventure game with a twist, there are no rules and no instruction book. The opening screen simply says "LOGON PLEASE:". You must use your deductive skills to enter an underground tunnel system and piece together a secret document. One caveat: despite the use of the term "hacker", the game does NOT involve activities currently associated with that word. It is a combination text and graphics adventure. Joystick required. C-64, Apple, Atari. Circle #5

Artworx 150 North Main Street Fairport, NY 14450 800-828-6573

FP II: With Falcon Patrol 2 the player controls a fighter plane equipped with the latest missiles to combat the enemy's helicopter-attack squadrons. Features 3-D graphics, sound effects and 16 levels of play. Joystick only, one player. C-64. (\$19.95). Circle Reader Service #6

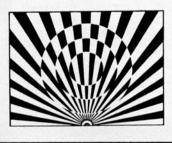
SORCERY: Adventure game in an arcade setting. Detailed graphics, animation and sound effects. 17 levels of difficulty. Joystick only. C-64. (\$19.95).

Circle #7

Avalon Hill Game Company 4517 Harford Road Baltimore, MD 21214 800-638-9292

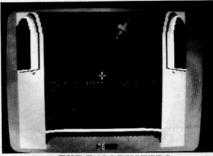
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FIGHT NIGHT



THE DAM BUSTERS



HACKER



**FALCON PATROL 2** 



SORCERY



UNDER FIRE!

UNDER FIRE (Extended Capability Disk 1): Two new maps, six scenarios. Units and vehicles from the armies of Germany, England, Italy, Japan, Soviet Union and the United States. Note that you must have the original game of UNDER FIRE in order to use this addition to the line. Apple.

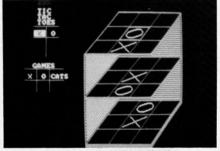
Circle #8

Brown-Wagh Publishing 800 Charcot Avenue #10 San Jose, CA 95131

CUBIC TIC TAC TOE: Three dimensional version of the familiar children's game. Three difficulty levels. Play against computer or another player. C-64/128, Apple, IBM. Circle #9

CBS Software
One Fawcett Place
Greenwich, CT 06836
203-622-2500 Circle #10

ERNIE'S BIG SPLASH: A preschool learning activity featuring the Muppet characters from Sesame Street. A fun way



CUBIC TIC TAC TOE



ERNIE'S BIG SPLASH

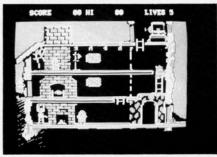


GROVER'S ADVENTURE

to introduce children to cause and effect and spatial relationships. Our in-house beta tester (five years old) rated this one highly. Recommended for ages four to six. C-64/128. (\$14.95)

GROVER'S ANIMAL AD-VENTURES: An animated animal classification activity developed by the Children's Television Workshop. Four animal environments with a wide array of creatures and objects to identify and place in their proper location (air, water or sky). As with all CBS products, there are suggestions for related family activities. Ages four to six. C64/128. (\$14.95).

RICHARD SCARRY'S BEST ELECTRONIC WORD BOOK EVER: Richard Scarry is a much-beloved children's book author and illustrator. This program is a reading readiness adventure, aimed at developing skills such as word identification, vocabulary building and word/object association. Lowly



THE GOONIES

Worm is the guide to six colorful environments (harbor, railroad yard, etc.) where children identify appropriate objects and associate them with the printed name. Four levels of difficulty to challenge varied skill groups. Ages five and up. C64/128, Apple. (\$19.95).

[Editor's note: The Sesame Street/CBS Software series is an excellent group of software programs for preschoolers. The graphics are attractive, the subjects familiar to children, educational aspects seem solid and the prices are reasonable.]

Datasoft 19808 Chatsworth Place Chatsworth, CA 91311

THE GOONIES: Hi-res graphics adventure game based on the recent movie of the same name. Eight screens inspired by scenes from the movie. Two character gameplay. Apple.

Circle #11



ZORRO

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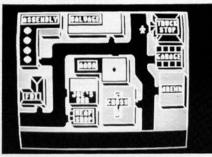
3333 BRISTOL ST., COSTA MESA, CALIFORNIA 92626 (714) 557-2447

ZORRO: Graphics adventure game as you fence your way through 20 screens. Your objective is to rescue a pretty senorita from the evil Sargeant Garcia. Arcade quality graphics. Apple with 64K. Circle #12

Electronic Arts 2755 Campus Drive San Mateo, CA 94403 415-571-7171

AUTODUEL: Wins the 1986 CGW trademark award. Four companies share the pie on this game.: Texas Instruments, Steve Jackson Games, Origin Systems, and Electronic Arts. AUTO-DUEL is based on the popular board game CAR WARS. The scenario is post-nuclear war America (2030 AD). Auto duels are a popular form of enter-tainment (and survival). You design your own vehicle - with weapons, armor, engine, etc and take it on the road to fame and fortune. Based on the subject matter alone this game is likely to be a big sales winner. Apple. Circle Reader Service #13

EUROPE ABLAZE: Designed by Strategic Studies Group, distributed by EA. Historical simulation and strategy game that recreates the air war over England and Europe from the years 1939 to 1945. Three built-in scenarios, with options to create an infinite number of user designed scenarios. The game is menu-driven, in the familiar SSG style. Play involves 24 specific aircraft, airbases, radar stations, shipping lanes, flak units, population centers, etc. From one to twelve players, or computer vs computer, with the computer



AUTODUEL

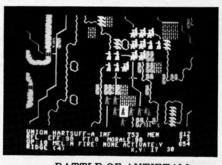
willing to take either side. Major review in our April issue. C64/128, Apple. (\$49.95).

Circle Reader Service #14

Strategic Simulations 883 Stierlin Road, Bldg A200 Mountain View, CA 94043-1983 800-227-1617 ext 335

BATTLE OF ANTIETAM: Grand tactical Civil War game covering the September 17, 1862 battle centered along the Antietam Creek at Sharpsburg, Pennsylvania. The Basic Game has simple rules and options it is possible to begin play almost immediately upon booting the disk. Intermediate and Advanced have much more complex decision making; such as hidden units, chain of command, facing, etc. Good historical accuracy for troops and weapons. Each turn represents 30 minutes and combat is resolved down to the individual soldier. Preliminary reviews are favorable, major review soon. C-64, Apple. (\$49.95). Circle #15

U.S.A.A.F.: Detailed strategic simulation of daylight bombing of German industry from 1943-1945. Day-by-day resolution, the Campaign Game will take approximately 730 turns! Scenarios of one-month duration are available for the faint of heart. Each turn can take from five to thirty minutes to plan and execute. Weather is important and good weather leads to more planning and bombing. 24 aircraft types, rated in nine categories (climb, speed, durability, etc.). One or two players, or computer vs computer. Full review in April, with comparison to **EUROPE** ABLAZE, C-64, Apple, Atari. (\$59.95)Circle Reader Service #16



BATTLE OF ANTIETAM

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SPELLBREAKER

#### As told by Scorpia

At last, we've gotten everything cleared up from the holidays (although Fred was practically broken-hearted at having to take down his garland). So just step on over to your favorite chair, and relax awhile before you embark on your quest to (once again) save the world, this time through the magical lands of Spellbreaker.

This one is a toughie, folks. When Infocom said that the concluding chapter of the Enchanter trilogy would be hard, they weren't kidding. On the other hand, that also means it's been well worth waiting for,

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because Infocom hasn't put out a RE-ALLY hard adventure in awhile.

For most of the game, you'll be spending your time picking up a number of little white cubes. They all look exactly alike, so your first task is to figure out a way of making each cube unique. This shouldn't be too difficult, especially if you take a good look at your inventory at the beginning of the game.

The cubes are magical, of course, and function as gateways to other places. This means that most of the time, you are exploring small clusters of rooms, rather than one giant area. It does help to make mapping easier. However, it also means that you spend a lot of time going back and forth through the cubes to solve puzzles.

Another thing to keep in mind here is that from time to time your spells will not work. Therefore you will have to memorize them once more and try again. Tedious, but necessary. So it's a good idea to save your position pretty frequently, as there are some situations where a spell backfire could mean disaster, since you may not have time to learn it again, or even cast it again if you have learned it more than once.

All the comings and goings through the cubes makes it rather difficult to present my usual coherent narrative, so for this column, I will simply deal with the rooms off each cube individually.

The Earth Room Cube. This is the first one you find (after you clear up the fog in Belwit Square). It leads to several sneaky obstacles, including an over-protective Roc, a sneezy Ogre, and an avalanche. Explore all the exits from the cube first, then go back and deal with the avalanche. When you get to the hut, make sure you have a chat with the Hermit, who will give you a clue as to what needs to be done to pick up the next cube. The snake is much too large; perhaps in your wanderings you can find a way of putting him on a diet. As for the idol, if only you could get its mouth open just a bit more. How tiresome. Zzzzzzzzzzzzzzzz...

The Soft Room Cube. This one is pretty simple, and you only need to use this cube once. Don't settle for a piece of the action, take it all.

The Water Room Cube. You will return to this one several times, as both the ocean and the Oubliette require two visits each. The first solution to the Oubliette is likely to leave you cold, while the second visit will probably make you feel like Alice in Wonderland. The ocean is a bit easier; you only need to pick up something during your first swim (and remember that your spell book is NOT waterproof!). For your second dip, keep in mind that only a fish can get down to the bottom. Hmm, I wonder why the grouper thinks he's seeing double? As for the tower, you'll need something to give you a lift.

The Air Room Cube. Here you come to a carpet shop (among other places). That blue carpet sure looks nice; unfortunately, the merchant wants a little more for it than you can afford. Maybe you can get him to bring his price down to a more reasonable amount. Just remember to check your inventory before you leave the store.

The Bone Room Cube. Unless you left something behind in the Guild Hall, you don't need to use this one at all.

The String Room Cube. Another onetimer. All you need do here is talk to Belboz (keep those cards handy).

The Light Room Cube. Only one visit needed, and your actions here should be pretty obvious.

The Change Room Cube. Now, this one is a bit sneaky, and the closest thing to a maze in the game. You have to make your way through the octagonal rooms, and you have to be careful that you don't end up going back the way you came, so it's essential to map out your progress. As to how you get through the rooms in the first place, surely you brought the compass along with you.

The Void Room Cube I. Here we have two of the more vexing problems in the game. Those rocks, for one. You night think there's no way of ever catching up to that exasperating brown-eyed rock, but it's really easier than you might suspect. The first thing you should do is map out the whole area (make careful note of that one diagonal corner; it's there for a reason) and make it a large map. Then use two

different objects, one to represent you, and one to represent the brown-eyed rock (a penny and a dime work nicely). Move the coins (or whatever) as you and the rock move in the game. This will give you a clear idea of how the brown-eved rock moves to foil your efforts at reaching it. Now a little thought should show you how you can corner it without difficulty.

The Void Room Cube II. The other nasty problem is the vault room. Not getting the vault door open (which can be done once you've souped-up your magical abilities), but determining which of twelve cubes is the real one. This is not so easy, and is made harder by the fact that once in the vault, you CANNOT save the game! Each time you enter the vault, the program chooses one of the twelve cubes at random to be the 'real' cube. Your difficulties are compounded by the eventual appearance of the [censored] alarm fairy, so your time is very limited. Actually, if you do everything right, and do not waste moves, you will have just enough time to determine the right cube and blorple out before the guards grab you (there is nothing, alas, that you can do about the obnoxious fairy). Jindak is the key to success here. It will indicate which pile the real cube is in. It then becomes a matter of elimination, with repeated use of Jindak and careful manipulation of the cubes. Think about it.

The Black Room Cube (Fred's favorite). An easy one, actually. The convention of Grues is not so terrible as it may appear. Remember the grouper.

The Fire Room Cube. Without doubt, the single nastiest problem in the game. The solution lies in the gold box (make sure it's empty). You've probably noticed that whenever you put a cube in the box, the designs change to something appropriate to that cube. Dolphins for the Water cube. Moles for the Earth cube. And so on. So there is some kind of relationship between the cubes and the box. Or at least the last cube that was in it. Keep that in mind, and remember that nothing is impossible.

The Sand Room Cube. Talk about deja vu! You've been to these places before, but from different cubes. And, from the look of things, at a different time. Here you must be careful and do the rooms in the right order. As a matter of fact, these problems are easy, so long as you remember that all must be as it was (will be?), down to the last detail. And that blank scroll is there for a very important reason.

The Magic Room Cube. The gateway to the end game. At last, you discover what it's all about, and who that mysterious cloaked figure is. There are two places here where timing is critical. First you must act quickly, because you will need time to recover completely. Second, you must wait for the right moment to cast your last spell, and only one moment is the right one. Be patient, and don't panic.

The Hypercube. You have only two moves to do something about it, and you need both of them. The first move is fairly obvious. As for the second, well, look in

your inventory; there should be an item there you've had from the start of the game, but never used. Do something (nonviolent) with it.

Whew! And so, once again, the world has been saved. Although, in this case, at a hefty price. A sad, and yet appropriate,

Well, Fred is pointing his claw (err, finger) at the invisible clock, so it's just about time to close the doors until next issue. In the meantime, if you need a hand (or three) with an adventure game, you can reach me in the following ways:

On Delphi: Visit the GameSIG. Just type GR GAM at the MAIN> prompt.

On GEnie: Stop in at the Games Round Table. Type: Scorpia to get there.

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See you next issue...happy adventuring!

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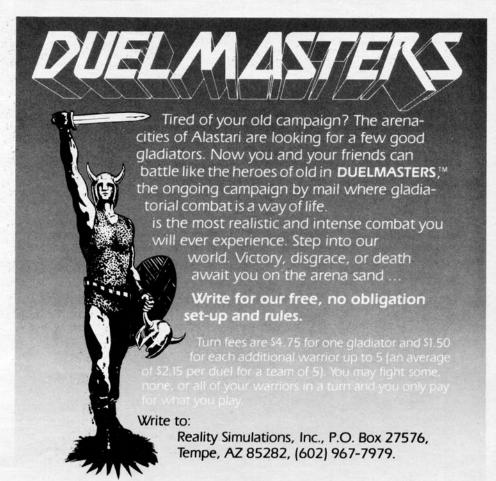
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# CONFLICT "VALLEY"

Downtown Saigon

I was sitting at my favorite table in the Miramar the Motel, sipping "Saigon Tea" with my staff. Watching the arc lights criss-cross the Saigon sky accompanied by the arc lights criss-cross the Saigon sky accompanied did not start the distance did not start the mission was on. The mission was one telephone operator) rushed in — the mission was one telephone operator was

"Let's go! You REIMF'S [Real Bollows and Street of the Coming?"

"No, sir. FIGMO [Forget it. I've got my orders]"

"No, sir. FIGMO [Forget it. I've got my orders]"

"No, sir. FIGMO [Forget it. I've got my orders]"

As we rushed out, the Saigon dollies bid us an affectionate farewell -- "Hey, cheap Charlie. You numbah ten!"

ten!"

Gathering our Slicks and Snakes [Slicks -- Huey choppers; Snakes -- Cobra gunships], we reinforced Valence St. Plei Mei, at the entrance to the Ia Drang Valey. Using air cav for the first time, we reinforced any positive contact, dug in and let the tac air dig out the positive contact, dug in and let the tac air dig out the enemy. Moving from one LZ [landing zone] to another, we secured the valley. Destruction of the enemy is the prime factor; terrain is immaterial. Losses of at least 4-1 are mandated by HQ; to achieve significant success requires 6-1.

quires 6-1.

In the final days of the push, we are joined by our allies. As the ARVN make contact, they greet us with "du ma, GI" [an affectionate Vietnamese term for first em'du ma, GI" [an affectionate of the mountain, the first emicans]. Pushing to the base of the mountain look forward icans]. Pushing to a success. But we still look forward ployment of air cav is a success. But we still look forward to PCOD [Preliminary Cessation of Overseas Deployment] and a return to the World [home].

[M. Evan Brooks (c) 1986]

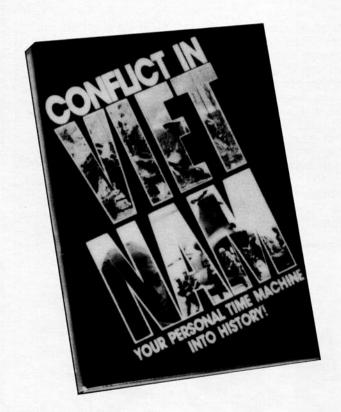
# VET

CONFLICT IN VIETNAM: THE VIEW FROM A PLAYTESTER

by M. Evan Brooks

Come on, all you big strong men, Uncle Sam needs your help again. He's got himself in a terrible jam Way down yonder in Vietnam ... -- Country Joe & the Fish (1967)

This time, can we win? -- Rambo (1985)



During the last two months, this writer has had the pleasure of playtesting Microprose's newest release in the Command Series, CONFLICT IN VIETNAM (CIV). This article will discuss certain design parameters, designer decisions, and playtest results. Additionally some tactical guidance in the playing of CIV will be provided.

#### INTRODUCTION

CIV is typical of the Command Series genre -i.e. input is via keyboard or joystick, action is in real-time, the game may be saved at any time and options exist for the player to play either side or switch sides at will. CIV is not a strategic game; it is operational in scale. There are five battles:

(1) Dien Bien Phu (French vs. Viet Minh; 1954) (2) Ia Drang Valley (U.S. vs. NVA [North Viet-

namese Army]; 1965)

(3) Khe Sanh (U.S. vs. NVA; Tet 1968)

(4) Fishhook (U.S. vs. NVA; Cambodia, 1970)

(5) Quang Tri (NVA vs. ARVN [Army Republic of Vietnam]; 1972).

The scale equals one mile to the hex. The basic unit is the battalion. As is customary with the Command Series, each scenario has numerous variants which modify history, but are usually

plausible alternatives. As the divisional/front commander, you are given the opportunity to see if you could rewrite history. Be advised that the game, while easy to learn, is quite difficult to master. Decisive victories are rare, and usual results are marginal, but this is accurate. When playing the computer opponent (as a more difficult opponent than historical), be willing to accept ignominious defeat. But at the same time, learn from its tactics and be thankful that you are not in a position to add more names to The Wall.

#### **DOCUMENTATION**

The game documentation is voluminous. Ed Bever, the designer, has written a veritable military history of the battles covered. However, this is as it should be. To date, the definitive military text of the Vietnam Conflict has not been written; therefore, the reader may be somewhat at a loss in seeking historical expertise. The "Recommended Readings" cover the field well, although this writer feels that the more reliable texts are limited to small unit actions. Larger historical works are too politically oriented. The documentation covers each scenario and variant separately, with orders of battle given in the appropriate areas. Please heed the documentation when it warns the reader to stop at a certain point, and play the game. The element of surprise will open the eyes of the most jaded gamer. This writer feels that the documentation was done well, but certain concepts must be remembered by the user. In Ia Drang, sub-variants of Airmobile (historical), Light Infantry and Armored Cavalry exist. Dr. Bever notes that if the light infantry or armored cav options had been selected by the political decision-makers, then the cost of Vietnam could have been reduced substantially "...and thus it would have been economical to deploy more men". However, US military doctrine has traditionally sought to minimize use of manpower through firepower-technology. While the cost of light infantry would have permitted more manpower, this would have been a political decision far beyond the scope of the game -- it may well have mandated mobilization of the Reserves, and of course, higher casualties in the field. The designer is well aware of these "restrictions"; this writer wishes to emphasize them to the readership.

#### PLAY TESTING

This writer received several copies of the game in its transition to a finished product. The majority of the playtesting was done by a group in New Jersey, but this writer did spend numerous hours mainly concentrating on the American scenarios. On 23 November 1985, this writer assembled a staff of experienced gamers/veterans to view the game. Present were: Dr. Bever (the designer); Dr. Raymond Bell (Brigadier General, USAR), former deputy director of the National Defense University's Wargaming & Simulation Center; Donald Whelan (Brigadier General, USA, ret.); and Dr. John Sloan (editor, International Military Encyclopedia). All three of the latter saw combat in Vietnam at the field grade level, with Dr. Bell serving in armor, General Whelan in artillery, and Dr. Sloan in the engineers.

Actually, the professionals were quite enthralled with the simulation. The basic concept was well received, and criticism was limited to generally items which the standard gamer would not note. Most of these criticisms are in fact detailed in the documentation (cf. "Designer's Notes"). For example, the professionals noted that nomenclature of units was incorrect. In order to make the units more understandable to the unmilitary civilian, the designer chose to forego proper military nomenclature. Similarly, the veterans noted that the company/battery was the basic building block; but

"Ballad of the Green Berets" received the nod. This writer feels that it is the best solution; although Vietnam was not an SF (Special Forces) war in total (the Snake-Eaters could not do everything), in the popular eye, they best represent the Vietnam War.

The most serious dispute was over victory conditions. How does one actually win the war in Vietnam? With the American emphasis on body count, the NVA also looked to American casualties as an indicator. While most military personnel preferred body count as a measure, Microprose's staff felt that "body count" was simply unmarketable and ghoulish. Unmarketable, yes; but then again, Vietnam was never intended as a marketing man's dream. For realism, this writer would have pre-



since once contact was made, building up was quick and continuous, the effect of utilizing battalions is not an egregious error. One adjustment that did occur was the deletion of ARVN Air Cav Troops in the Fish Hook scenario; Dr. Bever had extrapolated their TO&E (Tables of Organization and Equipment) from American units. No such units did exist, and they have been deleted from the final product. Minor "glitches" were noted: in the game US air on local command had a tendency to cross borders for attacks. The political ramifications of such escalations prohibited such missions, and they have been deleted from the final product.

One of the more interesting disputes was over the introductory theme. Initial candidates were "Ballad of the Green Berets" or "The Vietnam Rag". Neither song did much for this writer or the staff at Microprose. Discussions with numerous veterans revealed a dichotomy of opinion. Field grade officers could not really think of a song which represented the period; "grunts" (infantry, usually enlisted) and company grade officers split between "These Boots are Made for Walking", "Jumpin' Jack Flash", "Sympathy for the Devil" and other counterculture songs. "Ride of the Valkyrie" (Apocalypse Now) was seriously considered, but in the end,

ferred body count (KIAs), but one can understand and sympathize with Microprose's rationale.

As Dr. Bever admits in the documentation, certain of the scenarios are for learning purposes only. Dien Bien Phu as a historical simulation has the same appeal as Custer's Last Stand -- you might enjoy it if you play the winning side or if you are a dyed-in-leather masochist. Otherwise, the scenario serves as a learning tool for the novice. But even Dien Bien Phu has a variant, with American intervention, that plays a tense game. Similarly, the largest scenario, Khe Sanh, while impressive visually, is not in the same league of playability as the other scenarios; this scenario covers Tet 1968 from the DMZ to Khe Sanh to Quang Tri City. In initial test versions, the game ran almost sixty days. Much of this time, nothing was happening for the Americans. Although enemy units were infiltrating and "spotted", the American/ARVN player simply lacked the mobile resources to offer an effective counter-force. This lack of mobility is not a designer "glitch"; rather it is a recognition of the fact that the Third Marine Division along the DMZ was fixed by orders emanating from the White House,

Continued on pg. 46

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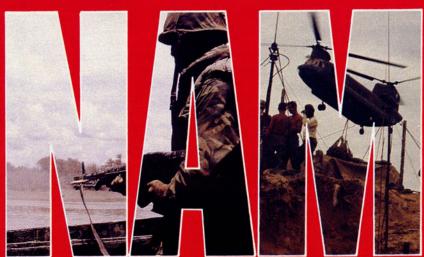
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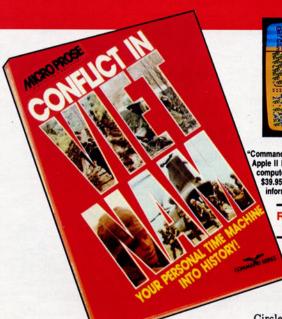
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Recently Richard Garriott (aka Lord British) visited the offices of Computer Gaming World. We were able to ask him a number of questions about his company, Origin Systems, as well as his latest game, Ultima IV. Here is what he had to say.



CGW: How did you get started in the publishing of computer games?

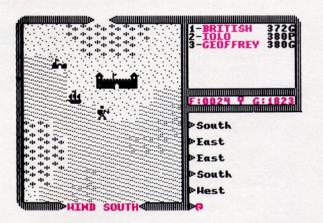
LB: By accident, actually. When I was in high school I took the one computer class my school offered, and using the school's one Teletype, system operated by paper tape no less. At the same time I learned to play fantasy games such as Dungeons and Dragons tm. This was in 1977. Since my school didn't have any other computer classes, another student and I managed to get a three year self study course approved. All we had to do was work on an approved project and show our work at the end of each term. My projects were computer fantasy games (back then they were pretty simple). During high school I wrote 28 small fantasy roleplaying games.; Upon graduation I went to work for a Computerland store and was exposed to an Apple II+. Wow! Graphics! Immediately I wrote a game with perspective-view dungeon graphics. I called it Akalabeth. The owner of the store convinced me to publish it myself. So I spent \$200.00 (a great sum of money at the time) on ziplock packaging which was the industry standard at the time. In just a few days I had sold about five of my first 200 units when the store owner sent a copy of my game to a publisher called California Pacific. A few days later I got a call from California Pacific saying that there were tickets waiting for me at the airport! I then flew to California and signed a contract and...

CGW: Why do you write as Lord British?

LB: In fact, I was born in Cambridge England. But that's not where I really come from. When I first learned fantasy games I was at Oklahoma University for high school summer studies. When I first arrived at the dorm, other students would come into my room and say "Hi". Of course I would say "hello" back and they would blurt out "What?... Hello!? No one from around here says 'Hello'. You must be from Britain or something... We'll call you British!" Well everyone that summer was similarly dubbed with a nickname, and I began to call all of my fantasy characters LORD BRITISH.

CGW: To date, you have had three publishers. Why?

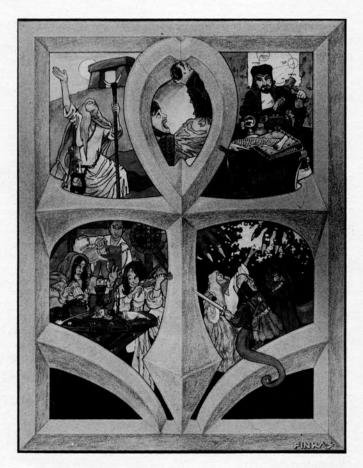
### inside Ultima IV



LB: My first two products were published by Bill Budge's company, California Pacific, which at that time was about the largest in the industry. Some months later California Pacific began to have financial troubles. It was time for me to move on. I was pleasantly surprised when many other publishers contacted me wanting to produce my next Ultima! The problem was, and still is matter of fact, that I get very personally involved with my games, wanting the end product to look and "feel" a specific way. For instance, I wanted a cloth map enclosed in a nice box, rather than just the ziplock with a disk in it. Not may publishers were willing to market my game with that much detail. Sierra On-Line liked my idea and agreed to package Ultima the way I preferred and that's how I agreed to sign with them. Sierra did very well for me but they did not seem very "author friendly" to me, and I never really knew if I was getting a fair shake. So my brother Robert, Chuck Bueche (another Sierra author as well as college roommate), and I started Origin Systems.

CGW: Tell us about Origin Systems.

LB: My brother, Robert, is the president of the company and is really perfect for the job. He graduated from Rice University with a double major in Electrical Engineering and Economics. He went to Stanford for his Masters in Engineering and Economic Systems, and then to The Sloan School of Management at MIT for a Masters in Business. Initially, our programming staff consisted of only



myself and Chuck Bueche. Chuck has been a good friend since high school, a fellow fantasy gamer and has been published through the same companies as me under the name, "Chuckles".

When we started OŚI it was probably the worst possible time for a new company start-up (even more so for a software company) since the 1983 computer industry shake-out had just started. Fortunately the name Ultima was familiar to distributors and Ultima III, our first product, was picked up right away. Today our staff has grown to about 20 plus, including a dozen or so programmers and translators both out and in-house.

#### CGW: What about your relationship with Electronic Arts?

LB: Origins Systems is still a pretty small company compared to some, and certain major store chains like Toys-R-Us and Sears only want to deal with a few (very few) publishers. That makes it difficult for us to get our product onto their shelves. Electronic Arts, now distributing our products, can reach these places and markets. But we still handle all other aspects of marketing, advertising and development. This agreement has done very well for both Electronic Arts and ourselves.

#### CGW: Now, let's talk about Ultima IV. How does Ultima IV differ from previous Ultimas?

LB: Well, to begin with, the world in Ultima IV is 16 times larger (256x256 tiles compared to 64x64). There are many new things like terrain encumbrance, mixed monster parties of up to 16

creatures and an expansive component-based magic system. You start the game with one player and build to a party of eight non-player characters from within the game or from characters you meet along the way. You can be ambushed at bridges, while camping, or at inns. The dungeons have detailed rooms with traps, disappearing walls, fire pits that open suddenly, secret doors and more! There are new weapons with neat graphic effects, hundreds of individuals in the game capable of interactive dialog and a huge plot that unfolds in great detail as the game is played.

CGW: The beginning of Ultima IV is unusual, somewhat reminiscent of a hi-res adventure. How does this work and what effect does it have on the game?

LB: Well, Ultima IV is probably one of the only games where the disk is booted first and the documentation read later. In Ultima IV it is intended that it be you, the player, traveling in the lands of Britannia. Since this is a game about the player's personal virtues, it is very important that one always identifies with the character and feels responsible for that character's deeds and actions with Britannia. To facilitate this I wrote the introduction to slowly pull the player into the fantasy, then ask the player questions about his or herself so that the computer can put together a profile of how the player feels he or she is (or would like to be) in real life. With this profile the computer generates a custom character that best matches the player's personality. Further, this will decide who the player is, the type of character (fighter, mage, etc.), attributes (strength, intelligence, etc.) and where in Britannia they will start the game. Because of this, the game will unfold differently for each player.

#### CGW: Where did the idea for a game about virtues come from and why did you do it?

LB: Two things. First, about two years ago, I saw a show on television that talked about the concept of an Avatar in many Eastern Religions. The show described how these certain religions believed an Avatar to be a perfect being who had achieved purity in 16 traits. Well, the dictionary definition of an Avatar is approximately, "The incarnation of any particular belief or philosophy." This show set the game design wheels in motion. A second major factor is more difficult to explain. You see, when I began writing Ultima's I was 19 years old and just out of high school. I was writing for the fun of it (as I still am mainly), but that was all. Now, as I have sort of grown up the ripe old age of 24 I receive things like fan mail! People write to me about things they have read into my games; things that I never even put in there, not to mention things that are. This has made me sit back and take a more responsible look at what I am doing. Personally, I do not believe all the flak that goes around in some circles about the bad effect fantasy games have on kids, but, no doubt, even my game has some little effect on some lives. Therefore, I feel that it is very important that this effect be a net good rather than a net bad. As an example, in all of the other Ultima's (and most

other fantasy games), even though a player was supposed to be a champion of good (versus evil), it is often needed if not essential for survival, to steal from the shops. I feel that this is not really necessary and that many other plot twists can be thought of that have a more positive nature - Ultima IV.

CGW: Why did you settle on the 8 virtues that you did?

LB: Well, I first wanted to find a group of virtues that covered as many motivating factors as possible that overlapped the least. After beating my



Lord British (r) presented with CGW Adventure Game of the Year Award by CGW editor Russell Sipe

head for a few weeks, with no luck, I decided to use a basic three and found Truth, Love and Courage to be not only a good set as far as I could tell, but a historical precedence in a number of other works. For example, in The Wizard of Oz the Scarecrow corresponds with Truth; Tin-Man with Love; and the Lion with Courage. With these three, there are eight combinations spawning the eight virtues, but since part of the game is to figure these out, I won't go any further.

CGW: Did you find it harder to design Ultima IV because you were changing to a different emphasis?

LB: Oh, Yes! Much harder! When you can use almost any idea that pops into your head in the design of a game, it is pretty easy to hash out a plot. But, when you are restricted to a previously accepted category, then say only one out of four ideas fit. If you look closely at the previous Ultima's, you can see that they lack much internal plot consistencies. The plot elements have little to do with each other. In Ultima IV, however, virtually everything is interrelated in some fashion, plus I've added much more!

CGW: Did user input have much effect on Ultima IV's design?

LB: Yes, it did. I get a lot of mail with suggestions on improvements and comments of what people liked and disliked. Very often, if I agree with the comment or criticism, that feature will be expanded or removed. By the way, I do answer my mail personally, although it may take me awhile to respond.

CGW: Was it consumer pressure that drove you to make the games more complex?

LB: No, seriously, my main motive to write is for the fun of it! (Much to the dismay of my office, I often go on no-work binges!). I rewrite each Ultima from scratch so that I can add significant improvements. This also has the unfortunate side-effect of making each Ultima take longer and longer to finish. Akalabeth took me only three months, Ultima I nine months, Ultima II one year, Ultima III one year and, finally, Ultima IV two years, to complete.

CGW: Does this mean that it will take you three years to write Ultima V?

LB: No. Even though Ultima V will be more work, we now have a larger programming staff at Origin Systems. Many of the routines which I would have difficulty with, will be supplemented by someone else to save time. In addition, since it will likely still take over a year for a new Ultima to be released, we are discussing plans in the meantime to release an *Ultima IV: Part II* by next Christmas. A new game, but in the same graphic system.

CGW: Is Ultima IV harder to play than previous Ultima's?

LB: No, in fact it is easier. This is because it has many menu-like displays, and easy to remember spells. The game grades itself to the player in the beginning. The first ten thousand moves only generate four types of monsters. The next ten thousand moves only eight types. After that the game breaks loose!

CGW: That's not in the documentation is it?

LB: No, but after playing, you have a feel for it because there will be monsters you never saw before.

CGW: Some CGW readers bemoan the fact that you cannot save games in the dungeons. Why is that?

LB: Well, this is a problem that with each Ultima I have tried to solve but have not succeeded... yet. The problem is that to save the game while the character is on the surface I need only to save the player location, status and surface information to the disk and to restore it is simple because it will always be the outside map! In a dungeon or town, though, I would also have to save the status and location of each non-player character or NPC, the status of each trap, the changes in the walls and much, much more... Then, even worse, the program would have to restore all of this when you wish to restart the game. It's a non-trivial problem.

CGW: Tell us about the playtesting procedure for Ultima IV.

LB: Ultima IV really got a rush playtest. We wanted to get it out by Christmas and so I, being the only one who knew the game well, was the only one to have completed the game prior to publication. We did have a number of other playtesters but none had the time to finish it but me. Basically, we were lucky, but since I write a little and play a little during development, Ultima's tend to be relatively bug-free as they go. By the way, OSI does normally heavy playtest, but we just rushed it on Ultima IV.

CGW: We've noticed that in Ultima IV, battle strategy is much more important than before.

LB: Yes, mainly due to two new additions. First, the fact that monster parties can have many different kinds of creatures, one should analyze opponents more carefully (i.e. take the wizard and then trounce the skeletons). The terrain encumbrance forces the player to consider how to best arrange his character team.

CGW: It seems that enemy parties are keyed to party size?

LB: To an extent. This is to help keep the game easy enough for beginner players and tough for large parties and advanced players.

CGW: Tell us about the dungeon rooms.

LB: The dungeons themselves are only 8x8x8, which seems small at first but each dungeon contains many 11x11, individually designed rooms. Each room can contain up to 16 different types of creatures, traps or other changing features like collapsing bridges or fire pits and a number of secret passages. These rooms are one of my favorite new features in this Ultima!

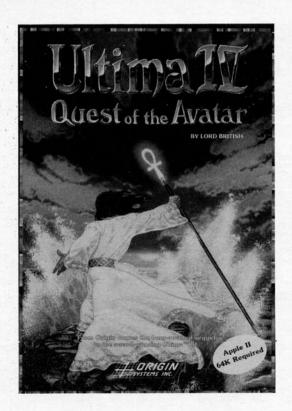
CGW: What inspired the reagents in spells?

LB: In Ultima III, I tried to make a magic system that was as authentic as possible. I even did research in supposedly real magic books to find ideas. I made up names for the spells from Latin roots so that they would sound authentic, but what actually resulted from that was a magic system that was hard to remember and difficult to use. So, for Ultima IV I wrote the 26 spell names in English, allowing the player to type the first letter of the spell to execute or cast the spell. I wanted to add back some of the complexity, so I put in reagents that must be pre-mixed to cast each spell. I tried to make the combinations logical as well, such as ginseng in healing type spells, and garlic in warding types, etc.

CGW: How do you develop the plot for an Ul-

tima? And how are they written?

LB: I program in just the way you are not taught to program in school. Most of the plot's detail is not decided upon until it comes time to put it in. The first thing I do is to decide what major features in the graphics I want, what the capabilities are, put them in and work on that. Then I let



the player walk around on the outdoor map. I then add the towns and the ability to walk in and out. Next I add monsters to threaten the player, followed by the ability for the player to fight back. Next I add shops so the player can buy weapons to better fight... in this manner I slowly add game elements as they become necessary. Technically, this is a bad programming technique, because portions may need to be re-written when new features are added. However, one of the major reasons new ideas get into an Ultima is because I use things that naturally fit into the existing code, needing then a minimum of additional code. This way lots more can be crammed into less space. In fact, the bridge trolls that many who have played Ultima IV have seen, were added about one week before the game's release, when I finally found a spot to put in the ten lines of code.

CGW: Can you save more than one game?

LB: Yes, all of the player information is stored on the "Britannia Disk". If you copy this disk, you have a back-up at that point.

CGW: Is there a clue book?

LB: About the time of this article's printing, one should be available.

CGW: Earlier you mentioned that you are working on Ultima IV: Part 2. What can you tell us about that product and what can you tell us about Ultima V?

LB: Not much since I am only in the concept phase on both of them. The whole plots change on a weekly basis, but if anyone has any neat ideas, please write! [Ed.: Richard can be reached at Origin Systems, 340 Harvey Rd., Manchester, NH 03103]. Oh, also some of you may know that for Ultima IV I included many NPC's submitted by Ultima players. I will probably do that again, so keep your ears open!



Strategically Speaking covers strategy game tips, including tips on wargames, sports games, economic and other "real life" simulations, and classic style games.

DISCLAIMER: The tips printed in SS are those of the authors. We try to avoid printing tips that don't work, but we cannot playtest all, or even most of them. So, let the player beware.

We pay \$5.00 for each Strategically Speaking tip used. Presently the bulk of tips submitted to CGW are on wargames. We also need tips on other types of strategy games as well. Tips can be mailed to Strategically Speaking c/o Computer Gaming World, P.O. Box 4566, Anaheim, CA 92803-4566. Try to keep tips under 250 words if possible:

#### CRUSADE IN EUROPE

With play balance set on FAIR, the allies run into difficulty with the crack German units defending the Normandy beachhead in the assault scenarios. The allied player can generally get an early breakout by ignoring the British sector entirely (i.e., instructing the British divisions to DE-FEND). Then, the allies can overwhelm the two German static divisions on the Cherbourg peninsula, capture Cherbourg with two U.S. divisions, wheel around behind the tough German 91st infantry division, and isolate it. Avranches is only 30 miles (five squares) away at this point, and the German cannot both defend this critical city and keep a strong defense in the British sector.

> Bob Beck Hanover, NH

#### DREADNOUGHTS

To obtain the highest score you must find and destroy the WS-8 convoy. You can do that be steaming your ships south-west straight into the southern convoy route at the very first moment you leave Norway. You will encounter the target convoy on the second day by using your search planes and by patrolling. Do not be surprised if you notice that there are battleships and cruisers near the WS-8 convoy. Go ahead and engage them. After they have been dispatched concentrate your guns on WS-8 until it is completely destroyed. By now victory is yours even if you lose both of your ships. Increase your score by sinking other convoys and escorts.

> Y.M. Lai Hong Kong

#### FIGHTER COMMAND

A good RAF Commander will use patrols effectively. The Luftwaffe needs to negate them somehow. Here are some tips that may help.

If the British player does not place patrols until the two minute clock starts running, use single squadrons from Norway as feints. Set the turn around point and offset points well out to sea and away from radar stations. Time over target for the first feint is 0630 and space the others out about an hour apart. This will keep the warning "ENEMY ACTIVITY - RAIDS EXPECTED SOON" and the two minute clock running constantly.

The British player is forced to keep patrols up from dawn to dusk, the Luftwaffe can see the endurance of the patrols and plan raids to hit during the changing of patrols (hopefully catching some

squadrons on the ground refueling.

The first time a fighter sweep is intercepted by the British player he is informed that it is a sweep and will not intercept with other squadrons. The Luftwaffe should pick a coastal target for a raid, send no bombers, but send ME 109s including the squadron that can dive bomb. Pick the target and the offset point as if this were a fighter sweep (which it is). Interceptions of this raid will only encounter fighters, but the British player is not told it is a fighter sweep and should assign more intercepts.

Mike Briggs Ft. Leonard Wood, MO



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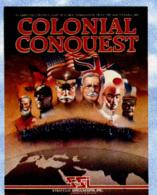
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### Tooling Through the Solar System with The Halley Project by Gregg Williams

I was there, I tell you. I was about 3 million kilometers away from Saturn, my ship turned 90 degrees away from the planet to set myself into an orbit. Once I had my speed set (a leisurely 10,000 km/sec--I was searching for the incredibly elusive moon, Iapetus), I turned my viewport toward the planet and saw it! Saturn, looking like a gigantic crescent moon. And there, nestling in the dark between the crescent tips of Saturn, was one of its moons, itself a crescent, a shockingly beautiful echo of the immense planet behind it--it was magnificent! As my ship sped past, the crescent moon crept outside the circle of its mother planet and became just another planet against the unchanging backdrop of the stars. The game for me was almost over, but I would never forget the beauty of that unexpected moment (or several others like it), which had made the long journey worthwhile.

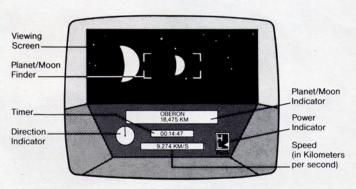
The Halley Project: a Mission in Our Solar System from Mindscape (created by Tom Snyder Productions), is a real-time game that takes place in a simulated solar system. The game runs on the Commodore 64 and Atari 800 family of computers (I played the Atari version); for more details, see the end of the article.

#### Training for the Halley Project

When you rip open the top-secret diplomatic pouch, listen to the briefing tape, and read the mission dossier (The Halley Project's packaging is very much like Infocom's), you discover that you have the opportunity to qualify for the top-secret Halley project by completing ten training missions of increasing difficulty that test both your knowl-

edge of the solar system and your skill at piloting a spacecraft.

A training mission comprises one or more legs, each of which gives you a destination somewhere in the solar system; each mission starts and ends on the top-secret research base inside Halley's Comet. In each leg, you have to navigate your ship to the destination, then orbit the planet (sometimes around its dark side) until you hear the homing beacon of the landing area and activate the ship's automatic landing system. The simpler missions have two legs with unambiguous destinations (like "Earth"); later missions have as many as six legs and vague descriptions ("any planet or moon warmer than Callisto") that will send you scurrying to an astronomy book or encyclopedia. Since you can save the game only at the end of each mission, plan to spend up to an hour on the early missions and as much as three hours on the later missions.



**Control Panel** 

#### **Editorial Comment**

By the time you read this Halley's comet should be approaching it's best appearance. Unfortunately, as you probably know, the view from the Northern Hemisphere will not be great. Not only is the geometry for good viewing poor, light pollution will have its negative effect as well.

When Halley last passed our way (in 1910) it could be seen from downtown New York City. Today, in some places in the United States, the moon is all that you can see from downtown.

There is a great tragedy here. Naturally we are concerned about the destruction of our environment here on earth. We pass laws to protect endangered species and preserve our wildernesses. But the most majestic display in

all of nature, the night sky, is being increasingly destroyed as each year goes by. Go out and take a look at the night sky from your backyard. How does it compare to the sky you remember ten years ago? No, your memory is not trying to compensate, the sky really was that much darker back then. And ten years from now it's going to be that much worse!

I for one want my children to be able to see the Big Dipper when they are old enough to pick it out among the stars. But that may not be possible in the future if we do not get on the ball and begin to insist on sensible lighting laws which calls for low-sodium street lights, ground directed lighting (that's where we want the light anyway), and a re-evaluation of the erroneous philosophy that makes us want to "light up the night".

Russell Sipe

#### Travel

Your Starbird spaceship has two means of transportation. Normal thrust can get you from 0 to 300,000 km/sec in 20 seconds (how's that for acceleration?). Your brakes (which sound like a braking ostrich in *Joust*) half your speed each time you use them.

To travel really long distances, you accelerate to, then past, the speed of light; this kicks you into hyperspace, through which you travel at the respectable pace of about 50,000,000 km/sec until you jump out of it. (A meter on the screen tells you how far you've travelled.)

In both modes of travel, your thrust is toward whatever's in your viewport. You can, however, rotate your spaceship to look in any direction. If you apply thrust towards a different location, your ship's trajectory becomes the vector sum of the component thrusts.

#### Navigating

It's here that you begin to suspect that your Starbird was built under government contract by the lowest bidder. No digital navigation readouts here. In order to navigate, you find out what constellation is behind your destination, aim your ship

Cancer

Leo

Virgo
Venus

Libra
Mercury
Earth
Scorpio

Sagittarius

470 Million KM

Earth at Edge of Circle on Radar Screen

toward the constellation, and blast off!

(The Halley Project authors have made several simplifications to the game. One is that all the planets in the solar system lie in the same plane. Another is that the twelve constellations of the zodiac form a band that encircles the solar system. The game includes a star-map strip that you use to identify the constellations you see out your viewport. Two other simplifications, the absence of Saturn's rings and some of Jupiter's and Saturn's moons, were made because of the limitations of 8-bit microcomputers.)

You use your ship's radar screen to determine the distance and direction to your destination. It's a versatile little device that shows part or all of the solar system (depending on joystick movement), with your ship always at the center of the screen. Unfortunately, budget cuts in the space program also resulted in the installation of a medium-priced radar that leaves out the computer-generated annotation of each dot on the radar screen. So, turning again to your trusty astronomy book, you deduce where you want to go by finding the sun on the radar screen (it's brighter than the other dots) and counting out the desired number of planets.

Once you find your destination, you adjust the radar image until the dot representing your destination touches the rim of the display. Then you can read off the distance to it (in millions of kilometers) and the name of the nearest constellation. You then align your ship so it's pointing toward the right constellation, jump into hyperspace, then jump back out (you hope) close to your destination.

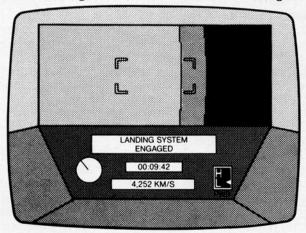
Depending on how skillful you are as a navigator, you may need to make two or more hyperspace jumps to get within 25 million km of your destination. (25 million km is about the shortest hyperspace jump you can reliably make without overshooting your destination further than from where you started. Anyway, at just under light speed, you can travel a million km in about 3.5 seconds. This is almost as fast and, unlike hyperspace, you can make in-flight corrections to your destination.)



#### Landing

When you get sufficiently close to a planet, your on-board computer identifies the name of the planet in the center area of your viewport and gives a running tally of your distance from it. To land, you must get within 100,000 km of it and circle the planet until you hear the homing beacon of the landing area. I found you often had to orbit as low as several thousand kilometers to find the beacon, and doing that on the dark side of the planet (where you can deduce the planet horizon only by the absence of stars) is no small task!

Once you hear the homing beacon, you must activate your ship's automatic landing system before you get out of its range--it's very frustrating when you lose the signal and have to run after it again.



**Landing System Engaged** 

#### Moons

Oh, I didn't tell you about moons, did I? In many cases, your destination will be a moon. Moons are just like planets--except (heh, heh) they don't show up on the radar. To get to a given moon, you should navigate to the planet the moon circles, then visually search for the moon, which your viewport will identify once you are close enough to it. The further a moon is from a planet, the harder it is to locate it unless you're in approximately the same orbit as it is--keep your reference books handy!

#### Scoring

The authors of this game have devised a clever, useful way of scoring your performance. Your score, which you try to minimize, is the number of seconds (excluding hyperspace jumps) that your ship is in motion during a mission. Because your score does not increase while your ship is at rest, the game encourages planning and efficient flight plans and minimizes the value of traditional arcade

skills. If you crash on a planet, you are hospitalized for a month (the positions of planets and moons shift accordingly) and you are released with 5 minutes added to your score (which is a rather severe penalty).

#### What is The Halley Project?

Frankly, I don't know yet. Once you qualify for it by completing all 10 missions (which I did), you send a registration card in to Mindscape with a secret number revealed to you at the end of your tenth mission. According to Mindscape, they will be sending the information needed to start the final mission, the Halley Project itself, starting in January, 1986.

Though Mindscape wouldn't reveal any details of the final mission, my guess is that it will have to do with the comet directly (after all, the 10 training missions do not, except in using the comet as the start and end of a mission). Also, note that that January date coincides with the beginning of the comet's maximum visibility in the sky. It's an interesting gimmick, but a frustrating one to most gamers—even gamers who buy the game later in 1986 will still have to wait "about 5 weeks" for the final material to be delivered. I won't be surprised if Mindset gets some threatening letters from irate customers!

If the final mission is sufficiently interesting, I'll report on it in the Atari column of CGW as soon as I can in mid-1986.

#### Did someone say "Educational"?

I haven't said anything about this being an educational game, though it obviously has educational value. As in most Tom Snyder Productions games, the education that takes place is so seamlessly a part of the game that it doesn't call attention to itself. This is not an educational game--rather, it's a great game that encourages you to pick up some facts along the way.

The thing I like most about this game (as with other simulation games) is that it teaches you the facts of experience, not the facts of book-learning. I still may not know the name of the fourth moon of Jupiter, but I do know that, near Pluto, the sun is so far away that it's hard to see anything; I also know that the innermost moon of Jupiter whips by so fast it's hard to land on. By encouraging "doing" rather than "reading/memorizing" skills, this game also encourages the development of general prob-

lem-solving skills.

(To enrich the learning experience, the mission dossier for this game includes a short bibliography of astronomy books and magazines and fiction about space. It also explains the simplifications made in this game and give some pointers on find-



ing the constellations used in this game in the sky.)

#### Conclusions

Obviously, I like this game. The simulation is accurate enough to be instructive but not so detailed that it is unplayable. I also like the way the game looks and sounds (the game adds a percussive soundtrack whenever you get near a planet—a typ—

ical Tom Snyder touch).

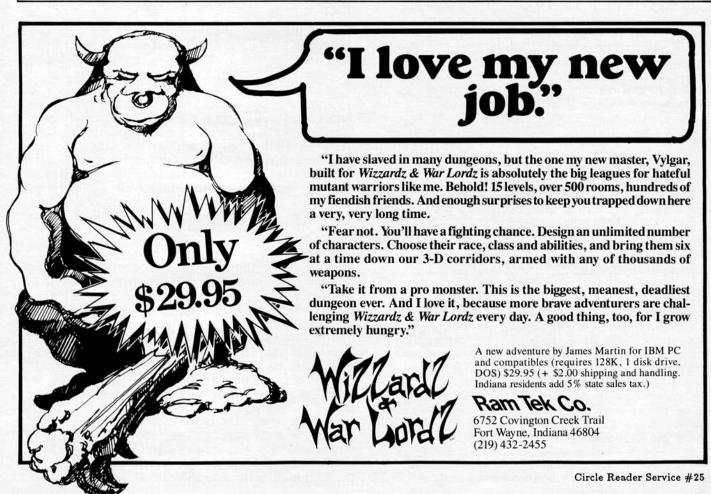
I also like The Halley Project because it gives me a whole new universe to explore and because it has much more depth than the simplistic scenarios of simple shoot-'em-up arcade games. This game has enough richness in it to fantasize about--"There I was, three million kilometers away from Saturn," I recounted to coworkers, "and the planet is *still* so big it fills most of the screen...." In some ways, describing The Halley Project is like describing yourself inside a challenging adventure game--you have to know where you are and how you got there before you can figure out what to do next.

The game gives good value for the money--I spent about 20 hours getting through each mission

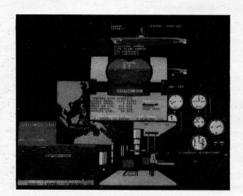
once, not including the final mission (whatever that turns out to be). The planets are randomly placed at the beginning of each mission, and you can replay each mission as many times as you like.

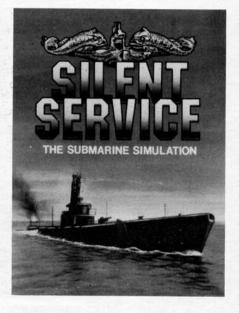
Until faster-than-light travel is discovered and used by commercial airlines, this simulation is the best way I know to drive through the solar system. And I'm proud of myself--this is one of the few video games I can finish. Program details: "The Halley Project," \$49.95, from Mindscape, 3444 Dundee Rd., Northbrook IL 60062; includes a single disk with versions of the program for both the Commodore 64 and Atari 800 series computers. A new version of this game for the Amiga computer is promised, price unknown. The Halley Project was created by a team at Tom Snyder Productions headed by Omar H. Khudari and Thomas F. F. Snyder

Gregg Williams is a technical editor for Byte Magazine as well as our Atari Playfield columnist during those times when he is not flying around the solar system.



## SILENT SERVICE





Designer's Notes

by Sid Meier of MicroProse

A long winding path usually leads from the first wildly ambitious design goals of a computer simulation to the finished product. Occasionally, though, a project services intact, refined by the rigors of development but unchanged in its essentials. Fortunately for all concerned, Silent Service proved to be such a product. In this article, I will discuss the major design decisions which initially defined Silent Service and discuss the features which resulted.

Silent Service is a detailed simulation of submarine warfare in the Pacific during World War II. The player commands a US submarine in actions that range from a single attack on a convoy to a war patrol lasting many weeks. Play proceeds in real-time during the action and accelerated real-time in the times between.

This last feature, the accelerated-real time, was designed to overcome the difficulty that has beset most previous computer submarine simulations: the fact that submarine warfare is so episodic, with moments of frantic activity following weeks of routine activity and hours of careful stalking. As a consequence, designs have tended to simplify and distort the situation in order to create a more arcade-like feeling. In contrast, our first design decision was to make the simulation as realistic as possible. We were convinced that a realistic simulation including all the key factors in commanding a submarine would contain more than enough interest, challenge and excitement.

One key factor was the immense size of the war theatre, which presented skippers with an endless number of potential battlefields. We created a mapping system which includes the entire Western Pacific ocean. Engagements may take place anywhere in this arena. The player can zoom in on any portion of the map until the screen displays an area of only 8 miles by 5 miles. The computer generates water depths and bridge and periscope views that are consistent with the map location.

A second key factor that introduced variation into submarine warfare was the sheer variety of tactical situations which faced skippers. Night attacks differed greatly from daylight attacks. Weather, water depth, and equipment capabilities each affected the captain's tactics. "Dud" torpedoes, deep diving pressure hulls, underwater temperature gradients, and varying visibility conditions all contributed to an infinite variety of tactical situations.

A third key factor that introduces variation is the fact that equipment on both sides evolved continuously. Silent Service's scenarios encompass the numerous changes that took place during the war. For example, prior to 1944 US submarines used 46-knot steam-propelled torpedoes, which left a bubble trail on the surface which pointed back towards the submarine. Only in 1944 were electric torpedoes which left no trail introduced. The pre-1944 skipper could count on an immediate counterattack and would generally begin his escape as soon as his torpedoes were fired. With electric torpedoes, a more deliberate attack was feasible. But by late 1944, most Japanese escorts had surface radar, which once again changed attack tactics.

Our second basic design decision was to place the player directly into the role of submarine cap-

tain. This role requires that a great deal of information be readily accessible. To facilitate the presentation of this information we implemented the "battle station" concept. Each battle station is represented by a separate screen which displays related information. The "Maps and "Charts" battle station contains the maps of various scales along with the most current information as to the position of enemy ships and escorts. The "Bridge/Binoculars" battle station provides a wide-angle view of enemy ships and nearby islands or coastlines. The "Periscope" battle station includes a magnified view of target ships, the Torpedo Data Computer readout (range, speed, target course, etc.), and the report from the target identification party. The "Gauges and Instruments" battle station displays fuel levels. battery charge, torpedo status, depth and other vital information. Finally, the "Damage Control" battle station indicates which components have suffered battle damage.

In playing the game, the player utilizes each battle station in turn to plan and carry out an attack. The Maps and Charts are generally used during the approach to the enemy convoy. From the bridge, the captain examines the convoy and selects his target. The deck gun can be fired if the target is small and unprotected, or a Japanese escort catches the sub on the surface. The periscope provides bearing and range information as the captain chooses the optimum moment to fire the torpedoes. This compartmentalization assures that a great deal of information is available while allowing the player to focus on the specific task at hand.

No simulation would be complete without a dangerous, crafty, and relentless enemy. Silent Service includes a sophisticated simulation of Japanese escort tactics, both their strengths and their weaknesses. Central to this simulation is the concept of "limited intelligence;" the escorts can only act upon information which they would actually know. Combined with realistic game mechanics, this rewards the well planned approach, the best firing position, and other sound submarine tactics. A sub can only survive if it makes maximum use of stealth and surprise.

One of the constants in the design and development environment at MicroProse is our focus on "real-life simulation" products. That is, products to which the player responds not only to what he sees on the screen and reads in the documentation, but also relies on his own experience, reading, and knowledge to enhance the game play. Another constant is to leave the game design flexible and modifiable until the very last stages of development. This allows us to improve and fine-tune the game in those areas which are clearly identifiable only near completion, namely user friendliness and playability. We are confident that Silent Service will appeal to computer gamers who want realism, detail, and depth along with smooth and fast paced play.

(Mr. Meier's previous designs include F-15 Strike Eagle, Solo Flight and the Command Series system used in Crusade in Europe and Decision in the Desert. All are published by MicroProse Software).

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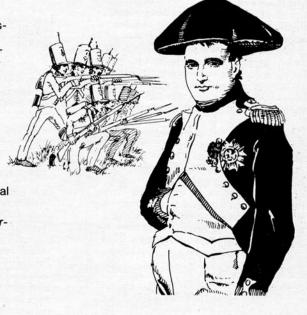
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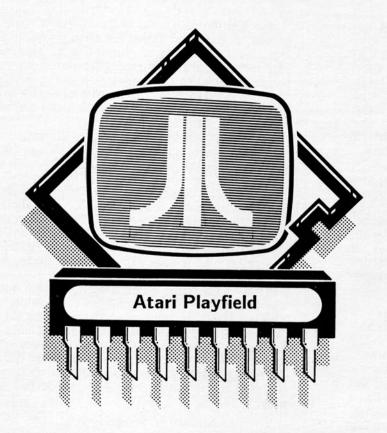


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**GREGG WILLIAMS** 

#### LUCASFILM'S SECOND WAVE

Lucasfilm's first two games, Ballblazer and Rescue on Fractalus, were originally conceived by the Lucasfilm design team as throw-away exercises; instead, the results were good enough (by their high standards) for publication, and the Atari and Commodore 64 communities gained two of the most unusual and state-of-the-art games ever made. Consider the fact that the two new games, Koronis Rift and The Eidolon, are the first two games that Lucasfilm meant for publication. The result, interestingly, is two games that give a "deeper" fantasy than the first two but that are not as easy to like. Both of the new games are simulations of alien environments; perhaps we're seeing an example of the old detail-versus-playability tradeoff. I could wholeheartedly recommend the first two games to anyone; I don't like these two, but you may. (Both games are \$39.95 each and are distributed by Epyx (1043 Kiel Ct., Sunnyvale CA 94089).)

#### KORONIS RIFT

One of the most amazing technological feats in Rescue on Fractalus was the calculation and display of a fractal landscape in real time (fractals are mathematically derived shapes that look like many irregular shapes-mountains, for example-in nature). Well, Lucasfilm must be determined to get their money's worth out of that code, because both of the new games

use variations on it--hills and valleys in Koronis Rift, cave tunnels in The Eidolon--with outstanding results in both cases.

KR (as I'll abbreviate it) is similar to Fractalus--from a ship orbiting a planet, you make repeated forays over the planet and return to the mothership. In Fractalus, you were looking for pilots to rescue; in KR, you are looking for the hulks of ships abandoned long ago by a legendary "confederation of over thirty different races" called the Ancients. When you find such a ship (and, by the way, shoot down all the Guardian saucers protecting it), you send a robot to loot it for technologically valuable modules.

I have seen the future, and it works: your ship has six slots that will accept Ancient module designs—no problems with compatibility here! Modules are identified by two symbols: the first indicates its purpose (if you're lucky—you have only a partial list of module types and often must discover a module's function), the second, the race that built it. (In addition, the color of a symbol also makes a difference.) Back in the mothership, your Psytek robot can analyze a module (giving its value and its efficiency and power ratings), dismantle it, or store it for later use.

You can play KR to maximize your score and/or to get to Rift 20 (hah! I couldn't get past rift 4!) and destroy the Guardian base. So the game becomes one of getting modules and knowing which to install in your ship, which to store in the

mothership, and which to dismantle for points as you try to strengthen your ship for battle against fiercer Guardians in the higher levels. If KR is a game, it is also a puzzle--there is so much about your ship, the Guardians, and modules that you have to deduct or learn through trial and (much) error that observation and strategy that arcade skill alone isn't enough to get you through this game.

I didn't like KR because I spent so much time in the time-honored "try something, get killed, restore a saved game" cycle so familiar to adventure players. The Guardians are too ruthless too early in the game for me--I spent almost as much time restoring my last position as I did playing it. Also, I found myself taking notes about everything to get an edge on this game, and I found it more work than fun.

I also had some mechanical problems with KR. In what may have been a deliberate design decision, your ship starts moving forward when your cursor touches the top border of your view window--this makes it virtually impossible to shoot at Guardians while standing still. Also, the disk holds only one saved game, and it does it on the (copy-protected) master disk. I anticipated problems and made a copy of the KR disk--it didn't boot, but I could save games to it. When the unexpected happened--the program messed up the KR disk and wouldn't accept a saved game--I substituted the copy and found that I could play the entire game from the floppy. My advice is to copy the KR disk and use it to start the game, then substitute the copy.

Still, I have to say that the graphics and sound in this game are outstanding, and the game's premise is imaginative. Its skill/strategy/study balance is interesting, but I didn't enjoy interacting with it; you may. The "depth" of the fantasy is outstanding, second only to that of an interactive adventure, but this game has color graphics and plays in real time! It's a unique challenge, but definitely not for everybody.

#### THE EIDOLON

AAAAAAAARRRRRGGH! Excuse me, but I just had to get that out of my system. I have two 48K Atari 800s and a 48K Atari 400, and I can't play Eidolon! Why? Because if you look in the fine print, the packaging says "requires 64K"! This means that Eidolon is playable only by owners of the 800XL, the 1200XL, and the two new Atari XE computers; Atari 400/800 owners, your computer can't run this game.

If you don't like the puzzle aspects of KR, you'll really be annoyed (as I was) by Eidolon--you have to use the same "die until you learn the rules" strategy as in KR, but this game doesn't have a savegame feature.

The Eidolon is a mysterious machine built by a long-dead Victorian scientist. When you activate it, you're suddenly transported to a maze of underground passages. The rules (told as a series of diary entries by its inventor) explain that you may meet a half dozen or so fanciful critters, that you can shoot fireballs of four colors (each with a different effect), that you may find jewels of three colors, and that you must overcome a dragon to get to the next level. The documentation hints at there being seven levels, with a final challenge past the dragon on level 7. Of course, the critters guard the jewels (of which you may need some or all). The documentation implies that you can simply sidestep some of them, but I never could get past them and had to blast them to pieces (honest).

I mean, really, I think this game suffers from a lack of imagination. You get transported to god-knows-where in this machine and you basically shoot at everything in sight. Is this a reasonable--let alone responsible--way to explore a new world?

I feel sorry for one critter in particular--it looks like a goofy Viking dwarf, and its eyes bug out and it makes a wonky sound when you shoot it. As my friend Rick Grehan said, it could be saying, "Wow, you're the first person I've seen in ten thousand years, will you be my friend? Let's go get a milk shake and--ow! What'd I do? Stop that! You're killing me! AAAACCCKKkkkkkk...."

Two other constraints lead to an interesting strategy twist. You have two resources you don't want to run out of in this game. The first is time: you have to finish a level before the clock counts down to zero; if you don't, the game (and your hard-earned progress) ends. The second is energy: contact with both the critters and the fireballs decreases the energy the Eidolon has; when that drops to zero, you're taken back to "reality" and get to try the same level again. This results in an interesting stay-alive strategy: deliberately killing yourself (you can't always do it) just to keep the game from ending. Weird.

My overall reaction is much the same as for KR--great sound and graphics; I don't care for the game's balance, but you may. Mapping each level is essential for people who don't have an uncanny sense of direction.

#### CONCLUDING REMARKS

If either of these games interest you, go out and buy them! They're definitely in the top 10% of Atari games, and we need to vote with our dollars to encourage Lucasfilm Games (and Epyx) to create Atari versions of future games. (Both games are packaged with both Atari and Commodore-64 versions, and I'm sure you realize that the C64 is the machine that games are designed for-with Atari translations only if it makes sense economically.) In fact, it wouldn't hurt to write Epyx expressing interest in seeing more Atari games.

CGW didn't get in any Atari ST games this month, so there's nothing to report on there--maybe next month. Also, I did receive the copy of Fooblitzky I bought (it's a multiplayer game with simple graphics, from Infocom). As they claimed, it is a lot like a mixture of Clue and Mastermind. I've only had time to play it once, but it was interesting--I will definitely cover it in fuller detail next month. Until then, remember--no matter where you go, there you are.

# Psi 5 Trading Co. The game that'll put your BMW into orbit.



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Circle Reader Service #27

# The Dam Busters. The game that'll keep your Aston Martin in the hangar.

You won't be doing much cruising around in your Aston Martin when you have the game that lets you refly one of the R.A.F.'s most decisive World War II bombing missions. You must

man seven different tactical positions within the bomber Grasp control of the intricate and complex cockpit or you will perish. Don't kid yourself, this is a very difficult game. To be successful, you'll need the right stuff!

Your mission is to match the legendary raid led by Wing Commander Guy Gibson on May 16th, 1943. Against incredible odds, British Lancaster Bombers from his Squadron 617 successfully breached three dams, flooding the Ruhr

Valley, and virtually crippling the Nazi war machine.

Accolde

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Roy Wagner

Listen to the crowds, the vendor selling, the referee making his calls, the ball against the floor and up in air and through the basket --- SWWIISH, two points! But you're not at a basketball game away from the security of your computer. No you are playing One-on-One on your Amiga. Sounds you have to hear to believe. Graphics you have to see to know that the Amiga is not just another computer, but rather the ultimate game machine. (It functions as an excellent business machine, but that's a ball in another court.)

The first games to make it to market were from

Activision: Hacker, Mindshadow, and Borrowed Time. These games had just recently been released for other computer systems, and now with enhanced graphics were released for the Amiga. All three are graphic adventures. New Amiga owners, anxious for any software to play with on their machines, bought out initial shipments. Users were pleased with what they saw and heard. But where were the games from EA (Electronic Arts) that had been advertised so much even before the Amiga was available?

Next to appear were three text adventures from Infocom: Wishbringer (Beginner Level), Spell-breaker (Advanced Level - third in the fantasy trilogy of Enchanter and Sorcerer), and the year's favorite, Hitchhiker's Guide to the Galaxy (Standard Level Fun). The text and flavor of the games remained unchanged, but the play was greatly enhanced

Nearly all Infocom games are designed to the limited disk capacity of 160K. An Amiga disk holds 880K and the Amiga comes with 256K of memory. Thereby an entire Infocom disk, program and data are loaded into the Amiga. This means no disk accesses and fast play! Games in progress can be saved using a thirty character text name and over thirty games can be saved to the Amiga disk that contains the game. An Infocom adventure is always fun, but on the Amiga it is a real pleasure. But where were the EA games?

The answer came soon. The earlier games released were able to use the initial operating system release (1.0). With release 1.1 right around-the-corner, EA had been using 1.1 for the final design of it's production release. This meant the EA titles

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could not be released until the users had 1.1. The corner ended up being a LONG block away for it was nearly a month from talk of the release of 1.1 to it's actual release. Even then EA sent their initial titles to the dealers and many were sold before the users received the official Commodore 1.1 upgrade package.

The first Electronic Arts software release was not a game, but Deluxe Paint, a super sophisticated painting, drawing, coloring and electronic sticker book. EA released this sensational tool before Commodore/Amiga's Graphicraft, a similar product. The delay of the latter was mainly due to a transfer of the product from it's initial developer Island Graphics to Aegis. The extensive features of Deluxe Paint will be hard to equal for any other product that produces static color graphics. EA and other companies are also working on animation products.

For games, EA initially released three of it's award winning classics with enhancements added for the Amiga.

One-on-One is a one/two player (Julius Erving and Larry Bird) basketball simulation. As mentioned above, it has tremendous sounds obtained by digitally sampling real sounds. The game options are selected from pull-down menus (using the wrong Amiga mouse button!). The background graphics are well done. However, as with prior versions, the player movements and actions handled with a joystick do not give the feeling that one is really in control. (EPYX does a much better job with their control even on a C64 in Summer/Winter

games.) This game with it's many play options is still fun to play.

Seven Cities of Gold is the simulation of the exploration of North and South America during the 15th Century. It includes sailing the Atlantic, encounters with regional natives, trading for gold, establishing missions and forts. The Amiga version is too faithful to prior versions. It appears graphically the same and the sounds are only somewhat better. My major objection is that the game uses a separate 880K disk for each map. This is extremely wasteful and unnecessary! Also instead of using game port two (the available port), this game requires you to remove the mouse and use that port. The game plays smoothly. Aside from these minor grievances it is an excellent teaching tool.

Archon is a cross between chess and fantasy role playing. One's strategic moves are made upon a chess like board using various fantastic pieces. When a piece is "taken", the final taking must be resolved in battle in an arcade like arena. The conversion of this game was done by two of the creators of the original game (Jon Freeman and Anne Westfall). The graphics and sound are superb and subtle. The game plays very nicely on the Amiga, is interesting, challenging and enjoyable. A very nice conversion done well for the Amiga.

It's time to put the cover back on our Amiga. Next time we will hopefully be reviewing new games making their first appearance on the Amiga. Until then, listen up, that sound you hear is coming from your Amiga.

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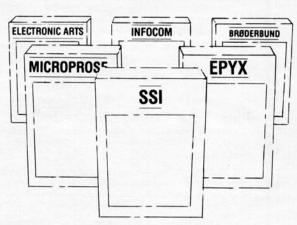
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## STARTREK THE KOBAYASHI ALTERNATIVE

#### by Scorpia

"Spock, scan for life readings".

"Scanning....no indications of life, Captain".

"Kirk to Transporter Room".

"Renner here, sir".

"Beam us up".

"Energizing ... ".

Does that bring back fond memories of the days when the USS Enterprise roamed the far reaches of the galaxy? Did you ever yearn to sit in the Captain's chair, secretly believing you could do just as good a job, if not better, than Captain Kirk himself? Well, here's your chance to find out, because the above dialogue is not from the show, but from 'Star Trek: The Kobayashi Alternative', a new game published by Simon and Schuster (yes, the book people).

There have been Star Trek-type games before, but they were all of the same mold: you flew around the galaxy, looking for Klingons to blast into space dust. They were shoot-em-ups, plain and simple. No landing parties, no contact with strange alien life forms, no problems to solve. You might just as well have been in the USS Clunker.

This one is different. The Enterprise is here, in all her glory, from Sick Bay to Engineering, from Kirk's Quarters to the Shuttle Deck. The Transporter Room is here, too, and you will be seeing a lot of it. While there will be some Klingons to fight, most of your time will be spent in beaming down and exploring those 'strange new worlds'. Not

by yourself, either; some familiar faces can be found among the crew: Spock, McCoy, Scotty, Uhura, Chekov. You can take any or all of them down with you.

Now, a word of explanation for those of you who might not have seen 'Star Trek II: The Wrath of Khan'. In this movie we learn about the Kobayashi Test, which is given to cadets at Star Fleet Academy. A pretty silly one, actually, since all it does is measure how well you die; there is no way to come out alive (short of rigging the computers, which is what Kirk did, hehe). Of course, this is all done in simulation; as McCoy might say: "He's not REALLY dead, Jim".

As I said, pretty silly; it takes more than being able to die nobly to make a starship captain. And so: The Kobayashi Alternative, a revised test, to see if you really have what it takes to sit in the captain's chair. It is a fair test; you have a chance of coming out alive and successful, providing you use your head. If you don't ....

So, you inquire, what is the test? Funny you should ask. Did you notice a name missing from the list of crewmembers above? Like maybe, Mr. Sulu? He's not on board the Enterprise. Where is he? Ahhhh, THAT is the question of the day. No one knows. The ship he is temporarily commanding, the USS Heinlein, has vanished in partially-mapped space. Your mission, Jim, is to explore that area of space, contact the inhabitants for information, and

find out what happened to the Heinlein and its crew. As always, should you or any of your...err, no, sorry, wrong show!

And now here you are, sitting in your chair on the bridge, with everyone waiting for your orders. Somehow, it doesn't seem to be quite so easy as you had imagined it would be. Where do you start? You have at least ten planets to visit, and the computer data on a few of them makes you a little nervous. Andorgha, for instance. Two Federation ships have been lost there. Is that what happened to the Heinlein? Maybe, maybe not. Then there's Tshio. Why is that planet under quarantine? And the inhabitants of Klusos have been known to fire at a Federation ship. What about Malakiyy? There is no real data at all about that one in the ship's computer, making it a somewhat mysterious place.

Many possibilities here, some of them perhaps unpleasant. But you have a job to do Captain, so you'd better decide soon where you're going. No one is going to help you make that decision, either. So, read the docs, get all the information you can from the computer, and warp out.

Now, that's Star Trek. The game is, in many ways, a faithful recreation of the show. You really can take the turbo-lift to the different decks, and visit Sick Bay, Engineering, Security, as well as a variety of other places. While you may not need to do this to win the game, the fact that these places are actually there gives a feeling of completion, a feeling that yes, by gosh, this IS the Enterprise!

You talk to the crew, too. "Spock, damage report". "Chekov, set course for Hastorang". "Scotty, how long will repairs take?". And so on. You can direct crewmembers to go places, perform actions, or provide information, and they will respond appropriately.

Each of the planets in the game is a world unto itself; no two are alike. Some, like Hastorang, may seem at least a bit familiar, but don't let that fool you. Beneath the surface, there are many surprises. And a few chuckles, too. The game has a definite (and occasionally sly) sense of humor to it.

Careful exploration of the worlds, and especially speaking to the different aliens, is a must, since this is the only way you can pick up the information you need to track the Heinlein. However, not every planet has worthwhile data. Some are red herrings, that seem to be important but really aren't, and others have no information at all. It's up to you to figure out which is which.

There are no graphics in the game. The IBM version has pretty windows, and the Apple version uses inverse bordering to set off the screen. There are three parts to the screen: the upper half, where you see the results of scans, responses from crew and aliens, and readouts from the computer; a two-line middle section, where you enter your commands; and the bottom third of the screen, which shows your current position and heading, as well as status reports on the engines, shields, phasers, and photon torpedoes.

Continued on pg. 42

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Roy Wagner

# DRAW ME A PICTURE (FLEXIDRAW)

FLEXIDRAW from Inkwell Systems is a sophisticated, light-pen graphics package. It offers all the features that one needs to produce and print professional quality drawings. It offers multiple line widths for freehand sketching, rubberbanding and point-to-point lines. Arcs, ellipses, circles and boxes can be automatically generated. Ten fonts in three sizes are available to label your drawing or to simply prepare a text only document using the fancy fonts. Symbol libraries for math and science, electronic schematics and architectural floor plans are provided. The light pen or cursor keys can be used for drawing and/or placing images. An Oops and Undo feature can stop or remove the last function performed.

Drawing in FLEXIDRAW is predominantly done in black and white with grey tones. A separate program, that is included, supports the addition of 16 high resolution colors. Patterns, from the many provided or of your own design, can be used to fill in light or dark areas. Shading, edge outlining and even picture simplification commands let you further refine your drawings. Two separate work areas can be used to transfer (cut & paste) from

other drawings or the two areas can be combined to double your work area. Images or cut areas can be rotated, flipped or video reversed. Twenty-eight popular B & W and five color printers, as well as ten interfaces are supported. Any problems are only a phone call away. The standard system disk also includes enhancement programs to add color to your drawings, transmit/receive graphics by modem, edit and animate sprites, and a high resolution plot package for use from BASIC.

Of the many graphics programs available FLEXIDRAW is certainly the best supported by it's parent company. Inkwell Systems is one of the few C64 companies that notify their registered users of each new release (currently 5.0) and will upgrade it for a reasonable cost. Inkwell regularly adds companion programs to further extend the capabilities of it's standard program. A FLEXIFONT program offers 33 different fonts, a font editor and a program to "capture" custom fonts from other programs.

Said to be coming soon will be a GRAPHIC INTEGRATOR that will convert picture files from one graphic package (Koala, Doodle!, Abacus, Micro Illustrator, Paint Magic) to another and particularly to FLEXIDRAW format. The output from several popular word processors can also be integrated with the drawing. (This program was not yet available for review.)

# THE SAGA CONTINUES (LODE RUNNER'S RESCUE)

One of the most successful games in the world is LODE RUNNER from Broderbund. In Japan, it is nearly a national pastime, with 15 authorized versions since it's introduction in 1983. Success comes from it's simple yet extremely challenging nature and variety of play. The original version has 150 different screens, extensive player options, and best of all, the option to create your OWN screens. Then came Broderbund's release of CHAMPIONSHIP LODE RUNNER with 50 screens and COMPUTER GAMING WORLD's very own disk with 60 screens produced by it's readers.

Just released from Broderbund is LODE RUNNER'S RESCUE. This sequel sends out his brave daughter to rescue him from imprisonment. The three-dimensional display is quite different from what we have seen before in other games. A labyrinth of 46 mazes must be traveled to reach Lode Runner's prison cell. These mazes are displayed from a 45 degree overview with towers, walls and roving guards. In place of laser blaster, bricks, ladders and hand over hand bars; we have stairs, trapdoors, elevators, jumping and swimming. Magic mushrooms and cats provide extra help. Instead of gold, she must gather keys before going on to the next level.

When one loses all of one's "lives", the game begins again at the last level achieved (not the first screen). This is an option I would like to see in ALL multiscreen games. This game also has the much favored option to create your own screens with an icon screen editor. an excellent game in all respects.

#### ANOTHER ONE ON TRACK (FAST TRACKS)

An auto race track game that I missed on the last loop was the recent release from Activision of FAST TRACKS. This game is based on the concept of slot cars and plays like the real thing. It comes with 22 predesigned tracks and includes a very nice "Design a Track" option. Several more very difficult tracks are available from Activision by mail.

A joystick is used to control acceleration and braking, and left-right movement to bump of other cars. Since you are racing a slot car, you don't steer but only control your speed on the curves. This is a one player game in which you race against three other cars controlled by the computer. You race five laps in order to try to better times recorded on the scoreboard. If you do, your name is added to the list.

Race tracks, that you create, can be sent to friends who don't even have the game. They can then try to beat your best times. This game offers a lot of variety and plays nicely. It comes in a close third to the Racing Destruction Set from EA and Pole Position.

#### KNOCK, KNOCK, WHO'S THERE? (LITTLE COMPUTER PEOPLE)

Another new title from Activision, LITTLE COMPUTER PEOPLE, offers an innovative new game concept. Essentially it is an interactive doll house. A mild mannered game of random adventure in a closed universe of a house on your computer screen. A resident for this home arrives shortly after the game is first started, checks out the house to see if it is to it's likings, and then moves in along with it's dog. The home provides everything that a LCP (Little Computer Person) might need; food, water, bed and bathroom. Entertainment is provided with a record player, tv, piano, library of books, telephone, and computer. Using the latter, it is able to communicate with you. With you it can play ANAGRAMS or the card games of WAR or POKER. You are responsible to keep the LCP supplied with food (for it and it's dog), water, records, and books. A different LCP is created for each game disk. This game is based on familiar concepts that we have seen before, but they are brought together nicely. The game is more cute than fun or challenging. The range of activities are limited and not very exciting, but can be interesting. The "game" is ideally suited for children. It does a good job of teaching about caring for another.

#### LUCAS STRIKES AGAIN

Distributed by EPYX, the creative people at the Lucasfilm Games Division have come up with games that are definitely impressive. BALLBLAZER, RESCUE ON FRACTALUS, THE EIDOLON, and KORONIS RIFT all show state of the art graphics and sound. They all offer advanced arcade concepts and are well documented. To play successfully will require your understanding of their subtle complexities. A step beyond the average game and highly recommended.

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# the learning game

#### **BOB PROCTOR**

#### The Adventure Game

The adventure game is one of the oldest and most popular forms of computer game. The classic Adventure, from which the genre takes its name, came into being before there was such a thing as a desktop personal computer. It was the advent of the home computer that changed Adventure and Zork and a few others from a treat enjoyed only by a rare few into a mass entertainment market with dozens of titles vying for popularity.

Many people still try to distinguish between adventure games and role-playing games. This distinction is blurring. The classic adventure games, which are like puzzles, are blending with simulations and with role-playing games, which feature large amounts of chance, to create games that are

very involving.

#### **Educational Aspects**

While the primary object of these games is to entertain, playing them does require skills that are useful. Beyond the obvious reading and keyboard skills, there is organization, planning, analysis and logic

Some newer games try to teach specific knowledge in a more direct attempt at education. Examples are *Robot Odyssey* by The Learning Company, which requires you to design logic circuits to complete the story, and *The Halley Project* from Mindscape.

# Rolling Your Own (STORY TREE)

If all of these benefits can be had by the person playing the game then they must benefit the person who creates the game twice as much. At least, that's the theory behind a new class of games that let you develop your own interactive stories.

Scholastic Software has a program called Story Tree that is the easiest to use of any such program I've seen yet. It is much simpler than Adventure Master by CBS. Rather than allow you to type any valid command at any time in the manner of the classic adventure game, this one only lets you make certain specific choices at certain points in the story. It does not support the manipulation of objects nor does it support graphics. All you can use is text so the stories go together very rapidly.

The idea of writing a story to be read several times -- with different plot twists each reading -- is a fairly recent one as far as I know. It is not limited to computer games; it is also used in the popular "Choose Your Own Adventure" books. Designing all of the loops and branches the plot can take requires planning and imagination.

#### How The Story Goes Together

There are three types of linkages in a Story Tree story. The simplest is a straight sequence or what Story Tree calls a "Continue". From screen A, you always go to screen B.

The second type is "Choice", where the reader can pick one of up to four alternatives. Each calls up a different screen; a new one, one seen before,

or even the same one.

The last type of link is "Chance". A screen with this type of link is always followed by one of two screens. As the designer, you can set the odds that determine how often each occurs. For example, a witness in a mystery might be cooperative 50% of the time and stubborn the other 50%. Or, an asteroid might pass harmlessly by 90% of the time but might might strike your ship the other 10%. This would end the story rather suddenly but it adds a greater sense of danger to subsequent playings.

#### Conclusions

Story Tree works very well at the intended age level -- from ages 9 to 14. The simplicity forces the story teller to focus on plot, setting, and characterization. There is no temptation to construct elaborate and difficult puzzles because there is no way to test for the presence of certain objects or use any secret words.

The simple format also lends itself well to nonfiction. The Story disk that comes with the program contains a sample bibliography and a sample report.

One of the best things about Story Tree is that it's a game without winners and losers. For those who thrive on competition, Scholastic is sponsoring a contest. The best story in each of two age brackets -- grades 4-6 and grades 7-9 -- will win an Apple II computer (which model is not specified). The deadline is April 30, 1986, so there's still time. Contact Scholastic Inc., Dept. WW, 730 Broadway, New York, NY 10003 for details.

Story Tree comes with a reference manual, the program disk and the story disk. The program is available for Apple II, Commodore 64 and IBM PC/PC Jr. List price is \$39.95 for the home version, \$74.95 for the school version. The latter includes backup copies of both disks and a large 3-ring binder for the manual and extra material for teachers.



Leslie B. Bunder

First of all, let me say hello to all you computer gamers in the United States. My name is Leslie B. Bunder and I am writing to you from London in order to keep you up-to-date with all the latest developments in computer games from England. If you want to express your opinions on this column or any of the games mentioned, just write to me. You can reach me at 50 Riverside Close, Cuckoo Ave., Hanwell, London W7 1BY, United Kingdom (please include an international reply coupon if you wish to receive a reply). Prices given for games in this column include air mail cost. If you send any money to these companies, send it as an international money order and allow four weeks for delivery.

The big craze in England at the moment is Rambo/commando type games. There are official versions of both the arcade game Commando and Rambo. These games require you to take the role of a soldier who must single handedly take on a whole army. All the home computer versions are based on the arcade game Commando but not to the extent that they infringe any copyright. If I had to recommend only one it would be the official home computer version of Commando produced by Elite Systems for the C-64, Amstrad CPC 464, 664, 6128, Timex/Sinclair 2000 and BBC. The price is a reasonable £9.95 for all versions and comes on tape.

The next game is Rambo which has some very nice touches to it. Unlike Commando, you can actually choose the weapons you want to use. Rambo's

music is better as well. The game is produced by *Ocean* and runs on the C-64, Amstrad, and Timex/Sinclair. The price is £10.95 on tape.

Another Commando clone is Who Dares Wins. It was the first commando type game. A nice little game, it is available on the C-64/128 at £9.95. WDW comes from Software House Alligata who have been noted for their excellent copies of arcade games well worth getting.

The final Commando clone, American G.I., comes from System 3. And at £8.50 it is a good value. It is polished and professional.

The addresses where you can contact these software houses are: Elite Systems, Anchor House, Anchor Rd., Aldridge, Walsall; Ocean Software, Ocean House, 6 Central St., Manchester, M2 5NS; Alligata Software, 1 Orange St. Sheffield, S1 4DW; System 3 Software, Southbank House, Black Prince Rd., London, SE1 7SJ. If you contact any of the above, mention this column and be sure and enclose a reply coupon if you require further information before ordering.

#### STOP PRESS... LATE NEWS...

Cartoon hero Scooby Doo turns up in the 'first cartoon animated game for the home computer' from Elite Systems, more news next time.

Watch out for Firebird Software, the software arm of British telecom (British equivalent of AT&T). There first release, Elite, is now available for the C-64. Elite is a 3-D space travel/trading game which, to put it mildly, is a 'mega-game'.

Activision has set up a separate software house in England under the name 'Electric Dreams'. The promise of Electric Dreams it to produce games only your imagination could have thought of.

Frankie Goes To Hollywood the pop group are also a computer game, produced by Ocean. FGTH features some breathtaking music the like of which has never been heard on the C-64 before.

The next craze after Commando games will be

ninja type games; more news next time.

A company called U.S. Gold (which specializes in producing U.K. versions of programs from Datasoft, Epyx, and others) controls about 25% of the game market in England.

The film Rocky Horror Picture Show is now an arcade game and will shortly be turned into a full length adventure game. Can't wait! It will be pro-

duced by CRL Plc.

Friday the 13th has now been brought to life as a computer game. The producers, *Domark*, promise a 'non-violent game'. They can't be serious.

Until next time, have fun playing. And watch for my special competition in the next issue of Computer Gaming World.

[Ed. Note: Minutes before going to press, CGW learned that a British software company has contacted The Naval Institute desiring to buy the rights to do a computer game on the best selling novel, *The Hunt For Red October*. No further information is available at this time].

#### KOBAYASHI (Con.)

The commands you enter on the command line are always verbal ones directed to a crew member. To perform an action yourself, you use one of the special function keys or movement keys. For instance, to move right, you would press the '->' arrow key; to check your inventory (on the Apple), you would press shift-2. There are function keys set up for help, inventory, giving an item to someone (always a crewmember), taking an item, using an item, examining an item, shooting a phaser, dropping an item, and taking a general look at your surroundings. A tenth function key brings up a sub-menu of utilities to save, restore, pause, or change the speed of the game.

Right about now, you're probably drooling at the thought of getting your hands on this game. Well, there are some flies in the ointment. You know what flies are. Bugs. And I'm sorry to say, Kobayashi Alternative has its share of them, most due to sloppy programming and inadequate testing (because if the testing was done properly, these problems would not be showing up).

For instance, you have just beamed down, and realize you left your tricorder back in the transporter room. So you tell Renner to get the tricorder, and beam it down to you. Renner (or anyone else, for that matter), will insist that there is no tricorder there, even though it is there in plain view.

Another, more exasperating problem, is the program's refusal to recognize Sulu's name. Whenever



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For Credit Card orders: (800) 622-4070 (nationwide) (800) 942-7317 (Illinois only) you ask someone (usually an alien) "Have you seen Sulu", the game responds with: "Alert, you must use accepted Star Fleet protocol", an indication that it doesn't understand you. Yet (as I know by certain devious means), the program is supposed to understand this. Someone slipped up here.

Going east on some planets can cost you your life. Usually, if you are walking towards something dangerous (like a sea of liquid helium), the program will give you a warning. Not when you're heading eastwards. This one killed me off several times on various planets.

Suppose you beam down to a planet alone, then decide you'd like someone, such as Spock, with you. Spock (or whoever) will beam down...and then stay at that exact spot, unless ordered to move. Only when you have formed an official landing party does everyone move with you.

When the game begins, the shuttlecraft is damaged and useless. You should be able to get it fixed at a certain planet, but thanks to a bug in the program, that won't be possible.

There are several points in the game when the transporter stops working. This is part of the story. Fine. Now, try asking someone about it. "Scott, what is wrong with the transporter". No response. None at all. So you try "Scott, fix the transporter", to which he replies "But Captain, the transporter isn't damaged!". Great! "Scott, beam us up", and he says "We're having a little trouble with the transporter, Captain". "Scott, what is wrong with the transporter". Silence. Sigh.

The documentation is both good and not so good. The information on the Enterprise and its crew is excellent. Anyone who had never seen a single episode of the show would learn all they needed to know from reading it. However, the docs for the game itself is another matter.

For instance: you boot up the disk, and the first thing it asks is if you have two drives. Innocently, you say yes, and are THEN informed that you should make a copy of side one of the disk, and put that in your second drive. NOWHERE is this mentioned in the docs; you only find out about it when you boot up.

Then there is the matter of clothing. Some of the planets have a pretty unpleasant atmosphere, and you don't want to go beaming down there just in your uniform. So, how do you get hold of a spacesuit? Don't look at the docs, you won't find out that way. What you have to do is call up the inventory function, where everything you are wearing or have on you is listed by number. Your uniform is number one. Pressing the 'l' key will then cycle through various garments.

Also, when you are in transit to a planet, you can't do anything while you wait to get there. I thought I would pass the time by calling up computer data, and it took me some time before I realized why I hadn't gotten to my destination. The

Continued on pg. 45

# ADER INPUT DEVIC

#### RID #26 (use card at page 5)

On this page a number of games are listed for evaluation. When evaluating a game consider such things as PRESEN-TATION (graphics, sound, packaging, documentation); GAME DESIGN (design, playability, interesting?); LIFE (does the game wear well?).

For each game you rate, place a 1 (terrible) through 9 (outstanding) next to the appropriate number. Leave blank any game which you have not played enough to have formed an opinion.

In addition to games, we have listed a few items about the magazine itself that we would like you to rate on the same scale.

#### Please mail R.I.D. #26 before March 31, 1986

1. U.S.A.A.F. (SSI)

- 2. Battle of Antietam (SSI)
- 3. Battalion Commander (SSI)
- 4. Panzer Grenadier (SSI)
- 5. NAM (SSI)
- 6. Norway 1985 (SSI)
- 7. Silent Service (MicroProse)
- 8. Conflict in Vietnam (MicroProse)
- 9. AutoDuel (EA)
- 10. Moebius (EA))
- 11. Touchdown Football (EA)
- 12. Ultima IV (EA)
- 11. Heart of Africa (EA)
- 12. Bard's Tale (EA)
- 13. APBA Baseball (Random Hse)
- 14. NFL Challenge (XOR)
- 15. JET (SubLogic)
- 16. Under Fire (Avalon Hill)
- 17. Mindwheel (Synapse)
- 18. Essex (Synapse)
- 19. Brimstone (Synapse) 20. Where Carmen SD? (Brdrbnd)
- 21. Dragonfire (Magicware)
- 22. Hardball (Accolade)
- 23. Star Trek: Kobayashi (Simon Schstr)
- 24. Law of the West (Accolade)
- 25. Star Fleet I (Cygnus)26. The Eidolon (Epyx)
- 27. Koronis Rift (Epyx)
- 28. World's Grtst Footbl (Epyx)
- 29. Spellbreaker (Infocom)
- 30. Championship LodeRunner (Brdrbnd)
- 31. Hacker (Activision)
- 32. Little Computer People (Activision)
- 33. Dam Busters (Accolade)
- 34. Fight Night (Accolade)
- 35. Wizard's Crown (SSI)
- 36. Europe Ablaze (EA/SSG)
- 37. Elite (Firebird)
- 38. Seventh Fleet (SimCan)
- 39. Rommel (GDW)
- 40. At the Gates of Moscow (SGP)
- 41. Rome & the Barbarians (Krentek)
- 42. Black Belt (Earthware)
- 43. Wings out of Shadow (Berserker)
- 44. Competition Karate (Motivated)
- 45. King's Quest II (Sierra)
- 46. The Goonies (Datasoft)
- 47. Alpine Encounter (Random House)
- 48. Icon (Macrocom)
- 49. The Dolphin's Rune (Mindscape)
- 50. Countdown to Shutdn (Activision)

- 51. What is your age?
- 52. What is your highest level of education attained?
- (1) High School (2) College (3) Graduate School
- 53. How much do you spend each month on computer games?
- 54. Which company do you feel is currently making the best computer game software?
- 55. Do you plan to purchase any of the following computers
  - in the next 12 months?
- (1) IBM (2) Mac (3) Atari ST (4) Amiga
- 56. Besides CGW, what comuter magazines do you read?
- (1) Family Computing (2) A+ (3) Ahoy (4) Incider
- (5) Compute Gazette (6) Other (please specify)
- 57. What is your overall rating for this issue (1-10)?
- 58. Do you ever purchase games or computer products by mail order (Y/N)?

#### **NEXT ISSUE:** SOME READER PROFILE DATA FROM PAST R.I.D.s

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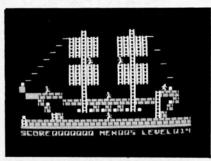
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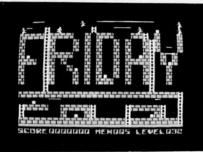
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#### KOBAYASHI (Con.)

ship had stopped the second I hit a key. Need I add that the docs don't mention this either?

Perhaps the biggest frustration with the game is the fact that the programming flaws make it so much more difficult. When you find yourself not getting anywhere, it is very hard to tell if this is due to 1) a red herring 2) a bug or 3) not phrasing something properly or asking the right question. I spent a lot of time trying to get that shuttlecraft fixed, before I found out that it just wasn't possible.

Still, there is hope. I've passed along to Simon and Schuster the various problems I've found, and I have heard that they are working on getting the program cleaned up (and perhaps even the documentation re-worked). However, as to when this revised version will be available, I don't know.

So we come down to the bottom line, and here is where it gets sticky. I can't give an unqualified recommendation; the programming flaws and serious omissions from the documentation preclude that. On the other hand, the game itself is well-designed, tricky, and faithful in many ways to the spirit of Star Trek. It is the inadequate implementation of the design that makes 'The Kobayashi Alternative' less than what it should have been. Therefore:

Bottom line: Recommended, with reservations. Try before you buy.

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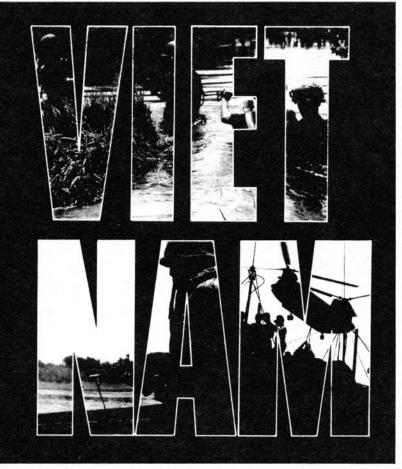
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as were the marines in Khe Sanh. Strategic considerations can hamper the best operational commanders, both in gaming and in historical terms. As playtesting continued, the scenario was cut down in duration. The latest version appears to run c. 3 1/2 weeks; as the American, the player will still find a sense of complacency settling in, and then... Suffice it to say, do not get too relaxed; loss of a key site (DMZ, Khe Sanh, or Quang Tri City) generates a decisive defeat, and one never knows where the enemy will appear. While a decisive win in the scenarios would not have really changed the outcome of the war, you do have a chance to see the problems faced by the field commanders.

Quang Tri offers the opportunity to have the



ARVN stand up (or fall down) to the NVA. Supported only by American air support, and not ground troops, can the South Vietnamese resist? A more traditional type of battle, since the ARVN did not have the mobile assets that were possessed by the American Army.

The American scenarios are this writer's favorite — <u>Ia Drang</u> and <u>Fish Hook</u>. The latter covers the Cambodian incursion. Historically, an empty threat, but the variants permit different NVA deployments, so that the American and ARVN troops deployed are never really sure what they may find. Based upon playtester input, a final variant was inserted to choose a random scenario; one never knows what is in the <u>Fish Hook</u> until contact is made and developed. Dry hole or hornet's nest?

#### PLAY POINTERS

There are certain nuances of CIV that are not apparent at first play. Here are some suggestions:

- (a) If a unit is in the lower row of the screen, sometimes one cannot access the unit. It is there; the problem is that the computer does not recognize the end of the map as the end of the "world", and will scroll down into imaginary hexes. If faced with this situation, merely scroll up the screen two or three hexes and then re-access the subject unit.
- (b) The Player As God: if a wargamer has access to parameters, he will usually exercise them, despite the sheer ahistoricity of results. Thus, if a player is a Supreme Commander, he should not be concerned with employment of battalions. But if the game offers this option to the player, rare is the aficionado willing to let the system do some of the work. In CIV, air and artillery power are the essential elements of American strength. Tactical air (A-10s and helicopter gunships) and strategic air (B-52 bombers) may be directly utilized by the player. In CIV, such leadership will generally obtain poor results for the following reason. When one directs a multiple air/artillery strike against an NVA unit, the unit causing the enemy to withdraw will adjust its fire. The remaining units will continue to fire into what is now an empty landscape. If left on local command, these elements will use their own discretion to choose and engage targets; if left to actual player control, the player will spend much of his time redirecting his artillery and air support rather than employing his ground troops in optimal positions. At first impression, this writer's response was muted (at best). But upon reflection, this limitation is actually inspired. In Vietnam, a commander could direct his indirect fire operations; divisional and corps commanders could exercise direct control over companies. But could they function effectively? -- usually not. If you wish to hog all the glory, then feel free to exercise your command at all levels. But realistically, a good commander should be able to delegate authority. When you restrict artillery and air employment to the minimum necessary, you will find that your efficiency actually increases -- your local commanders are generally competent.
- (c) The Jump Move: Airmobile battalions move quickly! They literally jump from the PZ (pickup zone) to the LZ (landing zone). But helicopters do not fly at night or in monsoons if at all possible. Therefore, if (especially in Khe Sanh), a unit is moved during such a time, it is actually being moved via ground transport (i.e. truck convoy), and its efficiency will be heavily impaired. It is not overly healthy running convoys through enemy-infested jungle. Also, Air Cav Troops (used for recon purposes) do not jump move. They are small, quick and ideal for surveying terrain and making initial contact. Once contact is made, call in the backup battalions by Jump Move. In Ia Drang and Fish Hook, victory is dependent on coverage of the terrain. This is accomplished via victory point LZs. While admittedly artificial, these LZs do compel

complete coverage by American forces. With airmobile battalions exercising jump moves, remember to leave the air cav troops on sweeps for these hexes.

- (d) Visibility: To achieve any degree of realism, use limited visibility. It is a real shock for the Anaricans to look at the map after the battle and discover hordes of NVA in their rear. This limited intelligence factor is the truest aspect of CIV.
- (e) Firepower: Since the NVA may usually fire from a range of two hexes, their strategy is dependent on hitting first, hitting hard, and dissipating before the American firepower can be brought to bear. Also, NVA units when retreating can move two hexes in any direction. Added during playtesting, this prohibits the Americans from fixing the enemy too easily. As for the Americans, a departure from military doctrine is the best approach. Doctrine calls for ground troops to fix the enemy and destroy him, aided by supporting fires (air/artillery). While this will work, the American will incur heavy casualties; optimum strategy is to use the ground troops to fix the enemy, adopt a defensive posture, and use air/artillery as the implement of destruction. While not doctrine, this was the approach utilized by the American Army in Vietnam; intensive infantry assaults were generally avoided.
- (f) Victory Conditions: Read and understand the victory conditions. Seize key terrain, and check the terrain to make sure that the enemy has not retaken it while you were engaged elsewhere. This point cannot be over-emphasized!
- (g) Given the short duration of the scenarios, supply is generally not a factor, especially for the Americans. Common sense will dictate when to withdraw units and allow them to recover.

#### CONCLUSIONS

CIV is a fascinating product. While not a "beer and pretzels" game (although some of the scenarios may be played as such), the detail and historicity coupled with the documentation make this game a virtual tutorial on the war in Vietnam. Expect to learn more than you would normally from a mere "game"; keep an open-mind, and be willing to accept new insights. Playing the NVA was a personally difficult role to accept; on the other hand, the NVA possesses the initiative in most scenarios, and the Americans are driven by NVA actions. While not emotionally satisfying to the average American, this is the way the war was. The American Army in Vietnam may be likened to a sledgehammer striking a pound of mercury. Be aware of your strengths, and even more aware of your weaknesses.

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# **READER INPUT DEVIC**

Adventure games and Electronic Arts were the dynamite duo this month. As predicted, *Ultima IV* was an instant hit at the cash register and in the computer. *Bard's Tale* also managed to slip past the perennial favorite - *Wizardry I*. The Wiz has faced many challengers in the past few years and beaten all of them. Our feeling is Ultima IV has the staying power to hold the line. It will be the benchmark of adventure games for quite awhile. On

the strategy side we find Silent Service rising to the surface to launch a shot at the 1985 Game of the Year. MicroProse anticipates sales in the area of 200,000 copies, which could make Silent Service the best-selling computer game of all time. The boys from down-under, SSG, nail yet another winner in Europe Ablaze. They don't make many, they take forever - but they produce fine games.

Strategy						Adventure/Action					
Name	Mfg	Machine	Tms Rtd	Avg Rsp	Rating	Name	Mfg	Machine	Tms Rtd	Avg Rsp	Rating
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Europe Ablaze	SSG	C,Ap	1	31	7.81	Bard's Tale	EA	C,Ap	1	57	7.8
Mech Brigade	SSI	C,Ap	3	72	7.70	Wizardry I	SirTe	Ap, I	16	73	7.7
M.U.L.E.	EA	C,At	13	81	7.51	Ultima III	Origin		10	107	7.6
War in Russia	SSI	Ap, At	6	71	7.40	Enchanter	Infcm	All	1	28	7.5
Decision in Desert	MicPr	C,At	2	45	7.33	Phantasie	SSI	C,Ap	4	75	7.4
Ancient Art of War	Brodr	I,Mac	5	30	7.32	F-15 Strike Egl	MicPr	ALL	5	140	7.2
Heart of Africa	EA	C	1	40	7.28	Knight of Diamonds	Company of the Compan	Ap	11	53	7.1
Crusade in Europe	MicPr	C,Ap,At	4	84	7.243	Legacy of Llygamyn Archon I	SirTe EA	Ap All	7	58 98	7.1 7.1
Fighter Command	SSI	C,Ap	8	43	7.24						
Guadalcanal Camp	SSI	Ap	9	48	7.24	Choplifter	Brodr	ALL	4	79	7.1
Seven Cities Gold	EA	ALL	7	118	7.20	One on One	EA	ALL	7	74	7.1
Carriers at War	SSG	C,Ap	4	81	7.17	Questron	SSI	C,Ap,At	5	97	7.1
Reach for Stars	SSG	C,Ap	4	50	7.12	Zork Series	Infcm	Ap, At, I	7	122	7.0
Combat Leader	SSI	C,At	5	56	7.11	Pinball Con Set	EA	C,Ap,At	4	47	7.0
Computer Baseball	SSI	All	6	36	7.10	Lode Runner	EA	All	6	60	7.0
Micro League BB	MicLg	All	3	84	7.09	Sorcerer	Infcm	ALL	5	58	7.0
Galactic Glad.	SSI	Ap, I	3	32	7.07	King's Quest II	Siera	Ap, I	1	27	7.0
Operation Mkt Grdn	SSI	C,Ap,At	4	58	7.06	Ultima II	Siera	Ap, 1	8	61	7.0
Flight Sim II	SubLg	C,Ap,At	5	91	7.05	Ultima I	CalPc	- C - C - C - C - C - C - C - C - C - C	2	48	6.9
Colonial Conquest	SSI	C,At	2	59	7.05	Ottima 1	Catro	Ap	2	40	0.9
cotomat conquest	331	C,AC	_	3,	7.05	Deadline	Infcm	Ap,At,I	3	44	6.9
Carrier Force	SSI	C,Ap,At	5	108	7.04	Galactic Advntrs	SSI	Ap, At	4	35	6.9
Field of Fire	SSI	C,At	. 4	72	7.01	Hitchhiker's Guide	Infcm	All	4	108	6.8
Under Fire	AH	( ) ( ) ( ) ( )	1	23	6.98	Olympic Decathlon	MicSf	All	4	63	6.8
Breakthru Ardennes	SSI	Ap	3	44	6.95	Planetfall	Infom	ALL	3	51	6.8
Computer Ambush	SSI	C,Ap,At	5	46	6.93	Summer Games			2	35	6.7
Excalibur	Atari	C,Ap,At	1	40	6.85		Epyx	C,At	3	49	6.7
Cosmic Balance	SSI	At An At	5	84	6.83	Racing Des Set	EA	C	3	57	
Bomb Alley	SSI	C,Ap,At	4	32	6.82	Adven Con Set	EA	C,At	3	5725 5.00	6.7
Eastern Front	Atari	Ap	4	61	6.81	Ballblazer	Ерух	C,At	3	66	6.6
Southern Command	SSI	At	5	40	6.79	Rescue Fractalus	Ерух	C,At	3	71	6.6
Southern Command	331	Ap	,	40	0.19	Highbringer	Infan	A11	2	12	
Star League BB	Gmstr	C An	1	73	6.78	Wishbringer	Infom	All	2	42	6.6
Gato		C,Ap	3	79	6.77	Rescue Raiders	SirTe	Ap	3	40	6.6
Gulf Strike	SpmHbt	Ap,I,M	4	33		Archon II	EA	C,Ap,At	4	76	6.6
	AH	At		1 - 3 - 3	6.75	Karateka	Brodr	C,Ap,At	3	79	6.6
Geopolitique 1990 Universe	SSI	C,Ap	3	29	6.73	Suspended	Infcm	At,Ap,I	6	61	6.6
73.00 3.00 3.00 4.00 0.00 0.00 0.00 0.00	OmTrn	Ap,I,M	4	46	6.73	Spy vs Spy	FrsSt	C,Ap,At	1	25	6.5
Kennedy Approach	Micpr	C,At		48	6.67	Mig Alley Ace	MicPr	C,At	3	40	6.5
North Atlantic 86	IZZ	Ap	2	72	6.65	Super Bowl Sunday	AH	C	2	30	6.5
Knights of Desert	SSI	All	5	63	6.61	Suspect	Infcm	Ap,At,I	2	48	6.3
Rails West Battalion Cmdr	SSI	C,Ap,At C,Ap,At	3	68 44	6.57 6.57	Infidel	Infcm	All	3	52	6.3
		/±001±00 1±000	_			Gemstone Warrior	SSI	C,Ap,At	3	76	6.3
Computer Qrtrbk	SSI	C,Ap,At	2	91	6.48	Mail Order Monstr	EA	С	1	48	6.3
JET	SubLg	Ι	1	29	6.48	Sky Fox	EA	C,Ap	2	107	6.3
Battle for Normandy		All	3	59	6.45	Six Gun Shootout	SSI	C,Ap,At	3	69	6.2
Robotwar	Muse	Ap	3	37	6.44	Blue Max	Synps	C,At	1	133	6.2
Chicamauga	GDW	At	1	26	6.38	Music Con Set	EA	С	1	43	6.1
Imperium Galactum	SSI	C,Ap,At	2	104	6.37	Seastalker	Infcm	All	1	46	6.1
Objective Kursk	SSI	C,Ap	1	65	6.37	Witness	Infcm	All	3	43	6.1
Broadsides	SSI	C,Ap,At	4	119	6.23	Murder on Zinder	EA	All	4	71	6.0
Andromeda Conq	AH	Ap,At,I	1	40	5.67	Zenji	Actvs	C,Ap	1	28	5.5
Dnieper Rvr Line	AH	All	1	46	5.00	-					



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A section of the battle map. The player is ready to move Law's Brigade of Hood's Division, Longstreet's Corps (the white X).

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