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SEASTALKER: A new interactive fiction game written for the beginner. In the tradition of Jules Verne's 20,000 Leagues Under The Sea, Seastalker was written by Jim Lawrence who has authored some 60 books of fiction (many of these were ghosted for series like Tom Swift Jr., The Hardy Boys, Nancy Drew and The Bobsey Twins). Available for most systems at $39.95.

SPITFIRE ACE: Like their Hellcat Ace and Mig Alley Ace games, Spitfire Ace puts you into a fighter cockpit as you fight for the skies. This particular game has fourteen scenarios that range from the Battle of Britain to a dogfight with the historic ME-262, first production jet fighter. MicroProse's whole "Ace" series is certainly worth the price. In this case, $29.95. Atari and C-64.

ARCADE BOOT CAMP: OK, arcade fans, here are all your favorites rolled up into one game. Mazes, ladders, racers, space invaders, etc. Work yourself up from a lowly private to Sergeant Major. Apple. $29.95.

MAP PACK: Graphics source disk that includes maps of all 50 states, the U.S., Canadian provinces, and the continents. Must be used in conjunction with the Complete Graphics System or other graphics utilities (such as the Print Shop mentioned above). Apple. $19.95.
STORY MAKER: Although billed as "A story construction kit for ages 7-14", Story Maker will be of interest to many adults. With Story Maker you can construct illustrated stories, draw cartoon strips, write illustrated letters, keep a diary or journal, etc. You can even use the program to make up a party game in which the guests each take turn writing part of the story. Apple, C-64, Atari (3rd quarter). $34.95.

OBJECTIVE KURSK: Gary Grigsby's game of grand-tactical tank warfare during the Eastern Front campaign of WWII. A total of more than 4000 tanks clash as the German player is given 11 days to take Kursk. Apple, Atari. $39.95.

That's right! We need your insights! Thanks to the suggestion of some of you readers, we will be adding a new column on strategy game playing tips. But this column will only get off the ground with your help! So here are the details:

1. The column will be limited to printing tips and strategies on strategy computer games. This includes wargames, sports games, economic and other "real life" simulations, and certain "classic" style computer games (such as Penguin's Penguin or SSI's Fortress).

2. The tips/strategies should be precise and to the point (don't give a mini-review of the game). While we want there to be some substance to your tips (i.e. the tip, "Never attack the Germans at less than 2-1 odds" won't do), we want you to keep it under 250 words. Most strategies should be no more than two or three paragraphs in length.

3. Payment for tips and strategies used in CGW will be two issues of CGW (either in the form of a two issue extension to your current subscription or in the form of a two issue "mini-subscription").

4. Submissions should be typewritten or neatly printed. Send your tips to:

Strategy Tips
C/O Computer Gaming World
P.O. Box 4566
Anaheim, CA 92803-4566
The icy waters of the north Atlantic churn once more under the prow of mighty warships. You maneuver your task forces on both the strategic and tactical levels in this exciting new computer wargame recreating early naval surface action in the European Theatre of WWII.

Features include detailed data for over 40 major warships, attack and reconnaissance air units, convoys, radar displays, realistic combat resolution and two-player or solitaire versions.

48K Disk available for Apple II, II+ & IIe for $30
Playing time: 1½ hours; Advanced complexity level

You, as Kapitan of the K.M. Graf Spee, are on the prowl in the stormy seas of the south Atlantic in December, 1939. Your mission is to wreak havoc on British merchant shipping while avoiding contact with the superior Royal Navy forces in the area.

Under Southern Skies gives you highly detailed data on numerous German and British warships of WWII involved in the south Atlantic campaign of 1939. Features include both strategic and tactical levels as well as options for one or two players.

48K Disk for Apple II, II+ & IIe for $25
Playing time: 1 hour; Intermediate complexity level

Gulf Strike

Tense land, air and sea combat in the explosive Persian Gulf region in the not-too-distant future. Based on the popular Victory Games’ boardgame of the same name, Gulf Strike features scores of different unit types and formations on the strategic level. Complete orders of battle for over a dozen nations allow you and a friend to explore all military aspects of this highly volatile area, where every minor confrontation can carry local repercussions. Solitaire option included.

48K Disk for Atari® Home Computers, $25
Playing time: 2 hours; Advanced complexity level

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Jupiter Mission 1999 is the new, one player, arcade/adventure game from Avalon Hill. It consists of eleven different programs spread over four disks and places you aboard the USSN Space Ship Beagle on its journey to Jupiter. Actually, you are one of a three man crew. You have been chosen not because of any special abilities, but because you are an average person and therefore you give the mission a "random" factor which the government felt was necessary for a successful completion.

The premise here is that two strangers have pulled you from your bed in the dead of night and have asked you to come with them. The journey takes you to the local spaceport where you are whisked to an orbiting space station. From there, you are taken to the space ship where you meet a computer named Beagle. The game starts six months into the journey when the ship encounters an asteroid storm and the two regular crew are killed. The computer, as a result, turns over control of the ship to you.

The first program is a slow arcade game which asks you to shoot the falling asteroids before they hit the ship. They only fall one at a time and they are usually on a predictable course but there are a lot of them and sometimes you don't even get a chance to shoot. Every one that hits the ship causes some damage that may or may not be repairable. A damaged ship can mean disaster in later phases of the game, so it is a good idea to play this section again and again in order to get off to a good start. Of course, some damage is repairable and repairing the Beagle is the second program you face. In this program, you are given a schematic of the ship and are to move a large cursor to various sections of the ship to determine the sections status. If a section has a damaged module, you may repair it by playing a color matching game. Avalon Hill refers to this program as a reaction time game. You must wait for matching colors to appear on the screen and then press the trigger before they change. Of the parts I have played, this one is by far the most boring. I suggest that once you get through here with a relatively undamaged ship, you save the game and never bother to replay the first two programs. The end of the repair program brings you to the end of disk one.

The second disk gets a bit more difficult. First, you must bring the Beagle back onto the proper course for Jupiter. This involves finding out how to navigate the ship and then doing the course change. Once in the Jupiter System, you must find out how to launch a probe and gather data concerning the moons. Some moons will be uninteresting while others will provide information that takes you closer to the source.

Continued on page 39
Insid the Industry

by Dana Lombardy

Here are the results of the survey in the April, 1984 issue of CGW (4.2) that asked the readers what their favorite games are and how they play them.

The different types of computer games were grouped into five categories for the purposes of the survey: Adventure games; Wargames; Arcade games; Abstract games which included such games as Sargon Chess, Fortress, and other chess, checkers, and backgammon type games; and, finally, Sports/Other games which included such games as Computer Baseball, Championship Golf, Cartels & Cutthroats, and M.U.L.E.

PART I

The readers were asked to check each category of computer games that they played at least five times a month. The total for all five categories is greater than 100 because a reader could check more than one category.

1. Adventure 64%
2. Wargame 73%
3. Arcade 53%
4. Abstract 12%
5. Sports/Other 39%

It was no surprise that the readers of CGW play mostly computer Adventure games and Wargames. The strong showing of Sports/Other games, as well as the very low number for Abstract games, was unexpected.

PART II

The readers were then asked to check the one category of computer game they played the most (their favorite).

1. Adventure 32%
2. Wargame 48%
3. Arcade 8%
4. Abstract 3%
5. Sports/Other 9%

Again, the readers picked Adventure and Wargames as the categories that they most favored. Fully 80% of the readers of CGW say that these two categories are their favorite, with the remaining 20% split between Arcade, Abstract, and Sports/Other games.

PART III

The last two parts dealt with how the readers played their computer games. The first question asked them to check each type of play that they were involved in at least three times a month.

Solitaire (player vs. computer) 98%
Player vs. Player (using the same computer) 44%
Tele-Gaming (vs. human or computer via modem) 6%
Spectator (watch a game or demonstration) 11%

Whether by choice of not, solitaire gaming is the largest form of computer play. It was somewhat surprising that spectator mode was almost double that of tele-gaming.

PART IV

The last question asked the readers to check the one type of play that they do each month (their favorite).

Solitaire 84%
Player vs. Player 16%
Tele-Gaming 0%
Spectator 0%

Solitaire was expected to dominate the results, but not by as great a margin as it did. The very poor showing of tele-gaming was a surprise.

SUMMARY

The reader of CGW who responded to the survey identified him or her self as most interested in computer Wargames and Adventure games by a wide margin over other types of computer games, although the others were played.

Solitaire style play was almost the only method used for play. Solitaire was preferred over player vs. player by a factor of more than 5 to 1.

Apparently, the readers of CGW are not involved in tele-gaming in any significant numbers yet. Despite the fact that tele-gaming can provide another means of solitaire play, there was zero responses to this as a favorite form of gaming, and only 6% are currently involved in tele-gaming.

We'll have the results of the survey in issue 4.3 in the next column. Thanks to all those who participated in these surveys, and good gaming!
“Biiiiill, telephone for you!”

Arrgghh! Interruptions, interruptions! How can you fight a war with all these interruptions! It was probably just as well.... imitating Mr. Spock’s mind-meld with a computer may be a bit extreme.... but that’s how *Fifth Eskadra* can affect you.

*Fifth Eskadra* (FE) is a strategic-level game dealing with a fictional modern naval war in the Mediterranean Sea. Fog of war is this game’s strongest suit, but not its only one. Each turn represents eight hours with phases for conflict level declaration, task force adjustment, movement, combat (submarine vs. surface), intelligence reports, and airstrike and surface-to-surface missile combat. Each player (NATO and Soviet) begins with major surface ships and significant submarine forces. Surface ships act in task forces (up to 10 per side) while submarines act alone. Each ship has ratings for SOA (Speed Of Advance), Commanding Officer’s Reliability, and Commanding Officer’s Initiative. All the player does, is give a destination, a type of mission, and hope that the task force commander will act accordingly. Of course, the CO’s initiative and reliability could lead him to pick his own destination and mission (which can either frustrate a Theatre commander or save a task force from an unexpected peril).

Perhaps FE’s most interesting feature is the pre-turn phase which allows the player to escalate or de-escalate the conflict. Your choices consist of Rising Tensions (peace), Conventional Warfare, Tactical Nuclear Warfare, Operational Nuclear Warfare, and the un-choosable Global Nuclear Warfare. Each turn both players choose a level, with the highest choice winning. If, for example, NATO picks “Rising Tensions” and the Soviet picks “Conventional Warfare”, then the level of conflict for the turn would be conventional warfare. Each turn of Operational Nuclear level conflict gives a 50% chance of the game ending with no winner due to the spectre of a global nuclear holocaust. Operational level is a last ditch attempt to win — ICBM’s enter the atmosphere and automatically destroy every, repeat EVERY aircraft carrier in the game. Each escalation of the conflict cost the instigator in victory points, with the cost increasing as does the level.

Unlike most SSI wargames which do not give you the choice of which side to play in solitaire mode, FE lets you play either side against the computer.

The release of FE convinces me that Simulations Canada will be climbing in importance in the computer simulation field.

Ed. Note: Like Simulation Canada’s first two computer wargames, Grey Seas, Grey Skies, and Fall Gelb, FE is played with the aid of a traditional fold-out map and cardboard counters. Also, as in the first two games, the program itself is unprotected so that the gamer can study and/or modify the program as it suits him. This is a laudable act on Sim-Can’s part and we appeal to the gaming community to eschew pirated copies of this, or any other computer game. It would be marvelous to be able to study the code on the wide range of computer wargames.

**Strategy Tips**

Here are some tips on playing the game well:

1. For the NATO player: Relax with the knowledge that you will lose the Kitty Hawk. Use that! Go for blood! One good airstrike can wipe out an entire Soviet Task Force.

2. For either side: Use power projection ashore to rack up points on shore bombardment.

3. Try to sweep the seas of enemy subs. Subs are deadly for surface forces.... even those with an anti-sub role!

*Continued on page 38*
A look at the authors should tell you that this game should be a good one. In Excalibur, the player takes the role of King Arthur, attempting to unite Britain through the use of battle, diplomacy, and magic. And while there is no provision for more than one player, it is both a demanding and fascinating game.

The game itself is divided into three modules, Camelot, Britain, and Battle. The importance of this is that only one can be in memory at a time, so that when you move from one module to another you must wait for the computer to swap the current module out to disk and bring the new module into memory. Most of Arthur’s time though, will be spent in Camelot, which is further divided into five “rooms”.

Merlin’s Room allows Arthur to use Merlin’s magic to influence other kings, put a plague on their armies, a pestilence on their crops, or to examine the state of their kingdoms and armies. Magic must be used sparingly, as each use of Merlin weakens him, compelling him to rest for progressively longer periods of time, during which periods he is unavailable.

The Treasury Room allows Arthur to manage the financial affairs of the kingdom and the army. He can raise or lower taxes, expand or decrease the army, survey the wealth of his kingdom, and see how much his vassals are giving him in tithes.

The Throne Room is where Arthur conducts his foreign policy. A map of Britain shows the status of each of the 15 other kings (tributaries, neutral, vassal, or enemy). Arthur uses this map to declare war on or give tribute to another king, see his current prestige, and to read the kingdom news.

The Round Table Room allows Arthur to monitor the relationships between his knights, Queen Gwynevere, and himself. He can give gifts or bestow honors in effort to maintain his knights loyalty, and banish those considered beyond redemption. If all of the knights get too disloyal, Arthur will be overthrown and the game will end. This room is also used to select which knights will accompany Arthur on foreign campaigns.

The Trap Room is a special case, used only when another king invades Arthur’s kingdom and starts raiding crops. Arthur has the choice of staying inside this room until the enemy leaves, meaning the affairs of the kingdom get neglected, or he can offer battle.

Moving out of Camelot, the Britain module allows Arthur to raid other kingdoms and to visit the castles of his vassals to get their tithes. The Battle module also allows Arthur and his army to fight his enemies, in a manner reminiscent of Legionnaire. Don’t however, be surprised when you get back to Camelot after a battle to discover that much has gone on in your absence, for the game takes place in “real” time, and other kings may take advantage of your absence in order to raid Camelot. The game can be saved at any time except during battle, and a pause control is also available.

In outline, a full game tends to go through five stages. At the outset of the game, all sixteen kings begin building armies for the campaigns to come. Each of the kingdoms
begins with a small “peacetime” army, and generally this period is spent building the armies’ strength and experience.

The second phase of the game is entered when the armies have been built up, and is marked by a flurry of declaration of war as the more aggressive kings begin to raid their neighbors. Arthur most often seems to be the target of kings Hengist and Penda, and it is against these two that Arthur will most likely want to use Merlin’s powers.

Phase three is entered when messages such as “King Horsa is weakening” appear in the news. This means that they soon will become someone’s vassal if their fortunes do not change rapidly. It helps to have defeated some enemies in battle by this time, as this will increase your prestige making you a more attractive candidate to be their liege.

Phase four is marked by the battle for vassals among the remaining kings in Britain. Additionally, some of the kings with vassals may weaken and become vassals themselves. This is important, since if a king becomes Arthur’s vassal, any vassals that king might have had also become Arthur’s vassals. A great victory over a powerful king may net Arthur three or more vassals.

The last phase is reached (if you survive) when only Arthur and one other king remain. Diplomacy lessens in importance as the kings fight to the finish to determine who will rule all Britain.

Strategy and Tactics

A defensive/reactive strategy is an effective overall approach to the game. The first three phases and much of the fourth are spent building a large, experienced army, while the other kings fight amongst themselves. Arthur then steps in and can defeat his weakened foes, especially if Merlin’s aid is still available. Of course, battles will have to be fought against invaders, and vassals should be defended if nearby. Using the tactics below, most battles should be victories.

Phase one offers the most opportunity to spend time in the Round Table Room, free from the cares of foreign events. The loyalties of the knights mostly shift little by little, but sometimes knights will jump far distance around the table. The manual implies that anyone who is too good a friend to Gwynevere should be banished to maintain the loyalties of the others. Watch closely if this situation occurs — if no one is becoming disloyal, don’t banish anyone since you need all the knights you can get on the battlefield. Remember also that when you honor a knight, you are increasing the percentage of troops he will command, so don’t overhonor your less battleworthy knights merely to keep their loyalty. Incidentally, you can’t honor Gwynevere, although you can give her gifts and banish her.

If the knights get farther than one shield’s width away from the Round Table, don’t leave them alone in Camelot or there will be a coup. Begin working on their loyalties right away!

It is best not to use Merlin’s powers too extensively early in the game. You should be able to handle all but the largest army without having to plague it. Not much of his power is used in showing you other king’s finances, though, so don’t hesitate to see if that incoming army is going to be too tough to handle. Remember, not all of a king’s army will accompany him on campaign, and the peasants will usually knock off a few men-at-arms, particularly if the invaders have little experience. Conversely, don’t be afraid to wait and let the enemy raid the crops if he looks too tough.

A few simple tactics on the battlefield will increase your chance of success. First, never be afraid to run away if the

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Designer’s Notes on EXCALIBUR
by Chris Crawford

It is always a productive exercise to look back on a design six months after it has been completed. Six months’ worth of hindsight allows one to see through the obsessions of the concluding work and assess the strengths and weaknesses of the design more clearly. I look back on EXCALIBUR with very different feelings than I have had for any of my other games. Each of my previous games in some way gave me cause for regretting its release. Each had some flaw or blemish that I wish I had corrected. EXCALIBUR is not without flaws, but I do not feel the sense of regret that I felt with my other games. Instead, I feel only deep pride in this game.

The primary source of my pride is the fine interweaving of so many elements into a unified whole. This game has diplomacy, economics, friendship, loyalty, treason, magic, armies, campaigns, battles, pillage, and yes, even adultery. These elements were not merely thrown in as part of some laundry list; they are an integral part of the design. They all fit together smoothly. The cleanliness of the fit is not so much a matter of programming as design. And I am very proud of it.

I am also proud of the manual that comes with the game. Everybody knows that a game should never require more than a single sheet of rules, or perhaps a few pages, right? Well, I violated that rule in a big way with my hundred-page manual/novella. Maybe it is a mistake, but it is a glorious one.

Of course, there remain flaws that give me pain. The game is still too “wargamy” for my taste; I wanted a game that would emphasize the non-military aspects of leadership. In EXCALIBUR, lack of military prowess will doom you, but lack of other skills (diplomatic, economic) will only cripple you. That’s too wargamy.

I was also disappointed with the very weak system for alliances that we created with the TRIBUTE option. We had once designed an option that allowed the player to create alliances, but it was too ambiguous to enforce. I wish that I had stuck with that idea and made it work.

The Round Table Room also failed to live up to my expectations. I really wanted Arthur to have a big job keeping the loyalty of his knights, but the implementation of the Round Table Room just doesn’t support strong interaction between Arthur and his knights. What I had in mind was something like the newly-released game GOSSIP, which in fact was conceived as a study for the interpersonal game that would take place in the Round Table Room. Unfortunately, kings don’t gossip with their knights, and I never could find a way to get strong interaction between Arthur and his knights.

My greatest regret, though, is that EXCALIBUR has not won the attention that I think it deserves. This game is my magnum opus, much grander in scale than anything else I have done. It is a shame that so few people are even aware of its existence.
WAR IN RUSSIA:
The View From a Playtester

by Tom Cheche

Name: War in Russia
Type: Wargame
System: Apple, Atari
# Players: 1-2
Author: Gary Grigsby
Price: $79.95
Publisher: Strategic Simulations
Mountain View, CA

Tom Cheche was a playtester for War in Russia.

After more than a year of playtesting, Strategic Simulations has finally released its long awaited eastern front “monster” game, War In Russia, (WIR) by Gary Grigsby.

An operational-level treatment of the Axis invasion of the Soviet Union, WIR covers Operation Barbarossa, from 1941 through 1945, along with two “shorter” scenarios. Case Blue covers the German summer offensive of 1942, and Zitadelle deals with the final German offensive of 1943 at Kursk and the Soviet counterattack. Each scenario can be played in a long or short version.

WIR is played in one-week turns on a 31 x 32, scrolling hi-res map with each hex being 50-miles across. There is also a strategic map display in the Apple version which gives the players an idea of the “big picture”. Up to two corps-sized units may be stacked in a hex, with corps capable of being broken down into divisional-sized elements.

The format of WIR is distinctly that of a Gary Grigsby design, with each turn comprised of a series of phases during which units are built, adjusted, and supplied. Units are moved strategically or have tactical movement plotted, airstrikes are plotted, and lastly, combat is resolved. But, while WIR is of a format similar to previous Grigsby games, it is not another variation on the Guadalcanal Campaign game system, as were Bomb Alley and North Atlantic '86. WIR employs a game system completely new to the SSI line.

WIR is an example of what Gary Grigsby refers to when he talks about “programming for effect”. In a simulation of something as sprawling as the Eastern Front in WWII it is not possible to represent every small detail. Instead, as many factors as possible are incorporated into the program with the goal of recreating the “feel” that was felt at the specific level that is being simulated. In WIR, Grigsby has succeeded in recreating the feel of the problems and considerations at the Operational level.

Axis Strategy Notes:

Aircraft are initially deployed in six Luftflotten, but as the Axis offensive moves to the east the Axis player will quickly consolidate those aircraft into two large groups for ground support. Air bases can be leap-frogged towards the ever-advancing front in order to allow the greatest number of aircraft possible in the air every turn.

Aircraft located near the northern edge of the map in Norway can strike Allied convoys to Murmansk and Archangel, but the investment does not prove to be worth the aircraft. Only occasionally are those convoys attacked, when attacks to take place they are not terribly effective, and the aircraft factors (1 factor = 0 aircraft) are sorely needed for ground support in the drive towards Moscow.

Air bases are most effective when they are a maximum of two hexes away from the target, since escorts can be employed in strikes up to two hexes away. On the other hand, nagging Soviet air strikes can be neutralized by attacking Soviet air bases, although the benefits don’t last very long. Soviet aircraft eliminated in ground attacks return to the supply pipeline two turns later.

Supply is the key to any Axis success. It is critical that the Axis advance units not outrun supply, and so the Axis player must balance his desire to exploit any openings in the Soviet front with the need to wait for supply to catch up with the advance.

German armor is precious and should be treated as such. Overextending armor can lead to disaster. The Soviet artillery capability can be awesome, and a counterattack against an out-of-supply armor group can have devastating effects, especially if there is no avenue of retreat.

This is another argument in favor of moderation by the attacking Axis, rather than a headlong charge eastward at full speed. With a stacking limit of two per hex, the Axis player can jam up his armor’s escape routes with infantry. If that happens, and his armor takes a beating, there will be no escape and the entire armor unit will be lost.

Each turn the supply, vehicle, artillery, and manpower pools are updated, and the judicious use of those replacements can be pivotal.
New units can be created, or the available men and machines can be sent directly to the front as replacements. This second method has its advantages:

New units are created one division at a time, so it will take more than a month to accumulate an entire new corps. After a new division has been created, it enters the board far to the rear. On its first turn it must make its way to the front and so will enter “rail” mode. Because a unit may only be in one movement mode per turn, this new unit will not be able to leave the railroad as it approaches the front on this turn. Hence, it will usually take two turns or more to get this new unit into position at the front.

The alternative is to pump those troops and vehicles into front line units as replacements. They show up at the front immediately, and they can keep those armor spearhead units operating at close to maximum strength. Supply is maintained by rail, and the progress of the offensive is often governed by the speed with which German gauge rail hexes are constructed. The deeper those rail hexes extend into Russia, the more likely the rail lines will be cut by partisans. Partisan activity can be suppressed by 20% for every 150 infantry points left in the pool, so in order to totally suppress the partisans a total of 750 infantry points will have to be left permanently in the pool. This is easier said than done.

Because Supply is at the heart of WIR, and because the kinds of supplies that eventually get to the front are a function of the number of factories that have been built, the factory construction sequence is critical, somewhat complex, and requires some explanation.

Each turn players have the opportunity to build factories up to their available limit. There are four types of factories; heavy industry, aircraft, artillery and vehicles. The development of heavy industry increases the ability to build factories, and so increases the factory building limit. But increasing the factory building limit is a two step process; first heavy industry must be built, then the specific factories. Factories may also be dismantled and rebuilt in different locations.

When factories are actually built, the phasing player can choose the location from a list of available cities. But the Axis player should know that there is no reason to build factories anywhere but in Germany. Supplies get into the supply pool just as quickly from factories in Germany as they do from factories in cities closer to the front. They are also not vulnerable to attack in Germany, and will therefore, never have to be relocated should the Soviet counterattacks move the front far to the west.

When playing the Barbarossa scenario, it is probably advisable for the Axis player to play for the long term and build heavy industry. Barbarossa challenges the Axis player to improve on the historical results of the 1941 summer offensive, and get into Moscow before winter sets in.

In Case Blue, the Axis player has his best chance of bringing about a preemptive victory. Ignoring Leningrad, the Axis drive should concentrate on Moscow and Stalingrad. A competent Axis player can take those two cities in the first half of 1943. Gorki and Kubyshev, and with them, victory, can be had by Winter. Working under such a timetable then Axis player should invest in vehicles, artillery, and aircraft rather than heavy industry.

The Zitadelle scenario purports to be the final German offensive, but it is more a study in futility. No sooner do the Germans attack than the Soviets counterattack with devastating power. Their overwhelming artillery superiority has telling effect, and the Germans have little hope of maintaining any momentum. Under these circumstances there appears to be little value in building heavy industry for the long term. The Axis is, at this point, on the defensive, and a long holding action-strategic withdrawal has begun.

A simulation of the scope of WIR can teach as well as entertain. The critical importance of supply to an offensive is graphically depicted, as well as the importance of air support. In fact, the lesson which is made most clear from playing WIR is that Hitler never should have launched Barbarossa in the first place.
It’s been almost 20 years since Paul Simon pictured Mrs. Robinson pouring over the candidates on a Sunday afternoon; laughing, shouting, choosing, and in the end, losing. Simon’s song hit a subconscious chord for my generation. It asked where the heroes had gone and where a clear-cut choice could be possible.

If you’re a conservative Republican, the choice is clear-cut. In 1984, Ronald Wilson Reagan will reprise his “good guy” roles from the silver screen and win handily. As of the writing of this article, the choice is not clear for the Democrats. It seems that each time Walter F. Mondale closes in on the nomination and looks like a certain victor, he loses a major primary contest. This, in turn, casts doubt about his “electability.” I felt that the “electability” angle needed to be explored, so I tested it using SSI’s PRESIDENT ELECT simulation. The questions were written in two extremely variable ways to shake up established positions: debates and foreign trips. In attempting to break up Reagan’s invincibility, I tried both tactics.

The first tactic was a debate. According to the news media, Mondale won the debate held in week #2. He won in points by 34 to 29 and in intangibles by 19 to 13. Nevertheless, the gap only closed to 57% to 43% in popular votes by a margin of 535 to 36 with 157 too close to call. Clearly, this campaign needed the “human touch.”

Once again, I attempted to put the Reagan campaign at a disadvantage. This time, I mocked the Hart campaign and allowed the computer to manage the President. On this occasion, Hart took a trip to a friendly country and received good enough press to narrow the gap to 53% to 46% in popular vote and 365 to 26 in electoral votes (with 147 “too close to call”). Finally, on week #5 of the campaign, the digitized manager of the Reagan campaign agreed to debate. At last, my idealistic Democratic bias cried out, “I’ve got the turkey now!” Indeed, Hart managed to WIN the debate in points (29 to 25), but only tied the President in intangibles (with 22 apiece). This turn of events narrowed the gap
to its most narrow point. Reagan held on to a slight lead in popular vote (52% to 48%), but for the first time, no longer held enough electoral votes to win (191 to 168 with 179 "too close to call"). Those figures proved as illusory, as they faded to a typical 55% to 44% and 370-7 (with 161 "too close to call") by the next week. With no news, gaffes, or bad press to explain it, Hart's miraculous campaign turned sour and finished with a Reagan victory. Final results were 59% to 41% and 535-3.

It was certainly a closer race with Hart vs. Reagan, but I still had not created the playability of a GAME. Thus far, I had enjoyed some marginally interesting simulations, but not a GAME. Siwek, in the article referenced earlier, had claimed that incumbency was the primary factor. I wondered what would happen if I run Hart as the incumbent against Reagan as the challenger with the exact same parameters regarding the world situation and national economy. Hart won handily! It is questionable whether he would have in a longer campaign. In both computer managed and human simulations, Reagan consistently hammered away at Hart's strength. In the computer campaign, with no debate occurring, Hart won 55% to 45% in popular votes, but only managed a 362-176 victory in electoral votes. In the human managed campaign, Hart managed to pull off a slightly better 56% to 44% victory in popular votes, but a significantly better 471-67 victory in electoral votes. Question: Does the fact that Reagan does better than Hart in challenging an incumbent under the same circumstances indicate 1) that Reagan is a better candidate than Hart or 2) that there is a definite conservative bias in the demographics built into PRESIDENT ELECT. As a player (with an admitted tilt toward the left, personally), it seems that there is a conservative bias in the demographics. Otherwise, I find it hard to explain the sudden erosion of Hart's support in the friendly trip and winning debate game and the much better showing by Reagan against an incumbent. Please note that the only different factor is the initial randomization. Whether or not such a right tilt is a delusion of this writer's paranoia, I was still looking for a strong Democratic challenger to make a race out of the 1984 simulation. Out of curiosity, I turned to Jesse Jackson.

I set up the computer as campaign manager for both sides in the Reagan—Jackson race. The Labor Day poll was ominous. Jackson was already losing by a fatal 61% to 39% in popular votes and Reagan already had 479 electoral votes to Jackson's 17 and the meager "too close to call" total of 42. It turned out that this race, like the others, was not "too close to call" and finished with the exact electoral vote count as the other simulations - Reagan 535—Jackson 3. The big difference here was that Reagan's popular vote margin was even wider over Jackson than over Mondale (69% to 31%). With that kind of disparity, I didn't even try the human factor in that race.

I think the only people who will want to replay these simulations from a Democratic perspective would be those with Alf Landon Syndrome (Republican Presidential nominee from Kansas who only won in Maine and Vermont in 1936) or George McGovern Complex (Democratic Presidential nominee from South Dakota who only managed to pull in Massachusetts and the District of Columbia in 1972). On the other hand, if you are a Republican... happy stumping!

**SUGGESTED RATINGS FOR PRESIDENT ELECT**

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(Higher # = degree of support)
DISPATCHES
Insights From the Strategy Game Design Front

Dan Bunten
of Ozark Softscape

To a certain extent I agree. The market that was controlled and manipulated by a few of the hardware manufacturers, software publishers and game developers is gone forever. The days of “me too” arcade games written by “whiz kid” programmers in a couple of months of their spare time are in the past. So too are the times when Atari, Activision, Imagic and others could crank out titles one after another and rake in the cash. But my perception is that that the market has not disappeared, it has matured. The “arcade craze” was an intense but short-lived phenomenon. The public has satisfied their need to control little animated objects on the screen. Their eye-hand coordination has been sufficiently challenged and exhausted. They have blasted all the aliens, eaten all the dots, navigated all the mazes and rescued all the damsels!

Strategy games now far outnumber arcade games on the best seller lists.

It’s no wonder that companies that rode the crest of the “arcade craze” are now floundering. It’s equally not surprising that “the game industry” should be seen as failing (at least to outsiders) since action/arcade games represented the vae majority of the revenues generated. However, I am very optimistic about games that fulfill the promise of home computing and create a whole new medium.

To me the outlook has never been better! With the death of the single-focus type action/arcade games, the attention of consumers has shifted towards more “substantial” products. Best seller lists are now populated by games that offer varied interaction and more cerebral elements. Strategy games now far outnumber arcade games in the lists. Just two years ago the opposite was true. Even the arcade games that make the lists have more depth than ever before. “Lode Runner” includes strategic planning and puzzle solving along with its fast action. “Julius Irving and Larry Bird Go One On One” allows a player to really get a feel for basketball and to experience pride in the way you can do turn-around-jump-shots. (You can even shatter the backboard with an overzealous slam dunk!)

Simple eye-hand action games are dead but what else can we say about the future of computer games? I feel certain there will be other obituaries to write. “Computer board games” seem to me to have a short life expectancy. Although these games offer more potential interactions than arcades do, they require too much from players and often deliver too little. In general, any game that was suitable as a board game will make a bad computer game. This is because of the differences in the two mediums. For instance a game like “Risk” is very easy to play on a board because all a player does is point and talk. (“I’m attacking there from here with all these men.”) However, the computer equivalent (no longer on the market) required the player to specify the I.D. numbers of the origin and destination countries as well as the number of units to be included. Even if the computer provided a reasonably good opponent (which it didn’t), this type of game would not be as good as an original design.

Games where the computer takes its turn then you take your turn are also “computer board games”. Although there are situations where this type of design is appropriate, it is usually a “cop-out” by the designer. It’s a lot easier to write a game where only one thing can happen at any moment. Another aspect of “computer board games” is their reliance on command languages. Single or multiple key-strokes are used to communicate the wishes of the player. The player must memorize the commands and keep checking the “quick reference card”. He is constantly reminded he is interacting with a computer program. If an easier interface were used instead, the player could forget he is playing a computer game and just go ahead and have fun. There was a time before designers had much experience with computers that board games were a logical starting place for a design. However, those days have passed. “Computer board games” may never completely die (since wargame designers are so enamored with them) but thankfully they are fading away!

Another group of games that I see as eventually passing away are the word guessing games. These go by another name in some circles — text adventure games. With or without the hi-res pictures, the main limitation of adventure games seems to be figuring out how to tell the computer what you want to do rather than what to tell it. You have to discover what words the parser (the
thing that tries to make sense of your words) understands. Granted, adventure games give you a sense of infinite possibilities. At first it seems you can talk to the computer like another person. Then you realize the person is deaf and you must use a keyboard to communicate. Before long you discover, however, that you're dealing with a retarded deaf kid with a fourth grade vocabulary. Still and all these games have such a following that they might survive. Maybe, they will improve so much that rather than die they will ascend into heaven!

The final group of games to disappear in the next couple of years will be the linear quest games. These games consist of solving a group of puzzles in a certain order that only the programmer knows for sure. At each crisis the player is rewarded for a wrong decision with the death of his character. Eventually you build up so many "hit points", abilities and miscellaneous paraphernalia that you can survive any situation. However, you still have to discover what the programmer had in mind for you to do to finish the quest. Another element (although not strictly necessary) is the fact that all interactions with other creatures in the game will be stereotypical. In general, if it moves kill it! Obviously, the idea of "larger than life" heroic quests has great appeal. But do I really have to die so many times (or buy cheat sheets and cheat programs) to enjoy them? I hope the future will bring more reasonable minds into the design of this type of game. I would love to play one that didn't feel like the programmer was punishing me!

So what will be left after all these genres have bitten the dust? The new and innovative products that will make this medium what it can become. Products that don't copy from other mediums but learn from them to create something new. I am reminded of the recent (July/August) cover of "Science 84" which showed five billiard balls that looked like a photograph shot at a slow shutter speed. The caption said "this picture is a fake". It was the result of 100 hours of graphics analysis of Lucasfilm's Vax computer. Shadows, reflections and even blurred motion were so realistic that you would swear it was a photo. I understand why the Lucasfilm folks thought this would be an achievement and I agree with their logic. However, if after they perfect this technology they continue to produce only photographic type images of things that could be photographed, they would be missing the point! Most people would agree that the real potential of computer generated art would be the creation of images that could not be done any other way. So it is with computer games. We have a new medium to invent and we must break out of the old patterns.

Arcade games were great for the graphics and easy human interface they originated. "Computer board games" taught us something about the potential for cerebral depth in game design. Text adventures showed us how we would love flexible and interactive communication in our games. Finally, quest games told us how much fun it is to pretend to be part of something bigger than life. Now it's time to bring those elements together in products that use the resources that are unique to our medium. It's time to make something new!

Dan Bunten is the author of Computer Quarterback, Cartels & Cutthroats, and Cytron Masters all available from Strategic Simulations. He is the lead designer of the Ozark Softscape group that wrote M.U.L.E. and Seven Cities of Gold both available from Electronic Arts.
So, now that you can see what you’re doing, it’s time to get up and look around the place. You’ll soon notice you’re quite alone here, and you won’t be able to leave; at least, not by the front door. But we’ll come to that in a little while. In the meantime, do some snooping in the various rooms. You’ll find a few helpful spells, and a few other interesting items, as well.

For instance, Belboz’s room is worth looking into. While you’re doing that, listen to the birdie, and make sure you check out everything! When you leave, you should have Belboz’s journal. If you don’t, you missed something, and you’ll never get out of the Guild Hall.

Another place you don’t want to miss is the storeroom. Pay special attention to that matchbook, and what’s written on it. The ochre vial is also important, so make sure you hang on to that, too (the calendar? Yes, it will be a different matter: you’re in the Dark Room, of course!). Seems they’re behind the bar? Fred is off this week; he’s been expecting you, and your usual chair to be worried. This time, it’s only a dream hellhound coming right at you, is no need you’re here for, is it? Settle in, and we’ll talk about it. Just remember to move fast (hopefully, you’ll go in the right direction); nothing lasts forever!

The fort is another interesting place to visit. There are two items in this area that you’ll need later, so take a good look around. The cannon, of course, is an obvious hiding place. However, getting to the scrolls in the barrel seems impossible (hope you have some band-aids handy!). What can be done? Perhaps a look at your handy Inforater might help. Especially when you think about what you found in the vicinity of the river!

The other item is a little less obvious. But, since there aren’t many rooms or other objects in the fort, you shouldn’t have too much trouble finding what you need. Just be careful not to overlook (or underlook!) anything.

Now it’s time to go underground. Of course, you’ve been making a map as you go along (haven’t you?), and you’ve probably spent some time down below already. If you haven’t, pose around down there till you come to the Toll Gate. Here you give up your Zorkmid to get by, and, continuing further on after that, you’ll come to the infamous Glass Maze.

Actually, the maze is not all that hard, although trying to get through it could drive you batty. When you make it out the exit to the Hollow, you’ll find a scroll there. However, NOW you have a problem. Two, in fact. For one thing, you can’t take the scroll back with you through the maze. For another, the maze will change as soon as you pick up the scroll (oops!).

Now what? Well, first, the answer to the scroll problem is really pretty simple. The
solution is right there in the Hollow, practically staring you in the face. Think about it. The maze is another matter. There are, in fact, two ways out. One is quick and dirty, the other long and hard. The hard one is finding your way out through the new maze, which can be done, but it will take awhile (if you do this, you'll have to learn a certain spell several times before you enter the maze).

The other way requires using one of the spells you found in the Guild Hall. If you've played around with that one at all, you know that it will always take you back to the place where you cast it, so if you're going to use it here, best cast the spell before entering the maze.

Ok, so now you're out of the Maze, and you have the scroll. But, you need a Zorkmid, so you can enter the Amusement Park (don't ask me what an Amusement Park is doing down here!). The tree is gone, so you can't go there for one. However, don't despair! There is a solution... it just requires a larcenous turn of mind, and quick fingers.

Once you have the coin, it's time to visit that strange Amusement Park. Give your Zorkmid to the gnome and enter. You'll find some rides here, as well as a Haunted House. What you really want, though, is that arcade at the far end. If you could just hit one of those cute little bunnies, I'll bet you could win a prize. You can't do that on your own, but you should have something with you that will help.

When you get your prize, take a look in the Carving Room (no, it's no? the place to cut up turkeys!). One carving in particular stands out. Look over your spells; you will need TWO of them here. When you've used the right ones properly, you will be able to progress into the Sooty Room.

Now, you are about to embark on the strangest part of this adventure. The Sooty Room leads to the Coal Bin Room, and here you will find breathing to be rather difficult. You'll need a potion here: I sure hope you did the right thing with the matchbook!

But the real surprise is when you meet... yourself! Your Older Self, in fact, sliding in to the room from a chute above. Listen carefully to what your twin tells you; you'll need that information. Also, remember that you're dealing with yourself here, so act accordingly (remember the Golden Rule?).

After your twin dives down the lower chute, you can proceed on to the Dial Room. Opening the door here should be no problem, and you will soon find yourself in the Shaft Bottom. The rope is important, so take that before you climb up to the mine.

The mine is a small (really small) maze of sorts; what would an Infocom be without one? It shouldn't take you long to map it out (it better not; your potion won't last forever!). Along the way, you'll find a timber; take it with you, because you'll need it soon.

Eventually, you'll come to the chute top. This is the one your Older Self came down a little while ago. However, before you can slide down yourself, you must find the way to the Slanted Room. You have the rope and the timber, which is all you need. All you have to do is figure out how to use them, so experiment a little there (it's a good idea to save the game, since it's likely you won't get the solution the first time).

In the Slanted Room, you'll find a scroll with a rather odd spell. It's meant to be used right there. Read room descriptions carefully before and after you cast the spell. You shouldn't leave empty-handed.

When you do come down the chute, you'll be back in the Coal Bin Room, and here you will see your Younger Self (I said this was the strangest part of the game!). This is a critical moment. If you don't do exactly the right thing here, you will cease to exist. Think back to what happened when you first entered this room, and do likewise.

Now it's time to go down the lower chute, before you choke. Ah, air again! You've made your way to a lagoon. In fact, you're probably pretty dirty from all that mess around in the mine, so why not take a swim and wash up? You might even find something of interest!

Ok, you're just about ready to face Jeearr. He's close by as a matter of fact. You just have to get past the nasty-looking vines (should be easy), and into the cave. Umm, well, there's those grues, too. You'll have to have a way of dealing with them. And in this case, light won't work (uh oh!).

Once you pass the grues, you will come to three doors. Two of them lead to very unpleasant consequences; the third will bring you to what you've been looking for: your showdown with the demon. So, before you open that door, you had best be prepared. You will need to protect yourself first; do that before you open the door. When you see what's on the other side, you'll know what other spell you need. Don't waste time, do what you must, and quickly! Congratulations, Sorcerer, you are now the leader of the Circle!

Whew! That's enough of magic for now. Next time, we'll come back to more mundane matters (so to speak!), when we take a look at solving a murder in Deadline. Until then, happy adventuring!

For those of you who need some extra help, there are 3 ways to get in touch with me:

By mail: send a self-addressed, stamped envelope, along with your questions, to: Scorpia, P.O. Box 338, Gracie Station, NY NY 10028.

On the Source: SMAIL to GAM-310.

On CompuServe: GO GAM-310.

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There is nothing quite like the thrill of a LODE RUNNER level you've never seen before. But by now, of course, You've played all one hundred and fifty levels and the truth is beginning to sink in; you may never see another NEW level! Egad! Can 150 actually be not enough?

Computer Gaming World is glad to announce a new contest that will satisfy this craving and give you a chance to demonstrate your creative talents at the same time. Just send in your own LODE RUNNER designs and we'll share the best with everybody. CGW will publish a disk of the winners and runners-up so that we can all join in the fun.

The most exciting thing about this contest is the large number of prizes. The best overall design will win $50, courtesy of the publishers of LODE RUNNER, Broderbund Software. Second place prizes of new Broderbund games will be awarded in three categories: Most Artistic, Most Challenging to Solve, and Most Challenging to Play. Finally, everyone whose work is included on the Computer Gaming World LODE RUNNER disk can purchase a copy of that disk as a special half price rate. The basis for judging is described in the Contest Rules below.

CONTEST RULES

1. All entries must have a possible solution, that is, you must be able to get all the gold and advance to the next level. If the solution to your puzzle is difficult, please include a description of how to beat it.

2. All entries will be judged on the basis of originality and playability. Prizes will be awarded in the following categories.

   ARTISTIC: Visual appearance is what counts here. Do you have a level that looks like something? Does it contain a word or message? Remember to be original.

   CHALLENGING TO SOLVE: These are the levels where it takes considerable time and thought to figure out HOW to complete the level. Maybe you can't get all the gold, or maybe you've got the gold but can't see how to get to the top of the screen.

   CHALLENGING TO PLAY: So you know how to win, but it still takes skill. Admittedly, the line between these two types of challenge (logical vs. coordination) gets a little fuzzy, but who said judging was objective?

3. No more than three (3) entries per person (they may all be on the one disk, in fact we'd prefer them that way).

4. Each disk submitted should be clearly labeled with:

   Your name and address The format of the disk (Apple, Atari, C64, IBM) The number of levels contained on it.

5. Mail your entry to:

   Lode Runner Contest C/O Computer Gaming World P.O. Box 4566 Anaheim, CA 92803-4566

6. All entries must be received no later than October 30, 1984.

7. All entries become the property of Computer Gaming World.

8. Disks sent with a return address label and postage will be returned after contest is concluded.
by Jack Tramiel, former chairman of Commodore. And you may well have been pondering, as have I, what does this portend? Some analysts speculate that Atari will forge ahead with a new low cost machine to compete with the Macintosh and IBM-PC. Other feel that the Atari 7800, the next generation dedicated game system may now be abandoned.

Which ever way Mr. Tramiel takes Atari, the outlook is not good for the world of serious computer gaming. Isn't the market already glutted with enough IBM look-alikes? Instead of spending more millions to make Atari respectable to business people, I wondered, why not spend the same money on arcade-type computer games, I love 'em. But let's get all those big, rugged guys from the Miller-time crowd and show them having a helluva' good time playing M.U.L.E. or Star Raiders, not only by engaging the lower brain centers. Only a relatively few people have a real need for a personal computer in their work. Everyone, on the other hand, needs entertainment and a way to enjoy time spent with friends and family. So, instead of building yet another machine that has a degree of IBM compatibility, instead of saying "hey, look our computer is almost just like the other guy's", why doesn't Atari move on to the next generation of computer-gaming machines?

A LAMENT

As you have probably heard or read by now, much of Atari Inc. has been bought by Jack Tramiel, former chairman of Commodore. And you may well have been pondering, as have I, what does this portend? Some analysts speculate that Atari will forge ahead with a new low cost machine to compete with the Macintosh and IBM-PC. Other feel that the Atari 7800, the next generation dedicated game system may now be abandoned.

Which ever way Mr. Tramiel takes Atari, the outlook is not good for the world of serious computer gaming. Isn't the market already glutted with enough IBM look-alikes? Instead of spending more millions to make Atari respectable to business people, I wondered, why not spend the same money on arcade-type computer games, I love 'em. But let's get all those big, rugged guys from the Miller-time crowd and show them having a helluva' good time playing M.U.L.E. or Star Raiders, not only by engaging the lower brain centers. Only a relatively few people have a real need for a personal computer in their work. Everyone, on the other hand, needs entertainment and a way to enjoy time spent with friends and family. So, instead of building yet another machine that has a degree of IBM compatibility, instead of saying "hey, look our computer is almost just like the other guy's", why doesn't Atari move on to the next generation of computer-gaming machines?

It seems abundantly clear to me that all Atari computers are HOME ENTERTAINMENT machines, not word processors, not spreadsheet calculators, not scientific or statistical analyzers. Yes, they can do these things, but it's not what they do best. Who's idea was it in the first place to sell something positive, namely the home computer, by advertising that it could be used to do something negative, namely writing and balancing the checkbook. As any programmer can tell you, a positive and a negative do not make a positive.

Dumping the 7800 (the dedicated game machine) would not appear to be a catastrophe. There's little doubt that the arcade boom of the early 80's is on the downside. This suggests that it's important for game oriented companies to re-position themselves in the market: away from arcade gaming. Unfortunately, Commodore's 64 commercials asking the rhetorical question "I see you scored a million points on Whap-po Invaders, but what do you know about real computers?", as well as Coleco's slogan that they "... bring the arcade experience home ..." have helped to instill in the public's mind that all computer games are arcade games (and are therefore frivolous). Isn't it time the rest of America learned what reader's of CGW have known all along: that computer gaming can exercise your mind as well as your reflexes, that simulations, adventures, and strategy gaming is challenging, entertaining, and an excellent adult recreation.

A PLAN

I truly believe that a great demand for a new generation of programmable gaming machines (with "some degree of compatibility with the existing Atari computers") could be created and successfully marketed by a three-pronged effort of: 1) defocusing on the hardware (which has a potentially negative connotation), 2) making it clear to targeted adult market segments that computer gaming is much more than arcade games, and most importantly, 3) selling the benefits of gaming: feeling good, competitiveness, relaxation, personal-family-social interaction — even business people gotta' unwind.

Instead of having just one spokesperson (i.e. Alan Alda), show a variety of ADULT "opinion leaders" enjoying the fellowship and camaraderie that goes with a good game. Let's get all those big, rugged guys from the Miller-time crowd and show them having a helluva' good time playing M.U.L.E. or Eastern Front — any game! and NOT an "arcade" game. When's the last time you saw a home computer commercial that didn't have an eight year old kid in it? Computer gaming is too fun and too important to relegate to elementary and junior high school aged kids. It's not that I'm against arcade-type computer games, I love 'em. But I suspect far too many adults equate computer gaming with games that can be played only by engaging the lower brain centers.

JUST A DREAM

The problem with my fantasy of an adult-oriented programmable gaming/simulation computer is that it's not where the market is today — and corporate planners tend to go with the numbers. This is unfortunate, especially since Atari was one of the handful of computer companies that got the whole personal computer market off the ground. Companies like Atari (and, yes, Apple) were led by men who were bold enough to cut their own paths. Back in the mid-70's, they didn't count heads to see where the pack was, they looked ahead to see where the market might be if they produced the right machine. Apple is to be applauded for NOT making the Macintosh "IBM compatible" — to have done so would have meant adding circuitry to downgrade the Macintosh's capabilities. Wouldn't it have been great to have heard that Atari announced fall '84 delivery of a new machine and programmable gaming/simulation computer for adults (of all ages) with advanced entertainment capabilities that no other computer on the market today, including the IBM PC, could touch.

MEANWHILE, BACK ON THE PLAYFIELD ...

If you are constantly on the look-out for an arcade game to match the excitement you originally felt when piloting your ship in Star Raiders, then both ENCOUNTER or DIMENSION X are worth looking at. These games, even though they are both from the same company, Synapse, have very different implementations of very a similar premise: wipe out enemy ships on a three-dimensional plane before they wipe you out. In both games you have a pilot's-eye view of a planet's surface. You speed your ship across a horizontal plane, encounter enemy, and shoot at them (as they shoot back) with photon-type torpedoes that appear smaller as they recede. Wipe-out the enemy, then proceed through a deadly gauntlet similar to Star Raider's hyperwarp, to another playground. Both games tell you the number of enemy remaining and both have "radar" that reveals their whereabouts.

The visual effect of piloting your ship in both games is quite good. The main screen in DIMENSION X looks like a multi-colored checkerboard. Depth is achieved by showing the checkerboard smoothly scrolls in all directions in response to your joystick. ENCOUNTER provides 3-D by showing an solid field scattered with pylons (reminiscent of the 2001 monolith) that increase in size as you approach them. I prefer the ENCOUNTER 3-D effect mostly because the enemy are easier to see on a solid field than against a checkerboard background.

The enemy in ENCOUNTER are also more interesting. Instead of just increasing the number of enemies, the encounter enemies change their fighting tactics. At different levels the enemy photon torpedoes are fired at you in different formations: one at time, in a column barrage, in bursts of three across, etc. This makes the game more fun because at each level you must develop different offensive-defensive tactics and strategies for defeating them. Plus, there are three kinds of enemy at each level: two that are firing at you and one that does a Kamikaze number while taking evasive action. Lots'a' fun and well-worth the encounter.
Britain's secret weapons in this battle for whose shoulders rests the task of coordinating the air defense of Britain. At Fighter Command, the radar contacts at ten fighter groups are monitored and interceptions are coordinated. As raids are identified and squadrons scrambled, the progress of all aircraft will be displayed on a huge map table. Controllers representing the various air groups are pushed around the board by controllers, like croupiers at some huge roulette table where the stakes are the very future of a nation.

There is no activity picked up by British radar until 0746. Then things begin to happen very quickly. Radar detects air activity over the French coast. German bombing raids are beginning to form. Still too soon to be able to discern individual groups, the bombers and their escorts are now only a mass of aircraft on the radar screens. But it will not be long before they are on their way towards England.

At 0750 all squadrons in 10 and 11 Groups, except those not assigned to specific patrol stations, are ordered to “runway alert.” With engines running and pilots aboard, those aircraft can, from “runway alert” status, be airborne within two minutes should they be needed.

At 0804 the first raid is identified: 100-plus aircraft at an altitude of one thousand feet over Dieppe. Uncertain of their destination, there is little time to wait; at one thousand feet, the raid is likely bound for a coastal target... perhaps an RDF station, or possibly an airfield.

The order goes out: Scramble fighters at Hawkinge and Lympne, two forward fighter strips. Four minutes later four small markers, British roundels, appear on the big map at Bentley Priory, representing the four Spitfire squadrons from Hawkinge and Lympne. They are airborne and moving towards the swastika that now lies over the sector of the map that outlines the English Channel just northwest of Dieppe where the incoming German raid was first sighted.

The four Spitfire squadrons are still clawing for altitude when the second raid is detected. It is a big one, 200-plus, also down low at one thousand feet, and moving quickly. This second raid is picked up due south of the RDF at Beachy Head, southwest of Hastings. It looks like it may be headed for the large fighter base at Tangmere.

No time to wait. Scramble all four squadrons at Tangmere.

Scramble Westhampnett.

Operating at only about two-thirds strength, the six squadrons that are ordered to intercept this second raid will only pack the punch of four full-sized squadrons, and only if all six make a successful intercept.

The first raid, raid A, has turned west, away from the pursuing interceptors. It is 0815 and the interceptors are now in a tail chase. Could raid A be headed for the city of Portsmouth? If so, the Spits may not get to them in time.

On the big map at Bentley Priory the roundels slowly make up ground on the raid A swastika. It now seems certain that the target is Plymouth, and interception before the Germans reach the target is questionable. But, Fighter Command can afford no more than six squadrons to be used on a 100 plane raid. This, surely, is only the beginning of what promises to be a busy day.

---

Tom Cheche has served as a playtester on a number of SSI games.

September 1, 1940. Another day in the Battle of Britain is about to unfold.

Cloud cover is heavy. Weather forecasts call for 50% cloud cover over Britain today, with German raids expected to strike secondary targets. British fighter squadrons bent on interception may find it difficult to find their prey. Intelligence warns that German air raids are likely to be heavy. And ULTRA, that wonderful box of wires and plugs that mysteriously decodes German communications with amazing reliability, warns that the sector airfield at Biggin Hill is a likely target.

At 0600 hours every fighter squadron in southern England goes on “hut alert”. Two fighter groups, 10 and 11, bear the burden of protecting the British heartland from Goering’s Luftwaffe during the critical days of August and September, when the Battle of Britain will be decided.

Ten Group is entrusted with the Southernmost area from the Isle of Wight westward to Plymouth and beyond. Eleven Group commands the area surrounding London, the Thames estuary, and the Channel coast at its nearest proximity to France. In the dispersal huts and tents of 10 and 11 Groups, as the Hurricane and Spitfire pilots while away the hours in card games and nervous chatter, the controllers await the word to scramble fighters.

The word will come from Fighter Command, headquarted at a mansion outside London called Bentley Priory. There, in a command center designed to monitor all incoming German raids, waits Air Chief Marshall Sir Hugh Dowding, the man on whose shoulders rests the task of coordinating the air defense of Britain.

Scattered the length of the British coast is a network of RDF (radar) stations. These are Britain’s secret weapons in this battle for survival. Capable of identifying altitude, direction and approximate size of incoming enemy air raids, they are the long range eyes of the RAF (Royal Air Force).

At Fighter Command, the radar contacts are monitored and interceptions are coordinated. As raids are identified and squadrons scrambled, the progress of all aircraft will be displayed on a huge map table. Counters representing the various air groups are pushed around the board by controllers, like croupiers at some huge roulette table where the stakes are the very future of a nation.

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Scramble Westhampnett.

Operating at only about two-thirds strength, the six squadrons that are ordered to intercept this second raid will only pack the punch of four full-sized squadrons, and only if all six make a successful intercept.

The first raid, raid A, has turned west, away from the pursuing interceptors. It is 0815 and the interceptors are now in a tail chase. Could raid A be headed for the city of Portsmouth? If so, the Spits may not get to them in time.

On the big map at Bentley Priory the roundels slowly make up ground on the raid A swastika. It now seems certain that the target is Plymouth, and interception before the Germans reach the target is questionable. But, Fighter Command can afford no more than six squadrons to be used on a 100 plane raid. This, surely, is only the beginning of what promises to be a busy day.
0816. Good news. On the big map the markers representing the Tangmere squadrons have been moved on top of the second, raid B, swastikas; indicating an intercept is close. Moments later there is radio confirmation that the Tangmere squadrons have “bounced” the incoming bombers, ambulance them from above.

A flurry of gunfire, broken reports of HE-111s being hit, several quick claims of bombers on the way down. One, two, three, possibly a fourth. Then a fifth and a sixth. A momentary silence, and then the report that at least a part of the Heinkel group has broken off and turned back. Good news. Good news, too, that there are no reports of losses from the Tangmere wing, at least initially.

But the rest of raid B continues to work its swastika westward across the board at Bentley Priory, and ironically, the target now appears to be Tangmere. Too late now to scramble any other aircraft, only the Westhampnett squadrons lie between the bombers and their apparent target. On the map at Fighter Command the marker representing the Westhampnett squadrons inches perceptibly closer to the swastika. It is going to be close.

And it is still only 0828. It is going to be a long day.

What we are dealing with here is a classic, a high point in the design of computer wargames. Fighter Command (FC) by Charlie Merrow and Jack Avery, SSI’s simulation of the Battle of Britain, is arguably the finest example of computer wargaming available for the home computer.

FC offers both solitaire and two-player capability, with multiple scenarios. In the solitaire mode the player becomes Sir Hugh Dowding, in charge of the fighter defense of Britain, while the computer, as Hermann Goering, orders the Nazi missions. The computer opponent is capable of playing at five levels of difficulty.

Furthermore, the computer virtually eliminates paperwork, and creates a “fog of war” that elevates FC from simple wargame to a faithful simulation that accurately recreates the pressures which must have been felt at Bentley Priory during the Battle of Britain.

It would not hurt for the prospective FC player to do a little reading up on the Battle of Britain before playing. Armed with some knowledge of the circumstances, the player will be able to more fully appreciate how good FC really is as a simulation.

The pacing of FC is one of its strengths. Radar contacts appear on the mapboard, then move inexorably towards their targets. No board-game slowness here; the computer updates activity in two-minute increments, and any indecisiveness in scrambling fighter squadrons can be disastrous.

FC is played in two phases. During the Orders Phase each side receives reports on damage sustained and dished out during the previous day’s activities. In the case of assessing damage to the enemy the information is predictably inaccurate. The British never know exactly how badly shot up the German bombing raids were, and the Germans never know exactly how much damage, if any, was realized from their bombing missions.

During the Orders Phase each side also receives reports on the numbers of available aircraft and air crews, the morale status of all squadrons, and weather forecasts. German forecasts of weather over Britain are not as accurate as are the British forecasts.

and the British also have the advantage of ULTRA reports, which frequently tip off at least one of the key German targets.

During this phase the German plans his raids, feints, and fighter sweeps, and assigns covering fighters at various altitudes. The British player can shift squadrons from base to base, assigns target priorities, and determines how aggressive his interceptors should be in seeking combat.

The program then shifts to the semi real-time Execution Phase that is the heart of FC.

Starting at 0600 and continuing until the last German raid of the day has left the map, or until 1800, whichever comes first, the British player must wait for the German raids to be picked up by radar. As the raids are identified, swastikas appear on the screen, simulating the movement of those markers on the map at Fighter Command.

The German player has nothing to do after the orders are given. As in real life, he must simply sit back and wait for the planes to return, then try to assess the damage to the British based on the often overly optimistic reports from his aircrews.

But life for the British player is more complex. He must decide which raids should be contested and which raids are only feints. He must avoid squandering his resources in interceptions of fighter sweeps. And he must not use too many of his planes too early in the day, for fear that the Germans may save their biggest raids until all of the frontline squadrons are on the ground refueling.

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GALACTIC GLADIATORS
meet the
STAINLESS STEEL RAT
Johnny Wilson

Name: Galactic Gladiators
Type: Personal Combat
System: Apple, Atari, C-64
# Players: 1-2
Price: $39.95
Publisher: Strategic Simulations

Ever wanted to try your hand as Slippery Jim DiGriz of Stainless Steel Rat fame? How about putting yourself in Gordon Dickson's Dorsal series? Fancy yourself as the next John Carter? Want to save the universe by destroying the robotic minions of Fred Saberhagen's Berserker series? Then, boot up your Galactic Gladiators (GG) disk and get set for some scenarios from science fiction literature.

In Harry Harrison's Stainless Steel Rat For President, there is a scene where Jorge, Slippery Jim's indigenous ally, and the DiGriz family must rescue Flavia, another native ally, from the Ultimados. Since GG only allows one character on each side to have the same initial letter, we had to change Jorge to Ricardo. We also felt that the scenario would have better balance if the teams each had another member, so we added the previously non-existent Eduardo to the scenario. Since Slippery Jim loves regurgitant grenades, smoke bombs and assorted pyrotechnics, we made the closest choice available by choosing gemstones. Further, there are no "needle guns" (the DiGriz weapon of choice) in GG, so we settled for phasors.

RESCUE OF FLAVIA

In the book, the Ultimados were ambushed upon their arrival at a roadblock caused by a tree which had been felled by our fun-loving good guys. In order to assure a Slippery-Jim-type scenario, it is recommended that the Ultimados be given no gemstones and that all but Bolivar of the Steel team have them. Note that Bolivar is given a heat ray gun. This is even more important in the second scenario.

Note, that in spite of the initial advantage caused by the gemstones, the Steel team must get advantage in a hurry as midway through the scenario, the advantage turns to the Ultimados due to blade weapons which may be used EVERY turn. It is recommended that the experience rule be used in all these scenarios because surprise is an integral part of the "Slippery Jim" modus operandi.

Victory Conditions: Ultimados must eliminate Steel. Steel must capture target square with Ultimados defending.

CAUGHT AT CHECKPOINT

After the rescue of Flavia, Slippery Jim's team of super spies run into an Ultimado checkpoint. In the book, Slippery Jim unveils a versatile laser to both mow down the guards and blast the checkpoint open for the team's escape. For the purpose of this scenario, Bolivar has been given a heat ray gun. The heat ray gun will do a nice job of clearing out the checkpoint but, of course, doesn't do a thing against Ultimados. My strategy suggestion for this scenario is that you have Bolivar blast the way clear at the very beginning of the scenario as he is the ONLY one with a heat ray gun. It is unlikely that you can successfully escape from the checkpoint if you don't allow Bolivar to clear the way initially. Once again, the team led by "Slippery Jim" has the advantage in gemstones, but don't get overconfident because the scenario can even up in a hurry if you don't use them effectively.

Victory Conditions: Ultimados must eliminate Steel. Steel must enter and exit the checkpoint structure.

ESCAPE FROM PRIMOROSO

The final scenario involves the scene where Slippery Jim attempts to sign his candidate up as an official candidate in this "banana republic" of outer space. Naturally, the ruling junta is not about to let a rival candidate survive if they can help it, so they ambush him and the Steel team. I recommend that you give the Ultimados at least one extra soldier with blade weapons to represent the "official" guard at the city hall of Primoroso. The battlefield is the plaza at Primoroso and is at long range to reflect the distance the Steel team had to go to escape. Note, however, that the team had an advantage in the book in the form of an available helicopter. Alas, you have no such deus ex machina in this scenario. You will need to add a poorly armed native to be Harapo, the indigenous candidate.

Victory Conditions: Ultimados must eliminate Steel. Steel must eliminate Ultimados.

These three scenarios should be enough to get you started in the world of the Stainless Steel Rat. It should also stimulate your imagination for creating other scenarios. If not, however, watch out for the next article in this series which will offer two scenarios from Fred Saberhagen's Berserker stories.

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26
EMPIRE OF VENNOLANDUA

Build an empire in a mystic age

EMPIRE OF VENNOLANDUA
LEGIONS OF ROME
GLOBAL CONFIRMATION

Legions of Rome is a simulation of the Roman Empire between 70'AD and 527 AD. The player as emperor seeks to preserve, develop, and expand the empire. Seven scenarios include the rise of Vespasian and the triumph of Justinian as well as two campaign scenarios complete with barbarian invaders, civil insurrection, and mutinous legions designed to test a Caesar's skills to the limit. The Apple version requires 48K and one disk drive. The PC version requires 64K and one disk drive.
I am not a pilot and I have never taken a flying lesson, but I am going to start up my trust C64. First I will takeoff from a Southern California airport and fly to Catalina Island. After that, a flight over New York City to view the Statue of Liberty. What a day, beautiful weather, a great day for flying! And I never left my computer.

If I want a different challenge, I could deliver air mail in Kansas or go on a World War I bombing mission behind enemy lines. These possibilities and more are now available for the Commodore 64, Atari, Apple, and IBM-PC computers. These programs include special options that play like games, but you have to know how to fly the airplane simulations before you can play them. Learning to fly these plans will take a serious effort on your part if you know nothing about flying a plane. Takeoff and flying around is fairly easy, but getting down safely is another matter.

SOLO FLIGHT (SF) is available for the Commodore 64, Atari and soon the IBM-PC and is a very good program. The 15 pages of documentation are well written and will teach you all you need to know to taxi, takeoff, fly about, and land. It does not, however, help much in learning how to get from one specific airport to another. There is coverage explaining detailed instrument approaches, but it is difficult to apply the material to flying with the computer. The 3-D visual ground references are minimal, the other graphics are excellent, and the sound of the engine is exceptionally well done.

The screen graphics are split into three visually distinct areas. On the top half are the sky and ground (a quarter of the screen each). The horizon stays constant, at the same location and straight even though you may be turning the plane (banking). On the bottom half of the screen are your instruments.

In the middle of the flight area, is a fixed size image of your plane, a 1930 vintage, single wing, single engine airplane. All of your actions are reflected with this image. Because of this, I found this program to be more like flying a model airplane, as opposed to a “real” airplane where I only saw the view from the cockpit. The actions of this plane are well done as it goes above or below the horizon.

SF provides a great deal of diversity. It includes for instance, three topologically different areas in which to fly. First, there are the flat Kansas plains, where takeoffs and landings at sea level are relatively easy. The area covers about 20,000 square miles, including Wichita, Topeka, and Kansas City. The view below is composed of some corn fields and several airports.

The second area is Washington region where you have a mixture of sea level and higher elevations. The basic flying area is centered about the famous Mount St. Helens, where you can fly right over it (safely). The third area is the Colorado ski area with lots of high altitude airports and mountain passes to fly through. This area is tough! The graphics for the airports are well done, but don’t expect to see the ski runs or lots of detailed scenery. The basic object of this simulation is to get from one airport to another. In fact, you can fly right through any visual object without crashing. This make sense because no one actually flying a plane would fly near any of these objects. They represent visual points of reference to be flown around.

The final flying option that this program offers is a game of flying mail from one airport to on or more others. You are scored on several factors, the most important ones being how fast you get from one point to another and the amount of fuel you use. You can select any one of the three areas and get more points for a more difficult area. You also select your skill level. The higher the skill level the tougher the flying conditions with high scores being saved to disk. My favorite feature of this option is that at the end of each flight, your flight path is displayed on a map of the area. (If you don’t know what you’re doing, this display is really fun as you see yourself flying around in circles and all about the map.)

For each flying area, you can select a flight condition:
CLEAR weather for easy flying, WINDY for greater control challenge, LANDING for final approach practice, and IFR for practice using instruments only with low clouds. Your instruments include an altimeter, air speed indicator, horizon/attitude indicator, fuel gauge, digital display of pitch, flaps, heading and climb rate; lights for temperature, landing gear down and brakes on. You have two bearing indicators (VOR) with digital value display only, an instrument landing signal (ILS) indicator, and an elapsed time clock. The instruments are easy to read and use, but not exactly what you would find in an FAA approved plane.

The joystick is used to control the movement of the plane in a manner very similar to the control of an actual plane (attitude, banking and slip turns). The keyboard is used for additional controls: throttle, landing gear up/down, braking, flaps, view (left or right side, back, front), and to pause the program. For excitement, you can even simulate a random instrument failure for practicing emergency procedures.

One time, because of this, my altimeter went out. Fortunately, there is an excellent display of your plane's shadow on the ground as you go down in altitude. I landed safely.

FLIGHT SIMULATOR II (SFII) is available for the Commodore 64, Apple, and Atari. (A similar program was written for the IBM-PC and is distributed by Microsoft. It does not use joysticks, the instruments are slightly different, and the plane is a Cessna 182 Skylane, rather than a Piper PA28-181 Archer II). This program is outstanding and certainly one of the best examples of excellent programming, documentation, and a full use of the capabilities of a microcomputer.

The first of SSII's two manuals, the 91 page Pilot's Operating Handbook and Airplane Flight Manual, is loaded with detailed illustrations and explanations on everything you need to know. It also gives references for additional information. The second manual, Flight Physics & Aircraft Control with an Introduction to Aerobatics, takes you well beyond normal flight considerations. The material is clearly stated and can be easily applied when running the program as both manuals are indexed for easy referencing.

The screen graphics are split into two distinct display areas. The top half gives a three-dimensional view out the aircraft's forward windshield. Ground terrain and sky colors vary based upon flying conditions (time of day and clear/cloudy). You can also look out from the plane in eight other directions including down. Depending on which way you look, parts of the plane will also block your vision. Another different perspective of view is called “radar”. You are able to look down on the plane, from high above, at the landscape below, which can be magnified or diminished in size using keyboard keys. The horizon varies based upon the attitude of the plane. It will slope if you turn and will disappear if you climb or dive too steeply.

Each separate flying area has specific topological features which can be seen, such as Sears Tower in Chicago, the Space Needle in Seattle, the Los Angeles freeways, and the World Trade Center and the Statue of Liberty in New York.

On the bottom half of the screen are displayed the flight instruments. Included are all of the instruments and equipment required under FAA regulations for day and night visual rules (VFR) and day and night instrument rules (IFR) under non-icing conditions, including flight within terminal control areas. The 49 individual indicators are very well represented on the screen and clearly explained in the manual.

This program provides a great deal of flying diversity. Eighty airports, in four areas (New York, Chicago, Seattle, and Los Angeles) are represented with several prominent land features in each area. Over thirty flight parameters can be set to establish your flying condition. These parameters include: starting location of plane (coordinates and altitude); settings for pitch, bank, heading, airspeed, throttle, rudder, aileron, flap and elevator. You can establish cloud layers, winds, and the reliability of your instruments. Your choice of season (winter, spring, summer or fall) and the time of day are used to control when dawn, day, dusk, and night occur.

There are two general modes of operation. The first automatically handles many little things that one must normally take care. The other, reality mode, requires you to do everything from starting the airplane engines to turning on the instrument lights when it gets dark. This is a very thorough simulation realistically done.

Continued on page 39
THE COMMODORE KEY

SIMULATIONS

Roy Wagner

A favorite type of program is the simulation. This is a program that attempts to represent something real through the use of computer graphics and a set of formulas (algorithms) which reduce very complex activities to something that can be realistically imitated on your computer. It must ideally, be able to get you so involved that you get "lost in the program" and forget that you are just sitting in front of a monitor pressing keys or moving a joystick. You ARE flying an airplane or managing a baseball team. The plane or ball players REALLY EXIST!

All good simulations should provide you with a “computer” opponent that responds as your theorized opponent would, or as would another human opponent. It is a difficult challenge to write a program which carries out this function. Once written, such a program takes a great deal of playtesting to refine the formulas and code used. A program like this on a limited memory (64K) micro is hard to please all players. At best, the program has it’s limits. An example of this is One-On-One from Electronic Arts. In this half-court, two-player basketball simulation, the programmer has stated his being unable to provide the hook shot. This limit does not mean that this program is not a fun game of basketball for two joystick players. You have enough options available to get involved in the action and to enjoy playing.

There are many types of simulation games: space, robot, airplane, financial, etc. Among most popular currently available are sport simulations. Most of these are all very well done, making good use of C64 graphics and sound (something we can now expect from all new games for the C64). Some of the sports simulations available for the C64 are: Auto Racing (Pole Position from Atari, Pit Stop from Epyx, Motor Mania from UMI), Baseball (Computer Baseball from SSI, Star League Baseball from Gamestar), Boxing (Ringside Seat from SSI), Basketball (One-On-One from Electronic Arts), Football (Computer Football Strategy from Avalon Hill), Golf (Professional Tour Golf from SSI, Pro Golf from Canadian Micro), Soccer (International Soccer from Commodore). And, due to the Olympics, we have two new and excellent sport simulations: SUMMER Games and HES Games.

Summer Games, from Epyx, offers competition for up to eight players representing any one of eighteen countries complete with that country’s flag and national anthem. One country available is EPYX, home of those great athletic record holders, Jumpman and Jumpman Jr. The game begins with the opening ceremony—the running in and lighting of the Olympic torch, complete with theme of release of doves. This introduction displays the excellent graphics to be seen throughout this game.

All menu selections and actions are performed using the joystick. You can compete in all events, or specify only a single event. Any current standing records can be beaten with your name being added to the record display and saved to disk. All events take some practice, and for that reason, an option exists to practice a selected event. Records broken with this option are not saved. And, if you complete all events, the score board of final standing is displayed as the top scorers national anthem is played.

There are eight events. The pole vault requires the coordinated manipulation of the joystick to plant the pole, flip it over the bar, and release the pole. You have three tries at each height. The 4x100 meter relay has two lanes running. You control the energy expended for each runner and the passing of the baton. The 100 meter dash has two runners, with you franticly moving the joystick left and right, or forward and back, to keep the runner moving. The screen often scrolls faster than the runners, in which case you are running blind. (This event can put extreme stress on a “cheap” joystick!) High board diving and the gymnastic horse vaulting both require well coordinated and graceful movements of the joystick to be a top rank scorer. The judges are tough, and will rate you on a zero to ten point scale just as in the actual events. The difficulty level of your performance is weighted into the final scores. The two swimming events, 4x100 meter freestyle relay and the 100 meter single freestyle, require perfect timing of swimming strokes and turns to score well.

The final event is skeet shooting. This event is handled very well. Your shotgun is held with sight down. One press of the joystick button signals to release the clay pigeon, the next press fires the gun. With the bird in the air you must sight the gun and fire. It is best to follow the bird because, if you try to hold the gun in any one position, muscle fatigue quickly affects that position. You have 25 birds from six different firing stations.

For all of these events, I cannot say enough about the good graphics and sound. The joystick controls are easy and feel right for each event, capturing the vicarious experience of the event. All option selections and screen changes are quickly handled by pressing the joystick button. (This game is a real winner!)

HES Games from Human Engineered Software offers competition for up to six players. Each player enters his name/country and four initials, a color for shirt and socks and the joystick port they want to use. You then select an event from the menu which also acts as a scoreboard for the events. Scores are NOT saved to disk.

There are seven events. The 100 meter dash and the 110 meter hurdles both require you to move the joystick quickly right-left again and again to score best. I am not sure how much effort is required because the runners do pretty well if you don’t move the joystick. The long jump requires the joystick running on the ground and in the air, and then a push to the right to land properly. A push of the joystick button sends the runner into his jump. Low board diving requires an extreme set of coordinated movements to perform properly. The judges here give you better scores if you call the type of dive you will be performing. If you
belly flop your tummy may glow red on your next dive! Archery is very realistically done. There are four targets at 30, 50, 70, and 90 meters, with wind and weather factors to contend with in shooting accurately. You fire six arrows at each target and must perform against the clock as you cock the bow, pull the arrow back, aim and fire. Due to the 50 pound pull of the bow, muscle fatigue affects your aim. The flight of the arrow is very well displayed. The final two events are weight lifting; the two-hand snatch and the clean and jerk. These two require perfect timing for each movement. When you are successful the weight is increased. For each event you can display the current World and Olympic records.

The graphics and sound for these games are also very well done. The joystick controls move awkwardly and are not explained very well in the instruction booklet. I found it harder to feel in control of these events (except for archery). Each event loaded does a bad track and sector disk check (that banging noise you hear from your drive when many commercial games are loading). This is one of the easiest protection techniques for game producers, but it can be harmful to your drive. Overused, it can cause your drive to go out of alignment. I think this game overuses it!

The game contains a very positive feature. It offers an instant replay of the last performance of all events except archery. This gives you the chance to review your best and worst performances. You can also save these to disk with your own file name to be called up at another time. The game disk comes with a "classic replay" for each event. I have heard that some new things have been added to the game and a new manual has been written that more clearly explains the joystick movements, but I do not know when this version will be available.

These two games are only available for the Commodore 64 right now. They both show excellent use of the C64 and are priced about $35.

SOME OTHER COMMENTS

Last issue I mentioned Ultima II. Well, Ultima III is already available. It is different in that you can have a party of four characters. You can have a fighter, cleric, wizard, and thief in play at the same time. You can choose from eleven different professions, five races, and three sexes (male, female, and other?), along with distribution of attribute points. A party can now only see that part of their surroundings which are not obstructed from view. You must move to see around things. Fighting is individually controlled for each of your party. The great mystery of the game is figuring out how the Moon Gates operate, for they provide hidden powers. This game was converted for the C64 by Origin Systems and is priced at $60. A book of maps and clues is available for $12.95.

Lord British, the "creator" of the Ultima series, is also in part responsible for the concept behind QUESTRON from SSI. A version will be available for the C64 very soon.

If you have any questions or comments pertaining to gaming on the C64, please send me a letter at the Computer Gaming World address listed in the front of the magazine. Let me know what areas of gaming you would like to see discussed. If you have a favorite game that I haven't mentioned and you think others should hear about it, let me know.

Roy translated SSI's COMPUTER BASEBALL for the C-64 and is now working on translating FIGHTER COMMAND.
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Ed. The Silicon Cerebrum deals with artificial intelligence in computer games. Bruce Webster's insights have been helpful to more than a few game designers.

In this installment, Bruce proudly tells us about his new game, SUNDOG. We think it is one of the best designs around.

O.K., after a year and a half of working on it, I'm entitled to plug my game, right? I mean, that's why this column has been so erratic the last six months or so — the big push to get the game out the door. And, of course, the subsequent push to get the debugged version out the door. Followed, naturally, by the current push to get version 2.0 out the door (which should have happened by the time you read this).

The game is SunDog: Frozen Legacy, a real-time science fiction adventure game, designed by myself and Wayne Holder. It represents our first attempt to squeeze a small "universe" on to a floppy disk, an environment in which you could wander around and do things. I plan to do a "designer's notes" article, so I won't go into depth about the game itself. I would, however, like to talk about the minor (and they are minor) aspects of artificial intelligence in the game.

Two aspects of the game required some sort of simulation of intelligence. The first (and most common in computer games) was in combat situations: ship-to-ship and man-to-man. Because the game is real-time — i.e., time is always passing, you can always continue to act — we didn't have the luxury of giving the attacker time to sit and think about what to do. Instead, we had to make small, quick decisions that would have the cumulative effect of making the attacker look intelligent (or, at least, something better than random). Ship-to-ship combat occurs in true 3-D; an attacking ship's location is stored in terms of two angles (theta and phi) and the range. The enemy's attack-runs are made by choosing delta values for its location; for example, by decrementing the range value until it reaches a certain limit, then incrementing it again, the ship will run in close to yours, then move away. Several factors are used for determining when and if to fire, or if the attacking ship should break off and leave.

Man-to-man combat, especially when several opponents are involved, presents a trickier problem, and we're still looking for ways to improve it. The biggest problem is deciding where each attacker should move to, and when, especially (again) because of the real-time constraints. The current solutions involves keeping a trace of your movements. Your attackers will tend to move to (and fire at) where you were, rather than where you currently are, which suggests one essential strategy for survival: keep moving! Each attacker has his (her?) own dexterity and strength values, which affect how accurately they shoot at you and how much damage they can take themselves.

The second minor aspect of AI in SunDog deals with the conversations that you have with various non-player characters. We wanted to give you more options than just a gun dealing with other people, so we designed an interaction scheme that would generate comments and reactions from the people with whom you were talking, then allow you to make specific responses (yes, no, charm, threaten, ignore, etc.). One important constraint is that SunDog is entirely joystick controlled, so your replies had to be selected from a menu (and a small one at that). An additional twist is a degree of emotional response from some of the characters. Bartenders will get irritated (and even abusive) if you waste their time, but become friendly again as you spend money. What's more, they will remember you (and what they think of you) between trips to the counter while you're in the bar.

Version 1.1 of SunDog has a limited repertoire of interactions. However, some program redesign in version 2.0 has enabled us to expand and enhance the interactions that can occur. Our eventual goal is to model different personality aspects of non-player characters and use those to drive complex interactions throughout the course of the game. In other words, we want to make you think that those people out there are real and distinct individuals.

If I've been vague in my description of what we did, it's because Wayne (the company president) is leery about publishing specifics on our techniques. He's not really worried about "giving away" secrets (though we do closely guard certain methods). Both he and I are more worried about taking some of the mystique out of the game. I've found that most other people enjoy SunDog far more than I do simply because I know exactly what can and cannot happen and how everything is done. That much knowledge removes the "escape" aspect of the game; it's far from completely realistic, but it's far from completely unrealistic. When others play, they're not quite sure where the limits are, and their minds fill in more details than are actually there.

Anyway, I apologize again for the erratic nature of these columns, but I hope it was in a good cause. Yes, I will pick up where I left off and finish the discussion of heuristic search. If you have questions or suggestions as to what you would like to see in this column, please write me at the following address:

Bruce F. Webster
FTL Games, Inc.
7907 Ostrow, Suite F
San Diego, CA 92111

Thanks for your patience, both with the sporadic columns and the "advertising".

THE SILICON CEREBRUM

by Bruce Webster
As you drive along the narrow and tortuous road, you feel an eerie sense of uneasiness. There is something about this night that just does not seem right, but you find it hard to put your finger on it. The sky is clear and cloudless. Stars upon stars fill the sky and the moon glows with a mysterious aura. Yet strangely enough, it is very, very dark.... Dampness permeates the air and a haunting silence fills your mind. You wonder where you are, but hesitate to open your eyes. As your eyes finally open you are stricken by an unfamiliar sight. Are those tombstones on the wall? You find yourself trapped in a mausoleum. Your goal is to find the way out, as there is no door....

You must escape this tomb, using trial and error, logical deduction, and the many objects to be found during your chilling adventure in *The Crypt of Medea* (CM). The place you find yourself in is not a friendly place. Exercise caution when, and how you pick up objects as the most innocent looking object should be treated with care. An incorrect move will lead to your sudden demise. Use every protective device offered to you in this foul and miserable place.

The documentation provided by Sir-tech is clear and concise. Included is a list of key or action words which may be used in the game. The list does not, however contain objects or nouns. These you must discover for yourself in the course of surviving this ordeal. A list of hints have been provided which will, if used detract from the full enjoyment of the game. But, they may provide the novice that extra little hint needed to move to the next stage of the game. These hints are encoded in cryptic messages. For the player who becomes hopelessly stuck an answer sheet has been provided, keyed so that it is impossible to accidently read the proper solution. But my suggestion is to staple the hint sheets to the back cover to reduce the evils of temptation. The list of coded words reveals operational words which may reduce the enjoyment for the expert player, but will save the novice from destroying his computer in frustration.

The game features excellent control functions. It is possible to place the game on temporary hold for those moments that cannot wait. The music can also be turned on or off as desired. The game further provides for using a “Mockingboard” speech synthesizer. When the Mockingboard is turned on, the game can speak to you. The game can be saved, thus preventing the feeling of utter despair when you realize you must start over from the beginning after being killed. The hazardous nature of the game’s location, and strange situation makes it a good idea (real vital) to save play at frequent intervals (up to nine copies can be saved). The game will be restored exactly as you saved it.

Finally, the game itself. Both the novice and the expert gamer will enjoy the challenge presented by CM. The problems are varied and the solutions intricate. The musical background provided at appropriate moments adds greatly to the enjoyment of playing this game. In at least one case, it is very important to examine the picture carefully from top to bottom in order to find what is needed. Examine each scene carefully to discover the objects which you will need to escape this damp dark place. Like all Sir-tech products, the Crypt of Medea is a finished, polished product. By making backups at frequent intervals, the “nasty” surprises will delight the player rather than lead to gloom and despair. At a certain place in the game, it is important to remember to think light to keep from that falling feeling. Some items must be used more than once, so it is important to remember where they were dropped.

The “Crypt of Medea” is an example of a mature and excellent product. This adventure will challenge all who find themselves trapped in this dark and evil place. Escape is possible .... all the tools have been provided. Some of the path to freedom is not obvious and must be searched for diligently. Accept the challenge presented by this excellently designed game.
Destructive Thread darken the skies. Once again it is time for the Dragonriders to take wing and do battle with the deadly nemesis of Pern. The touch of the burning Thread means death and where they fall crops will not grow. Your task as Weyr leader has been to form the strongest Weyr on Pern by negotiating alliances with Lord Holders and Craft Masters. Now that Thread are falling you mount your fire breathing Dragon to meet the Thread in the skies over Pern.

THE BOOKS

Dragonriders of Pern, a unique strategy/action game from Epyx, attempts to meld the excitement and fantasy adventure of Anne McCaffrey’s books with the action and strategy of a role playing game. While having read the fantasy novel DRAGONRIDERS OF PERN, or for that matter any of the books from McCaffrey’s “Dragon” series, will certainly be helpful in understanding the characters and premise of the game, prior knowledge is not essential.

OVERVIEW OF THE GAME

The game consists of two major phases: the Negotiation-Intrigue phase is strategy oriented and Thread Fighting is “arcade” action oriented. Together these two phases make for an interesting game concept.

Up to four human players, called Weyrleaders, can play the game; plus, there are two Weyrleaders that are always controlled by the computer. The two computer-controlled players provide competition during the Negotiation-Intrigue. Game variations include a standard game of both Negotiation-Intrigue and Thread Fighting, a no Thread Fighting game, and a Thread Fighting practice game.

In playing the standard game you can select the speed of play (slow, average, or fast) to effect the speed of your dragon, the Thread fall, the passing of days, and the “read times” on text displays. You can also select the Depth level for Thread Fighting: foreground only, foreground and midground, and foreground, midground, and distance. A nice touch here is that each player can select his own depth level.

The pace of the game is controlled by the computer which is continuously counting the days and years (called Turns). You can pre-select the number of Turns (each Turn equals between 10 and 15 minutes) up to 99. A save-game feature makes the 99 turn game feasible although I’m not sure why anyone would want to use it.

GAME PREMISE

The premise of the Negotiation-Intrigue phase of the game is not complex, actually applying what you’ve learned to the play of the game is. The idea is that during this phase each player (including the two computer players) vie to form alliances with as many major Holds and Craft Halls as possible (total 24). These potential allies depend on you to fight Thread, for them to save their Holds. However, as the premise goes, because Thread haven’t fallen in a long time they fear they will lose their...
political power to you. What this means in terms of game play is that you must woo them by doing things like inviting them to weddings and dragon hatchings (if they’re the kind that like dragons) and, if all else fails, dueling with them.

**NEGLIGENCE-INTRIGUE SCREENS**

Five different types of screens display information in the Negligence-Intrigue phase. All of the Negotiation-Intrigue screens are “text-oriented” (i.e., no graphics of the kind found in M.U.L.E.). Some of these screens are quite busy and may take some time to get used to. For example, the event screen shows events taking place, Weyrs’ (players) status, the Holds Weyrs are negotiation with, the Day events will occur, the current day, announcements of random or planned events, and the number of Dragon Wings possessed by each Weyr.

The game allows players to play in any order, just press the stick button your turn is next. When your turn begins, the Action Menu / Status Screen appears. Here you select one of eight actions. One action is to read a description of the personality of a selected Lord Holder or Craft Master. The personalities suggest who to invite to weddings and dragon hatchings, who to negotiate with, etc. Memorizing their dispositions is futile; they change during the course of the game and the change from game to game. This leaves you, the player, to juggle the personalities of 24 different entities.

The Action Menu / Status Screen is helpful in that it provides a list of your three strongest supporters — the best prospects for a negotiation.

So, the sequence for forming an alliance may go something like this:

Study the personality descriptions of the Lords Holders and Craftsman to see who may be easiest to make an alliance with. For example, if Lord Keroon is fond of Dragons, and if the computer has informed you that you will have a Dragon hatching soon, invite Lord Keroon. After the computer has clocked off the days, and the Lord has attended your Dragon Hatching, attempt to negotiate individually with him. If the negotiations are successful, on your next turn attempt an alliance.

At the end of Negotiation-Intrigue phase, the game awards victory points: you earn 2 points for each Hold you’re allied with and 1 point for each Craft Hall. The game ends when there are 20 Thread infested holds (holds that were not successfully defended in the Thread Fighting phase) or when a Weyrleader had earned 20 victory points. Or, the game ends when the number of Turns you pre-selected is up (plus or minus two).

**THREAD FIGHTING**

After each Turn (240 days) Thread Fighting occurs. The Thread Fighting screen displays a typical Pern landscape and a green dragon, which represents one of your Wings of dragons. Then, from the top of the screen, the Thread begin to fall groundward. You maneuver your dragon with the joystick, pressing the stick button to breath fire and disintegrate each Thread before it hits ground.

The Dragons of Pern are much more talented than the mythical beasts of Earth. Pern Dragons can “go between”, that is, occupy the space between time and travel through time and space. In Atari-Pern this means if you touch a Thread, you can take advantage of your Dragon’s ability to “go-between” by quickly hitting the space bar. Your dragon disappears then reappears elsewhere on the screen. This action allows your Dragon’s wounds to cool. If your dragon dies, the screen flashes red then another dragon appears to finish the Thread Fighting session.

After Thread Fighting, the screen displays the results by listing each Weyrleader, the number of dragons, killed or wounded, and the number of Thread that reached the ground and are now infesting Holds in Pern.

**CONTROLLING THE DRAGON**

The Thread Fighting practice game is important for learning to master the peculiar characteristics of controlling the Dragon Flight — especially at Depth 3. Depth 3 is most difficult because Thread fall at three depths simultaneously: foreground, midground, and distance (unlike Space Invaders, for example, where the enemy attacks in only the foreground). At Depth 3 you must turn your dragon and fly into the distance to attack the Thread. Controlling this action takes practice.

The game attempts to overcome the fact that the television screen is two-dimensional but aerial flights in the “real world” take place in three dimensions. Unfortunately, there are only two types of input from the Atari joystick (the stick and the one trigger). Although the attempt to create a three-dimensional experience is noble, the results are not entirely satisfactory. The programmer’s solution requires moving the joystick to

Continued on page 39
EXPEDITION AMAZON

Ohio Smith writhed and twisted like the serpent itself as he tried to escape the near-fatal embrace of the anaconda. Dr. Spock quickly opened the medical kit and prepared to give him aid, if he could wriggle out of the reptile's clutches. At last, the anaconda recollected, leaving a weakened and frustrated Ohio Smith behind. Lt. Uherda cancelled her futile attempt to radio a helicopter and Rocky (Malibu) was unable to bash the snake with the uprooted tree in his hand. The expedition moved on and stumbled into a native camp. There were all sorts of valuable artifacts in the abandoned encampment: 1) a tarjeta de beisbol - Luis Aparicio; 2) a Beatles' record; 3) a bottle of Perrier; and 4) the omnipresent parchment reading "#$%^&'FRINK-FRINK$%^#". Suddenly, a war party of Amazons jumped from ambush at our stalwart band of heroes. Rocky Malibu threw a grenade which killed five of them. Ohio Smith opened up with his automatic rifle and dropped ten of them. Dr. Spock insisted that the bad-tempered natives were simply the result of poor toilet training and Lt. Uherda vainly tried to reach civilization over the static of the old-fashioned radio.

The above was an attempt to characterize the good-natured humor of Expedition Amazon (EA). EA uses similar mechanics to Sword of Fargoal in that you explore the screen one step at a time. A major difference is that while Fargoal randomly establishes the dungeon levels, Amazon uses the same ten screens, both above and below ground. Each sector of Amazon (analogous to a Fargoal level) is explored a square meter at a time by pressing keys that reflect the four major compass directions. In this way, the map is filled in one block at a time. Further, the process of mapping the sector as one explores reminds me of Seven Cities of Gold (Electronic Arts). There are, however, some major differences from the latter. In EA, there is no animation involved in attacks until one actually enters the Lost City of Ka, the elusive final goal of the game. Whereas Seven Cities has animation throughout the game. In EA, there are not randomly generated sectors to explore (whereas SCG has the possibility of creating entire new worlds). Still, the feeling of exploration is there. Further, don't get the idea that it's easy to explore the ten screens. The frustration factor in my first few expeditions was at least as great as during my first few tries at Fargoal. There are some nasty little random encounters that can ruin an entire hour's worth of adventuring. For example, how are you going to explore the Amazon River after the wily natives steal your boat? What happens when you are just about finished exploring a section of the river and your boat hits a rock and sinks? Further, what if you should happen to fall into a trap which takes you underground, loosing you your hard earned sector map and forcing you start over? I know, as it happened to me on at least three occasions before I wised up and started making detailed notes on my own paper. (I defy that nasty program to steal those!) One of the most satisfying features of this adventure game was that by having four player characters, I could have a group over and play the game together. We had great fun laughing at each other's misfortunes, harassing one another for inexact shooting; and generally suggesting mutiny toward whoever happened to be piloting the boat or leading the expedition. We would name at least one of the characters for someone we didn't like and would absolutely refuse to give medical aid to them, regardless of what happened to them. This is cruel and holds the group back some, since that means that one of your party is almost always going to be a first level character. It doesn't really matter that much, however, since all you have to do is return to Flint University (the mobile home in the midst of the Texas armadillo ranch where all the fun begins) in order to get a replacement.

This game is full of some sparkling graphics and gags. The opening illustration of Flint University with its hit and run havoc should appeal to the "brutal" funny bone of many of us civilized savages and sly Pedro the Trader in Iquitos, Peru has a perfectly complete file of vile jokes and comments that can really bring out the groans from a group ("Joan of Arc didn't quit, she was fired!"). "Hitler's mother didn't realize she was raising such a fuhreher."). These features are only good for two or three times, but they sure are fun to spring on new gamers.

My biggest problem with the game involves its rather poor documentation. One is not informed, for example, that the pistols which are supplied all the expedition members do not have any ammunition. Bullets must be bought at the trading post in order not to have useless guns. I realize that this is largely common sense, but I have seen novice gamers stumble over less. The documentation suggests that the map sector can become a permanent part of the team's map portfolio before the entire number of square meters in a sector are explored. It doesn't make clear that one must explore every square meter except the traps in order to keep the map. Before the player discovers this, the player can lose numerous maps.

In spite of these minor difficulties, EA is a very enjoyable game that doesn't take itself too seriously. For me, it's much more satisfying to adventure in this manner than to deal with a limited parser in a text-only game. It is especially interesting to play with a group of three or four friends.

Johnny Wilson

FIFTH ESKADRA (cont.)

4. The CO of each carrier/airbase will suggest possible targets for airstrikes. However, you should make sure you have aircraft massed before you attack. Launching a three plane attack will only insure failure.

5. There is no need to request reinforcements from Washington or Moscow on turn one, as you will be turned down (it costs victory points to request reinforcements). Wait until the war starts and you actually lose some ships, then ask. In any case, the NATO player has a task force centered on the battleship New Jersey and the carrier Nimitz which will eventually arrive. The Soviet player will receive the Kiev and escorts.

6. There is also a chance of Italian and French forces entering the game for the NATO player. Use these aggressively, as they can be withdrawn from the war at any time.

Editor's Note: Several of our early attempts to play Fifth Eskadra were thwarted when the game crashed. After a little investigation we discovered that the game would crash if our Mockingboard was in slot #4. With the Mockingboard removed, we had no problem with the game.
control left/right, up/down, and near/far movement. By pushing the stick forward or back your dragon climbs or dives. To change directions you tap the joystick left or right. Your dragon changes directions by ¾ turn (45 degrees). To make a full turn (180 degrees) you briefly hold your joystick to the left or right. When fighting Thread at Depth 2 or 3, you tap the joystick, when the dragon is facing away from you, you stop tapping, and it begins flying away from you. You can tell you are at a different depth by the size of the dragon and the size of the Thread.

DOCUMENTATION

The documentation seems complete in that it discusses all screens, spells out rules for playing, and provides hints for playing. Plus, it contains a glossary of Pern terms and an ample Prologue written by Anne McCaffrey that gives you both a background and a flavor of characters and situation of Pern. However, if a ever a game needed a sample game description, this is it. It took several reading of the manual, plus several times playing to figure out what was going on in the Negotiation-Intrigue phase and what I was supposed to doing. Part of the reason for this may be that the computer continues to count days on the event screen as you decide what to do. This built in timer makes learning to play the game "intuitively" (i.e., by not studying the manual intensively) virtually impossible.

JUPITER MISSION (cont.)

of the radio signals. When you find the right moon, you must navigate the Beagle to the moon and send down a lander. Here comes your first major problem — how to get from where you are to where you want to be. This program is a more demanding version of the first navigation program and may cause you to pause for thought. Once you have figured it out and gotten to the moon you want, you then play a Lunar Lander game and get to the surface. Once on the surface you will discover an alien complex which must be explored. You will have to land on more than one moon and that you will have to explore more than one alien complex. Eventually, you will reach the last hazard to finding the secret of Jupiter Mission 1999, an arcade game that ???, well, let’s save it. One hint, though. When you get this far, save the game before you start the last part. Jupiter Mission comes with a small instruction manual, four disks, and four sets of sealed orders. The manual asks you not to open the orders unless you need help. The orders are really a supplement to the instructions, and I suggest that you open them as soon as you move to a new disk. The game itself is played in a progressive manner so that you do not need to switch game disks in and out. Once you go to the next disk, you will most likely not need to go back to the previous disk unless you are killed. You may save up to four games in progress, so that even if you are killed you may not have to restart from the beginning. The first screen gives you the option of starting the game from the very beginning (which gives you a nice little story of the game setting) starting at a point after the story, or starting from a saved game.

It is obvious that some very strong ATARI programmers have worked on this game. The graphics and display list routines are among the best ever produced by AH. Nothing flashy, gaudy, or too complicated. Just good down-to-earth programming. The program makes good use of character scrolling and seems to have tapped all the hidden ATARI features that are usually reserved for assembly language programs. All eleven games have been tied together nicely to present a coherent adventure which should provide many hours of solid enjoyment. I have only two complaints with the game. One, it is written in basic and does a lot of program chaining so that you spend quite a bit of time listening to your disk drive spinning. Two, a few of the individual games could use some improvement. Disregarding those minor problems and looking at it from the standpoint of overall playability, I would have to say that this is the best adventure game I have seen in a long time. It offers arcade for the action fan and problem solving for the adventure fan. The two combine to make a realistic role playing game. You will definitely get a lot of bang for the buck with this one.

WHO'S IT FOR

As a game, Dragonriders of Pern is unique. The Negotiation-Intrigue phase is mostly a matter of monitoring computer-controlled events and taking advantage of them to make alliances. The Thread Fighting phase is mostly a matter of mastering joystick control to wipe out thread-like space invaders. So, who's the game for? Well, if you are interested only in an arcade action, then, as interesting as Thread Fighting is, it's probably not worth the price the game. If you're interested in playing a somewhat complex strategy game where diplomacy is the objective (and not campaigning) then certainly the Negotiation-Intrigue phase will appeal to you.

FLIGHT SIMULATORS (cont.)

Once you are able to fly fairly well, there is an additional option — playing World War I Ace. This involves bombing runs and dog-fights with the computer controlling six different-style enemy flyers who are up there to stop you. Your flying skills had better be good, as you will need to refuel, re-engage, and out maneuver the enemy. Another optional mode of flight is performing aerobatics, which are explained in the second manual. These are not quite like reality, with its excessive g-forces or body unequilibrium, but certainly a lot safer.

The plane is controlled using either the keyboard only or joystick(s) and keyboard. The keys used are all very well selected to simulate the control yoke and special keys are selected with letters to simulate with letters that match their function, eg. P for pause, L for lights, B for barometer, C for COM radio, N for NAV radio, etc.) When using joysticks, one can be used for throttle, and the other is used similarly to a real plane's control yoke, to control the ailerons and elevators. The keyboard is used for elevator trim, flaps and rudder. When using the COM radio, the messages are displayed above the instruments and scroll at a rate you may set.

The manual contains an excellent section on the use of navigational aids. It explains, in great detail, the use of the very high frequency omnidirectional range (VOR) and automatic direction finder (ADF) gauges. Another outstanding feature, is a course plotting system which,
when activated, will leave a smoke trail superimposed over the scenery you fly. This option has a 400 mile flying range with a smoke mark left every five seconds for 75 minutes of flight time. A precision recording option with a 25 mile range, one second sampling for 15 minutes is also available.

This is a really nice feature when learning to use instruments only or for aerobatics. It is also helpful for a beginner to use.

FSII is designed to use a flying area ("world") that is 10,000 miles by 10,000 miles with a screen resolution equivalent to 2.5 inches. Additional airports in major areas, and flying conditions are planned to be released. For now, this program will more than keep anyone busy. You do not have to know anything about flying a plane to use it, but you do need to be serious about learning a lot of new things. An experienced pilot, though, can use this program to practice instrument flying and to fly in distant new areas without the expense of actually being there.

In summary, I would consider both these products to be excellent value for their price. SOLOFLIGHT is enjoyable and easy to use. It could be easily used by anyone eight years or older. On the other hand FLIGHT SIMULATOR II is serious fun. It is very close to reality and as such requires you to know how to fly an airplane, which can be learned with this program. If you already know how to fly or want the most realistic flight simulator available, buy FLIGHT SIMULATOR II. Got to go now, I'm taking the "plane" up for a flight over Chicago (Margaret — start up the C64!).

EXCALIBUR (cont.)

enemy looks too tough. You can ill afford the loss of too many knights for a number of reasons. Each knight is as effective as three men-at-arms; also, the fewer the knights the more men-at-arms each knight will have, providing compactness and ease of control but the expense of your flexibility. Any knight with less than two men-at-arms should be retreated off the battlefield immediately for his own protection.

Note that knights lose combat strength as they move, unless given periods of rest. For this reason, you should let the enemy come to you, instead of meeting him halfway across the field. It is not uncommon for a piece with an initial strength of 18 or so to be down to a four by the time it reaches your line of battle, considerably weakening it. By waiting, you also increase the chance that some of the enemy pieces will lose heart and stop advancing, further increasing the odds in your favor.

The most important pieces on either side are the royal pieces. For, if Arthur dies, the game is lost. While if your opponent dies, the battle ends and he becomes your vassal (fancy trick thee, for a dead king). To protect Arthur, it is best to advance the knights about a shield length ahead of him. Then, if you decide to withdraw, you can easily retreat Arthur off the bottom edge. A 'V' formation of knights, with Arthur at the center, protects Arthur and allows for the entrapment of the enemy king, who seems to advance straight towards Arthur. The more people attacking the enemy king, the greater the change of killing him outright. And, by keeping Arthur back, you may be able to attack him on three sides.

Often, the whole enemy army will retreat before it reaches your battle line. In that case, you should gradually push your knights forward, allowing them ample rest periods if needed. Do not give-in to the temptation to chase them at top speed. Enemy knights regain strength even while demoralized, so you may catch up to the foe only to find that he is up to full strength while your knight is exhausted from the chase. In many cases, the disheartened enemy regains his morale after a rest, and will come back to you again. This process of advance and retreat plays havoc with the enemy's line of battle. Further, retreating units will sometimes bump into advancing units, causing a standoff. The retreating unit should be attacked immediately, if feasible. As it is moving away from you (or attempting to do so), it will be unable to return your attacks. Knights should be picked off like this whenever possible, since enemy kings do not appear to get new knights. The fewer knights a king has, the larger the percentage of men-at-arms which are left to guard the castle, and the easier it will be in the future to get knights around the flanks of his army.

The documentation for this game is superb. There are some "quick start" instructions for those who can't wait to begin (and who can resist a new game?), but to really understand what is going on, it is necessary to read the 63-page novella that is included. The novella is quite readable and is even entertaining. In addition to telling the story and showing how to play, it provides additional strategy and tactics. Don't cheat yourself or the program — read the manual!

All-in-all, Excalibur is a magnificent piece of software. I have noticed only one bug — sometimes the computer hangs up when attempting to restart a saved game. Rebooting seems to solve the problem. I feel that in spite of this minor setback, this game is worth the money. Games of far lesser scope sell for more money than the $30 Excalibur costs. "A well-done" goes to the authors, and a question: "When will Chris Crawford's next game be released?"
SOFTWARE ARTISTS?

TO MAKE THE FIRST BASKETBALL PROGRAM that feels like the real thing, it helps to start with two guys who know what the real thing feels like.

Enter Larry Bird and Julius Erving. Bird — the hustler, the strong man, deadly from outside. Erving — The Doctor, maybe the most explosive player in the history of the game.

We talked to them, photographed them in action, studied their moves and their stats and their styles. Then we set out to create on computer disc an event which may never happen in real life. We put the two of them together on a dream court of light, for an electronic afternoon of one-on-one.

It wasn't easy. When they talked, we listened. When they criticized, we made big changes. When they gave suggestions, we took them.

And it shows. This thing is absolutely uncanny. You actually take on all the skills and characteristics of Bird or The Doctor — their own particular moves, shooting abilities, even strength and speed.

You'll meet with fatigue factors, hot and cold streaks, turnaround jump shots, and 360-degree slam dunks. But there's some whimsy in here, too — a funny referee, a shattering backboard, even instant replay.

It's called Julius Erving and Larry Bird Go One-on-One. You're Bird. Or you're The Doctor. And that's the last decision you'll have plenty of time to make.

Julius Erving and Larry Bird Go One-on-One is now available on diskette for Apple II, II+, and IIe computers. Apple is a registered trademark of Apple Computer. To find out more about Electronic Arts and its products, write us at 2755 Campus Drive, San Mateo, CA 94403 or call (415) 571-7171. For a free catalog, send a stamped, self-addressed #10 envelope. Also available for the Commodore 64. Coming soon on IBM and Atari home computers.
None of the books-into-games at CES were finished. The earliest were promised for October, which in this business can be translated as "someday... maybe." An executive of Simon and Schuster, which is distributing the Baen titles, was frankly disappointed with the incomplete versions they were displaying and admitted he had no idea when — or whether — their first game would appear.

While final judgements cannot be rendered on unfinished products, the early returns are not favorable. While the three companies’ approaches differed somewhat, with Spinnaker’s Trillium line perhaps the most promising and Baen the most questionable, all of the games were in a standard adventure mode that mixed lots of text with largely static graphics. The pictures were pretty, but the text parsers were a joke compared with Infocom’s; the player interaction seemed as limited as that in Dragon’s Lair; and the "arcade" interludes boasted by some weren’t much more sophisticated than Pong. From design to program, the games were clearly state-of-the-art... six years ago.

I am not alone in this judgement. Various computer magazines have refused to review or mention the games because, according to several sources, the editorial staff felt sorry for the book authors involved and did not want to be the ones to deliver the bad news. One editor pleaded with a well-known author to keep "his" game off the market for fear it would do lasting damage to the author’s reputation.

How could this happen? How could so much creative talent combine to so little effect?

Easy. Actually, in retrospect, it seems almost inevitable. T.A.N.S.T.A.A.F.L.

In the first place, the economics of the situation almost guarantee that the programmers involved, despite the hype, would not be first-class. Big Name Authors and Best-Selling Books don’t come cheap. Although the draw of author and book is clearly a marketing advantage — and should therefore be paid out of the marketing/advertising budget — the cost is normally borne by R&D. A big chunk of the royalties that would otherwise go to the developers of the game is paid, instead, to the author of the book. What top-flight game designer or programmer would take that kind of a pay cut? Regardless of their deficiences as game designers, most good programmers are still at work on their own ideas. Those who can’t come up with original subjects for games are busy making a lucrative living converting popular games to new computers. Therefore, the majority of programmers available for these book projects are either inexperienced or inadequate or both.

THE PRACTICE EFFECT

Nor can the authors save these projects. They don’t know how. INFOWORLD makes much of the authors’ involvement, but sheer interest and creativity are not sufficient. Consider: If I announced that I was designing and building my own house, would you assume that I could do as good a job as an architect and a general contractor? It’s not impossible; I’m a creative person, and I might have a hidden aptitude for the job, but you wouldn’t bet odds on it, would you?

As you may know, many established science-fiction writers — book authors — submitted scripts for the Star Trek TV series and, later, the first movie. You may also have heard that most of those scripts were lousy. This should not be surprising: books and movies are very different media. Success in one does not imply mastery of the other.

The difference between books and movies, however, is minor compared to the difference between books and computer games. To cite only one key example, while the action of a book should not be totally predictable, events must build toward a particular end. In retrospect, the outcome should seem not just logical but inevitable. Games are just the opposite: any number of endings must be possible, or why play? The more open-ended a game is, the more options that are under the player’s control, the less it is like a book — and the better a game it is.

The worst part is that the SF people involved don’t know how little they know about the subject. Few of the authors involved in all these projects play games: most lack the time; many lack the inclination. Technophobes like Ray Bradbury, who admits that he cannot use the computer he owns, believes the apex of computer usage is to enter the text of a book and read it on the CRT. Would he know a good computer game if he fell over one? When editor-publisher Jim Baen claims that one of his projects is "the most ambitious game ever," should we laugh or cry? Has he even heard of — much less played — Wizardry III, Ultima III, Murder on the Zinderneuf, or Seven Cities of Gold?

NOT THIS AUGUST

I would agree that SF writers are much more likely game designers than the man on the street. Numerically, that means that a handful out of hundreds (rather than a handful out of millions) may succeed at it eventually. But it will take time. To date, I know of only two who have successfully made the conversion from SF writers to game designers: Michael Berlyn and your crotchety columnist. Surely, there will be others, but their first efforts are likely to be embarrassing if they don’t realize that the sophistication of their audience is greater than their own.

The games E.T. and Alien proved that it takes more than a hot title to make a good game, and they and the PC Jr showed that there are things even the buying public won’t swallow. Games worthy of our favorite books will be a terrific Christmas present — but not this Christmas.
At the end of a long, winding road, atop sheer, stone cliffs, looms a castle made entirely of crystal. Within its translucent walls lie a myriad of rooms, filled to overflowing with valuable and informative scrolls. Though remote, the castle is easily found, and an intrepid adventurer may spend many fruitful hours exploring its labyrinthine halls.

The Crystal Castle is located in a town near the Ohio-Michigan border, but its address is not on any street map. Rather, by simply dialing the number 313-856-3804, any caller may gain admittance to the Castle's anteroom. For, indeed, this castle is a bulletin board system (BBS), and its operators have dedicated their Apple computer and ten megabyte hard drive to gaming.

Online 24 hours a day, 7 days a week, the Crystal Castle BBS is one of the country's newest — and best — gaming BBSs. From the ingenious graphic depiction of a castle, which greets you at logon, to the numerous adventure game tutorials and growing download library, this BBS is a gamer's delight. The Castle also offers several play-by-message games and eighteen separate bulletin boards as well — the "Diplomacy Room" and the "AD&D Campaign." Much of the Castle's offerings are free. However, callers who wish to read an adventure tutorial, play an online game, or download a program must raise their "access level" by contributing material or cash to the BBS. Information on how to attain a higher access level is available in the "Castle Blueprints" section. Callers are limited to 20 minutes per online session.

Because the Castle is such an extraordinary BBS, I wanted to find out more about how it began and who the system operators are. The two SysOps — Pam Barnhart ("Lady Crystal") and Dave Oberheu ("The Dungeon Master") — were most gracious in granting me an interview in CompuServe's GameSIG conference area. Here are some excerpts:

CGW: How did you two get together to run the Castle?
DM: We have some good games in there Ohio?
DM: About 30-40% are long-distance. The rest are from the Toledo area people. The long-distance is increasing every Saturday, though!
CGW: How successful is your download area?
DM: We have some good games in there now, and we're always looking for new ones.
DM: We keep our eyes open for good public domain games we can put up. We would like to change some of the download area every 3-4 months.
CGW: Did you write most of the adventure tutorials?
DM: No, we are really both too busy to start such a laborious task.
DM: All of them are donated by callers.
CGW: How do you get the word out about the Castle?
DM: We advertise on other boards and CompuServe.
DM: The users do the rest!

If you enjoy adventure games, or would just like to explore an outstanding bulletin board system, be sure to visit the Crystal Castle. The Dungeon Master and Lady Crystal will make you feel at home!

I welcome comments about your tele-gaming experiences. You can contact me on CompuServe at 76703,657 or via U.S. Mail to: Patricia Fitzgibbons 195 Claremont Avenue #115 Long Beach, CA 90803

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As the pilot of a World War II B-17 bomber in this role-playing game, can you survive 50 dangerous but exciting raids over France and Germany to earn the crushed cap of a true veteran? Find out as you travel back to 1942 as part of the 8th Air Force Bomber Group. On 48K disk, $39.95.

15 months of development time have gone into this game to make it the definitive division-level simulation of the Russian War. You can re-enact the entire campaign from June 1941 through December 1944 or select one of 3 shorter scenarios. If you call yourself a real wargamer, you must play it! On 48K disk, $79.95.

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AVAILABLE IN JULY

SEE US AT ORIGINS '84
There were 289 RIDS turned in by press time for this issue.

Newly rated games and updated game ratings are listed with bold type in the table on page 47. The breakdown by machine was: Atari — 48%; Apple — 35%; C-64 — 16%.

GAME RATINGS

The table on page 47 includes games evaluated by our readers. For a game to be included in this listing it must first have been offered for rating in our regular RID rating system. Games offered for evaluation are those covered in the magazine and/or those having a good sales record during the time of evaluation. Once offered for evaluation, the game must have been evaluated by a sufficient number of readers to be included in the results. Any game not evaluated by at least 10% of the respondents was not included in the results.

Games were rated on a scale of 1 (terrible) to 9 (outstanding). Respondents were asked to consider such things as PRESENTATION (graphics, sound, packaging, documentation); GAME DESIGN (design, playability, interesting?); LIFE (does the game wear well)?

Several people have asked about games that are offered for ratings more than once over the course of several issues. We usually re-rate the top ten each time (and sometimes other games as well). Please rate the game each time we ask (not just the first time you notice it in the R.I.D.).

RID #15 (Use card provided)

On this page a number of games and articles are listed for evaluation. Please take time to evaluate these games and articles. Use the guidelines above for game evaluation. Leave blank any game which you have not played enough to have formed an opinion. Please rate articles on the basis of the article itself, not your opinion of the game being reviewed. Enter a zero for any article that does not interest you.

GAMES

2. 7 Cities of Gold (EA)
3. Ultima III (Origin)
4. Wizardry (Sir-tech)
5. Flight Sim. II (Sub-Logic)
6. Sorcerer (Infocom)
7. One On One (EA)
8. Archon (EA)
9. Legacy of Llygwyn (Sir-tech)
10. Quostron (SSI)
11. War In Russia (SSI)
12. President Elect (SSI)
13. Sundog (FTL)
14. Summer Games (Epyx)
15. HES Games (HES)
16. Lode Runner (Broderbund)
17. Fighter Command (SSI)
18. Death in the Caribbean (MicroFun)
19. Fifth Eskadra (Sim.Canada)
20. Grey Seas, Grey Skies (Sim.Canada)
21. Fall Gelb (Sim.Canada)

COLUMNS

We are interested in what you, as a reader, want to see in CGW. If you are a regular reader of CGW we ask that you rate your interest level in the following regular columns. Please base your responses on the column over a number of issues (not solely on this issue). Please respond to each column with a number from 1 to 4:
1 = Not interested at all
2 = Mildly interested (you read the column occasionally).
3 = Very interested (you read the column regularly).
4 = Extremely interested (the column is one of the reasons you buy CGW).

22. Taking A Peek
23. Inside The Industry
24. Industry News
25. Scorpion's Tale
26. Dispatches
27. Silicon Cerebrum
28. Name of the Game
29. Tele-Gaming
30. The Learning Game
31. Atari Playfield (2 installments so far)
32. Commodore Key
33. Reader Input Device

MISCELLANEOUS

34. What computer do you own?
   1 = Apple;
   2 = Atari;
   3 = C64;
   4 = IBMpc;
   5 = Other (Please specify)

A. What additional would you like to see in CGW?

B. Is there anything we should delete from CGW?

C. Other Comments
### Game Ratings

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