RUN's

FUN PAK 128

A
special
collection
of new games
for the C-128!

▶ Space adventure ▶ Role-playing action
▶ Arcade action ▶ Brain-teasing challenges

Introduction

Welcome to FUN PAK 128

Over the last few years, I have often been asked why more games were not being written for the C-128. Some have appeared, of course, but they've been few and far between. When *RUN* started planning its special disk projects for this year, someone half-jokingly suggested a C-128 games disk, and the more we thought about it, the more exciting it seemed. The question was whether we could find enough creative programmers to do the project justice. After some searching, we discovered that there were many skilled C-128 programmers who were eager to write games for their favorite machine, so the decision was made to go for it!

Now you have the fruits of their labor in your hands: a total of eight games that run only in C-128 mode. Of the eight, four use the C-128's 40-column display, while the others are true 80-column programs.

On side 1 of your disk are the 40-Column mode games. These are a mixture of sophisticated strategy, arcade action and graphic puzzles. Foremost among them is John Ryan's complex and challenging Bloodstar. This game of strategy pits you (as America) against the expansionist policies of Japan, the Soviet Union and the United European States in a race to colonize the rest of our solar system.

Starting with a simple spacecraft like the space shuttle, you must build a series of space stations (with animated shuttle launches) that you then use to produce the more complex interplanetary craft needed to send colonists to the far reaches of the solar system. Once a colony is established, you, as supreme ruler, must decide the colonists' activities, whether agricultural, mining, industrial or military. You must also build a space fleet of fighting ships—starfighters, heavy cruisers, battle stars, and so on—to defend your territories from attack and to launch strikes of your own against hostile nations. From conquest to diplomacy, Bloodstar. is a superb example of strategic gameplay.

To exercise your mental muscles, we have two Leonard Morris games, called Cubix 2 and Cubix 3. In these 3-D puzzles, you try to create complex solids from their component parts. Be warned

that these puzzles are neat to look at, but tough to solve!

Rounding out our 40-column array is another by Leonard Morris. Mazamorf is a new twist on the classic, maze-style arcade game. In this one, the mazes keep changing, so besides avoiding the nasties who are following you around, you must also try not to get stuck in the maze!

Since the C-128 is blessed with a powerful 80-column RGB display, FUN PAK 128 also includes four dedicated 80-column games. To access them, first make sure your monitor and computer are in 80-Column mode; then boot them up from side 2 of the disk.

The first is Gwynell, an advanced role-playing game by Anton Treuenfels, in which you create an adventurer who can explore the many dungeon levels in search of treasures and exotic new weapons. This 3-D maze game has you encountering creatures drawn in high-resolution graphics. When playing Gwynell, it's up to you to decide if those contacts are peaceful or violent.

In wanting to break new ground with FUN PAK 128, we asked Charles Orcutt to create some 80-column, bitmap arcade games. And did he ever! In Bye, Bye, Brick, you have an 80-column, color bitmap version of the always popular Breakout game. Controlled by the keyboard or joystick, Bye, Bye, Brick has multiple levels of high-speed arcade action.

Then there is Death Quadrant, an arcade game that somewhat reminds me of the classic, Asteroids. In Death Quadrant, you must defeat level after level of alien invaders, while keeping them from blasting you out of the sky.

Finally, we have a unique combination of a driving game and arcade shoot-'em-up in the form of Nighthawk 128. How long can you avoid the vampire bats and still stay on the road?

Well there you have it—a set of games devoted entirely to your C-128. We hope you enjoy FUN PAK!

Lou Wallace
Technical Manager
RUN *Magazine*

Directory

How To Load

Side 1 of your FUN PAK autoboot disk has the 40-column games (Bloodstar, Cubix 2, Cubix 3 and Mazamorf), while side 2 has the 80-column games (Gwynell, Bye, Bye, Brick, Death Quadrant and Nighthawk 128). To access the games, merely insert the disk into your drive and reset the computer. When the title screen and menu appear, press the letter key for the game you want to play, and it will load automatically. If you have a 1541 drive that doesn't like to autoboot, you must load the menu manually by typing RUN "FUNPAK 128" and pressing return.

Since your Fun Pak 128 is completely unprotected, please feel free to make copies for your own use. This is especially important for Bloodstar and Gwynell, which have Save Game options. It is best to play those games only from a backup disk that has room for the saved games.

Bloodstar

By John Ryan

THE YEAR IS 2047, and World War III has just ended with an uneasy armistice. Unlike the two previous wars, however, nuclear exchanges between the warring parties have made the earth almost uninhabitable.

Now it is time to pick up the pieces. But where space once seemed a domain for scientists and hot-shot astronauts, the world must now look to the stars for healing. The push is on to leave behind this irradiated planet and pursue a new manifest destiny: the colonization of the solar system. Bloodstar is an imaginative adventure toward this goal.

LOADING THE GAME

If you have a RAM expansion unit, plug it in before turning on the computer. The game requires you to access numerous files, and an REU will reduce this access time by 98 percent! Turn on your computer in 128 40-Column mode and enter RUN "Bloodstar." A joystick is not required.

(Note: If you do not own an REU, but have a 1581 disk drive, then copy the files on this disk to 3½-inch format; this will also appreciably reduce the access times, as the burst protocol is used during access when possible. Whether or not you're using an REU, leave your disk in the drive at all times.)

THE GAME

Welcome to Bloodstar, a strategy game of colonization and conquest, where you must leave the bounds of Earth in search of new and fertile territory. While technology has not advanced far enough to search for planets beyond our solar system, there are 52 potential planets and moons in our own solar system to explore and develop.

Sound easy? Well, even in 2047, space travel is a slow and laborious undertaking. A flight to Pluto, for example, could take well over three years and would leave your ship without enough fuel for a

return journey! Obviously, you must gain the technology to efficiently traverse the immense distances between the planets. You accomplish this by building specialized space stations.

As your technology base grows, you (playing the part of the United States) may build more advanced ships in which to explore. Instead of slow scout probes, you may develop transports to carry pioneers to new planets, as well as various classes of warships to protect your territory.

Bloodstar is played in turns, where each turn represents one month. Accumulating mission points is the name of the game. As you explore, colonize and develop your colonies into economic powerhouses, your mission point total climbs. At the end of the day, the player with the most mission points wins the game. Your mission point total appears on the main screen.

THE TREATY AND THE PLAYER NATIONS

World War III involved four major players: The United States, Japan, the newly formed United European States (UES) and the USSR. The treaty signed by these players and their allies is fragile at best, and the smallest incident could spark a confrontation between

any of the four. To succeed in this game, you must understand your competition and abide by the war-ending treaty.

The treaty set forth several important rights that shall not be infringed on by the concerned parties:

1. The Earth is considered neutral territory, and shall not be claimed by any nation as sovereign. Territory beyond Earth's international space boundary, however, is considered fair game.

2. Space stations may be constructed only in Earth's orbit and may not harbor offensive weapons of any kind.

3. No nation shall attack the space station of another.

4. Each nation has the inalienable right to self-defense. If attacked, no nation shall be held in contempt by other peaceful nations if retaliation is made.

5. Under this treaty, no nation shall build more than 100 space vehicles. In addition, no more than 25 space stations may be constructed.

Player 1: USA—Once the shining beacon of the West, the USA had fallen into a 40-year period of scandal and technological brain-drain. Since the war, the USA has slowly returned to the inventiveness and spirit that characterized her in the late 1900s. The USA is a technological wonderland and always receives bonuses in ship movement.

Player 2: Japan—Japan was again pounded during the war, her immense industrial base decimated. But ever resilient, the Japanese people are well on their way to recovery. It goes without saying that the Japanese excel in industry and receive bonuses on commerce space stations and planet industry. United States relations with Japan have historically been CORDIAL.

Player 3: UES—As Europe entered the war, it become evident that the military and industry strength of its individual countries could not match the might of the USA, USSR or Japan. So Britain, Germany, Belgium, France, Spain, and the Netherlands were formed into a federation of states. UES took a beating from the USSR during the war, so their industrial capacity is lacking. They are a tenacious

group, however, and fearless in combat. UES always gains a bonus when engaged in battle. USA relations with UES have historically been FRIENDLY.

Player 4: USSR—The USSR was the military power house of the war, and unleashed the nuclear first strike, which, oddly enough, actually spurred the four warring nations to make peace. The USSR excels in making weapons of war, and always gains bonuses for ship building and planetary and orbital defenses. USA relations with the USSR have historically been WARY.

THE MENUS

The initial main screen lists the six principal options, several of which have sub-menus with, in turn, further sub-options. (See Table 1 for an overview of the menu structure.) The selections from most menus and sub-menus are activated by pressing designated function keys. Let's take a look at each of the first four initial screen options and their sub-options. (The fifth and sixth options, Turn and Disk, are self-explanatory.)

F1: MAIN

Main (F1 from the initial screen) is the heart of Bloodstar. It is here that you may launch space shuttles to construct your stations, build transports and warships, and a host of other things. Its sub-options are:

LAUNCH OPERATIONS **(F1 under Main)**. Launch Operations has, in turn, two options: Maintenance and Launches.

Maintenance—Before you may launch a shuttle into space, you must make sure that the vehicle has had sufficient maintenance to get it off the ground. The Maintenance option allows you to delegate a portion of your annual Maintenance Points (MPs) to various systems aboard the shuttle. You are only allotted 1500 MPs per year, so use them wisely.

Launches—Building each space station requires four shuttle launches, but before you can launch a shuttle, you must ensure that you have first purchased a space station (see Funding, below), and that you have delegated MPs in the Maintenance sub-option.

In purchasing your space stations, you'd be wise to buy a Research station first, then a Commerce station, so you can begin to generate income. By all means, postpone buying any ships until you have

stations purchased, or you'll exhaust the funds you need to launch the shuttles to build your stations.

Getting back to the shuttle launches, press the G key to start the countdown, which lasts about 40 seconds. During the countdown, the shuttle's systems experience several malfunctions that lower the MPs of each system. If the MPs for any system reach zero, a SYS

Table 1. Outline of Bloodstar's menu structure.

Initial Screen Options	Sub-Menus and *Their* Options
F1—MAIN	
	F1—Launch Operations
	F1—Maintenance
	F2—Launches
	F2—Vehicles/Stations
	F1—See Stations
	F2—See Vehicles
	F3—Funding
	F1—Probe
	F2—Transport
	F3—Explorer
	F4—Starfighter
	F5—Battle Star
	F6—Heavy Cruiser
	F7—Station
F2—DATA (List of planets and moons)	
F3—MAPS	
F4—DIPLOMACY	
	F1—Change Japanese Stance
	F2—Change UES Stance
	F3—Change USSR Stance
	(Options under each are:)
	1. Friendly
	2. Cordial
	3. Neutral
	4. Wary
	5. Hostile
F5—TURN (Shifts the turn to next nation.)	
F6—DISK (Options to save or load.)	

FAULT appears. If you see this, quickly press F8 to access the maintenance menu again to fix the system. Once you return to the launch screen, the launch will be on hold, so you'll have to press G again to resume the countdown or A to abort it.

If all the systems remain operational throughout the countdown and liftoff phases of flight, your shuttle is launched and ¼ of your space station is built. Each shuttle launch costs 200 credits, and you may only launch one shuttle per month.

Note that if you must abort (or if you have a System Fault during liftoff), you lose the 200 credits and are not offered another launch until the next turn.

VEHICLES AND STATIONS. **(F2 under Main)**. Pressing the F2 key under the Main option brings up the option to purchase and administrate your space vehicles and stations. This menu also has two sub-options: See Stations and See Vehicles.

1. See Stations—This option brings up a screen displaying the number of stations you own, their types, their operating capacities and the Repair, Commercial and Research outputs of each. The capacity of a station affects the output. A completely built station has a capacity of 100 percent, while two stations, with only one operational, have a capacity of only 50 percent. As a station progresses toward completion, this capacity edges closer to the 100 percent mark. Each nation is limited to 25 space stations.

2. See Vehicles—This option allows you to issue orders to any space vehicle you own and presents you with a plethora of other choices for action. Here you can view the data concerning each ship you own, including: Ship Identification, Type of Vessel, Vessel Efficiency, Location of Vessel, Destination of Vessel, Estimated Time of Arrival (ETA) and Ship Status, or Mission (which may be Garrisoned, Patrol, Enroute or Under Repair). By treaty, each nation is limited to 100 vessels and four task forces.

At the bottom of this screen is a menu with a number of options for issuing orders to a single vessel or to task forces, or for commands that initiate various other actions.

ISSUING (O)RDERS TO VESSELS

You press the O key on the menu at the bottom of the See Vehicles screen if you wish to issue orders to task forces or single vessels. All such orders involve the Garrison, Patrol, Move or Repair commands.

Garrison—Garrisoned vessels are those simply sitting at a system,

usually awaiting another command. When a vessel reaches a destination, it automatically becomes a garrisoned ship. Garrisoned ships are sometimes surprised by intervening enemy ships, which inflict heavy damage during the first stages of battle.

Patrol—Vessels on patrol are particularly effective in combat. Patrol missions involve vessels or task forces actively roaming the current system in search of enemy vessels. Patrol vessels are never surprised and normally get in the first punch when enemy vessels enter a patrol system.

Move—To move a vessel or task force from one system to another, simply select the destination (planet or moon) with the cursor and press return. When you return to the roster, the mission of the ships designated to move will be "enroute." Be careful with this option, for once you issue a movement order, the ships respond immediately, zooming toward their new destination without delay, and may not be recalled.

Repair—Only ships or task forces in Earth orbit may be repaired. The rate at which ships are repaired is determined by the number of repair stations you own. Each station can repair a ship at the rate of two efficiency points (EPs) per month (or turn), so, for example, five repair stations could repair at the rate of ten EPs per turn.

OTHER SEE-VEHICLES SCREEN COMMANDS

(F)orm Force—You choose the option of creating a task force by pressing the F key. The program will then ask you to enter a task force number from 1–4. If you're forming a new task force, you have to choose the planet or moon that you want it to orbit. You do this by placing the cursor over the territory where you have the ships that will be joined into the task force, and press return.

For example: If you have 15 ships orbiting Mars, place the cursor over that planet, then hit return. Any ships joining a task force must be orbiting the same system. In addition, only Garrisoned, Patrol and Repair mission ships may join a task force. Enroute vehicles may not be issued any orders until they reach their destinations.

If a non-enroute task force exists, then you may attach new ships to the task force by either ID number or efficiency point level. Follow the prompts as they appear. Placing ships into a task force by ID is a bit tedious, but it offers more control over the makeup of the force. Simply enter the starting and ending ID numbers of the ships you want to add. (If you are only adding one ship, then these two numbers will be the same.)

Alternatively, you may join to a task force ships whose efficiency levels are at or below a certain number. Each ship begins with 100 EPs when constructed. During each turn (month) of space travel, a ship will lose two EPs. If the points drop to zero, the vessel will be destroyed. This is a very important aspect of space travel during the early stages of the game, since the travel times between the planets and moons is so great. You must always keep in mind that if the ETA in another system is, say, 20 months hence, then your ship will lose 40 EPs before it ever gets there.

You'll also lose EPs during battle as each ship sustains damage. So if you *must* fight with your neighbors, do it close to home, or your ships may not have enough pep to take more than one or two blasts from a laser.

Forming task forces by EPs is also a good way to band together a group of damaged ships for a trip home to the repair station. Simply enter the efficiency number at the prompt, and all non-enroute ships in the system will be formed into a task force.

Ships belonging to a task force will have their ID numbers reversed on the roster. Moreover, formed task forces will show a + symbol to the left of the color bar.

(S)plit Force—By pressing the S key, you can split off a portion of one task force and attach it to another; but to use this option, you must have at least one unused task force. The new task force will then be formed in the same system as the parent force. Again, you may split the force by ID or efficiency points.

(C)olonize—Use this option to unload colonists to a system. Select the system to be colonized. Then, if there are any transports in the system, you'll be asked how many you want to unload. (Note: If a task force is composed solely of transports, you may have to disband it manually after unloading your colonists, since the menu will show the task force as still being formed. Do this on your next turn.)

(D)isband Force—You may use this option to disband any task force not enroute. In battle, a task force will automatically be disbanded if all its member ships have been destroyed.

(R)oster—Initially, the Roster displays the ID numbers of only the first 13 ships of your fleet. To view more ships, enter the starting ID number of the group of ships you'd like to see.

FUNDING. **(F3 under Main.)** Pressing the F3 key under Main gives you the Funding menu, from which you may purchase ships and space stations. Note that the most powerful ships require high

technical levels to buy. At tech level one, you may only purchase unarmed probes or space stations. Since all ships move at a rate relative to the current tech level, a probe is just as fast as a heavy cruiser. But where a probe is lightly armored and without weapons, a heavy cruiser is a monster of a ship, complete with neutron bombs and photon cannons.

If you have enough credits, you may purchase any craft you are authorized for. If you make a mistake during purchase, you can sell the ship back at one-half the purchase price. Once you leave the menu, however, you may not sell any ships.

You select option 7 on the Funding menu to purchase space stations, of which only one can be bought at a time. Each station requires four shuttle launches and specializes in one of three areas: Commerce, Research or Repair. Commerce stations contribute to the economy of a nation by providing 100 credits per tech level. Repair stations, used for repairing damaged or efficiency-depleted ships, operate only in Earth orbit, and you must have at least one for repairs to take place. Research stations engage in activities that further the advance of science. Only through investing in these stations can a nation increase its technological base. A research and development station contributes 100 tech points (TPs) per level to a nation's tech level, the values for which are displayed on the station screen. The tech level values are 200 TPs for level 2, 2000 for level 3, 7500 for level 4 and 15,000 for level 5.

F2: DATA—BUILDING WORLDS

Press F2 (Data) on the main screen to build on any worlds you may own. The Data screen lists all the planets and moons, but in order to see the statistics for a particular world, you must either (1) have a ship in the system, or (2) have colonists on the surface of the system. If you own the world, you'll see its name color-coded in blue. If the system is uninhabited, its name is displayed in white. A system owned by another nation will have that nation's color. (The nations' color codes are shown at the bottom of the screen.)

Living on worlds other than our own is an immense technological undertaking and presumes that several things happen prior to colonization. Since Earth is the only system with a breathable atmosphere, it is assumed that Envirodomes are built on the systems' surfaces. In the case of Jovian planets (Jupiter, Saturn, Uranus and Neptune), which have no real surfaces, the colonies actually exist in the atmosphere on freeform platforms. For these planets, activities

such as mining are accomplished by remote drones.

The potential profitability of colonizing a planet depends on several factors, each ranging on a scale from 1 to 100.

Environment—The Environment is the most crucial aspect of a planet's potential. The minimum environment needed to colonize a system is 25; below this level, the environment is too hostile to support a colony. At Tech level 5, you may begin Terraforming a planet (building up the system's environment), thus increasing its production and support capability. Each environment point costs 25 credits. Environment directly impacts a system's agriculture, mining and industry limits and production.

Agriculture—The agricultural limit of a system is its environment minus 25. It takes ½ population to produce each unit of agriculture, and each agriculture unit will feed five population. Excess food is converted into credits at five credits per food unit. All excess food is put into a global pool that can be used by any of your systems that need it. As soon as you colonize a system, you should *immediately* provide food, or your populace will die out in one or two months.

Mining—A Mine requires three of your population and produces

The Solar System

01	Mercury	27	Atlas
02	Venus	28	Dione
03	Earth	29	Phoebe
04	Moon	30	Epimetheus
05	Mars	31	Mimas
06	Phobos	32	Rhea
07	Deimos	33	Iapetus
08	Jupiter	34	Pandora
09	Io	35	Enceladus
10	Europa	36	Titan
11	Ganymede	37	Prometheus
12	Callisto	38	Tethys
13	Pasiphae	39	Hyperion
14	Adrastea	40	Uranus
15	Amalthea	41	Miranda
16	Thebe	42	Ariel
17	Metis	43	Umbriel
18	Ananke	44	Titania
19	Sinope	45	Oberon
20	Leda	46	Neptune
21	Himalia	47	Triton
22	Lysithea	48	Nereid
23	Elara	49	Pluto
24	Carme	50	Charon
25	Saturn	51	Ceres
26	Janus	52	Pallas

Pop			
	Cost	Work	Produces
Agriculture	5	.5	5 food
Mining	15	3	3 ores
Industry	20	2	15 credits
Army	10		
PD/OD's	25	Per tech level	
Welfare	5	Minimum is 25	
Environment	25	Only after TL 5	

STATIONS

Research	100 points per level
Commerce	100 credits per level
Repair	2 EP's per station per ship

Mission Points

Research Station — 25 Per station
Commerce Station — 15 Per station
Planet Colony — 50
Moon Colony — 35
At the end of each year, credits accumulated are converted to mission points at the rate of .5 per credit.

two ores, which are used by industry. Excess ore is converted to credits at five credits per ore unit.

Industry—Each industrial complex uses two ore points and requires two population to run. Industry produces 15 credits (plus welfare bonuses).

Orbital and Planetary defenses—There are four layers of defense: ships, planetary and orbital defenses, and armies. Orbital defenses, built in geostationary orbit about the system, intercept enemy ships before they can get to the surface. Planetary defenses are conventional ground-to-ship missiles that attempt to intercept enemy ships that reach the planet's surface.

Soldiers may be garrisoned on a system to protect the populace. You may recruit up to ten percent of your population for the army each turn, and each army unit costs ten credits. An enemy task force with transports may engage a system's army. Once the system's army has been defeated, the planet reverts to the attacking player's control.

Welfare—The welfare of a planet rises and falls during the course of the game and reflects the overall well-being of the populace. In time of war, the welfare falls, thereby reducing the agricultural, mining and industrial output. A welfare of 50 percent is optimum. High welfare increases output, while a lower value reduces it. A welfare below 20 causes the population to drop.

During each turn, you build up the capacity of a system by entering numbers within the parentheses of each item. You'll notice that most industries have a limit to the right, as determined by the planet's environment. The limit for population and defenses is 255. If a planet's population falls to zero, the system reverts to its virgin state, effectively wiping out all traces of civilization.

Let's look at Mars as an example system:

Population: 50
Mines: 12
Agriculture: 25
Industry: 8

With 50 population, you need at least ten agriculture (50/5 = 10). With 25 agriculture, you can feed 125 people. It will take $12\frac{1}{2}$ population to work the agriculture (25 × .5). This gives you 37.5 population left over, with 15 agriculture points left free to go into a trade pool.

You need 36 people to work the 12 mines (12 × 3), but since you have a surplus of 37.5 population after agriculture, there's more than enough, with 1.5 population left over. The mines will produce 36 (12 × 3) ore points.

You're in trouble with industry, however, since you need two population to work each industrial unit. Since you have only 1.5 population left, the 36 ore points will go into your global pool for your other systems to use if needed. (In addition, any allies you may have can use your global resources. See Diplomacy, below.)

At the end of each turn, after all systems have been worked, left-over global resources are converted into credits.

F3: MAPS

F3 on the main screen gives you the System Map of all the moons and planets. To find out the name of a system, move the cursor over it and press return. If there's a ship orbiting a system, the flag of the owner will appear below the system.

F4: DIPLOMACY

How your competition views you depends largely on the diplomatic stance you have taken towards them. Pressing F4 on the main screen allows you to see the current stances and to alter your stance toward each of the three other nations. You choose the nation from the Diplomacy menu and are presented with the five possible stances you may take: Friendly, Cordial, Neutral, Wary and Hostile.

Nations friendly to each other are considered allies, and will not spark a confrontation while meeting at a system, while nations hostile to each other are considered at war. The stances of other nations toward you will rise or fall up this scale, depending on your actions and those of nations you are friendly with.

For example, you are friendly with Japan, but Japan is wary of the USSR and hostile with the UES. Accordingly, the USSR may become wary of you, while the UES just may decide to bomb your nearest system!

Nations friendly to each other share global resources when possible. In other words, if one of your systems does not have enough food to feed the population, any excess food from an ally will automatically be used to make up the difference.

You can always play the middle ground, though keep in mind that changing your stance against one nation almost always causes other nations to change their stance against you accordingly, whether for better or worse. Being neutral does not guarantee your safety

BloodStar
System Map
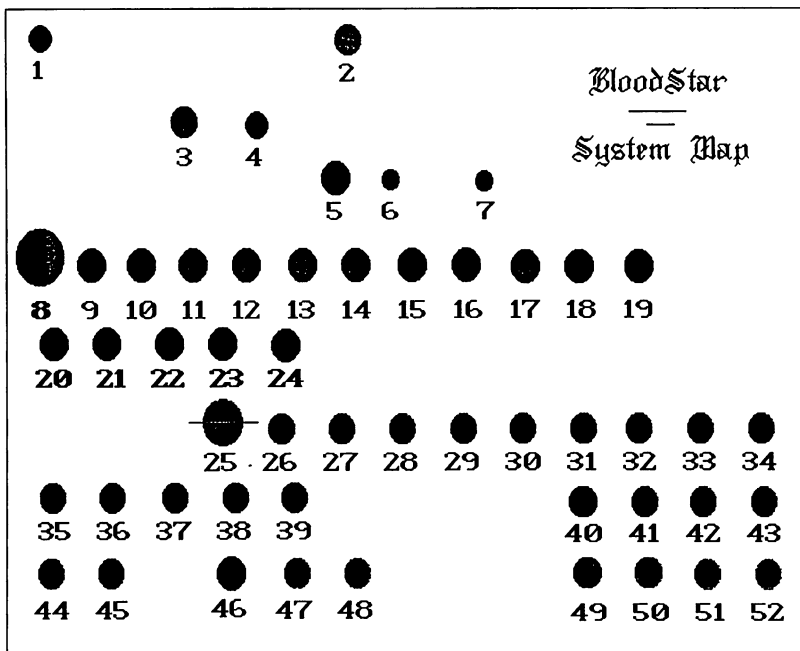
(and you'll lose any possibility of trade that could come in handy in later stages).

COMBAT

No matter what steps you take to maintain good relations with your neighbors, there will come a time when you must defend yourself. If two hostile nations meet in a system, then battle will ensue.

The outcome of a battle depends on several determining factors:

1. The number of ships involved. The player with the most ships has an overwhelming advantage as long as the ships are evenly matched in technology level.

2. Initiative. Task forces on patrol have a first strike advantage over enemy ships entering a system.

3. Weapons. Battle Stars are virtually useless in space battle, since their main punch comes from planetary bombardment. If a group of heavy cruisers happens upon a group of Battle Stars, things could get nasty.

4. Efficiency levels. Task forces on long search and destroy missions lose EPs during space travel and battle. If you engage a fresh enemy task force, it could spell disaster.

Battle occurs automatically when enemy fleets meet. Then you'll have the following options available to you: Attack, Withdrawal and See Ships. For a sustained attack, hold down the A key. As the battle continues, you may see a decline in both your ship count and that of your enemy. Therefore, it's wise to use the See Ships option occasionally to ensure that your task force is not being overwhelmed. If the battle begins to go badly, you can withdraw from the system.

If you are victorious over the enemy, or if you have ships orbiting an enemy system, several other options become available. If the system has defenses, you may Attack Orbital Defenses, Bomb the Planet or Withdraw.

These options require cautious attention, for you must ensure that each level of system defense has been neutralized before attacking the planet. For example, if you choose Bomb the Planet with orbital defenses still active, you must fly through a gauntlet of missiles as you strive to reach the planet. Needless to say, a small force could be decimated before dropping a single bomb. In other words, each level of defense will get a free shot at you if you attempt to bypass it to reach another objective.

Once you have knocked out any orbital defenses, bombing a planet will produce results that depend on the status of its defenses. If planetary defenses are present, your bombing run will be aimed at the nasty surface-to-air missiles. But if all defenses have been eliminated, you will instead be offered the chance to land an attack force of troops on the planet's surface in an attempt to overcome the defending army.

Naturally, bombing a planet not only destroys its defenses, but its resources as well. A well-fortified system could be tough to overcome, and you may find it reduced to rubble by the time you win the battle.

WINNING

Winning the game takes a combination of resource management, aggressive strategy and learning to manipulate the attitudes of other nations. After the ten years (120 turns) required to complete the game, the winner is displayed and you're offered the chance to play again.

Mission Points are granted for building ships or space stations, settling new worlds, accruing credits and for each unit of population you own. Moons are worth more than stations, and planets are worth more than moons. Credits for population and ships are tallied each turn and are randomized according to the welfare value of the system's population. You are awarded points for ships according to their tech level and efficiency values. Mission points for credits are tallied at the end of each 12 turns. You are not granted Mission Points for engaging in needless aggression.

STRATEGIES

Resource conservation is clearly the strategy to use. In colonizing systems, seek out those with the highest environments, because this attribute affects all of a planet's other resources. Since the population of a system continues to grow as long as the welfare and environment are high enough, its expansion may strain or exceed the system's agricultural limit. Excess food from other systems and allies could make up the difference, but that would deprive you of credits, as all excesses are sold at the end of the turn.

If your population begins to exceed the capacity of a system, convert extra population into army units; an army is self-sufficient and does not count against your food requirements.

It is better to have more mines than industry. A mine produces

three ores, of which industry uses only two. Excess ores can be traded or sold. But excess industries drain resources from your other systems.

Your computer opponents are extremely smart and are expert at generating just the right amount of resources (especially Japan). To survive, you must first try to gain the technology base for building quicker or more powerful vessels. Then concentrate on colonization and commerce. You'll quickly fall behind in Mission Points by taking this route, but you can make up the difference later as you colonize or conquer other worlds.

In battle, always attack with task force. Never send in a single ship to overcome a system unless that system is completely defenseless. At the higher levels, you can use a large group of unarmed probes to screen your more powerful ships, as enemy defenses will first tend to target the largest group of ships in a task force.

Attack orbital defenses first, then take out the planetary defenses. Land battles are best fought with at least a 2 to 1 superiority. Once you land an army force or colonize a system, your force will be depleted by a corresponding number of transports.

Always keep an empty task force slot open. After a battle, split your attack force by efficiency levels; then send the damaged ships home for repair.

COMMON PROBLEMS AND SOLUTIONS

Problem: When I try to form a task force to a system, nothing happens. Why?
Solution: You must have ships in a system to form a task force. Remember, when forming a task force, place the cursor over the system you're forming it to. (Normally Earth at the beginning).

P: Why, after I place colonists on a planet, does the population show zero when I inspect the system?
S: Simple. You didn't create any food for them in the *same* turn in which you placed them on the system. They starved.

P: The program won't let me inspect a system.
S: Place a ship in orbit about the system.

P: In battle, my ships don't seem to cause any damage to the other guys.

S: Check your task force makeup. Battle Stars carry only bombs and cannot attack vessels.

P: I don't understand the output numbers at the bottom of the station window.
S: These are the outputs of your various stations. For example: "Commercial Output. . .500" means your stations are generating 500 credits per turn. Conversely, "Repairs. . .4" means you have two fully operational repair stations that will repair four EPs per ship per month.

P: Sometimes my enroute ships just disappear. What's going on?
S: Check your efficiency levels. If the EPs of a ship drop to zero, it is destroyed.

P: Nobody likes me. My systems are getting blasted!
S: So is life. Try to determine which the strongest nation is, then set your relations to Friendly. Memories are long, so if you've been on the attack, don't expect the wounds to heal quickly. On the other hand, becoming an ally of a powerful nation can mean big credits.

RUN it right: **C-128 (in 80-Column mode)**

Gwynell

By Anton Treuenfels

GWYNELL IS A "3-D" adventure-type game in the tradition of Telengard, Wizardry, Moria, Avatar and Journey. A game session always begins, and often ends, at Haven, the gateway between the mundane world and the world of Gwynell. Haven is in a kind of limbo, a timeless resting place connected to both worlds but relatively unaffected by either. It's also the place where you create, save, recall and retire characters. Gwynell consists of a city and a dungeon with various levels below it.

At Haven, and often in Gwynell, choices are presented in the form of menus. Pressing the return key at a menu selects the highlighted

option, and the cursor-up and -down keys move the highlight. If no choice is appealing, you can usually exit by pressing the e (for exit) key. At Haven, this is treated as a request to return to the mundane world.

CHARACTERS

At the start of the game, you must either awaken an old character from disk or create a new one in order to enter Gwynell. Character names may be up to 20 characters long and include a variety of upper- and lowercase letters, numbers and punctuation marks. If several characters reside on the same disk, the first 12 characters of their names must be unique. Each character also needs some possessions and may belong to one of four guilds.

Food and water are necessary, even when a character is inactive, so you must replenish his or her supply from time to time. Lack of either food or water slows recovery from fights, and lack of both is eventually fatal. New characters are automatically equipped with enough food and water to survive for a time.

THE CITY

The top level of Gwynell is a city where various goods and services are offered for sale in stores, inns and banks. The four guild headquarters are also located there. New characters arrive in the city near the stairs to the first level of the dungeon.

NAVIGATION

The view on the screen is always straight ahead in the direction the active character is facing. To move the character, press the w, d, a and x keys, which form a roughly diamond-shaped pattern on the left side of the keyboard. The w key moves the character one step forward to the next square, assuming the way is clear; d, a and x turn the character to face right, left and to the rear, respectively, all without moving from the current location.

You can also press these keys in combination with the shift key. W moves a character one step forward through a door, while D, A and X combine turning and stepping forward.

At any time, you can press h to see a list of the keys that currently cause something to happen, which, in the city or dungeon, include w, d, a, x, W, D, A and X.

Sometimes when a character takes a step, he or she may seem to land on a nonadjacent square. This impression may or may not

actually be true, but if it is, you may be able to put it to use. In any case, you're well advised to keep accurate maps.

ITEMS

There are many useful items in Gwynell, and they can be either purchased in the city or won in combat in the dungeon. A character can carry up to ten of these items, in addition to his or her hands, and a list of them is displayed at all times. A new character comes equipped with hands, a purse of gold, a knapsack of food and a skin containing water.

A character can use only one item of a given type at a time. To designate an item's status, press the u key, use the cursor keys to highlight the item, then press return to toggle it between used and unused. When an item is being used, an asterisk appears before its name in the list, and other items of the same type automatically become unused.

Each type of container can hold only a certain type of commodity, and the amount of the commodity contained is shown in parentheses. When a container is empty, nothing shows after its name. Containers normally have a maximum capacity, so to carry more, a character must acquire additional or larger containers.

The contents of a container that's not in use may be emptied into a container of the same type that is in use. To do so, press the c (for combine) key, highlight the container you want to empty and press return. Its entire contents will be transferred, but any excess over the amount needed to fill the container will be lost. If the receiving container is already full, no transfer can take place.

You can remove any item, except hands, from a character's possession to make room for others. This is done by pressing r, highlighting the item and pressing return. It will disappear from the character's list and cannot be recovered.

BUYING AND SELLING

In the city, a character may enter stores and inns to buy and sell items. There are many such establishments, and prices vary with location and time. While the shopkeepers are too shrewd to let you profit from buying an item in one establishment and selling it in another, you'll benefit from comparison shopping when substantial amounts of gold are involved.

Transactions are handled by menu, with item names on the left and prices asked or offered on the right. To buy, highlight the item

you want and press return; the purchase price will disappear from the purse your character is using, and the item will appear on the character's list, either as a separate listing or as an increased quantity. To sell, once again highlight the item involved and press return; the purchase price will be added to the purse your character is using and the item will disappear from the character's list.

Particularly when selling, keep in mind that containers are handled separately from their contents. Don't inadvertently sell your gold for the price of the purse it's in.

BANKING

There are several thrift institutions in the city, which use rather primitive procedures. To make a deposit, a character must hand over a purse and its entire contents; withdrawals can be made only in standard amounts; no interest is paid on deposits; and individual loans and checking accounts are unknown. Of course, the banks are excellent for storage. They can safely keep far more gold than a character can possibly carry.

ENCOUNTERS

When two characters meet, they can either elect to pass or fight. Fights occur in real time and can be initiated unilaterally.

During combat, the program periodically highlights each character's current weapon, and these are the times to attack or swap weapons. You attack by pressing return, swap by moving the highlight to the weapon you want and pressing return. An attack will kill, injure or miss an opponent, depending on the relative strengths of the attack (weapons) and defense (armor).

Every offensive and defensive item affects the timing of a fight by slowing its owner to a greater or lesser degree. In other words, the frequency with which a character can make a move in combat depends on what items he or she is using.

The other combat options are to do nothing, which leads to death, or to run away. To run, press any of the keys normally used for moving around. If the opponent runs, try to block his or her way.

A fight ends when one character has either died or fled. In case of death, the victor can loot the body of everything he can carry.

HAVEN

When a character isn't busy doing something in Gwynell, you can press (shifted) Q to send him back to Haven to rest on disk for a

while. Since time doesn't pass in Haven, Q can also be used as a pause feature.

Dead characters return to Haven, as well. There, they may be put to rest on disk or dismissed from the game altogether. A dead character cannot return to Gwynell; resurrection is not available there as yet, although the guilds do intend eventually to offer their members insurance that will cover the costs involved.

RUN it right: **C-128 (80-Column mode); joystick**

Death Quadrant

By Charles Orcutt

DEATH QUADRANT TAKES PLACE in a two-dimensional area in space, surrounded by a square boundary and containing a trigger-happy robotguard. Your situation is deadly, because you're stuck in the area, and he's after you. You both have space vehicles, his round and yours triangular, with equally destructive capacity, and you both have shields. Your advantages are that you can move faster and are more intelligent, so you can dodge his fire more easily than he can evade yours. You move and fire with a joystick in port #2.

The robotguard moves steadily in your direction, firing rapidly toward the quadrant you are in. Once he has swept his current vector with fire power, he updates his vector in accordance with your relative location. When you move into a new quadrant of the square, he turns and moves toward you, continually firing. He relies solely on his shields for protection, but you rely on your evasive cunning as well as your shields.

At higher levels, his shields are more powerful, but your scoring increases. You lose a life if you collide with him, regardless of your shields. But you gain a life if you deplete his shields and proceed to the next level. He also uses more fire power as the levels increase, and he can cross the boundary—in effect wrapping around—if his vector should continue long enough.

The program makes very little use of color, except that the background color flashes red if you hit your enemy, green if you hit a

border, and blue if you are hit youself. Your purpose is to join the ranks of the D.Q.L.L. (Death Quadrant Longevity List), which is recorded on your disk.

The program makes use of the high-resolution screen in 80-Column mode. It contains emulated sprites, and because there can be over 20 different moving objects (including fire power), the animation seems to outperform real sprites, which do not exist in 80-Column mode. The program is designed to perform equally well on all versions of the 128.

RUN it right: **C-128 (80-Column mode); joystick**

Bye, Bye, Brick

By Charles Orcutt

THIS IS A VARIATION of the arcade classic, Breakout. In this colorful game, the bricks are in motion, scrolling leftward and wrapping around the screen. An RGB monitor is recommended. As you continue batting the ball to break bricks, the ball begins to move faster. It gets to be quite a challenge to keep the ball from missing your paddle. You play with a joystick in port #2.

If the ball strikes a yellow brick, the brick turns green instead of breaking, but a green brick breaks when hit. This makes certain screens more interesting. As you reach higher levels, you get increasing scores and extra balls, and the bricks scroll faster. There are seven screens in the game, and once you get to level 8 (quite an achievement!), you'll see the first screen again, moving at its original speed. Your high scores are recorded on disk.

The game is designed to be compatible with all versions of the 128. Full implementation of color is done by not using the bottom 2000 bytes of the high-resolution screen.

Nighthawk 128

By Charles Orcutt

NIGHTHAWK IS A TERM sometimes applied to one who likes to be awake at night. This game deals with one nighthawk's typical journey home after a night on the town. You ride a scooter because it gets great gas mileage, but because you have to contend with vampire bats, the scooter is equipped with a harpoon launcher. You control the scooter and harpoon with a joystick in port #2.

As the winding road sways to and fro, the moving scooter reacts, and you need to compensate or you'll lose strength. But compensating sometimes gets you bitten unless you compensate wisely. You must also try to squeeze off harpoons into bats, because for every ten bats killed, you get to a higher level, and higher levels give you more strength. On the other hand, higher levels also result in greater loss of strength when you're bitten or sway too far to one side of the road.

You get one point for every bat killed at the lowest level, two if you're at the second level, and so on. At game's end, a screen appears displaying the top ten scores, which you can then save to disk. You can pause the game with the shift key and restart it with the R key.

The game uses a technique called pseudo-bitmapping, which is like regular bitmapping except that it uses redefinable characters instead of the regular Bitmapping mode. This is necessary in order to permit a rapid transition from one defined screen to the next and because the game is designed to operate on 128s that have only 16K video RAMs. Of course, it also works on 128s with 64K video RAMs. The game produces some color with RGB monitors, but is limited in color definition.

Cubix 2

By Leonard Morris

CUBIX 2 IS A MORE DIFFICULT version of Cubix 1, which appeared in the July 1989 issue of *RUN*. Both are "three-dimensional" construction puzzles that challenge your sense of spatial relationships and powers of deduction.

While two programs are involved in Cubix 1, Cubix 2 has three: a Basic program called Cubix 2, a machine language program called ML-Cubix 2 and a sprite program called SPRCubix 2. To work the puzzle, load and run Cubix 2. There's no need for a joystick; input is from the keyboard.

Your goal is to build on the screen a large cube (four units on an edge) out of 11 odd-shaped sections, each of which contains five, six or seven unit cubes. The sections are displayed in the top area of the screen and labeled 1–9, + and −. Each must be singled out, oriented properly, moved into the cube construction area and positioned.

To work with a particular section, press the key corresponding to its label (use the main keyboard for numbers), and a larger version of it will appear on the left side of the screen. There you can rotate it, by pressing the corresponding letter keys, around the X, Y and Z axes until you have it oriented as you want, ready to slide into the growing cube.

The cube is built on the right side of the screen. When you have a section oriented to your satisfaction, press M to move it into the cube area, then use the numeric keypad to position it. Numbers 1 and 9 slide it in and out along the Z axis, 2 and 8 up and down along the Y axis and 4 and 6 left and right along the X axis. Finally, fix the section in place by pressing the P key, which redraws the cube showing the new section firmly planted. It also makes that section's number at the top of the screen change color, so you can keep track of which sections you've used.

To cancel a move into the cube—should you decide to rotate the section further, for instance—press the C key. To retrieve a section

that you've already placed, press its number and then the R key. The number at the top of the screen then reverts to the original color, and the cube is redrawn with the section deleted.

In addition to rotating the sections individually, you can rotate the entire cube-in-progress at any time by pressing the zero key and the X, Y and Z keys.

If you attempt to do something the program doesn't allow, such as place a section in an occupied area of the cube or beyond the cube's boundaries, a tone sounds to alert you. There's no penalty for a mistake.

As an innovation with Cubix 2, you can see one of the many solutions to the puzzle by pressing the * key. The demonstration proves that the puzzle can be solved, but disappears too fast to let you see the details.

Good luck. Cubix 2 is captivating—and it's hard!

RUN it right: **C-128 (in 40-Column mode)**

Cubix 3

By Leonard Morris

CUBIX 3, LIKE CUBIX 1 in the July 1989 issue of *RUN* and Cubix 2 on this disk, challenges your sense of spatial relationships and powers of deduction. However, here your task is not to construct a cube, but to rotate four cubes with different-colored sides so that none have the same color on the same side. There's no need for a joystick; input is from the keyboard.

You must be able to see all the sides of all the cubes at the same time, but that, of course, is ordinarily impossible. So, I've rendered the cubes in two-dimensional fashion, with the front a relatively large square, the back showing through a window in the front and the other four sides arranged as narrow trapezoids around the front.

The cubes are numbered, 1–4. To choose one for rotation, press its number, and the number on the screen becomes highlighted. Then you can rotate the cube in the X,Y and Z directions by pressing

the X, Y and Z keys, respectively. An animated display in the center of the screen demonstrates which key to press for which direction.

You can switch any two cubes at any time by pressing the S key and then, at the prompts, the numbers of the cubes you want switched. A menu always shows at the bottom of the screen to remind you of the keys you can press.

In case you think Cubix 3 sounds easy, consider this: positioning one cube in a specific way is a 1-in-6 proposition, two cubes is 1-in-36, three is 1-in-216 and four is 1-in-1296. You'd better get to work!

RUN it right: **C-128 (in 40-Column mode); joystick**

Mazamorf

By Leonard Morris

MAZAMORF IS A ONE-PLAYER, arcade-style maze game with a new twist: The maze keeps changing, forcing you to make quick and decisive moves. A joystick plugged into port 2 is needed to play.

The joystick is used to control a red-colored character who scoots around trying to collect gold pots and avoid the horrible Green Meanies. The pots, which appear one at a time in the corners of the maze, increase your score and the number of walls Red can pass through. The pot collection is cumulative from game to game, and when Red has gathered 20, you advance to the next level of play.

Four Green Meanies relentlessly pursue Red through the maze. If they catch him, they latch on and sap his health until he can wriggle away. His health level starts at 100 in each game, and the longer his contact with Meanies, the more it decreases. Of course, Red should try to avoid the Meanies, but sometimes getting to the gold is more important.

Adding to the excitement of Mazamorf are the frequent changes in maze configuration that give the game its name. The pattern of change differs at each of the four levels of play, and the changes are more frequent at higher levels.

To shake off Meanies or take a shortcut to a gold pot, Red can

pass through a wall, assuming the wall counter on the right side of the screen reads at least 1. It reads 4 at the start of a game, then decreases by one each time he goes through a wall. It increases by one when he grabs a gold pot.

To send Red through a wall, bring him up to it and press the firebutton. Be careful, because if he's not next to a wall when you press the firebutton, he will just move a little and the counter will still go down.

In addition to the wall counter, the program also displays your present score, your highest score so far, Red's health level and the number of gold pots he must still grab before you can advance to the next level. When the Meanies sap his health down to 50, a warning appears at the bottom of the screen. The game ends when they drain it to zero. ■

FUN PAK 128

Eight New C-128 Games Included:

- ▶ **Bloodstar**
- ▶ **Gwynell**
- ▶ **Death Quadrant**
- ▶ **Bye, Bye, Brick**
- ▶ **Nighthawk 128**
- ▶ **Cubix 2**
- ▶ **Cubix 3**
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