FUEL: The colored bar at the upper left side of the screen is your fuel indicator. When you run out of fuel, your chopper will slowly lose altitude until you crash. You can get extra fuel by shooting or bombing the alien ground craft which have an "F" on them (FUEL TANKS).

SCORING:
Enemy Craft	100-400 points
Rockets	50-100 points
Fuel Tanks	200 points
Arrow	0 points
Mushrooms Cloud	5000 points
Bouncing Saucers	200 points

9. SPACE SENTRY

METHOD OF PLAY: You begin the game in command of ten ships. Your mission is to destroy all twenty alien crafts scattered throughout the patrol zone. When all twenty alien crafts are destroyed you will be awarded a bonus ship and a new wave of twenty alien crafts are released into the patrol zone. Use the right joystick to direct movement and speed of your ship and the joystick button to fire laser beams. Fire in the direction you are moving and a direct hit is needed to destroy alien craft.

RADAR SCREENS: Three radar screens located at the bottom of the screen give you valuable playing information:

Left Radar Screen: Shows space mines which must be avoided and not blasted as the blast will destroy your ship!
Right Radar Screen: Shows location of your refueling station.
Middle Radar Screen: Shows location of alien craft.

When you press the fire button your laser beam is activated: the white spot in the center of each radar screen indicates your relative position. By observing the radar you can see that the alien craft have their own inherent velocities, but the space mines and refueling station are stationary - their motion is relative to your motion.

FORCE FIELD: Holding the fire button down activates a force field (shield) around your ship which protects you from alien fire. It does not protect you from collisions. When your fuel drops below ten, your shield is deactivated.

SKILL LEVELS: Choose skill level 1-9 at the start of each game. One is the easiest. The skill level chosen determines how long it takes for your shield to come back up after you fire.

10. STORM ARROWS

METHOD OF PLAY: Use the right joystick to maneuver your land skimmer through the treacherous streets of Talon Alpha in an effort to evade and destroy the Imperial Storm Arrows which pursue you relentlessly. Be aware of the Imperial Pursuit Cruiser as it rapidly homes in on you and lays contact mines which, if not destroyed, will eventually turn into deadly Storm Arrows. The mines start turning into Storm Arrows when only one Storm Arrow is left. Press the right joystick button to fire torpedos - only one torpedo can be on the screen at a time. A dynamic meter at the top right of the screen indicates the number of torpedos available each round. A torpedo refueling station will appear at random; get to it quickly to recharge a portion of your supply of torpedos.

SCORING: Points for destroying a Storm Arrow start at 50 and increase each round up to a maximum of 200. For destroying a Pursuit Cruiser or capturing the torpedo refueling station you earn between 200-900 points. Bonus timer points are awarded if you complete each round before the round timer goes to zero. The amount of points you receive is equal to the value of the timer when you finish the round.

SCREEN DISPLAY: On the right side of the screen, the high score is at the top, remaining skimmers in the center, and bonus points at the bottom. On the left side of the screen, the current score is at the top, the torpedo meter in the center, and the bonus score timer at the bottom.

BONUS POINTS: Bonus points are awarded for completing each round at the rate of 1000 times the round number. You will hear and see your bonus points scored between rounds. You can press any key while bonus points are being shown and get into standby mode for a rest. To resume the game, press another key. You will be awarded an additional land skimmer for completing each six rounds. Additional torpedos, not to exceed 15 per round, can be obtained by destroying the Pursuit Cruiser (2 for each Cruiser) or capturing the torpedo refueling station (3 for each Cruiser).

NEW GAME: Your score and the top five scores are displayed at the end of each game. By pressing the fire button you can restart the game. By pressing the ENTER key, you can enter a new player's initials and restart the game.

COLOR ZAP

METHOD OF PLAY: You are stationed at the center of the Stargate Epsilon (center of screen) through which any ship must pass to approach your home star. War has been declared and you have just received word that hordes of alien starships will try to gain access to your home world through Stargate Epsilon. Use the button on your right joystick to fire your high speed laser cannon to destroy attacking alien ships. There are four entry points where alien ships will appear. Position the right joystick (right, left, top, bottom) in the corresponding direction that you want to fire and then shoot. Move quickly as more alien ships will appear at the same entry points. You must destroy all alien ships and their deadly photon torpedos to survive the round.

DEATH SATELLITE: If you survive a round of attacking ships, orbiting Death Satellites will materialize. You must aim carefully to destroy them. At the left side of the screen a colored bar indicates how many alien ships remain to be destroyed before the Death Satellites appear. Each time your shields are hit, more alien ships may have to be killed than before the shield was hit. The size of increase is dependent upon the skill level at which you are playing.

SCORING:
Alien ships	50 points
Alien photon torpedo	10, 20, 30 points depending upon how close they are to you when you hit them
Death Satellites	100 points

SHIELDS: The game is begun with three shields each of which protect you from an alien torpedo. Every 10,000 points you earn one extra shield up to a maximum of five, and the skill level will automatically increase by two.

GUN MELT DOWN: You may fire continuously by holding the fire button down. This will, however, heat up your laser cannon and may cause it to melt down. The colored column at the lower right edge of the screen will indicate how close to melt down you are. When you rapid fire, the cannon will heat up and the column will shrink, when you don't shoot the cannon will cool off and the column will grow.

SKILL LEVELS: Choose from 16 skill levels. The more experienced you become, the higher skill level you will want to choose. As the skill levels increase, more and faster alien ships and Death Satellites will appear.

2. COLOR SPACE INVADERS

HOW TO PLAY: A "rack" of invaders will appear on the screen. You must destroy them all before they drop a bomb on you or they reach the earth (bottom of the screen). You start the game with four bases and lose one every time you get hit by a bomb. Invaders are destroyed from your base. The base is moved with the right and left arrow keys and the missiles are fired by hitting the space bar. The game will automatically start a demonstration game if you do not answer its questions. You may escape the demonstration game by typing ENTER.

SCORING: Points are scored for each invader destroyed: 10 points for invaders in the bottom two rows, 20 points for invaders in the middle two rows, and 30 points for invaders in the top two rows. A 500 point bonus is scored for each "rack" destroyed. The mother ship which moves across the top of the screen is worth a variable number of points up to a maximum of 300.

LEVEL OF DIFFICULTY: At the beginning of the game you select the level of difficulty you wish to play. As the level of difficulty increases, you have fewer missiles to fire, the invaders move faster and your base becomes a bigger target.

SHIELD: The shield is the blue (sometimes red) line just above the castles. Missiles will go through the shield but bombs will explode when they hit it. When hit by a bomb, the shield will be inoperative for about three seconds. The "1" and "2" keys control the motion of the shield.

MYSTERY INVADER: The mystery invader appears and disappears at random intervals. It always appears on top of an existing invader and is worth 100 points. The invader upon which it appears must be shot before the mystery invader can be destroyed. An audible signal will alert you to the appearance of the mystery invader.

HYPERSPACE: Pressing the "Y" key will cause the base to move into hyperspace.

JOYSTICKS: The joysticks may be used to control the movement of the base and shield. Pressing the "X" key will activate the joysticks. Pressing it again will return control to the keyboard. The joysticks operate as follows:

RIGHT JOYSTICK: base movement   LEFT JOYSTICK: shield movement   RIGHT BUTTON: fire missile   LEFT BUTTON: hyperspace

3. PLANET INVASION

METHOD OF PLAY: A wave of Praetorian aliens attack the planet's surface and you must destroy them all before they capture all of your planet's valuable Caloxin crystals. The aliens will try to grab the Caloxin crystals and carry them off of the top of the screen. You start the game with 3 ships and 3 Smart Bombs and you lose a ship each time you are destroyed.

CONTROLLING YOUR SHIP: 1. RIGHT JOYSTICK: Up and down movement controls ship elevation. Right and left movement controls the speed and direction of the ship. 2. RIGHT BUTTON: Fires missiles. 3. SPACE BAR: Explodes one Smart Bomb which will destroy all aliens on the screen. 4. 'H' KEY: Causes your ship to move into hyperspace.

PLAYING FIELD: The playing field extends beyond the display screen. The long range scan above the regular screen shows the location of all the Praetorian ships on the playing field. Beware - if all of your Caloxin crystals are destroyed or captured you will have to fight in the outer reaches of space far from the planet's surface. Every fourth wave of aliens will give you a new set of crystals to defend. The wave number is displayed to the right of the long range scan.

BONUS: Every 10,000 points you will receive a bonus ship and a Smart Bomb. At the end of each wave a bonus of 100 x (the number of crystals left) x (the wave number) will be given.

SCORING: GRABBERS - 150 points. Grabbers capture your Caloxin crystals. They will become a Killer (150 points) if they reach the top of the screen with Caloxin. Shooting a Grabber with Caloxin will kill the Grabber and allow the Caloxin to fall to the planet. If the Caloxin does not fall too

far it will not be destroyed when it hits the ground (250 points). If it falls too far, however, it will be destroyed when it hits the planet unless you catch it with your ship first (500 points).

CHASERS - 250 points. Chasers will appear if you take too much time to destroy a wave of aliens. They will track your ship and don't have to be destroyed in order to finish a wave.

MINERS - 250 points. Miners will leave mines as they move.

BEAMERS - 1000 points. Beamers will split into 3 Berserkers (150 points) when they are hit.

STRATEGY: Two players: one person flies the ship and fires on the aliens with the right joystick. The other person operates the keyboard using hyperspace and Smart Bombs.

One player: use one hand on the joystick and the other hand for the keyboard.

NEW GAME: To start each new game after you have lost all three of your ships, hit the fire button after waiting a few seconds to view the score.

4. SPACE WAR

METHOD OF PLAY

SPACE MINES: There are four space mines defending the Death Star. These mines are invisible, however they will become visible if you get close to them. About one second after they become visible they will explode. Hitting the mine will not zap your ship, but the explosion will. You will hear a warning buzzing sound when you are getting close to a mine. After exploding, the mines will immediately be reincarnated at a random position.

DEATH STAR: The Death Star itself can fire defensive missiles. The shield around the Star will stop rotating if it is hit with one of your missiles. When the shield is not rotating, the Star cannot fire missiles. After a short delay, the shield will start rotating again and one second after it resumes rotation it will start shooting.

CLOAK: You possess a "cloaking" device which will protect you from missiles, explosion debris, meteors, and the enemy ship. While the cloak is activated, none of the above mentioned items can destroy your ship. The cloak requires energy to operate it. A graphic measure of the amount of cloak energy remaining is displayed to the left of the words "SPACE WAR" at the bottom of the screen. The left joystick button activates the cloak and you may not fire missiles while it is activated. Once the cloak energy is gone, pressing the left joystick button will have no effect.

DIFFICULTY LEVEL: You may choose a difficulty level from 0-15. The difficulty level affects the following game parameters:

1. How soon the enemy ship appears and disappears.
2. At what distance the space mines become visible.
3. How soon the mines explode after they become visible.
4. How long the Star's shield remains paralyzed after it has been hit.
5. How close to the Star your ship can get before the Star starts shooting at it.
6. Accuracy of the enemy missiles.
7. Gravity pull of the Black Hole.
8. How fast the enemy ship moves and how often it fires.
9. Amount of cloak energy.

SCORING: Ten points are scored for hitting the shield of the Death Star. 300 hundred points are scored for going through the hole in the Star's shield and hitting the main body of the Star. 100 points are scored for hitting the enemy ship and a random number of points from 0-90 is scored for hitting the meteor, which incidentally, will not destroy the meteor.

BONUS SHIP: You get one bonus ship (four maximum) for every 1000 points scored. Everytime you score a bonus ship the difficulty level is automatically increased by one and your cloak energy reserves are increased by 50% of their current value plus a constant bonus amount.

MOVEMENT: The right joystick controls the direction and acceleration of the ship and the left joystick controls the direction of the ship's gun. The right joystick button will fire missiles. The control of the direction of the ship's gun may be transferred to the right joystick by pressing the 'X' key. Hitting 'X' again will transfer control back to the left joystick.

5. SPACE RACE

METHOD OF PLAY: Maneuver your ship around the four cornered "race track" in space while destroying hordes of alien ships: Collectors, Swarmers, and Berserkers. As you fly around the race track bouncing off walls, watch out for the mines laid by the Swarmers. You may use the keyboard or joystick.

ALIEN	POINTS	MOVEMENTS
Mines	25	Static
Collectors	200(first hit)	Float at random
Collectors	100(last hit)	Float at random
Swarmers	400	Chase you slowly and fire missiles
Berserkers	600	Actively chase you and fire missiles

When a Swarmer is killed, a Collector will become a Swarmer, and if a Swarmer is left alone too long it will give birth to a Berserker which immediately attacks you.

BONUS SHIP: You start each game with four ships and are awarded a bonus ship every 10,000 points. The number of ships you currently have is shown on the right bottom of the screen. You may only accumulate a maximum of five extra ships. Each time you are awarded an extra ship the skill level increases by two.

HIGH LEVEL ATTACK WAVES: The game will get harder each time you clear the screen. At higher level attack waves the Collectors must be hit twice to be destroyed. One hit is indicated by a hole in the middle of the Collector and the second hit vaporizes him. At an even higher level the race track will disappear for one board.

DIFFICULTY LEVELS: Choose skill level 0-15, with level 15 being the most difficult game.

CONTROL OPTIONS: Use either the right joystick or keyboard to maneuver your ship and fire missiles. For keyboard use:

1 = rotate counterclockwise   right arrow = shoot   2 = rotate clockwise   left arrow = thrust   clear = reverse direction

NEW GAME: Press fire button or hit "Y" key for a new game.

6. GALAX ATTAX

METHOD OF PLAY: While under a constant barrage of enemy fire you protect your ground base by shooting alien fighters in formations. Then watch out! They will leave formation to attack, but now an ace fighter can really score. Use the right joystick to control the motion of your ship and the right button to fire missiles.

SCORING: There are three different attacker shapes. They are worth 50, 100, and 200 points when in convoy formation at the top of the screen and their point value doubles when they leave convoy formation and become a diving attacker. A bonus of 500 points is awarded for each "rack" (complete attacking formation) that is destroyed. The number of the current rack you are playing is indicated by the number of flags at the center top of the screen.

BONUS SHIP: A bonus ship is awarded for every sixth rack (flag) of alien attackers destroyed. The flags at the top center of the screen will be reset after every ten flags.

NEW GAME: At the end of the game, the score of the current player is displayed along with the five highest scores. If the same player wants to play another game just hit the fire button. If you want to enter a new player's initials, hit any key on the keyboard.

7. ANDROID ATTACK

METHOD OF PLAY: Press ENTER to start the game and hit the fire button to replay the game. Use your laser gun to pulverize the androids in the room, avoiding the deadly walls and android fire; then proceed, exploring room after room destroying as many androids as you can. The right joystick controls your direction and pressing the fire button fires your laser gun. You will fire in the direction you are facing. You may aim and fire in eight directions by pressing the fire button and moving the joystick to the direction you want to fire. You can jump or duck by putting the joystick in the center position and pressing the fire button. If the joystick is moved up just above center, you will jump. When the joystick is positioned just below center, you will duck. With a little practice you will become expert at jumping and ducking. Pick up the crown in each room for extra points and leave the room quickly! The count-down timer in the lower right of the screen indicates how much time you have left before you must leave the room or be destroyed.

GHOST ANDROIDS: When you destroy an android, it turns into a mine which can use up a unit of suit protection if you touch it. After a time, mines become ghost androids which hunt you relentlessly. Destroy them quickly as they can chase you through walls.

PROTECTIVE SUIT: You are wearing a special space suit designed to give you units of protection against laser fire. The level of protection units you have is shown at the bottom center of the screen. If you have three or more units of protection, you may may sacrifice one unit (and only one) by running into a vertical wall, thereby creating a doorway at that spot. Each time you are hit by android laser fire, you will use a unit of protection. When all units are used up, being hit by laser fire will destroy you and end the game.

SCORING: Your score is indicated in the bottom left of the screen. You receive 50 points for each android and 100 points for each ghost android that you hit. Pick up the crown for another 100 points.

BONUS: You gain one extra protective unit by earning 10,000 points, up to a maximum of 10 units. Work quickly! If you clear a room of all androids and mines and pick up the crown, you will receive a bonus score equivalent to the amount left on the countdown timer. You must leave the room to receive the points.

DIFFICULTY: If you receive the bonus points by clearing the room of all androids and mines, pick up the crown, and leave before your time runs out. The next room will be harder than the one you just left. The androids become smarter and faster and they will move quicker and shoot faster!

SKILL LEVELS: Android Attack has 16 skill levels to choose from with level 0 for beginners and level 15 for advanced players.

TALKING VERSION: There are two versions of Android Attack: a 16K non-talking version(ANDR16) and a 32K talking version(ANDR32). The talking version does not require any special hardware in order to talk.

8. WHIRLYBIRD RUN

METHOD OF PLAY: Be on guard for rockets that are constantly being launched as you fly your chopper over varying terrain using the right joystick. To control speed and elevation you fire missiles and drop bombs by pressing the button on the right joystick. Try to destroy as many rockets, alien ships and alien bases as you can but avoid crashing into mountains, the top of the board, or alien craft.

You start each game with four choppers and a full fuel tank for each chopper. Hitting an enemy fuel tank will add one fuel unit to your fuel tank. Your current score, number of remaining choppers, and fuel level are shown at screen top.

SCENARIOS: The game progresses through five different game boards, each providing a different challenge. The Cavern of Doom provides the final obstacle to your chopper flight. The varying heights of the mountains and the ceiling make this the most difficult board to master and successful completion of the Cavern of Doom will restart the board sequence at an increased difficulty level.

SPACE PAC
MASTER INSTRUCTIONS

Space Pac is a collection of ten machine language space games. It is strongly recommended that the user make backup copies of the original tape or disk. There are no extra copies of the programs on the disk; however, the back side of each tape contains a duplicate copy of each program in the same order as the front side.

SYSTEM REQUIREMENTS

None of the games of Space Pac require Extended or Disk Basic, and all programs will work on the Color Computer 3. All of the games will run in 16K of RAM except for the 32K version of Android Attack (ANDR 32).

LOADING INSTRUCTIONS

CASSETTE: Position the tape at the beginning of the proper game using the tape counter and the starting position of the appropriate game as found in Figure 1. The tape counter is only an approximate method to find the start of the game at best and most tape counters will have their readings vary from one tape player to another. Keep trying until you locate the gap of silence between games. Set the tape player to PLAY and type CLOADM(enter) on the computer. When the program has loaded, type EXEC(enter).

DISKETTE: Place the Space Pac diskette into Drive 0. Type LOADM"FILENAME"(enter) followed by EXEC(enter) when the file is loaded. Find the desired FILENAME in Figure 1.

IN CASE OF TROUBLE

CASSETTE: If you encounter an FM error, make sure that you are using CLOADM and EXEC not CLOAD and RUN. If you encounter an IO error, try adjusting the volume of the tape player and making sure that you start loading the game from the gap of silence between games on the tape. If all else fails, try loading the backup copy which is on the back side of the tape (in the same order as the front).

DISKETTE: If you encounter an FM error, make sure that you are using CLOADM and EXEC not CLOAD and RUN. If you encounter an IO error, try to load the game on another disk drive if possible. Often disk IO errors are caused by drives which are out of alignment and need to be adjusted. If that does not correct the problem the diskette must be returned to Spectral for replacement.

SPACE PAC MASTER INDEX
TAPE 1

GAME NAME	FILENAME	START	END	XFER	TAPE COUNTER
1. Color Zap	COLORZAP	&H1E00	&H33AB	&H1E00	002-014
2. Color Invaders	INVADERS	&H1C1C	&H3FFF	&H1C1C	015-034
3. Planet Invasion	INVASION	&H1C0A	&H3F00	&H1C0A	035-055
4. Space Race	SRACE	&H2800	&H38FF	&H2800	057-067
5. Space War	SPACEWAR	&H1B1B	&H3FFF	&H1B1B	068-090
6. Galax Attax	GALAX	&H1E10	&H3F00	&H1E10	091-112
7a. Android Attack	ANDR16	&H1C40	&H3F00	&H1C40	113-135
7b. Android Attack	ANDR32	&H1C40	&H7F00	&H1C40	136-195

TAPE 2

GAME NAME	FILENAME	START	END	XFER	TAPE COUNTER
8. Whirlybird Run	WHIRLY	&H1E10	&H3E00	&H1E10	002-018
9. Space Sentry	SENTRY	&H2400	&H3FF0	&H3000	020-038
10. Storm Arrows	STORM	&H2000	&H3F00	&H2000	045-065

Figure 1

REPLACEMENT POLICY

1. Replace defective tape	$3.00 each
2. Replace defective disk	$5.00 each
3. Replace tape with disk	$6.00 each

Return original tape or disk (shipping prepaid) to: Spectral Associates, 3320 South 90th Street, Tacoma, WA 98409