

# TO: ISDF Pilots

# FROM: INTERSTELLAR SPACE DEFENSE FORCE COMMAND

This manual has been prepared to better acquaint ISDF pilots with the Gorfian enemy. Careful study of this information will enhance mission effectiveness.

Information of the diabolical enemy is incomplete and any observations of Gorfian activity that would improve or correct this manual should be transmitted to ISDF intelligence.

This material is ISDF classified under Category 2.

See Manual Index on following page.

# **GORF ARCADE CREDITS**

Published by Champ Games © 2022, 2023 Champ Games LLC

Code and Design: John W. Champeau Game Graphics and Voices: Nathan Strum Sound Effects: Bob DeCrescenzo

Additional Game Testing: Tom Martin (Machine), Steve Ramirez (sramirez 2008),

Nathan Withee (McCallister), Jürgen Oster (Bomberman94)

Nathan Strum Packaging Design and Art:

Manual text adapted from the Gorf Combat Manual, published by Midway Mfg. Co. (Thanks to the Arcade Flyer Archive for preserving this unique piece of video game history.)

# **GORF CREDITS**

Gorf is a product of Midway Mfq. Co., a major manufacturer and creator in the coin-operated amusement industry. Midway Mfg. Co. is a division of the Bally Manufacturing Corporation. Gorf, Astro Battles and Galaxian are registered trademarks assigned to the Midway Manufacturing Division of the Bally Corporation.

© Copyright 1981 Midway Mfg. Co. All Rights reserved.

Executive Producer: **Dave Nutting** Game Concept/Design: Dave Nutting

Jamie Fenton

Video Programming: Jamie Fenton Audio Programming: Scot Norris Added Program Support: Rick Frankel

Bob Oaden

Electronics Design: Jeff Frederickson

Dave Otto

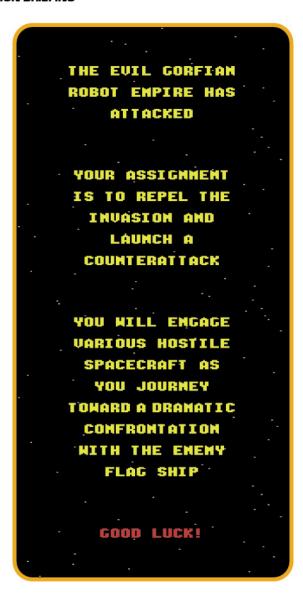
# REFERENCE GUIDE

# INDEX

Message to Pilots	2
Credits	2
Index	3
ISDF Mission Briefing	4
Space Missions	5
ISDF Structure and Chain of Command	5
Promotion Schedule	6
Mission Initiation and Flow	7
ISDF Space Fighter Specifications	8
Mission Flight Controls	8
High Scores	0
Gorflan History and Military Capabilities	1
Mission Scenarios:	
ASTRO BATTLES	2
LASER ATTACK	4
GALAXIANS	5
SPACE WARP	7
FLAG SHIP	8
ISDF Membership Patch	9

This COMBAT MANUAL is assigned to:

Ρi	lot I	Mar	ne:
ГΙ	IULI	ıvaı	HE.



# SPACE MISSIONS

A unique sight and sound adventure for special pilots enlisted in the Interstellar Defense Forces for a challenging voyage against the Gorfian Empire.

In a series of missions, the pilot's assignment is to repel the Gorfian robot attacks and launch a counter attack to ultimately destroy the enemy Flaq Ship.

Throughout the missions, the Gorf leader speaks and taunts pilots with phrases like: "Prepare yourself for annihilation"....."Survival is impossible"...."Some galactic defender you are"....."Ha!ha!ha!ha!na!"...."My Gorfian robots are unbeatable"...."Too bad Space Cadet" – AND MORE!

Pilots who can complete five basic missions are rewarded with promotions and continuous action against the Gorfian Empire.

# ISDF STRUCTURE AND CHAIN OF COMMAND

# ISDF STRUCTURE

The Interstellar Space Defense Force was commissioned by act of the Interstellar Congress in 3192.23 to defend the Union from external threats. It has evolved into a highly efficient fighting force, which has proved equal to all challenges.

The ISDF is organized in small autonomous units, with central co-ordination. Our philosophy is to encourage individual initiative within a framework of mutual support.

As an ISDF recruit, you start at the rank of SPACE CADET. As you gain skill and experience, you will be promoted.

When conversing with your fellow officers, address them using the highest rank they have attained during their lifetime.

When you first attain a higher rank, enter the date and score in the appropriate space on the Promotion Schedule on the next page.

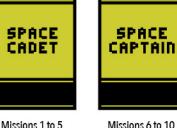
SPACE WARRIOR and SPACE AVENGER are special honorary ranks which are recognized throughout the universe as having great distinction.

If you complete more than 35 missions, you will be renown as SPACE MASTER, and after 50 missions you will battle to defeat the Gorfian Empire as SPACE CHAMPION.

If you believe your rank or score is a record achievement, inform ISDF intelligence. We will require some form of verification. Acceptable methods would include affidavits from witnesses, screen photographs, or press clippings. We will acknowledge your report and, if superlative, publicize it.

# PROMOTION SCHEDULE



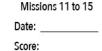






Date:_		
Score:		





Missions 16 to 20 Date: Score:









Score:



Missions 36 to	50
Date:	
Score:	



Missions	51 to 100
Date:	
Score:	

If your skills aren't up to the level of SPACE CADET, you can begin your training as an unranked SPACE ROOKIE. Your first five missions will be counted as training missions, and you must complete all of them before you can attain the beginner's rank of SPACE CADET.

To defeat the Gorfian Empire you must successfully complete all 100 missions. The ISDF will transmit a special congratulatory message to you if you can complete this epic task!

# MISSION INITIATION AND FLOW

# STARTING YOUR MISSION

Activating your Space Fighter is a simple matter. You merely select from one of the four skill levels by moving your control stick left or right, then press the FIRE button on your control stick to launch your fighter (or press RESET on the ship's console).

NOVICE is the simplest level, suitable for beginners. You can only begin as a SPACE ROOKIE on Training Mission T1 in this mode.

STANDARD is the skill level most pilots will enter into service at.

ADVANCED is for more highly skilled pilots, and is nearest in difficulty to the classic arcade game based on the legendary Gorfian battles.

CHALLENGE! is only for the most highly skilled pilots who wish to test their abilities to their fullest.



# MISSION FLOW

When each mission is completed, your ship will travel in hyperspace towards your next encounter. The screen will go dark during hyperspace travel.

When the last enemy in a mission is destroyed, you will be immune to any of their remaining weapons fire, since your hyperspace drive protects you as you warp away.

After completing Mission 5: FLAG SHIP, you will be warped back to ASTRO BATTLES and repeat the sequence. Your ship will be refitted with more powerful thrusters, and the missions will grow progressively harder.

# ISDF SPACE FIGHTER SPECIFICATIONS

The FS-15 Interstellar Space Fighter is the front line defense fighter of the ISDF. Veterans of earlier missions against SPACE INVADERS and the GALAXIANS will recognize the many improvements in the FS-15-W:

- · Improved two axis maneuvering system
- Ergonometric hand control with firing trigger
- Enhanced quark packet laser with abort feature
- Full certification for WARP operation

Manufacturer: ISDF Facility at YAWDIM

Length: 20 M Height: 6 M Wingspan: 16 M Mass: 5,000 Kg

Maximum Speed: C 17

Propulsion: Two Graviton accelerators quark fusion powered

Acceleration Factor: 1.7 C/sec.

Flight Controls: 2150 gg/sec. thrust vectoring engines

Armament: Quark packet resonator charged by separate quark fusion system

Sustainer Range: 310 pix
Transfer Time: 240 pix/sec.

Cost: \$1,350,000,000,000,000



# HAND CONTROL OPERATION

All Space Fighter controls are organized into a single, easy to use hand control. Tilting the hand control to the right, left, up or down will maneuver your ship in the corresponding direction. The ship moves slightly faster horizontally than vertically. The maneuvering rate is increased for ranks SPACE CAPTAIN and above.

Pressing the FIRE button activates the quark packet resonator, firing a laser burst originating at the front center of the ship.

If the pilot presses FIRE while a laser burst is traveling upward, the current shot is aborted and a new one begins. This capability offers these advantages:

- 1) You don't have to wait for a bad shot to go off the screen to shoot again.
- 2) You can react instantly to a higher priority threat situation.
- You can make test shots to determine target lead while awaiting an optimal combat situation.
   The only disadvantage is that an over-eager pilot will sometimes abort a good shot just before it connects.



# OPTIONAL SPACE FIGHTER ENHANCEMENT MODULES

If you plug an AtariVox into the right flight control port of your ship's console, you will be able to intercept communications from the Gorfian Empire and hear them taunting you.

An AtariVox will also save your scores and skill level options.

Plugging a SaveKey into the right flight control port will save your scores and skill level options, but you can't eavesdrop on the Gorfian Robots.



#### SPACE FIGHTER CONSOLE SWITCHES

Toggling the TV TYPE switch on your fighter's console will activate your ship's Time Dilation drive, causing everything to Pause, giving you an opportunity to catch your breath. Space Fighters with a 7800 designation have a switch labeled PAUSE for this function. Press the fire button to re-engage combat.

Setting the LEFT DIFFICULTY console switch to A (Expert) will disable your Quark Laser. Your shot will have to travel until it collides with an enemy target or exits the combat area before you can fire another shot. This mode requires the utmost precision!

Pressing SELECT on the ship's console allows you to use the flight control stick to select your desired starting rank and Mission at the start of a game (but only up to Mission 20 – everything after that you have to earn the hard way). Note: The MISSION SELECT feature is not available for NOVICE skill.



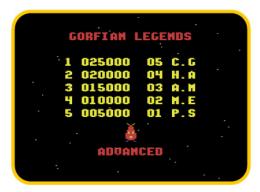
At the bottom-right of your tactical display, a star followed by a number will appear. The color indicates your current skill level, and the number is your current Space Rank:

★= NOVICE	★= STANDARD	★= ADVANCED	r= Challenge!
1 = SPACE CADET	2 = SPACE CAPTAIN	3 = SPACE COLONEL	4 = SPACE GENERAL
5 = SPACE WARRIOR	6 = SPACE AVENGER	7 = SPACE MASTER	8 = SPACE CHAMPION

# HIGH SCORES

Four sets of High Scores are maintained in the Legion of Gorfian Legends, one for each of the skill levels. Scores are retained if your ship has a SaveKey or AtariVox module installed. You may enter up to three alphanumeric characters for your score.

If your score places in the top five for your chosen skill level, it will be displayed following the mission briefing message on your tactical display. Your highest mission number reached will be shown next to your score.



To erase all currently displayed scores, toggle the TV TYPE switch on your fighter's console (or PAUSE on 7800 consoles). The message "RESET SCORES?" will appear. Press the FIRE button on your control stick to erase the scores, or move the control stick in any direction to CANCEL.

Scores obtained during training missions will be shown with a 'T' preceding the mission number.

Scores obtained during games started at any point higher than Mission 1 will be noted with a "+" following the mission number. "+" scores will not be accepted for ISDF Membership Patch submissions (see page 19).





# GORFIAN HISTORY AND MILITARY CAPABILITIES

The Gorfs are the legacy of the organic life forms of DAOT. These aliens were a particularly warlike strain whose ultimate weapons were robot warriors. The development, production, command and control of these forces was totally automated.

DAOT was denuded of organic life by a massive attack by RESAR about 3,000 years ago. The radiation levels that eradicated the Daotians had no effect on the RESAR robots, which went on to win the war. These robots evolved into the Gorfian Empire as we know it today, inheriting the warlike tendencies of their creators.

The Empire is sustained by rapacious consumption of resources, particularly silicone and metallic elements. For this reason they attack our planet, to seize our sand and coins.

The Gorfian Empire is a totalitarian state with a rigid class structure. The highest levels are occupied by the Gorfs themselves. Gorfs descended from a command and control robot designed to operate on planetary surfaces as well as in space. Although they look like angry space gumdrops, they are extremely dangerous!

Gorfs communicate with each other telepathically. Collectively they form a high intelligence which rules the Empire. Sometimes this intelligence penetrates our communication system with taunts and insults.

The lower ranks are filled by a variety of special purpose warrior robots. They can be categorized by mission: invasion, invasion support, fighter, defensive fighter, or command and control. All robots are programmed to sacrifice themselves without reservation to destroy their enemy.

The basic Gorfian strategy is to attack in overwhelming numbers. Individual robots are viewed as expendable. Their intention is to overload their opponent's defenses with a flurry of activity, trapping him in lethal fire.

The essence of Gorfian tactical doctrine is random attack. Through unpredictable behavior, they wish to thwart rational countermeasures. This pseudo-random behavior occurs within a larger rational context, which when understood, allows the ISDF pilot to anticipate trouble. We will discuss Gorfian tactics in greater detail in the mission scenarios.



# MISSION SCENARIOS

# **ASTRO BATTLES**

Standard Gorfian doctrine for planetary invasion specifies that special purpose invasion Droids be deployed in an attack matrix in the atmosphere. These Droids are dropped from a Gorf (carrier type) flying above the invasion area. The invasion is supported by various command and supply ships (Gorfs and UFOs) which fly above the invasion front.

Your ship is vectored into position as the Gorf makes its approach. By skillful shooting you can destroy the Gorf and some of the matrix invaders before the rack is formed. The attack matrix, once formed, begins its descent.



Their primary attack weapons are small anti-matter gravity bombs. These have the effect of locally disrupting defense force fields and are, of course, fatal to spacecraft.



Our defense system consists of a sub-quark matrix energy field. This will neutralize all bombs that strike an undisrupted area.

The Defense Shield is deactivated whenever your QP laser fires. Caution should be exercised to prevent being hit by bombs. This effect can be used to advantage when the matrix is at the other side of the field, to preserve the Defense Shield.

It is recommended that the matrix be attacked from the edges. By destroying columns of invaders, the rate of descent is reduced, giving more time to avoid the bombs and repel the invasion. If the invaders land on our planet, your ship will be destroyed, but if spares are available, you will continue into space. When up against a SPACE CAPTAIN or above, the matrix will be deployed at a lower altitude. The bombing rate will also increase.

At completion of this mission, you will lift off our home planet and enter space. Your ship will make the transition through hyperspace to the next mission.

# ASTRO BATTLES SCORING

50 Points	Invaders in the attack matrix
60 Points	Lowest level invader in midair
80 Points	Middle level invader in midair
100 Points	Highest level invader in midair or the large UFO
200 Points	The small UFO
250 Points	The Gorf at mission start
300 Points	For destroying the Gorf after deployment

# **CHALLENGE! MODE**

The following enhancements have been added to challenge experienced warriors:

- · Additional invaders will be added for each ranking through SPACE COLONEL
- . The invaders will begin dropping bombs before the matrix has been completely formed



# LASER ATTACK

The outer orbital zone above the invasion area is patrolled by attack fighters. They act as the first line of defense against our counter-attack. We leave hyper space to engage them.

This force is generally organized in formations of five ships: an anti-particle Laser ship, three Dive Bomber ships and a Gorf. As a unit they can maneuver very rapidly. The Dive Bomber ships and Gorfs will try to ram you, while the Laser ships aim to pin you down with a Laser Beam.



Recommended strategy is to destroy the Laser ships as soon as possible, as the Dive Bombers and Gorfs are easier to destroy. The Dive Bombers do become more vicious when both Laser ships are destroyed, so be wary!

The Laser ships alternate between maneuvering and firing. The best time to attack them is when they just begin to fire. Be certain that you can move away before the Beam hits you!

Dive Bombers and Gorfs should be destroyed at maximum possible range, especially when they power dive. At close range it is possible to fly into an explosion – a deadly error.

In later missions, the formations will move about more rapidly, and the Dive Bombers will accelerate as they dive.

#### LASER ATTACK SCORING

100 Points	Gorfs and Dive Bombers
300 Points	Laser Ship

# **CHALLENGE! MODE**

The following enhancements have been added to test the reflexes of the most skilled pilots:

- . A third attack force will join the fray starting with SPACE COLONEL
- . The Dive Bombers will fire at you as they charge your ship

# GALAXIANS

We are now in deep space, approaching the defense perimeter of the Gorfian Robot Empire. Our intrusion is met by the deployment of a fighter matrix. These robots are similar to those used in the GALAXIAN wars. They will move back and forth in formation, launching attack runs using anti-photon bombs.



The fighter matrix has four levels; the highest occupied by two Leader robot ships. Immediately below are the Escort robots. One or more Escorts will accompany a Leader in making formation attack runs.



Below the Escorts are the Heavy Bombers. These robots drop three bombs during each run, while all others drop two. The lowest level, called Drones, acts as a shield for those above. Bombers and Drones attack individually, and only from the edges of the formation. One way of reducing the intensity of attack is to leave one Bomber or Drone robot at each edge, and destroy the formation from the inside out.

All robots will try to ram you, as well as bomb you. You must exploit our superior mobility to survive.

During the final phase of battle, the robots will make continuous attack runs. They will release their

bombs at higher altitude and in greater numbers.

Robots destroyed in mid-space score higher than those destroyed in formation.

As in ASTRO BATTLES, we have the advantage of being able to fire while the robots are being deployed. For extra points, try to hit them before they settle in. You can blast through a column to expose a Leader ship or trim the formation edges as suggested above.

Occasionally a Gorf will appear in order to distract you and draw your fire away from attackers.

This mission grows harder by increasing the frequency of attacks and reducing the threshold at which continuous attacks begin.

# **GALAXIANS SCORING**

50 Points	Any Robot while in formation
60 Points	Drone during dive
80 Points	Bomber during dive
100 Points	Escort during dive
300 Points	Leader during dive and Gorf

# **CHALLENGE! MODE**

The following enhancements have been added to hone your fighting skills:

- · Additional Galaxians will be added for each ranking through SPACE COLONEL
- The Galaxians in formation will also drop bombs on you!
- Gorfs will replenish destroyed Escorts



# SPACE WARP

We drive on into Gorfian territory, drawing near the enemy Flag Ship. The Flag Ship protects itself by generating a Space Warp. Until recently, this prevented us from making contact.

Our improved technology allows us to penetrate and fight within space warps. The Flag Ship will try to stop us here by launching Space Warp Fighters at us.

Space Warp Fighters are among the most sophisticated Gorfian weapons. They fly spiral courses and possess very accurate sub-quark torpedo launchers. These Torps are aimed directly at you and close in on your ship in two seconds or less.



Torps can be launched from any altitude, including positions below you. Some spiral courses can result in mid-warp collision with your ship.

If a Fighter escapes, it will not return to haunt you. You can complete this mission using only defensive tactics. Offensive attack is recommended however, to gain points and reduce the number of Torps to avoid.

Fighters are easiest to destroy when they first emerge. They are moving slower and the spiral is tighter. Get as close as possible to the center for minimum firing time. If you miss, back off to gain room. Aim to intercept the spiral path tangent to its sides.

At Mission 9 and above, the number of Fighters launched is increased, the spiral velocity doubles, and the Torps move faster.

# SPACE WARP SCORING

250 Points	All attacking fighters
------------	------------------------

#### CHALLENGE! MODE

The following enhancements have been added to sharpen your piloting skills:

- . The Space Warp will try to pull your ship into its center
- Any enemies that escape will warp back to their starting point to attack again

# **FLAG SHIP**

We now confront the Flag Ship: it is very different from the robots we have fought before and calls for a new set of tactics.

The Flag Ship is constructed of superdense neutronium. Power is provided by a large guark fusion reactor. Armament consists of a sub-quark Fireball launcher and a protective Force Field. Unlike force fields of our technology, they can shoot through from their side without deactivation. In advanced missions, the Flag Ship will be accompanied by several Gorfs. It will also launch Fireballs at a faster rate.

Neutronium ships are difficult to destroy. A blast that would destroy a conventional robot will only dislodge a chunk of neutronium. These chunks represent a serious mid-space collision hazard. Points are awarded if you blast one in flight. During missions 15 and beyond, these chunks will have higher velocity.

The only way to destroy the Flag Ship is to hit its internal power reactor. This can be done by chipping through the neutronium beneath with repeated shots. It is reported that there is a small Reactor Vent near the center through which a skillful pilot can hit the reactor with one shot.



Recommended strategy is to first create large voids in the Force Field with repeated shots. Observe the rate and direction of fire from the Flag Ship, and when clear, shoot for the reactor. It is important to hit the reactor as soon as possible, since the firing rate intensifies over time.

When the reactor is hit, an unstable reaction will ensue. This culminates in a violent explosion which will generate an unstable space warp, scattering the neutronium.

You have accomplished your mission and will receive a field promotion for your skill and bravery. This is a moment to savor, for soon the battle will begin again.

#### RESERVE SPACE FIGHTERS

An additional reserve Space Fighter will be awarded to pilots at each promotion achieved, beginning with SPACE CAPTAIN. If all of your Space Fighters are destroyed, you will have failed your mission and the Gorfian Empire will rule the galaxy!

# FLAG SHIP SCORING

20 Points	Hitting Flag Ship and dislodging a chunk of neutronium	
100 Points	Destroying an escort Gorf	
150 Points	Destroying a chunk of neutronium in flight	
1,000 Points	For hitting the power reactor	

# CHALLENGE! MODE

The following enhancements will test the mettle of even the most battle-hardened pilots:

- . The Flag Ship will regenerate its Force Field every sixth time it changes direction
- A third Gorf escort will be added
- . The Dive Bombers from LASER ATTACK will periodically replace the Gorf escorts

# ISDF MEMBERSHIP PATCHES

As a volunteer pilot, active in the fight against the diabolical Gorfian Robot Empire, you will receive your proper respect and identification by earning achievement patches.

You must reach at least the following Missions for each patch you wish to earn (starting at Mission 1):

SPACE WARRIOR	Reach Mission 21 on Novice difficulty (starts at Mission T1)
SPACE AVENGER	Reach Mission 26 on Standard difficulty
SPACE MASTER	Reach Mission 36 on Advanced difficulty
SPACE CHAMPION	Reach Mission 51 on Challenge! difficulty

To get your patch, take a photo of your final score using a Gorf Arcade cartridge on a real game console. The Gorf Arcade cartridge,

For contest rules and to submit your score visit: ISDF Command Headquarters

www.champ.games/gorfian-legends



