EMPIRE SOFTWARE

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Welcome to the world of Space 1889, a world filled with scientific wonders, strange civilizations, international intrigue, and, of course, adventure. This computer adventure is based on the pen and pencil science fiction role playing game of the same name. It is a highly unique concept because, despite the fact that Space 1889 deals primarily with outer space exploration, it is set in the 19th century, at the height of Victorian colonial expansion.

How is this possible?

The 19th century saw the birth of science fiction, and the works of the early masters of this genre, H.G. Wells, Jules Verne, and Arthur Conan Doyle still have tremendous appeal. Their speculations about interplanetary travel and alien civilizations were based on sound principles of science as it was then understood. Since then, we have discovered that principles such as those proposing the existence of “luminiferous ether,” — at that time widely accepted — have no real foundation in fact.

But what if they did? What if instead of quantum mechanics and relativity, there was only “the ether”? And what if the fertile, brilliant mind of a young inventor named Thomas Edison discovered the method to travel through the ether and explore the secrets of our solar system?

The answer to that question is what this game is all about.

I. A Note On Gender

For ease of expression, all references to characters and game players in this manual use the masculine pronoun. This, however, does not imply the exclusion of females either as players or characters in the game. Although Victorian society did not encourage women to embark on careers of danger and adventure, the large number of women who did so anyway is ample proof that it was possible. For more on this theme, see the Women in the Victorian Era section of this introduction.

II. The World of Space 1889

The period from 1870 to 1900 was
historically one of tremendous political, social, and technological change. In Space 1889 this is even more the case, as flight and space travel have been added to the other achievements of this era. This section of the manual is designed to give players an overview of the era as it applies to the concepts of the game, its many opportunities and occasional limits. This is not an authentic historical account. It is a mixture of actual history coupled with science fiction.

Technology

Although electricity was known and utilized, widespread residential use of electricity was just being adopted. Many homes were lit by gaslight, and all “appliances” were hand-powered. Indoor plumbing, on the other hand, was widespread in the cities of the industrialized countries.

Industry was almost universally powered by coal-fried steam boilers. Oil burning boilers were used where oil was plentiful; the gasoline engine was developed by Herr Benz and Herr Daimler of Germany in the mid-1880s; and Otto von Diesel was tinkering with an oil-burning internal combustion engine of his own. None of these were in widespread use, however.

Transportation

Transportation in the 1880s was notable for its lack of single person mechanical vehicles, such as the automobile. The closest to this was the urban cab, but the cab of the 1880s was horse-drawn. Trips outside the city would usually be made by train, powered by a coal-fire steam locomotive. Horse-drawn coaches still serviced areas not linked by rail, and travel in primitive surroundings was by horse or even foot.

On the water, the sailing vessel still was used as a slower, but cheaper, means of transporting low priority cargoes. The majority of cargoes and passengers were carried in steamships. Steam vessels were in the midst of a tremendous increase in power and efficiency due to adoption of more advanced engine technology and forced draught boilers. Mr. Parsons in the United Kingdom produced his first working steam turbine in 1884, and this invention promised even more efficient steam transportation in the near future.

In the game, you will be able to transport your party of characters on land by foot or by horse, across water in sailing vessels, and through the air in Zeppelins.
Flight

One of the great differences between the world of this game and the historical 1880s is the greater incidence of flight. Edison’s discovery of liftwood on Mars in 1870 and its subsequent use in aerial steam vessels provided a tremendous spur to aeronautical research. Count von Zeppelin produced an efficient, hydrogen-lifted, rigid airship in 1874 that was powered by a lightweight steam engine; and in the 1880s began producing airships using the more efficient internal combustion engines of Herr Daimler. At the time of the game, these are in widespread use.

However, flying machines are built using liftwood whenever possible. Liftwood is the product of a tree which grows in certain parts of the Martian highlands. It synthesize a complex organic compound with contragravitational effects. Attempts to artificially reproduce this compound in the laboratory have thus far failed, and the trees will not grow anywhere except in certain locations on Mars. Thus, the supply of liftwood is severely limited and is the cause of many conflicts.

Space Travel

Interplanetary space travel was first demonstrated by Thomas Edison in 1870, and while it is hardly commonplace, it is an accepted part of life in 1889. It has made possible the establishment of extensive colonies on Mars and Venus, frequent visits to Mercury and occasional visits to the Moon.

Space voyages are fairly long, typically taking a month or more between worlds. The voyages are made in interplanetary ether flyers powered by large solar boilers. A reflecting lens directs the Sun’s rays onto the boiler’s water tank to produce steam and power the ship without the need for combustion. (Ships do not carry enough oxygen to support continuous burning of coal for several weeks.) Because the Sun’s rays are quite weak farther out from the Sun, solar boiler-powered ships have so far been unable to explore beyond the asteroid belt that spans the distance between Mars and Jupiter.

Weapons

Military weapons are, at the time in which the game is set, in a period of transition from breech-loaders to bolt-action magazine rifles; 1889 is the first year in which large numbers of British infantry turn in their Martini Henry breech-loaders for the new Lee Metford eight-shot, bolt-action rifle. Artillery has been largely converted to rifle breech-loaders, and for
light close-range work relied on the ingenious and deadly Hotchkiss Revolving Cannon, something like a large gatling gun firing exploding rounds. But the new technology of quick-firing guns, such as the British 4.7" naval gun, promised an even more dramatic increase in firepower.

Machineguns had been in service since 1861 when Mr. Gatling invented his famous weapon. Still in widespread service, it had been supplemented and to an extent supplanted by newer versions of man-powered machineguns, such as the Gardner, Nordenfelt, and Montigny Mitrailleuse. All of these weapons relied on a gunner turning a crank or operating a lever to continue firing. In 1889, however, the British began buying their first quantities of the Maxim gun, a self-loading gun that would continue firing under its own power so long as the gunner held down the trigger.

International Relations

Britain was, in 1889, a constitutional monarchy; America was a stable republic and France an unstable one. Germany and Russia were empires ruled by hereditary monarchs, and Japan was a society in transition, a curious mixture of the new and the old. All aspired to “great power” status, however, and in 1889 great power status required interplanetary colonies, trade, and liftwood.

III. The Victorian Age

In the year 1889, Great Britain was approaching the height of her power, pride, and prestige. She was the mistress of an empire which covered a quarter of the Earth’s dry surface and exerted a quiet, iron grip on the water. She controlled much of the world’s commerce and led the globe in manufacturing production. She possessed a political stability unknown amongst the nations of Europe and had, two years before, celebrated the 50th anniversary of the coronation of her ruler, Queen-Empress Victoria. There seemed no limit to British energy, ambition, and resolution. The frontiers of the Empire were being pushed back farther every day; and, since Edison and Armstrong had plummeted into the atmosphere of Mars 19 years before, there were vast areas of two planets upon which the Sun, it was said, never set.

Britain and the World

In the middle of the 19th century, British governments were concerned not with expanding the empire but with
making a profit from the useful colonies and areas that already existed. By the 1880s, however, a new spirit of populist expansionism had taken hold. The "New Imperialism," embodied by men like Chamberlain and Cecil Rhodes, was a creed of "the White Man’s Burden," of divinely inspired missions, a right and duty to dominate foreign lands and peoples as a race of natural-born rulers. This was not the old style of mercantilist empire — though the profit motive loomed large in its manifestation and its rhetoric — but a new, proud, vulgar expression of British ambitions.

Not surprisingly, Britain had few friends. Her European neighbors generally envied British wealth, disliked British boastfulness, and, if they laughed at the small size of her army, had a healthy respect for the might of the Royal Navy. Relations with the French were built upon an ancient rivalry, and threats of an invasion by Napoleon III in the '50s and '60s; and the Fashoda Incident of 1898 almost brought the two to war. Relations were worse yet with the Russians, for the "Great Game" of intrigue and exploration over the northern gateways to India was in full swing. Germany was increasingly seen as an economic threat, as her industry grew in leaps and bounds. The new Kaiser, Wilhelm II, was prone to making grandiose and excitable comments that worried his great-aunt Victoria and her government. Land-locked Austria-Hungary was of minor concern to British interests, while the minor nations — Italy, Spain, Portugal and Turkey — were treated with a cavalier mixture of patronizing goodwill and callous disregard. The only nation which seemed to be growing closer to Britain was the United States, where people spoke most of the same language and claimed an Anglo-Saxon heritage.

Victorian Values

Victorian Society was characterized by strong adherence to a widely accepted set of values, through which many of the actions of the British government and her citizens can be explained. Each value tended to produce both virtues and vices; sometimes, paradoxically, at the same time and in the same
person. All that was best and all that was worst about Victorian society lay in these virtues and vices (see chart).

At his best the Victorian Englishman combined a boyish zest for hard work and adventure with tremendous personal courage and integrity. At his worst he was smug, prudish, half-witted, hostile to everything alien to his race and class, and pointlessly obsessed with sporting activities. The difficulty for outsiders was that very often all these attributes, positive and negative, could be found in the same individual. Add to this mixture the frequent eccentricities cultivated by Victorians, and one might meet a particularly “rum character” or “queer fish,” a fellow whose obvious virtues were somehow counterbalanced by strange or unattractive quirks of character.

Players should be aware that a general acceptance of and adherence to these basic values is essential to success in Victorian society at large. However, that does not mean that the characters you generate in Space 1889 are obligated to rigidly play out each and every virtue and vice appearing on the chart.

Victorian Society

British society in the 19th century was divided quite sharply into classes which determined the lives and expectations of its members. Movement between classes was not easy; it was difficult to gain acceptance when attempting to rise, and it was a shameful degradation to fall.

In descending order, as a Victorian observer might see them, the class hierarchy ran as follows:

The ROYAL FAMILY, which was at this period fairly large. Besides the queen herself, there were royal personages in key positions in society; the Prince of Wales was the leader of the London “fast set” of bon viveurs, while the Queen’s cousin, the Duke of Cambridge, was commander-in-chief of the army.

The ARISTOCRACY was the elite of British society in terms of wealth, prestige and power. Hunting, elegant parties, winters in France, afternoon drives and dinner at the Carlton or the Turf club; these were the pursuits of a leisured class, a class whose wealth, though based in rolling acres of prime farmland, allowed them to live wherever and however they chose. The real aristocracy — as opposed to the county squires of Berkshire and Kent — consisted only of some 200 families, and those born to rule usually knew one another
from childhood. A man was expected to be a leader. Women were luxuriously cloistered and bargained away in marriages every bit as arranged as those of India; their educations were limited to music, art, and the conduct befitting a lady.

The GENTRY were the poor relations of the aristocracy. They were not dukes or earls, though some might carry minor peerages or baronetcies, often of very ancient lineage indeed. In education and attitudes they were much like the higher nobility, but with lesser expectations, assumptions, and, of course, bank accounts. Their traditional offices of government were those ancient county appointments—magistrates and sheriffs rather than ambassadors and ministers. Likewise, their career paths were the same restricted avenues—estate management, the church, the armed and diplomatic services, and perhaps law. The country gentry had strong ties to the land, carried traditional responsibilities seriously, were stable and honest, and retained tremendous respect in their communities—far greater than any self-made man could ever expect. The country gentlemen could be expected to be a model Englishman, courteous and dutiful.

Below the “quality” of the shires was a group that has received little recognition as a class but which would contribute its sons to the service of the Empire in large numbers. These were the country doctors, parsons, lawyers, and the better-off type of landholding or tenant farmer. Their traditional roles were as supporters of the gentry and the old, rural-based order. Many would gravitate to the Army and Navy, or the civil services of India or Syris Major, where they would enjoy a frugal prosperity and a sense of useful position.

The URBAN MIDDLE CLASSES were the Victorians par excellence. It was the values and virtues of the urban middle class like self-help, duty, competition, and piety, that came to define the era. In their prosperous respectability the tradesmen, lawyers, manufacturers, parsons, and clerks came to dominate the tone, and many of the institutions, of British life. It was a middle-class empire, and Victoria, in her attitudes and pronouncements, was a middle-class queen. The rise of the Victorian middle class was a consequence of a burgeoning economy fueled by Britain’s industrial and commercial dominance in world affairs. The Middle-class man tended to look down on the workers, who were so clearly morally inferior in their drunkenness, poverty, and savage
amusements, and when he had contact with the poor, it was often with the plan of educating and improving them in his own likeness.

The MIDDLE CLASS was not adventurous in spirit. Caution, planning, thrift, and profit were the watchwords. The middle class provided the traders, the professional men, the engineers, and the senior clerks.

The WORKING CLASSES of the cities fell into several categories. At the top were the craftsmen, the “artisans,” who with careful budgeting, good health, and 12-hour shifts could attain a modest prosperity and adopt some of the comforts and values of the middle class.

Below this comfortable working class came the poor. They made up the largest group of urban Britons, yet they were unrecognized in any form other than a narrow and unfair stereotype. The myth saw the poor as immoral, drunken, and shiftless. In truth, since they were overcrowded in tiny, dark, cold rooms, and grossly underpaid for their labor, they had every reason to fit this image. The harsh life of bad food, “cruel habitations,” work that was back-breaking in effort and seldom steady, meant that the city poor were stunted and malnourished.

The RURAL LABORERS were, perhaps, the poorest of all. The green fields might not run rife with pickpockets and beggars, but there was little hope for the comfortable life of an established town artisan. Many countrymen made their way to the towns in the hope that, since employers liked the “thick-set, red-faced men of enormous strength” from the shires, they might find success.

The urge to escape rural poverty was strong, and country-born people could be found at the ends of the Earth and beyond — as soldiers and sailors, domestics, horse handlers, blacksmiths, and any position that honest labor and a strong back could take on.

The Army

Britain did not have much of an army by the standards of continental Europe. It did not help that the British Army had no permanent tactical organization of brigades, divisions, and army corps; nor did it have a General Staff on the Prussian model. It was a very old-fashioned army; a German military attache reported, “It is excellent for fighting savages, just as ours is excellent for fighting the French.” Indeed, the British
Army was a superb instrument for small-scale operations against irregular opponents. It was at this regimental level that the British Army was unequalled, which served rather to mask the manifest inadequacies of officer training, staff work, tactical theory and logistical support.

The Combat Arms

Modern training emphasized dismounted action with carbines, mounted scouting, and pursuit of a beaten foe as the work of the cavalry; but natural conservatism, success against spear-armed opponents, and a belief in the virtues of the "arme blanche" meant that cavalrymen, even the highly experienced Indian regiments, still looked for a chance for the knee-to-knee charge with sword and lance.

Gunners and engineers were, as groups, the most modern and professional elements in the British Army. With rifled guns — some muzzle-loading, others breech-loading — and with balloon detachments, railway companies, telegraph crews, and steam traction engines, the technical services looked forward to the 20th century rather than backward to a glorious martial past.

Women In The Victorian Era

The traditional picture of Victorian womanhood presents an image of frailty and timidity — an oppressed group rigidly corseted into a sternly-respectable second place to the male. There were, however, women unwilling to bow to convention, and many more whose outward genteel graces concealed a spirit of strength, vision, and adventure.

IV. Introduction To The Game Scenario

In Space 1889, you will create five characters, male or female, from among six attributes and 24 skills (see Characters and Character Generation). After your characters are generated you will be asked to choose the leader of your group. The introductory sequence of the game will be centered around that character.

The scenario begins at a reception in a London museum, where an exhibit of recently discovered Egyptian artifacts is about to be presented. Archaeological expeditions in Egypt are often occurring. Several tombs have been discovered, but the tomb of King Tutankhamen, rumored to be filled with priceless objects, remains hidden in the desert sands. Every notable in the fields of anthropology and archaeology are at this gala, black tie affair. Wealthy, upper class members of
society are also present. You (your lead character) have been invited to the exhibit opening, as well. Upon arriving at the museum you are surprised, and happy, to see four friends (the other members of your party) who worked with you on archaeological expeditions in the past. The joyous reunion sparks reminiscent stories of adventure and excitement It has been several years since you worked together, but the comradeship still exists.

Later in the evening, you overhear a conversation between two men. They are discussing a proposed expedition to the Valley of the Kings in Egypt. Apparently, the location of King Tut’s tomb has been discovered. One of the men is holding a report outlining the proposed expedition, to be funded and carried out by the Germans. After their discussion the two men leave the reception. You present the idea of undertaking a journey to Egypt in search of Tut’s hidden treasures. Your friends eagerly accept. Whether it’s the excitement of viewing the Egyptian artifacts in the museum, or the need for excitement and intrigue, your group of adventurers is back in business.

Your adventure begins as your party leaves the museum reception in search of the elusive man who has the report outlining the proposed German expedition. Before anything else, you have to get that report. So begins an epic journey that will carry you across the world: from the scorching deserts of Egypt to the mysteries of the Far East. Your adventures may also lead you to the mysterious realm of outer space, where you will travel to the dark caverns of the moon, the deserts of Mars, the swamps of Venus and the lush valleys of Mercury’s Twilight Zone in search of the answer to the greatest mystery of all time.
An exciting aspect of Space 1889 is its unique character
and career generation system. You will be responsible for
determining a character’s strengths and weaknesses by
choosing a set of basic ability scores you wish to develop.
Further, once you develop a character, you will be able to
select his career. You can also personally create new careers
for your characters.

This approach differs from other computer role-playing
adventures, which assign characters a set of initial attribute
scores that can’t be changed. For example, if you want one of
your characters to be physically strong and agile, you can
keep generating basic ability scores until the character has
high numbers for STRENGTH and AGILITY. On the other
hand, if you desire a character with a keen mental edge, you
can choose a basic set of ability scores that include high
INTELLECT and SOCIAL LEVEL numbers. The Space
1889 character and career generator is simple to use, but
detailed enough to let you mold your characters into
 likenesses of your choosing. This is extremely important in a
role-playing environment because your characters will grow
to mean more to you than just a computer graphic with a
name. Other computer role-playing games offer little control
over the development of characters and their careers, thus
making it difficult to fashion a character that is truly your
alter-ego.

The character generation process was designed for ease of
use and enjoyability. In your spare time, you may want to
generate characters and add them to your character pool. If
one of Your characters perishes during game play, you will be
able to replace fallen members of your party with one of the
auxiliary characters from your character pool. It’s not
mandatory to generate extra characters; the character pool
will already have several pre-generated characters from
which to choose. If you do not want to generate your own
characters at all, you can choose pre-generated characters and get right into the game!

I. Selecting From Lists

Throughout the character and career generation process, you will be asked to select an option from a list shown. You will notice a blinking box surrounding the first option you can select. Use the keyboard, joystick or mouse (your technical supplement provides additional information on which peripherals may be used in your version of the game) to move the box to the option you wish to select. Press the return, joystick button or left mouse button to make the selection. To abort selecting, press either the Escape key or the right mouse button.

II. Character Pool and Party Organization - Main Menu Options

The MAIN MENU in the character generation program allows you to control your character pool and organize your party of characters. The options and their descriptions are as follows:

1. Add Character to Character Pool
   This option takes you to the CHARACTER MENU where you can create a new character. A maximum of twenty characters can be created and saved in the character pool.

2. Remove Character From Character Pool
   This option allows you to permanently delete characters from your character pool. After selecting this option, you are asked which character you wish to delete.

3. Add Character To Party
   This option lets you select characters for your party from the character pool. After you've selected a character, he is moved from the character pool to your party.

4. Remove Character From Party
   To remove a specific character from your party, select this option. The character you choose is removed from your party and moved to the character pool.

5. Load Party
   You can load a previously saved party for reordering or adding more players. When this option is selected, you are asked from which drive you wish to load the party. Choose a drive from the list shown. After you make your selection, a
list of all the saved parties on that drive will be loaded. When you select a party from the list shown, it is loaded into memory.

6. Save Party

This option allows you to save the current party to a file that you choose. You are asked which drive you wish to save the party to. Select a drive from the list shown. After you make a selection, you are asked to enter an eight character file name for the party. If the file already exists on the specified drive, you are asked if you wish to overwrite it. Otherwise, the party is saved on the drive under the file name you have given.

7. Save Character Pool

It is recommended that you save the character pool often if you are generating many characters. Selecting this option saves the character pool to the current drive.

8. View Character

This option allows you to view a previously created player. Select a character from the party or character pool list shown. The character information sheet appears, containing a picture of the character as well as his attributes, skills, health, wealth, and careers.

9. Create Careers

You can create and modify your own careers for your characters using this option. See Career Generation for a more detailed description of this process.

10. Exit Program

By selecting this option, you leave the character and career generation program.

III. Character Creation - Character Menu Options

To generate characters, you must select “Add Character to Character Pool” from the MAIN MENU. The CHARACTER MENU then appears. Using the CHARACTER MENU options, you can begin to create and save characters for use in the game. The options and their descriptions are as follows

1. Generate Character Attributes

By selecting this option, you take the first basic steps to defining, describing and creating your characters. First, you are asked if the character is male or female. After you make
your selection, you are asked to give your character a **name**. The name can be up to **12** characters long.

**Next**, the computer randomly generates basic attribute levels for the character (based on a roll of dice). Attributes are a measure of your character’s basic **physical**, intellectual and social qualities in comparison with those of other characters existing within the time **frame** of the **game**. In Space **1889**, there are six such **attributes**: STRENGTH, INTELLECT, AGILITY, CHARISMA, ENDURANCE and SOCIAL LEVEL. A description of the basic character **attributes**, and the various skills your characters can possess can be found in the section Attributes and Skills. Alongside each basic attribute is a number indicating your character’s proficiency in that **attribute**. The numbers range from **1** (the lowest level) to **6** (the highest level). If you do not want to develop a character with the basic attributes scores that have been **generated**, the computer will continue to randomly generate new attribute scores until you accept a basic set worth **developing**. **Last**, you are asked to pick a face for your character from five choices shown on the **screen**.

The **first** skill under each attribute heading will be started at a score one less than the attribute level itself. For example, if your character has a STRENGTH attribute of **6**, his Fisticuffs skill level (**the first** skill listed under **STRENGTH**) is **5** (**6-1**). Therefore, your character is extremely strong and skilled in the use of his **fists**. **Also**, the character’s Throwing skill is one half the **STRENGTH** attribute. Once again, this is explained in more detail in the section **Attributes and Skills**.

**2. Select Character’s Career(s)**

After selecting a set of basic attributes for your **character**, you must choose at least one career in which you wish your character to **excel**. An overview of the **careers** you can **choose**, and the basic attributes and skills your characters must possess to select **careers**, can be found in the section **Careers**.

When this menu option is **selected**, a window appears in the center of the **screen**. The information in the window is **coded** as **such**:

1) All career **headings** are centered and displayed in YELLOW.

2) All careers that you can select (based on your **attributes**) are displayed in WHITE.

3) All careers that you can’t choose (based on your **attributes**) are displayed in **BLACK**.
attributes) are displayed in GRAY.

Joystick Users: Use the up and down joystick positions to scroll through the list. Press the fire button to select the career of your choice.

Mouse Users: There are two arrows displayed in the bottom corners of the window. Pressing the left mouse button on either of the arrows scrolls the careers one at a time, in a direction corresponding to the arrow pressed. Pressing the right mouse button on the up arrow scrolls the selections to the first career at the top of the screen. Likewise, pressing the right mouse button on the down arrow scrolls the page down to the next career list. Mouse users can also move the arrow inside the window and click on one of the careers. That career will now be highlighted. If the career was already highlighted, the character gets the career — if attributes and skills permit.

Keyboard: All game players can use the keyboard. Use the arrow keys to move the highlight up and down. Use the PgUp and PgDn keys to move the box to the next career at the top or bottom of a new career list, respectively. Use the Home and End keys to move to the beginning and end of the career list. Press the Return key to select the highlighted tamer choice.

Note: Some careers may be undertaken only by males, while others are exclusively for females. Males are not permitted to enter a female-only career; but females, depending on their AGILITY and INTELLECT attribute levels, may pass themselves off as males and embark on a male-only career.

3. Buy Extra Skill Points

Depending on the number of tamers you choose, and your SOCIAL STANDING, you are given a number of general skill points that can be used to increase the skill levels your character already possesses. A detailed description of this process can be found in the section General Skill Points. The maximum number of general skill points, and the amount of general skill points needed for each increase in skill level, is displayed in a window above the skill list. Use the cursor keys, joystick or mouse to select the desired skill. Press the Return key, joystick button, or left mouse button to increase that skill by one. Press the Escape key or the right mouse button to escape out of this option.

4. Redo Character

If, after developing a character, you don’t want to include
him in your character pool or party, you can delete him using this menu option.

5. Return to Main Menu

This option takes you back to the MAIN MENU. If you have successfully created a character, he will be added to the character pool.

IV. Attributes and Skills

Attributes

Character attributes are divided into two main types: physical and psychological. Physical attributes are STRENGTH (STR), AGILITY (AGL), and ENDURANCE (END). Psychological attributes are INTELLECT (INT), CHARISMA (CHR), and SOCIAL LEVEL (SOC). Each attribute is defined by a number from 1 to 6, with the higher numbers representing greater proficiency. In the case of SOCIAL LEVEL, the number defines a specific social class to which the character belongs, as shown below.

<table>
<thead>
<tr>
<th>SOCIAL LEVEL</th>
<th>Attribute</th>
<th>Social Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>STR: 6</td>
<td>Aristocracy</td>
</tr>
<tr>
<td>5</td>
<td>INT: 2</td>
<td>Wealthy Gentry</td>
</tr>
<tr>
<td>4</td>
<td>AGL: 3</td>
<td>Gentry</td>
</tr>
<tr>
<td>3</td>
<td>CHR: 4</td>
<td>Middle Class</td>
</tr>
<tr>
<td>2</td>
<td>END: 1</td>
<td>Tradesman</td>
</tr>
<tr>
<td>1</td>
<td>SOC: 5</td>
<td>Working Class</td>
</tr>
</tbody>
</table>

Note - Definitions for each social class are contained in the Victorian Society section of the manual introduction.

Let’s say, for example, that Sean O’Connery has the following attributes:

<table>
<thead>
<tr>
<th>Physical</th>
<th>Psychological</th>
</tr>
</thead>
<tbody>
<tr>
<td>STR: 6</td>
<td>INT: 2</td>
</tr>
<tr>
<td>AGL: 3</td>
<td>CHR: 4</td>
</tr>
<tr>
<td>END: 1</td>
<td>SOC: 5</td>
</tr>
</tbody>
</table>

Sean’s STRENGTH attribute of 6 makes him a remarkably strong man, perhaps the strongest in Europe. His AGILITY is average, but his ENDURANCE is very low. He has below-average INTELLECT but sufficient CHARISMA to make him a likable, agreeable fellow. His SOCIAL LEVEL of 5 indicates that he is from the wealthy gentry.

Skills

The game includes 24 principal skills, divided into six
groups of four each, and each group is associated with a particular attribute. These skills are listed in the Attributes and Skills Chart on the following page.

**Explanation of Skills**

**STRENGTH-Based Skills**

**Fisticuffs**  The ability to hit an opponent with fist or foot and cause pain or injury, and also the ability to hold and restrain an opponent or, conversely, to struggle free from an opponent’s grasp. Fisticuffs skill would be used in any situation where a character attempts to subdue or silence an opponent with a blow, wrestle someone to the ground, or fight off an attacker.

**Throwing**  The ability to hurl objects accurately. As a weapons skill this is used as the equivalent of Marksmanship with any thrown weapon (spear, knife, hatchet etc.). It is also used to determine success when hurling grappling hooks, heavy lines, rocks, grenades, etc.

**Close Combat**  This skill defines a character’s ability to keep his head in situations of mortal danger and use a weapon effectively. The primary emphasis of close combat is on bashing weapons, edged weapons, or pole arms. Whenever a character attempts to use any weapon in close combat, whether a firearm or melee weapon, the Close Combat skill is used
to determine success.

**Trimsman**

Trimsman skill is the ability to maintain a liftwood vessel in proper, level trim. Liftwood vessels are supported by many individual liftwood panels, arranged much like Venetian blinds, which provide varying amounts of lift depending on their angle toward the surface of the planet. The exacting task of maintaining trim requires almost constant adjustment of the individual panels. The focus of the Trimsman skill is on cloudships or interplanetary ether flyers.

**AGILITY-Based Skills**

**stealth**

Stealth is the ability to move silently and avoid detection. This skill is used to determine the character’s ability to sneak upon guards, creep past enemy outposts or sleeping animals, lurk in shadows and dark alleys, etc.

**Marksmanship**

Marksmanship indicates the character’s ability to hit a distant target with a firearm or bow. The emphasis of the Marksmanship skill is on pistols, rifles (including carbines and shotguns), and bows.

**Mechanics**

The ability to construct, operate, and repair machines. The prime emphasis is on steam engines, electrical devices, or skill with precision machinery.

**Crime**

Crime skill covers a familiarity with one or more of a variety of illegal practices. The primary emphasis is on forgery, lockpicking, and pickpocketing.

**ENDURANCE-Based Skills**

**Wilderness Travel**

Wilderness Travel is the ability to travel across uncharted and hostile country — an essential skill for
explorers and adventurers. The primary emphasis is on mountaineering, foraging, and map making.

**Fieldcraft**
The ability to judge the lay of the ground and use its potential to the fullest. Fieldcraft skill determines the ability of a character to move silently through the woods, use the lay of the land to move under cover and unobserved, and take up covered positions with good fields of fire in combat.

**Tracking**
Tracking is the ability to detect and follow the trail of a man or an animal. This is particularly important for hunters, but is also useful if pursuing a fleeing enemy.

**Swimming**
The ability to avoid drowning without use of flotation devices.

**INTELLECT-Based Skills**

**Observation**
The ability to notice things. This skill defines the ability of a detective to notice clues or items out of place, the ability of a soldier to notice an enemy ambush or signs of enemy movement, the ability of a scientist to notice an unusual rock formation or the skeleton of an extinct animal, etc.

**Engineering**
The ability to design and supervise the building of structures. The primary emphasis is on structural engineering (bridges, roads, dams, and buildings), naval architecture (the design of nautical and aerial vessels), explosives (the use of dynamite and gunpowder to move earth and rock or destroy structures), or earthworks (the construction of military fortifications).

**Science**
The Science skill covers a familiarity with the basic laws of science and the body of scientific knowledge. Primary emphasis is on Physics, Chemistry,
Character and Career Generation

**Biology, Geology, Archaeology, or Astronomy.**

**Gunnery**  The ability to man and direct the fire of large weapons including muzzle-loading cannons (such as the Martians use), breech-loading cannons (of the modern European type), machineguns (including rotating cannons of the Hotchkiss type), and exotic weapons such as the Smuts Discharger.

**CHARISMA-Based Skills**

**Eloquence**  Eloquence is the ability to convince non-player characters (NPCs) to go along with your ideas. This is particularly important when trying to convince a financier to fund an expedition, or a bureaucrat to issue a special permit.

**Theatrics**  The ability to play a role convincingly is covered by Theatrics skill. This skill defines the ability of a character to fool NPCs when impersonating someone else, or the ability to tell convincing lies. It is also used when preparing a successful disguise.

**Bargaining**  The ability to effectively negotiate. This determines the ability of a character to get the best possible price when buying or selling an item, the ability of diplomatic personnel to negotiate with foreign officials, etc.

**Linguistics**  Linguistics is the ability to learn, understand, read and speak foreign languages.

**SOCIAL LEVEL-Based Skills**

**Riding**  Riding skill is the ability to control animals while riding them. This skill’s primary emphasis is on riding the terrestrial horse, the Martian gashant and flying skrill, or the Venusian pacyosaurus.
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Piloting  The ability to steer a vessel. While a skill level of 1 or greater is sufficient to operate a vessel, higher skill levels are useful in avoiding crashes in hazardous situations. Higher skill levels are also necessary to attempt and survive difficult maneuvers. Primary emphasis is on aerial flyers, Martian cloudships, Zeppelins, interplanetary ether flyers, nautical sailing vessels, and desert vessels.

Leadership  Leadership is the ability to project a forceful, commanding presence. This skill is used to determine a character's success in rallying demoralized troops, recruiting followers from NPCs, facing down brigands or thugs, and so forth.

Medicine  A knowledge of medicine and the ability to administer care to wounded and ill characters is covered by this skill. Medicine skill determines the chance of successful recovery by a patient and the length of time that a specific recovery will take.

V. Careers

A character may have one career and six general skill points, or two careers and two general skill points. If your character has two careers, they are referred to as his first and second career.

Career Selection

Each career lists a prerequisite for entry (or the notation “no prerequisite”). For example, the merchant career listing reads SOC 4-, CHR 3+. Thus, the prerequisite for being a merchant is a SOCIAL LEVEL of 4 or less and a CHARISMA level of 3 or higher.

There are several limitations on career entry, which are explained below.

Male Only  These are government positions from which women are barred by policy. Female characters may attempt to enter such careers, but only by successfully impersonating a man,
which was done in this time period with surprising regularity (one woman disguised as such actually rose to the position of cabinet minister in Canada).

Female Only The Adventuress career is open only to women.

Criminal careers The Master Criminal career may only be selected as a second career. Other Criminal careers may be selected as first careers; but, if so, then the only second careers possible are other Criminal careers: the Army, Actor, or Adventuress.

Career Skills
A career provides a character with a number of skills. The career usually provides seven skill points, distributed among a variety of different skills. A few of the more difficult or selective careers provide more skill points. For example, the Merchant career skill listing is Bargaining 3, Eloquence 1, Linguistics 1, Leadership 2. Those skill levels are received or added to skills already acquired.

Second Career
A second career may be a repeat of the first career or it may be an entirely new career.

General Skill Points
General skill points are used to increase your character’s skill levels. Each skill level increased in an area with an associated attribute level of 5 or 6 costs one-half general skill point. Each skill level increased in an area with an associated attribute of 3 or 4 costs one general skill point. Each skill level increased in an area with an associated attribute level of 1 or 2 costs two general skill points.

No character may have a skill level greater than his associated attribute level (although career skills may cause the skill level to be higher than the associated attribute). No character may buy an increase in Close Combat skill greater than one above his career-generated level.

Wealth
All characters begin the game with a “fortune” or life’s savings. This represents the money they have accumulated or
inherited and which is available to bankroll any expedition they may undertake. The aristocracy and wealthy gentry have an annual income or allowance from their family or income-producing lands, and their initial fortune represents the first year’s installment of this income. Each year in the game they receive additional money.

The amount of the initial fortune is determined by the computer and is based on your character’s attributes, careers and SOCIAL LEVEL. In all cases the resulting amount of money is in pounds sterling. If your character chose a career as either a Merchant, Adventuress, or Criminal, the computer multiplies your starting fortune by an additional 10. If your character’s second career was Master Criminal, the starting fortune is multiplied by an additional 50.

**Income**

Characters with a SOCIAL LEVEL of 5 or 6 receive an annual income equal to their initial fortune. This is paid in 12 equal monthly installments and represents the income from their estates.

Characters who are in government service receive a monthly salary. For characters in the military, this salary is entirely consumed by pay stoppages for lodging and equipment, mess bills and so forth. For game purposes they have no income, but are supported by the service. Officials of the Foreign Office and the Colonial Office receive a salary of 40 pounds sterling per month. At the end of every 30 days, your character’s incomes will be automatically deposited into your party account.

**Career Listings**

The career or careers chosen by a player determines the sorts of skills available to his character.

**Part 1-Government Careers**

**ARMY**

Male only. No prerequisite.

SOC1: Private soldier, any branch — Close Combat 1, Swimming 1, Marksmanship 1, Bargaining 1.

SOC2: Noncommissioned officer — Close Combat 1, Swimming 1, Marksmanship 1, Leadership 1.

SOC3, 4: Officer, native regiment or technical branch — Leadership 2,
Marksmanship 1, Close Combat 1.

**SOC 5, 6: Officer**, fashionable infantry or cavalry regiment — Leadership 2, Marksmanship 1, Close Combat 1, Linguistics 1, Riding 1, Eloquence 1.

**NAVY** Male only. No prerequisite.

**SOC 1**: ordinary Seaman —
Swimming 1, Gunnery 1, Mechanics 1, Close Combat 1, Marksmanship 1, Trimsman 1, Riding 1.

**SOC 2**: Petty Officer — Swimming 1, Gunnery 1, Mechanics 1, Leadership 1, Close Combat 1, Marksmanship 1, Piloting 1.

**SOC 3, 4**: Engineering officer —
Leadership 1, Mechanics 2, Science 1, Close Combat 1, Marksmanship 1, Piloting 1.

**SOC 5, 6**: Line officer — Leadership 2, Close Combat 1, Piloting 1, Observation 1, Gunnery 2.

**FOREIGN OFFICE (AGENT)**

*Prerequisite*: **INT** 4+.

Linguistics 2, Crime 2, Theatrics 2, Observation 1.

**FOREIGN OFFICE (DIPLOMAT)** Male Only. 

*Prerequisites*: **SOC** 3+, **INT** 4+.

Bargaining 2, Linguistics 3, Eloquence 1, Observation 1.

**COLONIAL OFFICE**

*Male only. Prerequisite*: **SOC** 4+.

Bargaining 1, Linguistics 2, Eloquence 1, Observation 1, Theatrics 1, Marksmanship 1.

**Part 2 - Exotic Careers**

**BIG GAME HUNTER**

*Prerequisites*: **AGL** 4+, **END** 5+.

Wilderness Travel 1, Fieldcraft 1 Tracking 2, Marksmanship 2, Linguistics 1.
EXPLORER  Prerequisites: END 5+, STR 2+.
Wilderness Travel 2, Fieldcraft 1, Marksmanship 1, Linguistics 2,
Leadership 1, Swimming 1.

DILETTANTE TRAVELLER  Prerequisite: SOC 5+.
Linguistics 3, Pilot 1, Science 1, Wilderness Travel 1, Marksmanship 1,
Swimming 1.

ADVENTURESS  Female only. Prerequisites: INT 4+, CHR 5+.
Close Combat 1, Marksmanship 1, Linguistics 2, Theatrics 2, Eloquence 1,
Crime 1, Leadership 1.

REPORTER  Prerequisites: INT 4+, CHR 4+.
Observation 1, Theatrics 2, Eloquence 1, Linguistics 2, Wilderness Travel 1.

Part 3 — Service Careers

ACTOR  Prerequisites: SOC 4-, CHR 5+.
Theatrics 3, Eloquence 1, Linguistics 2, Leadership 1.

PERSONAL SERVANT  Prerequisites: SOC 3-, CHR 4+.
Close Combat 1, Linguistics 2, Bargaining 1, Medicine 1, Riding 1,
Observation 1.

TUTOR/ GOVERNESS  Prerequisites: SOC 2, 3 or 4, INT 5+.
Science 2, Linguistics 2, Eloquence 1, Theatrics 1, Leadership 1, Medicine 1.

GROUNDSC- KEEPER  Prerequisites: SOC 3-, END 4+.
Marksmanship 1, Wilderness Travel 1, Tracking 2, Fieldcraft 3.

Part 4 — Mercantile Careers

INVENTOR  Prerequisites: INT 4+, AGL 3+.
Science 2, Engineering 2, Mechanics 2.
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**MERCHANT**
*Prerequisites: SOC 4-, CHR 4+.*
Bargaining 3, Eloquence 1, Linguistics 1, Leadership 2.

**MECHANIC**
*Prerequisites: SOC 3-, AGL 4+.*
Mechanics 3, Engineering 1, Science 1, Observation 1, Bargaining 1.

**ENGINEER**
*Prerequisites: SOC 4-, INT 4+.*
Engineering 2, Mechanics 2, Science 1, Observation 1.

**SEAMAN**
*Prerequisites: SOC 3-, STR 3+.*
Fisticuffs 1, Throwing 1, Swimming 1, Linguistics 2, Piloting 1, Observation 1.

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**Part 5 — Professional Careers**

**DETECTIVE**
*Prerequisites: SOC 3+, INT 5+.*
Close Combat 1, Science 2, Crime 2, Theatrics 1, Tracking 2, Medicine 1.

**DOCTOR**
*Prerequisites: SOC 3 or 4, INT 4+.*
Science 2, Medicine 3, Observation 1, Linguistics 1.

**SCIENTIST**
*Prerequisites: SOC 4+, INT 5+.*
Science 3, Engineering 1, Observation 1, Linguistics 2.

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**Part 6 — Criminal Careers**

**MASTER CRIMINAL**
*Second career only. Prerequisite: INT 6.*
Crime 2, Science 1, Close Combat 1, Marksmanship 1, Theatrics 1, Linguistics 1, Leadership 2, Medicine 1.

**POACHER**
*Prerequisites: SOC 3-, AGL 4+.*
Marksmanship 1, Close Combat 1, Fieldcraft 2, Tracking 2, Crime 1.

**SMUGGLER**
*Prerequisites: END 4+, AGL 4+.*
Close Combat 1, Piloting 1, Crime 2, Linguistics 1, Bargaining 1, Swimming 1.

**THIEF**
*Prerequisites: SOC 3-, AGL 5+.*
Close Combat 1, Stealth 1, Crime 2, Theatrics 2, Eloquence 1.

ANARCHIST \textit{Prerequisites: SOC 3-, AGL 5+}.  
Crime 2, Close Combat 1, Eloquence 1, Engineering 1, Theatrics 1, Linguistics 1.

VI. Career Generation

To create your own careers for use in the \textit{game}, you must select \textit{“Create Careers”} from the \textit{MAIN MENU}. When this option is \textit{selected}, the \textit{CAREER MENU} appears. Using the \textit{CAREER MENU} \textit{options}, you can begin generating your own \textit{careers}. The \textit{CAREER MENU} \textit{options} are as \textit{follows}:

1. \textit{Create New Career}.

This option allows you to create a new career of your \textit{choice}. You can create up to ten extra careers to add to the 40 that already \textit{exist}. You cannot \textit{delete}, view or change any of the 40 existing careers that came with the \textit{game}. However, you can \textit{delete}, view or change any of the ten careers you \textit{generate}. These careers will appear in a list at the bottom left corner of the \textit{screen}.

After selecting this menu \textit{option}, the bottom part of the \textit{screen} is replaced with the career \textit{information sheet}, which provides the name of the career as well as the attribute and skill levels associated with it. You \textit{will} enter this career \textit{information}. The following example uses a new career of Desperado (taken from \textit{CHALLENGE MAGAZINE, The Magazine of Science-Fiction Gaming from GD W GAMES, issue 43, page 41.}) The career information would be entered as \textit{follows}:

\textbf{A. Career Name}

This is the name you will give the \textit{career}. This is also the \textit{name} that will appear in the career list when \textit{“Select Character’s Career(s)”} is chosen from the \textit{CHARACTER MENU} during the character generation \textit{process}. The \textit{name} for this new career may be up to 30 characters \textit{long}.

For our \textit{example}, the career will be named \textit{DESPERADO}.

\textbf{B. Type}

This signifies the career heading the new career will fall \textit{under}. The options you have are:

1. Government Careers
2. Exotic Careers
3. Service Careers
4. Mercantile Careers  
5. Professional Careers  
6. Criminal Careers  

A small input window is displayed with the words  
NEXT PREVIOUS OK  
Select NEXT to go to the next career type.  
Select PREVIOUS to go to the career type listed previously.  
Select OK to accept the current career type.  

For the career DESPERADO, you would select “6. Criminal Career.”  

C. Male/Female Only  
Here, you select whether the career will be available to men only, women only, or members of either sex. The options provided are  
1. Male Only.*  
2. Female Only.  
3. Doesn’t Matter  

A small input window is displayed with the words  
NEXT PREVIOUS OK  
Select NEXT to go to the next option.  
Select PREVIOUS to go to the option listed previously.  
Select OK to accept the current option.  

* Females may attempt a Male Only career. If their attributes and skills match a certain criteria, they may succeed.  

The DESPERADO career can have either sex.  

D. Prerequisite 1 and Prerequisite 2  
These two options specify the initial criteria for choosing a career. A character who does not meet the required criteria cannot excel in this career. To have no prerequisites for the career, hit the Escape key on both options. Otherwise, from the menu, you can form an equation. The first part of the equation can be one of the following attributes:  
1. STRENGTH  
2. AGILITY  
3. ENDURANCE  
4. INTELLECT  
5. CHARISMA  
6. SOCIAL STATUS  

Choose the attribute you wish to declare as a prerequisite for the career by pressing the Enter key, joystick button or
Character and Career Generation

left mouse button when that attribute is highlighted.

Next, you must determine whether you want the required scorn for that attribute to be less than or equal to, equal to, or greater than or equal to the third part of the equation, which is any number from 1 to 6.

After choosing the first prerequisite, press the Escape key or the right mouse button to continue. You will then be asked to enter the second prerequisite. If you wish to have no other prerequisite, just press the Escape key or the right mouse button.

For DESPERADO, there is only one prerequisite:

SOCIAL STATUS \leq 3.

E. Skill Listing

After you’ve entered all the above information, you can specify the skill levels for the new career. You have a total of ten skill points to spread out among all 24 skills. You cannot award more than three skill levels per skill (so you can’t create a career that bestows a Science skill level of 6, for instance).

To increment a skill, move the highlight to the skill and press the + or left mouse button.

To decrement a skill, move the highlight to the skill and press the - or right mouse button.

To continue, press the Escape key. It is not necessary to use all ten skill levels during the creation of a career.

For DESPERADO, you want to set the following skills values:

Riding -2 Fieldcraft -1 Marksmanship -2

Close Combat -2.

Following this step, you will return to the CAREER MENU. The new career you have just generated (DESPERADO) is added to the career list that appears when “Get Character’s Career(s)” is selected from the CHARACTER MENU.

2. Delete A Career

This option allows you to delete any career currently in your career list. Scroll through the list of careers to select the one(s) you want to delete. Again, you may only delete careers you have created, not any of those that came with the game.

3. View A Career

This option permits you to view a previously created career. Scroll through the career list to select those you wish to view. The career information sheet is displayed with all
information pertaining to the attributes and skills for the career.

4. **Save Careers**

It is recommended that you save your career list often if you are generating new careers. Selecting this option saves the career list to the current drive.

5. **Return To Main Menu**

This option returns you to the MAIN MENU. If you have successfully created careers, they will appear in the career list the next time you create a character.

**VII. Character and Career Generation Summary**

Here is a breakdown of the character and career generation process.

1. The character’s sex is chosen.
2. A name is given to the character.
3. A basic set of attributes are generated by the computer for the character. The attributes can be re-generated until a desired set is displayed.
4. The character’s face is selected for game play.
5. One or two careers are chosen for the character (you can create up to ten new careers to add to the 40 existing careers).
6. You can increase the basic skills for that character.
7. Once the character is fully developed, you can save him to the character pool or regenerate his information.
I. Introduction

Throughout your adventures in Space 1889, you will visit the planets Earth, Mars, Mercury and Venus, as well as the Earth’s moon, Luna. These worlds vary from the high population and varying environments of Earth to the scorching deserts of Mars and the humid swamps of Venus. You will encounter many unique individuals on your journey; some of which will be members of alien societies. Some of these aliens include Martians, Lizard Men, Moon Men and Selenites. The characters you meet can be helpful to your adventures, or they can oppose you any way possible. As you explore planets your party may be attacked. In situations like this, you can utilize the advanced combat system in the game to plan and execute your battle strategies.

While exploring planetary surfaces, all action takes place on two game screens: the Overhead Interface Screen and the Combat Screen.

II. Overhead Interface Screen

At left is the Overhead Interface Screen that appears during Space 1889 game play. The setup of the interface and the descriptions of the screen are as follows:

A. This is a small description area. There are three different descriptions displayed in this portion of the screen. These descriptions change depending on what action you perform. The descriptions are:

1. THE CURRENT DAY. While exploring a planet, city, or building, the current day will be displayed here.
2. ITEM DESCRIPTION. When picking up, viewing, using, or dropping an
item, the name of the item is displayed in this area.

3. NAME OF A PERSON. If you talk to an inhabitant of the planet you are currently exploring, the name of that NPC (non-player character) will be displayed here.

B. This is a picture area. There are three different types of pictures that will be displayed.

1. GROUND PICTURE. This will change depending on what type of terrain you are walking on.
2. ITEM PICTURE. When picking up, viewing, using, or dropping an item, the picture of the item is displayed in this area.
3. NPC PICTURE. If you talk to an inhabitant of the planet you are currently exploring, a picture of that NPC will be displayed in this area.

C,D,E,F. These options (Choose, Up Arrow, Down Arrow, Exit) are for mouse users only. They are used when selecting an item from a list.

G. A basic description of the leader of the party is displayed in this area. The description consists of:

1. NAME. The name of the party leader.
2. GOLD. The party leader’s wealth.
3. HEALTH. The party leader’s current health and the level where the leader becomes unconscious.
4. WEAPON. The name of the party leader’s readied weapon.
5. STR, AGL, END, INT, CHR, SOC. The party leader’s STRENGTH, AGILITY, ENDURANCE, INTELLECT, CHARISMA, and SOCIAL LEVEL, respectively.

H. Here, a picture of the party leader appears. You will select pictures for your characters during the character generation process. If the character is riding a horse, a small horse’s head will appear in the upper left side of the picture. If the character is unconscious, a skull will appear in the upper right corner.

I. This area is used for three different purposes.

1. LAND MAP. When exploring a territory or city, this portion of the screen shows the party leader figure on the overhead portion of the map. During ground exploration and movement, your party is represented by one figure. During combat
sequences your party breaks into five individual figures, each with its own unique color.

2. TALKING TO AN INHABITANT. When conversing with an NPC on the planet you are exploring, all interaction takes place in this portion of the screen. Your action and the NPC's response are displayed in this area.

3. MAKING A SELECTION. When you are asked to make certain selections, such as which of your characters you want to purchase an item, a list of acceptable options is displayed here. Note: This window only shows a portion of the possible options, there may be more than can fit in the space available. Be sure to scroll to see all the options.

J. This portion of the screen is a small text message area. The messages that appear in this portion of the screen are usually warning messages detailing certain options that your character can’t perform at that time.

K. All the game play icons that can be used in the game appear in this section of the screen. Descriptions of the icons can be found in the section Game Play Icons.

III. Overhead Interface Icons

The universe of Space 1889 is interactive. You must perform certain actions to get necessary responses that will thrust you deeper and deeper into the plot of the game. You perform actions by using a series of icons located at the bottom of the Overhead Interface Screen (see the picture of the Overhead Interface Screen).

To select an icon, either position the mouse pointer over the icon you want and press the left mouse button; or press the key corresponding to the highlighted letter in the icon name.

The Overhead Interface Icons are:

TAKE. Allows you to take an object lying nearby. All objects in the game are initially displayed as brown bags. If an object can be taken, you are asked to name the character taking the object. The picture and object name appears on the left side of the screen. Select one of your characters to take the object and press the Return key. If the character you selected cannot carry the item, you will be asked to select another character. If you do not wish to keep the item that you’ve taken, press the Escape key.
Planetary Exploration and Ground Combat

DROP. Allows you to drop any item in your inventory. You are asked to name the character dropping the item. After selecting a character, a list of all the objects he is carrying is displayed. Select the object you want to drop and press the Return key; or press Esc to exit.

QUERY. Allows you to communicate with the wide range of NPCs inhabiting the Space 1889 universe. From the overhead map, position your party leader figure so that he faces the individual to whom you wish him to talk. Then select the QUERY icon. You can then talk to the individual. See Talking To The Inhabitants for a more detailed description of this process.

CURE. Allows you to cure a member of your party. First, select which character will perform the medical treatment. Next, choose the injured character who will undergo treatment. Note: Characters are healed at a rate that is based solely upon the career abilities and medical knowledge of the character performing the healing. Therefore, an unskilled character who attempts to heal a comrade may end up doing more harm than good.

ITEMS. Allows you to view the items your current party leader is carrying. After selecting this icon, the first item in the character’s inventory is displayed in the upper left side of the screen. Use the arrow keys to scroll through the list. Press the Escape key to exit.

USE. Allows you to use an item. Select the item you wish to use and press the Return key. Certain objects perform specific functions. See the section titled Objects in the Game for a more detailed description of object functions.

VIEW. Provides a description of any portion of the map that your party leader is currently facing.

STUDY. Provides a description of any object in your party leader’s inventory. Select the object you wish to study and press the Return or the Escape key to exit.

LEAD. Allows you to change your party leader. Continue pressing until the character you want to place in the lead position is displayed in the box on the left of the screen.

PARTY. Accesses the party information screen (right), identical to the one that appears during the character and career generation process. A red box highlights the character you are currently viewing.
- Use the LEFT and RIGHT Arrow keys to move to another player. Press the Escape key to exit.
- Pressing the Enter key allows you to change the lineup of your characters. A green flashing box appears. Highlight the position in the party you want the character to assume. Press Enter to place him there.
- Pressing the DOWN arrow key takes you to another screen that shows you the current character's fatigue and mental level, inventory list, and the number of days remaining in your journey, if you are traveling by boat or zeppelin. From this screen, you can press ‘G’ to GIVE an item from one character to another. A green highlight box is displayed in the first character's inventory list. Move the highlight to the object you wish to give to another character and press the Enter key; or press the Escape key to exit. Once the object is selected, a green highlight box is displayed surrounding the character faces. Highlight the character you want to receive the item and press the Return key. If the player has an open slot in his inventory list, the object is placed there.
- Press the UP arrow to return to the previous screen.

FIGHT. Initiates ground combat mode. See Ground Combat for a more detailed description of this option.

ROB. Allows you to rob an NPC inhabiting the Space 1889 universe. Position your party leader figure on the overhead map so that he faces an NPC, and select this option. If you successfully pickpocket the NPC, you may end up with a valuable object. However, you can just as easily be thrust into combat mode if the NPC realizes he is being robbed.

HUNT. You can track inhabitants and creatures on a planet by selecting this icon. After this icon is chosen, your party leader will tell you the number of paces necessary to find the nearest NPC or creature in the direction you are facing on the overhead map. The Tracking skill affects your character's ability to successfully hunt.

GAME. Provides game options including:
- SAVE: Saves the game you are currently playing.
- LOAD: Loads a saved game from disk.
- PAUSE: Pauses the game. Press any key to continue.
- QUIT: Quits the current game. You will be asked if you want to save the game first.
IV. Talking To Inhabitants

Communicating with NPCs is an important part of the Space 1889 computer adventure. There are many ways to communicate with NPCs. You can sell, buy and trade objects. Likewise, an NPC may provide you with useful information if you offer him a bribe or give him an item he deems valuable.

To communicate with an NPC, your party leader must face the NPC on the overhead map, and you must select the QUERY icon. The NPC’s picture and name appears, and the COMMUNICATION ICONS appear at the bottom of the screen.

The characters in Space 1889 can speak languages other than English. In this case, the Linguistics skill is used to determine the effectiveness of a language translation. If the translation is poor, the NPC’s message will be garbled. If an NPC does not wish to talk, try to use another player as the party leader.

Communication Icons

1. TALK. Initiates the communication process. A message from the NPC appears in the text window. The NPC may make a general statement, offer useful advice, or ask you to perform a task for him.

2. BUY. If the character is looking to sell worthwhile information or a valuable object, select the BUY icon. After selecting this icon, the following icons will appear:
   - INFO: If the NPC wishes to sell information, select this icon.
   - OBJECT: If the character wishes to sell an object, select this icon.
   - LEAVE: Returns you the regular TALK icons.

After selecting either INFO or OBJECT, additional icons will appear. They are
   - MONEY: To buy an object or information with money. After selecting this icon, you are asked which character will pay for the object or information, and which one will receive the object or information once it is bought. Next, you are asked to input the amount of money you are paying for the object or information. If you offer the NPC an acceptable sum of money (this sum of money differs for each of your characters and is based upon specific bargaining skills. Choose the character
responsible for buying wisely), your character receives the object or information. An NPC may only give you a sentence or two of information. At times, NPCs may have a lot more information up their sleeves. By allowing one of your characters with excellent Linguistics and Bargaining skills to speak for your party, you may get a little more information out of NPCs.

ITEM: To trade an item for an object or information. After the ITEM icon is selected, you are asked which of your characters will trade for the object or information, and which one will receive the object or information once the trade occurs. Next, a list of objects you can trade appears. If you offer an NPC one of your items, he may give you an object or information. As with buying information, an NPC may only tell you a brief amount of what he knows, so you must choose your party leader wisely when it comes to trading.

LEAVE: Takes you back to the BUY icons.

3. SELL. If an NPC is looking for an object, and one of your characters has it in his possession, choose the SELL icon. You are asked which one of your characters will bargain with the NPC, and which one will receive the money when the item is sold. If the NPC wants an item in your character’s possession, he will buy it for a certain amount of money (which differs for each of your characters and is based on certain bargaining skills) or an object he possesses.

4. LEAVE. Takes you back to exploration mode.

Note: NPCs in Space 1889 may have more information to share with you after a transaction occurs. It is a good idea to converse with the NPC again after you have bought, sold or traded an object or piece of information. Also, if you sold an NPC an object, and you discover a similar item later, that same NPC may buy that object, too.

V. On The Surface Of A Planet

Ground Movement

Movement on the ground is measured in days. The amount of game time devoted to each day varies depending on which portion of the game you are playing (city and building exploration, space travel etc.). The length of days in game time is shortest when you are traveling through space. On planetary surfaces, the length of a day is shorter when you are traversing the planet at large than when you are exploring a city, which in turn is shorter than when you are inside a
In general, the greater the amount of territory you are trying to explore, the shorter the amount of game time allotted for each single day. In combat mode, time freezes until the combat sequence is over.

Fatigue

At the end of each day, a fatigue factor is determined for each of your characters. This fatigue level varies from character to character depending on the weight a character is carrying in items, the amount of food your party has, whether a character is riding a horse, and his ENDURANCE level. If the fatigue level is equal to, or greater than, a character’s STRENGTH, AGILITY or ENDURANCE, the character becomes unconscious. Rest and food are the only remedies for fatigue.

Rest

In order to rest, you must discover an Inn or pitch a tent. You must have a tent in your inventory in order to pitch one. After proper rest, the fatigue level for each one of your characters is reduced to zero and the day is increased by one.

Food

Each player eats two meals per day. Food can be purchased at a market. Food adds nothing to the weight of a character or your party as a whole. If your party runs out of food, each of your characters becomes more susceptible to fatigue.

VI. Ground Combat

Although character interaction is the most important part of Space 1889, there are times when you need to battle enemies or deadly creatures.

The combat system is designed so that you, the player, control one of your party’s five characters personally, while giving your other four characters a combat strategy they will carry out without your direct intervention. This combat design allows all five of your characters to get into action in battles against one to five opponents.

In combat mode, the overhead map window extends the entire length of the screen and remains stationary while your group of characters breaks from the party leader figure to five individual figures, representing each member of your party. Also, notice the bottom of the screen has changed. The
Planetary Exploration and Ground Combat

A. The viewable map size has been increased to cover the full width of the screen so that you have more room to move and position your characters.

B. Character combat information with current combat technique highlighted.

There are several ways to initiate combat mode:

1. Press the ‘F’ key (FIGHT) from the Overhead Interface Screen.
2. Try to ROB an NPC and fail.
4. Kill a comrade of an NPC.
5. Talk to an NPC you should be avoiding.

In combat mode, each one of your characters will act on his own except for the character you are personally controlling. Each character begins combat mode executing the BLOCK command.

Changing Combat Moves

You can change each of your characters’ combat strategy and change the character you are controlling at any time.

Press the ‘N’ key to start a NEW ACTION for your characters. At this point, the combat sequence will stop so you can take your time developing a new battle strategy while changing your characters’ actions. The character you presently control and the action he was last performing is highlighted with a red flashing box. You can move the red box to a new combat action for that particular character, or move it to one of your other characters’ boxes to change his combat actions.

As your characters move in combat, a red box will surround your lead character’s attribute box to show which character you must personally control in combat. Pressing the appropriate key for any of the combat actions in the five individual boxes will activate that particular action. The combat actions and their results are explained below. After all combat actions have been determined for your characters, press the ‘N’ key to return to combat mode. The character whose combat actions you determined last will be your current party leader—whom you must personally control. The other four characters will carry out the combat actions you specified for them. An unconscious character, of course,
cannot perform combat moves at all.

There are six combat actions that can be executed by each character in your party. They are: ATTACK, Change WEAPON, RELOAD Current Weapon, MOVE to a new location, BLOCK an enemy's attack, or FLEE.

ATTACK. Pressing the 'A' key allows one of your characters to attack an enemy character. After pressing this key, a box that is the same color as your chosen character surrounds the first enemy on the screen. Use the Arrow keys to change which enemy that particular character will attack. Press the Return key to attack the enemy who is highlighted. During combat mode, your character continues to attack the enemy you highlighted with his current weapon. As your enemy moves around on the screen, so will your character’s target sight. If the weapon of a character not under your control runs out of ammunition, he automatically reloads his weapon and continues to attack the enemy, provided he has another clip of ammunition. If the character does not have another clip for the weapon, he attempts to BLOCK an enemy’s attack.

WEAPON. Allows you to change your character’s current weapon. You are given a list of weapons in that character’s inventory. Use the UP and DOWN arrow keys to scroll through the selections. Select the weapon you want this character to use or press the Escape key for no weapon at all (FISTS). This changes the character’s weapon so you can select an ATTACK, BLOCK, RELOAD, MOVE or FLEE option.

RELOAD. If your character’s current weapon is out of ammunition, you can reload it by selecting this option. This option is mainly used in combat mode for the character you are personally controlling since the other characters in your party automatically reload their weapons themselves.

MOVE. Allows you to instruct your characters to move to certain locations on the visible map. After selecting this option, a box that is the color of the current character appears over that particular character’s figure on the visible map. Move the square to a location where you want that character to move and press the Return key, fire button or left mouse button to verify the position, or press the Escape key or right mouse button to exit this option. Your character moves from his current location to the new coordinates you have given him. When he has reached that destination, he assumes the
BLOCK combat action. Note: The MOVE option is invalid for the character you are personally controlling during combat. You are responsible for moving this character yourself.

BLOCK. Provides added protection for characters you want to keep out of combat. In this mode, your character is ready for an enemy attack, and can block it more readily than a character who is attacking. In BLOCK mode, your character has less of a chance of being hit by enemy fire.

FLEE. The flee option only works in combat attack phase and is initiated by the character you are personally controlling. The FLEE option regroups your party and takes them out of combat mode. At this point, your party will once again be represented by your party leader figure. You can now move your party away from the fight scene and continue with the game.

Combat Strategies
Here are some strategies that you can utilize to survive in combat sequence more successfully:

A. If a character is riding a horse, he will be more difficult to hit. You can buy horses at the transportation outlet.

B. Having a shield or wearing armor absorbs damage during an attack. Shields and Armor can be bought at the general store.

C. If a character has a high (2+) Fieldcraft skill, placing him in bushes makes him harder to see, and thus, harder to hit.

D. Attacking at close range, or in close combat with a close combat weapon, not only makes it easier for you to hit the enemy, but also makes it easier for an enemy to hit you. Most combat should be executed at long range if your character has good Marksmanship.

E. Having all your characters in one area makes it easier for a character to be hit. If the enemy has poor marksmanship and misses his intended target, it may hit one of your other characters.

F. Any combination of the above, such as riding a horse while wearing armor, or standing in the bushes while performing the BLOCK option, will greatly reduce the percentage of being hit.
VII. Items You Can Purchase

Various items, objects, equipment and firearms can be purchased on the planets you visit during your journey. These items can be acquired from alchemists, or in pawn shops, markets, and weapons shops. There are many more items that can be acquired by bargaining with NPCs. Likewise, there are items your characters may discover on the overhead map. In both of these instances, these are items and objects you can not purchase in stores. Here is an overview of the items, equipment, inventions, and weapons you can purchase in stores to aid you on your adventure.

Scientific Equipment and Reference Materials

2. DOCTOR’S BAG AND SUPPLIES. A leather bag containing surgical instruments and supplies, and also a supply of medicines and other materials for the treatment of wounds and sickness. Wt: 10 lbs. Price: £3.

3. EDISON’S ENCYCLOPEDIA OF GENERAL INFORMATION: A tome of useful information about the universe, written by the inventor of the ether flyer. No inventor or scientist can be without this compact volume. Wt: 1 lb. Price: 1/-.


5. ROBB’S MEDICAL COMPANION AND HOUSEHOLD PHYSICIAN. A compact source of medical information for use by those not trained as physicians. Wt: 1 lb. Price: 2/-.

Here is a synopsis of the British monetary system in 1889.

The basic units of exchange are the pound, the shilling, and the penny. Twelve pennies make a shilling, 20 shillings (or 24 pennies) make a pound. Pennies are sometimes divided into half-pennies (half-pennies) and farthings (quarter-pennies). Prices are written as “pounds shillings/pennies.” For example, three pounds, two shillings and six pennies would be written as £3 2/6, and read as “three pounds, two-and-six.” Shillings alone are written without the £ sign; for example, three shillings is written 3/-. Pennies alone are identified by the abbreviation “d” following the number; for example, sixpence would be written as 6d.

In 1889, a pound sterling was worth $5 in American currency. A shilling was worth $.25 and a penny just over $.02. You can specify in your pre-game setup your choice of using British pounds or English pennies.
Tools
6. LOCKPICKS. Tools for opening locks without the proper key, including several picks, skeleton keys, and so on. Wt: Negligible Price: 18/.

7. SHOVEL. Tool used in excavating. Wt: 5 lbs. Price: 2/-.

Traveling Gear:
8. CAMPING OUTFIT. A gentleman needs certain essentials for life, even in the wilderness, and this kit provides them all in a convenient carrying case. It includes a stove, tent, cot, folding stool, cooking pots, dining utensils, toilet requisites, and many other items. Wt: 80 lbs. Price: £2.

9. CLOTHING, FOUL WEATHER. A rubberized hat, overcoat and boots to protect the wearer from wind and rain. Wt: 3 lbs. Price: 8/- to 12/-.

10. CLOTHING, ROUGH-LIVING. A suit of heavy-duty clothing, including pants, shirt, jacket, boots, hat, and so on, for use by explorers and those who expect to be “roughing it.” Wt: 3 lbs. Price: £1.

11. LAMP, MINER’S SAFETY. A small lamp designed to be worn on the head, usually fueled by carbide and water. A pound of carbide will provide 16 charges, each charge will last two hours. Wt: .3 lbs. Price: 8d.

12. LANTERN, CARBIDE. A larger version of the miner’s safety lamp. A pound of carbide will provide eight charges, and each charge will provide light for four hours. If spilled, the carbide will not burn, unlike liquid fuels. Wt: 1 lb. Price: 1/-.

13. ROPE, 100 ft. This has a tensile strength of 300 pounds. Wt: 5 lbs. Price 2/-. 

Explosives:
14. GUNPOWDER. Although outdated by human standards as an explosive, it is still widely used as an ammunition propellant. Gunpowder comes in six-pound kegs, but may be divided into smaller one-pound charges with the use of cloth bags or small tins. Gunpowder has an explosive power of 1 per pound. Wt: 6 lb. per keg Price: 10/-.

15. DYNAMITE. Invented in 1866 by Nobel, dynamite has largely replaced gunpowder as a common explosive. Dynamite comes in cases, each with 100 half-pound sticks. Dynamite has an explosive power of 4 per pound (2 per stick). Wt: 50 lbs./case Price: £5.
**Firearms**

16. **Pistols**

**SINGLE-BARREL PISTOL.** This is a one-barreled breech-loading cartridge pistol, of which the Remington Rolling Block Pistol is typical. **Wt:** 1 lb. **Price:** 8/-.

**LIGHT REVOLVER.** This is a small caliber pistol with a single barrel and a multiple-shot rotating cylinder, of which the Hopkins and Allen .32-caliber revolver is typical. **Wt:** 1.5 lbs. **Price:** 10/-.

**HEAVY REVOLVER** This is a large caliber pistol typified by the Colt Single Action Army Revolver. **Wt:** 2 lbs. **Price:** £2.

**LIGHT MULTIBARREL PISTOL.** A small pistol with two (rarely more) barrels, sometimes called a derringer, typified by the Remington .41-caliber Double derringer. **Wt:** .7 lb. **Price:** £1.

**HEAVY MULTIBARREL PISTOL.** A four-barreled pistol, typified by the British Lancaster pistol. **Wt:** 2 lbs. **Price:** £1.

17. **Rifles**

**BOLT ACTION RIFLE.** A modern rifle with a five-round magazine, such as the French Lebel, the Austrian Mannlicher, or the German Mauser rifles. Such weapons have a manually worked bolt which loads and ejects each round. **Wt:** 9 lbs. **Price:** £2.

**BOLT ACTION CARBINE:** Similar to the Bolt Action Rifle, but with a slightly shorter barrel. **Wt:** 8 lbs. **Price:** £1 6/-.

**LEE METFORD BOLT ACTION RIFLE.** Recently adopted on a trial basis as the British Army’s new combat rifle, the Lee Metford is similar to other bolt action rifles with the exception that it has a larger, eight-round magazine. **Wt:** 9 lbs. **Price:** £2.

**BOLT ACTION CARBINE (LM).** Similar to the Lee Metford rifle but with a shortened barrel. **Wt:** 8 lbs. **Price:** £2 6/-.

**BREECH-LOADING RIFLE.** A single-shot cartridge weapon, typified by the Remington Rolling Block Rifle, or the British Martini-Henry. **Wt:** 8 lbs. **Price:** £2.

**BREECH-LOADING CARBINE.** A shorter-barreled version of the breech-loading rifle. **Wt:** 7.5 lbs. **Price:** £1 18/-.

**LEVER ACTION RIFLE.** A modern rifle with a multiple-
round magazine, with a manually operated lever which ejects a spent round, cocks the weapon, and loads another round. The most famous example is manufactured by the American arms firm of Winchester. Wt: 9 lbs. Price: £2 2/6.

LEVER ACTION CARBINE. A weapon similar to the lever action rifle, but with a shorter barrel (and often in a smaller caliber). Wt: 8 lbs. Price £2.

MUZZLE-LOADING RIFLE. A single-shot weapon in which the ammunition is loaded into the muzzle or front of the rifle instead of through a closable breech. The British Enfield and American Springfield Rifle-Musket are typical examples. Wt: 7 lbs. Price: 8/- to 10/-.

MUZZLE-LOADING CARBINE. Similar to the muzzle-loading rifle, but with a shorter barrel. Wt: 6 lbs. Price: 6/- to 8/-.

SMOOTHBORE MUSKET. A primitive muzzle-loader, lacking the grooves in the barrel (rifling) which give a rifle bullet stability during its flight. Consequently, the smoothbore musket has a shorter range and is less accurate than rifled weapons. Wt: 8 lbs. Price: 6/-.

SMOOTHBORE CARBINE. Similar to the smoothbore musket, but with a considerably shorter barrel. Wt: 7 lbs. Price: 6/-.

HEAVY DOUBLE RIFLE. A very large-bore, breech-loading rifle (between .50 and .60-caliber, often using the new nitrocellulose gunpowders), built with two barrels, also commonly called an "elephant gun." Such weapons are usually custom built to suit an individual customer and are thus quite expensive. The firm of Holland and Holland, in London, is the most famous maker. The Holland and Holland .600 Nitro Express is the finest example available. Wt: 10.5 lbs. Price: £10.

18. Shotguns

12-GAUGE DOUBLE. In shotguns, gauge is a measure of bore diameter, expressed in the number of lead balls of that barrel diameter which make a pound. Double means the weapon has two barrels. By 1889 most shotguns used modem-type cartridges rather than loose powder and shot. Wt: 9 lbs. Price: £3 to £5.

12-GAUGE LEVER ACTION. A shotgun with a tubular magazine capable of holding five cartridges. The weapon is cocked and cartridges loaded and ejected by means of a manually operated lever. The Winchester Repeating Shotgun
is a typical example of a lever action shotgun. Wt: 9 lbs.
Price: £5.


12-GAUGE SCATTERGUN. A standard 12-gauge double-barrel shotgun with the barrels sawed off to give greater effectiveness at close range. Favored by American desperadoes. Wt: 6 lbs. Price £5.

19. Machineguns

GATLING .50. A hand-cranked machinegun with six to 10 rifled barrels grouped to rotate around a central shaft. As the crank is turned, the barrels revolve, each barrel in turn receiving a cartridge, firing it, and moving out of the way for another. Gatling guns have a very high rate of fire, but tend to jam because of their complexity. Wt: 200 lbs. Price: £40.


MITRAILLEUSE: A hand-cranked machinegun with 25 stationary barrels and a detachable breechblock containing the cartridges for each. The gunner places the block in position and turns the crank, caroming the hammer to each barrel and firing them in sequence. Wt: 300 lbs. Price: £60.

GARDNER. A hand-cranked, two-barreled machinegun. The operation of the crank loads, fires, and ejects a cartridge from each barrel alternately. Gardner guns have a slower rate of fire than Gatlings, but the water-cooled breech of each barrel allows the fire to be kept up longer. The simpler mechanism of the Gardner gun is less prone to jamming than that of the Gatling gun. Wt: 40 lbs. Price: £50.

NORDENFELT. A machinegun with one, three, or five barrels, each with a separate ammunition feed system. Unlike other machine guns, the Nordenfelt uses a side-acting lever instead of a crank. The gunner draws back the lever, which ejects the spent round and cocks the hammer for each barrel, and then releases it, which loads a fresh cartridge and releases the hammer to fire it. Nordenfelt guns are less prone to jamming, and the action of working the lever automatically clears the jam in the normal course of firing (and except in the single-barrel version, the other barrels still fire, so a jam is not as critical as on other weapons.) The barrels can be adjusted to be parallel or angled for a fan-shaped spread of fire. Wt: 15 lbs. Price: £20.
MAXIM. The Maxim gun is a single-barrel, water-cooled machinegun which uses the force of one cartridge’s recoil to eject the spent round, load a fresh one, and fire it. This sequence continues until the gunner removes pressure from the trigger or the ammunition is exhausted. Maxim guns are just entering experimental service with the British Army (although the gun has been on the market since 1883). Wt: 40 lbs. Price: £150.

**Melee Weapons**

20. PIKE. A primitive pole arm, designed for thrusting. It is between 12 and 18 feet in length. Wt: 6 lbs. Price 2/-.

21. SPEAR. A pole arm designed for thrusting or throwing. It is between four and seven feet in length. The smaller versions can be thrown as well. Wt: 3 lbs. Price: 1/-.

22. SWORD. An edged weapon designed for cutting or thrusting. Wt: 2 lbs. Price: £2.

23. KNIFE. A short, edged weapon designed for combat, used mainly for thrusting at close quarters. A typical example is the American Bowie knife. Wt: negligible Price: 1/-.  

24. CLUB. A bashing weapon, usually improvised from local materials, such as a table leg or tree branch. Wt: 3 to 4 lbs. Price: Free.

25. AXE. A bashing weapon, also usable as a wood-cutting tool. Wt: 3 lbs. Price: 2/-.


27. MACHETE. A long-bladed cutting tool, usable as an edged weapon. Wt: 2 lbs. Price: 8d.

28. GREAT SWORD. A large, edged weapon designed for use with two hands, such as the Scottish Claymore or the Martian Coddling- Chopper. Wt: 6 lbs. Price: £10.

**Armor**

29. DOUBLET. Stiffened leather protection for the chest and abdomen. Wt: 2 lbs. Price 1/-.

30. SHOULDER SCALES. Metal epaulets designed to protect the shoulders and neck from downward chopping blows. Wt: 2 lbs. Price: 2/6.

31. MAIL. Protection for the chest, arms, and upper thighs, made of interlocked metal rings. Wt: 4 lbs. Price: 18/-.

33. **HELMET.** Protection for the head, usually of metal. Wt: 2 lbs. Price £1 2/-.

34. **SHIELD.** A blocking device usually made of wood and sometimes covered in leather or metal. Wt: 4 lbs. Price: 12/-.

35. **BOW AND ARROW.** A simple missile weapon which holds a sentimental attachment for many Englishmen. Wt: 2 lbs. Price: £1.

36. **JAVELIN.** A simple missile weapon. Wt: 2 lbs. Price: 10d.

37. **THROWING KNIFE.** Most knives can also be used as missile weapons. Wt: .5 lb. Price: 1/-.

38. **STONE.** Perhaps the simplest of missile weapons, gathered from the ground. When thrown using a sling, the range is tripled. Wt: 1 lb. Price: Free.

**Inventions**

39. **MINERAL DETECTOR.** This device allows detection of rare minerals, such as gold and silver. Wt: 100 lbs. Price £1000.

40. **SLEEP GAS.** An extremely volatile liquid which induces unconsciousness when breathed in gaseous form. Within a few seconds of inhalation, the victim rapidly loses consciousness and will fall into a light sleep which will last one hour after the gas has dissipated. The victim will then awaken without ill effects. This gas can also be used as an improved anesthetic during surgical operations. One ounce of the liquid will vaporize in 10 minutes (or instantly, if sprayed) and fill an area 10 feet square to be effective density. Wt: 1 ounce Price: £1 per ounce.

41. **ANTIBIOTIC.** A substance with bactericidal properties that can be ingested by mouth, applied topically, or injected into the body using a hypodermic syringe. Severe infections and fevers can be cured within days using this compound. Wt: 10 doses per ounce. Price: £3 per dose.

42. **STRENGTH ELIXIR.** A liquid which temporarily boosts STRENGTH 2 points higher. This effect lasts for a number of hours equal to the device reliability; then the user must rest for eight hours. Wt: 1 ounce per dose Price: £2 per dose.

43. **WATER-BREATHER.** A small device which permits the wearer to extract dissolved oxygen from water in a
manner similar to a fish’s gills. It is a masklike contraption which covers the mouth and nose, and enables normal underwater breathing for an indefinite period. The functional portion of the device is differentially permeable and constructed of an artificial cellulose-like material. Wt: 1 lb. Price: £12.

44. FOOD PILL. The essential nutrients and minerals of food condensed into an easily portable tablet form. One ounce of tablets, taken with a pint of water, provides the equivalent of a full meal. Wt: 1 ounce Price: £1 10/- per ounce.

VIII. Planets

During your adventures in Space 1889, you will be journeying to a number of locations in our solar system: our own planet Earth, as well as the planets Mars, Mercury and Venus. In addition, you may even visit the dark caverns of Earth’s moon (Luna) as the scenario unfolds. Each of the planets is very different, with its own unique geography, civilizations, creatures, natural riches, and modes of transportation. However, for convenience during game play, cities and buildings within a city are represented with the same artwork and icons on each planet. The following describes how cities and buildings are presented:

Cities and Buildings Within A City

As you walk around the planets, you will notice large buildings. These buildings represent cities that can be entered and also indicate the city’s limits.

When you move your party leader figure through the opening of the building, your party will be placed on the outskirts of the city you have entered. After you have fully explored the city you can lead your party leader figure to any one of the city outskirts (there are usually four: NORTH, SOUTH, EAST, and WEST of the city) to travel elsewhere on the planet.

When traveling through cities, you will also see buildings. These are actual building complexes that can be entered and explored. Walk to the entrance of the building to go inside. When you are finished exploring the building, you can exit by walking to the door you entered. You may notice stairs leading to different levels of a building. Guide your party leader figure to the front of the stairs to be transported to the next level of the building.

Also, while searching the city, you may discover caves.
Guide your party leader figure to the cave entrance to enter it. Cave exploration is handled in the same manner as building exploration.

Stores
Throughout the various cities on the planets there are different stores for your characters to buy and sell items. Here is a list of those locations and their icons:

1. PAWN SHOP. In the pawn shop you can buy or sell any item. To buy an item, select BUY PRODUCTS. You then specify which of your characters will buy the product, and which one will receive the product. Then you will be asked what product you want to buy. To sell an item, select SELL PRODUCTS. You then specify which character will sell the product, and which one will receive the money from the transaction. Then, you will be asked what item from your character’s inventory will be sold.

2. ARCHAEOLOGIST. An archaeologist can supply information about an item in your inventory. Select which character will pay for the information, and which has the item to be examined. Select the item from his inventory. You will then be given a description of the item you selected.

3. TAVERN. Bartenders will usually share information if you buy a drink or two.

4. BANK. At a bank, you can move money to and from your party account and between your characters. Select WITHDRAW to take money from your party account and disperse it into one of your character’s pockets. Select DEPOSIT to put money into the party account. Select INSPECT to view the balance in your party account. After each selection, except INSPECT, you are asked which of your characters will perform the transaction.

5. ETHER PORT. Ether Ports are the only locations where you can buy an interplanetary ether flyer necessary to travel between planets. You can either update your ether flyer (you must select this option the first time you enter an ether port so that you can build your initial flyer) or use your ether flyer. See Ether Flyer Design for information concerning the selection UPDATE FLYER. If you’ve already constructed your own ether flyer, you can select USE FLYER to journey into space and travel to other planets.

6. MARKET. You must buy food for your party or they will quickly become fatigued. The market cashier asks you which of your characters will pay for the food. He then tells
you how many days of food the character can buy with his money, and how much food your party currently has. The food adds no weight to a character or the party, so it is a good idea to buy as much food as you can.

7. WEAPON. You can either BUY WEAPONS/AMMO or SELL WEAPON. If you decide to sell a weapon, you are asked which one of your characters will sell a particular weapon, and which one will receive the money from the transaction. If there are any rounds of ammunition included with the weapon, you are properly reimbursed. If you decide to BUY WEAPONS/AMMO, you are asked whether you wish to BUY WEAPONS or BUY AMMUNITION. To BUY WEAPONS, you must determine which one of your characters will pay for the weapon(s), and which one will receive them. Next, you will asked what weapons you want to purchase. To BUY AMMUNITION, you are asked which character will buy the ammunition, and which one will receive it. Then you will select the ammunition type and then the number of rounds you wish to buy.

8. ALCHEMIST. In the alchemy store, you can buy biological inventions. Select which character will pay for an item, which will receive it, then select the item to be bought.

9. HARBOR. Obviously, your party of characters cannot travel across an entire planet by foot. Various modes of transportation are available on each planet that allow you to cross land or water. The harbor is the location where you can rent these various modes of transportation. In the harbor, you are asked which character will pay for the transportation and the type of transportation you wish (horse, zeppelin etc.). If you buy horses, you are asked who you wish to buy horses for. If you rent a boat or a zeppelin, you are asked how many days you want to rent the transportation for. If you rent a boat or a zeppelin, you are immediately placed in the ship. To get back to ground travel mode, you must find another harbor at which to dock. If you do not return your ship within the time period for which it was rented, you must pay for the extra days. If you refuse to pay or don’t have enough money, you can only dock at the harbor where you originally rented the craft.

10. INN. When you enter an inn, seek out the shopkeeper (you must talk to the people in this building to find out who this person is). He asks you if you wish to stay for the night. If you do, you will automatically begin a new day and the fatigue levels for each of your characters will be zero.
Refer to the Appendix for a diagram of each of the constellations shown above.
I. Interplanetary Ether Flyer Design

An Interplanetary Ether Flyer is a ship designed to lift itself out of the atmosphere of a planet and journey through the ether (the substance filling the space between planets) to other worlds. When your party has acquired the funds necessary to purchase an ether flyer, you can venture into the mysteries of space. An ether flyer, it comes complete with a repair crew that fixes damages to the ship, and a galley with enough food to last even the longest voyages.

When it’s time to design your ether flyer or update an existing one, you will find yourself at the Ether Flyer Design Screen. Here, you determine the specifications of your ether flyer. The rules for ether flyer design, and the cost of each part of the flyer follow:

HULL SIZE. You must specify a hull size for the ship, which determines its size and weight. The larger the hull, the larger and heavier the ship. The weight of the ship, in tons, is 100 times the hull size.

LIFT TYPE. The lift type specifies the level to which the ship is able to negate a planet’s gravitational pull. There are two types of lift: Hydrogen and Liftwood. Hydrogen lift costs 50 per ton of the vessel. It is not practical for vessels greater than 200 tons of lifted mass. Liftwood costs 200 per ton of the vessel and can only be bought on Mars. Due to the magnetic field of Venus, liftwood quickly deteriorates on that planet.

PROPELLER TYPE. An ether propeller is the device used to drive the ship through the ether. There are three options available for an ether propeller: the Edison Patent, the Armstrong Patent and the Zeppelin Patent. Each propeller is defined by its power value (the amount of energy needed to make it work) and its efficiency. Power values are expressed as whole numbers (1, 5, etc.). Edison propellers may be purchased at any power value, and cost 1000 per power value. They have an efficiency of 25.
Armstrong propellers may be purchased at any power value, and cost 500 per power value. They have an efficiency of 20.

Zeppelin propellers may be purchased at power values up to and including 4, and cost 100 per power value. They have an efficiency of 15.

**SPEED.** To determine interplanetary speed, multiply the propeller power value by the propeller efficiency and divide the result by the lifted mass. The result is the flyer’s interplanetary speed value. For example, a 14-ton vessel with a propeller with a power value of 2 and an efficiency of 20 has an interplanetary speed of 2.857, which rounds to 2.9. Interplanetary speed levels can vary from one to any number, depending on how much you want to invest in your ether flyer.

**BOILER POWER LEVEL.** Only limited amounts of oxygen can be carried aboard the craft, and these critical oxygen supplies need to be supplemented with large numbers of green plants just to meet the needs of the passengers and crew. Any sort of power plant which requires combustion is out of the question. As electric batteries cannot store enough energy to power a long interplanetary flight, a solar boiler is the only practical source of power. The boiler power level is the same as the propeller power level. The weight of the solar boiler in tons is twice its power value. The cost of a solar boiler is 500 times the propeller power value.

**ENGINE SIZE.** An ether propeller will not function in atmospheres where air densities are greater than those equivalent to 24,000 feet above sea level on Earth. Since all combat between ether flyers occurs within the orbit of a planet, an engine must be present (an engine controls speed during space combat). The engine costs 2000 per engine size.

**ARMOR VALUE.** The armor value is any whole number. An armor value of 0 indicates that no armor is affixed to the ship’s basic structure. Determine the weight of the armor, in tons, by multiplying the armor value by 10 times the hull size. Armor costs 10 per ton.

**ARMAMENT:** Your ether flyer has locations at the top and bottom of the ship for weapons. Both weapon locations have a 180-degree rotating capability. The TOP GUN can attack an enemy vessel above and to the sides of your ship, and the BOTTOM GUN can attack below and to the sides of the ship. If your ether flyer and the enemy ship are on the same altitude, the top gun will be used (see Space Combat).
Space Travel, Navigation and Combat

Select your guns from those listed (see Ship Weapons).

II. Space Navigation

Once you have bought, fixed and/or updated your ether flyer, you may want to travel to another planet in the Solar System. The planets that you can visit in Space** 1889 are Mercury, Venus, Earth, Mars and Earth’s Moon, Luna (see The Solar System). The outer planets — Jupiter, Saturn, Uranus — are impossible to reach and explore due to the fact that ether flyers are solar boiler- powered and lose energy when they get farther away from the Sun. If an alternate method of powering an ether flyer were discovered, a journey to one of the outer planets just might be possible.

In Space Navigation Mode, the screen is set up as follows:

A. Extended Play Area for space movement.

B. Icons used for space navigation.

The border of the playing area will be the same color as that assigned to the current party leader.

Using the cursor keys or joystick, maneuver your ether flyer to a planet and position your ship on the graphic of the world. As you enter the planet’s orbit, you will view the Space Combat Screen. From this screen, you can land your flyer on the planet or break out of orbit and journey back into the ether toward another world.

The planets are in continuous orbit around the Sun, so the planet you land on may not have the same position in space when you leave. If you stay in one position for a certain amount of time, you can see the planets move in their orbits.

Space Navigation Icons

Here are the icons utilized in space navigation:

COURSE. When this icon is selected, your current party leader will attempt to plot a course from your position in space to the planet you specify. The party leader will give a list of the constellations that should be followed to get the
planet in the quickest way possible. Navigation instruments, Conklin’s Atlas and a fairly strong grasp of Science will make the course more accurate. Remember: If your party leader has none of the above skills and or items, you’re more than likely going on a wild goose chase through the ether.

Note: see the pictures of the constellations in the Appendix to help you navigate between worlds.

LEAD. Allows you to change the party leader. Be sure to choose the character most capable of ensuring that you arrive at your chosen destination. Continue pressing until the color that corresponds to the character you want is displayed as the border color.

PARTY. Allows you to view your current party and trade objects between the players. See PARTY icon in the OVERHEAD INTERFACE SCREEN section for a detailed description of how this icon works.

GAME. Presents the following options:
SAVE. Saves the game you are currently playing.
LOAD. Loads a saved game from disk.
PAUSE. Pauses the current game. Press any key to continue.
QUIT. Quits the current game. You are asked if you wish to save the game first.

III. Space Combat

About Ether Flyers

Commercial ether flyers average between two and three million miles per day, and some military vessels are capable of even greater speeds and distances. Even the slowest interplanetary vessels can travel one million miles per day. This translates to over 41,000 miles per hour, 700 miles per minute, and slightly over 60,000 feet per second. The most powerful modem naval gun fires its shell at a velocity of approximately 20,000 feet per second. At these velocities it is virtually impossible to even detect an approaching vessel, let alone engage it with gunfire. Only when an ether flyer drops to planetary speeds, enters orbit around a planet, or dips into the atmosphere, is it vulnerable to enemy warships.

All combat between interplanetary ether flyers must, by necessity, take place either in close orbit or deep within a planetary atmosphere.

Ether propellers will not function in dense atmospheres, so an ether flyer must rely on conventional propulsion and lift at lower altitudes. This means that all interplanetary ether
Space Travel, Navigation and Combat

Flyers are capable of reaching altitudes which are considerably above the maximum ceiling of any other aerial vessel. Aerial vessels have five altitude levels: Very Low, Low, Medium, High, and Very High. Interplanetary ether flyers have five additional altitude levels: Lower Troposphere, Upper Troposphere, Lower Stratosphere, Upper Stratosphere and Orbital.

These five higher altitudes represent considerably larger increments of height than do the five lower altitude bands. As a result, ether flyers at any of the higher altitudes may not attack or be attacked by vessels at different altitudes. If an ether flyer suffers sufficient hull damage to reduce its maximum ceiling below Orbital, it may not leave the planet’s atmosphere.

Repair Crew

A repair crew is purchased along with the ship. They will be on the ether flyer at all times, and their primary responsibility is to repair the ship when it has been damaged. If your repair crew is killed, the ship can only be repaired at an ether port. You do not see, or have control over your ether flyer’s repair crew.

Space Combat Icons

ASSIGN. You can assign your characters as officers to important stations on the bridge of your ship. When you select this option, your ether flyer description area is replaced with the officers’ area. You will see your five officers as you have assigned them. There is the Captain (party leader), whose attributes and skills affect final decisions (such as if a hit was made, etc.); Helmsman, whose attributes and skills affect the navigation of the flyer; Trimsman, whose attributes and skills affect the steadiness of flight; and the two Gunners, whose attributes and skills affect the accuracy of the weapons they are using.

If you want to transfer characters to different stations, move the highlight to the officer you wish to replace and use the left/right arrow keys, joystick or right mouse button to select who will occupy this position. Use the Enter key, joystick button or left mouse button to assign the character to that station. If the character is already assigned to another station, he will move to the new one. If there is a character already occupying that station, he will trade positions with the newly assigned character. Press the Escape key to leave this option.
PARTY. Allows you to view your current party and trade objects between the characters. See PARTY icon in the Overhead Interface Screen section for a detailed description of this icon.

GAME. Additional game options include:
   - SAVE. Saves the game you are currently playing.
   - LOAD. Loads a saved game from disk.
   - PAUSE. Pauses the current game. Press any key to continue.
   - QUIT. Quits the current game. Asks if you wish to save the game.

LINK. If you have inflicted sufficient damage to an enemy ship and rendered it helpless, you can link your ether flyer with the enemy vessel and board it. Move your ether flyer alongside the enemy ship and select the LINK icon. You can TOW a ship to the ether port and receive money for the defeated vessel’s scrap parts.

UNLINK. If you have linked with a ship and do not wish to tow it back to port, select the UNLINK icon to separate from the damaged enemy ship. The helpless ship will eventually fall to the surface of the planet.

BOARD. If you are linked with a ship, you can board that ship and explore it by selecting the BOARD icon after linking.

Space Combat Screen
The Space Combat Screen is divided into four sections:

A. Playfield
B. Player’s Ether Flyer Descriptions
   1. BRIDGE
   2. DAMAGE
   3. HULL HITS
   4. ARMOR
   5. MANEUVER
C. Enemy’s Flyer Descriptions
D. Current Icon List

The space combat screen provides a side view of the planet ranging from the ground to the sky. You can fly your ether flyer from left to right. If you try to go off the side of the screen, the screen scrolls to a new section of the planet. If you fly off the top of the screen, you are transferred back to the Space Navigation Screen. When flying over a planet, notice a blue square on the ground. This represents the ether port for the planet. To land on and
explore the planet, guide your ship to this square and land on it.

If there is an enemy ship in the vicinity (there will only be one at a time), its ship statistics are displayed in the Enemy’s Ether Flyer Description Box. You will notice this information is presented in the same manner as the information in your ether flyer’s description box.

To fire at an opponent, be sure the enemy vessel is in the viewscreen and press the Enter key or the joystick button. If your ship is higher than the enemy ship, the bottom gun will be fired. If your ship is on the same level or lower than the enemy ship, the top gun will be used. The list of guns available for the ether flyer follows in the section Ship Weapons.

Bridge

The ship is manned by officers (the characters you assign to various stations), and a repair crew.

OFFICERS. Each enemy ship has a limited number of senior officers who perform key leadership functions, just as your ship does. If all officers on a vessel are killed, it attempts to withdraw from the battle and escape. If it is immobilized or boarded, it will surrender.

The Captain of the ship is represented by the letter “C” in the BRIDGE section. The Helmsman is represented by the box labeled “H” in the bridge crew, while the Trimsman is represented by the box labeled “T”.

If, for any reason, there is no one at the helm of a vessel, it may not change course or speed (except as a result of additional combat damage or a collision). If there is no one at the trim station of a vessel, it may not voluntarily change altitude. In addition, the vessel may take a loss-of-trim critical hit resulting in a probable crash. (See Damage for a more detailed description of damages in space combat).

GUNNERS. These people man and fire the guns. If, for any reason, there is no one at the guns, you cannot fire that weapon. The two gunners are represented by the boxes labeled 1 and 2.

Maneuver

Each ship has a series of hull boxes arranged in rows. Each row has hull boxes equal to the ship’s hull size and each row corresponds to one of the altitudes at which the ship can fly. For example, a ship with a hull size of 3 and a maximum altitude of High (see About Ether Flyers) would have four
rows of boxes (one each for Very Low, Low, Medium, and High altitude), each row containing three boxes. An example of these boxes are displayed at right. As hull damage is suffered, these boxes turn red.

**Damage**

When a weapon shot strikes a vessel, there are four different types of damage that may result. The chance of a shot hitting is determined by the range at which the gun is fired. Altitude differences also affect the chance of hitting a target. No ship may fire at another ship if the difference in altitude (in levels) is greater than the range (in ship lengths). For example, your ship cannot fire at another vessel two ship lengths away and three levels below you.

The display shows the areas that can be damaged. If the station is damaged, it appears as red on the screen:

1. & 2: The two guns (top and bottom respectively)
2. M: Magazine
3. T: Trim
4. S: Screw
5. R: Rudders
6. L: Lift
7. E: Engine
8. B: Boiler

The four types of damage are:

1. **GUN.** A gun hit destroys one gun. When an entire row of hull boxes turns red your maximum altitude drops a level during its next movement phase (see Maneuver). When all of the hull boxes turn red, the ship crashes.
2. **HULL.** A hull hit causes the hull boxes to turn red. When an entire row of hull boxes turns red your maximum altitude drops a level during its next movement phase (see Maneuver). When all of the hull boxes turn red, the ship crashes.
3. **CREW.** Each crew hit causes casualties to the repair crew.
4. **CRITICAL.** If a blow to your ship is critical, there are different consequences:
   a) **Magazine.** Although there are two guns on the ship, there is only one magazine, or shell locker. When struck, the ship automatically loses both guns. The ship also takes hull damage.
   b) **Bridge.** Bridge crewmen are injured or killed (those characters you assigned to stations).
   c) **Boiler.** Damage to the boiler affects the speed of the ship. However, this speed reduction is not permanent, and the amount of the reduction is reduced as the repair
crew fixes it.

d) Screw (Propeller). When the air screw (propeller) is hit, the ship’s speed is reduced. If a vessel has its movement reduced, the repair crew may jury-rig a propeller for a temporary fix. The jury-rig allows the vessel to move, but the propeller can only be permanently fixed at an ether port.

e) Trim. When the ship’s trim controls are damaged the ship suffers a sudden loss of trim. The ship immediately attempts to recover trim. If the Trimsman is dead, the Captain makes the attempt. If the Captain is dead, any surviving officer may make the attempt. If the ship recovers trim, it remains at its current altitude but may not voluntarily change altitude for a short period of time. If the ship does not recover trim, it immediately drops one altitude level, and the attempt to recover trim is repeated. This procedure is repeated until either the ship recovers trim or it crashes. If the ship drops one or more altitude levels, it will be unable to move for a short period of time.

f) Rudder. The ship may not change course until the rudder is free.

g) Lifters. The ship’s large lifting panels are temporarily jammed in place, and the ship may not change altitude until they are free.

Ship Weapons

At an ether port, you can equip your flyer with the following weapons:

European Artillery

European artillery consists of modern rifled breech-loading pieces which fire shell and shrapnel.

1-POUNDER HOTCHKISS ROTATING CANNON. The Hotchkiss rotating cannon is a rapid-fire weapon similar in overall principle to the Gatling gun but of an improved and more rugged design. Wt. 300 lbs. Price: £160.


6-POUNDER RIFLED BREECH-LOADER. Wt. 600 lbs. Price: £200.


12-POUNDER RIFLED BREECH-LOADER. Wt. 1000 lbs. Price: £300.
5-INCH HOWITZER. Wt. 3000 lbs. Price: £1000.
7-POUNDER MOUNTAIN HOWITZER. Wt. 400 lbs. Price: £200.

HALE ROCKET. An improvement over the old Congreve rocket, with much better accuracy and higher reliability. Wt. 20 lbs. Price: £5.

Martian Artillery
Martian Artillery pieces are muzzle-loading guns mounted on wooden carriages. They fire round shot or grapeshot.

SWEEPER. Wt. 1 ton Price: £200.
LIGHT GUN. Wt. 4 tons. Price: £400.
HEAVY GUN. Wt. 4 tons. Price: £1000.
ROD GUN. Wt. 3 tons. Price: £800.

IV. The Solar System

The solar system consists of the Sun and all its orbiting planets and satellites. These bodies are generally divided into the Inner and Outer solar systems. However, the four outer solar system worlds (Jupiter, Saturn, Neptune and Uranus) are too cold and distant to support life and are beyond the reach of solar-boiled powered ships, which can venture only so far from the source of their power. The inner worlds of Mercury, Venus, Earth and Mars, however, are of genuine interest.

Earth
The Earth, as the original cradle of humanity, is the standard against which all other worlds are judged. It has the greatest variety of life and possesses the richest resources. The Earth of Space 1889 is our planet as it actually existed in the late 19th century. See The World of Space 1889 for a more detailed description.

Luna - Earth’s Moon
Of all the inner planets, only Earth has a companion of any significant size: the Moon, known more popularly by its
astronomical name, Luna.

Luna is 2160 miles in diameter (3392 miles in circumference). Surface gravity is only 16 percent that of Earth; and Luna has no surface water, two aspects which make it extremely inhospitable to visitors and difficult to explore without specialized equipment. Occasional expeditions on the lunar surface have, however, discovered numerous entrances to sub-Lunar grottos and caverns which are inhabited by Moon Men and Selenites. Selenites are likened to Earthly insects. They resemble a cross between a human being and a beetle. They live in settlements throughout the caverns of Luna.

Moon Men are actually descendants of the long-destroyed planet Vulcan, but they have forgotten their origins. The most striking difference from humans is their pale, almost translucent skin, which shows an elaborate network of veins and arteries, and a hint of the musculature working beneath. Their rough, scaly skin has a faint blue cast. They are about man-size, perhaps a bit taller, but appear shorter as they are somewhat stooped.

Rumors continue to persist about hidden treasures and great wealth in diamonds hidden in the caverns of Luna.

Mars

The planet next outward from the Earth is Mars. For centuries the dark red mystery of Mars has excited the imagination of humanity; so it was little wonder Edison chose the red planet as the destination of the first interplanetary ether flyer expedition. Accompanied by Jack Armstrong, an intrepid Scottish explorer and soldier-of-fortune, Edison set out on January 6, 1870 and arrived on Mars on March 9. The landing was rough and tore open the hydrogen balloon used to lift the ether flyer into the atmosphere. The two explorers would have been stranded on Mars forever were it not for the fact that the planet was inhabited.

Edison and Armstrong landed just outside the city now known as Syrtis Major, and were taken prisoner by the local Martian ruler. Armstrong quickly learned the Syrtan language, however, and Edison impressed the Martian ruler with his tremendous technical knowledge. The pair were soon released, and Edison was provided with the materials necessary to repair his balloon and generate the hydrogen needed to fill it. Within months, the repaired ether flyer was ready to carry Edison, Armstrong and a curious Martian back
to Earth. The triumphant trio landed outside of Cincinnati, Ohio, on August 7, 1870.

The Earth was electrified. Edison and Armstrong received fame and fortune. Within a year, dozens of companies were manufacturing Edison Flyers, and vessels of several nationalities were soon making regular voyages to Mars, with rapid and dramatic changes for both worlds. Martian liftwood met the Industrial Revolution, and neither planet would ever be the same again.

The terrain of Mars is as diverse as that of Earth. In broad terms, the world is divided into the ancient seabeds, the vast deserts, the craggy mountain ranges and the polar icecaps. The most salient feature of the red planet, however, is the fact that it never rains. The free water of its ancient seas vanished long ago and is now frozen in the glacial wastes of the polar icecaps or chemically locked into the rust-red deserts. Without free water, there is no evaporation cycle to feed clouds, and therefore no rain.

Mars has a diameter of 4200 miles and a surface area of 55.4 million square miles. It has only 25 percent of the surface area of Earth, but its dry land area is roughly equivalent Earth's. The Martian atmosphere is breathable and very similar to Earth's. Its most distinguishing feature is its lack of humidity, which reflects the overall dryness of the entire planet. Ancient civilizations dug vast networks of canals to carry the little water that could be found to drying, dying fields and cities. But today, even after Herculean efforts, Mars is a dying planet. When Martian civilization arose some 35,000 years ago, a temporary climatic spasm had melted large parts of the icecaps and flooded ancient, long-dry seabeds. On the shores of those newly-refilled seas the great civilizations rose and flourished. Ten thousand years later, as the climate again shifted and the seas started to recede, the Martian civilizations struggled to reverse the flow of water. When that failed, they dedicated their energies to building the canals that would carry the melted icecap waters to all parts of their world. Those canals today mark the surface of Mars.

Three distinct types of Martians inhabit the planet. The Canal Martians are the most civilized and most highly-advanced technologically. It is they who manufacture gunpowder, cast guns (when they can get the metal), and build the largest and most advanced cloudships. Despite this,
however, the Canal Martians possess a stagnant culture and have not made a single major scientific discovery in centuries. Hill Martians are more primitive than Canal Martians, both in appearance and in technological advancement. They are still capable of relatively sophisticated creations in many different kinds of wood, though they lack the practical and artistic metal-working skills of the Canal Martians.

High Martians are a brutish lot, both physically and technologically. Although they can work metal, they prefer to obtain manufactured goods by trade or brigandage, or as tribute. As masters of the high places where liftwood grows, they have a monopoly on the most important item of trade on the planet.

Since Edison and Armstrong’s historic landing in 1870, the British have established settlements on Mars and exploited many of the natural riches of the planet including liftwood, minerals and metals, and Bhutan spice, a flavorful and mildly narcotic product. Likewise, the Belgians, Germans, French and Japanese all have colonies on the red planet.

The animal life of Mars is diverse, as well. Some of the more famous animals include the cunning and fierce Steppe Tiger, Flying Skrill, and the Legendary Fauna, an incredible large, flying dragon.

Venus

The second planet from the sun in our solar system is Venus. Beneath its constant shroud of clouds, Venus is a swamp world drenched with nearly continuous rainfall and withering heat.

Venus is almost completely covered with water, but the average depth is less than ten feet. The swamp planet is now in the Mesozoic Age of dinosaurs, and the vast areas are the domain of lumbering reptiles including Tyrannosaurus Rex, and the flying pterodactyls.

The planet is inhabited by tribes of Lizard-Men. The Lizard-Men of Venus are upright bipeds, although when speed is desired, they will often slither on their bellies. Most Lizard-Men live in an appallingly primitive state, wandering the lowlands in nomadic, small family and clan groups. Some Lizard-Men, however, have begun to ascend the path to civilization, though they are still savage primitives in
most respects.

During the initial journeys to Venus, it was discovered that the peculiar nature of the Venusian magnetic field interacts with the ether in an unknown fashion, causing radically-accelerated liftwood decay, a fact which stranded the first three expeditions to the planet.

Germany has dominated the exploration and exploitation of Venus, although Russian, Italian, British and American settlements are also present. Although not as heavily colonized as Mars, Venus presents almost equal economic potential with an abundance of raw materials needed to produce drugs, dyes, and other chemical products.

Visitors to Venus will find a number of interesting and amusing aspects to the world. Clothing (leather goods in particular) will grow a thin coating of green slime unless sprayed with carbolic acid every day or so. Though rubberized clothing is resistant to the climate, it is also quite heavy and hot, while most conventional clothing soon becomes rotten and reduced to rags. Iron and steel which are not properly cared for will soon turn to useless lumps of rust. Wood must be treated with creosote, carbolic acid, or some other chemical preservative or it will rot within weeks.

Weapons are essential. Travelers in the lowlands must be prepared to defend themselves from the attacks of giant dinosaurs and hostile Lizard-Men.

Mercury

The innermost planet is Mercury. One face of the planet is constantly locked toward the Sun and, as a result, is a boiling desert; the other hemisphere of Mercury eternally faces the depths of space and is locked in perpetual winter. Between these two extremes is the Twilight Zone of Mercury, a band of temperate climate which circles the entire planet.

The twilight zone of Mercury is trapped between two extremes. To one side, perpetual dusk, night and cold; to the other, perpetual dawn, day and heat. The sun sets eternally in the twilight zone, yet never moves completely below the horizon. The Mercurian twilight zone is a band about 100 miles wide encompassing a many-channeled river which makes its way entirely around the planet. Deep river valleys lined with rocky cliffs sport exotic plant life and occasional
prehistoric shelled creatures just beginning to emerge from water onto land.

Mercury boasts raw materials in abundance, such as lead and tin on its Bright Side; and dry ice and ammonia on the dark. The materials can be acquired only if considerable hazards are overcome.

Great Britain established its predominantly scientific outpost on Mercury — Princess Christiana Station — in 1880. It is situated at the Mercurian North Pole, and its scientists study the Sun and the local Mercurian environment. No other permanent national bases are located on Mercury. Princess Christiana Station is a sprawling complex of buildings, all of which are fairly small. Fewer than 100 people permanently inhabit the station, and their quarters and working facilities are housed in modest bungalows spread across a quiet meadow on the banks of the World River.

There are several riches hidden in the planet. Aside from the mineral wealth of Mercury’s Hot Side, there are treasures to be found along the banks of the world river as well. Glow crystals can be found in the bottom of swamps along the left bank of the river. These crystals are, for unknown reasons, able to absorb solar energy and convert it to electrical energy. Most crystals found, however, are valuable only as curios or jewelry. But extensive prospecting may lead to the discovery of one or more crystals of more remarkable size and power.

The large crabs of the World River are dangerous if encountered, but some adventurous types have taken to hunting them for their shell gland. This gland, which is about the size of a walnut, is found under the creature’s shell in the center of its back. It is much in demand by the perfume industry, due to its unique and powerful musky odor. Each gland must be preserved in ice to prevent its decay, but if properly cared for it can be sold for great sums.

A map of the Inner Solar System can be found on the next page.
Earth's orbital wake is unusually turbulent because of the interference of its orbiting Moon.

The Planetary ether wakes are pressed outward from the Sun. When the wakes of two planets cross, violent ether vortexes are produced. When three wakes meet, the resulting ether storm is especially violent.
### Glossary of Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aristocracy</td>
<td>The elite of British society in terms of wealth, prestige and power.</td>
</tr>
<tr>
<td>Attributes</td>
<td>The basic building blocks to developing your characters. Attributes consist of STRENGTH, AGILITY, ENDURANCE, INTELLECT, CHARISMA, and SOCIAL LEVEL.</td>
</tr>
<tr>
<td>Bhutan Spice</td>
<td>A flavorful and mildly narcotic product of the bhutan plants. The spice is in very high demand on Mars and on Earth.</td>
</tr>
<tr>
<td>Canal Martians</td>
<td>The most advanced of the Martian races; but their culture — though responsible for Mars’ highest cultural and scientific achievements — has begun to decay.</td>
</tr>
<tr>
<td>Captain</td>
<td>The party leader during the space combat sequences of the game.</td>
</tr>
<tr>
<td>Character</td>
<td>Refers to a fictional role assumed by the player in a role-playing game. In Space 1889, one player controls five characters.</td>
</tr>
<tr>
<td>Constellations</td>
<td>Unique, mostly mythologically-based patterns in the stars used by travelers to help map the sky and aid in navigation.</td>
</tr>
<tr>
<td>Ether</td>
<td>The substance that fills all space, even the volume also filled by ordinary matter.</td>
</tr>
<tr>
<td>Ether Flyers</td>
<td>Ships invented by Thomas Edison in 1868 that enable travel through the ether to the inner worlds (Mercury, Mars, Venus, and Earth’s Moon).</td>
</tr>
<tr>
<td>Female Only Career</td>
<td>Careers in the Victorian era that were only open to women.</td>
</tr>
</tbody>
</table>
Gashant  Very large animals found on Mars, used to carry loads as heavy as 300 pounds.

Gentry  The poor relations of the aristocracy. They were not dukes or earls, though some might carry minor titles.

Glow Crystals  Found in the bottoms of swamps along the river banks of Mercury, glow crystals are able to absorb solar energy and convert it through an internal property to electrical energy.

Gunner  Responsible for manning one of the two gun stations aboard an ether flyer during space combat.

Helmsman  The person responsible for navigation during space combat.

High Martians  The rootstock from which the other two varieties of Martians descended. The savage High Martians are the terror of Canal Martians, Hill Martians and humans alike.

Hill Martians  Of the three types of Martians, the less genteel Hill Martians are the frontiersman of Mars, living on civilization’s edge.

Hull  The basic size of an interplanetary ether flyer. The greater the hull size, the larger and heavier the ship.

Income  The annual amount of money a character can receive based on his or her career.

Legendary Fauna  A large flyer, resembling a dragon, found on Mars. It is said to be a ferocious predator, and is very rare.

Lifters  Large lifting panels on an ether flyer that allow it to change altitudes.
### Liftwood
The greatest single resource Mars produces. Liftwood is the product of a tree which grows in certain parts of the Martian Highlands. It synthesizes a complex organic compound with contragravitational effects and allows vessels to fly.

### Lizard-Men
The natural inhabitants of the planet Venus. They are upright bipeds who are rather barbaric and savage in their methods.

### Male Only Career
Careers that pertain only to men. Female characters may attempt to enter such careers, but only by successfully impersonating men.

### Martian Canals
The canals cut into the planet of Mars to carry melted icecap waters to all parts of the red planet.

### Moon Men
Descendants of the long-destroyed planet Vulcan who inhabit the caverns of Luna.

### NPC
A character in a role-playing game that is not controlled by the player (Non-Player Character).

### Party
Your five characters are collectively called a party of adventurers.

### Party Leader
The character who is in the lead position of the party. The party leader can be changed throughout the game. The success of many tasks attempted by the party depend on the aptitude of the character who is Party Leader at the time.

### Player
The individual playing a role-playing game. In Space 1889, five characters are controlled by one player.

### Pound
A basic unit of British currency. Twenty shillings, or 240 pennies, make a pound. In 1889, a pound sterling was worth $5 in American currency.
### Appendix

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Princess Christiana Station</strong></td>
<td>Great Britain’s scientific outpost on the planet <strong>Mercury</strong>.</td>
</tr>
<tr>
<td><strong>Repair Crew</strong></td>
<td>The crew that comes with your ether flyer when you purchase it. The repair crew fixes damage to the ship. You do not personally control the repair crew during the game.</td>
</tr>
<tr>
<td><strong>Rudder</strong></td>
<td>Device on an ether flyer that allows it to change course.</td>
</tr>
<tr>
<td><strong>Screw</strong></td>
<td>Another term for the propeller on an ether flyer.</td>
</tr>
<tr>
<td><strong>Selenites</strong></td>
<td>Large, insect like creatures that inhabit the caverns of <strong>Luna</strong>.</td>
</tr>
<tr>
<td><strong>Shell Gland</strong></td>
<td>Small glands found in the shell of the crabs that inhabit the World River on the planet <strong>Mercury</strong>. The glands are very valuable and command a high price.</td>
</tr>
<tr>
<td><strong>Shilling</strong></td>
<td>A basic form of British currency. Twelve pennies make a shilling. Twenty shillings make a pound. A shilling was worth $0.25 in American currency in 1889.</td>
</tr>
<tr>
<td><strong>Skills</strong></td>
<td>Acquired by characters during their careers. These skills affect the ability of the characters to succeed at certain tasks. There are 28 skills in <strong>Space 1889</strong>.</td>
</tr>
<tr>
<td><strong>Skrill</strong></td>
<td>This flying plant eater, found on <strong>Mars</strong>, appears to subsist off the leaves of <strong>liftwood</strong> trees and <strong>bushes</strong>. Only the <strong>Queln</strong> tribes on Mars have tamed the wild animal.</td>
</tr>
<tr>
<td><strong>Solar Boilers</strong></td>
<td>The device that powers an ether flyer, allowing it to travel through the ether.</td>
</tr>
<tr>
<td><strong>Steppe Tiger</strong></td>
<td>One of the most fierce and cunning animals on the planet <strong>Mars</strong>. It is an expert hunter and will attempt to</td>
</tr>
</tbody>
</table>
get very close to its intended prey before making a quick charge and a **kill**. It especially enjoys attacking **humans**.

**Task**

An action that a character attempts to perform during the **game**. Every task is assigned a difficulty that determines the number needed to **succeed** at it. Difficult tasks require a higher **number** than routine or simple **tasks**. Applicable attributes and skills lower the number needed to **succeed**.

**Trimsman**

The character on the ether flyer responsible for keeping the ship flying in a **smooth**, steady **manner**.

**Twilight Zone**

The temperate area of the planet **Mercury** in the middle of the two extreme **zones**.

**Victorian Era**

Usually referred to as the time period between 1860 and 1900. An age of tremendous **political, social, and technological change**.

**Wealth**

The fortune amassed during the career of a character in the **game**.

**Zeppelins**

Large, flying ships capable of cross-continental flights on various **planets**.
# Weapons Charts

## Small Arms Firing Table

<table>
<thead>
<tr>
<th>Weapons</th>
<th>Shots</th>
<th>Mag</th>
<th>Reload Time</th>
<th>Damage</th>
<th>Req. Strength</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pistols</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-Barrel Pistol</td>
<td>1</td>
<td>—</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Light Revolver</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Heavy Revolver</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Light Multibarrel</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Heavy Multibarrel</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td><strong>Rifles</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bolt Action Rifle (LM)</td>
<td>1</td>
<td>8</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>120</td>
</tr>
<tr>
<td>Bolt Action Carbine (LM)</td>
<td>1</td>
<td>8</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>90</td>
</tr>
<tr>
<td>Bolt Action Rifle</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>120</td>
</tr>
<tr>
<td>Bolt Action Carbine</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>90</td>
</tr>
<tr>
<td>Lever Action Rifle</td>
<td>2</td>
<td>12</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>75</td>
</tr>
<tr>
<td>Lever Action Carbine</td>
<td>2</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>45</td>
</tr>
<tr>
<td>Breach-loading Rifle</td>
<td>1</td>
<td>—</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>90</td>
</tr>
<tr>
<td>Breach-loading Carbine</td>
<td>1</td>
<td>—</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>60</td>
</tr>
<tr>
<td>Muzzle-loading Rifle</td>
<td>1</td>
<td>—</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>75</td>
</tr>
<tr>
<td>Muzzle-loading Carbine</td>
<td>1</td>
<td>—</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>45</td>
</tr>
<tr>
<td>Smoothbore Musket</td>
<td>1</td>
<td>—</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>45</td>
</tr>
<tr>
<td>Smoothbore Carbine</td>
<td>1</td>
<td>—</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>30</td>
</tr>
<tr>
<td>Long Hunting Rifle</td>
<td>1</td>
<td>—</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>200</td>
</tr>
<tr>
<td>Heavy Double Rifle</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>150</td>
</tr>
<tr>
<td><strong>Shotguns</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-gauge Double</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>30</td>
</tr>
<tr>
<td>12-gauge Double</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>12-gauge Semiautomatic</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>12-gauge Lever Action</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td><strong>Non-Firearms</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bow</td>
<td>1</td>
<td>—</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>30</td>
</tr>
<tr>
<td>Spear</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>2</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Throwing Knife</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Stone</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>
### Melee Weapons

<table>
<thead>
<tr>
<th>Weapon</th>
<th>Reach</th>
<th>Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pike</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Spear</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Rifle/bayonet</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Pole Arms

- Pike: Reach 3, Damage 2
- Spear: Reach 2, Damage 2
- Rifle/bayonet: Reach 2, Damage 2

#### Edged Weapons

<table>
<thead>
<tr>
<th>Weapon</th>
<th>Reach</th>
<th>Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Sword</td>
<td>2</td>
<td>1 + S</td>
</tr>
<tr>
<td>Cutlass</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Saber</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Knife</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Machete</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Bashing Weapons

<table>
<thead>
<tr>
<th>Weapon</th>
<th>Reach</th>
<th>Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Club</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Axe</td>
<td>2</td>
<td>1 + S</td>
</tr>
<tr>
<td>Hatchet</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

### Artillery Ammunition Effectiveness

<table>
<thead>
<tr>
<th>Ammunition Type</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shot</td>
<td>3</td>
</tr>
<tr>
<td>Shell</td>
<td>2</td>
</tr>
<tr>
<td>Grapeshot</td>
<td>3</td>
</tr>
<tr>
<td>Shrapnel</td>
<td>4</td>
</tr>
</tbody>
</table>

### Martian Cannon Firing Table

<table>
<thead>
<tr>
<th>Weapon</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweeper</td>
<td>100</td>
</tr>
<tr>
<td>Light Gun</td>
<td>200</td>
</tr>
<tr>
<td>Heavy Gun</td>
<td>300</td>
</tr>
<tr>
<td>Rod Gun</td>
<td>400</td>
</tr>
<tr>
<td>Rogue</td>
<td>400</td>
</tr>
</tbody>
</table>
### Machinegun Firing Tables

<table>
<thead>
<tr>
<th>Weapon</th>
<th>Shots</th>
<th>Mag.</th>
<th>Reload Time</th>
<th>Damage</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gatling 0.50</td>
<td>2/6</td>
<td>36</td>
<td>3</td>
<td>3</td>
<td>300</td>
</tr>
<tr>
<td>Gatling 1-inch</td>
<td>2/6</td>
<td>18</td>
<td>4</td>
<td>4</td>
<td>300</td>
</tr>
<tr>
<td>Mitraillous</td>
<td>8</td>
<td>8</td>
<td>3</td>
<td>3</td>
<td>300</td>
</tr>
<tr>
<td>Gardner</td>
<td>2/4</td>
<td>20</td>
<td>2</td>
<td>3</td>
<td>300</td>
</tr>
<tr>
<td>Nordenfelt 1-B</td>
<td>3</td>
<td>15</td>
<td>2</td>
<td>3</td>
<td>150</td>
</tr>
<tr>
<td>Nordenfelt 3-B</td>
<td>5</td>
<td>48</td>
<td>2</td>
<td>3</td>
<td>300</td>
</tr>
<tr>
<td>Nordenfelt 5-B</td>
<td>8</td>
<td>48</td>
<td>2</td>
<td>3</td>
<td>300</td>
</tr>
<tr>
<td>Maxim</td>
<td>10</td>
<td>50</td>
<td>2</td>
<td>3</td>
<td>300</td>
</tr>
</tbody>
</table>

### British Field Gun Firing Table

<table>
<thead>
<tr>
<th>Weapon</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-pr HRC</td>
<td>400</td>
</tr>
<tr>
<td>6-pr RBL</td>
<td>600</td>
</tr>
<tr>
<td>7-pr MH</td>
<td>600</td>
</tr>
<tr>
<td>9-pr RBL</td>
<td>600</td>
</tr>
<tr>
<td>12-pr RBL</td>
<td>600</td>
</tr>
<tr>
<td>15-pr RBL</td>
<td>600</td>
</tr>
<tr>
<td>20-pr RBL</td>
<td>600</td>
</tr>
<tr>
<td>40-pr RBL</td>
<td>800</td>
</tr>
<tr>
<td>5&quot; Howitzer</td>
<td>800</td>
</tr>
<tr>
<td>Hale Rocket</td>
<td>600</td>
</tr>
</tbody>
</table>

HRC: Hotchkiss Rotating Cannon  
RBL: Rifled Breech Loader  
MH: Mountain Howitzer

### Armor Values Table

<table>
<thead>
<tr>
<th>Armor Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doublet</td>
<td>1</td>
</tr>
<tr>
<td>Shoulder Scales</td>
<td>1</td>
</tr>
<tr>
<td>Mail</td>
<td>2</td>
</tr>
<tr>
<td>Breastplate</td>
<td>3</td>
</tr>
<tr>
<td>Helmet</td>
<td>1</td>
</tr>
<tr>
<td>Shield</td>
<td>1</td>
</tr>
</tbody>
</table>
Ether Flyer Designs

Small Bird

Aphid

Dauntless
The Constellations

Andromeda  Aquarius  Aquila  Aries

Bootes  Cancer  Canis Major  Canis Minor

Capricorn  Cassiopeia  Centaurus  Cepheus

Crater  Cygnus  Delphinus  Draco
When the prospect of developing a computer version of Space 1889 arose, we were very excited for several reasons. First, the role-playing game from Game Designers’ Workshop had a unique flavor, combining the classic visions of great science fiction writers like Jules Verne and H.G. Wells with an exciting period of time in world history, the Victorian Era. Needless to say, there’s no other role playing or computer game on the market that has this basic premise. That thought appealed to us, because we could approach the project with a fresh perspective. Most garners have been in a medieval castle or on a star cruiser in some far away galaxy. But we would be developing a game where the player would man the helm of an ether flyer, equipped with nineteenth century armaments, ready to explore the secrets of our very own inner solar system. The challenging and unique background of the role-playing game was a strong starting point that kept us excited throughout the project.

Additionally, Space 1889 gave us a chance to combine historic fact with fiction. Of course, Martians and Moon Men don’t really exist (we think), but people like Thomas Edison and Thomas Cook did. Several of the NPCs in the game are actual historic figures from the time period. In addition, the background for the Egyptian sequence, the geographic land maps of Earth and the constellations by which you will navigate your ether flyer are all accurate. We’ve tried to design a game where you will have fun and actually learn a few things about life in the famous Victorian Era of 1860-1900. Our purpose was, above all else, to make the game fun; but there is an educational value we hope adds something special.

Likewise, we wanted to have a complex scenario with a unique “pay off” in the end. Instead of saving the universe or making two quadrillion dollars, we tried to develop a unique plot that will remain a mystery until the very end. Instead of gold, diamonds, or a perilous princess as your reward, we’ve offered a chance for the greatest wealth of all — immortality.

We strove to maintain a close tie-in with the role-playing game. Most of the basic rules of the computer version are derived from the pen and pencil version of Space 1889.

We’ve tried to create a game that is fun and challenging and convenient to learn and use, and we hope you find it a rewarding and entertaining adventure. Any comments or
suggestions on the game are very welcome. Please drop us a line or give us a call. Through your input we can continue to build on the game design for future Space 1889 computer role-playing adventures.

Many thanks to everyone at Game Designers’ Workshop, including Marc Miller for the background material and assistance in the scenario creation, and Frank Chadwick, creator of Space 1889, for a fun and unique concept.

Don Wuenschell
Steve Suhy
F.J. Lennon

August 1, 1990

Credits

Game Design By
Steve Suhy
Don Wuenschell
F.J. Lennon

Programmed By
Don Wuenschell

Graphics By
Steve Suhy

Manual & Written Supplements By
F.J. Lennon
Gary T. Almes

Original Music Composed By
Derek Schofield

Original Package Design By
John Emory

Cover Illustration By
Mark Strutzman