

MOBIUS-I — RULEBOOK

(c) Copyright — 1984 — Dan C. Carver & Edward C.

Cooper IV All rights reserved

No part of this manuscript may be reproduced or transmitted in any form or by any means without written permission from the publisher, Carver Corporation, Scottsdale, AZ.

OVERVIEW * Contents

* OVERVIEW	i
* PLAYERS	1.0
PLAYER I.D. NUMBERS	1.1
CODE NAMES	1.2
DIPLOMACY	1.3
* STARS	2.0
STELLAR I.D. NUMBERS	2.1
STELLAR LOCATIONS	2.2
STELLAR COLORS	2.3
STELLAR TYPES	2.4
Dwarf Stars	2.4.1
Main-Sequence Stars	2.4.2
Giant Stars	2.4.3
Supergiant Stars	2.4.4
STELLAR ORBITS	2.5
Orbital i.d. numbers	2.5.1
* PLANETS	3.0
PLANETARY I.D. NUMBERS	3.1
PLANETARY CLASSES	3.2
The Terran classes	3.2.1
The Jovian classes	3.2.2
Asteroid belts	3.2.3
SATELLITES	3.3
ENVIRONMENT RATINGS	3.4
OWNERS	3.5
PLANETARY NAMES	3.6
PARKING ORBITS	3.7
* COLONIES	5.0
RESOURCES	5.1
RAW MATERIAL DEPOSITS	5.2
EXOTICS	5.3
STRUCTURES	5.4
POPULATION	5.5
Housing population	5.5.1
Life support	5.5.2
Morale	5.5.3
Suspended animation	5.5.4
Growth	5.5.5
Deaths	5.5.6
INDUSTRY	5.6
Extraction	5.6.1
Building	5.6.2
Priority	5.6.3
Industry and Morale	5.6.4
FORTIFICATIONS	5.7
STORAGE	5.8
* FORCES	6.0
SHIPS	6.1
Cargo bays.....	6.1.1
Weapons and Shields	6.1.2
Hyper drives	6.1.3
Drive coefficients	6.1.4
Maximum ship's mass	6.1.5
Total ship's mass	6.1.6
Jump Range	6.1.7
Flights	6.1.8
Travel time	6.1.9
Fleets	6.1.10
PLANETARY FORCES	6.2
ORBITAL FORCES	6.3
* CHARACTERS	7.0
ROLE PLAYING	7.1
ATTRIBUTES	7.2
CHARACTER I.D. NUMBERS	7.3
CHARACTER NAMES	7.4
JOBS	7.5
Unskilled jobs	7.5.1
Skills	7.5.2
Skill ratings	7.5.3
Advancement	7.5.4
Maximum skill ratings	7.5.5
LOCATIONS	7.6
Home locations.....	7.6.1
SURVIVAL	7.7
CHARACTER DEATHS	7.8
NOTORIETY	7.9
Mundane jobs	7.9.1
Public jobs	7.9.2
Clandestine jobs	7.9.3
Blown covers	7.9.4
Incommunicado characters.....	7.9.5
STAFFS	7.10
MOVEMENT OF CHARACTERS	7.11
NEW CHARACTERS	7.12
NEW JOBS	7.13
* COMBAT	8.0
COMBAT ROUNDS	8.1
ATTACKS	8.2
TARGETS	8.3
ATTACK FACTORS	8.4
DEFENSE FACTORS	8.5
TOTAL ATTACK	8.6
TOTAL DEFENSE	8.7
RESOLVING ATTACKS	8.8
CASUALTIES — Forces	8.9
CASUALTIES — Colonies	8.10
RETREATS	8.11
RESERVES	8.12
DROPS	8.13
CAPTURING PLANETS	8.14
CAPTURING CARGO	8.15
* REBELLION	9.0
* VICTORY AND SCORING	10.0
ENDING TURN	10.1
SCORING.....	10.2
Planets	10.2.1
Raw and exotic deposits	10.2.2
Population	10.2.3
Production	10.2.4
Characters	10.2.5

Prisoners and fugitives	10.2.6	COMMUNIQUES	12.4
Special cases	10.2.7	GENERAL STAR LISTINGS	12.5
Scoring on the last turn	10.2.8	LIMITED INTELLIGENCE	12.6
* ORDERS	11.0	Information on Orbits	12.6.1
ORDER DIAGRAMS EXPLAINED	11.1	Information on Colonies	12.6.2
ORDER CODES	11.2	Information on Fleets, Forces & Cargo	12.6.3
Exotic order codes	11.2.1	Information on Characters	12.6.4
Job order codes	11.2.2	Information on Combat	12.6.5
ORBITAL DESIGNATION ORDERS	11.3	Information on Flights & Passengers	12.6.6
INFILTRATION ORDERS	11.4	* MISCELLANEA	13.0
DROP ORDERS	11.5	REQUESTING A GAME	13.1
ATTACK ORDERS	11.6	STARTING A GAME	13.2
RETREAT ORDERS	11.7	DESIGNING YOUR SHIP	13.4
CAPTURE ORDERS	11.8	Step #1 Your Jump Range	13.4.1
NAME ORDERS	11.9	Step #2 Your Drive Rating	13.4.2
USE ORDERS	11.10	Step #3 Maximum Mass	13.4.3
EMPLOY ORDERS	11.11	Step #4 Your Drive's mass	13.4.4
TRANSFER ORDERS	11.13	Step #5 Cargo Bays	13.4.5
MOVE ORDERS	11.15	Step #6 Weapons and Shields	13.4.6
ADDITION & SUBTRACTION ORDERS.....	11.16	Step #7 Your Ships Total Mass	13.4.7
COMMUNICATION ORDERS	11.17	Step #8 Final Jump Range	13.4.8
STANDING ORDERS	11.18	Step #9 Starting number of ships	13.4.9
DISABLE , ENABLE & CANCEL ORDERS	11.19	Step #10 Think it over	13.4.10
SEQUENCE OF EXECUTION	11.20	THE SETUP SHEET — FILLING IT OUT	13.5
WRITING YOUR ORDERS	11.21	Choice of codename	13.5.1
The game number	11.21.1	Ship Specifications	13.5.2
The turn number	11.21.2	Choice of ending turn	13.5.3
Your player i.d. number & codename	11.21.3	YOUR ORDERS FOR THE SETUP TURN	13.6
Your account number	11.21.4	COLONIZING PLANETS	13.7
Your name and signature	11.21.5	ERRORS AND CORRECTIONS	13.8
Your orders	11.21.6	PAYMENT OF TURN FEES	13.9
Indentation	11.21.7	DUE DATES	13.10
Standing and communication orders	11.21.8	OUR ADDRESS	13.11
Multiple page turnsheets	11.21.9	* APPENDICES	14.0
Ending your turnsheet	11.21.10	EXOTIC APPENDIX	14.1
Copying your orders	11.21.11	JOB APPENDIX	14.2
Paper	11.21.12		
Writing implements	11.21.13	1* OVERVIEW	
SAMPLE TURNSHEET	11.22	Mobius-I is a unique combination of science fiction, grand strategy, diplomacy, exploration, and role-playing. As overlord of a starfaring race you are responsible for the exploration and colonization of a newly discovered star cluster. You will compete with up to 11 other players and face numerous challenges, such as rebellion, space plagues, and the enigmatic Mobius Bands.	
* THE TURN REPORT	12.0	The stars in the cluster will range in size and color; from Red Dwarfs to Blue-white Super-giants, each encircled by up to 5 planets. Each planet will be classified as to its type (Asteroidal to Super-Jovian), its environment and its natural resources, and may be named and exploited by the player who owns it.	
ABBREVIATIONS	12.1	Each player in the game will control a number of “characters” each with its own skills, rating and name. A number of different jobs may be assigned to your characters, each having a direct effect on the game. Your planetary governors will affect your people’s morale and loyalty and battles may be drastically affected by the presense of a single general or admiral. Your characters’ expertise will grow with their success and their collective skills will directly affect your ultimate standing in the game.	
Exotic Abbreviations	12.1.1	Each player is allowed to design the type of ship that his or her race will use and the use of “standing” orders (orders which	
Job Abbreviations	12.1.2		
TURN REPORT SECTIONS	12.2		
The Turn report Heading.....	12.2.1		
Sample Turn report	12.2.2		
Orbit and Planet reports	12.2.3		
Fleets & Forces report	12.2.4		
Personnel reports	12.2.5		
Combat reports	12.2.6		
Obituaries	12.2.7		
Traffic reports	12.2.8		
Passenger lists	12.2.9		
Star reports	12.2.10		
TURN REPORT APPENDICES	12.3		
Personnel files	12.3.1		
Score, Drive coefficient & Ship Specs.	12.3.2		
Asset reports	12.3.3		
Order listings	12.3.4		

are automatically executed every turn) will allow you to minimize the risk of missed turns and to automate your lines of supply.

Mobius-I is computer moderated, reducing the possibility of human error or bias. Each turn you will receive a printed report listing all of your planets, colonies, characters, and forces as well as combat reports and a wealth of information on your empire's health and welfare. Based on this report you send us your orders for the next turn and our computer processes them. You do NOT need a computer of your own to play Mobius-I. All you need is a pencil, paper, and your own imagination.

* **THE RULEBOOK:**

Sections 1.0 through 10.0 will give you a good background on stars, planets, colonies, characters, combat, victory conditions, and ships and other forces at your command.

Section 11.0 lists the types of orders you may give. It is, for the most part, a reference section and only requires some quick skimming the first time through to give you a general idea of the variety and effects of the orders. It will find its greatest use when you actually begin writing orders for your game.

Section 12.0 gives detailed descriptions of the information you will be given on your turn reports. In general it is a reference section, but a quick look at the sample turn report (12.2.2) and the the sample turn report appendices (12.3) will give you a good idea of the wealth of information you will be receiving each turn. Much of it will be cryptic upon first glance but further reading of this section will clear that up.

Section 13.0 contains miscellaneous information on requesting and starting a game, due dates, corrections and our address.

Last but not least are the Exotic and Job Appendices at the back of the rulebook (14.1 and 14.2). Reading these two sections will give you a good idea of the actual effects that exotics and characters can have on the game. We have placed these in the back of the rulebook as a convenient place to add in new information on exotics and jobs.

We look forward to having you as one of our players.
GOOD GAMING!

PREFACE

Though long awaited, the final breakthrough that gave Mankind the stars came sooner than expected. The first hyperdrives were massive brute-force affairs and many men and women rode them into oblivion before the twisted physics which governed hyperspace were fully comprehended. As the drives were perfected the Corridor was born, a vast band of stars stretching inward along the spiral arm. But as the Corridor extended further inward, lines of communication and control stretched and grew tenuous. Finally, rebellion ignited in the rim worlds and chaos spread until the entire Corridor erupted in open war. It took three-hundred years before an uneasy peace was established among the hundreds of warring factions.

It was not until late in the Second Expansion that a small open cluster of stars was discovered some fifteen-thousand light-years above the galactic plane. Its discovery was a fluke. Hidden behind a dark nebula, it would have remained undisturbed for thousands of years, if not for a freak aberration of hyperspace that hurled a starliner hundreds of light-years off course. The starliner's

mayday probes reached known space twenty years too late for her passengers and crew, but the probes' astrogration records reported the existence of the new cluster and the race was on.

Expeditions were mounted by dozens of empires, private companies and alliances, for the astrogration reports had shown numerous stars with rotation rates slow enough to indicate the presence of planets. The first survey ships to reach the cluster confirmed the cluster's richness, posting the highest planet-to-star ratio ever recorded.

The colony ships began to arrive and for a time the various factions were content with exploration and colonization. When trouble came it started with small skirmishes at contested border worlds, escalating gradually until, a threshold having been reached, the cluster plunged into conflict.

Mankind named the cluster: MOBIUS.

* **1.0 THE PLAYERS:**

The number of players in any given game of Mobius-I may vary; however, the average number of players will be 12. Each player is given:

- 1) a number, and
- 2) a code-name.

* **1.1 PLAYER I.D. NUMBERS:**

Player I.D. numbers are used frequently in your orders. They are essentially a means of abbreviated identification. The player number zero (0) is reserved for identifying rebel colonies and forces.

Player I.D. numbers are NOT account numbers. Each game that you play in you will be assigned a new player number, but your account number will always remain the same.

* **1.2 CODE NAMES:**

Each player is allowed to choose a code-name which will represent his empire or holdings during the course of the game. A code-name must be at least one letter long and cannot exceed fifteen letters or numbers in length. The name must start with a letter. There may be more than one word in a name, but the blanks or hyphens between words count as letters. The code-name "Rebels" is reserved for identifying rebel colonies and forces.

FLYING BUFFALO RESERVES THE RIGHT TO REJECT ANY NAME WHICH WE FEEL IS DEMEANING, DEROGATORY, IN BLATENT BAD TASTE, OR MAY INTERFERE WITH THE GAME'S PLAYABILITY.

* **1.3 DIPLOMACY:**

Once you have met other players in the game you will be allowed to communicate with them for the purposes of negotiation and alliance. By means of a "communication" order you may send other players your name and address and correspond with them directly.

It is impossible for Flying Buffalo to monitor direct correspondence, nor would we wish to. However, we do request that you keep things civil. We strongly discourage cross-game vendettas and alliances.

For those players who have not previously played in a game involving diplomacy we issue the following caution:

YOU TRUST OTHER PLAYERS AT YOUR OWN RISK.
Some players will be scrupulously honest in their dealings with

you. Others will not. There is nothing in this rule book which says that other players cannot lie to you, or break alliances without notice. Consider yourself warned.

*** 2.0 STARS:**

The playing field in Mobius-I is a two dimensional representation of a small open cluster of stars. The number of stars in a cluster may vary from game to game, but the average cluster will consist of 88 stars. Stars in Mobius-I have four important attributes.

- 1) an identification number
- 2) a location
- 3) a color
- 4) a type

*** 2.1 STELLAR I.D. NUMBERS:**

Each star has its own unique identification number. The lowest stellar i.d. number that may exist is ten (10). The highest will depend on the number of stars in the cluster. Stellar i.d. numbers will always end in a zero (0).

*** 2.2 STELLAR LOCATIONS:**

Each star will have a location given by two coordinates. The "X" coordinate is the horizontal distance (in light years) from the left edge of the cluster. The "Y" coordinate is the vertical distance (in light years) from the top edge of the cluster.

The distance between any two stars may be determined by the following equation. X1 and Y1 are the coordinates of the first star and X2 and Y2 are the coordinates of the second.

Distance = square root((X1 - X2) squared + (Y1 - Y2) squared)

Average distances between stars may vary from game to game.

*** 2.3 STELLAR COLORS:**

There are six possible stellar colors:

- 1) Red
- 2) Orange
- 3) Yellow
- 4) Yellow-white
- 5) White
- 6) Blue-white

A star's color corresponds directly to its temperature, with red stars being the coolest stars and blue-whites being the hottest.

*** 2.4 STELLAR TYPES:**

There are four different types of stars:

- 1) Dwarf stars
- 2) Main-sequence stars
- 3) Giant stars
- 4) Super-giant stars.

*** 2.4.1 DWARF STARS:**

For the purpose of this game a dwarf star is not just a very small star, but is also considered to be a dying star. Having already burned up most of their stellar fuels, these stars have collapsed to a fraction of their original size. They are mere cinders, slowly cooling towards their final collapse and extinction. Dwarf stars may be of any of the above stellar colors.

*** 2.4.2 MAIN-SEQUENCE STARS:**

These are the most populous of the stars. Most of the

stars in a mobius cluster will be main-sequence stars. These are relatively healthy stars. They may be of any color. Red main-sequence stars are the smallest and coolest of the main-sequence stars. Blue-whites are the biggest and hottest. Our own sun is a yellow main-sequence star.

*** 2.4.3 GIANT STARS:**

These are stars which, late in their life spans, have expanded to many times their original diameter. Eventually they will begin collapsing and become dwarf stars. Only three colors of giants may exist: red, orange, and yellow. Unlike main-sequence stars, red giants are the largest of giants and yellow giants the smallest.

*** 2.4.4 SUPER-GIANT STARS:**

These are the most impressive stars, being many times the size of giant stars. They may be of four colors: red, orange, white, and blue-white. Like the giant stars, red super-giants are the largest. Blue white super-giants are the smallest.

*** 2.5 STELLAR ORBITS:**

In addition to the previously mentioned attributes each star has 5 orbits encircling it. These orbits do not represent any set distance from a star, but are relative to a star's color and type. The first orbit (the closest) around a red main-sequence star will be much closer than the first orbit around a blue-white super-giant.

*** 2.5.1 ORBITAL I.D. NUMBERS:**

Each orbit will have a unique identification number. This number is determined by taking the star's i.d. number and adding the orbit. For example: The first orbit around star #20 would have an i.d. number of 21, whereas the fifth orbit would have an i.d. number of 25. This is a quick and simple way to tell both which star you are at and which orbit around that star you are in. Orbital i.d. numbers are very important as you will be using them to code your orders for the computer.

*** 3.0 PLANETS:**

Each orbit may or may not contain a planet. If an orbit is not occupied by a planet it is called an "empty" orbit. You may move to an empty orbit but you cannot colonize or capture it. If a planet exists then it will exhibit six major attributes:

- 1) a planetary i.d. number
- 2) a planetary class
- 3) an environment rating
- 4) an owner
- 5) a name
- 6) a parking orbit

*** 3.1 PLANETARY I.D. NUMBERS:**

A planet's i.d. number is the same as the orbital i.d. number of the orbit it occupies. The terms "Planetary I.D. number" and "Orbital I.D. number" are synonymous.

*** 3.2 PLANETARY CLASSES:**

There are seven classes of planets: 1) Sub-terran 2) Terran 3) Super-terran 4) Sub-jovian 5) Jovian 6) Super-jovian 7) Asteroid belt These are size categories. A terran world is not necessar-

ily anywhere near as hospitable as our own planet Earth. A brief discussion of the various classes follows.

*** 3.2.1 THE TERRAN CLASSES:**

Sub-terran, terran, and super-terran planets are all small rocky planets, and are the only classes of planets whose actual surfaces may be colonized. Mercury, Mars, and Pluto are examples of sub-terran planets and Earth and Venus are examples of terran planets. Super-terran planets are much larger than terran planets but smaller than any of the jovian planets. Our own solar system does not contain any examples of super-terran planets.

*** 3.2.2 THE JOVIAN CLASSES:**

Sub-jovian, jovian, and super-jovian worlds are gas giants. The surfaces of these planets cannot be colonized, but for game purposes all jovian planets are assumed to have satellites (moons) and any colonization will take place on these satellites. Neptune and Uranus are sub-jovian planets, whereas Saturn and Jupiter are jovian planets. Our our solar system does not sport any super-jovian planets, but they are the largest class of planet possible.

*** 3.2.3 ASTEROID BELTS:**

This class is pretty-much self explanatory. These are belts of countless small rocks and planetoids, the largest of which may approach the size of a sub-terran planet.

*** 3.3 SATELLITES:**

Satellites or moons are not specifically represented in Mobius-I. Their existence may be assumed with any planet larger than a sub-terran. A planet's resources are considered to represent both the planet and its satellites.

*** 3.4 ENVIRONMENT RATINGS:**

Each planet is rated as to its environment. The lower the environment rating the more habitable and less costly to colonize a planet will be. The lowest and best environment a planet may have is a rating of one (1). A planet's environment is determined largely by the type of star it orbits, the orbit it occupies, and the class of the planet.

*** 3.5 OWNERS:**

Any player may own a planet. Owning a planet will give you the right to colonize and name the planet as well as exploit its resources. A player becomes the owner of a world by capturing it by means of a "capture" order (see combat).

*** 3.6 PLANETARY NAMES:**

Any planet may be given a name by its owner. Rebel and unowned worlds may not be given names by any players (although a planet will retain any name given it prior to becoming unowned or rebellious). A planet's name must be at least one letter long and cannot exceed fifteen letters or numbers in length. The name must start with a letter. There may be more than one word in a name, but the blanks between words count as letters. A name cannot start with a blank. Hyphens between words are acceptable. If a world does not have a name the word "UN-NAMED" will appear.

FLYING BUFFALO RESERVES THE RIGHT TO REJECT ANY NAME WHICH WE FEEL IS DEMEANING, DE-

ROGATORY, IN BLATENT BAD TASTE, OR MAY INTERFERE WITH THE GAME'S PLAYABILITY.

*** 3.7 PARKING ORBITS:**

Ships, their cargo, and orbital forces are always assumed to be in a parking orbit around the planet. Cargo may exist in orbit without the presence of ships, as it is assumed to be contained in cargo pods which will safely maintain their contents. Cargo left in orbit will remain in orbit and be retained by its owner until he or she transfers it to another player or colony, or it is captured in combat. When ships arrive in orbit they are assumed to automatically unload their cargo into free orbit.

*** 5.0 COLONIES:**

Only the owner of a planet may colonize it. A colony is divided into two sections:

- 1) Resources
- 2) Storage.

*** 5.1 RESOURCES:**

A colony's resources are the active parts of the colony. A colony's resources are made up by the following:

- 1) Raw Material deposits.
- 2) Exotic deposits (or exotics in use by the colony).
- 3) Structures housing population and industry.
- 4) Active Population (as opposed to population in suspended animation).
- 5) Industry which is extracting or building various items.
- 6) Fortifications.

*** 5.2 RAW MATERIAL DEPOSITS:**

Raw materials are the stuff out of which you build ships, structures, industry, and planetary forces. In addition raw materials are used to support your population, so the quantity and richness of a planet's raw material deposits will have a good deal to do with how self-supporting a colony on that planet will be. The quantity and richness of raw material deposits are reflected by a single rating. The higher the raw material rating the greater the number of deposits and each deposit's richness will be.

*** 5.3 EXOTICS:**

Exotics are special materials, substances, or items which may be found or produced on a planet. The types of exotic resources may vary from game to game. Exotics will generally fall into four categories:

- 1) EXTRACTED EXOTICS are exotics which are found as deposits and must be extracted with industry.
- 2) MANUFACTURED EXOTICS are exotics which are manufactured by industry using raw materials or other exotics.
- 3) CONSTRUCTED EXOTICS are exotics which are assembled from previously manufactured or extracted materials.
- 4) WILD EXOTICS are generally a power unto themselves. They may or may not be amenable to a player's control.

Each different type of exotic will have its own special use or effect upon the game. Some will be beneficial, some will not. The various types of exotics and their uses are listed in the Exotic and Job Appendices. There may be up to five different exotics in any given game of Mobius-I.

*** 5.4 STRUCTURES:**

Structures are the basic building blocks of colonies. They house and support population and industry and are used to create fortifications. The number of structures required to colonize a planet depends on the planet's environment rating and will be discussed where applicable. Structures are added to a colony's resources by an "addition" order and are removed by a "subtraction" order.

*** 5.5 POPULATION UNITS:**

Your population is required to supervise industry. Each industry will require 1 (one) population unit to run it. Population is added to a colony's resources by an "addition" order and removed by a "subtraction" order.

*** 5.5.1 HOUSING POPULATION:**

Population must be housed in structures. The number of structures required is governed by the following formula:

$$\text{Total population} \times \text{Planet's environment rating.}$$

EXAMPLE: You have 20 population and an environment of 10. You require 200 structures for housing (20 X 10 = 200).

*** 5.5.2 LIFE SUPPORT:**

Population uses up raw materials in their life support systems. Life support is a function of structures (one of the reasons more structures are required for higher environments). To calculate the raw materials required for life support you need to know the Life Support Factor (LSF) of the planet. The Life Support Factor is determined by the following formula:

$$\text{Life sup. factor} = 25 / \text{the planet's environment rating}$$

(rounded to the nearest integer)

Environment	LSF
1	25
2	13
3	8
4	6
5	5
6 or 7	4
8 to 10	3
11 to 16	2
17 and up	1

The life support factor represents the number of population that one raw material will support. The total raw materials required per turn are found by the following formula:

$$\text{Raw required} = \text{Total population} / \text{Life support factor}$$

(rounded up)

EXAMPLE: You have 20 population units and an environment of 10. The life support factor is 3, (1 raw material will support 3 population). You require 7 raw materials for life support each turn (20 / 3 = 6.6666 rounded up = 7).

Raw Materials required by life support will be removed from storage each turn by the computer. Life support cannot use raw materials in orbit (they must first be transferred down to the colony's with a "transfer" order).

*** 5.5.3 MORALE:**

Any group of population will have a morale (expressed as a percentage) between 0% and 100%. Low morale reduces your industry's production and may cause your population to rebel. Overpopulation (not enough structures to house your population) as well as deaths due to overpopulation and insufficient life support will cause your morale to drop. Underpopulation (having more structures than your population requires) will tend to cause morale to go up. The presence of some types of characters or exotics may also change your morale. Even in the absence of any of the above, MORALE WILL HAVE A NATURAL TENDENCY TO FLUCTUATE BY 10% UP OR DOWN EACH TURN. When you add two different groups of population together their morale will change in the following manner. "P1" is the number of population units in the first group. "M1" is the morale of the first group. "P2" and "M2" are the number of population units and the morale of the second group.

$$\text{New Morale} = ((P1 \times M1) + (P2 \times M2)) \text{ divided by } (P1 + P2)$$

(rounded to the nearest whole number)

*** 5.5.4 SUSPENDED ANIMATION:**

Population in storage, in orbit as cargo, and in transit between orbits is in a state of suspended animation. Suspended population does NOT require life support or housing and its morale will not change unless population of a different morale is added to it. Suspended population cannot run industry and will not grow. Placing population in suspended animation (by placing them in storage) will use up 1 extra raw material per population suspended. Population is suspended by removing them from a colony's active population via a "subtraction" order. You take population out of suspended animation by adding them into a colony's active population with an "addition" order.

*** 5.5.5 POPULATION GROWTH:**

Population growth is governed by the following formula:
New Population = total pop. X (0.05 / Environment rating) (rounded down)

If overpopulation exists then the population's growth will be stunted in proportion to the degree of overpopulation.

*** 5.5.6 POPULATION DEATHS:**

- Population deaths occur due to:
- 1) COMBAT: Deaths will be in direct proportion to the percentage of the colony which is destroyed.
 - 2) OVERPOPULATION: Deaths due to insufficient structures housing population will be proportional to the degree of overpopulation and the environment rating.
 - 3) INSUFFICIENT RAW MATERIALS: Insufficient raw materials for life support will cause deaths proportional to the degree of shortage and the environment rating.
 - 4) EXOTIC MATERIALS AND JOBS: Some types of exotics and characters with certain jobs may cause deaths.

*** 5.6 INDUSTRY:**

Industry is used for extracting raw materials and exotics and for building structures, more industry, planetary forces, ships, and some exotics. Each industry requires one population unit to run it. When added to a colony's resources, each industry requires structures equal to the planet's environment rating to house it.

STRUCTURES HOUSING POPULATION CANNOT BE USED TO HOUSE INDUSTRY. Industry in storage or in orbit does not require these structures. Industry is added to a colony's resources by an "addition" order and removed by a "subtraction" order. *

* 5.6.1 EXTRACTION:

Raw materials and some exotics are exploited by extracting them from the planet with industry. Each industry extracting raw materials or an exotic will produce a number of units equal to the raw or exotic rating. If you have a raw material rating of 7 then each industry extracting raw materials produces 7 raw materials. The raw or exotic material's rating is also the maximum number of industry which can extract that particular material. A raw material rating of 7 allows you a maximum number of 7 industry extracting, each producing 7 raw materials (a total of 49 raw materials per turn). Life support can use raw materials on the turn they are extracted. Newly extracted raw materials are placed in storage.

* 5.6.2 BUILDING:

Industry is also used to build structures, more industry, planetary forces, ships and some exotics. Each industry is capable of processing 10 raw materials.

STRUCTURES: Each industry building structures will consume 10 raw materials from storage and produce 20 structures (each costing 1/2 of a raw material).

INDUSTRY: Each industry building new industry will consume 10 raw materials from storage and produce 1 (one) new industry (costing 10 raw materials).

PLANETARY FORCES: Each industry building planetary forces will consume 10 raw materials from storage and produce 2 planetary forces (each costing 5 raw materials). **NEWLY BUILT PLANETARY FORCES ARE PLACED ON THE PLANET'S SURFACE.**

SHIPS: The number of industry and raw materials required to build ships will vary according to the following formulas. "S" is the number of ships to be built and "M" is the mass of the ship. Any fractions are rounded up.

Industry required = (M times S) divided by 10
Raw materials consumed = M times S

Each ship built will require a number of raw materials equal to its total mass. **NEWLY BUILT SHIPS ARE PLACED IN ORBIT AROUND THE PLANET THAT PRODUCED THEM.**

EXOTICS: Some exotics will require industry to build them. Details will be listed in the Exotic Appendix.

With the exceptions of planetary forces and ships all newly built items are placed in the colony's storage. Industry cannot build with raw materials on the same turn the raw materials are extracted. Any raw materials or exotics used in building are taken only from the colony's stores. Raw materials and exotics in orbit are not accessible to industry (they must be transferred to the colony's stores with a "transfer" order).

* 5.6.3 INDUSTRIAL PRIORITY:

If you have insufficient population or raw materials to service all of your industry then only part of your industry will produce. Industry will have priority over population and raw materials in the exact order in which it is listed on your turn report.

* 5.6.4 INDUSTRY AND MORALE:

Morale affects your industry's production. If your morale is 25% then each industry will produce 25% of the items it normally produces. The computer deals only with whole numbers. If you have one industry building planetary forces and your morale is 25% then you don't produce half of a planetary force. Instead the computer will give the industry a 50% chance of producing one planetary force that turn. If you have sufficient industry extracting raw materials and sufficient population to run them then they will always extract at least the number of raw materials required to support your population, regardless of morale.

* 5.7 FORTIFICATIONS:

Fortifications are used to increase the defense of your colony. Fortifications are constructed from structures. The number of structures required to construct one fortification is as follows:

structures per fortification = 100 + environment rating.

Fortifications are completely defensive and will only protect your colony. **FORTIFICATIONS DO NOT ENHANCE THE DEFENSE OF YOUR PLANETARY FORCES.** Fortifications are not built with industry. Instead they are added to your colony via an "addition" order and removed with a "subtraction" order. The computer will automatically remove the required number of structures from a colony's stores when a fortification is added. Only structures in a colony's stores can be used to construct fortifications (structures in orbit must be first transferred into the colony's stores via a "transfer" order). Fortifications have a defense factor of 1000.

* 5.8 STORAGE:

A colony's storage is that section of a colony in which is stored raw and exotic materials, structures and industry not in use by the colony, and population in suspended animation. Items in storage are accessible for the colony's use. Items in orbit around the planet are not. Items are transferred into storage via a "transfer" order.

* 6.0 FORCES:

Forces are those units which make up your military strength. Your forces are composed of the following units: 1) Ships 2) Planetary forces 3) Orbital forces

* 6.1 SHIPS:

Besides being a major component of your military forces ships also move cargo and characters within and between star systems. Players design the type of ship they will be using in the game. Your ship designs cannot be changed in the course of play. Ships are composed of four basic units: 1) Cargo bays 2) Weapons 3) Shields 4) a Hyper-drive

* 6.1.1 CARGO BAYS:

Cargo bays constitute the cargo capacity of your ship. Each cargo bay has a capacity of 10 spaces. The space required by exotics may vary and you should check the Exotic Appendix for details. Each bay has a mass of one (1). **SHIPS MUST HAVE AT LEAST ONE (1) CARGO BAY.** The number of cargo spaces required by various types of cargo are listed below. Characters do not take up cargo space.

Cargo Spaces

Raw Materials.....	1
Structures.....	1
Population.....	5
Industry.....	20
Planetary Forces..	10
Exotic Materials...1	(may vary)

* 6.1.2 WEAPONS AND SHIELDS:

Each weapon will generate one (1) attack factor in combat and has a mass of one (1). Each shield will generate one (1) defense factor and has a mass of one (1). A ship's offense and defence compliment each other, so each weapon will generate one-fourth of a defense factor and each shield will generate one-fourth of an attack factor. SHIPS MUST HAVE AT LEAST ONE (1) WEAPON AND ONE (1) SHIELD.

* 6.1.3 HYPER DRIVES

Hyper-drives are what move your ships around space. They do not require fuel as it is assumed to be loaded when the ship is built and lasts, for all practical purposes, forever. The rating of your ship's hyper-drive is an indication of the drive's size and power and will determine how many light years your ship can move in one turn. This distance is known as the "jump range." The minimum drive rating is one (1) and the maximum depends on the drive coefficient being used in your game (more on this later). The mass of a hyper-drive is determined by:

Drive Mass = Drive-rating + Mass of previous drive-rating.

EXAMPLE: A drive rated at 1 would have a mass of 1. A drive rated at 2 would have a mass of 3 (1 + 2). A drive rated at 3 would have a mass of 6 (1 + 2 + 3).

The following table gives the mass for a number of drives.

Rating	Mass	Rating	Mass	Rating	Mass
1	1	8	36	15	120
2	3	9	45	16	136
3	6	10	55	17	153
4	10	11	66	18	171
5	15	12	78	19	190
6	21	13	91	20	210
7	28	14	105	21	231

* 6.1.4 DRIVE COEFFICIENTS:

Drive coefficients may vary from game to game and are used to calculate jump ranges and maximum ship's mass.

* 6.1.5 MAXIMUM SHIP'S MASS:

The maximum mass that your ship can have is determined by:

Maximum Ship's Mass = Drive rating x Drive Coefficient.

EXAMPLE: If your ship has a drive rating of 7 and the drive coefficient is 6 then the maximum possible mass of your ship is 42 (7 X 6).

* 6.1.6 TOTAL MASS:

Your ship's total mass is determined by adding together the mass of its hyper-drive and all of its cargo bays, weapons, and shields. The total mass of your ship is the number of raw materials it will take to build each ship. The higher the total mass, the greater the number of industry required to construct each ship. The total mass may never exceed a ship's maximum possible mass.

EXAMPLE: A ship has 5 cargo bays, 5 weapons, 5 shields, and drive rating of 7 (mass of 28). Its total mass is 43 (5 + 5 + 5 + 28 = 43).

* 6.1.7 JUMP RANGE:

The jump range of your ship design is determined by the drive rating and your ship's total mass. It is generally best to be liberal with your jump range rather than conservative. A ship's jump range is determined as follows:

Range = (Drive-rating squared X drive coefficient) / total mass

EXAMPLE: Assuming a drive rating of 7, a total mass of 43, and a drive coefficient of 7 you square the drive rating (7 x 7 = 49), multiply by the drive coefficient (49 x 7 = 343), and divide by the ship's mass (343 / 43 = 7.9767). The ship can therefore move 7.9767 light-years in one turn.

* 6.1.8 FLIGHTS:

A flight is a group of ships that is in intra-system or interstellar transit. For purposes of identification each flight of ships will be given a unique flight number. Each time you give your ships a "move" order the computer will create a flight and flight number.

* 6.1.9 TRAVEL TIME:

Travel time is the number of game turns which it will take for a given flight of ships to move from one point to another. Moving from one orbit to another within the same star-system (intra-system) will always take exactly one turn. Travel time for moves between orbits in different star-systems (inter-stellar) will vary depending on your jump range and the distance between the two star-systems. In order to determine the travel time (in game turns) between star-systems you divide the distance between the two systems by your ship's jump range. Any fractions are rounded up. Ships within 1 turn's jump range will arrive at the end of the turn in which they are launched.

EXAMPLES: Your ships have a jump range of 7.0. If you move them to a system 6.5 light years away they will arrive at the end of the turn (6.5 / 7.0 = .928714 rounded up = 1.0). If you move to a system 14.2 light years away they take 3 turns to arrive (14.2 / 7.0 = 2.0285714 rounded up = 3.0). The turn they were launched counts as one of those turns.

* 6.1.10 FLEETS:

A fleet is considered to be all of your ships, cargo, and orbital forces in orbit at a given planet.

* 6.2 PLANETARY FORCES:

Planetary forces are your surface military forces. They are, for the most part, highly mechanized and controlled by a small number of military personnel. Planetary forces do not require raw materials for life support. Nor do they require structures to house

them. Each planetary force has an attack factor of 2 and a defense factor of 2. Planetary forces must be on the surface of a planet in order to engage in combat. Only planetary forces may capture a world. Planetary forces may never be captured on a planet's surface. When planetary forces retreat or are recovered into orbit (via a "recovery" order) they become orbital forces.

*** 6.3 ORBITAL FORCES:**

Orbital forces are simply planetary forces which are in parking orbit or transit. The term "orbital forces" is used mainly to differentiate between planetary forces which are on a planet's surface and those in orbit. They can exist in orbit without support from ships or a colony. Orbital forces cannot engage in combat. They must first be dropped to a planet's surface in order to fight. Orbital forces become planetary forces when they are dropped to a planet's surface via a "drop" order. Orbital forces are considered to be cargo and as such may not be destroyed in an attack on a fleet. However, this also means that they are eligible for capture.

*** 7.0 CHARACTERS:**

In any society there are those individuals who personify the meaning of the word "best." By deed, influence, or intellectual accomplishment, they rise to the top. They are the prime movers and the greatness and power of a society are a reflection of their presence.

Such individuals are an integral part of Mobius-I. These individuals are known as "characters" and they are an invaluable resource. You will never have enough of them to accomplish all the tasks you desire so your ability to effectively utilize the characters under your command will have a decisive affect on your success in the game.

*** 7.1 ROLE PLAYING:**

Even the most popular of role playing games is susceptible to a wargaming mentality (which is great if you're playing a straight wargame). Many players tend to treat their characters merely as units with attack and defense factors to be pushed about the board as a logistical means to an end. Without personality, they become useful only so long as they can bludgeon a dragon.

Mobius-I characters are even more susceptible to this treatment because the game is moderated by a computer and is played on a strategic level. In addition, as the game progresses the players must control a substantial number of characters. However, we strongly urge you, at the very least, to treat some of your characters as individuals. Give them a name and a personality and if possible base some of your decisions and strategies on those imagined personalities.

No game system can force you to role play. It can only provide a framework of rules. Role playing by its very definition demands that a human being do the role playing. If you don't, Mobius-I won't do it for you (and neither will any other game).

If you treat your characters as mere problems in logistics you may still find the game very interesting, but if you imbue your characters with spirits of their own you'll add immensely to your enjoyment.

*** 7.2 CHARACTER ATTRIBUTES:**

Each of your character will have the following attributes: 1) an i.d. number. 2) a name. 3) a job. 4) a survival rating. 5) from

1 to 5 skills. 6) a location.

*** 7.3 CHARACTER I.D. NUMBERS:**

Each character will be given a unique i.d. number. This number is largely a form of abbreviated identification and will be used extensively in writing your orders.

*** 7.4 CHARACTER NAMES:**

A character's name must be at least one letter long and cannot exceed twenty letters or numbers in length. The name must start with a letter. There may be more than one word in a name, but the blanks or hyphens between words count as letters.

ONCE GIVEN, A CHARACTER'S NAME CANNOT BE CHANGED. Characters are given names with a "name" order.

FLYING BUFFALO RESERVES THE RIGHT TO REJECT ANY NAME WHICH WE FEEL IS DEMEANING, DEROGATORY, IN BLATENT BAD TASTE, OR MAY INTERFERE WITH THE GAME'S PLAYABILITY.

*** 7.5 JOBS:**

Each character can be assigned a job. The various different jobs that your character can be assigned along with their affects on the game are listed in the Exotic and Job Appendices. Characters can only hold one job at a time. Jobs are assigned to a character via an "employ" order. There are basically two types of jobs: 1) Unskilled Jobs 2) Skilled Jobs (Skills)

*** 7.5.1 UNSKILLED JOBS:**

Unskilled jobs will fall into one of the following categories:

1) JOBS WHICH ANY CHARACTER CAN FULFILL regardless of skill. The job "FUGITIVE" is a good example of this. Any character can become a fugitive regardless of how good he is at doing anything else.

2) JOBS WHICH ARE SPECIAL NOTICES to the player controlling the character. "UNEMPLOYED" is a good example of this second. Its not really a job but a notice to the player that he has failed to assign a job to this character.

3) JOBS WHICH ARE DESIGNED TO HAVE AN EFFECT on the character regardless of any skills. The job of "CONDEMNED" is an example of this. Giving a character this job will result in having him executed (killed).

*** 7.5.2 SKILLS:**

As each character is created by the computer he is given the ability to learn from one to five different skills. Characters will start out with no skills at all, learning new skills by on-the-job training.

If you wish to give a character a new skill you simply employ him in that skill. The computer checks to see if the character can learn a new skill and if he hasn't already learned all the skills he can, the computer gives him the job. Once a character has been employed in a skilled job he retains that skill permanently. Skills have two main attributes:

- 1) a skill rating.
- 2) a percentage chance of advancement.

*** 7.5.3 SKILL RATINGS:**

When one of your characters is assigned a new skill he is given a rating for the skill between 2 and 4. This rating is an

indication of your character's talent in that skill. The higher the rating, the higher the character's talent. The rating will be the primary factor in calculating the character's effectiveness on the job.

*** 7.5.4 ADVANCEMENT OF RATINGS:**

Characters may further their expertise and increase their talent at a given skill. Each turn a character is employed at a skill, his chances of advancing to a higher rating will increase. This is represented by a percentage chance of advancement. The chance will never be less than 1% and never greater than 99%. A character's percentage chance of advancement will increase in direct proportion to the difficulty and degree of success that the character experiences on the job. Generals and Admirals in combat will tend to advance faster than those who are not. Governors successfully coping with large colonies and morale problems will advance faster than those whose colonies are small and problem free. Each higher rating will be progressively harder to achieve. When a character advances to the next higher rating his percentage chance of advancement will drop back to 1% and the whole process of advancement will start over again.

*** 7.5.5 MAXIMUM SKILL RATINGS:**

The maximum skill rating possible is 10. However, not all characters will reach this level. When a character is first employed in a new skill the computer will determine the maximum rating the character will be able to achieve in that skill. This ceiling on a character's ability to advance will generally be less than 10. The player will not be told what this ceiling is, and only through time and observation will these ceilings be revealed (a consistently low percentage chance of advancement is a good clue). Characters with higher ceilings on their ratings will tend to learn and advance faster than those with lower ceilings.

*** 7.6 LOCATIONS:**

Characters can be located in the following places:

- 1) in a colony.
- 2) with planetary forces.
- 3) with a fleet.
- 4) on a flight of ships.

If a character is located in a colony, the colony must have active population. If a character is located on a fleet there must be ships or orbital forces present. Locations must have an owner, so you will always be told not only the type of location but which player owns it. A fleet owned by player #2 and a fleet owned by player #5 are two entirely different locations even though both fleets may be at the same orbit. When your characters are on a flight you will be told the flight number. Most of the time you will know where your characters are, but occasionally circumstances will dictate that you not be told where your characters are located. You should check section 2.3.21 for movement of characters between locations.

*** 7.6.1 HOME LOCATIONS**

Some jobs require that a character be at a certain location in order to take full advantage of his rating. Such a location is called a home location. Home locations are listed in the Job appendices. If a character is employed at a job with a home location and the character is located somewhere other than the home location then the character's rating for that job will be 'discounted'.

The following table lists discounts for all ratings:

Original	Discounted	Original	Discounted
2	1	7	4.9
3	1	8	6.4
4	1.6	9	8.1
5	2.5	10	10
6	3.6		

*** 7.7 SURVIVAL:**

Like skills, the survival rating that a character starts with will be between 2 and 4. A survival rating may be increased and a character will be given a percentage chance of advancing to the next higher survival rating. Survival ratings will tend to increase faster on planets with higher environment ratings and under life threatening or stressful circumstances. The higher a character's survival rating the better his chances are of surviving a fatal situation. Some types of jobs may call upon a character's survival rating in addition to a skill rating.

*** 7.8 CHARACTER DEATHS:**

Whenever a character's location suffers damage or casualties he risks being killed. The risk will be in direct proportion to the casualties suffered by the character's location. The higher a character's survival rating the better his chances of surviving a threatening situation. Character deaths are generally public knowledge to any player located at the orbit in which the death occurred and present at the time the death occurs. On the turn in which a character is killed an obituary will be printed on the turn reports of all players entitled to notification.

*** 7.9 NOTORIETY:**

Your character's job and his location will generally dictate which players (besides yourself) know he exists. A character is known to you if he appears on your turn report. There are generally three classes of jobs and notoriety associated with them:

- 1) Mundane jobs.
- 2) Public jobs.
- 3) Clandestine jobs.

*** 7.9.1 MUNDANE JOBS:**

Characters employed in a mundane job will be known only to the character's owner and the player who owns the character's location.

*** 7.9.2 PUBLIC JOBS:**

Characters employed in a public job will be known to the character's owner and any other player who has an active colony, forces, or characters at the same orbit or planet.

*** 7.9.3 CLANDESTINE JOBS:**

Character's employed in a clandestine job be known only to their owners. However, it is possible for the owner of your character's location to blow your character's cover, at which point he will know about your character too.

*** 7.9.4 BLOWN COVERS:**

Each turn that a clandestine character is at a location owned by another player the computer checks to see if the character's cover is blown. The higher a character's survival rat-

ing the less likely he will lose his cover. Moving a clandestine character to a location owned by another player will double the character's risk. The longer a character remains at a given location without having his cover blown the less the risk that he will lose his cover.

*** 7.9.5 INCOMMUNICADO CHARACTERS:**

Occasionally circumstances will dictate that you will not receive a report on one of your own characters.

*** 7.10 STAFFS:**

When more than one character is employed at the same skill and at the same location, the computer will pick the character with the highest skill rating and put him in charge. If the computer encounters more than one character with the highest skill rating it will choose the character with the lowest character i.d. number. The rest of the characters employed in the same skill will be considered to be his staff and will add 1/10 of their rating to the rating of the character in charge.

EXAMPLE: You have 3 characters on one of your fleets, all of them are employed as admirals. Character #1 has a rating of 6 as an admiral. Both the other characters are rated at 5. The character with the rating of 6 would be placed in charge and the other two characters would be considered his staff. The staff would boost the rating of the character in charge to 7 ($6 + 5/10 + 5/10 = 7$).

*** 7.11 MOVEMENT OF CHARACTERS:**

Characters may travel between locations using "Travel" or "Infiltration" orders. Only the owner of a character or the owner of the character's location may order a character to travel. Infiltration orders are used only for characters with clandestine jobs and can be ordered only by a character's owner. Clandestine characters whose cover is blown cannot be infiltrated. Characters are moved between orbits and star-systems by means of a "move" order. Only characters located on a fleet may be moved with a "move" order.

*** 7.12 NEW CHARACTERS:**

Each turn the computer will check all of your colonies with active population to see if you have recruited any new characters. The higher your population and morale the greater your chances are of recruiting one or more new characters. Also, colonies on planets with higher environment ratings will tend to produce more characters. Each new character is created with an i.d. number, a survival rating, and a maximum number of skills that he can learn. His name will be listed as "UN-NAMED." You will start the game with three characters. You can't have more than 100 characters. If some die, you can start getting more again. But prisoners, hostages, and underground fugitives are counted against your 100, so the computer could stop generating new characters for you even though your total listed appears to be less than 100.

*** 8.0 COMBAT:**

Combat is the means by which you attack and defend against other players and capture planets. Combat is conducted for the most part by ships and planetary forces, although some types of characters and exotics may strongly effect combat. Combat is conducted orbit by orbit. Your forces at one planet may not

attack forces at a second planet.

*** 8.1 COMBAT ROUNDS:**

Combat is conducted in rounds (somewhat like boxing). There are 10 rounds of combat in one turn of Mobius-I. Ships and planetary forces engaged in combat will continue combat until they have destroyed their targets, they are forced to retreat, they themselves are destroyed, or 10 rounds pass.

*** 8.2 ATTACKS:**

An attack is made by assigning a given percentage of your ships or planetary forces to attack a given target. This percentage does not have to equal a whole number of ships or planetary forces. Your ships and planetary forces attack independently of each other even though they may be attacking the same target. You may attack any number of different targets, but can never use more than 100% of your ships or planetary forces, though you may use less. Once a percentage of your attacking forces are committed to attacking a target, they will continue to attack it to the exclusion of all other targets until it is destroyed. Attacks are made by means of an "attack" order.

EXAMPLE: If you have 5 ships and assign 50 percent of them to attack a given target then 2.5 ships will attack the target. This simply means that only half of one of your ship's total firepower has been applied to the target.

*** 8.3 TARGETS:**

There are three types of targets:

- 1) Ships
- 2) Planetary forces
- 3) Colonies

Attacks are affected by the target. Ships attacking ships will attack at full effectiveness. Ships attacking a colony or planetary forces will halve their attacks. Planetary forces attacking planetary forces or a colony will attack at full effectiveness, but halve their attacks against ships. When specifying a target you must also specify who owns it. It is not enough that you tell the computer that you are attacking ships; you must also tell the computer whose ships they are.

*** 8.4 ATTACK FACTORS:**

Attack factors are a measure of the firepower each ship or planetary force generates. A ship's attack factor is equal to the number of its weapons plus 1/4 of its shields. Planetary forces will have an attack factor of exactly 2.

EXAMPLE: A ship has 7 weapons and 4 shields. It therefore has an attack factor of 8 ($7 + 4/4$).

*** 8.5 DEFENSE FACTORS:**

Defense factors are a measure of each ship or planetary force's ability to withstand attacks. A ship's defense factor is equal to the number of its shields plus 1/4 of its weapons. Planetary forces will have an attack factor of exactly 2.

EXAMPLE: A ship has 5 shields and 8 weapons. It therefore has a defense factor of 7 ($5 + 8/4$). If it had 7 weapons it would have a defense factor of 6.75 ($5 + 7/4$).

*** 8.6 TOTAL ATTACK:**

The total attack is the sum of the attack factors for all of

the ships and planetary forces attacking a given target.

EXAMPLE: You have 11 ships, each with an attack factor of 10, and you attack another player's ships with 50% of your ships. Your total attack against the other player's ships is equal to 50% of your ships (5.5 ships) times each ship's attack factor (5.5 x 10). The total attack factor would be 55. If your ships had attacked planetary forces, the final total attack would have been halved to 27.5 (55 / 2).

* 8.7 TOTAL DEFENSE:

The total defense is the sum of the defense factors for your ships, planetary forces or colony at a given planet. Ships, planetary forces and colonies each have a separate total defense factor.

EXAMPLE: You have 5 ships, each with a defense factor of 7 and you have 10 planetary forces, each with a defense factor of 2. The total defense factor for your ships would be 35 (5 x 7) and the total defense factor for your planetary forces would be 20 (10 x 2).

A colony's total defense factor is equal to the sum of the following three items:

- 1) Total structures housing population / Environment
- 2) Total functioning industry x 10
- 3) Total fortifications x 1000.

EXAMPLE: You have a colony on a planet with an environment of 10. It has 30 structures housing population, 3 industry, and 5 fortifications. Its total defense is equal to 5033 (3 + 30 + 5000).

* 8.8 RESOLVING COMBAT:

Combat is resolved each round by comparing the total attack against the total defense of each target. This is accomplished by the computer in several steps until a final percentage of casualties is arrived at.

STEP 1: Estimate the probable percentage of casualties.

STEP 2: Establish a range of possible casualties with the estimated casualties at the center of the range.

STEP 3: Pick a level of casualties from the previously determined range of possibilities.

* Step #1:

An estimate of the probable percentage of casualties for a combat round may be made with the following formula:

Probable casualties = total attack / (total attack + total defense)

Example: You have 100 ships at a world. The total attack against them is 500 and their total defense is 500. The probable percentage of casualties for your ships is 50% (500 / (500 + 500) = .5 or 50%).

* Step #2:

Once the computer has estimated the probable casualties for a target it creates a range of possible casualties using the estimated casualties as the midpoint. The range of casualties will vary depending on how heavy the estimated casualties are. If the estimated casualties are 50% or less the range is between 0% and the probable casualties multiplied by 2. If the estimated casualties are greater than 50% the range will be between 100% and the

estimated casualties minus (100% minus the estimated casualties).

Examples: If the probable casualties are 25% the range of possible casualties is between 0% and 50% (25% X 2 = 50%). If the probable casualties are 50% the range of possible casualties is between 0% and 100% (50% X 2 = 100%). If the probable casualties are 70% then the range is between 40% (70% - (100% - 70%) = 40%) and 100%.

* Step #3:

Once the computer has established a range it generates a random percentage within the range. The percentage generated is not completely random. When rolling two six-sided dice you will have a greater tendency to roll sevens than any other number. Likewise the computer is biased toward the original estimated casualty percentage and will tend to generate percentages closer to that than not.

The casualty percentage thus generated is the actual percentage of casualties that the target suffers.

* 8.9 CASUALTIES — FORCES:

When assessing casualties the computer deals only in whole numbers. You can never lose half of a ship or planetary force. You either lose an entire planetary force or ship or none at all.

If you only have one ship and 70 percent casualties the computer will treat this as a 70 percent chance of losing that one ship. The computer will then produce a random percentage between 1% and 100%. If the random percentage is less than or equal to the percentage chance of losing the ship then the ship will be lost. If the random percentage is greater then you will not lose the ship.

If your planetary forces have taken casualties and the planet's environment rating is greater than one (1) then your casualties will be increased by the environment rating treated as a percentage.

EXAMPLE: You have 100 planetary forces at a planet with an environment rating of 10. Your planetary forces suffer 10 percent casualties. On a planet with an environment rating of 1 this would mean that you would lose 10 planetary forces. However, since the planet's environment rating is a 10, your casualties are increased by 10 percent. Your actual casualties would be 11 planetary forces (10 percent of 10 planetary forces = 1 additional planetary force).

* 8.10 COLONY CASUALTIES:

As with ships and planetary forces, colonies suffer damage each combat round. The computer first calculates the percentage of damage done to the colony and then destroys that percentage of all of your colony's structures, industry, fortifications, population, and storage items.

Like planetary forces the percentage of damage to your colony will be affected by the planet's environment rating if the environment rating is greater than one (1).

Attacking a colony will increase the morale of its active population by adding the percentage of destruction expressed as a whole number to the population's morale. Morale may not be increased beyond 100.

* 8.11 RETREATING:

You may not wish to remain to the bitter end of a battle. Particularly if you are on the losing end as this will result in the utter destruction of your ships and planetary forces. This may be avoided by ordering your planetary forces or ships to attempt to retreat when their casualties exceed a given percentage of their total strength. This percentage is called the "retreat threshold."

The retreat threshold must be a percentage between one (1) and 99. Retreat thresholds are set by means of a "retreat" order.

Ordering ships or planetary forces to retreat is not necessarily a guarantee that they will be able to do so. Nor is it a guarantee that you will suffer only the level of casualties set by the retreat threshold. You are essentially telling the computer that you will unconditionally accept any casualties up to the level set by the retreat threshold.

When your casualties exceed your retreat threshold the computer generates a random number called a retreat factor. With ships the retreat factor will be a number between one (1) and your jump range rounded up. With planetary forces the retreat factor will be a number between one (1) and 5.

The computer will then divide any casualties above the retreat threshold by the retreat factor and if there are any ships or planetary forces left it will retreat them. Note that if the retreat factor is a one (1) you take the full measure of casualties.

In addition the retreat factor will be reduced in direct proportion to the calculated casualties for the round. The greater the attack against you the lower your retreat factor. The maximum possible retreat factor will never fall below 2.

The computer will also (by means of a rather convoluted formula which will not be listed here) reduce any attacks made by your planetary forces or ships in the round in which they retreated.

Ships and planetary forces have separate retreat thresholds. If you set a retreat threshold for your ships, but not for your planetary forces, then only your ships will retreat.

When planetary forces retreat they move into orbit around the planet and become orbital forces.

When ships retreat they must retreat to a different orbit. Therefore you must set a retreat destination for ships as well as a threshold. The orbit retreated to may be in the same star system or another star system entirely.

When ships retreat they take as many orbital forces with them as their cargo capacity allows. However, they will leave all other cargo behind, subject to capture by other players.

Planetary forces must retreat one full combat round prior to your ships' retreat in order to be taken by the retreating ships. You may, if you wish, key your ships' retreat to your planetary forces' retreat, forcing your ships to delay their retreat until the planetary forces are safely on board.

* 8.12 RESERVES:

If you do not use the full 100% of your ships or planetary forces to attack then the unused percentage is considered to be in reserve.

Your reserves' first priority will be to attack ships or planetary forces which are attacking you (known in the war- biz as counter attacking). If they do not find any attacks against you then they will reinforce any attacks that you are making.

Ships and planetary forces will allot reserves separately from each other and they will tend to be biased. Your reserves of

planetary forces will attack units attacking your planetary forces before they will attack any units attacking your ships. However, reserves will immediately attack any units attacking a colony owned by you, regardless of whether the reserves are planetary forces or ships.

In addition, if a number of ships or planetary forces destroy their allotted target then they will be placed in reserve where they will promptly go looking for something new and interesting to shoot at.

If you do not make any attacks at all with your ships or planetary forces then all of your ships or planetary forces are considered to be in reserve and will attack anything that attacks them.

There is one disadvantage to reserves. On the very first round of combat only 75 percent of your reserves will commit themselves to targets. On all subsequent combat rounds any reserves you have will commit themselves 100 percent.

The computer will automatically commit reserves in direct proportion to the size of an attack against you or the size of your attack against a target.

Reserves guarantee that no ship or planetary force is a sitting duck. If you shoot at it expect it to shoot back, regardless of whether its owner commanded it to do so.

BEWARE: by attacking a target with just one of your ships or planetary forces you are ultimately committing all of your ships and all of your planetary forces to the destruction of that target.

* 8.13 DROPS:

Orbital forces are not allowed to attack. They must first be dropped to a planet's surface where they become planetary forces.

Drops occur on the first combat round. Forces being dropped may not attack on the first combat round, but they are allowed their full defense.

Players may order attacks on forces being dropped by simply ordering their ships or planetary forces to attack the dropping player's planetary forces. This will result in attacks against both the dropping forces and any planetary forces the dropping player already has on the planet's surface.

Drops do not by themselves constitute an act of combat and will not cause reserves to counter-attack. However, dropping forces and then ordering them to attack something will cause reserves to be committed against the dropping units (but not until the second round).

You drop planetary forces by means of a "drop" order. You are also allowed to drop important characters along with your planetary forces (such as generals).

* 8.14 CAPTURING PLANETS:

Planets (and any colony on their surface) may be captured only if you have planetary forces on a planet's surface.

In order to capture a planet the owner's planetary forces and the planetary forces of all other players attempting a capture must be totally destroyed or forced to retreat.

By ordering an attempt to capture a planet you are ordering your reserves to commit attacks against the ships and planetary forces of the owner of the planet, any other player attempting a capture, and any player (other than yourself) who attacks the colony.

You do not order a percentage of your planetary forces to capture a planet, you merely declare that you wish to capture it

(via a "capture" order) and when all combat for the turn is concluded the computer will check to see if you have met the conditions for capturing it.

* 8.15 CAPTURING CARGO:

If all of a player's ships at a given planet are destroyed or have retreated then any cargo that player left behind is forfeit to any player who attacked him or her.

In order to capture the cargo the capturing player must have ships remaining in orbit at the conclusion of all combat.

If more than one player is eligible to capture cargo then the cargo is divided up between the capturing players, proportional to number and strength of each capturing players ships. Being eligible does not guarantee that you will capture cargo when more than one player is capturing.

Even if a player has no ships, planetary forces, or colony at a planet you may attack him in order to capture any cargo he may have in orbit at that planet (usually such attacks are made against non-existent ships).

* 9.0 REBELLION:

Whenever your active population's morale falls below 90% there is a chance that your colony will rebel. The probability of rebellion varies with the population's morale in the following manner:

Morale Percentage chance of rebellion

100% to 90%	Rebellion cannot occur
89% to 50%	$(100\% - \text{Morale})^2$
49% to 0%	$100\% - \text{Morale}$

If your morale is 80% then you have a 4% chance of rebellion ($100\% - 80\% = 20\%$, $20\% \times 20\% = 4\%$). If your morale is 30% then you have a 70% chance of rebellion ($100\% - 30\% = 70\%$).

The percentage chance of rebellion may be reduced if you have planetary forces present. However, in order to have any effect you must have a number of planetary forces greater than the colony's active population. The percentage chance of rebellion will be divided by:

number of Planetary Forces / population

If you had 20 population and 30 planetary forces present then the percentage chance of rebellion would be divided by 1.5 ($30 / 20 = 1.5$). If the chance of rebellion was 50% it would be reduced to 33.3% ($50\% / 1.5 = 33.3$).

Each turn that there is a chance of rebellion the computer will generate a random percentage from 1 to 100. If the random percentage is less than or equal to the percentage chance of rebellion then the colony will rebel.

When a colony rebels the planet and colony will become owned by rebels (player #0). Rebel planetary forces will be created from the colony's population. The higher the population and the lower the morale then the greater the number of rebel planetary forces created. In addition some of your own planetary forces may defect to the rebel's side. The greater the number of rebel forces the greater will be the number of defections. In the process of rebellion the colony may suffer damage (looting and rioting in the streets).

Rebel and loyalist planetary forces do not immediately

attack each other. All attacks will be made during combat on the following turn. Rebel forces may or may not initiate their own attacks on enemy forces. You must order a capture in order to take the colony away from the rebels. Rebel colonies will be run by the computer, although provisions have been made to allow a neutral player to be placed in a game in the rebel's positions. Some characters and exotics may affect some aspects of rebellion.

* 10.0 VICTORY AND SCORING:

You win a game of Mobius-I by being the player with the highest score when the game ends on a predetermined turn.

* 10.1 ENDING TURN:

On the setup turn of each game each player will be asked to pick the turn on which he would like the game to end. The turn picked must be between turn 25 and turn 35. The ending turn will be the average of all of the players choices.

* 10.2 SCORING:

You score points each turn in two major ways:

- 1) controlling planets
- 2) controlling characters.

* 10.2.1 PLANETS:

For each planet you control you will receive 10 points per turn. In addition you will receive extra points for the following:

- 1) raw material and exotic deposits.
- 2) population.
- 3) production.

* 10.2.2 RAW AND EXOTIC DEPOSITS:

For each raw material or exotic deposit you will receive a number of points equal to the raw or exotic material's deposit rating each turn.

EXAMPLE: You control a planet with a raw material deposit rating of 12 and a deposit of alloys rated at 7. You would receive 19 points for the two deposits ($12 + 7 = 19$).

Only exotics which are extracted have a deposit rating so some exotics will not allow you to score in this manner.

* 10.2.3 POPULATION:

For each active colony you own you will receive a number of points equal to the number of active population multiplied by their morale expressed as a percentage each turn.

EXAMPLE: You control a colony with an active population of 100. Their morale is 90% so you would gain 90 points per turn ($100 \times 90\% = 90$).

You do not gain points for population in suspended animation.

* 10.2.4 PRODUCTION:

For each industry that operates at full production you will receive 2 points. If an industry is not working at full production (due to low morale or insufficient raw materials or population) then you will receive points proportional to its actual production.

EXAMPLE: You have ten industry building structures. If those industries were operating at full production they would produce 10 new industries each turn and you would receive 20 points each turn ($10 \times 2 \text{ points} = 20 \text{ points}$). However, if your

morale had dropped to 90% and those 10 industries only produced 9 new industries they would be operating at 90% of their full production so you would only receive 18 points that turn (90% of 20 points = 18 points).

*** 10.2.5 CHARACTERS:**

Each character you control will give you a number of points equivalent to the sum of his skill ratings plus his survival rating. If a character has a skilled job then the number of points received for that skill will be tripled.

EXAMPLES: You have a character who is unemployed and has the three following skills and ratings: General-3, Admiral- 2, Governor-5, Survival-4. You would receive 14 points (3 + 2 + 5 + 4) for this character each turn.

If instead of being unemployed the character was employed as a General then you would receive 20 points each turn (9 + 2 + 5 + 4).

If he was employed as an Admiral you would receive 18 points (3 + 6 + 5 + 4).

If he was employed as a Governor you would receive 24 points (3 + 2 + 15 + 4).

*** 10.2.6 PRISONERS AND FUGITIVES:**

If you are holding another player's character as a prisoner then you will receive the points for that character and the other player will not. You will not receive points for characters that are underground fugitives. You will receive points for fugitives who are not underground.

*** 10.2.7 SPECIAL CASES:**

Some exotics and skills may affect your score, either by contributing points or by modifying your score in some way. You should always check the Exotics and Job Appendices for such exotics or jobs as are applicable to your game.

*** 10.2.8 SCORING ON THE LAST TURN:**

On the last turn you will receive triple the value of the points scored on that turn.

*** 11.0 ORDERS:**

Orders are the means by which you tell the computer how you want to manipulate the various colonies, forces, resources and characters under your command. The following is a listing of these orders and their effect:

Order type	Code	effect
------------	------	--------

ORBIT DESIGNATION (ORB) .. Designates orbit to be affected by orders.

INFILTRATE (INF) .. Infiltrates clandestine characters into fleets, planetary forces or colonies.

DROP (DRP) .. Drops orbital forces and characters to a planet's surface.

ATTACK (ATK) .. Commands your forces to attack another player's forces and colonies.

RETREAT (RET) .. Sets conditions under which your forces will attempt to retreat from battle.

CAPTURE (CAP) .. Commands your forces to attempt to capture a planet and any colony which exists there.

NAME (NAM) .. Names your planets and characters.

USE (USE) .. Some exotics require a use order in order to be exploited by a player.

EMPLOY (EMP) .. Assigns jobs and skills to your characters.

TRANSFER (TFR) .. Transfers items between fleets and colonies.

MOVE (MOV) .. Moves ships,cargo and characters between orbits and star systems.

ABORT (ABO) .. Aborts flights that have not yet reached their destinations.

SUBTRACTION (SUB) .. Removes industry, structures, fortifications, and population from a colony's resources.

ADDITION (ADD) .. Adds industry, structures, fortifications and population to a colony's resources.

COMMUNICATION ... (COM) .. Sends a brief message to another player in game.

AUTO(AUTO) .. Turn on and off automatic homing of characters, commandeering and transfers, and use of boost to accelerate long flights.

DEFAULT (DEFAULT) .. See rules for AUTO order.

STANDING (STD) .. Creates an order that will be executed every turn until canceled or disabled.

DISABLE (DIS) .. Places a standing order on hold

ENABLE (ENA) ..Will cancel a hold on a standing order.

CANCEL (CAN) .. Will cancel a standing order.

*** 11.1 ORDER DIAGRAMS:**

Order diagrams are a simple means of representing to the player the various possible ways in which each different type of order may be written. The following will explain how to read these diagrams:

Let us assume the existence of a caveman named Og. Og is a microcephalic idiot who smells consistently of mastodon fat. He is a boor at parties and eats mashed potatoes with his fingers. However, Og has one outstanding talent. Og grunts. In order to get Og to grunt you must command him with a grunt order. Below is a diagram of the grunt order. Lower case letters in parentheses are for reference only. They are not actual parts of the order.

* Diagram of grunt order:

* GRUNT— , ———> END

In order to get Og to grunt you would write the order in the following manner:

* Example of grunt order:

GRUNT , END

The first part of the diagram is the codeword "GRUNT" in capitals. Any time you see a word or series of letters in capitals it means that you should copy that part of the order verbatim. In this case "GRUNT" happens to be the codeword signifying a grunt order. All orders will begin with a codeword designating what type of order is to follow. A list of order codes can be found at the beginning of this section.

The second part of the diagram is a comma. If you encounter a comma in an order diagram it means that you should literally write down a comma.

The third part of the diagram is a line and arrow indicating the sequence in which the order must be written. When using an order diagram to write orders the diagram must be followed in the direction indicated by the arrows. Consider these arrows as one-way street signs with a bulldozer waiting at every corner to flatten you if you try to drive in the wrong direction. Note that the arrow is not part of the actual order.

The last part of the diagram is the code word "END". This code signifies the completion of the order and will come at

the end of all of your orders.

When given the order “GRUNT,END”, Og grunts impressively, (shaking windows for blocks around).

Now, if we wanted Og to grunt several times we would have to write several grunt orders. However, a different grunt order might allow us to specify the number of times Og should grunt. The diagram for such an order would look like this.

* Diagram #2:

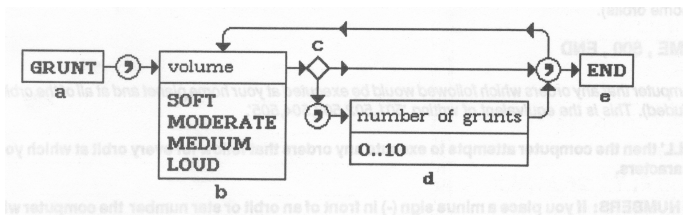
*GRUNT , ———> number of grunts , ———> END

* Example #2:

GRUNT , 5 , END

Once again the first part of the order is the codeword “GRUNT”. However the second part of the order now asks for the number of times you wish Og to grunt. Once again the arrows indicate the sequence in which the order must be written. Any other combination of the parts of the order would be contrary to the sequence directed by the arrows. Both commas listed in the diagram were actually parts of the order. When given this order Og emits five tremendous grunts which are followed by the distant but distinct sound of breaking glass. You begin to wonder whether you might be able to get Og to turn down the volume a bit.

* Examples 3a,3b,3c:



3a: **GRUNT , SOFT , END**

3b: **GRUNT , MODERATE , 3 , END**

3c: **GRUNT , MODERATE , SOFT , 5 , LOUD , LOUD , END**

The second part of the order (b) now requires you to list the volume of Og’s grunts. All of these choices are in bold capitals and must be printed verbatim. When choices are listed like this you are limited to only one of the choices, then you have to go on to the next part of the order. The third part (c) is a junction (the diamond shaped box) and allows you to choose how to continue the order. You may turn downward and list the number of times Og is to grunt (d) or you may continue without listing the number of grunts. Either way you end up at another junction (e) where you may end the order or go back and specify another volume. If you do not specify the number of times Og may grunt at a given volume then he will only grunt once. Choosing another volume does not cancel any previous volumes. It merely tacks on the new one.

When given the first of the orders (3a) Og looks puzzled and begins pounding himself on the head with both of his ham-like hands. Suddenly he pauses and somewhere in the back of his walnut-sized brain a rather dim little light flashes on. Looking none too confident, Og grunts softly (and tentatively) once. You smile at Og and nod encouragingly. Og grins back and begins nodding mindlessly and enthusiastically. When you give Og the second order (3b) he grunts moderately (and with more confidence) three times. When you give Og the last order (3c) he grows

wildly excited, grunting moderately once, softly five times and finally emitting two ear-shattering mega-grunts.

* 11.2 ORDER CODES:

Order codes are standardized abbreviations that will be used in writing your orders. They are basically a means of saving wear and tear on your writing hands and our typing fingers. The following is a list of order codes currently in use. Those codes followed by an asterisk are codes designating types of orders.

- ADD = Addition *
- ATK = Attack *
- ARM = Army
- CAP = Capture *
- CAN = Cancel *
- CHR = Character
- COL = Colony
- COM = Communicate *
- DIS = Disable *
- DRP = Drop *
- EMP = Employ *
- ENA = Enable *
- END = End of order
- FLT = Fleet
- FTF = Fortification
- IND = Industry
- INF = Infiltrate *
- MOV = Move *
- NAM = Name *
- OFC = Orbital forces
- ORB = Orbit *
- PLF = Planetary forces
- PLN = Planet
- POP = Population
- RAW = Raw Materials
- RET = Retreat
- SHP = Ships
- STC = Structures
- STD = Standing order *
- SUB = Subtraction *
- TFR = Transfer *
- USE = Use *

* 11.2.1 EXOTIC CODES:

Exotic codes may vary from game to game and it is generally best to look them up in the exotic appendix. However for the purposes of demonstration we will list a few here.

- ALY = Alloys
- BST = Boost
- LUX = Luxury goods
- MED = Medical goods

* 11.2.2 JOB CODES:

Job codes, unlike all other order codes, are generally not abbreviated. Some jobs cannot be assigned by the player so they will not have a job code.

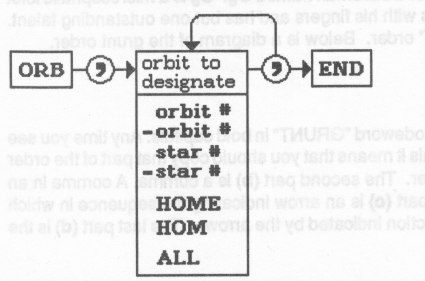
It is generally best to check the Exotic and Job Appendices before attempting to use a job code in an order. However, for the purposes of demonstration we will list a few here.

ADMIRAL (skilled - public)
 CONDEMNED (unskilled - public)
 FUGITIVE (unskilled - clandestine)
 GENERAL (skilled - public)
 GOVERNOR (skilled - public)
 HOSTAGE (unskilled - public)
 PRISONER (unskilled - incognito)
 SECURITY (skilled - public)
 SPY (skilled - clandestine)

*** 11.3 DESIGNATING AN ORBIT (ORB) :**

In order for the computer to carry out an order it must first know what orbit that order is going to affect. If you have a ship in the fifth orbit of star #50 and you wish to move it to another orbit you must first tell the computer that the ship you wish to move is at Orbit #55. You do this with an orbital designation order. Once you have designated the orbit you can write any number of orders which affect your holdings in that orbit.

If you want an order to apply to every possible orbit you can use the word ALL instead of an orbit designation. This is mainly useful for NAME and EMPLOY orders so you won't have to list the orbit designations for every character.



*** EXAMPLE #1:**

ORB , 122 , END
 Example #1 would tell the computer that any orders which followed would be meant to affect your holdings and characters at orbit #122. Note that the orbit number can be either an orbital i.d.

number or a planetary i.d. number. Since they are one and the same it makes no difference. The computer will assume that any orders given will be for the designated orbit until you designate a new orbit.

*** EXAMPLE #2:**

ORB,122,END
 1st ORDER
 2nd ORDER
 3rd ORDER
 ORB,205,END
 4th ORDER
 ORB,ALL,END
 5th ORDER

In example #2 the computer would assume that the first, second, and third orders were for orbit #122 and that the fourth order would be for orbit #205. The fifth order would be applied to every orbit where it was legal. The ALL designation should be used carefully.

The main thing to remember is that you have to tell the computer where something is before the computer can do anything with it.

*** 11.4 INFILTRATION (INF) ORDERS :**

Infiltration orders are the means by which you sneak clandestine characters into and away from locations owned by other players. Only characters with clandestine jobs can be infiltrated. ((See diagram on next page))

*** EXAMPLE #1:**

INF , COL , 7 , CHR , 32 , END

Example #1 would infiltrate character #32 into the colony owned by player #7.

*** EXAMPLE #2:**

INF , ARM , 3 , CHR , 19 , FLT , 5 , CHR , 77 , 25 , END

Example #3 would infiltrate character #19 into the planetary forces belonging to player #3. It would also infiltrate characters #77 and #25 into the fleet belonging to player #5.

*** EXAMPLE #3:**

INF , FLT , 4 , CHR , 33 , MOV , 22 , CHR , 33 , END

Example #3 is a special case in that it is the only instance in which a character may be given two different locations to infiltrate on the same turn. Example #4 will infiltrate character #33 into the fleet belonging to player #4 and then that character will infiltrate any flight bound for orbit 22. If no flights leave for orbit 22 then the second part of the order will fail.

THIS IS NOT THE USUAL MANNER IN WHICH YOU MOVE CHARACTERS BETWEEN ORBITS AND STAR SYSTEMS. Normally you use "move" orders. The above is only used for sneaking clandestine characters onto another player's flight.

*** EXAMPLE #4:**

INF , MOV , 200 , CHR , 45 , END

Example #4 is another special case in that it is currently the only instance in which a stellar i.d. number is used in an order. Example #4 would cause character #45 to infiltrate any flight bound for any orbit of star #200. If several flights were bound for star #200 the character would take the first flight to leave. The above example assumes that character #45 has already infiltrated another player's fleet.

*** EXAMPLE #5:**

INF , MOV , 2 , CHR , 185 , END

Example #5 is an example of infiltrating a flight by flight number. Character #185 will attempt to infiltrate the second flight out no matter where it's going. If there is no second flight ordered that turn then no infiltration will be attempted.

*** EXAMPLE #6:**

INF , MOV , 0 , CHR , 185 , END

This is the same as example #5 except that character 185 will attempt to infiltrate the last flight out.

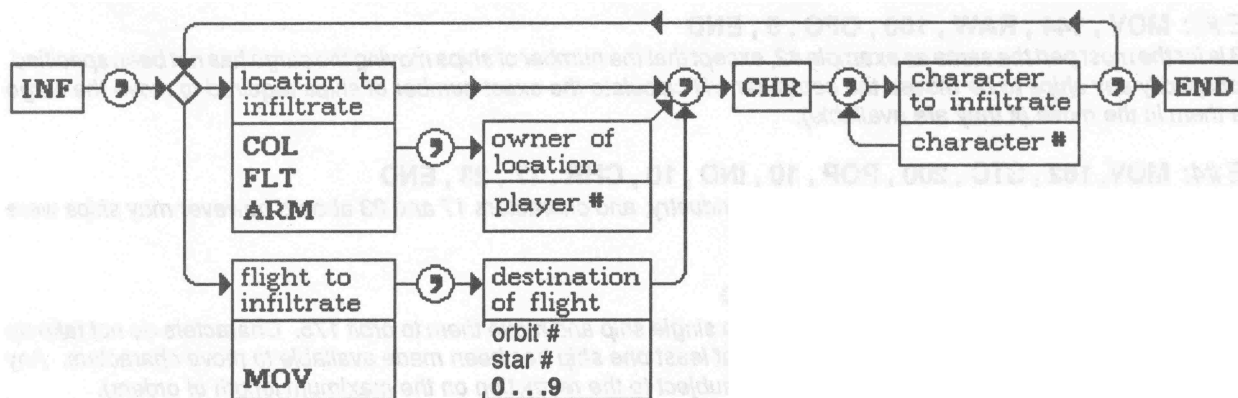
*** EXAMPLE #7:**

INF , MOV , 343 , 344 , 0 , CHR , 185 , END

In this example character 185 will attempt to infiltrate a flight to orbit 343 if there is one. If there is no flight to orbit 343 then a flight to orbit 344 will be infiltrated. If there are no flights to either orbit 343 or 344 then the last flight out will be infiltrated.

*** GENERAL NOTES:**

A flight single digit flight destination will be treated as a flight number, not as an orbit designation. A zero means the last



flight out.

Any time a clandestine character attempts an infiltration he runs the risk of blowing his cover. If a character's cover has already been blown (making him known to the location owner) any infiltration order he is given will fail. Infiltrations occur prior to combat so it is possible to infiltrate a character and retreat out of orbit on the same turn.

*** RESTRICTIONS:**

- Restriction #1: Only clandestine characters can be infiltrated.
- Restriction #2: You can infiltrate only your own clandestine characters.
- Restriction #3: Underground fugitives cannot be infiltrated.
- Restriction #4: In order to infiltrate a colony that colony must have active population.
- Restriction #5: In order to infiltrate a fleet there must be ships or orbital forces present on that fleet.
- Restriction #6: A character cannot be infiltrated and travel on the same turn.
- Restriction #7: A character can be infiltrated only once per turn.

*** 11.5 DROP ORDERS (DRP) :**

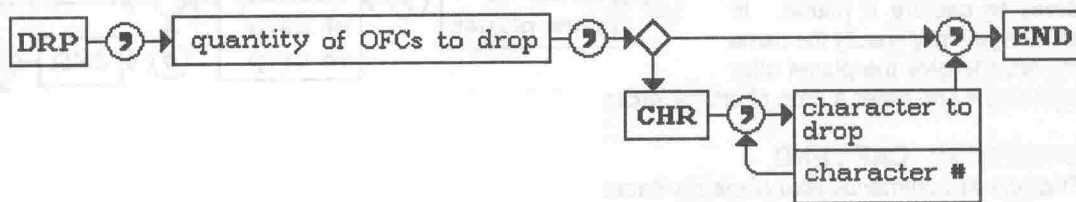
Drop orders are the means by which you move your orbital forces out of orbit and on to a planet's surface where they become planetary forces. Drops occur prior to the travelling of characters and you may need to move military personnel with the orbital forces. Therefore drop orders allow you to specify characters to be dropped along with the orbital forces.

*** EXAMPLE #1:**

DRP , 30 , END

Example #1

would remove 30 of your orbital forces from orbit and drop them to the planet's surface. Once the orbital forces have been dropped they become planetary forces.



*** EXAMPLE #2:**

DRP , 25 , CHR , 17 , 22 , 35 , END

Example #2 would remove 25 of your orbital forces from orbit and drop them to the planet's surface. In addition, characters #17, #22, and #35 would also be removed from your fleet in orbit and dropped to the planet's surface along with your planetary forces.

*** GENERAL NOTES:**

When characters are dropped they become located with your planetary forces. If you attempt to drop more orbital forces than exist then the computer will drop as many as actually exist. Drops in and of themselves do not constitute an act of aggression. Only an attack or capture with opposition will trigger combat. If combat does not occur then the drop is made without incident. If combat is initiated then all drops will occur on the first combat round.

*** WARNINGS:**

If you drop all of your orbital forces and you do not have ships in orbit then any characters located on your fleet will be dropped with your orbital forces, regardless of whether you wanted to drop them or not. This is known as "forced relocation." As long as a

single orbital force or ship remains in orbit the characters can remain in orbit.

Orbital forces in the act of dropping cannot attack on the first combat round, but they do get their full defense. An attack against the planetary forces of a dropping player will also target the dropping orbital forces.

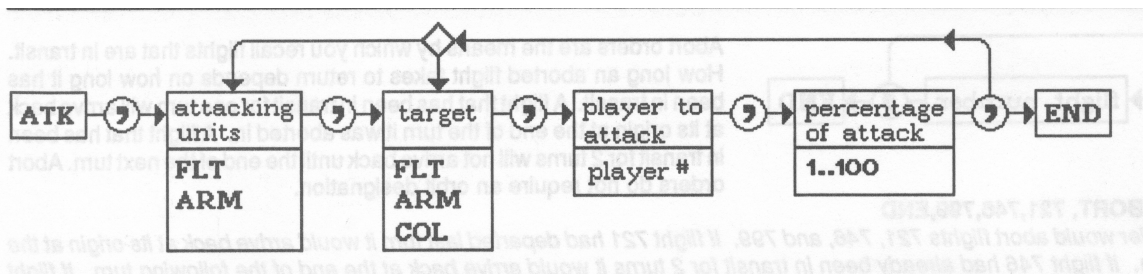
*** RESTRICTIONS:**

Restriction #1: Characters being dropped must be located on your fleet and be known to you.

Restriction #2: Characters cannot be dropped and given a travel or infiltration order on the same turn. If they have been given an infiltration order then they cannot be ordered to drop and if they have been ordered to drop they cannot be ordered to travel. This restriction does not apply to characters caught in forced relocation.

*** 11.6 ATTACK ORDERS (ATK) :**

Attack orders are the means by which you command your ships and planetary forces to attack selected targets and players.



*** EXAMPLE #1:**
ATK , ARM , FLT , 1 , 100 , END
Example #1 would order your planetary forces to attack the ships belonging to player #1 with 100% of their firepower.

*** EXAMPLE #2:**

ATK , ARM , FLT , 1 , 50 , ARM , 1 , 50 , END

Example #2 would order your planetary forces to attack the ships belonging to player #1 with 50% of their firepower and to attack the planetary forces belonging to player #1 with the remaining 50% of their firepower.

*** EXAMPLE #3:**

ATK , FLT , ARM , 1 , 25 , FLT , 2 , 25 , END

Example #3 would order your ships to attack the planetary forces belonging to player #1 with 25% of their firepower and to attack the ships belonging to player #2 with another 25%. Note that only fifty percent of your ships' total firepower would have been allotted to the chosen targets. The remaining 50% would be considered to be in reserve.

*** EXAMPLE #4:**

ATK , FLT , FLT , 1 , 30 , ARM , 3 , 30 , COL , 40 , END

Example #4 would order your ships to attack the ships belonging to player #1 with 30% of their firepower, the planetary forces belonging to player #3 with another 30%, and any colony on the planet's surface with the remaining 40%. Note that no player i.d. number was required for ordering the attack on the colony.

*** GENERAL NOTES:**

It is important to remember that orbital forces cannot attack and must be dropped to a planet's surface in order to do so. You may order forces being dropped to attack, but they will not execute the attack until the second combat round (they cannot attack while being dropped).

Attacks may be used to capture another player's cargo in orbit even though that player may not have any forces at that orbit. However, in order to capture you must have ships in that orbit. The simplest means of doing so is to order your ships to attack the other player's ships (even though those ships do not exist).

*** RESTRICTIONS:**

Restriction #1: You may order only your own forces to attack another player.

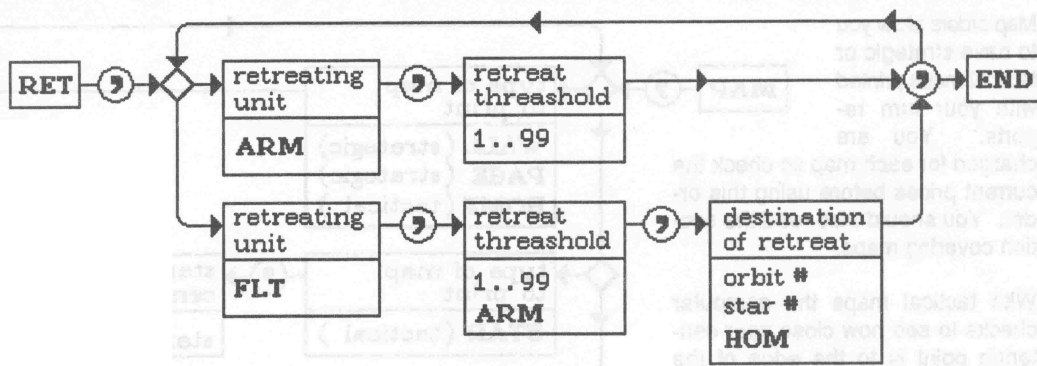
Restriction #2: You may never order more than 100% of your forces to attack.

Restriction #3: You can never attack your own colonies or forces.

Restriction #4: Attacks made by your planetary forces must be ordered in a separate order from attacks being made by your ships.

*** 11.7 RETREAT ORDERS (RET) :**

Retreat orders set the conditions under which your forces will attempt to retreat from combat. Retreats are conditional and occur only if combat occurs and the conditions of retreat are met.



* EXAMPLE #1:

RET , ARM , 50 , END

Example #1 will cause your planetary forces to retreat into orbit if their casualties exceed 50%.

* EXAMPLE #2:

RET , FLT , 20 , 115 , END

Example #2 will cause your ships to retreat to orbit #115 if their casualties exceed 20%.

* EXAMPLE #3:

RET , FLT , ARM , 115 , END

Example #3 commands your ships to hold their retreat until your planetary forces have retreated into orbit where they can be loaded aboard. Your ships will attempt a retreat to orbit #115 on the round following the retreat of your planetary forces. If all combat ends on the round that your planetary forces retreat then your ships will not retreat.

*** GENERAL NOTES:**

Because retreats are conditional you should not depend on them to move your forces to a given orbit. If you give your ships an order to retreat and combat does not occur then your ships will not move to another orbit. If combat occurs and your ships are not attacked or their casualties do not exceed their retreat threshold then, again, your ships will not move. If you want your ships to move regardless of whether combat occurs or not, then you should back up your retreat orders with a "Move" order. This will insure that your ships end up where you want them to.

When ships retreat they take as many orbital forces as their cargo bays will hold. ALL OTHER CARGO WILL REMAIN BEHIND.

*** WARNINGS:**

Characters located with retreating forces will be retreated with the forces (via a forced relocation).

Giving your forces a retreat order does not guarantee that your forces will be able to retreat, only that they will make the attempt (they may be destroyed in the process). Also, if all forces attacking your forces are destroyed or retreat then your forces will hold, even if their casualties exceed their retreat threshold.

*** RESTRICTIONS:**

Restriction #1: You may give retreat orders only to your own forces.

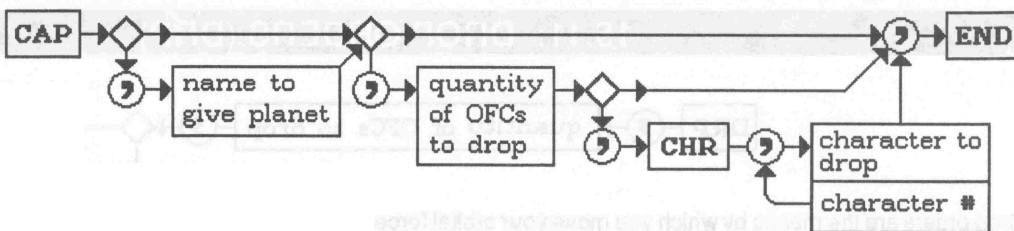
Restriction #2: Retreat thresholds must be between 1% and 99%.

Restriction #3: Planetary forces must retreat one full combat round prior to your ships' retreat in order to be retreated with the ships.

Restriction #4: Ships cannot retreat to the same orbit they are retreating from.

*** 11.8 CAPTURE ORDERS (CAP) :**

Capture orders are the means by which you command your planetary forces to capture a planet. In addition you may specify the name you wish to give the planet after you have captured it. You can also specify how many troops to drop and which characters to drop instead of writing a separate Drop order.



* EXAMPLE #1:

CAP , END

Example #1 would command your planetary forces to attempt to capture the planet they are currently located at. No name has been specified so the planet's name would remain unchanged.

* EXAMPLE #2:

CAP , EARTH , END

Example #2 would command your planetary forces to attempt to capture the planet they are currently located at and if the capture is succesful will give it the name of "EARTH".

* EXAMPLE #3;

CAP , MARS , 35, CHR , 19 , 20 , END

Example #3 would order your fleet to drop 35 orbital forces. characters 19 and 20, and name the planet MARS.

*** GENERAL NOTES:**

Only planetary forces may capture a planet, so if a player has only orbital forces at a world and has not ordered a drop then a capture order will automatically cause ALL of the player's orbital forces to be dropped. A drop order must PRECEDE a capture order or the number of force to drop must be specified in the CAP order in order to prevent an automatic drop. Right:

ORB,122,END

DRP,10,END

CAP,END

Wrong:

ORB,122,END

CAP,END

DRP,10,END

An automatic drop will NOT drop characters (unless you have no ships in orbit) so if you have characters to drop you should precede the capture order with a drop order for your orbital forces and characters or include them in the capture order itself.

If you have any planetary forces already on the surface of a planet an automatic drop will not occur.

Captures occur after all combat for the turn has been concluded. In order to make the capture you must have planetary forces remaining after combat and the planetary forces of the owner and all other players attempting to capture must have been destroyed.

Transfers occur after captures so it is possible to capture a planet and then transfer all of your planetary forces back into orbit.

*** WARNINGS:**

By ordering a capture you automatically commit all of your forces to the destruction of all of the forces belonging to the planet's owner and all of the forces belonging to any other player attempting to capture or destroy the planet's colony.

If you do not have any ships in orbit and an automatic drop occurs then any characters located with your orbital forces will be dropped (forced relocation).

*** RESTRICTIONS:**

Restriction #1: You can order only your own planetary forces to attempt a capture.

Restriction #2: Empty orbits cannot be captured.

Restriction #3: You must have planetary forces or orbital forces present to order a capture.

Restriction #4: You cannot capture your own planets.

Restriction #5: A planet's name must begin with a letter.

Restriction #6: A planet's name cannot exceed 15 letters in length.

*** 11.9 NAME ORDERS (NAM) :**

Name orders are the means by which you give your planets and characters names.

* EXAMPLE #1:

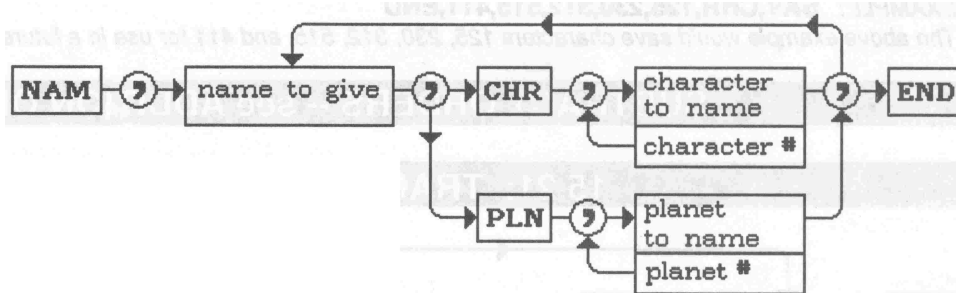
NAM , EARTH , PLN , 433 , END

Example #1 would give the name "EARTH" to planet 433.

* EXAMPLE #2:

**NAM , BLACK BART ,
CHR , 15 , TYPHOID MARY ,
CHR , 22 , END**

Example #2 would give the name BLACK BART to character 15 and the name TYPHOID MARY



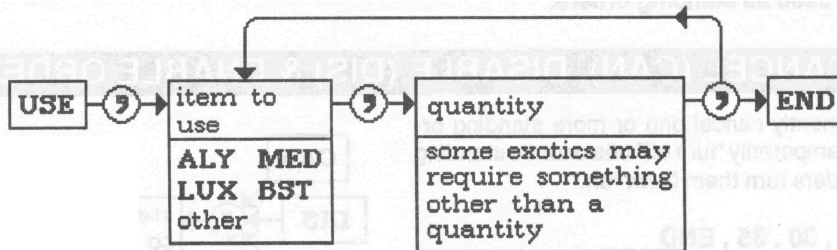
to character 22.

*** RESTRICTIONS:**

- Restriction #1: You can only name characters and planets which you control.
- Restriction #2: Character and planet names must begin with a letter.
- Restriction #3: Character names cannot be longer than 20 letters.
- Restriction #4: Planet names cannot be longer than 15 letters.
- Restriction #5: Characters can only be named once.

*** 11.10 USE ORDERS (USE) :**

Use orders are the means by which you make use of some types of exotics. Not all exotics require use orders.



*** EXAMPLE #1:**

USE , ALY , 20 , END

Example #1 would make 20 alloys available to a colony's industry. In this instance the 20 alloy are a quantity.

*** EXAMPLE #2:**

USE , BST , 20 , END

Example #2 differs from example #1 in that boost is being used and instead of a quantity the number listed represents the

percentage that you want to boost your jump range. In this case the player wants to boost his range by 20%. This order would be followed immediately by the move which the player wanted to boost.

Example:

USE,BST,20,END

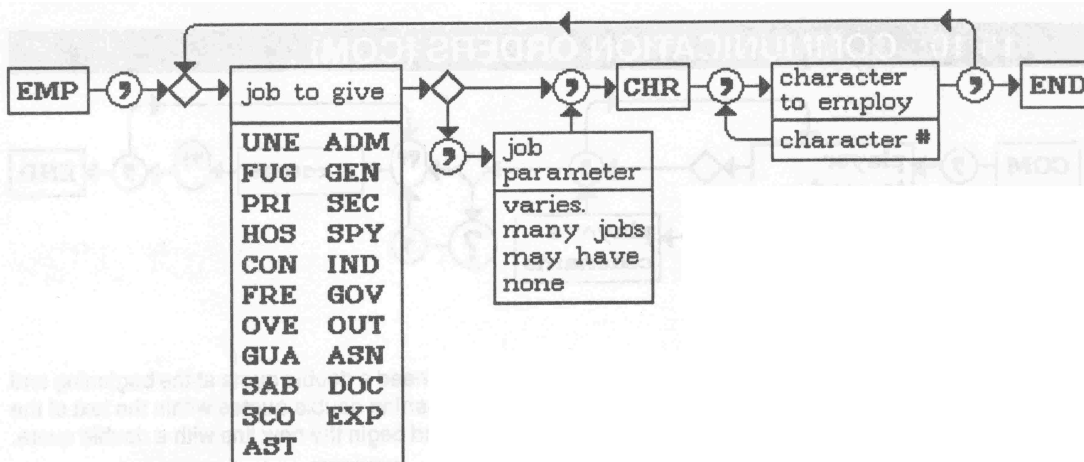
MOV,135,SHP,10,END

The computer would automatically calculate the amount of boost required to boost the jump range of all 10 ships by 20 %.

*** GENERAL NOTES:**

As mentioned above the format for use orders may vary from one exotic to the next. Each exotic's listing in the Exotic and Job Appendices will give examples and explanations of the proper format to be used.

*** 11.11 EMPLOY ORDERS (EMP) :**



Employ orders are the means by which you assign various jobs to your characters. For the most part only you may assign a job to one of your characters. However, some jobs may be assigned by the owner of your character's location. You should check the job appendix for details concerning any job you wish to assign a character.

*** EXAMPLE #1:**

EMP , GENERAL , CHR , 15 , END

Example #1 would employ character #15 as a general.

*** EXAMPLE #2:**

EMP , GENERAL , CHR , 15 , 16 , 22 , END

Example #2, like example #1, would employ character #15 as a general. However, it would also employ characters #16 and #22 as generals too.

* EXAMPLE #3:

EMP , GENERAL , CHR , 15 , ADMIRAL , CHR , 16 , 22 , END

Example #3 would employ character #15 as a general and characters #16 and #22 as admirals.

* EXAMPLE #4:

EMP , FUGITIVE , 3 , CHR , 21 , END

Example #3 is an example of employing a character in a job requiring a parameter. In this case the job of "FUGITIVE" requires the player to list the number of turns that the character is going to spend "underground" and hence incommunicado. This extra listing is the "parameter." In the above case the character #21 would be employed as a fugitive and would spend 3 turns underground. Some jobs may require more than one parameter and some will require none at all.

* **GENERAL NOTES:**

Not all jobs may be used in an employ order and many (although not all) can be assigned only by the character's owner. In addition, some jobs will require parameters and others will not, so it is always best to check the Exotic and Job Appendices before attempting to employ a character in a given job.

* **RESTRICTIONS:**

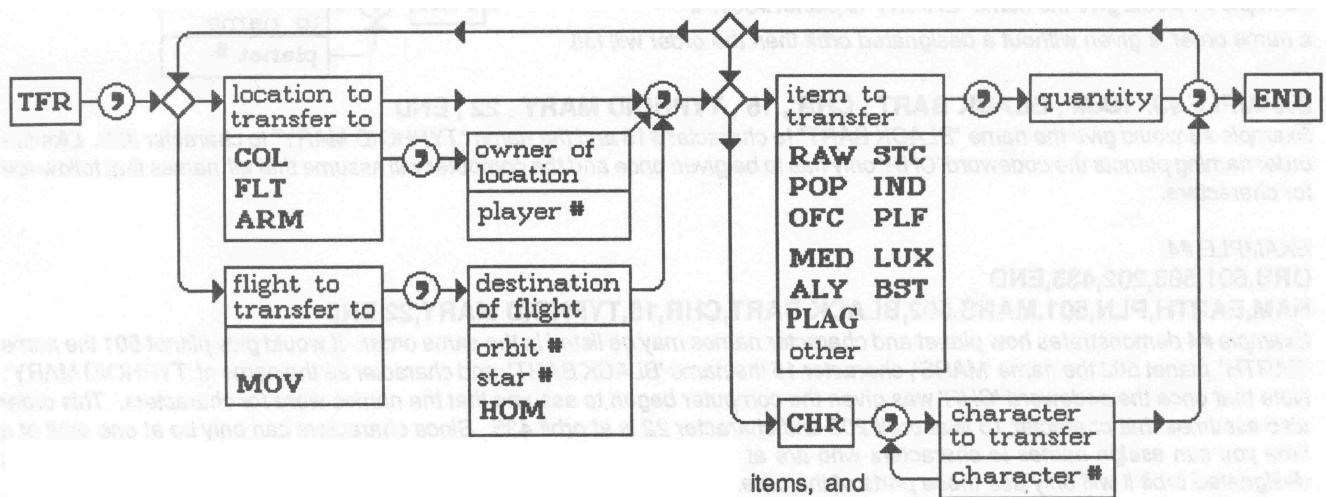
Restriction #1: You may employ a character only once during a turn.

Restriction #2: When both the owner of a character and the owner of the character's location attempt to employ a character, then the location owner's order will take precedence.

Restriction #3: Only characters known to you may be employed.

* **11.13 TRANSFER ORDERS (TFR) :**

Transfers are the means by which you move and trade various materials, goods, and items between fleets and colonies.



* EXAMPLE #1:

TFR, FLT, 12, RAW, 500, STC, 100, OFC, 150, END

Example #1 would remove 500 raw materials, 100 structures, and 150 orbital forces from your fleet and transfer them to the fleet belonging to player #12.

* EXAMPLE #2:

TFR, COL, 2, RAW, 200, IND, 20, CHR, 42, END

Example #2 would remove 200 raw materials, and 20 industry from your fleet and transfer them into the stores of the colony belonging to player #2. Character 42 would also be transferred to player #2's colony. To transfer to your own colony you list your own player #.

* EXAMPLE #3:

TFR, FLT, 5, STC, 300, POP, 100, END

Example #3 would remove 300 structures and 100 population from your colony's storage and transfer them to the fleet owned by player #5. Again if you had preferred to transfer the items to your own fleet you would simply list your own player number as the owner of the fleet.

* EXAMPLE #4:

TFR , COL , 0 , RAW , 600 , END

Example #4 would remove 600 raw materials from your fleet's cargo and transfer them down to the colony's stores REGARD-

LESS OF WHO OWNED THE COLONY. If you specify player #0 as the owner of a colony then the items will be transferred to the colony regardless of who owns it. Otherwise, if the owner you have listed does not own the colony then the transfer will not take place.

* EXAMPLE #5:

TFR , MOV , 625 , LUX , 10 , CHR , 175 , END

Example #5 would remove 10 luxury goods from your colony's storage and put them on an already existing flight to orbit 625. Character 175 would also be transferred to that flight. Transferring to a MOV is useful, for example, if you have a standing order already sending a flight to an orbit and you want to add items to it just for this turn. If you transfer to a flight that doesn't exist the computer will attempt to create the flight after all other MOVE orders for that orbit have been processed.

* **GENERAL NOTES:**

If you attempt to transfer more items than you have then the computer will transfer as many items as actually exist.

* **WARNINGS:**

If you specify player #0 when transferring to a fleet then the items will be transferred to the Rebel fleet regardless of whether any rebels exist or not. In effect the items become unowned and must be taken back by capture. If you transfer all of your orbital forces to another player's fleet and you have no ships in orbit then any characters located on your fleet automatically travel to the other player's fleet. This is known as "forced relocation". Forced relocation will not occur as long as at least one orbital force or ship remains with your fleet.

* **RESTRICTIONS:**

Restriction #1: You can transfer only items which you own.

Restriction #2: You may transfer items only if you have forces or a colony with active population at the orbit at which the transfer takes place.

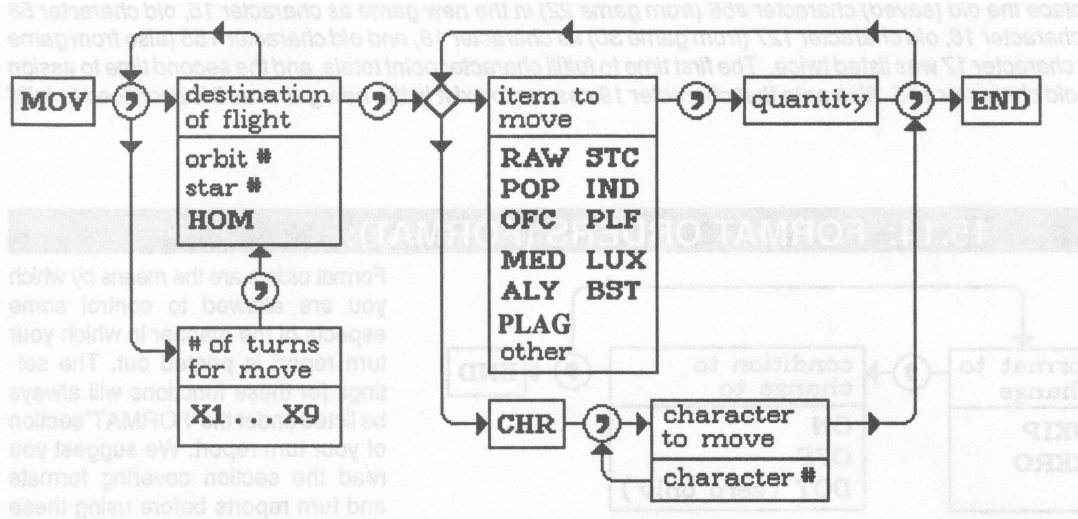
Restriction #3: Ships, planetary forces and characters can never be transferred.

Restriction #4: Orbital forces can only be transferred between fleets. They may never be transferred to colonies.

Restriction #5: Items transferred can only be transferred once on any given turn.

* **11.15 MOVE ORDERS (MOV) :**

Move orders are the means by which you command your ships to move forces, cargo and characters between orbits and star systems.



* EXAMPLE #1:

MOV , 122 , SHP , 3 , END

Example #1 would move 3 of your ships to orbit #122 (the second orbit of star #120).

* EXAMPLE #2:

MOV , 144 , RAW , 100 , OFC , 5 , SHP , 2 , END

Example #2 would load 100 raw materials and 5 orbital forces aboard two of your ships and move them to orbit #144. If the computer found that more than two ships were required to move the above cargo and extra ships were available then the

computer would commandeer enough extra ships to move all of the cargo. However, the computer would always move at least two ships (granted that they were available) even if one of the ships were empty of cargo.

* EXAMPLE #3:

MOV , 144 , RAW , 100 , OFC , 5 , END

Example #3 is for the most part the same as example #2, except that the number of ships moving the cargo has not been specified. If you do not specify any ships to be moved the computer will figure out exactly how many ships are needed to move the cargo and commandeer them (if they are available) for the move.

* EXAMPLE #4:

MOV , 162 , STC , 200 , POP , 10 , IND , 10 , CHR , 17 , 23 , END

Example #4 would load 200 structures, 10 population, 10 industry, and characters #17 and #23 aboard however many ships were required and move them to orbit #162.

* **EXAMPLE #5:**

MOV , X3 , 175 , CHR , 15 , 99 , 62 , END

Example #5 would load characters #15, #99, and #62 aboard a single ship and move them to orbit #175. Characters do not take up cargo space but the computer will always make sure that at least one ship has been made available to move characters. Any number of characters may be loaded onto a single ship without effecting its cargo space. Due to the X3 parameter the flight will take at least three turns to arrive. It may take more than 3 turns if the destination is more than 3 turns away and insufficient Boost is available.

* **GENERAL NOTES:**

Regardless of whether you are moving within a starsystem (intra-system) or between two different starsystems (inter- stellar) you must specify a specific orbital i.d. number as your destination. Cargo is loaded in the order in which you list it. If there is a shortage of ships then the cargo listed first is most likely to be loaded and moved. It is always a good idea to list your critical cargo first. It is permissible to list the same type of cargo more than once within the same order.

Each move order you write will be treated separately. Each move order will create its own flight of ships with its own unique flight number. Each flight will be loaded separately and is considered to move separately from all other flights (even though they may have the same destination and arrive on the same turn).

If you attempt to move more ships or cargo than you have then the computer will automatically move as many as actually exist.

You can change the number of turn that a flight will be in transit by using the ETA parameter. This is done by putting the letter X and the number of turns you want to flight to last right after the MOV part of the orders. For example: if you want the flight to last 4 turns your order would start with MOV,X4,... If the destination is too far away then the flight will use enough Boost to arrive on time. If insufficient Boost is available then the ETA then the flight will take longer than you specify. If you don't have enough Boost to reduce the travel time by at least one turn then no Boost will be used.

* **WARNINGS:**

If you move all of your ships at a given orbit and there are no orbital forces remaining then any unordered characters located on your fleet will be moved to a colony or army (in that order) owned by you. If that's not possible then they'll leave on the last flight of ships out. This is known as a "forced relocation". As long as you have at least one orbital force or ship remaining the forced relocation move will not take place. Just to be safe, it's best to specify where you want your characters to go in the MOVE order itself.

Except in the instance of a forced relocation, characters will not move of their own accord. You must specify them in your move order or they will remain behind.

CARGO IS ASSUMED TO BE UNLOADED INTO ORBIT WHEN YOUR SHIPS ARRIVE AT THEIR DESTINATION. If you wish to move that cargo again you must specify the cargo in the new move, otherwise the cargo will remain behind floating around in orbit (even if you move all of your ships).

* **RESTRICTIONS:**

Restriction #1: You can only move items or characters which are located on your fleet. Transfer and travel orders occur prior to move orders so items and characters may be transferred to your fleet and moved on the same turn.

Restriction #2: You cannot move planetary forces. Recoveries take place prior to moves so you may recover planetary forces (turning them into orbital forces) and move them (as orbital forces) on the same turn.

Restriction #3: You can only move characters which are known to you.

ABORT ORDERS (ABO) :

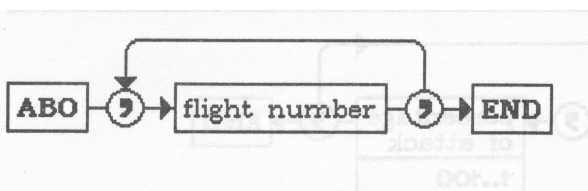
Abort orders are the means by which you recall flights that are in transit. How long an aborted flight takes to return depends on how long it has been in transit. A flight that has been in transit for one turn will arrive back at its origin at the end of the turn in which it was aborted. A flight that has been in transit for two turn won't arrive until the end of the next turn. Abort orders don't require orbit designations

* **EXAMPLE: ABO,85,86,END**

The above would abort flights 85 and 86.

* **11.16 ADDITION (ADD) AND SUBTRACTION (SUB) ORDERS:**

Additions and subtractions add and remove industry, structures, fortifications, and population, to and from a colony's resources. Additions remove items from storage and add them to a colony's resources. Subtractions remove items from the colony's resources and place them in storage.

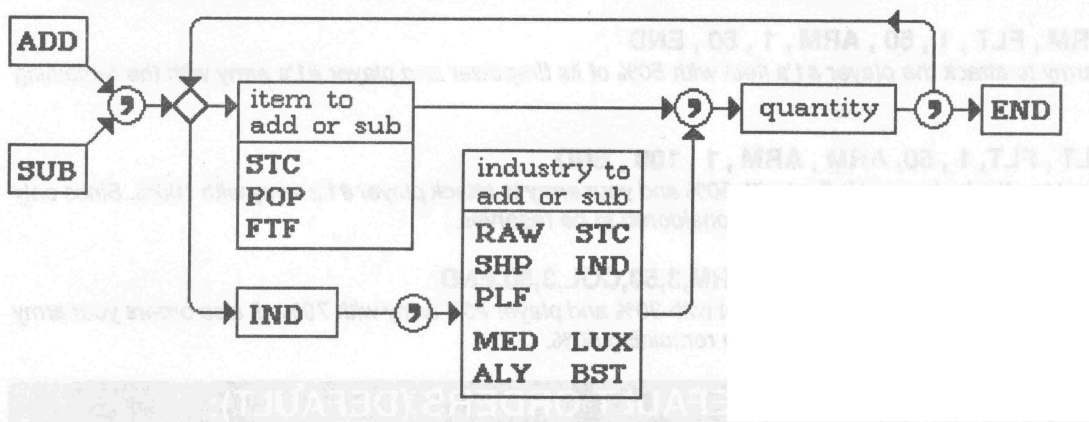


* **EXAMPLE #1:**

ADD , POP , 10 , FTF , 5 , STC , 10 , END

Example #1 would add 10 population, 5 fortifications, and 10 structures housing population to the colony's resources. In doing so it would remove 510 structures (500 for fortifications + 10 for housing) and 10 population from the colony's storage. Adding population re-

moves them from suspended animation. When adding population the computer will check to see if enough structures to house them exist. If there is insufficient housing and there are structures in storage the computer will add the required structures. If there are still insufficient structures for housing then the computer will limit the number of population units it adds. If no housing existed and the planet had an environment of 10 then the computer would remove an additional 100 structures from storage and use them to house the added population.



* EXAMPLE #2:

ADD, IND, RAW, 10, IND, STC, 2, IND, IND, 5, IND, PLF, 8, END

Example #2 would add 10 industry to the industry extracting raw materials, 2 industry to the industry building structures, 5 industry to the industry building more industry, and 8 industry to the industry building planetary forces. In doing so it would re-

move 25 industry from storage. Industry requires structures to house it so the computer will automatically remove the proper number of structures from storage. If the planet had an environment of 10, 250 structures would be removed from storage to house the industry. If there are insufficient structures available in storage then the computer will limit the number of industry it adds.

* EXAMPLE #3:

SUB, POP, 20, FTF, 3, STC, 50, END

Example #3 would remove 20 population, 3 fortifications, and 50 of the structures housing population, from the colony's resources and place them in storage. Fortifications cannot be stored so they are broken down into structures. Example #3 would place 350 structures in storage (50 from structures housing population and 300 from fortifications). Subtracting population places them in suspended animation, so 20 raw materials would be removed from storage for this purpose.

* EXAMPLE #4:

SUB, IND, PLF, 10, IND, SHP, 5, IND, MED, 1, END

Example #4 would remove 10 industries building planetary forces, 5 industries building ships, and 1 industry extracting medical goods from the colony's resources and place them in storage. The structures housing the subtracted industry will also be placed in storage. Assuming an environment of 10, 160 structures would be placed in storage.

*** GENERAL NOTES:**

Subtractions are executed prior to additions so it is possible to subtract and add an item or industry on the same turn. Industry will not build or produce on the turn that it is added or subtracted. A colony does not need to exist prior to an addition, so in order to start a new colony you just add the proper amounts of structures, population and industry. It is permissible to combine additions or subtractions to industry with additions or subtractions to structures, population, and fortifications. It is never permissible to combine additions and subtractions in the same order.

*** WARNING:**

If you subtract all of the active population from a colony any characters located at the colony will be relocated to your planetary forces.

*** RESTRICTIONS:**

Restriction #1: Only the owner of a colony may add or subtract to its resources

Restriction #2: To make an addition or subtraction you must have either active population in the colony or planetary forces on the planet.

Restriction #3: If you add or subtract structures for housing you must add or subtract in multiples of the environment rating.

Restriction #4: You can never subtract more than half the structures required to house population.

*** 11.17 COMMUNICATION ORDERS (COM) :**

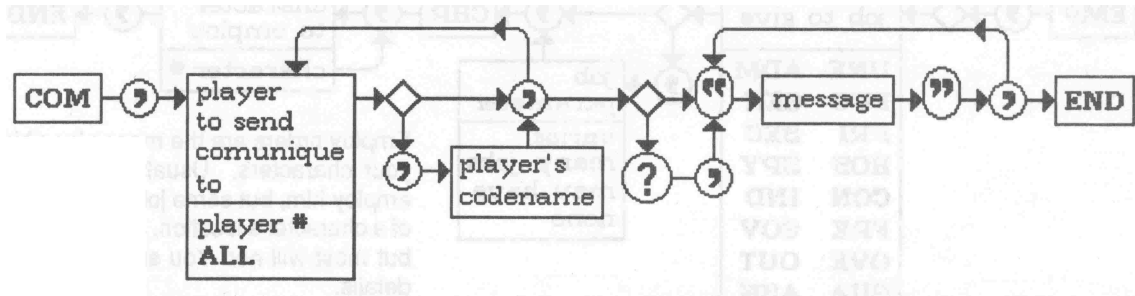
Communication orders allow you to send a brief message to another player (such as your address or phone number). In order to do so you must know the other player's codename.

* EXAMPLE:

COM , 4 , GOLDEN HORDE , “ GREETINGS. CONTACT ME AT: “ , “ HAWLEY SMOOT “ , “ 1984 E. DOOMS-DAY AVE. “ , “ VAL HALLA, CA 98765 “ , END

If you were player #2 and your codename was “STAR HAMMER” then example #1 would cause the following message to be printed at the end of player #4’s turn report:

COMMUNIQUE FROM #2 — STAR HAMMER



_ GREETINGS.
CONTACT ME AT:
HAWLEY SMOOT
1984 E. DOOMS-
DAY AVE.
VAL HALLA, CA
98765 _

* **GENERAL NOTES:**

If the first line of message is the word

“ANONYMOUS” then the player receiving the message will not be told who sent him or her the message.

Example: **COM,7,DRAGON LADY,”ANONYMOUS”,”YOU’RE DOOMED”,END**

* **RESTRICTIONS:**

Restriction #1: Communication orders can’t be longer than 255 letters or numbers, including commas, quote marks, and messages.

Restriction #2: You cannot have more than 5 lines of message.

Restriction #3: You can only send one message per turn to each player.

* **11.18 STANDING ORDERS (STD) :**

Standing orders are orders that the computer will automatically execute every turn. This way the player can give the computer an order only once and the computer will continue to execute it until the player tells it to stop. Each standing order is numbered so that the computer knows in what sequence the standing orders are to be executed (much like a computer program). Standing orders are always executed last (i.e. after all not-standing orders).

STD , —> order # , —> order

* EXAMPLE #1:

STD , 10 , ORB , 115 , END

Like normal orders you must designate the orbit to be affected by the standing orders. You do this by making a standing orbital designation. Example #1 is listed as standing order #10 and is designating orbit #115 as the orbit to be affected by the orders that follow.

* EXAMPLE #2:

STD , 20 , TFR , COL , FLT , 3 , RAW , 500 , END

Example #2 creates standing order #20. Standing order #20 is a transfer order and will transfer 500 raw materials from the colony’s storage to player #3’s fleet every turn.

* EXAMPLE #3:

STD , 30 , MOV , 255 , RAW , 500 , SHP , 5 , END

Example #3 creates standing order #30 which will move 500 raw materials with 5 ships to orbit #255.

By adding three more orders to the three previous examples we can set up an automated line of supply which will ship 500 raw materials to planet #255 and 50 orbital forces to planet #115.

STD,10,ORB,115,END

STD,20,TFR,COL,FLT,3,RAW,500,END

STD,30,MOV,255,RAW,500,SHP,5,END

STD,40,ORB,255,END

STD,50,TFR,FLT,COL,3,RAW,500,END

STD,60,MOV,115,OFC,50,SHP,5,END

This sequence of orders would essentially ship 500 raw materials from the colony on planet #115 to the colony on planet #255. At the same time 50 orbital forces from planet #255 would be shipped to planet #115. On the following turn the ships used to ship the planetary forces would be used to ship raw materials back and visa versa. By automating your lines of supply you can take much of the

drudgery out of writing your orders.

Actually the above sequence is lacking two orders. One to recover the 50 orbital forces so they can be shipped and another to drop the 50 orbital forces that have already arrived. If we made these standing orders #55 and #35 respectively the computer would add them in as follows:

```
STD,10,ORB,115,END
STD,20,TFR,COL,FLT,3,RAW,500,END
STD,30,MOV,255,RAW,500,SHP,5,END
STD,35,DRP,50,END
STD,40,ORB,255,END
STD,50,TFR,FLT,COL,3,RAW,500,END
STD,55,TFR,FLT,PLF,50,END
STD,60,MOV,115,OFC,50,SHP,5,END
```

Note that these two new orders have been placed in their proper numerical order regardless of the sequence in which the computer received them.

The only orders which cannot be standing orders are name orders, disable orders, enable orders, cancel orders, and communication orders.

If the computer is unable to execute a standing order for one reason or another it does not cancel the standing order. Instead the order just fails and the computer tries again next turn.

The computer cannot really tell when a standing order has become useless or counter-productive and will mindlessly continue trying to execute it (which can prove disastrous on occasion). We have therefore provided the players with the means to temporarily or permanently cancel standing orders via disable, enable, and cancel orders.

* 11.19 DISABLE (DIS), ENABLE (ENA) & CANCEL ORDERS:

Disable orders temporarily “turn off” one or more standing orders and Enable orders turn them back “on.” Cancel orders permanently cancel one or more standing orders.

* EXAMPLE #1:

```
DIS , 20 , 30 , 35 , END
```

Example #1 would disable standing orders #20, #30, and #35. The computer would not execute these orders until they were turned back on by an Enable order.

* EXAMPLE #2:

```
ENA , 20 , 35 , END
```

Example #2 would enable standing orders #20 and #35 (i.e. turn them back on). Standing order #30 would remain disabled.

* EXAMPLE #3:

```
CAN , 30 , 35 , END
```

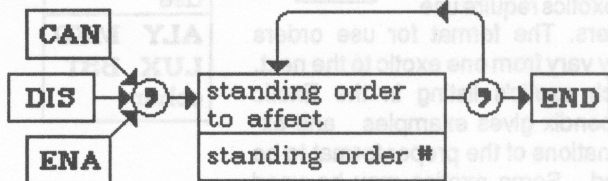
Example #3 would cancel standing orders #30 and #35 permanently. A cancel order will cancel a standing order regardless of whether it is disabled or not.

* GENERAL NOTES:

You CANNOT disable, enable and cancel standing orders all in a single order. Each must be written as a separate order. If you disable a standing order you cannot enable or cancel it on the same turn and visa versa.

* 11.191 AUTO and DEFAULT

Auto and Default are the means by which you control commanding, automatic transfers, homing of characters, and automatic use of boost. Auto orders are used to temporarily turn these functions on or off on an orbit by orbit basis. Default orders permanently turn these functions on or off for all orbits until another Default order changes them. The current settings for these functions are listed under the DEFAULTS section of your turn report. You can't give more than one Default order per turn. Automatic transfers and homing occur only once per turn so their condition for any given orbit is determined by the last Auto order written for that orbit.



EXAMPLE #1: **DEFAULT, TFR, ON, CMD, ON, HOM, ON, END**

This example turns on automatic transfers, commanding, and homing. We currently recommend that the above settings be used.

EXAMPLE #2: **AUTO, TFR, OFF, HOM, ON, END**

Example #2 turns automatic transfers off and automatic homing on for the orbits under which the order is listed.

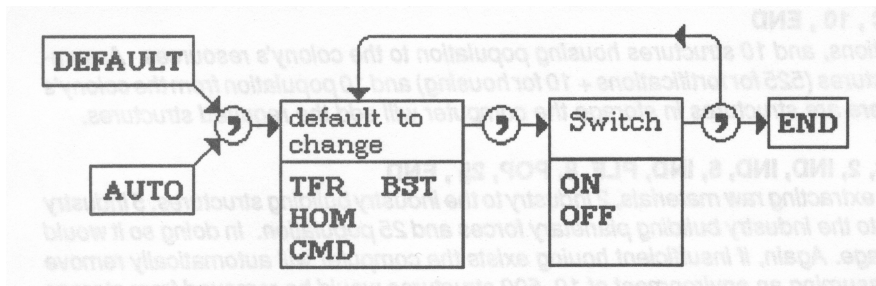
EXAMPLE #3:

AUTO,CMD,OFF,END

TFR,FLT,10,MED,27,END

AUTO,CMD,ON,END

You may disable commandeering on an order by order basis by sandwiching the order or orders to be affected between one Auto order and another.



EXAMPLE #4: **DEFAULT,BST,ON,END**

The above order would turn automatic boosting on for all of your star systems. With automatic boosting turn on the computer will attempt to use boost whenever it is available and useful (i.e. if a flight would take more than one turn the computer will use enough boost to move the flight to its destination in one turn). Automatic boosting is subject to the availability of boost and restrictions due to the maximum boost value.

* 11.192 QUANTITY PARAMETERS

You may want to be precise about the number of items or materials you leave behind when you drop, transfer, move, add, or subtract. However, production or extraction may vary and the results of combat are not completely predictable so this can be difficult. This is particularly a problem with standing orders which must function over a number of turns under varying conditions. If you have a colony which is producing surplus raw materials you might want to ship the surplus home each turn, but because morale may vary the surplus may also, making it difficult to judge the quantity you can move home without shorting the industry that you have building at the planet. You can avoid this problem by using 'quantity parameters' which allow you to restrict the materials you move each turn based on the number that you want left behind. Parameters are allowed anytime an order requires a quantity, but the number of parameters and what they restrict will vary depending on the type of order and what material or item is affected.

In order to use a parameter you follow a quantity with a dash (-) and then the parameter. If a second parameter is used you follow the first parameter with another dash and then the second parameter. In order to use a second parameter you have to list a first parameter too (you can always make it a zero). If it is possible to use two parameters you may use both or use just the first. If you're using only the first of two parameters then it is not necessary to list the second.

* EXAMPLES OF USING QUANTITY PARAMETERS:

ADD,POP,15-2,END - add up to 15 population but leave at least two in storage.

CAP,URANUS,100-10,END - Capture the planet, naming it URANUS, dropping up to 100 orbital forces but leave at least 10 in orbit.

MOV,375,RAW,1000-0-5,OFC,25-5-10,END - Move up to 1000 raw materials to and 25 orbital forces to orbit 375. Leave at least five RAW on the planet. Leave at least 5 OFC in orbit and leave at least 10 on the planet if any PLFs were commandeered from there.

MOV,605,PLF,100-10-5,END - Move up to 100 PLFs to orbit 605 leaving at least 10 on the surface and at least 5 in orbit as orbital forces.

STD,4400,SUB,POP,1-15,END - A standing order to put one population into cold storage each turn as long as it won't reduce the active population to less than 15.

USE,LUX,32767-10,END - Use all but 10 luxury items to increase the morale of the population.

* 11.20 SEQUENCE OF EXECUTION:

The following is a general list of the order in which the computer executes orders, combat, production, disaster and rebellion. It is not meant to be complete and "USE" orders may be processed at any point in the sequence depending on the exotic they are using.

1) Assassinations occur.

2) INFILTRATION orders executed (INF).

3) Combat occurs:

a) DROPS (DRP), ATTACKS (ATK), RETREATS (RET) and CAPTURES (CAP) are noted by the computer but not yet executed.

b) Combat commences.

c) Drops are executed on the first combat round.

d) Attacks are executed and retreats occur as needed.

e) Combat ends (maximum of 10 rounds).

f) Captures are executed.

4) EMPLOY (EMP) and NAME (NAM) orders executed.

- 5) Life support removes raw materials needed for life support.
- 6) TRANSFER (TFR) and NAME (NAM) orders executed.
- 7) MOVE orders executed (MOV) — ships, cargo, and passengers depart.
- 8) SUBTRACTION orders executed (SUB).
- 9) Automatic transfers to colonies occur.
- 10) Automatic “homing” of characters occurs.
- 11) Production occurs:
 - a) If life support needs more raw materials they are removed as they are produced.
 - b) Extraction and Building occur. This is considered to be simultaneous and items extracted cannot be used for building on the same turn. Industry which is building can use only raw materials already in the colony’s stores.
- 12) ADDITION orders executed (ADD).
- 13) Rebellion occurs.
- 14) Population deaths due to causes other than combat or rebellion occur.
- 15) Population grows.
- 16) New Characters are recruited.
- 17) Ships within one jump of orbit arrive.
- 18) Condemned characters are executed.
- 19) Advancement of character skills occurs.
- 20) Scoring occurs.

It is important to note that orders are executed by type. Hence all transfer orders for a given orbit will always be executed before any move orders for that orbit, regardless of which you wrote down first on your turnsheet.

Also the computer executes these orders on an orbit by orbit basis. The first thing the computer does when processing an orbit is to read through all of the orders and pick out any which effect that orbit. This means that you may have orders for a given orbit in several different places on your turnsheet and the computer will always find and execute them when it comes to the proper orbit (as long as you have headed each separate chunk of orders with the proper orbit number).

*** 11.21 WRITING YOUR ORDERS:**

Each turn you will send in a turnsheet listing all of the orders you wish to be executed that turn. At the top of this turnsheet you will need to list some important information:

- 1) The game number.
- 2) The turn number.
- 3) Your player i.d. number.
- 4) Your code name.
- 5) Your account number.
- 6) Your name
- 7) Your signature.

*** 11.21.1 THE GAME NUMBER:**

The first line of your turn sheet should begin with the game number. You should always print it exactly as it appears on your turn report, including the word “GAME”, the number sign, and any letters preceding the number.

*** 11.21.2 THE TURN NUMBER:**

The turn number that you list will be the turn number listed on the last turn report that you received. On the setup turn you should list the words “SETUP TURN” instead of a turn number.

*** 11.21.3 YOUR PLAYER I.D. NUMBER & CODE NAME:**

Following the turn number you should list your player

i.d. number followed by your code name. Your player i.d. number should be preceded by the word “PLAYER” and a number sign.

*** 11.21.4 YOUR ACCOUNT NUMBER:**

The second line of your turn sheet should begin with your account number. Your account number should be preceded by the word “ACCOUNT” and a number sign.

*** 11.21.5 YOUR NAME AND SIGNATURE:**

Following your account number you should list your proper name and follow it with your signature.

*** 11.21.6 YOUR ORDERS:**

Following all of the above information you should list your orders. Any given order may not exceed 255 letters, numbers, and commas in length.

*** 11.21.7 INDENTING ORDERS:**

All orders following an orbital designation should be indented several spaces. This makes it easier for us and you to read your turn sheet.

* Example:

```
ORB,124,END
    TFR,FLT,COL,3,RAW,100,STC,12,END
    TFR,COL,FLT,3,POP,20,END
    MOV,123,SHP,5,END
```

```
ORB,235,END
```

```
    EMP,GOVERNOR,CHR,7 ADD,COL,STC,50,END
```

If an order cannot be fitted on a single line then it may be listed on two separate lines but the second line should be indented under the first.

* Example:

```
ORB,315,END
    EMP,GOVERNOR,CHR,7,18,22,GENERAL, CHR,35,
    45, ADMIRAL,CHR,12,15, PRISONER, CHR,
    16,52, CONDEMNED, CHR,62,END
```

Every line of an order must end in a comma or the code word “END”. If a line ends in a comma then the computer assumes that the next line is still part of the same order. If it encounters the code “END” it will assume that it has finished with that order.

*** 11.21.8 STANDING ORDERS AND COMMUNICATION ORDERS:**

Standing orders and orders affecting standing orders should always be listed last on your turn sheet. Disable, enable, and cancel orders should be listed first. Communication orders should be listed after all of your regular orders for a turn and before your standing orders.

*** 11.21.9 MULTIPLE PAGE TURNSHEETS:**

Frequently players will be unable to list all of their orders on a single sheet of paper. In this event you may write your orders on several pages. However, each page must be numbered and headed by the game number, the turn number and your player i.d. number.

For safety’s sake you should begin each new page with an orbital designation. This way if the pages somehow become mixed up the computer will still know which orbit your orders are affecting.

*** 11.21.10 ENDING YOUR TURNSHEET:**

You should count the number of orders that you have given and at the very end of all of your orders you should print the word TOTAL =###, (### being the number of orders you have written) and then the words "END OF ORDERS".

*** 11.21.11 COPYING YOUR ORDERS:**

We keep your turnsheet on file. You will receive a listing of your orders with your turn report, but you might make an extra copy of your orders before sending them to us, as your original turnsheet will not be returned.

*** 11.21.12 PAPER:**

We have a pre-printed turnsheet for Mobius-I. Or you may use any standard 8 1/2 x 11 paper for your turnsheet. If you are not typing your orders you should use lined paper. You should only use one side of the paper. If you cannot fit all of your orders on one side then use another sheet of paper. We will not be responsible for orders listed on the back of a turnsheet.

*** 11.21.13 WRITING IMPLEMENTS:**

When writing your orders use a pen, NOT a pencil. The pen's ink should be dark (black or blue is preferable). Red ink is not allowed.

*** 11.22**

*** SAMPLE TURNSHEET**

Page #1 of 1

GAME #M-15 TURN #3 PLAYER #4 GOLDEN HORDE
ACCOUNT #0000 HAWLEY SMOOT (signature)

ORB,31,END
CAP,HOT ROCK,END
TFR,FLT,COL,4,STC,200,POP,5,IND,5,END
ADD,STC,50,POP,5,FTF,1,IND,RAW,5,END
MOV,24,SHP,12,END
ORB,53,END
SUB,STC,10,END
EMP,GOVERNOR,CHR,78,GENERAL,CHR,38,39,
ADMIRAL, CHR,12,19, PRISONER,CHR,27,
CONDEMNED, CHR,29,END
TFR,ARM,4,CHR,38,39,FLT,4,CHR,12,19,END
NAM,CHR,78,OG THE CAVEMAN,END
ORB,64,END
DRP,100,CHR,63,15,END
CAP,ANVIL,END
ATK,SHP,SHP,2,50,SHP,7,25,PLF,2,25,END
ATK,PLF,PLF,2,100,END
RET,SHP,PLF,53,END
RET,PLF,33,END
USE,BST,100,END
MOV,53,SHP,10,END
ORB,78,END
EMP,GENERAL,CHR,37,GOVERNOR,32,END
TFR,ARM,4,CHR,37,COL,4,CHR,32,END
ORB,87,END
INF,COL,7,CHR,45,52,END

RET,SHP,0,53,END
ORB,112,END
TFR,FLT,PLF,200,END
MOV,92,OFC,1,END
MOV,93,OFC,1,END
MOV,94,OFC,196,CHR,31,44,47,17,SHP,100,END
MOV,95,OFC,1,END
TFR,FLT,4,CHR,31,44,17,END
COM,2,STAR HAMMER,"GREETINGS. CONTACT ME AT:",
"1984 E. DOOMSDAY AVE., VAL HALLA,
CA 98765",END
CAN,2,3,5,END
DIS,7,END
ENA,20,21,END
STD,32,TFR,COL,FLT,4,RAW,500,ALY,220,END
STD,33,MOV,112,RAW,500,ALY,220,SHP,10,END
STD,12,MOV,53,OFC,25,SHP,10,END
TOTAL=39
END OF ORDERS

*** 12.0 TURN REPORTS:**

Each turn you will receive a printed report on the status of all of your holdings. At first glance, the turn report for Mobius-I can be a little intimidating, however, don't be discouraged. Most players find that after one or two turns they are able to scan their turn reports and pick out the information they need. Much of the information in the the turn report will be needed only on occasion, but rather than decide what information you need, we prefer to give you as much information as we can and let you pick and choose.

*** 12.1 ABBREVIATIONS:**

There are a number of abbreviations which you will encounter in your turn report. The following is a listing of these abbreviations and their meanings.

- A Arrival
- AST Asteroid Belt
- BLU-WHITE ... Blue-White
- C Casualties
- CHR Character
- CHR# Character number
- COL Colony
- D Departure (traffic & passenger reports)
- D Destroyed (combat reports)
- ETA Estimated Turn of Arrival
- FLIGHT# Flight number
- FLT Fleet
- FTF Fortifications
- IND Industry
- JOV Jovian
- JOV- Sub-Jovian
- JOV+ Super-Jovian
- LFS-FAC Life Support Factor
- MAIN-SEQ Main-Sequence
- MOR Morale
- NEW-POP New Population
- OFC Orbital Forces
- ORB# Orbit number
- P# Player number
- PLF Planetary Forces

PLR Player
 PLR# Player number
 POP Population
 R Retreat or Retreated
 RAW Raw Materials
 RAW-REQ Raw Materials Required (for life support)
 SHP Ships
 STC Structures
 STC-REQ Structures required (to house population)
 T In Transit (traffic and passenger reports)
 TER Terran
 TER- Sub-Terran
 TER+ Super-Terran
 XLOC X-location (coordinate)
 YLOC Y-location (coordinate)
 YEL-WHITE ... Yellow-White

...(number sign)... Number
 - ...(minus sign)... Departure (traffic reports)
 + ...(plus sign)... Arrival (traffic reports)
 = ...(equal sign)... In Transit (traffic reports)

*** 12.1.1 EXOTIC ABBREVIATIONS:**

You should check the Exotic and Job Appendices for any abbreviations of exotics. However, for the purpose of examples to follow we list a few exotic abbreviations here.

ALY Alloys
 BST Boost
 LUX Luxury goods
 MED Medical goods

*** 12.1.2 JOB ABBREVIATIONS:**

Jobs will rarely be abbreviated. However if any job does have an abbreviation it will be listed in the Exotics and Job Appendices.

*** 12.2 TURN REPORT SECTIONS:**

The turn report is a star system by star system, planet by planet, listing of military forces, colonies, cargo, fleets, flights, combat reports, traffic reports, and characters. The turn report is broken down into several different sections and types of reports: * a) The Turn Report Heading * b) Star reports * c) Orbit or Planet reports * d) Fleets & Forces reports * e) Personnel reports * f) Combat reports * g) Obituaries * h) Traffic reports * i) Passenger lists * j) Report Appendices * k) Communiques * l) General Star Listing * m) Setup Sheet

On the following page are examples of “a” through “i” of the above and sections 12.2.1 through 12.2.10 explain how to read them. Examples and explanations of the Report Appendices, Communiques and General Star Listing are given in sections 12.3, 12.4 and 12.5. An explanation of the Setup Sheet is given in section 13.5.

*** 12.2.1 THE TURN REPORT HEADING:**

The turn report heading gives you basic information about your game. It tells you what your game number is, your player i.d. number, your codename, your current score, which turn is being reported on and when your orders for that turn are due back to us. The due-date is the date your orders have to be in our hands (not just post-marked).

1* 12.2.2 Sample Turn Report:

```

1* a> T U R N   R E P O R T :   M O B I U S - I   G A M E           M X - 1
1* a> P L A Y E R       # 2   S T A R H A M M E R   T U R N # 16
1* a> *****
1* a> S C O R E = 13984      D U E - D A T E : Mar 17 1983
1* b> *****
1* b> S T A R 20          (-10 , -5)      Y E L L O W   M A I N - S E Q
1* b> (21)              (22) TER         (23) TER-      (24) AST        (25) JOV
1* b> *****
1* c> P L A N E T 22 S A N C T U A R Y T E R R A N E N V I R O N M E N T = 1
1* c> O V E R - P O P U L A T E D
1* _4c> O W N E D B Y P L A Y E R 2: N E W - P O P = 4 D E A T H S = 3 L F S - F A C = 25 R A W - R E Q = 9 S T C - R E Q = 76
1* _4c> S T A R H A M M E R : R A W M E D L U X A L Y B S T S T C P O P : M O R I N D F T F : P L F S H P
1* c> R E S O U R C E       : 20   0       0       6       0 70   76:87   70   5:— —
1* c> I N D U S T R Y       : 18   0       0       5       0   0 —:— 5 —:10 40
1* _4c> S T O R A G E       : 360   0       0 30   0 50   10:95   5 —:— —

1* _4d> F L E E T S & F O R C E S A T P L A N E T 22           _
1* _4d> P # C O D E N A M E : R A W M E D L U X A L Y B S T S T C P O P : M O R I N D O F C : P L F S H P
1* _4d> 2 S T A R H A M M E R       : 300 12       0       0 20   0       0:0   0       50:100 63
1* _4d> 5 W R A I T H       :       0       0       0       0       0       0       0:0   0       5:0   1

1* _4e> P E R S O N N E L A T P L A N E T 22           _
1* _4e> P # C H R # N A M E J O B   L O C A T I O N

```



```

1*_4e> 2 CHR(31) LORD TIGER          GENERAL (5-75%)    PLF-2 _
1*_4e> 2 CHR(35) EMPEROR WANG        GOVERNOR (4-12%)  COL-2 _
1*_4e> 2 CHR(47) LORD WOLFADMIRAL (7-1%)    FLT-2 _
1*_4e> 5 CHR(72) BLUE BEARD          ADMIRAL          FLT-5 _
1*_4f> AGGRESSION REPORTED AT PLANET 22 LASTING 3 ROUNDS _
1*_f> 2 STAR HAMMER: OFC(0) PLF(167-C30-C32-C15) SHP(40-C14-C0-C0):
1*_4f> _      SHP->SHP(7)50% SHP->PLF(7)50% PLF->PLF(7)100% _
1*_f> 7 DARK EMPIRE: OFC(350) PLF(0+350-C126-C180-C44-D3) SHP(60-C12-R1):
1*_4f> _      SHP->SHP(2)75% SHP->COL(2)25% PLF->PLF(2)100% PLF->CAP _
1*_4f> COLONY SUFFERED 10% DESTRUCTION _
1*_4g> OBITUARIES FOR PLANET 22 _
1*_4g> P# CHR#      NAME CAUSE OF DEATH      LOCATION
1*_4g> 7 CHR(10) HOWLING MAD SMITH      COMBAT [ROUND-1]  PLF-7 _
1*_4h> TRAFFIC AT PLANET 22_
1*_4h> FLIGHT# ORB# ETA: RAW MED LUX ALY BST STC POP:MOR IND OFC:PLF SHP
1*_4h> 2-210-A 102 16 +0 +0 +0 +0 +0 +0:0 +0 +50:— +10
1*_4h> 2-215-T 144 17: =0 =0 =0 =0 =0 =0 =0:0 =0 =200:— =32
1*_4h> 5-222-A ???? 16: +0 +0 +0 +0 +0 +0 +0:0 +0 +5:— +1
1*_4h> 7-228-R ???? ??: -0 -0 -0 -0 -0 -0 -0:0 -0 -0:— -48
1*_4h> 2-229-D 144 17: -50 -0 -0 -0 -0 -0 -0:0 -0 -0:— -1
1*_4i> PASSENGER LIST FOR PLANET 22 _
1*_4i> FLIGHT# ORB# ETA: P# CHR#  NAME JOB _
1*_4i> 2-210-A 102 16: 2 CHR(47) LORD WOLF      ADMIRAL _
1*_4i> 2-229-D 144 17: 2 CHR(83) RICHELIEU SECURITY _
1*_4i> 5-222-A ???? 16: 5 CHR(72) BLUE BEARD      ADMIRAL _
1*_4i> 7-228-R ???? ??: 7 CHR(49) ALEXOV      ADMIRAL _

```

1* _____
* **12.2.3 ORBIT / PLANET REPORTS**
1* _____

```

1*_a> PLANET 22 SANCTUARY TERRAN ENVIRONMENT = 1
1*_      b      c      d      e
1*_f> O V E R - P O P U L A T E D
1*_g> OWNED BY PLAYER 2: NEW-POP=4 DEATHS=3 LFS-FAC=25 RAW-REQ=9 STC-REQ=76
1*_4 _      h      i      k      l      m      n
1*_p> STAR HAMMER : RAW MED LUX ALY BST STC POP:MOR IND FTF:PLF SHP
1*_4 r      _
1*_s> RESOURCE      : 20  0  0  6  0 70  76:87  70  5:— —
1*_      t      u      u      u      u      v      w      x      y      z
1*_aa>INDUSTRY      : 18  0  0  5  0  0 —:— 5 —:10 40
1*_      bb cc cc cc cc dd      ee      ff      gg
1*_hh>STORAGE      : 360  0  0 30  0 50  10:95  5 —:— —
1*_4 _      ii kk kk kk kk ll      mm nn rr      _

```

* a) PLANET'S VITAL STATISTICS * b) Planetary i.d. number * c) Planet's Name * d) Planet's Class * e) Planet's Environment rating
* f) EMERGENCY NOTICES
* g) COLONY'S VITAL STATISTICS * h) Owner's player i.d. number * i) Population increase for the turn * k) Population deaths for the turn * l) Colony's Life-support factor * m) Raw materials required for * life-support. * n) Structures required to house current population.
* p) COLUMN HEADINGS * r) Owner's codename
* s) COLONY'S RESOURCES * t) Raw material deposits * u) Exotic deposits or Exotics in * use by the colony. * v) Structures housing population * w) Active population of colony * x) Morale of active population * y) Total functioning industry * z) Fortifications
* aa) BREAKDOWN OF INDUSTRY * bb) Industry extracting * Raw materials * cc) Industries extracting or * building exotics * dd) Industry building Structures * ee) Industry building more Industry * ff) Industry building Planetary * forces * gg) Industry building Ships * hh) COLONY'S STORAGE * ii) Raw materials in storage * kk) Exotics in storage * ll) Structures in storage * mm) Population in storage * nn) Morale of population in storage * rr) Industry in storage

*** [A] PLANET'S VITAL STATISTICS:**

The first line of a orbit report will contain the most basic information about the orbit or any planet which occupies that orbit.

If a planet does occupy the orbit then the planet's i.d. number, name, class, and environment rating will be listed. If the planet does not have a name then the word "UN-NAMED" will appear.

If the orbit is not occupied by a planet then you will receive a listing similar to the example below. Orbital and planetary i.d. numbers are interchangeable.

* Example: ORBIT 21 EMPTY

*** [F] EMERGENCY NOTICES:**

Emergency notices alert the player to any special conditions which exist at a planet or orbit. Some exotics and special character skills will cause an emergency notice to be printed. The following are the common emergency notices along with their meanings:

1) OVER-POPULATED : You do not have enough structures housing population.

3) REVOLUTION : Revolution occurred this turn and the colony has turned rebel.

Emergency notices caused by exotics and character skills will be listed in the exotics appendix and the character skill appendix in the back of the rulebook.

*** [G] COLONY'S VITAL STATISTICS:**

The third line will be printed only if the planet is owned by one of the players. It will begin by listing the player i.d. number of the player who owns the planet/colony. Following the owner of the planet will be a series of vital statistics concerning any colony which may exist on the planet. You will receive these statistics only if you own the planet.

NEW-POP is the number of new population units which appeared at the planet that turn. DEATHS will be the number of population units which died during the turn. LFS- FAC is the life support factor for the planet in question. The life support factor is the number of population units which will be supported by one raw material. RAW-REQ is the total number of raw materials required for life support in the coming turn. STC-REQ is the number of structures required to house all of the population at the planet.

*** [P] COLUMN HEADINGS:**

The fourth line following the owner line will be a list of abbreviated column headings preceded by the code name of the player who owns the planet. If the planet is not owned by any player then the codename listed will be "UNOWNED."

Much of the information on the turn report for Mobius-I is organized in the form of tables with lines and columns. This allows for quick scanning of information. Each section which takes on this format will begin with a list of column headings.

The first heading (RAW) stands for Raw materials This is followed by up to four exotic column headings. These exotics may vary from game to game but in this example the headings stand for the following:

MED = Medical goods LUX = Luxury goods ALY = Alloys BST = Boost

Following the exotics headings will be headings for:

STC = Structures POP = Population MOR = Morale IND = Industry FTF = Fortifications PLF = Planetary Forces SHP = Ships

Sometimes a listing under a particular heading will be inappropriate. If this is the case three dashes (—) will appear rather than a number.

*** [S] COLONY'S RESOURCES:**

The RESOURCE line will begin with the number of raw materials deposits on the planet (t). This will be followed by a number of listings for exotics (u). For some exotics a listing on this line will stand for a number of deposits. For others they will stand for items in use by the colony and still others will never have a listing on this line. You should consult the Exotics & Job Appendices to make sure just what a listing for a particular exotic on this line means. In the above example all of the exotics are extracted so the number listed under each is the number of deposits to be found on the planet.

Following the exotics are the number of structures housing population (v). THE STRUCTURES LISTED ON THE RESOURCE LINE IN THE "STC" COLUMN ARE USED ONLY FOR HOUSING THE COLONY'S POPULATION AND HAVE NOTHING TO DO WITH THE STRUCTURES USED FOR HOUSING INDUSTRY. Listed under the "POP" column are the number of active population in the colony (w) and their current morale (x).

Listed under the "IND" column will be the total number of functioning industry on the colony (y). The number of structures housing industry is not explicitly listed anywhere in a planetary report. However, you can calculate the number of these structures by multiplying the total number of functioning industry by the planet's environment rating.

Listed under the "FTF" column will be the number of Fortifications protecting the colony (z). Note that the "PLF" and "SHP" columns are not used on the resource line.

*** [AA] BREAKDOWN OF INDUSTRY:**

The INDUSTRY line will give you a detailed breakdown of how your industry is distributed and what it is extracting or building. In the case of exotics some industry may be extracting and some may be building. It is possible that some exotics may not require industry. You should consult the Exotic appendix if you are unsure which is doing what. Note that the "POP", "MOR", and "FTF" columns are not used on the industry line. You cannot "build" fortifications. They must be added to a colony with an "add" order and removed with a "subtract" order. * [HH] COLONY'S STORAGE:

The STORAGE line gives you a listing of all of the items your colony currently has in storage. Population listed on this line is considered to be in suspended animation. Raw materials and exotics in use by industry must be in storage (or transferred to storage prior to building). Note that the "FTF", "PLF", and "SHP" columns are not used on the storage line. Fortifications are stored as structures. Planetary forces and ships will always be listed under "Fleets & Forces".

1* _____

*** 12.2.4 FLEETS & FORCES REPORT**

1* _____

1* a> FLEETS & FORCES AT PLANET 22

```

1*_4 _ b _
1*_4c> P# CODENAME : RAW MED LUX ALY BST STC POP:MOR IND OFC:PLF SHP
1*_4 d> 2 STAR HAMMER : 300 12 0 0 20 0 0:0 0 25:100 63
1*_4 f h i i i i i i i i k m n
1*_4 e> 5 WRAITH : 0 0 0 0 0 0 0:0 0 5:0 1
1*_4 f h i i i i i i i i k m n

```

- * a) SECTION HEADING * b) Location of Fleets & Forces being reported on
- * c) COLUMN HEADINGS
- * d & e) PLAYER DATA LINES * f) Player's i.d. number * h) Player's codename * i) Cargo in orbit * k) Orbital forces in orbit * m) Planetary forces on surface * n) Ships in orbit

The Fleets & Forces report is a listing of ships, planetary forces, orbital forces, and cargo. With one notable exception, all of the items listed in this section are considered to be in orbit. The notable exception is planetary forces which are always considered to be on a planets surface.

* [A] SECTION HEADING:

The section heading tells you that this is a Fleets and Forces report and which orbit or planet the report covers.

* [C] COLUMN HEADINGS:

This line of the fleets and forces section is a series of column headings. These headings are much the same as the column headings for planets with three differences. The first difference is the abbreviation "P#" which stands for the player id. number of the player who owns the fleet. This is followed by the "CODENAME" heading. The last difference is the replacement of the fortifications heading (FTF) with the abbreviation "OFC" which stands for "ORBITAL FORCES".

* [D & E] PLAYER DATA:

The column headings will be followed by a list of each player who has cargo, forces, or ships in orbit. In the above example two players are listed, player #2 and player #5.

Each listing for a player begins with his player number, followed by the player's codename. In the above example player #2's codename is "STAR HAMMER" and player #5's codename is "WRAITH".

Following the player's number and code name is a listing of any cargo in parking orbit which the player owns. In this particular case player #2's cargo consists of 300 Raw Materials (under the "RAW" column), 12 Medical Goods (under the "MED" column), and 20 units of Boost (under the "BST" column).

Following the cargo are any orbital forces, planetary forces on the planets surface, and ships. In the above example player #2 has 25 orbital forces, 100 planetary forces and 63 ships at planet 22. Player #5 has 5 orbital forces and 1 ship.

If a player does not have any fleets, forces or cargo then no listing will be printed for that player. If no players have fleets, forces or cargo at an orbit or planet then a Fleets & Forces report will not be printed. Your own fleets, forces and cargo will always be printed first, even though other players may have a lower player number.

1* _____

*** 12.2.5 PERSONNEL REPORTS:**

1* a> PERSONNEL AT PLANET 22

```

1*_4 _ b _
1*_4c> P# CHR#NAME JOB LOCATION
1*_4 d> 2 CHR(31) LORD TIGER GENERAL (5-75%) PLF-2
1*_4 h i k m n r s t _
1*_4 e> 2 CHR(35) EMPEROR WANG GOVERNOR (4-12%) COL-2
1*_4 h i k m n r s t _
1*_4 f> 2 CHR(47) LORD WOLF ADMIRAL (7-1%) FLT-2
1*_4 h i k m n r s t _
1*_4 g> 5 CHR(72) BLUE BEARD ADMIRAL FLT-5
1*_4 h i k m r s _

```

- * a) SECTION HEADING * b) Location of Personnel being reported on
- * c) COLUMN HEADINGS
- * d to g) CHARACTER'S VITAL STATISTICS * h) Controlling player's i.d. number * i) Character's i.d. number * k) Character's name
- * m) CHARACTER'S JOB * n) Skill rating (skilled jobs only) (skilled jobs only)* r) % chance of advancement (skilled jobs only)
- * s) CHARACTER'S LOCATION * t) Player I.D. number of player who owns the location

A Personnel report will list all characters located at a given orbit or planet and known to you.

* [A] SECTION HEADING:

The section heading tells you that this is a personnel report and which orbit or planet the report covers.

* [C] COLUMN HEADINGS:

The column headings for character reports are relatively uncomplicated. Only the first two headings are abbreviated. "P#" stands for the player i.d. NUMBER of the player who controls the character. "CHR#" stands for the Character's i.d. number.

* [D to G] CHARACTER'S VITAL STATS:

Following the column headings each character will have a listing of his vital statistics, beginning with the player i.d. number of the player who owns the character. The player number will be followed by the abbreviation "CHR" followed by the character's i.d. number in parenthesis. Next is the character's name, followed by the characters current job, and finally his location.

* [M] THE CHARACTER'S JOB:

The listing of a character's job may consist of up to four different parts. The first part will be a description of the character's job. In the above example the first character listed (Lord Tiger) is employed as a general. Emperor Wang is employed as a governor, and Lord Wolf and Blue Beard are employed as admirals.

If the character is controlled by you and is employed in a skilled job then the job description will be followed by the character's skill rating and his percentage chance of advancement. The two numbers will be separated by a dash and enclosed in parentheses. In the above example Lord Tiger would have a rating of 3 as a general and would have a 75% chance of advancing to a 4.

Some jobs require that special notes be given to a player. These extra notes are known as parameters and will be enclosed in square brackets "[.]" The above listings do not contain an example of parameters, but any jobs which list parameters will have examples of those parameters in the Exotic and Job Appendices.

Note that player #2 does not receive the rating and percentage chance of advancement for Blue Beard, because Blue Beard belongs to player #5. For the sake of clarity only the skill currently being used in a character's job will be listed here. A complete listing of skills will be listed in the personnel files in the appendix section of the turn report.

* [S] THE CHARACTER'S LOCATION:

The last part of each character listing will be the character's location (s) followed by a dash and the player number of the player who owns the location (t). The following abbreviations will be used for character locations: PLF = Planetary forces, COL = Colony, and FLT = Fleet.

In the above example Lord Tiger is located with the planetary forces of player #2. Emperor Wang is located in player #2's colony, Lord Wolf with player #2's fleet, and Blue Beard with player #5's fleet.

1* 12.2.6 COMBAT REPORTS:

```
1* _____
1* a> AGGRESSION REPORTED AT PLANET 22 LASTING 3 ROUNDS
1* 4 _ b _
1* c1>2 STAR HAMMER: OFC(0) PLF(167-C30-C32-C15) SHP(40-C14-C0-C0):
1* d e f h k1 k2 k3 r k1 k2 k3
1* c1> SHP->SHP(7)50% SHP->PLF(7)50% PLF->PLF(7)100%
1* 4 _ s t u v s t u v s t u v _
1* c2>7 DARK EMPIRE: OFC(350) PLF(0+350-C126-C180-C44-D3) SHP(60-C12-R1):
1* d e f h i k1 k2 k3 m r k1 n
1* c2> SHP->SHP(2)75% SHP->COL(2)25% PLF->PLF(2)100% PLF->CAP
1* 4 _ s t u v s t u v s t u v s w _
1* x> COLONY SUFFERED 10% DESTRUCTION
1* 4 _ z _
```

- * a) SECTION HEADING
- * b) Length of combat
- * c1 & c2) INDIVIDUAL PLAYER REPORTS
- * d) Player's i.d. number
- * e) Player's codename
- * f to r) ATTACKING UNIT REPORTS
- * f) # of orbital forces at beginning of combat
- * h) # of planetary forces at beginning of combat
- * i) # of OFCs dropped
- * k1 to k3) Casualties per round
- * m) Round unit was destroyed
- * n) Round unit retreated
- * r) # of ships at start of combat
- * s to w) TARGET REPORTS
- * s) Type of attacking unit
- * t) Type of target
- * u) Owner of target
- * v) Percentage of attack
- * w) Capture attempted
- * x) COLONY CASUALTY REPORT
- * z) Percentage of colony destroyed

When combat is initiated in an orbit all players at that orbit will receive a combat report.

* [A] SECTION HEADING:

The combat heading will notify a player that combat occurred during the turn. If the player survives to the end of all combat he will be told how many rounds the combat lasted.

*** [C] INDIVIDUAL PLAYER REPORTS:**

For each player who is involved in combat there will be a listing of how many forces the player started the combat with, their casualties, retreats, and targets. Each individual report will begin with the player's i.d. number and codename.

*** [F TO R] ATTACKING UNITS REPORT:**

The second part of each individual player report will be a listing of general information about each attacking unit belonging to the player. It will start with the number of orbital forces the player started the combat with.

Next will be information about the player's planetary forces, beginning with the number of planetary forces the player started with. If the player dropped any orbital forces the number of starting planetary forces will be followed by a plus sign (+) and the number of dropping forces. In the above example player #7 started with 0 planetary forces and dropped 350 orbital forces (+350). This will be followed by a listing of the number of casualties suffered by the planetary forces each round (k1 through k3) separated by dashes (-). Casualties will always be preceded by the letter "C". In the above example player #7's planetary forces suffered 126 casualties ("C126") on the first round of combat, 180 casualties ("C180") on the second round, and 44 casualties ("C44") on the third and last round of combat.

If all of the planetary forces belonging to a player are destroyed the casualties will be followed by a dash, the letter "D" and the turn the forces were destroyed on. In the above example player #7's planetary forces were completely destroyed in round 3 ("D3"). If the planetary forces retreated the casualties will be followed by a dash, the letter "R" and the turn the forces retreated on.

Following the statistics for the player's planetary forces will be the statistics for any of the player's ships involved in combat. Like the statistics for planetary forces the number of ships the player started the combat with will be listed first. Following this will be the number of casualties suffered each round and (if applicable) the round in which the player's ships were destroyed or retreated. In the example player #2 started combat with 40 ships, losing 14 of them on the first round and none on the second and third rounds. Player #7 started combat with 60 ships, losing 12 of them on the first round and also retreating on the first round.

*** [S to W] TARGET REPORTS:**

Following the report on the player's attacking units will be a list of targets attacked by those units. However, target reports will only be printed for attacks initiated by attack orders. Attacks made by reserves will not be listed but may be surmised from the target reports listed.

Each target report will begin with the type of unit attacking (s) followed by an arrow ("->") pointing at the type of unit that was attacked (t), the player who owned the target enclosed by parenthesis (u), and the percentage of the attacking units total strength directed against the target (v). In the example the first target report for player #2 indicates that player #2's ships (s) attacked the ships (t) belonging to player #7 (u) with 50% (v) of their total firepower ("SHP->SHP(7)75%"). In the second target report player #2's ships attacked the planetary forces belonging to player #7 with the remaining 50% of their total firepower ("SHP->PLF(7)50%") and in the third target report player #2's planetary forces attacked the planetary forces belonging to player #7 with 100% of their firepower ("PLF->PLF(7)100%").

If a player has ordered his planetary forces to attempt to capture a planet a target report indicating the attempt will be printed (w). In the example player #7 attempted to capture the planet ("PLF->CAP") but failed because his planetary forces were annihilated.

*** [X] COLONY CASUALTY REPORT:**

If a colony is attacked a report indicating the percentage of destruction (z) suffered by the colony. Only players who have forces surviving at the end of combat will be given a report on the colony.

1* _____1

*** 12.2.7 OBITUARIES:**

1* _____

1*_4a> OBITUARIES FOR PLANET 22 _

1*_4b> P# CHR#NAME CAUSE OF DEATH LOCATION

1*_4c> 7 CHR(10) HOWLING MAD SMITH COMBAT [ROUND-1] PLF-7 _

1* d e f g h i

* a) SECTION HEADING

* b) COLUMN HEADINGS

* c) OBITUARY * d) Controlling player's i.d. number * e) Character i.d. number * f) Character's name * g) Cause of death

* h) LOCATION OF DEATH * i) Player who owns the location

Whenever a character dies an obituary will be printed. Only players who were present when the character was killed will receive the obituary. Deaths are, in general, considered to be public knowledge. However, if you are not present when one of your characters is killed you may not receive an obituary.

*** [G] CAUSE OF DEATH:**

There are a number of circumstances which may result in a character's death, and each will result in a different notice being printed under this heading.

COMBAT: When characters are killed in combat the round in which the character was killed will be listed.

LIFE-SUPPORT FAILURE: This means that the character died because there were insufficient raw materials on hand for life support.

OVER-POPULATION: This means that the character died because there were insufficient structures to house all of a colony's population.

EXOTICS AND JOBS: Some types of exotics or jobs can cause the death of a character. The Exotic and Job appendices will list the various cause-of-death notices appropriate for the exotics and jobs involved.

* 12.2.8 TRAFFIC REPORTS:

```
1* _____
1*_4a> TRAFFIC AT PLANET 22_
1*_4b> FLIGHT# ORB# ETA: RAW MED LUX ALY BST STC POP:MOR IND OFC:PLF SHP
1*_4c1>2-210-A 102 16 +0 +0 +0 +0 +0 +0:0 +0 +50:— +10
1*_4c2>2-215-T 144 17: =0 =0 =0 =0 =0 =0 =0:0 =0 =200:— =32
1*_4c3>5-222-A ???? 16: +0 +0 +0 +0 +0 +0 +0:0 +0 +5:— +1
1*_4c4>7-228-R ???? ??: -0 -0 -0 -0 -0 -0 -0:0 -0 -0:— -48
1*_4c5>2-229-D 144 17: -50 -0 -0 -0 -0 -0 -0:0 -0 -0:— -1
1*      d1 d2 d3      e      f      g1 g2 g3 g4 g5 g6      g7 g8 g9      g10 h
```

* a) SECTION HEADING

* b) COLUMN HEADINGS

* c1 to c5) FLIGHT REPORTS

* d1 to d3) FLIGHT NUMBER * d1) Player i.d. # of owner * d2) Flight i.d. number * d3) Type of flight

* e) ORBIT OF ORIGIN OR DESTINATION

* f) ESTIMATED TURN OF ARRIVAL

* g1 to g10) LIST OF CARGO

* h) NUMBER OF SHIPS IN FLIGHT

Traffic reports list the departures, arrivals, and retreats of flights of ships and their cargo. They will also list flights in transit to an orbit but not yet arrived. Each time a player writes a move order or retreats his ships out of orbit a flight report (c1 through c5) is generated.

* [D1 to D3] FLIGHT NUMBERS:

Each flight has a flight number consisting of three parts separated by dashes. The first part is the i.d. number of the player who owns the flight. The second part is its flight i.d. number. Each flight i.d. number is unique, so that players may track flights from one orbit to another. The third part is a single letter code designating the type of flight. The possible codes and their meanings are as follows.

A = Arrival D = Departure R = Retreat T = in Transit

In the above example the first flight (210) is owned by player #2 and is an arrival. The second flight (215) is also owned by player #2 and is in transit but has not yet arrived. The third flight (222) is owned by player #5 and is an arrival. The fourth flight (228) is owned by player #7 and has retreated. The fifth and last flight (229) is owned by player #2 and has departed.

* [E] ORBIT OF ORIGIN OR DESTINATION:

The meaning of the orbit number listed in the column headed by "ORB#" depends on the type of flight being reported on. If the flight is a departure or a retreat this will be the orbit the fleet is moving to. If the flight is an arrival or in transit the number will be the orbit departed or retreated from. If the flight does not belong to you, you may not be given this information. Instead a series of question marks will be printed instead of a number (????).

In the above example flight #210 (which has just arrived) came from orbit #102. Flight #215 (which is in transit) came from orbit #144. Flights 222 and 228 belong to other players so player #2 is not told where they came from or where they are going. Flight #229 (which has departed) is bound for orbit #144.

* [F] ESTIMATED TURN OF ARRIVAL:

The Estimated Turn of Arrival (ETA) is the turn on which the flight will arrive at its destination. If a flight belongs to another player you may not receive its ETA. Instead a series of question marks will be printed ("???").

* [G1 to G10] LIST OF CARGO:

Each flight report will list of all of the cargo aboard the flight. Raw materials are listed first, followed by up to 4 different exotics (g2 to g5). Following the exotics are structures (g6), population (g7), their morale (g8), industry (g9), and orbital forces (g10). Preceding each amount of cargo is a symbol indicating whether the cargo is on a departing or retreating flight (a minus sign), an arriving flight (a plus sign), or a flight in transit (an equal sign). This helps distinguish traffic reports from fleets and forces reports.

If a flight does not belong to you, you will probably not receive a complete cargo list. Instead you may be told whether a type of cargo is present but not how much is being moved (a series of asterisks, “***”, will be printed instead of an amount) or you may not even be told whether any cargo exists at all (a series of question marks, “???”), will be printed instead of an amount).

1* _____

*** 12.2.9 PASSENGER LISTS:**

1* _____

1*_4a> PASSENGER LIST FOR PLANET 22 _
1*_4b> FLIGHT# ORB# ETA: P# CHR# NAME JOB _
1*_4c1>2-210-A 102 16: 2 CHR(47) LORD WOLF _
1*_4c2>2-229-D 144 17: 2 CHR(83) RICHELIEU _
1*_4c3>5-222-A ??? 16: 5 CHR(72) BLUE BEARD _
1*_4c4>7-228-R ??? ??: 7 CHR(49) ALEXOV ADMIRAL _
1* d d e f g h k m

- * a) SECTION HEADING * b) COLUMN HEADINGS * c1 to c4) PASSENGERS * d to f) FLIGHT INFORMATION (see also section 12.2.8)* d) Flight number of the flight
- * d) Flight number of the flight
- * passenger located on * e) Orbit of origin or destination * f) Estimated Turn of Arrival
- * g to m) PASSENGER INFORMATION (see also section 12.2.5)* g) Controlling Player’s i.d. #
- * g) Controlling Player’s i.d. #
- * h) Passenger’s Character id. # * k) Passenger’s Name * m) Passenger’s Job

*** 12.2.10 STAR REPORTS:**

1* _____

1* *****
1* a> S T A R 20 (-10 , -5) Y E L L O W M A I N - S E Q
1* b c d e f
1* g> (21) (22) TER (23) TER- (24) AST (25) JOV
1* h h i h i h i h i
1* *****

- * a) STAR’S VITAL STATISTICS * b) Stellar I.D. Number * c) Star’s X-location * d) Star’s Y-location * e) Star’s Color * f) Star’s Type * g) SCAN OF STAR’S ORBITS * h) Orbital I.D. Number * i) Class of planet occupying orbit

*** [A] VITAL STATISTICS:**

This line contains basic information about the star; its I.D. number, its location, color, and type. Passenger lists contain information on characters aboard flights which are departing, arriving or in transit.

*** [D to F] FLIGHT INFORMATION:**

The listing for each passenger will begin with information on the flight the passenger is aboard. If your character is aboard another player’s flight of ships then you will receive a passenger listing but no traffic report will be printed. See also section 12.2.8.

*** [G to M] PASSENGER INFORMATION:**

Following the flight information will be information on the passenger; who owns him, his character i.d. number, and his name. A passenger’s job is listed only if he’s in transit or belongs to another player and is aboard another player’s departing flight. See also section 12.2.5.

*** [G] ORBITAL SCANS:**

The second line of the star report will be an abbreviated scan of the five orbits surrounding the star. Each orbit will be listed by its orbit number enclosed in parenthesis. If a planet exists in that orbit its class will be listed in abbreviated form immediately following the orbit number in question. If you own the planet in question it will be underlined. The possible abbreviations are as follows:

AST Asteroid belt JOV Jovian JOV- Sub-Jovian JOV+ Super-Jovian TER Terran TER- Sub-Terran TER+ Super-Terran

In this example there is a Terran planet in the 2nd orbit, a Sub-Terran in the 3rd, an Asteroid belt in the 4th, and a Jovian in the 5th. You will get a scan only if you have a colony or forces at one the stars orbits.

1* _____

* 12.3 THE TURN REPORT APPENDICES:

At the the end of your turn report will be the Appendices. The Turn Report Appendices contain general information about your holdings and characters and will be broken down into 6 sections: a) PERSONNEL FILES * b) ASSET REPORT * c) SCORE * d) DRIVE COEFFICIENT e) SHIP SPECIFICATIONS f) THE ORDER LISTING (e and f will not appear on the setup turn)

1* APPENDICES: MOBIUS-I GAME MX - 1
1* PLAYER #2 STARHAMMER TURN# 16
1* *****

1*_4a> PERSONNEL FILES FOR STAR HAMMER -
1*_4a> CHR# NAME JOB ORB# LOCATION
1*_a> CHR(31) LORD TIGER GENERAL (5-75%) 22 PLF-2
1*_4a> SKILLS (1) SURVIVAL (7-4%) ADMIRAL (2-3%)_
1*_a> CHR(35) EMPEROR WANG GOVERNOR (4-12%) 22 COL-2
1*_4a> SKILLS (0) SURVIVAL (4-82%) _
1*_a> CHR(47) LORD WOLF ADMIRAL (7-1%) 22 FLT-2
1*_4a> SKILLS (2) SURVIVAL (8-43%) _
1*_a> CHR(83) RICHELIEU SECURITY (3-23%) 144 2-229-D
1*_a> SKILLS (0) SURVIVAL (9-1%) GENERAL (4-1%) GOVERNOR (5-3%)
1*_4a> ADMIRAL (2-15%) SPY (6-2%) _
1*_4b> ASSETS FOR STAR HAMMER -
1*_4b> PLANETS =16 PERSONEL =5 FORTIFICATIONS =67 AVERAGE MORALE =89%_
1*_4b> : RAW MED LUX ALY BST STC POP IND PLF SHP
1*_b> RESOURCE : 193 6 42 98 21 1516308 70 — —
1*_4b> INDUSTRY : 107 6 5 42 7 10 — 17 59 75
1*_4b> _
1*_b> SURFACE : 3166 121 25 330 49 50 23 17 422 —
1*_b> ORBIT : 938 0 25 105 134 100 8 0 235 73
1*_4b> TRANSIT : 400 36 25 98 49 250 0 10 310 24
1*_4b> TOTAL : 4504 157 75 533 232 400 31 27 967 97
1*_c> #2 STAR HAMMER'S SCORE ... 13984
1*_c> HIGHEST SCORE 17233
1*_d> DRIVE COEFFICIENT = 8
1*_4e> SHIP SPECIFICATIONS -
1*_4e> P# CODENAME : MASS-COST BAYS WEAPONS SHIELDS DRIVE JUMP
1*_4e> 2 STAR HAMMER: 56 8 4 8 8 9.1429
1*_4e> 5 WRAITH : 49 — — — — -.——
1*_4f> ORDERS FOR STAR HAMMER WERE -
1*_f> ORB,21,END TFR,COL,FLT,2,RAW,350,MED,12,END ATK,PLF,PLF,7,100,END
1*_f> ATK,SHP,SHP,7,50,PLF,7,50,END TFR,FLT,2,CHR,83,END
1*_4f> MOV,144,RAW,50,SHP,1,CHR,83,END -
1*_f> ORB,102,END TFR,FLT,PLF,50,END TFR,FLT,2,CHR,47,END EMP,ADMIRAL,CHR,47,END
1*_4f> MOV,21,OFC,50,CHR,47,SHP,10,END -
1*_f> ORB,144,END MOV,21,SHP,OFC,200,SHP,32,END TFR,FLT,PLF,200,END
1*_4f> ADD,COL,FTF,5,END -
1*_4f> CAN,10,20,30,END DIS,50,END -
1*_f> STD,40,ORB,144,END 1*_4f> ***,50,MOV,145,IND,2,SHP,1,END -
1*_4f> 1 STANDING ORDER 17 ORDERS TOTAL

1* 12.3.1 PERSONNEL FILES:

1* _____
1*_4a> PERSONNEL FILES FOR STAR HAMMER -
1*_4b> CHR# NAME JOB ORB# LOCATION
1*_c1>CHR(31) LORD TIGER GENERAL (5-75%) 22 PLF-2
1*_ d e f h i k m n
1*_s1> SKILLS (1) SURVIVAL (7-4%) ADMIRAL (2-3%)
1*_4 _ t u v w x z _
1*_c2>CHR(35) EMPEROR WANG GOVERNOR (4-12%) 22 COL-2
1*_ d e f h i k m n

1* s2> SKILLS (0) SURVIVAL (4-82%)

1* _4 _ t u v _
1* c3>CHR(47) LORD WOLF ADMIRAL (7-1%) 22 FLT-2
1* d e f h i k m n

1* s3> SKILLS (2) SURVIVAL (8-43%)

1* _4 _ t u v _
1* c4>CHR(83) RICHELIEU SECURITY (3-23%) 144 2-229-T
1* d e f h i k r

1* s4> SKILLS (0) SURVIVAL (9-1%) GENERAL (4-1%) GOVERNOR (5-3%)

1* t u v w x z w x z

1* s4> ADMIRAL (2-15%) SPY (6-2%)

1* _4 _ w x z w x z _

* a) SECTION HEADING * b) COLUMN HEADINGS

* c1 to c4) CHARACTER'S VITAL STATS * d) Character's i.d. number * e) Character's name * f) Character's job * h) Job rating (skilled jobs only)* i) % chance of advancement

* i) % chance of advancement (skilled jobs only)* k) Orbit located at or

* k) Orbit located at or * in transit to * m) Character's location * n) Player i.d. number of player who * owns the location * r) Flight number (characters in transit only)

* s) CHARACTER'S SKILLS * t) Unused skills remaining * u) Survival rating * v) % chance of advancing to higher * survival rating * w) Type of skill * x) Skill rating * z) % chance of advancement

The personnel files contain information on the many skills possessed by your characters as well as their name, current job and location.

* 12.3.1

* [A] SECTION HEADING:

The section heading tells you that this is the personnel file section of the turn report appendices.

* [B] COLUMN HEADINGS:

The column headings for the personnel files differ from the the column headings for personnel reports in that there is no column for the controlling players i.d. number (all characters listed in the personnel files belong to the player receiving the report) and a column has been added for the orbit in which the character is located or in transit to (ORB#).

* [C1 to C4] CHARACTER'S VITAL STATS:

The first line for each character listed in the personnel files will list the character's i.d. number, his name, his current job, his job rating, his percentage chance of advancing to the next higher job rating, the orbit in which the he may be found, and his current location and the player who owns that location. If the character is currently in transit between worlds (as is character #83) the orbit number listed will be his destination orbit and his location will be a flight number. More detailed information about a character's job and location may be found in section 12.2.5. Flight numbers are covered in section 12.2.8. In the example Lord Tiger is a general with a rating of 5 and 75% chance of advancing to a 6. He is to be found in orbit #22 with the planetary forces of player #2. Richelieu is a security officer with a rating of 3 and 23% chance of advancing to a 4. He is in transit to orbit #144 aboard flight #229 belonging to player #2.

* [S1 to S4] CHARACTER'S SKILLS:

The second line of each character's listing (s1 through s4) and sometimes, as with character #83, a third, deals with the skills which your character has learned, but is not currently employed in. This line will always start with the word "SKILLS" followed by a number enclosed in parenthesis (t). This number is the number of new skills which your character can still learn. Each time your character learns a new skill this number will decrease. When it reaches zero your character will no longer be allowed to learn any new skills. In the above example Lord Tiger is still capable of learning one new skill and Lord Wolf may still learn 2 new skills. Emperor Wang and Richelieu, however, have used up all of their skills and may not learn any new ones. Next will be listed the character's survival rating (u) followed by his percentage chance of increasing his survival rating in the coming turn (v). The survival rating is mandatory for all characters, but does not count as a learned skill and does not affect the number of skills a character may learn. In the example Lord Tiger has a survival rating of 7 and a 4% chance of increasing it to a 6. Emperor Wang has a survival rating of 4 and an 82% chance of increasing it to a 5. Lord Wolf has a survival rating of 8 and a 43% chance of increasing it and Richelieu has a survival rating of 9 and a 1% of increasing it. Following the survival rating will be a list of all of the skills which the character has learned (w) but is not currently employed in and each skill's rating (x) and percentage chance of increase (z). Note that a character can only increase the rating of his current job so none of the skills listed on the second or third lines of a character's listing can actually increase until the character is employed in one of those skills. In the examples Lord Tiger is employed as a general (rated at 6), but he also has experience as an admiral (rated at 2). Emperor Wang is employed as a governor (rated at 4) and has no other skills and in fact cannot learn any new ones. Lord Wolf is employed as an admiral (rated at 7) and has learned no extra skills, but, unlike Wang, he has the potential to learn two new skills if he needs to. Richelieu is employed as a security officer (rated at 3) and has experience as a general (rated at 4), a governor (rated at 5), an admiral (rated at 2) and a spy (rated at 6). A very versatile character even though he can't learn any new skills.

*** 12.3.2 SCORE, DRIVE COEFFICIENT & SHIP SPECIFICATIONS:**

1* _____

1* a> HIGHEST SCORE 17233 1* b> #2 STAR HAMMER'S SCORE ... 13984

1* c> DRIVE COEFFICIENT = 8

1* _4d> SHIP SPECIFICATIONS _

1* _4e> P# CODENAME : MASS-COST BAYS WEAPONS SHIELDS DRIVE JUMP

1* _4f> 2 STAR HAMMER: 56 8 4 8 8 9.1429

1* _4g> 5 WRAITH : 49 — — — — .—

1* h i j k m n p r

* a) HIGHEST CURRENT SCORE * b) YOUR CURRENT SCORE * c) DRIVE COEFFICIENT FOR THE GAME

* d) SECTION HEADING * e) COLUMN HEADINGS * f and g) SHIP SPECIFICATIONS * h) Player's i.d. number * i) Player's codename * j) Mass-Cost of design * k) Number of Bays * m) Number of Weapons * n) Number of Shields * p) Number of Drives

* r) Jump range of ships

* [A] SCORE:

Your current score is listed a second time in the report appendices along with the the current highest score in the game (but not who scored it).

* [C] DRIVE COEFFICIENT:

This is the drive coefficient being used in your game.

* [F & G] SHIP SPECIFICATIONS:

The ship specifications section lists your ship's characteristics; total mass, bays, weapons, shields, drive rating (p), and jump range. If you meet other players' ships, the total mass of their ships will be listed. Ship specifications are not printed on the setup turn.

1* _____

1* 12.3.3 ASSET REPORTS:

1* _____

1* _4a> ASSETS FOR STAR HAMMER _

1* b> PLANETS =16 PERSONEL =5 FORTIFICATIONS =67 AVERAGE MORALE =89%

1* _4 _ c d e f _

1* _4g> _ : RAW MED LUX ALY BST STC POP IND PLF SHP

1* h> RESOURCE : 193 6 42 98 21 1516308 70 — —

1* _4i> INDUSTRY : 1076 5 42 7 10 — 17 59 75

1* _4 _ _

1* j> SURFACE : 3166 121 25 330 49 50 23 17 422 —

1* k> ORBIT : 938 0 25 105 134 100 8 0 235 73

1* _4m> TRANSIT : 40036 25 98 49 250 0 10 310 24

1* _4n> TOTAL : 4504 157 75 533 232 400 31 27 967 97

* a) SECTION HEADING

* b) GENERAL STATISTICS * c) Total number of planets owned * d) Total number of characters * e) Total number of fortifications * f) Average morale of all active population

* g) COLUMN HEADINGS

* h) RESOURCE TOTALS * i) INDUSTRY TOTALS

* j) TOTAL POSSESSIONS IN STORAGE OR ON PLANET'S SURFACE * k) TOTAL POSSESSIONS IN ORBIT * m) TOTAL POSSESSIONS IN TRANSIT * n) TOTALS OF j, k and m

The assets section gives you an idea as to the relative health of your empire, the efficiency of its operation, and the growth you are experiencing. Its major purpose is to give you a strategic viewing, the overall picture, rather than the specific planet by planet information listed in the main report.

* [B] GENERAL STATISTICS:

The first line of your asset report will begin with a listing of the total number of planets you control, followed by the total number of characters under your control, the total fortifications you have in place on all of your colonies, and the average morale for all of your active population.

* [H] RESOURCE TOTALS:

The line following the column headings will list the total of all of your raw material deposits (under RAW), the total of all of your exotics (deposits or in use by the colony), the total number of structures housing population (under STC), the total number of active population on all of your planets (under POP), and the total of all of your functional industry (under IND).

* [I] INDUSTRY TOTALS:

The fourth line is a breakdown of how your total industry is allocated, much like a planetary report, except this report covers all of your industry on all of your planets.

* [J] SURFACE POSSESSIONS:

The fifth line lists the total quantities of items in storage in your colonies or on the surfaces of all of your planets. Of particular importance is the total number of your planetary forces (under PLF). Ships are not listed on this line as they can never be located on a planets surface.

* [K] POSSESSIONS IN ORBIT:

The sixth line lists the total quantities of items floating around in orbit around all of your planets. Of particular importance is the total number of ships in orbit around all planets (under SHP) and the total number of your orbital forces in orbit (under PLF).

* [M] POSSESSIONS IN TRANSIT:

The seventh line lists the total quantities of items you have in transit between worlds.

* [N] TOTAL POSSESSIONS:

On the eighth line are the totals of lines j, k and m. Here in one scan you can take in your total military strength, as well as the totals of various vital possessions you have on hand. Its then up to you to decide if these figures adequately support the strategy you are strying to pursue. Of particular interest are the total number of planetary forces and orbital forces (under PLF) and the total number of ships (under SHP).

1* _____

1* **12.3.4 ORDER LISTINGS:**

1* _____

1* _4a> ORDERS FOR STAR HAMMER WERE _
1* b> ORB,21,END TFR,COL,FLT,2,RAW,350,MED,12,END ATK,PLF,PLF,7,100,END
1* b> ATK,SHP,SHP,7,50,PLF,7,50,END TFR,FLT,2,CHR,83,END
1* _4b> _ MOV,144,RAW,50,SHP,1,CHR,83,END _
1* b> ORB,102,END TFR,FLT,PLF,50,END TFR,FLT,2,CHR,47,END EMP,ADMIRAL,CHR,47,END
1* _4b> _ MOV,21,OFC,50,CHR,47,SHP,10,END _
1* b> ORB,144,END MOV,21,SHP,OFC,200,SHP,32,END TFR,FLT,PLF,200,END
1* _4b> _ ADD,COL,FTF,5,END _
1* _4c> CAN,10,20,30,END DIS,50,END _
1* d> STD,40,ORB,144,END 1* _4d> ***,50,MOV,145,IND,2,SHP,1,END _
1* _4e> 1 STANDING ORDER 17 ORDERS TOTAL
* a) SECTION HEADING
* b) ORDERS EFFECTING SPECIFIC ORBITS
* c) GENERAL ORDERS
* d) STANDING ORDERS
* e) ORDER TOTALS

The orders section gives you a listing of the orders you submitted for the turn. The orders section will not be printed out on the setup turn.

* [B] ORDERS AFFECTING ORBITS:

Orders effecting specific orbits are listed orbit by orbit. More than one order can be listed on a line. However, when you submit your orders you should ONLY LIST ONE ORDER PER LINE. It's too easy for a typist to miss an order tacked on behind another one.

1* _____

1* **12.4 COMMUNIQUE:**

1* _____

1* _4a> COMMUNIQUE FROM #7 — DRAGON LADY _
1* b> ALL AGREEMENTS ARE CANCELED.
1* b> YOU HAVE TRIFLED WITH THE DRAGON LADY ONCE TOO OFTEN.
1* _4b> YOU SHALL PAY WITH YOUR DESTRUCTION! _
* a) PLAYER WHO SENT COMMUNIQUE
* b) MESSAGE

Whenever a player writes a communication order a communique will appear at the end of the turn report of the player to whom the message was sent. The first line of the communique will list the player number and codename of the player who is sending the communique. This will be followed by the message itself.

The above example would have been generated by the following order:

COM,2,STAR HAMMER,"ALL AGREEMENTS ARE CANCELED.", "YOU HAVE TRIFLED WITH THE DRAGON LADY ONCE TOO OFTEN.", "YOU SHALL PAY WITH YOUR DESTRUCTION!"

* [C] GENERAL ORDERS:

General orders are those orders which do not require any orbital designations (such as cancel,enable,disable,and communication orders). They will be listed in a section all to themselves.

* [D] STANDING ORDERS:

Your standing orders are listed by order number rather than by orbit number, as this is the order in which the computer stores them. Standing orders which are disabled will appear with three asterisks (***) instead of the standing order code (STD).

* [E] ORDER TOTALS:

At the end of the order sections the computer will list your total number of standing orders and the total of all of your orders (including the standing orders).

1* _____

1* **12.5 GENERAL STAR LISTINGS:**

1* _____

1* a> STAR LISTING: MOBIUS - I GAME MX - 1

1* a> PLAYER # 2

1* a> *****

1*_4b>	STAR#	XLOC	YLOC	COLOR	SIZE	DISTANCE	NOTES
1*	10	-1	-2	ORANGE	GIANT	3.6056 LIGHT YEARS	near
1*	20	-10	-5	RED	MAIN-SEQUENCE	12.5300 LIGHT YEARS	
1*_4	30	1	1	BLUE-WHITE	MAIN-SEQUENCE	*****	HOME
1*	c	d	e	f	g	h	i

* a) SECTION HEADING * b) COLUMN HEADINGS * c) Stellar i.d. number * d) Star's X-coordinate * e) Star's Y-coordinate * f) Star's Color * g) Star's Type * h) Distance from your home system * i) Special Notes

The General Star Listing is a listing of all of the stars in your cluster. The general star listing will only appear on the setup turn.

1* _____

1* **12.6 COMPLETE AND PARTIAL INFORMATION:**

1* _____

In general, if you own something you will receive a complete report on it. If you do not own something you will probably receive only partial information or no information about it at all. We have adopted the following conventions for incomplete or partial information.

- 1) "****" Three asterisks in a row will mean that you know that something exists but not how much of it.
- 2) "???" "???" "?" One or more question marks will indicate you are not entitled to the information.

Much of what you see will be determined by where you are. If you have forces at orbit #255 then you will receive information on orbit #255. The following will give you guidelines as to what entitles you to information. For this purpose the following definitions are assumed:

- 1) ACTIVE COLONY: An active colony is a colony with active population.
- 2) FORCES: Forces are considered to be any ships, planetary forces or orbital forces.
- 3) CHARACTERS: for these guidelines a character is any character who is not a prisoner or an underground fugitive (not all fugitives are underground).

* **12.6.1**

The first number listed for each star is its stellar i.d. number. The next two numbers are the star's X and Y coordinates (d & e respectively). The coordinates are followed by the star's color and type. Following the stars size will be its distance from your home system in light years. If the star system happens to be your home system a line of asterisks will be printed instead of a distance. There are two types of special notes which may follow the star's distance. If a star is within 10 light years of your home system then then the word "near" will follow the star's distance. If the star is your home system then the word "HOME" will follow the star's distance.

The amount of information you receive will be affected by the following:

- 1) OWNERSHIP: Ownership entitles you to the greatest amount of information. If you own it you will almost always receive complete information on it.
- 2) ACTIVE COLONIES AND FORCES: Having an active colony or forces will entitle you to some information on any other player's possessions in the same orbit.
- 3) CHARACTERS: Having characters located in an orbit will entitle you to minimal information on other player's possessions. Sometimes a character's job will entitle you to more or less information.

* **12.6.1 INFORMATION ON ORBITS:**

You will receive information on an orbit if you:

- 1) own an active colony at that orbit. 2) have forces at that orbit. 3) have characters at that orbit.

Having any of the above in an orbit entitles you to basic information on any planet occupying it. If a planet exists you will be told its name, class and environment rating.

*** 12.6.2 INFORMATION ON COLONIES:**

You will receive information on a colony if you:

- 1) Own the active colony.
- 2) have forces or characters at the planet.

If you do not own the colony, but have forces present then you will be told whether raw or exotic deposits exist (but not their ratings), the number of structures housing population, whether or not any population exists (but not how many or what their morale is), the total number of industry, and the number of fortifications protecting the colony.

If you have only characters at the orbit (but not at the colony) then you will be told only whether structures, industry, and population exist, but not their quantities.

If you have characters located at a colony then you will be told how many population exist and their morale.

*** 12.6.3 INFORMATION ON FLEETS, FORCES, & CARGO:**

You will receive information on fleets, forces and cargo if you fulfill one of the following conditions:

- 1) You own an active colony at that orbit.
- 2) You have forces or characters at that orbit.

You will receive complete information on your own fleets and forces but your information on other player's possessions will be limited. If you have an active colony or forces at that orbit then then you will receive partial listings of cargo and complete listings of planetary forces, orbital forces and ships.

If you have only characters at that orbit then you will receive no information on cargo and partial information on planetary forces, orbital forces and ships.

*** 12.6.4 INFORMATION ON CHARACTERS:**

You will be given information on characters if you meet one of the following conditions:

- 1) You own the characters.
- 2) Another player has characters (who are known to you) at a location owned by you.
- 3) There are public characters at an orbit and you have: an active colony, Forces, or characters belonging to you at that orbit.

You will almost always receive full information on your own characters (unless they are prisoners or their job limits what information you receive). However, if a character belongs to another player you will not be told his job rating or percentage chance of advancement. You will not receive any information on another player's clandestine characters unless you blow their covers.

*** 12.6.5 INFORMATION ON COMBAT:**

If combat occurs in an orbit then you will receive information on that combat if you:

- a) own an active colony in that orbit.
- b) have forces at that orbit.
- c) have characters at that orbit.

To receive information on combat you must have been involved in the combat or have an active colony or forces present at the time combat occurred. If you have only characters present or you have forces arriving at the end of the turn then you will be told that combat occurred but no details. Combat information will be complete only up to the point that your forces retreated or were destroyed.

*** 12.6.6 INFORMATION ON FLIGHTS & PASSENGERS:**

You will receive information on departing and arriving flights if you:

- a) own the flight.
- b) own an active colony on the turn a flight departs or arrives.
- c) have forces present during and after a flight's departure, or forces present or arriving the same turn a flight arrives.
- d) have a character aboard the flight.

You will receive information on flights in transit if you:

- a) own the flight.
- b) have a character aboard the flight.

If a flight does not belong to you and you have an active colony or forces present you will be given partial information on the flight's cargo and full information on the number of orbital forces and ships in the flight. You will receive the flight's number but not its origin or destination. If it is departing you will not be told its ETA.

If you only have a character on board another player's flight you will receive a passenger listing for the character but no traffic report for the flight.

You will receive a passenger listing for a character if:

- a) You own the character.
- b) The character is aboard one your flights (and the character is known to you).
- c) The character has a public job and you have an active colony or forces present.

If the flight is a retreat or the character belongs to another player and is aboard another player's fleet then you will not be given the passenger's destination or ETA.

Character's with certain jobs may greatly change the amount of information you receive on flights and their passengers.

1* _____

*** 13.0 MISCELLANEA**

*** 13.1 REQUESTING A GAME:**

Once you have read over the rules and decided to play, you need only to send us a letter stating that you wish to be placed in a game and enclose a check or money-order in the amount of the setup fee. The check or money-order should be made out to Flying Buffalo. With your rules you should also receive a listing of the current setup and turn fees. You should also be sure to list your name and address, even if you've listed it on the envelope. You should print (not write) both clearly. Once we receive your request we will place you in a game as quickly as possible. You should allow at least 4 weeks for your game to start. If you have not heard from us by then you should contact us again.

*** 13.2 STARTING A GAME:**

When you start in a game you will receive a setup sheet, a general listing of all of the stars in your game and a turn report. Your first considerations will be mapping the cluster, designing your ships, filling out the setup sheet and writing orders for the setup turn. Sections 13.4 through 13.7 contain suggestions for all of these tasks.

*** 13.4 DESIGNING YOUR SHIP:**

The following section will show you a simple method of arriving at a design for your ships. It is not necessarily the best method and it will tend to result in the creation of medium to large

sized ships. But it will give you some idea of what is involved.

*** 13.4.1 STEP #1 Your Jump Range:**

The simplest method for picking a jump range will require the use of the general listing of stars that you received with your setup turn. Find the three nearest stars to your home system. The distance to the farthest of the three is the minimum jump range you will want for your ship.

*** 13.4.2 STEP #2 Your Drive Rating:**

Round up the jump range that you have chosen. The resulting number is the drive rating you will use. Due to the manner in which jump ranges are calculated, you are guaranteed a minimum jump range equal to your drive rating.

Example: You pick a jump range of 5.3521 and round it up to 6. You will therefore use a drive rating of 6.

*** 13.4.3 STEP #3 Maximum Mass:**

To calculate the maximum possible mass of your ship you multiply the drive rating by the drive coefficient.

Example: If you pick a drive rating of 6 and the drive coefficient is 8 then the maximum possible mass of your ship design is 48.

*** 13.4.4 STEP #4 Your Drive's Mass:**

In section 5.1.3 there is a table of masses for drives of various ratings. Look up the mass of your drive in this table. A drive rating of 6 has a mass of 21. Subtracting the drive's mass from the maximum possible mass will tell you how much mass you have to devote to cargo bays, shields, and weapons.

Example: Your drive's mass is 21 and your maximum possible mass is 48. You have 27 mass units left to devote to cargo bays, shields, and weapons ($48 - 21 = 27$).

*** 13.4.5 STEP #5 Cargo Bays:**

Your cargo bays are important for shipping, colonization and delivering planetary forces to a target. More cargo bays mean fewer ships required for shipping and colonization and more planetary forces per ship to drop on pesky neighbors. It's generally better to be generous with your bays than stingy. A good rule of thumb is to have at least as many cargo bays as your drive's rating (although this is not necessarily a good idea with very small ships). You must have at least 1 cargo bay. Each cargo bay has a mass of 1. When you have decided on the number of bays you want, subtract that number from the mass remaining. This will give you the amount of mass remaining that you can devote to weapons and shields.

Example: You have 27 mass units left and decide that you want 8 cargo bays. Subtracting 8 mass units for the bays, you end up with 19 mass units to devote to weapons and shields.

*** 13.4.6 STEP #6 Weapons & Shields:**

This is largely a matter of personal preference. If you want to take the easy way out you'll divide your remaining mass equally between weapons and shields and toss a coin over the odd mass unit. You must have at least 1 weapon and 1 shield. Each weapon or shield has a mass of 1.

Example: You have 19 mass units left. You decide to devote 10 of them to weapons and 9 of them to shields.

*** 13.4.7 STEP #7 Ship's Total Mass:**

In order to calculate your ship's total mass you must add together the masses of your cargo bays, weapons, shields, and drive. If the resultant total is less than or equal to your design's maximum possible mass then you've done everything right. If the total mass is greater than the maximum possible mass then you have to reduce your bays, weapons, or shields until the total mass is equal to the maximum possible mass.

Example: Your drive's mass is 21. The mass of your cargo bays is 8. The mass of your weapons is 10, and the mass of your shields is 9. Your design's total mass is 48 ($21 + 8 + 10 + 9 = 48$).

*** 13.4.8 STEP #8 Final Jump Range:**

To calculate your jump range you use the following formula:

Jump Range = (Drive squared X Drive coefficient) divided by Ship's total mass

Example: Your drive's rating is 6, your total mass is 48, and the drive coefficient is 8. First you square the drive's rating ($6 \times 6 = 36$), then multiply by the drive coefficient ($8 \times 36 = 288$), and finally divide by the design's total mass ($288 / 48 = 6.0$) leaving you with a jump rating of 6.0 light years.

*** 13.4.9 STEP #9 Starting # of Ships:**

On your turn report there are only a bunch of question marks where your ships should be. This is because the number of ships you start the game with depends on how massive your design is. When we send your setup turn we don't know what your design's total mass is. So on your setup sheet (following the drive coefficient) you will be given a formula to figure how many ships you start the game with. All the players in your game will be using the same formula.

Example: Your design has a total mass of 45. The formula given on your setup sheet is as follows:

Starting # of ships = 1000 divided by your ship design's total mass.

This means that you start the game with 22 ships ($1000 / 45 = 22$ with a remainder of 10). Any remainder is added to the raw materials in storage at your colony. In this case 10 raw materials would be added to your raw materials in storage.

You may write move orders for these ships on the setup turn even though they do not appear on your turn report.

*** 13.4.10 STEP #10 Think it over:**

Hopefully you now have a ship design that you can live with for the rest of the game. However, before finalizing it, you might want to take a few things into consideration:

1) The greater the total mass of your design the greater the number of raw materials and industries needed to build your ships.

2) You are only allowed one ship design so be sure you're happy with it.

3) The greater the total mass of your design the fewer the number of ships you will start the game with.

In addition you might want to glance at your star listing or map and see how many stars you will be able to reach on the first turn. You may find that if you could increase your jump range by a mere tenth of a light year you would be able to reach an extra star or two. If you decrease your design's total mass, your drive

will be able to push your ship further, so by subtracting shields, weapons, or cargo bays you can increase your jump range.

Example: Your ship has a jump range of 6.0 light years and a total mass of 48. You find that if you could increase your range to 6.35 you'd be able to reach two extra stars. After a bit of calculation you find that if you remove 3 shields from your design it will increase your jump range to 6.4 light-years ($288 / 45 = 6.4$).

* 13.5 THE SETUP SHEET:

The setup sheet must be filled out and returned with your orders for the setup turn. The setup sheet is broken down into three sections.

- 1) Choice of player's code name.
- 2) Ship design specifications.
- 3) Choice of ending turn.

* 13.5.1 CHOICE OF CODE NAME:

You are given three choices for your code name. We will always attempt to give you your first choice, but in the event that a code name is requested by more than one player we may have to give you your second or third choice. For your convenience the blanks for your choices are divided up into 15 spaces.

* 13.5.2 SHIP SPECIFICATIONS:

The second part of the setup sheet deals with the ship design you will be using during the game. It must be filled in with your drive rating, and the number of cargo bays, weapons and shields you wish your ship to have.

* 13.5.3 CHOICE OF ENDING TURN:

After you have filled out your ship specifications you will need to write down the turn number you would like the game to end on. This turn number must be between 25 and 35.

* 13.6 ORDERS FOR THE SETUP TURN:

After completely filling out your setup sheet you will want to write your orders for the setup turn.

Your first concern in the game is exploration. You should send ships with orbital forces to all of the orbits in your home system which contain planets. In addition you should send ships and orbital forces to all of the stars within one turn's jump range. Of course you do not know which orbits around other stars will contain planets. If you have enough ships you can send ships and orbital forces to all of the orbits of all of the nearest stars. If you don't have enough ships to accomplish this you will have to guess which orbits will probably be filled with planets.

It is important to remember to recover your planetary forces into orbit before attempting to move them as orbital forces. If you have any doubts as to how many to recover then recover them all. You can always drop them back down on the next turn.

You will also want to name your characters and give them a job. It is always advisable to make at least one of them a governor and leave him at your home colony. You may wish to send some of your characters out with your exploration fleets as admirals or generals. If you do, remember to write travel orders moving them up to your fleet in orbit.

* EXAMPLE:

Your home planet is located in orbit #43. You have 15 ships, 100 planetary forces and 3 characters. There is a sub-terran

planet in orbit #41, a jovian planet in orbit #45 and there are three nearby stars you wish to explore (star #30, star #80, and star #120). Your orders for the setup turn might look something like this:
ORB,43,END

```
NAM,BRIGHT FORGE,PLN,43,NAM,LARRY,CHR,
    12,MOE,CHR,13,CURLY,CHR,14,END
EMP,GOVERNOR,CHR,12,GENERAL,CHR,13,
    ADMIRAL,CHR,14,END
MOV,41,OFC,2,SHP,1,END
MOV,45,OFC,2,SHP,1,END
MOV,31,OFC,2,SHP,1,END
MOV,32,OFC,2,*SHP,1,END
MOV,33,OFC,2,SHP,1,END
MOV,34,OFC,2,SHP,1,END
MOV,35,OFC,2,SHP,1,END
MOV,81,OFC,5,SHP,1,END
MOV,82,OFC,5,SHP,1,END
MOV,83,OFC,5,SHP,1,END
MOV,84,OFC,5,SHP,1,END
MOV,122,OFC,5,SHP,1,END
MOV,123,OFC,5,SHP,1,END
MOV,124,OFC,5,SHP,1,END
MOV,125,OFC,5,CHR,14,SHP,1,END
```

* 13.7 COLONIZING PLANETS:

This section is included to give you a rough idea of how to go about colonizing planets. As an example we will assume that you have captured a super-terran world with an environment of 4 and a raw material deposit of 20.

First you need to find how many industry, population and structures you need to colonize the world. The best place to start is the planet's raw material deposits. In order to fully exploit these deposits you require 20 industry. These 20 industry require 20 population to run them. Each industry and each population requires 4 structures to house them. You therefore require:

- 20 industry to extract raw materials.
- 20 population to run the industry.
- 80 structures to house your population.
- 80 structures to house the industry.

Next you need to transfer these items from your home colony's storage to your fleet in orbit and then move them to the world you wish to colonize:

```
ORB,43,END
TFR,FLT,3,IND,20,POP,20,STC,160,END
MOV,122,IND,20,POP,20,STC,160,END
```

Before moving all these goodies you should make sure that you have enough ships to move them all (the above cargo would require 660 cargo spaces). For simplicity's sake we'll assume that you do. When this cargo reaches planet #122 you must transfer the cargo down to the planet:

```
ORB,122,END
TFR,COL,3,IND,20,POP,20,STC,160,END
```

Make sure that you have at least one planetary force on the planet's surface. If you don't you won't be allowed to set up the colony. If planetary forces are present you can set up the colony with an addition order:

```
ADD,POP,20,IND,RAW,20,END
```

The computer automatically adds the proper number of structures to house your population and industry. It is usually best

to let the computer add the structures. If you do add structures you should do it at the very end of the order.

Right: ADD,POP,20,IND,RAW,20,STC,8,END

Wrong: ADD,POP,20,STC,80,IND,RAW,20,END

If the computer executed the "wrong" example it would first add 80 structures when it adds the population (POP,20). It would then add another 80 structures to house the population (STC,20) making a total of 160 structures housing population. No more structures would be available to house the industry so no industry would be set up! When in doubt let the computer do it.

You would now have a functioning colony, although the industry would not start to produce until the following turn. Not all worlds will be this easy to colonize and some players will opt to partially colonize many worlds rather than fully colonizing just a few.

*** 13.8 ERRORS & CORRECTIONS:**

When the computer tells us one of your orders is illegal we may attempt to correct the order. If the intent of the order is clear and the correction is obvious, then as a courtesy to the player we will correct it. If there is any question as to the player's intent the correction will not be made and the order will fail.

Do not become dependant upon us to correct your mistakes. Your orders are supposed to be legal when they reach us and Mobius Games takes no responsibility for orders incorrectly coded by the player.

We do take responsibility for any orders which we miscode into the computer provided they do not fall into one of the following two catagories.

1) ILLEGIBILITY: If the error is made because we cannot read your handwriting the order will not be corrected. Make sure that you clearly print all of your orders. If we can't read your orders your entire turn may be disallowed!

2) IRREMIABLE ERROR: As hard as we may try to prevent it, we may make an error that we cannot correct. In such a case the error will be declared irremediable and will NOT be corrected. If such an error happens to you then we will refund the cost of the turn in which the error occurred.

*** 13.9 PAYMENT OF TURN FEES:**

You may pay your turn fees on a turn by turn basis, but we would prefer that you pay for several turns in advance. Any funds received above and beyond the fee for a given turn will be placed in your account. If you send us a check for \$100.00 we will place an extra \$5.00 of credit in your account. Please do not try to "run up a tab"; payment needs to be in advance.

*** 13.10 DUE DATES:**

A turn's due date is the date that we require your orders for the turn to be back in our hands (not just postmarked). Normal game turns will generally fall due 2 weeks (14 days) from the date that we mail it to you. A "slow" game will generally fall due 30 days from the date that we mail it. There may be slight variances in due dates from one turn to another.

*** 13.11 OUR ADDRESS:**

All game requests, orders, payment and correspondence should be sent to:

FLYING BUFFALO, INC
PO BOX 1467
SCOTTSDALE, AZ 85252
or emailed to GAMES@FLYINGBUFFALO.COM

1* 14.0 EXOTIC AND JOB APPENDICES

The Exotic Appendix is a listing of all of the exotics which may currently be used in games of Mobius-1. As new exotics are implemented we will send you information to be added to this appendix.

Following the name of each exotic, enclosed in parentheses, will be the abbreviation and order code for that exotic. If the parentheses are empty then no abbreviation or order code exists for that exotic.

Following the abbreviation will be a listing of the exotic's type. The possible types are as follows:

* Extracted
Extracted exotics are found on planets as deposits and must be extracted from a planet with industry.

* Manufactured
Manufactured exotics are manufactured by industry using raw materials or exotics.

* Constructed
Constructed exotics are exotics which are assembled from previously built exotics or materials usually by means of an "addition" order.

* Wild
Wild exotics are generally a power unto themselves. They may or may not be amenable to a player's control.

Following the exotic's type will be a brief description of the exotic's purpose or effect on the game. This in turn may be followed by an order diagram, indicating the manner in which the exotic is utilized with a "use" order. If the exotic cannot be utilized in a use order then the following message will appear:

* CANNOT BE "USED"
Following all of the above and separated by three asterisks (***) will be a more detailed description and examples of the exotic's effects and uses.

NO NEW EXOTICS WILL BE ADDED TO A GAME WHICH IS ALREADY IN PROGRESS.

* 14.1 PLAGUE () Wild
Plague causes sickness and death in your active population. It may exist on any planet and may spread via characters, ships, cargo, planetary forces, and orbital forces. * CANNOT BE "USED"

Plague may lay dormant for several turns before suddenly becoming virulent. When plague does become virulent you will receive an emergency notice stating that plague exists at the planet in question followed by the plague's virulence enclosed in parentheses.

A plague's virulence will be a percentage from 10% to 100%. A plague's virulence will dictate how contagious and how

devastating a plague may be. A plague will have the following affects on active population:

percentage of population falling sick = plague's virulence.
percentage of sick population who die = plague's virulence.

A plague with a virulence of 50% will cause 50% of your population to fall sick and will kill 50% of those sick every turn until it has been cured.

Sick population cannot work so the plague's effect on your production will be the same as if your morale had dropped. If 50% of your population are sick then your industry will only produce at 50% of its normal production (this is in addition to any production loss due to low morale).

Plague may spread whenever transfers, drops, recoveries, moves, travels, or infiltrations are made from an infected location. The percentage chance of a plague spreading is equal to the plague's virulence. If the plague has a virulence of 30% then you will have a 30% chance of spreading the plague. Each transfer, drop, recovery, or move order that you write is treated as a separate chance for the plague to spread. Plague that is aboard a fleet is treated as cargo (the player will not be told that it exists) and once transferred, moved, or dropped will no longer exist on the fleet. Dormant plagues may be spread.

Plague may be cured by the use of Medical goods. Curing a plague does not guarantee that it will not re-occur on a later turn, but if it does it will be less virulent. Planet's and characters will retain the plague until cured by medical goods. A character is cured by being located at a colony where medical goods are used. Plague cannot kill planetary forces on a plague world. However, any characters located with those planetary forces risk death or contamination from the plague. If two or more plagues of varying virulency meet they may mutate into a stronger plague.

* **14.1 MEDICAL GOODS (MED) Extracted**

Medical goods are used to cure plagues and reduce deaths among a colony's population.

* CANNOT BE "USED"

Medical goods do not require use orders. The computer will automatically use the proper number of medical goods when the need arises (if the medical goods are on hand in the colony's stores). If a plague has broken out and medical goods are available in the colony's stores then the number of medical goods used can be determined by the following formula:

Medical goods used = (population x plague's virulence).

Any fractions are rounded up. If the proper number of medical goods are on hand then they will be taken from the colony's stores and the plague will be cured. If there are insufficient medical goods on hand then the computer will use as many as are available to reduce deaths.

EXAMPLE:

If you had a colony with a population of 100 and a plague with a virulency of 50% then the colony would require 50 medical goods to cure the plague (100 x 50%).

When population deaths occur (due to reasons other than plague) then the computer will use up medical goods in an attempt reduce the number of deaths. The greater the percentage of the population that is killed the less the number of population the medical goods will save.

2 % saved = % deaths - (% deaths)

* EXAMPLE

You have a population of 100 and suffer 50% percent casualties. If did not have any medical goods then 50 population would die. If medical goods were present in the colony's stores then 25% of your population would be saved (50% - (50% x 50%) = 25%). As a result only 25 of your population would die (50 - 25 saved = 25 deaths). If your casualties had be 80% then only 16% of your population would be saved (80% - (80% x 80%) = 64%). As a result 64 deaths would result (80 - 16 saved = 64 deaths).

Medical goods exist as deposits and must be extracted using industry. Medical goods may be used by the computer on the same turn that they are extracted.

* Exotics

* **LUXURY GOODS (LUX) Extracted**

Luxury goods are used to increase your morale and reduce the possibility of any decreases in morale. In addition, at the end of the game you will receive 1/4 of a point for each luxury good than you own.

* USE , —> LUX , —> quantity , END

When luxury goods are used at a colony a luxury index is created:

Luxury Index = luxury goods used / active population

If a governor is present at a colony when luxury goods are used then the governor's rating will be increased in the following manner:

Governor's rating = Governor's rating + luxury index

If no governor is present then the use of luxury goods will essentially create an "artificial" governor's rating in the following manner:

Governor's rating = 1 + luxury index

Any increase in morale will then be multiplied by the governor's rating (real or artificial). Any decrease in morale will be divided by the governor's rating. Increasing a governor's rating in this manner will also increase the probability of morale increasing rather than decreasing.

Lower morales will decrease the effectiveness of luxury goods. The effect of luxury goods will only last for the turn in which they were used. You may only use luxury goods which are in the colony's storage. Points received for luxury goods will NOT be tripled on the last turn.

* EXAMPLE:

USE , LUX , 30 , END

This example would use 30 luxury goods, removing them from the colony's stores in the process. If the active population were 10 then the luxury index would be 3.0. If no governor were present an artificial governor's rating of 4.0 would be created. If a governor with a rating of 5 were present then the his rating would be boosted to 8.

* Exotics

* **ALLOYS (ALY) Extracted**

Alloys reduce the amount of raw materials needed to build various items.

* USE , —> ALY , —> quantity , END

* (a) (b)

Alloys function by “extending” raw materials. One alloy and one raw material is the equivalent of 4 raw materials. When you make alloys available to industry (by means of a “use” order) the computer will automatically calculate how many alloys will actually be used by the industry. Any extra alloys will be returned to the colony’s stores. **YOU CANNOT USE MORE ALLOYS THAN THE AMOUNT OF RAW MATERIALS AVAILABLE.** If you attempt to do so the computer will return the extra alloys to the colony’s stores. Alloys exist as deposits and must be extracted using industry.

The maximum amount of alloys that can be used by a colony’s industry is calculated as follows:

$$(\text{Total industry building} \times 10) / 4$$

The number of building industry that can be supported by a given number of alloys and raw materials can be calculated as follows (assuming that the number of raw materials available is greater than or equal to the number of alloys available):

$$((\text{Total alloys} \times 3) + \text{total raw materials}) / 10$$

Only alloys in storage may be used by a colony’s industry. In addition the alloys will be made available to the industry only on the turn that the use order is given.

* EXAMPLE:

USE , ALY , 40 , END

This example would make 40 alloys available (from the colony’s stores) to the colony’s industry. If the colony had 50 raw materials and 10 industry building planetary forces then 25 alloys and 25 raw materials would be used up by the industry. The remaining 15 alloys and 25 raw materials would be left in storage. In fact the 40 alloys and 50 raw materials could have supplied up to 17 industry. It should be noted that only 5 of the industry would have produced if only the 50 raw materials were available.

* **14.1 BOOST (BST) Extracted**

When used in your ships’ hyperdrives, boost will extend your jump range.

* **USE , —> BST , —> percentage to boost , —> END**
* jump range

* (a) (b)

Only boost located on a fleet may be used. Boost in storage at a colony cannot be used unless it is first transferred to the fleet. When you order a flight to be boosted (by means of a “use” order immediately preceding a move order) the computer will automatically calculate the amount of boost needed to boost the flight’s range by the percentage desired.

Boost used = (# of ships x drive rating) x percentage to boost range

If the proper amount of boost is not available to boost a flight to the proper range then the computer will boost the range as far as it can with the boost available. The maximum percentage that a flight may be boosted is dependant upon your game’s drive coefficient:

$$\text{Maximum boost} = (\text{drive coefficient} / 2) * 100 \text{ percent}$$

If your game’s drive coefficient is 7 then you can boost your jump range by up to 350 percent ($7 / 2 = 3.5$, $3.5 \times 100\% = 350\%$). Boost “used” has priority over boost as cargo. Retreats cannot be boosted.

* EXAMPLE:

USE , BST , 100 , END

MOV , 295 , SHP , 10 , END

The example above would boost the jump range of the flight moving to orbit #295 by 100 percent. If you had 8 drives and a jump range of 8.0 light-years then your jump range would be increased to 16.0 light-years using up 80 boost in the process ($10 \times 8 \times 100\% = 80$). If star #290 were 16 light years away the move would only take 1 turn.

* **14.2 THE JOB APPENDIX**

The JOB APPENDIX is a listing of all of the jobs currently available to characters in Mobius-I. As new jobs are implemented we will send you information to be added to this appendix.

Following the name of each job will be a listing of the job’s type. The possible types are: * 1) Unskilled * 2) Skilled

Following the type of job will be a listing of the job’s notoriety. The possible types of notoriety are: * 1) Public * 2) Mundane * 3) Clandestine

For further information on the above types and notoriety you should consult the section on characters.

Following the name, type, and notoriety will be a brief description of the job. This in turn may be followed by an order diagram, indicating the manner in which characters are employed at the job via an “employ” order.

Generally the entire employ order diagram will not be shown. Instead only the segment of the order designating the job and any parameters required by the job will be shown, preceded and followed by ellipses (...).

If the job cannot be given in an employ order then the the following message will appear:

* **RESTRICTED TO COMPUTER**

Following all of the above will be a more detailed description and examples of the job’s effect on the character and the game.

Players will be warned in advance whenever a new type of job is to be added to a game in progress.

* Jobs

NEW RECRUIT: Unskilled Mundane
RESTRICTED TO COMPUTER

This job is simply a notice to the player that the character has just been created by the computer.

This job can only be given to a character by the computer and will only appear on the turn in which the new character is created. If the character is not given a new job he will become “unemployed” on the following turn.

UNEMPLOYED: Unskilled Mundane
RESTRICTED TO COMPUTER

This job is a notice to the player that the particular character in question does not have a job. *

TOURIST: Unskilled Mundane
RESTRICTED TO COMPUTER

This job is a notice to the player that the character is currently at a location owned by a player other than the character’s owner.

This job is can only be assigned to a character by the computer. Whenever a character with a NON-CLANDESTINE job travels, is infiltrated or is forcibly relocated to a location owned by another player then the character will become a “tourist”. Characters with clandestine jobs will NOT become tourists and will retain their jobs. Characters with some types of mundane and public jobs (such as prisoners and hostages) will also retain their jobs.

*** DECEASED Unskilled Public**
RESTRICTED TO COMPUTER

This job indicates that a character has died.

Other types of jobs (such as “condemned”) can result in a character’s death, but you cannot employ a character as “deceased.” When a character has died an obituary will be printed, listing the cause of death. In the Personnel File in the Turn Report Appendices the character will be listed as “deceased”. Deceased characters will only be listed in the Personnel Files on the turn they die. They will be deleted from the Personnel Files on all subsequent turns.

*** FUGITIVE: Unskilled Clandestine**

This job will cause a character to go “underground” hence escaping detection (and possibly capture) by another player.
EMP, —> FUGITIVE , —> number of turns , —> CHR...

When you employ a character as a fugitive the character will go underground for a number of turns specified by you. A character can be underground for a minimum of 1 turn and a maximum of 5 turns. When a character is underground he will disappear from all players’ turn reports including your own.

As long as a character is underground his chances of having his cover blown will be greatly reduced. In addition the longer you keep him underground the lesser the chance of his cover being blown both during and after being underground. Underground fugitives cannot be infiltrated.

When the character resurfaces he will remain a fugitive and will reappear on your turn report (and on any other player’s turn report if they blow his cover).

Only the owner of a character or the computer can employ a character as a fugitive. The computer will automatically employ a character as a fugitive if an attempt to capture him (by making him a prisoner or hostage) fails or he manages to escape while employed as a prisoner or hostage.

If you attempt to employ a character as fugitive on the same turn that the owner of the character’s location employs him as a prisoner then the location owner’s order will take precedence.

*** EXAMPLE:**

EMP,FUGITIVE,1,CHR,15,FUGITIVE,4,CHR,17,END

This example would employ characters 15 and 17 as fugitives. Character #15 would remain underground for 1 turn and character #17 would remain underground for 4 turns. Character #15 would disappear from your turn report for 1 turn and #17 would disappear for 4 turns.

*** PRISONER: Unskilled Mundane**

*** HOSTAGE: Unskilled Public**

Employing a character as a prisoner or hostage will result in the character being captured. There is always a chance

(usually very low) that a character will avoid capture.

The higher a character’s survival rating the higher his chances of avoiding capture. The advantage, however, always lies with the owner of the character’s location.

Only the owner of the character’s location or the computer may attempt to employ the character as a prisoner or hostage. In addition the owner of the location must know of the character (i.e. receive a report of the character on his turn report).

Whenever you capture a location (such as a colony or orbital forces) where other players’ public and mundane characters are located then those characters are automatically made your prisoners. If you move a prisoner or hostage to a location owned by another player then they are turned over to the other player (hostages automatically changing into prisoners in the process).

Prisoners are known only to the player holding them prisoner. Hostages, however, are public knowledge and are most useful when you want the character’s owner to know that you hold that character.

Prisoners and hostages can escape, becoming fugitives in the process. The higher your security the lower the chance of escape.

*** EXAMPLE**

EMP , PRISONER , CHR , 18 , HOSTAGE , CHR , 45 , END

This example would attempt to capture characters 18 and 45. If successful it would make character #18 a prisoner and character #45 a hostage.

*** 14.2**

*** CONDEMNED: Unskilled Mundane**

Employing a character in this job will result in the character being executed (killed).

*** EMP , —> CON , —> CHR...**

In order for a character to be condemned he must be your prisoner or hostage. In addition the prisoner or hostage must be at a location owned by you.

Condemned characters are not executed until the end of the turn they were condemned on. Throughout that turn the character must remain your prisoner and at a location owned by you or the execution will fail.

Characters being moved from one orbit to another (via a “move” order) cannot be executed. If you had a prisoner on board your fleet that you had condemned and you subsequently moved him to another orbit the execution would fail.

Executions come after rebellions, so if a colony rebels all executions are canceled.

Executions are public and will be known by all players present at the time of the execution. If the character is a hostage then the execution will also be known to the character’s owner regardless of whether the character’s owner is present or not.

You will never see a character’s job listed as “condemned.” Instead (if the execution is successful) you will receive an obituary listing the character as having been “executed”.

*** EXAMPLE**

EMP , CONDEMNED , CHR , 15 , 23 , 65 , END

The above example would result in the execution of characters 15, 23, and 65.

* Jobs

* **FREEMAN: Unskilled Mundane**

Employing a prisoner or a hostage as a “freeman” will free the character, returning control to the character’s owner.

* **EMP , —> FRE , —> CHR...**

A character must be a prisoner or a hostage in order to be employed as a “freeman”. Only the player holding the character or the computer may free him.

If you move a prisoner to a location owned by the character’s owner then the computer will automatically free him.

If a character is at a location owned by his captor and the character’s owner captures that location then the character will be freed by the computer.

If a rebellion occurs it is possible that some prisoners and hostages may be freed.

Prisoners and hostages who escape, become employed as fugitives, not as free men.

A character will only appear as a “freeman” on the turn that they are freed. If you fail to re-employ a free man he will become “unemployed” on the following turn.

* EXAMPLE:

EMP , FREEMAN , CHR , 83 , 102 , END

This example would free characters 83 and 102, but only if they were already hostages or prisoners.

* **GOVERNOR: Skilled Public**

Employing a character as governor will (usually) improve the morale of the colony at which the character is located.

* **EMP , —> GOV , —> CHR...**

In order for a governor to have any effect he must be located at a colony owned by the player who controls him. However, a character does not have to be located at a colony to be employed as a governor.

A governor’s effect on a colony depends for the most part on the natural flux in the colony’s morale (between 1% and 10% up or down). If you have a governor at a colony he will increase the chance of that natural flux being positive and decrease the chance of the flux being negative.

If your colony’s MORALE DECREASES, then the drop in morale is DIVIDED by the governor’s skill rating.

If your MORALE INCREASES then the increase will be MULTIPLIED by the governor’s skill rating.

Having a governor at a colony does not guarantee that morale will not drop. Certain conditions or events such as overpopulation will cause the morale to drop, regardless of the presence of a governor. However, the governor will reduce the severity of such drops.

Only the owner of a character may employ him as a governor.

* EXAMPLE:

EMP , GOVERNOR , CHR , 25 , 27 , END

The above order would employ characters #25 and #27 as governors. If character #25 had a rating of 5 and character #27 had a rating of 3 then character #25 would be placed in charge of the colony and character #27 would become part of his staff. The governors’ combined rating would be 5.3.

If the colony experienced a 10% drop in morale then the governors’ rating would convert it into only a 1.89% drop. If the

colony experienced an increase of 2% in morale then the governors’ presence would convert it into a 10.6% increase. However, the morale could not be increased beyond 100%, so if the morale was originally 95% then adding 10.6% would only increase the morale to 100%, not 105.6%.

* **ADMIRAL: Skilled Public**

Employing a character as an admiral will increase the attack and defense of the ships on with fleet the character is located at (as long as the fleet is owned by the same player who owns the character).

* **EMP , —> ADM , —> CHR...**

In order for an admiral to have any effect HE MUST BE LOCATED AT A FLEET owned by the player who controls him. However, a character does not have to be located at a fleet to be employed as an admiral. Only the owner of a character can employ that character as an admiral.

If you have an admiral with your fleet then your ships’ attack and defense will be multiplied by your admiral’s rating.

If you only have one admiral on a fleet and he is killed on the first round then you immediately lose his multiplying effect on your attack and defense. For this reason it is advisable to have more than one admiral on a fleet if you expect to engage another player in combat. Not only does it increase your attack but in the event that the admiral in charge is killed early in the combat you still have an admiral or admirals to carry on the battle.

Employ orders are processed after combat so in order to have an admiral present during combat you must employ him at least one turn prior to the turn in which combat occurs. If you attempt to employ an admiral on the same turn that combat is initiated then it’s too late.

* EXAMPLE:

EMP , ADMIRAL , CHR , 13 , 19 , END

This example would employ characters #13 and #19 as admirals. If both characters had a rating of 5 then character #13 would be placed in command (a tie goes to the character with the lowest i.d. number) and character #19 would become part of his staff. The admirals’ combined rating would be 5.5.

If you had 10 ships on your fleet, each with an attack factor of 5 and a defense factor of 10, then your total attack factor would be 50 and your total defense factor would be 100. Your admirals would increase your total attack to 275 and your total defense to 550.

* **GENERAL: Skilled Public**

Employing a character as a general will increase the attack and defense of the planetary forces the character is located with (as long as the planetary forces are owned by the same player who owns the character).

* **EMP , —> GEN , —> CHR...**

In order for a general to have any effect HE MUST BE LOCATED WITH PLANETARY FORCES owned by the player who controls him. If you are dropping orbital forces and want to take advantage of any generals you have with your fleet you must drop the generals along with the orbital forces. A character does not have to be located with planetary forces to be employed as a general. Only the owner of a character can employ that character as a general.

If you have a general with your planetary forces then the planetary forces' attack and defense will be multiplied by your general's rating.

If you only have one general with your planetary forces and he is killed then you immediately lose his multiplying effect on your attack and defense. For this reason it is advisable to have more than one general if you expect to engage another player in combat. Not only does it increase your attack but in the event that the general in charge is killed early in the combat you still have a general or generals to carry on the battle.

Employ orders are processed after combat so in order to have a general present during combat you must employ him at least one turn prior to the turn in which combat occurs. If you attempt to employ a general on the same turn that combat is initiated then it's too late.

* EXAMPLE:

EMP , GENERAL , CHR , 84 , END

This example would employ character #84 as a general. If you had 20 planetary forces, each with an attack and defense 2, then your total attack factor would be 40 and your total defense factor would be 40. If character #84 had a general's rating of 7 then your total attack and total defense would both be increased to 280. If your general was unfortunate enough to be killed in the first round of combat your attack would drop to 1/7th of what it would have been if you general had survived.

* **SECURITY: Skilled Public**

Characters who are security officers will decrease the success of other players' spys and increase the chances of other players' clandestine characters being exposed (i.e. having their covers blown).

* **EMP , —> SEC , —> CHR...**

A character employed as a security officer will improve the security of any location he is located at as long as that location is owned by the player who controls the character.

The higher a security officer's rating the better the security will be, and the greater the chance that any clandestine characters at that location will have their covers blown.

A security officer's effect on clandestine characters may vary with the type of clandestine job the character holds. If security officers have any special effect on a given type of clandestine character then that effect will be noted under the listing for that job.

If you have a security officer aboard one of your flights of ships and other players have characters aboard (who are not spys) then the other players will not be told the destination or ETA of the flight.

If spys are aboard a flight then the security officer will decrease the chance of the spys getting any detailed information on the flight and its cargo.

Locations without security officers are assumed to have a security rating of 1.

Only the owner of a character may employ that character as a security officer.

* EXAMPLE:

EMP , SECURITY , CHR , 52 , 67 , END

This example would employ characters #52 and #67 as security officers. If character #52 had a rating of 4 and character #67 had a rating of 5 then character #67 would be placed in charge and character #52 would become part of character #67's security staff. Their combined rating would give their location a security rating of 5.4.

* **SPY: Skilled Clandestine**

Characters who are spys will (if they are successful) allow you to receive reports on other players' colonies, fleets, and planetary forces as if you owned them.

* **EMP , —> SPY , —> CHR...**

Having a spy at a location owned by another player does not guarantee that you will receive a complete report on that location. Getting a full report depends on the security that exists at the spy's location.

If your spy's rating is GREATER than the security rating of the location then the spy's percentage chance of receiving a full report are as follows:

Percentage chance = $100 - ((\text{security rating} / (\text{spy rating squared})) \times 100)$

EXAMPLE: You have a spy at another player's colony and your spy's rating is 5. The security rating at the colony is 4. In order to find your spy's percentage chance of receiving a full report you would first square your spy's rating ($5 \times 5 = 25$), then divide the colony's security rating by the squared spy rating ($4 / 25 = 0.16$), multiply the result by 100 ($0.16 \times 100 = 16$) and finally subtract the number derived from 100 ($100 - 16 = 84$). Your spy would therefore have an 84% chance of receiving full information on the colony on any given turn.

If your spy's rating is LESS THAN OR EQUAL to the security rating of the location then the spy's percentage chance of receiving a full report are as follows.

Percentage chance = $(\text{spy rating squared} / (\text{security rating})) \times 100$

EXAMPLE: You have a spy on another player's fleet and your spy's rating is 3. The security rating for the fleet is 7. In order to find your spy's percentage chance of receiving a full report on the fleet you would first square the fleet's security rating ($7 \times 7 = 49$), then divide your spy's rating by the squared security rating ($3 / 49 = 0.0612$) and finally multiply the result by 100 ($0.0612 \times 100 = 6.12$). Your spy would therefore have a 6.12% chance of receiving full information on the fleet on any given turn.

In order to get a full report on a location a spy must be at that location at the end of the turn. If you have a spy at a colony and you move that spy to a fleet then you will receive a full report on the fleet but not on the colony.

In order to get a full report on combat a spy must survive combat. In addition the computer will make a special check to see whether the spy managed to beat the security at the character's location. This special check is for a full report on combat only. Another check will be made at the end of the turn to see if the spy can beat the security and get a full report on his location.

In order to get a full report on all flights leaving from a given fleet a spy must be present at the fleet both during and after

the departure of all the flights. If a spy is located on a fleet and then leaves aboard a flight of ships then he will receive full information on the flight he departed on but not on the fleet or any other flights that departed that turn.

If any of your spys receive a full report on a location then you will also receive a listing of the current score of the player who owns the location.

If you have more than one spy at a location then the spy with the highest rating will be placed in charge of the spy network and the rest will be placed on his staff.

If you have a spy or spys on another player's fleet then the computer will give that spy or spys a percentage chance equal to the spys' rating of discovering the complete specifications for the other player's ship design.

EXAMPLE: You have two spys on another character's fleet. One has a rating of 6 and the other has a rating of 5. Your spys' rating for that fleet is 6.5 giving you a 6.5% chance of receiving the other player's ship specifications

Infiltration orders are executed prior to employment orders so if you wish to infiltrate a character as a spy you must employ him as such at least 1 full turn prior to the turn on which you infiltrate him.

If you employ one of your characters as a spy for the first time and that character is at a location owned by you then that character's survival rating will automatically be increased by 1 (unless he has already achieved his maximum survival level).

* EXAMPLE:

EMP , SPY , CHR , 23 , 25 , END

This example would employ characters #23 and #25 as spys.

* **ASSASSIN: Skilled Clandestine**

An assassin (if they are successful) will kill the character who has been assigned as his target. However, an assassin's attack is not guaranteed to succeed. First, an assassin must be at the same location as the target. Second, the assassin must penetrate the location's security. An assassin's chances of penetrating security are calculated in the same manner as spies. See "Penetration of Security" under "SPY" elsewhere in this appendix. Once an assassin has penetrated security he has a chance to attack his target. This chance is calculated by the following formula. Chance to kill = (assassin's rating / target's survival rating) x 20%

* **EMP , —> ASN , TARGET, —> CHR...**

* EXAMPLE

EMP , ASN , 119 , CHR , 88 , 89 , END

In this example characters 88 and 89 would be employed as assassins and assigned to kill character 119.

The percentage chance to kill may not exceed 99%. Assassins may be networked but only with other assassins assigned to the same target. Since assassinations are the first things to occur each turn you must employ, target, and move the assassin into position a full turn prior to the actual attempt. The assassin will then make the attempt at the beginning of the next turn. Once an assassin has a target the target's character number will appear in square brackets following the assassin's job description. If an assassin is unsuccessful the word '[FAILED]' will appear. If an assassin fails to penetrate the location's security then the assassi-

nation will not even be attempted. An assassin's effectiveness will be considerably reduced if his cover is blown. During an assassination it is possible for the assassin to be killed, captured, or driven underground. The higher an assassin's rating and the lower the security the better the assassin's chances of escape. However, be forewarned, an assassin's life is not usually a long and merry one. The presence of guards will substantially increase an assassin's chances of death or capture.

* **GUARD: Skilled Mundane**

By employing a character to guard another character you increase the survival of the guarded character. A guard increases another character's survival by reducing the probability of death. Whenever a character is threatened (his location suffers damage or an assassination attempt is made) the guard will reduce the probability of death as follows: Probability = % chance of death / (1 + (guard rating x 0.2))

There are some circumstances in which guards will have no effect. If the percentage of death is 100%, guards will have no effect (they'll probably be dead too!) Also, guards have no effect on death due to plague.

Guards may be networked but only those guards assigned to the same character. A guard must be at the same location as the character to be guarded in order to affect that character. Like spies, a guard's survival rating is increased by one rating point the first time they are employed (unless they are already at their maximum survival rating).

Anytime a character who is guarded is threatened, the guards will have a greater chance of dying. Guards will increase the probability of an assassin being killed or captured. A character who has the guard skill may guard himself. If you do not specify a character to guard when employing a guard then the guard will guard himself.

* **EMP , —> GUA , TARGET, —> CHR...**

* EXAMPLE

EMP , GUA , 243 , CHR , 88 , 89 , END

In this example characters 88 and 89 would be employed as guards and assigned to guard character 243.