REACH FOR THE STARS
T/M

THE CONQUEST OF THE GALAXY

PLAYER'S MANUAL

Table of Contents

1. INTRODUCTION

On the reverse of each data card are the instructions to get the game up and running in your computer; either Apple or Commodore.

Commodore 64 owners should note that they will have to use the (f1) key instead of the (ESC) key. There is no (ESC) key on the C−64.

Start up the game and play through the introductory tutorial presented on the inner surfaces of the game album.

The player's manual can be consulted at any time after you have completed the tutorial.

Reach for the Stars is a game of colonization, expansion and conflict in a hypothetical galaxy. Throughout the game, you must explore new star systems and colonize the most promising planets, allocate the resources produced by your planetary colonies to defense, research and development, environment and social factors, consumer contentment and industrial expansion as well as develop a policy to deal effectively with the alien threats which are certain to arise.

The information in this booklet, the keystroke summary on the back page of this booklet and the game routines summary on the reverse of the data card will (hopefully) explain how to do all these things better than your opponents. The chapters are presented, more or less, in the order that you will need them.

In fact, the key summary and game routines summary are all that is needed to play the game. The player's manual details the fine points of the game.

2. THE NATURE OF THE GALAXY

The galaxy is a 34 by 23 hexagonal grid as displayed on the data card. In reality, the galaxy is 'donut' shaped. Task forces which exit the top edges of the galaxy reappear on the bottom edge; those which exit the right margin reappear on the left. For example, *Pollux* is 4 hexes from *Capella* and *Saiph* is 9 hexes from *Zosma*.

Each new game, the 54 star systems are randomly provided with up to 3 planets each. Appendix A details the planetary types and their relationship to the spectral class of the star system.

The computer will designate a particular star system as the 'home world' for each player. 'Home worlds' will have one primary, secondary or tertiary planet each and never be located within 5 hexes of another 'home world'.

3. THE GAME MENU

The game menu is two pages in length. The first page is shown in Screen A.

It is used to establish the names and natures of the players or to restart a previously saved game.

Each player, whether human or computer, can be given a name. Type (1), (3), (5) or (7) to name players 1 − 4 respectively. Enter the name (to a maximum of 15 characters) and type (RET).

Type (2), (4), (6) or (8) to distinguish between human and computer players and to grade the computer players.
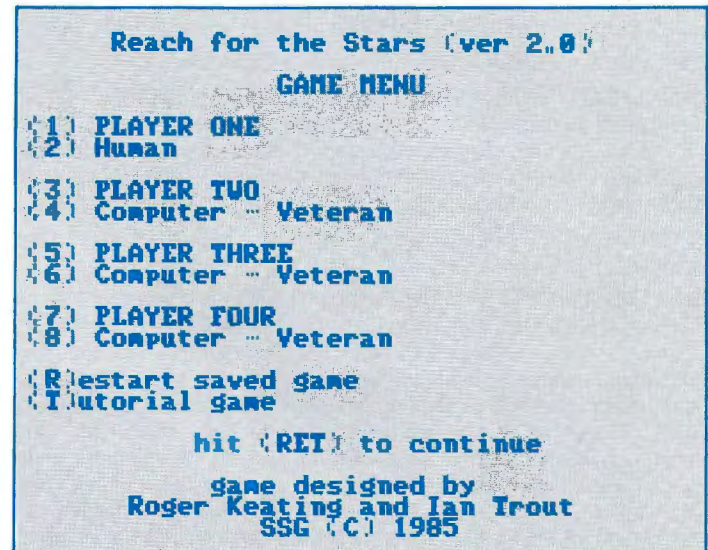
Screen A

Type the appropriate number until your choice is presented. We suggest you don't tangle with veterans until you know what you are doing.

(R) is used to restart a saved game. The save game routine is described in Chapter 9 of this manual.

Type (RET) to proceed to the second page of the game menu, the ‹OPTIONS MENU›.

These options are treated in detail in Chapter 10. For your first games, leave everything as shown on the screen.

Type (RET) to begin the game.

4. THE PRODUCTION ROUTINE

The production routine for each planet you control is completed on Screen B.

Screen B

The Star System Display

The upper component is the star system display.

(N)AME – This utility allows the star system to be renamed to any 8 letter word not already in use. Type (N) and enter the new name. This utility will not confuse the computer, but may frustrate a flesh–and–blood opponent.

OWNER – The number of the player currently controlling the planet.

POPULATION – To the left of the slash is the current size of the planet's population; to the right of the slash is the optimum population size for the planet. In normal circumstances, a planet's population will increase naturally as long as the social level is greater than 40. It will decrease if the social level is less than 40. The current population size can exceed the optimum population size and when it does, overcrowding has occurred. Excess population should be encouraged to emigrate. Build transports and send them out to pioneer new colonies. Overcrowding will cause a sharp fall in social level. Once the population size of a planet falls to 0, it will revert to its primal condition. So don't start a colony with insufficient pioneers.

INDUSTRY – To the left of the slash is the planet's current industrial capacity; to the right of the slash is the planet's maximum industrial capacity. The maximum capacity for each planet is fixed at the beginning of the game and can never be exceeded by current capacity. Current capacity is increased through the purchase of industrial units during the production routine.

SOCIAL – To the left of the slash is the current social level; to the right of the slash is the current planetary environment. In normal circumstances, the social level will tend to move toward the planetary environment. Prior to colonization, the social level of all planets is 0. Once inhabited, the rate of increase/decrease in the social level depends upon RP investment, current planetary environment, overcrowding and the provision of consumer services. Planetary environment can only be increased through RP investment. Both have a maximum level of 100.

DEFENSE – The number outside the bracket is either the number of planetary defense bases deployed or the size of a conquering force. If a ‹+› is inside the bracket then the number represents the number of PDBs deployed. If a number appears in the bracket, it identifies the player who originally colonized the planet. The conqueror's number appears on the ‹OWNER› line and the number outside the bracket is the size of his occupation force. Players will not be allowed to build more than 50 PDBs. The size of the conquering population cannot exceed the optimum population or 50, whichever is smaller. PDBs which are not maintained are eliminated. Conquering forces which are not maintained suffer attrition.

The Planetary Production Display

The lower component is the planetary production display.

Resource points are the crux of the game. The player who makes the most will invariably win. The following formula is used by the computer to calculate the RPs produced by each planet in the production phase.

Note that population in excess of the maximum industrial capacity (or 50) will not contribute toward RP production.

RPs not consumed in a particular production phase are transferred to Global RPs and become available in subsequent turns to other planets in your empire. This is interstellar trade. Furthermore, Global RPs earn interest at the rate of 6.25% per production phase.

Trade pools of Global points may behave peculiarly once they exceed 60,000. In any but the longest of games, this is very unlikely to occur.

INDUSTRY – The manufacture of industrial units is limited only by the maximum industrial capacity of the planet.

EXPLORERS – These vessels have no combat capability and will be destroyed instantly on meeting enemy vessels other than explorers.

TRANSPORTS – These are the vehicles by which population is moved from one star system to another. They are your colonists or invading forces. The population unit and the transport are inseparable until a star system is colonized/invaded at which time the transport is permanently destroyed. The number of transports which a planet can construct in a particular production phase is determined by the size of the population. Up to 25% of a planet's population may emigrate in a single turn. All excess population on an overcrowded planet may emigrate. Transports have a minimal combat capability. Do not use them as substitutes for real warships.

STARSHIPS – A planet cannot build more starships of each model than the current industrial capacity. Mk2 – Mk4 starships cannot be built at all until their research and development costs have been paid. The offensive and defensive strengths, as well as the movement allowance, improves with each successive model.

SOCIAL LEVEL – The relationship between social level and industrial capacity determines the main component of RP production. It is important to develop the two in conjunction.

PLANET ENVRN – Though planetary environment does not directly influence RP production, it does exert a profound influence on social level. The one–time expense incurred in raising the planetary environment may well be of greater value than a continual investment in the more cheaply increased social level.

SHIP DEVELOP – All players begin the game with Mk1 technology. To reach Mk2 technology, and thus be able to construct Mk2 starships, an investment of 400 RPs is necessary. The computer keeps track of your installments and displays the amount on the ‹Technology RPs› line. The investment of a further 1000 RPs and 2000 RPs will respectively develop Mk3 and Mk4 technology. In addition to enabling the construction of better starships, ship development investment improves the fighting ability of your PDBs. Note that regardless of technological development, the maximum rating for PDBs is level 3.

PLANETARY DEFENSE BASES – A maximum of 5 PDBs per turn can be constructed on each planet. Every PDB requires maintenance and will be eliminated without it. Both the construction and maintenance costs for PDBs are dependent upon the current technology level. Garrisons require maintenance and may not construct PDBs.

SERVICE POPN − This is the provision of consumer goods to your populations. One RP per population unit is required. You cannot spend more and if you spend less you will suffer a degree of unrest proportional to the extent of your tyranny. This will manifest itself in a lower birth rate, industrial sabotage and the pollution of the environment. In circumstances where your populations are subjected to extreme deprivation, outright rebellion may occur, reducing a once profitable economy to a worthless junkpile.

Restrictions on RP Production

Star systems are considered to be interdicted when enemy vessels other than explorers or transports occupy their hex. In these circumstances, unused RPs are lost, no investment in ship technology is permitted and the use of Global RPs is denied.

5. THE MOVEMENT PHASE

In this phase, task forces are formed from ships present on star systems and destinations are plotted for them. Transports present in a star system may colonize any planet with the capacity to receive them.

The speed at which a TF moves is equal to the speed of the slowest ship in it. TFs cannot have their destinations altered while in deep space, nor can they alter their composition. Remember the 'wrap−around' nature of the galaxy when issuing orders. (*Antares* to *Tarazed* is 4 hexes; *Castor* to *Agena* is 5 hexes.)

The maximum size of a TF is 255 ships of each type; the minimum size is one ship of any type. The maximum number of TFs allowed, per player, is 80. In a sensible game, these maxima are never reached.

A Note on Player Identification

Each player's TFs are represented by silhouettes as shown below. When several players collide in hex, the silhouettes are replaced by a graphic indicator showing who is present.

A Note on Visibility

Once a friendly vessel has reached a star system, it is considered to be explored. The information revealed on it is then available to the player for the rest of the game. For experienced gamers interested in more restricted intelligence, we recommend the use of the Hidden Victory Condition Option.

To examine the complete galaxy on one screen, type (P). Friendly and known enemy star systems are identified.

Selecting and Moving Task Forces

The introductory tutorial, together with the game routine summary and the key summary, guides you through the formation, selection and movement of task forces. The information in this section outlines alternate means of moving TFs as well as how to select particular TFs. Consider Screen C.

There are 2 additional techniques by which TFs can be given objectives. They are identified in the 2 lines of text in the bottom left hand corner of the screen.

The I,J,K,M keys will move the cursor to the nearest star system containing a friendly TF. I = up, J = left, K =
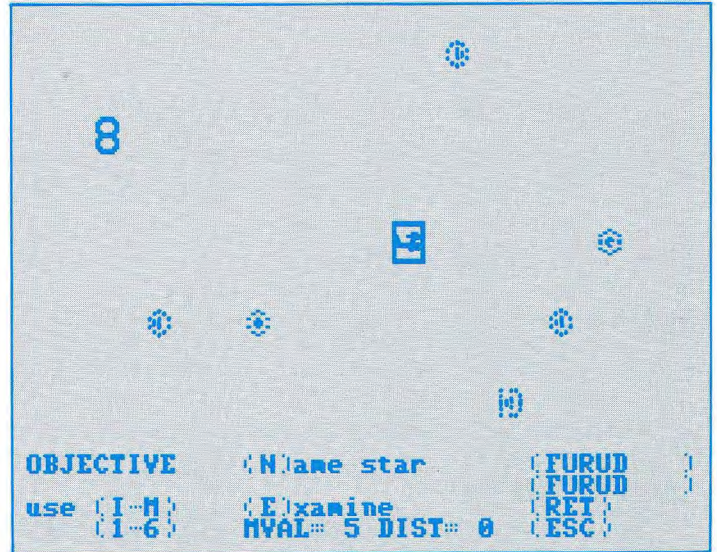
Screen C

right and M = down. Once the chosen destination is located, type (RET) to select and (Q) to confirm.

The 1 − 6 keys will move the cursor hex by hex across the star map. Again, once the chosen destination is located, type (RET) to select and (Q) to confirm.

At times during the game, especially in later turns, you may wish to move only some of your TFs. Use Cntl(B)(6), if necessary, to locate the star system containing the chosen TF and then return to the star screen. Obtain the flashing block cursor and type (N) followed by the name of the star system. The cursor will flash at the new location. Type (RET) to select the TF there.

A Note on the Movement of Explorers

The repeated movement of single explorers across the galaxy can become a bit boring. They can be moved with a single keystroke. Type Cntl(X). They will seek out unexplored star systems until every one has been discovered. This option does not preclude explorers receiving normal orders provided they are given before Cntl(X) is typed.

The End Turn Display

The error sound will inform you that all TFs have been given orders; i.e. you will not be able to select a TF. Type (ESC) to obtain the end turn display as shown in Screen D.

Type (Q) to end the turn. (RET) will take you back to the flashing block cursor. (A) can be used to order any unmoved TFs automatically.

6. THE COMBAT PHASE

Combat is mandatory and will occur whenever opposing TFs containing ships other than explorers or transports end a movement phase in the same star system. Combat is resolved in a series of rounds and continues until only one player has ships remaining in the star system. All other vessels will have been either rubbed out or fled in terror.
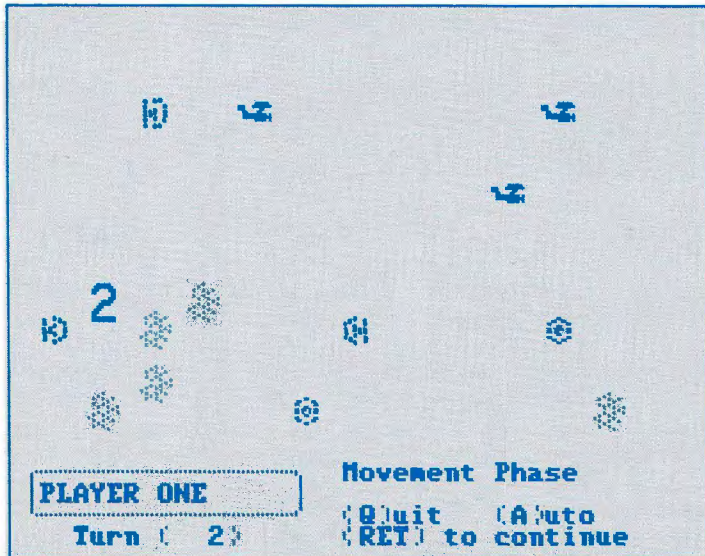
Screen D

The computer resolves all combats and displays the results of each round on the combat display as shown in Screen E.

For each ship type involved in the combat, the display shows the number of ships remaining after each round and the number destroyed in the round. Each participant can assess his performance and evaluate his chances if the combat is continued. To assist you with this, the computer gives its assessment of your position at the top of the display.

Screen E

You must decide whether to continue the combat or withdraw.

Type (RET) if all combatants wish to continue. The above routine will be repeated. Type (ESC) if at least one combatant wishes to withdraw.

Each player, in turn, will be asked whether they wish to withdraw. Type (RET)(Q) if you intend to remain and fight it out. Type (RET) and then use the movement routine if you intend to flee. The (F)orm routine is accessible so you do not have to withdraw all your ships. However, those which are withdrawn must all be given the same destination. You must wait until a subsequent round to withdraw ships to a different destination.

Withdrawing ships move one hex immediately, remain stationary in the following movement phase, then move normally after that.

Eventually, one player alone will have ships remaining in the star system (unless a simultaneous withdrawal occurs). The final combat display will reveal the victory points he has earned from his success.

7. THE PLANETARY CONQUEST PHASE

The planetary attack and conquest routine is not mandatory. Where an opportunity exists for a possible planetary attack, you will be presented with Screen F.
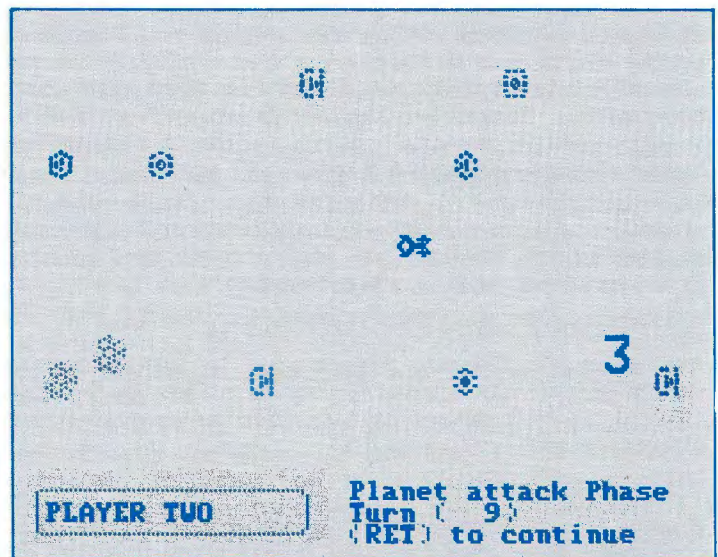
Screen F

It is very similar to the movement routine.

Type (RET) to continue.

Type (E) to examine the star system and assess the strength of the enemy colonies. Enemy PDBs must be attacked and destroyed before a planetary invasion can occur. Type (ESC) to return to the planetary display.

Type (A) to advance to the planetary attack display as shown in Screen G.

Where there is more than one planet in a star system, type (RET) until the target planet is selected. The attack indicator will appear in inverse. All ships except transports will be formed into a single TF to attack the planet. Type (A) again to implement the attack or (Q) which will abort the attack and end the turn for those ships.

```
STAR SYSTEM : MIRZAM  # SPECTRAL CLASS
                           G - WHITE

Planets        -1
               TERT'RY
     OWNER      ( 1 )
POPULATION    74/ 85
  INDUSTRY    45/ 45
    SOCIAL    80/ 88
   DEFENSE    22 ( + )
- - - - - - - - - - - - - - - - - - - - -
Planet attack



        IIIIIIIIIII


(A)ttack planet
(Q)uit attack
```

Screen G

Attacks against PDBs are resolved using the same mechanics as ship-to-ship combat. The difference is that the attacking player may type (ESC) to call off the attack at the end of any combat round. He does not withdraw. If a planet's PDBs are eliminated, surviving ships may launch further attacks against other planets defended by PDBs or attack the now defenceless planet. Attacks may also be launched against undefended planets.

Type (A) in both circumstances to attack the planet. Population, industry and planetary environment are reduced in proportion to the size of the attack. Note that small forces may cause no damage at all. Type (Q) if you wish to refrain from such an attack. Either action will end the turn for those ships.

Colonies undefended by PDBs may be conquered if transports are present. After the planetary attack routine is completed, any transports available over the star system are selected. Type (C) to conquer and Screen H will appear.

```
STAR SYSTEM : MIRZAM  # SPECTRAL CLASS
                           G - WHITE

Planets        -1
               TERT'RY
     OWNER      ( 1 )
POPULATION    84/ 85
  INDUSTRY    25/ 45
    SOCIAL    80/ 83
   DEFENSE     0 ( + )
- - - - - - - - - - - - - - - - - - - - -
INVASION

Storm-troopers (  16 )

          max

         0 (  16 )


(Q)UIT
(ESC) to exit
```

Screen H

The conquer routine is identical to the colonization routine. Type (Q) to exit if not all the transports are used in the invasion.

Note that only combats and planetary attacks involving human players will be displayed. Combatants may request non participants to look the other way until the action in question is resolved.

A Note on Invasion and Occupation

Conquered planets are important both in terms of the additional RP production and the victory points awarded. Remember that the garrison must be kept up. If the garrison drops below half the size of the conquered population, then revolt will occur. A revolt will attrite your garrison in proportion to the shortfall.

Population increase on conquered planets is much lower than on your native planets. Transports built on conquered planets will function identically to native transports.

8. VICTORY CONDITIONS

Each player's performance throughout the game is assessed by the accumulation of victory points. There are four categories for which victory points are awarded, namely *colony development, battle victories, planetary conquest* and *colony destruction.* Appendix B details the exact points awards.

The computer keeps a running total of the VP awarded to each player and this display may be consulted whenever the flashing block cursor is on the screen by typing Cntl(B)(8). Screen I illustrates a typical victory screen display.

```
Current Victory Status   Turn  17 of  40


 Develop-Battles-Conqu't-Destr't-  Total
PLAYER THREE
    121 -   160 -    0 -   312 -    593
PLAYER TWO
     96 -   355 -    0 -   100 -    551
PLAYER FOUR
    121 -    30 -    0 -     0 -    151
PLAYER ONE
    ( 2 )   ( 2 )   ( 2 )   ( 2 )    140
     95 -    45 -    0 -     0 -     140

    Hit (RET) to continue
```

Screen I

At the end of every game, the computer will break in with a final compilation of each player's VPs.

Note that the game may be continued beyond the end-point indefinitely. Funny things may happen to your VPs once you get more than 60,000 of them; don't expect this to happen until turn 200+.

A player is considered to have won an overwhelming victory if, at any time, his VP total is greater than the combined VP total (+512) of all his opponents. An overwhelming victory can not be achieved once the leading player has reached 32,000 VPs or the combined total of the 2nd, 3rd and 4th players exceeds 32,000 VPs.

A substantial victory is achieved if the winning player's VP total is 25% greater than his nearest rival.

In other circumstances, the winning player's victory is considered marginal.

9. THE SAVE GAME ROUTINE

Saving a Game

One game at a time may be saved on the master disk. Up to 10 games may be saved on each initiallized save game disk.

To save a game in progress to the master disk, type Cntl(B) to obtain the ‹UTILITY MENU› when the flashing block cursor is on the screen. See Screen J.

```
     Reach for the Stars (Ver 2.0)
              UTILITY MENU

 [1]  LOAD GAME  -- from MASTER disk
 [2]             -- from SSG save game disk

 [3]  SAVE GAME  -- to  MASTER disk
 [4]             -- to  SSG save game disk

 [I] initialize a SSG save game disk

 [6]  EXAMINE    -- Task Forces
 [7]             -- Planetary Systems
 [8]             -- Victory Conditions


          Hit [RET] to continue

          game designed by
      Roger Keating and Ian Trout
            SSG [C] 1985
```
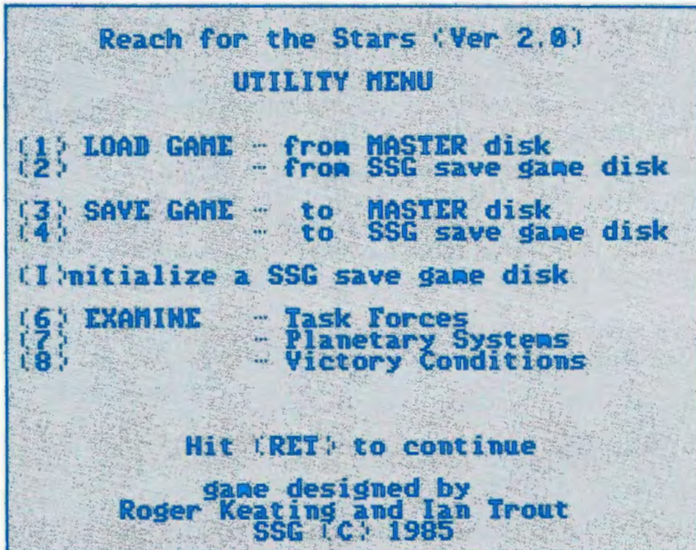
Screen J

Type (3) then (Y) as instructed to save the game.

Before you can use a save game disk, it must be initiallized. Recover the ‹UTILITY MENU› and type (I). Insert a blank disk into your drive and type (Y) to initiallize.

Type (4) to save a game to an SSG save game disk. Type (RET) to get the catalogue as shown in Screen K.

Select a numbered location to save the game, type that number, then enter a comment (to 23 characters) to identify the game. Type (RET) to save.

Loading a Game

To load a game from the ‹GAME MENU› which appears on booting up the disk, type (R) to obtain the ‹UTILITY MENU›, then (1) or (2) as appropriate.

To load a game under other circumstances, obtain the ‹UTILITY MENU› and again type (1) or (2) as appropriate.

```
        Reach for the Stars
        SAVE GAME SCREEN
··········· [ CATALOG ] ···········
  [0]  TEST 12543
  [1]  TEST 12544
  [2]        -- free --
  [3]        -- free --
  [4]  ROGER'S RUBOUT
  [5]        -- free --
  [6]        -- free --
  [7]  IAN'S DEMISE
  [8]        -- free --
  [9]        -- free --

            HIT NUMBER
       TYPE IN A COMMENT
       HIT [RET] TO SAVE
       HIT [ESC] TO BYPASS
```

Screen K

10. THE OPTIONS MENU

Scenario Length

The basic game is 40 turns long. To vary the length, type (1) to position a cursor over the ‹40›, then enter the desired number of turns. The minimum number is 10. The maximum number is 255.

Optional Features

Type (2) to obtain the ‹OPTIONAL FEATURES› menu as shown in Screen L.

```
       Reach for the Stars (ver 2.0)

             OPTIONAL FEATURES

 [1]  OFF  Novas
 [2]  ON   Natural disasters
 [3]  OFF  Xenophobes
 [4]  OFF  Solar debris effect
 [5]  OFF  Random star map
 [6]  OFF  Task Force setup
 [7]  OFF  Automatic explorer move
 [8]  OFF  Hidden victory conditions
 [9]  OFF  Enhanced computer players
 [0]  OFF  Random game

       Hit [ESC] for [OPTION MENU]

          game designed by
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            SSG [C] 1985
```

Screen L

There are 10 optional features, each with an identifying number. To instruct the computer to include a particular option in the game, type the appropriate number. For example, type (2) to introduce natural disasters into the game. A description of each optional feature follows.

NOVAS – Star systems are not stable and there is always the small possibility that a few of them will go *nova* in the course of the game. The risk becomes greater as the higher starship technologies are achieved. You will usually get some notice of the impending disaster (a warning will appear on the planetary production screen) and you will be permitted to emigrate with all but one of your population. In addition, there is a chance that the star's condition will stabilize and it will revert to normal.

On going *nova*, everything in the star system is obliterated. TFs subsequently plotted to that star system will never be heard from again.

NATURAL DISASTERS – Plague, famine, meteorites, pollution; in fact any of a plethora of disasters can visit a planet in the course of a thousand years. At any time, one or more such disasters can affect a colony. Population, industrial capacity, social level and planetary environment in any combination will be affected; sometimes slightly, sometimes dreadfully.

XENOPHOBES – Xenophobes are a miasmic life form which cause irritation more than conflict. Whenever a xenophobe plague infests a star system, access to Global RPs will be denied. In addition, any combat which occurs in an infested star system will result in greatly increased casualties for all participants. Xenophobes can not be attacked or manipulated in any way. Infested star systems will be identified on the production display.

SOLAR DEBRIS – Solar debris hexes represent navigation hazards and prevent faster than light travel. Whenever a TFs movement plot takes it through a solar debris hex, it stops immediately. In the following movement phase, it continues on its way.

RANDOM STAR MAP – You may generate a random galaxy whenever you wish a change from the standard map. Note that there will always be 54 star systems.

TASK FORCE SET-UP – Rather than begin the game on a star system, each player begins randomly in space with a fleet comprising 4 MkIs, 4 explorers and 60 transports. Each player has 400 Global RPs at his disposal once a colony has been founded.

AUTOMATIC EXPLORER MOVE – Explorers are moved by the computer just as for a Cntl(X) order. Players, however, are unable to give orders at any time to their explorers. This option really speeds up the game, especially at the beginning.

HIDDEN VICTORY CONDITIONS – There are two effects from this option. Firstly, players will be unable to access the current victory point awards until the end of the game. Secondly, intelligence on star systems is restricted. Unless you maintain a warship over the star system, or were the last player to visit the star system, information on certain solar characteristics will not be available.

ENHANCED COMPUTER PLAYERS – Once you become bored with beating up the veteran computer opponents, try a game or two with these good 'ole boys.

RANDOM GAME – The computer takes a basic game and re-establishes most of the production, movement and research values. The variations are not great but introduce some considerable suspense.

Variable Movement Costs

Type (3) to obtain the ‹VARIABLE MOVEMENT COSTS› menu as shown in Screen M.

Every type of vessel can be given a movement allowance between 1 and 17. Note that low allowances will make for very long games.

Variable Production Costs

Type (4) to obtain the ‹VARIABLE COST OPTION› menu as shown in Screen N.

```
    Reach for the Stars (ver 2.0)

         VARIABLE COST OPTION

             min  norm  max
INDUSTRY   -  5 -  10 -  20 -  ( 10 )
EXPLORER   -  2 -   3 -  10 -  (  3 )
TRANSPORT  -  2 -   5 -  15 -  (  5 )
  MARK 1   - 10 -  14 -  20 -  ( 14 )
  MARK 2   - 15 -  30 -  50 -  ( 30 )
  MARK 3   - 30 -  80 - 100 -  ( 80 )
  MARK 4   - 50 - 120 - 200 -  (120 )
GLOBAL PTS -  1 -   2 -  30 -  (  2 )X100
MARK 2 R+D -  1 -   4 -  97 -  (  4 )X100
MARK 3 R+D -  2 -  14 -  98 -  ( 14 )X100
MARK 4 R+D -  3 -  34 -  99 -  ( 34 )X100

      Hit (ESC) for "OPTION MENU"
```

Screen N

You will be allowed to alter the unit and development costs for most items on the production schedule within the broad range shown on the display. The initial Global RPs can also be varied. Note that some values are multiplied by 100 as shown on the right of the screen.

Variable Victory Conditions

Type (5) to obtain the ‹VARIABLE VICTORY OPTION› menu as shown in Screen O.

```
    Reach for the Stars (ver 2.0)

       VARIABLE MOVEMENT COSTS

         (min=1 max=17 MP's)

                norm    new
Explorers    - 10 -  ( 10 )
Transports   -  5 -  (  5 )
Mark 1       -  5 -  (  5 )
Mark 2       -  8 -  (  8 )
Mark 3       - 12 -  ( 12 )
Mark 4       - 17 -  ( 17 )


   Hit (ESC) for "OPTION MENU"


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        SSG (C) 1985
```

Screen M

```
Reach for the Stars (ver 2.0)
    VARIABLE VICTORY OPTION
PLAYER ONE        enter multipliers


    COLONY DEVELOPMENT    2
      STARSHIP BATTLES    2
    PLANETARY CONQUEST    2
    COLONY DESTRUCTION    2


       TOTAL MUST = 8


    Hit (ESC) to finish entry
```

Screen O

The actual points awarded for the accomplishment of the various goals do not change with this option. Rather a multiplier is introduced such that 1 or more of the 4 victory criteria are emphasized at the expense of the remainder. Under standard conditions, VPs for each category are multiplied by two. You may change any and all of these multipliers. The sum must always be 8; no category can be greater than 4 and no category can be less than 1.

Each human player, in turn, selects his multipliers then enters them on the display. Initially, all multipliers are set at 2. Type (RET) until the cursor corresponds to a category you wish to change.

Once you are finished selecting the options, type (RET) to start the game.

11. DESIGNER'S NOTES

Two years of almost ceaseless galactic warfare have taught us a lot. Rather than try to remember it all, we've reproduced a history, with anecdotes, of a splendid battle fought out in that 'oh so well known' galaxy.

As always, we get enhanced veterans to oppose us. Options 7 − 0 are in effect. The random game is one of our favourites, along with the automatic explorer move. Using hidden victory conditions leaves everyone in suspense right up to the final whistle.

Attila le Trout takes the number 2 slot. Killer Keating fills in at 4.

A non−aggression pact is duly sworn between us until after the computer players have been put in their proper place... which has to be done fast. The consequences arising from allowing an enhanced veteran to get on his feet don't even bear thinking about.

And now to battle.

Attila (turns 1−10) − Both Killer and I use essentially the same plan. Find a good planet nearby, develop it, build a navy and conscript a dedicated force of space marines, then smash the nearest enemy colony we can find. Home is *Arneb*, in the middle of what is usually a valuable cluster of planets. Not so lucky this time. *Shedir* is the best of a bad bunch and a bit too far away. Transports are sluggish; 4 Mval is all they've got.

The new colony gets off to a bad start. 'The Duke' must be nearby since both planets are continually harassed, even to the point where the fledgling colony on *Shedir* almost dies out. Things improve a bit around turn 7; two lucky battles result in 70 VPs and 'Bad Boy Baker' gets stuck into Killer over his developing colony at *Regulus*. It's good to see him suffer.

Killer (turns 1−10) − Home is *Nath*. Check (P) for enemy planets; no luck. *Regulus* looks good. I'll go for it.

Colony away to *Regulus*.

Build like crazy. Attila in trouble. 'The Duke' is continually spiking him. My luck still holds out. Go get him, Duke.

Curses. 'Bad Boy Baker' has found me. It's time to improve defenses and locate the source of the threat.

Mk 1s move at 7. It will be a compressed galaxy. Attila interdicted at home (oh... what bad luck, sir!).

Attila (turns 11−20) − The plan is simple. Development of Shedir is completed in conjunction with researching Mk 2 technology. *Canopus* is the target. 'The Duke' has a colony there and its too close for comfort.

The invasion is delayed for 2 turns. Mk 2 technology has cost 600 RPs. At last the fleet is despatched, some 13 Mk 2s and 17 transports. Success depends upon catching 'The Duke' at Mk 1 technology. Alas, things go wrong from the outset. *Canopus*'15 PDBs are also of Mk 2 calibre. The attack is called off after 9 warships are lost for a mere 4 PDBs.

It's a desperate situation.

Killer (turns 11−20) − *Spica* and *Canopus* are the best prospects. *Canopus* is closest. The form−up point will be *Altair*.

Canopus is interdicted by Attila. It looks like his target as well. The choice is between a strike on *Spica* or a pre−emptive raid on *Shedir* to ruin Attila's plans. I'll go for *Spica*, notwithstanding the special satisfaction achieved from rubbing out Attila's men.

41 Mk 1s and 30 transports head for *Spica*. Mk 2 technology is still a turn or two away.

Attila's attack on *Canopus* fails (chuckle) but reveals 'The Duke's' Mk 2 technology. The 30 Mk 2 PDBs at Spica are too tough. Reinforcements will be called up.

Attila (turns 21−30) − Disaster again! Every ship I own, some 12 Mk 2s, 3 Mk 1s and 19 transports launch a furious attack on *Canopus*. The defenses, 14 PDBs, hold out. All my warships are destroyed. *Canopus* survives with just 1 PDB.

It's certain doom for me. Killer's huge fleet swamps *Spica* at its first attempt.

Another fleet is assembled for the invasion of *Canopus*. At last. *Canopus* falls... but all too late.

'The Duke' strikes back. 79 Mk 2s, 8 Mk 1s and 10 transports smash *Shedir* to pulp.

Killer's colonies on *Regulus* are my next target. *Mizar* is selected as the form—up point. Another disaster. 'Bad Boy Baker' has also chosen *Mizar* as his form—up point and he's got more ships than I have. 88 Mk 1s to be exact. My 6 Mk 2s and 20 transports are slaughtered. Barely 10% of them manage to flee to *Altair*.

A new form—up point is selected, *Canopus*.

All this while, Killer is going from strength to strength. *Enif* is captured from 'The Duke' and *Pollux* wrested from 'Bad Boy Baker'.

And if this isn't enough. Turn 30 ends with 'Bad Boy Baker' visiting *Canopus* with 67 Mk 2s, 91 Mk 1s and 12 transports. It's not a social call and my 39 Mk 2s are totally inadequate to answer the challenge. The remnants flee to *Altair*.

Killer (turns 21—30) — Half a dozen nearby star systems are probed. Enemy colonies are turned up at *Enif*, *Pollux* and *Sabik* (the planet with the horrific salt mines).

Enif falls to the first attack and enough storm troopers remain after the invasion to roll on to *Pollux*. Success again. My empire is expanding splendidly. What a fun game! I mention this to Attila but stony silence is all the reply I get.

Where to now. I think I'll look in Attila's direction.

Attila (turns 31—40) — Spite drives me to continue the attack on *Regulus*. With only my home planet still operable, it's simply a matter of time before I am snuffed out.

Predictably, the attack on *Regulus* is a complete failure. My 25 Mk 2s are opposed by 30 PDBs... at level 3 technology. Half my fleet is wiped out in the first round. Again, I flee to *Altair*.

I apologise to Killer but don't think it will do me much good.

It doesn't. Killer smites *Arneb* with a fleet of stupendous proportion. *Arneb* is obliterated. Some 20 surviving population 'head for the hills' on their now barren planet.

I eke out the remainder of the game in galactic oblivion.

Killer (turns 31—40) — Attila's puny fleet attacks *Regulus*. To my surprise, I've just reached level 3 technology. What a jolly way to find it out.

And now I can justify a return visit without the slightest dent in my credibility.

But first to destroy *Canopus*. My invincible fleet suffers a slight reverse on its first attempt to capture *Canopus*. The second attack is more resolute. Canopus is incorporated into my ever—growing empire.

The fleet moves to nearby *Shedir*. Not a trace of humanity remains. 'Bad Boy Baker' must have got there before me and eradicated everything.

Now on to *Arneb* and to wipe out the last trace of Attila's worthless civilization. The meagre opposition is swiftly brushed aside and the planet's surface subjected to an all—out bombardment. Only a few wretched souls survive.

The end of the game is nigh. One final blast to build up my VPs. *Capella* wins the lottery and is duly destroyed by my massive fleet.

It's another glorious victory.

Attila doesn't seem to have done too well. What a pity.

In the Designer's Notes to the first edition, we acknowledged the inspiration afforded to us by Metagaming's *Stellar Conquest*. We have no reason to change that statement. And if your computer breaks down, give it a go. It's well worth the effort.

Roger Keating
Ian Trout

Sydney, 1985

Appendices

Appendix A

PLANET CHARACTERISTICS

PLANET CHARAC.	PLANET TYPE (%)			
	PRIM	SEC	TERT	HOST
POP	70—100	40—80	20—50	20—30
IND	25—60	25—70	25—80	25—100
SOC	55—100	30—80	10—55	5—20

DISTRIBUTION OF PLANET TYPES

SPECTRAL CLASS	PLANET TYPE (%)			
	PRIM	SEC	TERT	HOST
B	2	13	37	48
F	19	25	13	43
G	55	13	13	19
K	13	31	19	37
M	7	19	37	37

Appendices

Appendix B

VICTORY POINT AWARDS

COLONY DEVELOPMENT

Each player receives 1 VP for every 16 population and industrial units on controlled native planets. These points are awarded every turn.

STARSHIP BATTLES

Only the victorious player receives VPs for the destruction of enemy ships. TR = 10, Mk 1 = 5, Mk 2 = 8, Mk 3 = 12, Mk 4 = 20

PLANETARY CONQUEST

Each player receives 1 VP for every 4 population, 8 industrial units and 16 garrisons on conquered enemy planets. These points are awarded every turn.

COLONY DESTRUCTION

Each player receives 4 VPs for the destruction of every unit of enemy population, industry and occupying garrison.

Star System Record Sheet

'B' Class Star Systems

ACRUX
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

ADARA
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

AGENA
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

ALGOL
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

MINTAKA
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

NUNKI
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

SAIPH
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

SPICA
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

'F' Class Star Systems

ARNEB
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

CANOPUS
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

CAPH
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

KOCHAB
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

POLARIS
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

PROCYON
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

SHEDIR
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

WESEN
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

VEGA
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

ZOSMA
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

'G' Class Star Systems

ALHENA
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

ALIOTH
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

ALTAIR
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

CAPELLA
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

DENEB
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

MEGREZ
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

MIRZAM
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

MIZAR
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

NATH
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

PHAEDA
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

REGULUS
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

SABIK
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

SIRIUS
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

THUBAN
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

'K' Class Star Systems

ALMAK
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

ASCELLA
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

DUBHE
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

ENIF
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

GEMMA
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

GIENAH
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

HAMAL
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

IZAR
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

NIHAL
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

POLLUX
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

RASTABAN
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

RIGEL
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

SCHEDAR
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

TARAZED
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

'M' Class Star Systems

ALUDRA
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

ANTARES
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

CASTOR
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

DIPHDA
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

ETAMIN
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

FURUD
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

ROSS
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

WOLF
	OWN	PDBs	POP	IND	SOC
1					
2					
3					

REACH FOR THE STARS
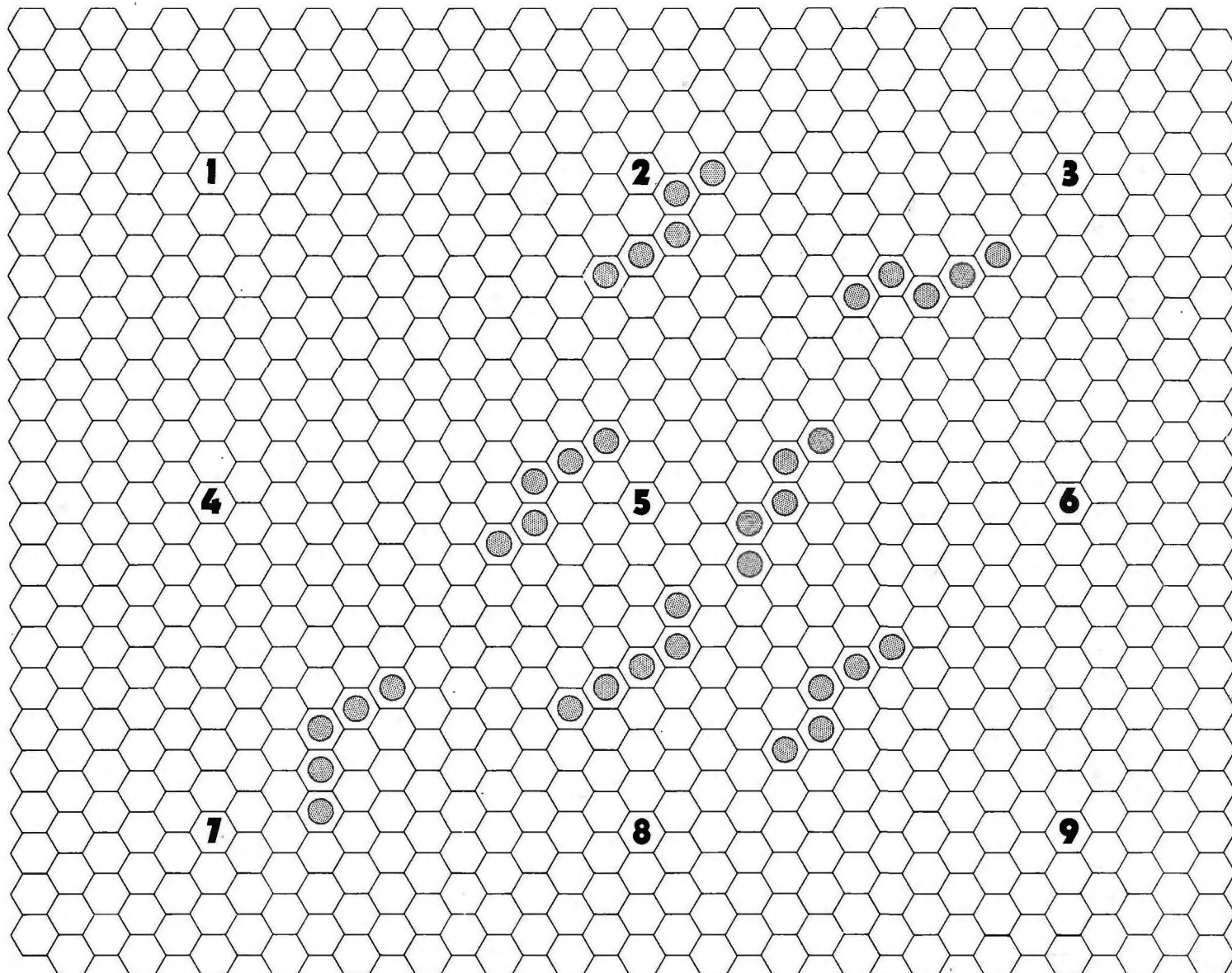
STAR SYSTEM IDENTITY KEY

☐	"B" CLASS	☐	"G" CLASS
☐	"F" CLASS	☐	"K" CLASS
	☐	"M" CLASS	

⬤ SOLAR DEBRIS

ITEM PRODUCTION COSTS

ITEM	RP'S/ITEM
INDUSTRIAL CAPACITY	
EXPLORERS	
TRANSPORTS	
MARK I STARSHIPS	
MARK II STARSHIPS	
MARK III STARSHIPS	
MARK IV STARSHIPS	
PLANET DEFENSE BASES	4/8/16*

*Cost per item at Starship levels I—III respectively

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MOVEMENT ALLOWANCES
(hexes/turn)

EXPLORERS............	Mk II's......................
TRANSPORTS............	Mk III's.....................
Mk I's..................................	Mk IV's......................

DEVELOPMENT COSTS
(in RP's)

SOCIAL LEVEL/FACTOR......................................	4
PLANETARY ENVIRON/FACTOR............................	8
BASE MAINTENANCE/UNIT..........................	1/2/2*
Mk II TECHNOLOGY..	
Mk III TECHNOLOGY..	
Mk IV TECHNOLOGY...	

*Cost per item at Starship levels I—III respectively

REACH FOR THE STARS

Star map with the following star system names arranged across a hex grid:

CASTOR, SAIPH, ASCELLA, WOLF, PHAEDA, ALUDRA, POLLUX, ACRUX, MIRZAM, ENIF, RIGEL, DIPHDA, VEGA, SPICA, MEGREZ, SABIK, GIENAH, ALGOL, WESEN, GEMMA, ALTAIR, HAMAL, PROCYON, SCHEDAR, CANOPUS, SHEDIR, REGULUS, ROSS, DENEB, NIHAL, ALIOTH, DUBHE, TARAZED, KOCHAB, ARNEB, MIZAR, THUBAN, ANTARES, RASTABAN, ETAMIN, NATH, CAPH, ADARA, NUNKI, MINTAKA, ALHENA, IZAR, SIRIUS, POLARIS, ALMAK, AGENA, FURUD, CAPELLA, ZOSMA

Region numbers: 1, 2, 3, 4, 5, 6, 7, 8, 9

STAR SYSTEM IDENTITY KEY

- "B" CLASS
- "G" CLASS
- "F" CLASS
- "K" CLASS
- "M" CLASS
- SOLAR DEBRIS

ITEM PRODUCTION COSTS

ITEM	RP'S/ITEM
INDUSTRIAL CAPACITY	10
EXPLORERS	3
TRANSPORTS	5
MARK I STARSHIPS	14
MARK II STARSHIPS	30
MARK III STARSHIPS	80
MARK IV STARSHIPS	120
PLANET DEFENSE BASES	4/8/16*

*Cost per item at Starship levels I–III respectively

DEVELOPMENT COSTS
(in RP's)

SOCIAL LEVEL/FACTOR	4
PLANETARY ENVIRON/FACTOR	8
BASE MAINTENANCE/UNIT	1/2/2*
Mk II TECHNOLOGY	+400
Mk III TECHNOLOGY	+1000
Mk IV TECHNOLOGY	+2000

*Cost per item at Starship levels I–III respectively

MOVEMENT ALLOWANCES
(hexes/turn)

EXPLORERS	10	Mk II's	8
TRANSPORTS	5	Mk III's	12
Mk I's	5	Mk IV's	17

KEYSTROKES IN *REACH FOR THE STARS*

‹Q›   (Q) is the terminating key. It will fix your decisions for the current phase or routine. You cannot change your mind once (Q) has been typed.

‹ESC› (ESC) is the *go–back* key. It will –

(i) take you back to the preceding screen erasing the instructions you have just entered wherever the (Q) key is also present on the screen,

(ii) take you back to the preceding screen without erasing the instructions you have just entered wherever the (Q) key is not on the screen, and

(iii) bring up the flashing block cursor so that it can be moved to another star system or TF or to allow you to use the Cntl keys.

‹RET› (RET) is the selecting key. It will –

(i) select the next star system or TF to be dealt with in the production and movement phases, and

(ii) select the next item or sub–routine in a routine.

WHEN THE FLASHING BLOCK CURSOR IS ON THE SCREEN, YOU MAY TYPE –

* (I), (J), (K) or (M) to move the cursor to the nearest star system in the appropriate direction. I = up, J = left, K = right and M = down.

* (1) – (6) to move the cursor hex by hex across the star map.

* Cntl(B) to obtain the Utility Menu.

* Cntl(X) to move your explorers automatically.

* Cntl(S) to turn the sound on/off.

* (N)('star system name') to move the cursor to that star system.

* (S)(1–9) to move the cursor to that sector of the star map.

AT ANY TIME, YOU MAY TYPE –

* (P) to display the galactic map.

* (0) to centre the screen on the cursor.