United States Patent [19]

Allred

[11] **3,807,740**

[45] **Apr. 30, 1974**

[54] **SPACE FLIGHT BOARD GAME APPARATUS**

[76] Inventor: **Richard A. Allred,** 335 S. Bradway, Othello, Wash. 99344

[22] Filed: **Aug. 29, 1972**

[21] Appl. No.: **284,613**

[52] **U.S. Cl.**..... **273/134 AA,** 273/134 B, 273/134 D

[51] **Int. Cl.** **A63f 3/00**

[58] **Field of Search** 273/134

[56] **References Cited**

UNITED STATES PATENTS

3,223,420	12/1965	Turner	273/134 AA
3,373,995	3/1968	Fors	273/134 AA

Primary Examiner—Delbert B. Lowe

Attorney, Agent, or Firm—Wells, St. John & Roberts

[57] **ABSTRACT**

A board game playable by one or more persons, designed to simulate a moon landing or other space mission. A game flight board has a grid formed thereon symbolic of space flight positions. A manually movable marker simulates a space vehicle and is movable about the grid between a transverse orbital path and fixed target bases. A related controller board area has indicia symbolizing a consumable fuel supply for a space vehicle and additional indicia indicative of movement to be imparted to the game flight board marker about the grid. Indicator tokens are moved sequentially about the controller board in response to a chance device, thereby indicating movement to be imparted to the game board marker simulating a space vehicle and simulated use of fuel. The object is to move the marker or "space vehicle" across the grid between the orbital path and a chosen target base within the limits of the available "fuel supply" on the controller board area.

3 Claims, 3 Drawing Figures

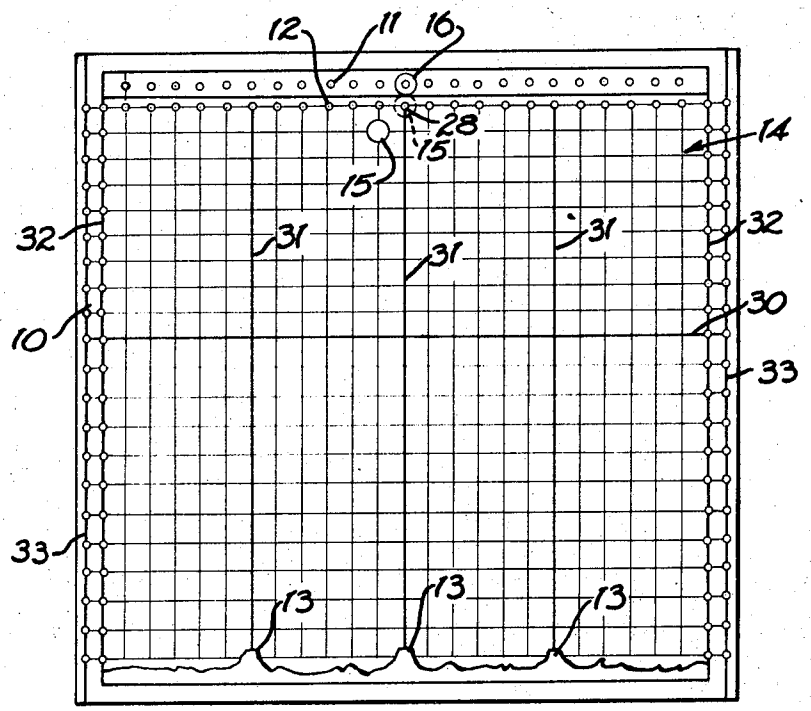


FIG 1

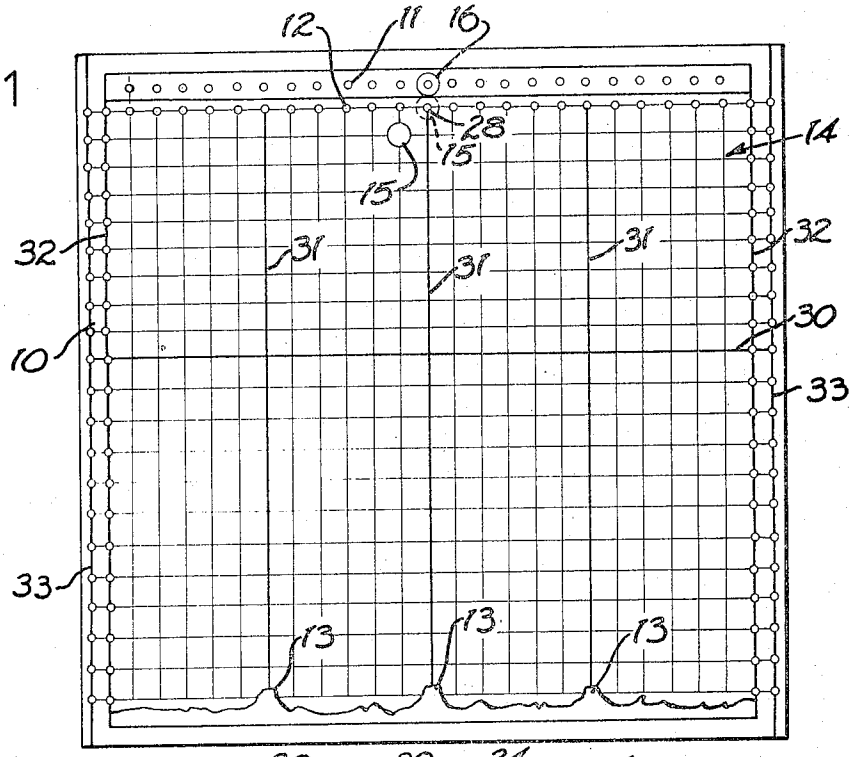


FIG 2

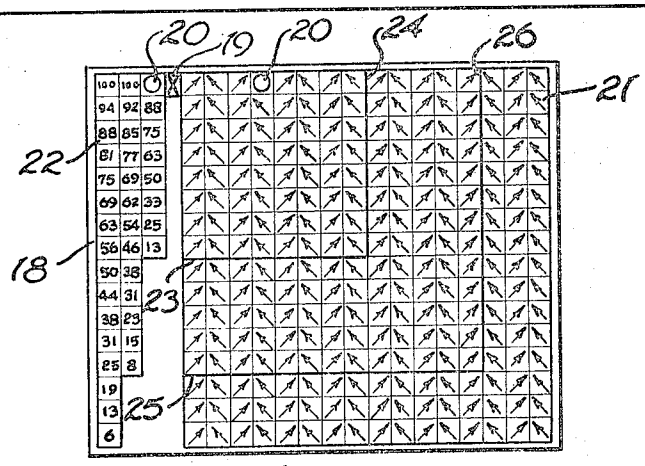
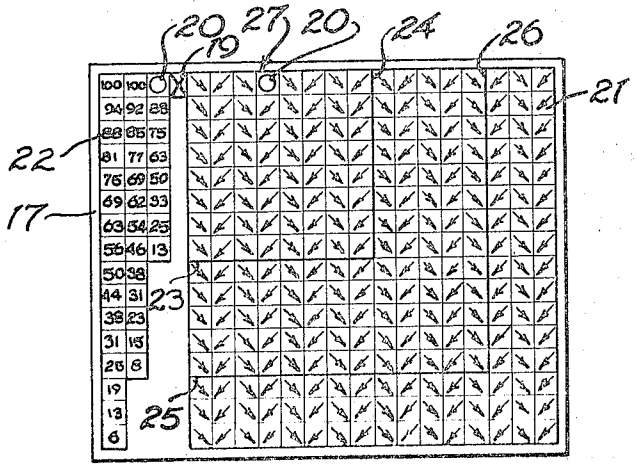


FIG 3



SPACE FLIGHT BOARD GAME APPARATUS

BACKGROUND OF THE INVENTION

This invention results from a desire to simulate space vehicle movement in a relatively inexpensive board game challenging to persons of all ages. The game has been developed for play by a single person, or by two or more persons either competitively or alone. The game is controlled by chance, and success hinges upon reaching defined goals while depleting a consumable fuel supply similar to the available fuel carried by actual space vehicles.

One object of this invention is to provide a versatile game which can be played in a number of different modes so as to constantly challenge and maintain the interest of a user.

Another object of the invention is to provide a reasonably economical board game not requiring any specially molded elements or structural support.

Another object of this invention is to provide a fascinating board game simulating space travel and playable by one or more persons.

These and further objects will be evident from the following disclosure, which details a specific embodiment of the basic game. It is to be understood that this embodiment is provided only by way of illustration, and that the disclosed invention is fully defined in the appended claims.

DESCRIPTION OF THE DRAWINGS

FIG. 1 is a plan view of the game flight board;

FIG. 2 is a plan view of the controller board area for ascent; and

FIG. 3 is a plan view of the controller board are for descent.

DESCRIPTION OF THE PREFERRED EMBODIMENT

While not necessarily limited to such a simulation, the game board elements shown in the drawings specifically apply the concepts of this space flight game discosure to a game simulating a moon landing. Three boards or board areas are used in playing of the game. The largest board, flight board **10** (FIG. 1) has a printed array on its face including transverse orbital paths **11, 12** arranged across the top of the board. Paths **11, 12** guide movement of markers representing a command ship and lunar lander respectively. Three printed lunar landing bases **13** are located across the bottom of board **10** and a two-dimensional rectangular printed grid **14** is positioned between the orbital paths **11, 12** and the landing bases **13.**

Each player controls a position marker **15** that moves about the flight board **10** to simulate a lunar landing craft. A common command ship is simulated by a second marker **16** shared by the players when there are more than one.

Two smaller controller board areas, shown in FIGS. **2** and **3,** are used to control movement of markers **15, 16.** These areas might be printed on a large board containing flight board **10** or as independent boards. The descent controller board **17** is used during movement of position marker **15** about grid **14** to the base **13** from path **12** and ascent controller board **18** is used during its return. Indicator tokens **20** are placed on the boards **17, 18** and are moved in response to use of a conventional six sided die (not shown) or other chance device having a numerical indication.

A player pilots the landing craft simulated by marker **15** by moving the marker in the manner indicated by the descending system provided on board **17** and the ascending system provided on board **18.** Each of these systems includes a printed flight computer and related fuel gauge. The flight computer comprises a number of transverse printed rows **21** presenting adjacent squares, each having an indicator arrow printed therein directed diagonally either upward for ascent (on board **18**) or downward for descent (on board **17**). The fuel gauge is simulated by vertical columns **22** adjacent to the rows **21.** The squares forming columns **22** have numerical indications of remaining percentages of fuel for the lander controlled thereby. The data provided by each computer progress the lander on the flight board **10.** The data of columns **22** indicate how long it can continue to descend or ascend as limited by the remaining fuel shown in the vertical columns **22.**

The flight board **10** provides three different landing bases **13** on the simulated lunar surface. The controller boards **17, 18** can be programmed to land a vehicle on one, two or three of the bases in a single mission. Before playing, each person must devise a flight plan choosing the number and location of chosen target bases **13.** A flight plan is a written memo or list indicating the number of landings that will be attempted by the player and specific details concerning the landings, such as choice of bases and the order of landing upon them.

All missions or games begin with the markers **15, 16** in lunar orbit. The marker **15** is first located at the center position on the orbital path **12** and the marker **16** is likewise located on the center position of the path **11.** Each lander represented by a marker **15** undocks from the command ship represented by marker **16** and descends toward the land-ing bases **13** under control of the tokens **20.** As they descend, fuel diminishes in response to movement of the tokens **20** as the player attempts to land his craft. After landing, his final goal is to attain a re-docked position with the command ship, which moves during play along a simulated orbital path across the printed path **11.** The basic objective is to complete a mission according to the initial flight plan. Since the fuel supply diminishes at a rate that cannot be predicted, it is sometimes necessary to revise a flight plan and consider alternative missions short of exhaustion of the fuel supply and resulting loss of the lander.

Each player begins with the command ship marker **16** at the center of path **11** and his lander marker **15** positioned on board **10** adjacent to marker **16** and immediately beneath it on path **12** position of marker **15** in phantom lines at FIG. **1.** Each player is furnished with controller board areas similar to boards **17, 18** and four tokens **20.** One token **20** is placed outward of each upper left hand corner square of the rows **21** on each board **17, 18** on a starting location identified by numeral **19.** The others are placed at the tops of the selected vertical columns **22** relating to the number of landings that will be attempted by the player. In the illustrated boards, the left hand column **22** is used to indicate fuel supply for three landings, the center to indicate fuel supply for two landings and the right hand column to indicate fuel supply for one landing. The area of the rows **21** used for a single landing attempt is bor-

dered by lines **23, 24.** The area used to control two attempted landings is bordered by lines **25, 26.** The entire area of rows **21** is used to control three landings.

To play the game, the player rolls a conventional die or operates other chance means and moves the tokens **20** in response to the number indicated thereon. For instance, if the number "**4**" were rolled in the first play, the token **20** at location **19** of the descent controller board **17** would be moved four spaces to the right, thereby locating it on the square indicated in FIG. **3** by the numeral **27.** The arrow on square **27** points downwardly to the left, indicating that the position marker **15** is to be moved diagonally from its original position (shown at **28** in FIG. **1**) to the grid intersection immediately below and to the left of it.

Play continues in this manner by sequentially rolling the die and advancing the token **20** along the rows **21** to indicate movement to be imparted to the marker **15.** As the token reaches the right hand end of a row **21** or the chosen border **24, 26,** it is dropped to the left hand end of the row **21** immediately beneath it. Simultaneously, the token **20** on the corresponding vertical column **22** is dropped one row, thereby providing a numerial indication of remaining fuel in the consumable fuel supply for the simulated lander. In this manner, the marker **15** is moved about the grid **14** and the player attempts to reach the chosen landing base **13.**

Each time the token **20** on any column **22** of either board **17, 18** of any player is dropped one row, the marker **16,** which simulates the command ship, is moved one step in either direction, but must be continuously moved during each game in the same direction, either from left to right or right to left. When it reaches the end of path **11,** it is moved to the opposite end and again begins travel in the chosen direction. When two or more players are involved, only one of them controls the marker **16.** This will normally be the one rolling the highest number on his first play. If his lander later crashes or he loses, a remaining player takes over.

During descent, a player has the option of utilizing his ascent controller board as an alternative to movement as indicated by the tokens **20** on the descent controller board. The tokens **20** on the ascent controller board are initially located and moved by the player in the same manner described above. Should the marker **15** drift too far to the side of the selected landing base **13,** the player has the option of checking the indication that would be provided by the ascent computer after roll of the die. It is sometimes advisable to ascend and locate the marker **15** closer to the vertical path to the selected base **13** than to allow it to drift too far to one side or the other. However, the player must keep in mind that both controller boards **17, 18** require use of a depletable fuel supply and that no substitute source of fuel is available in the simulated game. Alternating use of boards **17, 18** is most helpful when nearing a landing at the lower end of the grid **14.**

When attempting multiple landings, the player, after establishing a landing on the first elected base **13,** must next ascend to or above the multiple landing line at the center of the flight board **10,** indicated by the numeral **30.** If his mission involves more than one landing, the player may not use his descent board **17** or descend again to a second or third landing until his marker **15** reaches the mutliple landing line **30.** He does have the option of returning to the path **12** if he desires for reasons of board position, but must avoid redocking until all landings are accomplished. Only the ascent controller board **18** can be used during ascent of the lander by upward movement of marker **15** following each successful landing. Alternate use of these boards **17, 18** is permitted only during descent maneuvers.

After the player has reached his indicated targets, the ascent controller board **18** is continued in use, within available limits of fuel, in an attempt to simulate a rendezvous procedure or docking between the lander and command ship simulated by markers **15, 16.** First, the marker **15** returns to any location along the orbital path **12** in the manner described above, continuing movement of marker **16** in its chosen direction. After reaching path **12,** the lander marker **15** is moved along path **12** in the direction of movement of marker **16** according to the value of the number indicated on the die, while continuing to move marker **16** in its usual manner. Each location on the board along path **12** serves as one count. During rendezvous the tokens **20** of either board **17, 18** must be moved in their normal fashion, disregarding the directional arrows. This simulates use of fuel. If fuel on both boards **17, 18** is exhausted prior to successful rendezvous, the player loses. The mission terminates when the marker **15** is again immediately beneath the marker **16,** simulating a successful redocking procedure.

All play must take place before the tokens **20** on the required controller boards **17, 18** reach the lower right hand corner of the controlling area for the number of landings chosen by the player. A player cannot further descend his lander after depleting descent fuel as indicated on the board **17.** He cannot ascend or continue to rendezvous after depleting the ascent fuel indicated on board **18.** When both systems are completely depleted of fuel, the lander **15** is assumed to have crashed and the game is either over (if played by only one person) or the person controlling that marker **15** has lost the game (if two or more are playing.)

Various modifications can be made in playing the game. As an example, the darkened vertical lines **31** leading to the landing bases **13** can be utilized as "radar paths," permitting a player to elect vertical movement after landing on one of these lines. This election can be premised on rolling a particular number on the die. Once these conditions are met, the marker **15** can be moved vertically downward in response to the number rolled on the die, continuing movement of the tokens **20** on the descent controller board **17,** but paying no attention to them as indicative of movement of the marker **15.**

Collisions of the markers **15** can be avoided by alternate use of the systems simulated by boards **17, 18.**

A player can be penalized for moving beyond the boundary lines **32** at each side of the flight board **10,** and not be permitted to return back onto the grid **14** until a specified number is rolled on the die, again continuing to deplete his fuel supply on the boards **17, 18.** During this time the marker **15** remains stationary on an outside line **33** representing a lander "out of contact."

The game described above provides an interesting challenge to a single player or to multiple players either moving independently of one another or in competition. It is reasonably inexpensive to fabricate, requiring no special structural elements or marking pieces, although the markers **15** may be either printed or shaped to simulate the space vehicles involved. The game pro-

vides a challenge to players of any age and can be readily mastered by anyone.

Various changes can be made in the specific features of the game without deviating from the basic structure. For this reason, only the following claims are intended herein as limiting definitions of the game concept.

Having described my invention, I claim:

1. A space flight board game, comprising:

a game flight board having a grid formed thereon symbolic of two-dimensional spaced flight positions located between starting and finishing positions on the grid;

a position marker simulating a space vehicle, the position marker being manually movable about the grid of the game flight board;

a manually movable indicator token;

a controller board having a plurality of sequentially arranged spaces having indicia related thereto which, when interpreted in accordance with playing rules, relate to the player information concerning usage of a symbolic consumable fuel quantity and which individually direct movement to be imparted by the player to the position marker on the grid of the game flight board in response to positioning of an indicator token on said indicia;

chance means for the selection of a single symbol from a group of symbols;

said indicator token being movable sequentially along said spaces on the controller board by a player in response to the symbol selected by said chance means.

2. A game as set out in claim **1** wherein said sequentially arranged spaces on the controller board comprise:

parallel rows of indicator squares each having printed indicia related thereto showing direction of the movement to be imparted to the indicia marker on the game flight board in response to the positioning of an indicator token thereon.

3. A game as set out in claim **2** wherein said sequentially arranged spaces further comprise:

a column of indicator squares arranged perpendicular to said rows along one end thereof and respectively corresponding to individual rows, each square having printed indicia relates thereto showing progressive depletion of the symbolic consumable fuel quantity.

* * * * *