United States Patent [19]

Schauffler

[11] **3,726,527**

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[54] **WORLD TRANSPORT GAME APPARATUS**

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[52] **U.S. Cl.** ..**273/134 AC,** 273/134 AD, 273/134 B, 273/134 E, 273/141 R

[51] **Int. Cl.** **A63f 3/04**

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

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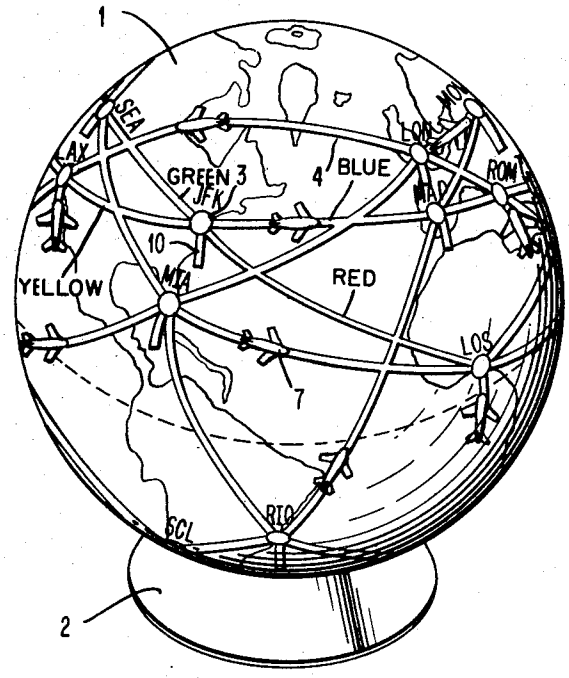
Primary Examiner—Delbert B. Lowe

Attorney—Woodcock, Washburn, Kurtz & Mackiewicz

[57] **ABSTRACT**

Game apparatus including miniature models of air or sea transports operated in world-wide service on great-circle tracks between international airports or seaports on an inflated plastic globe or a flat board as directed by a radar-screen-facsimile spinner and random-order cards. Numbered patches are affixed to the models, and distinctively colored patches are affixed to tables indicating related facilities such as hangars acquired by each player.

5 Claims, 10 Drawing Figures



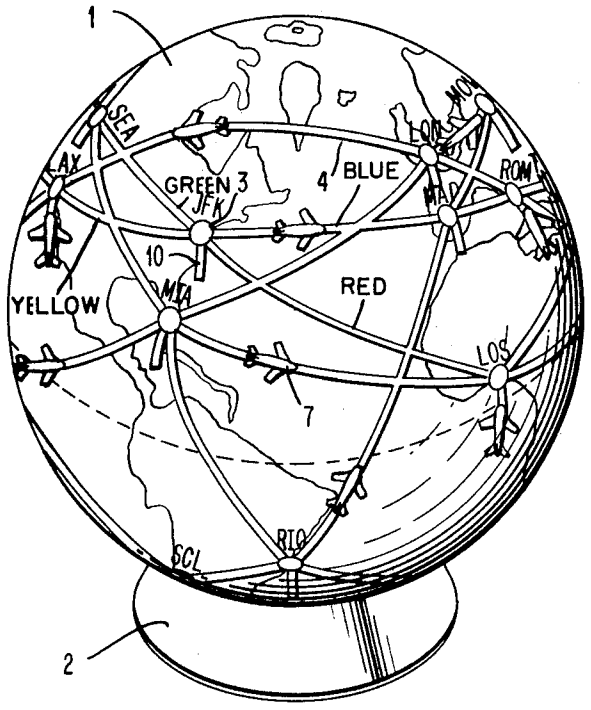


FIG. 1A

FIG. 1C

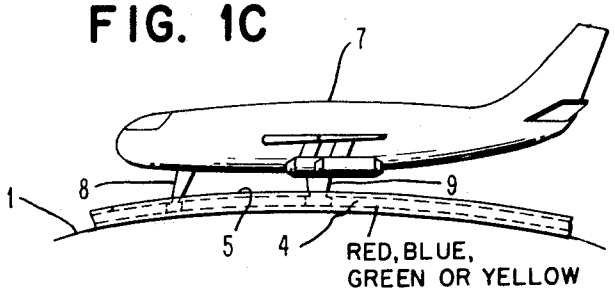


FIG. 1B

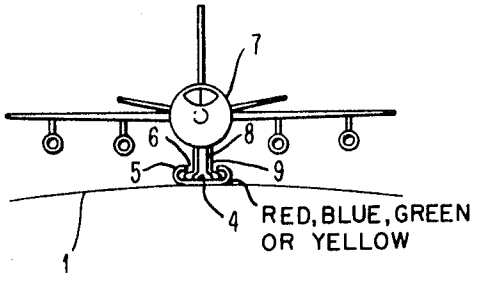


FIG. 1Ca

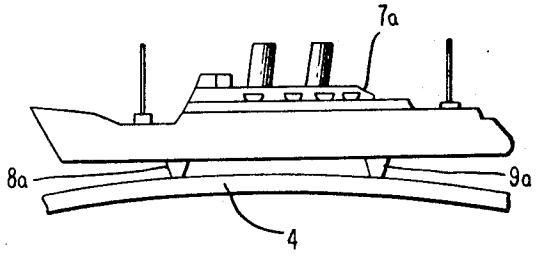


FIG. 2A

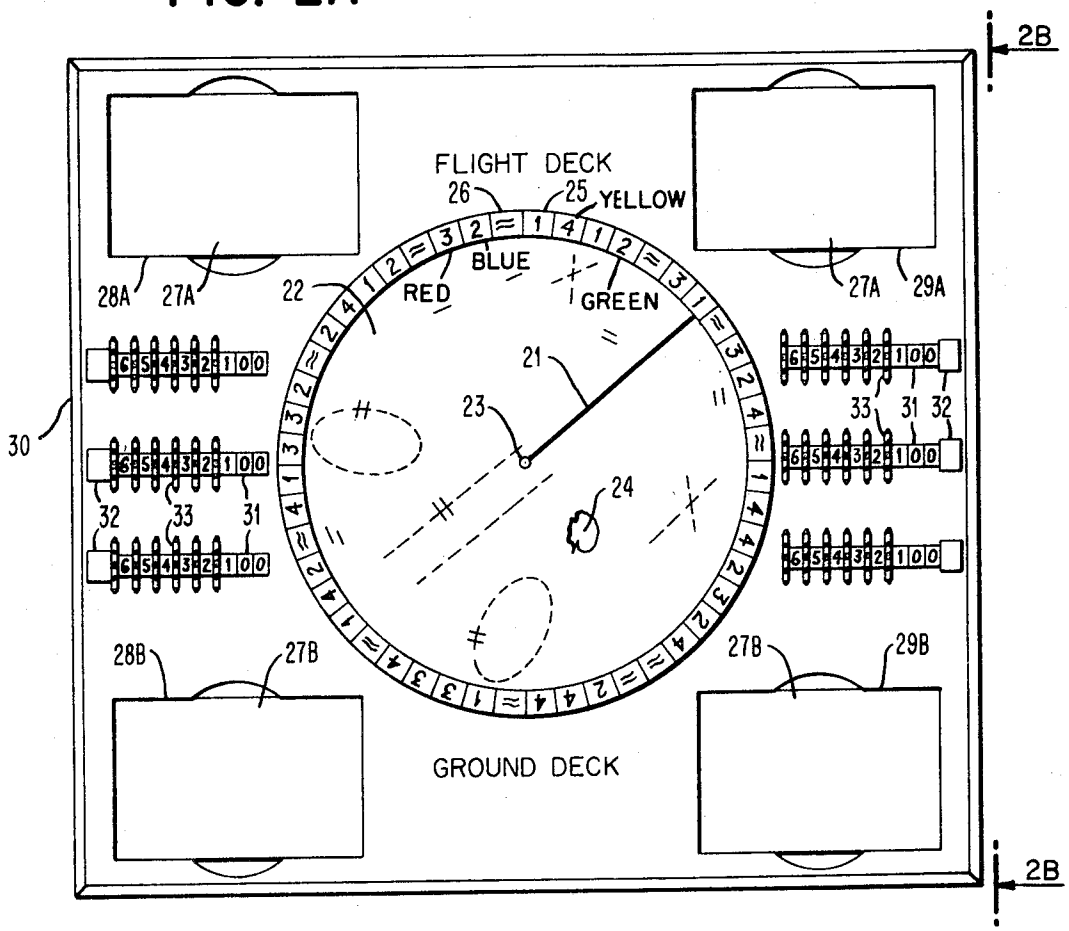


FIG. 2B

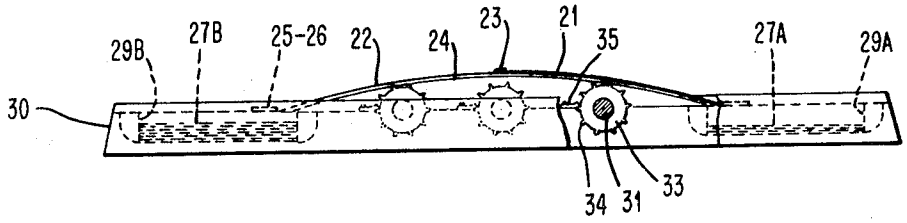


FIG. 3D

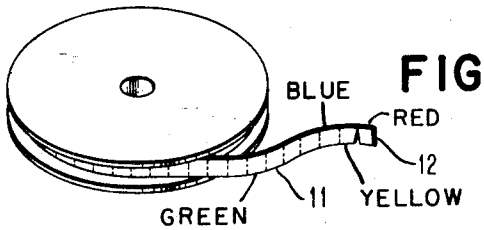


FIG. 3C

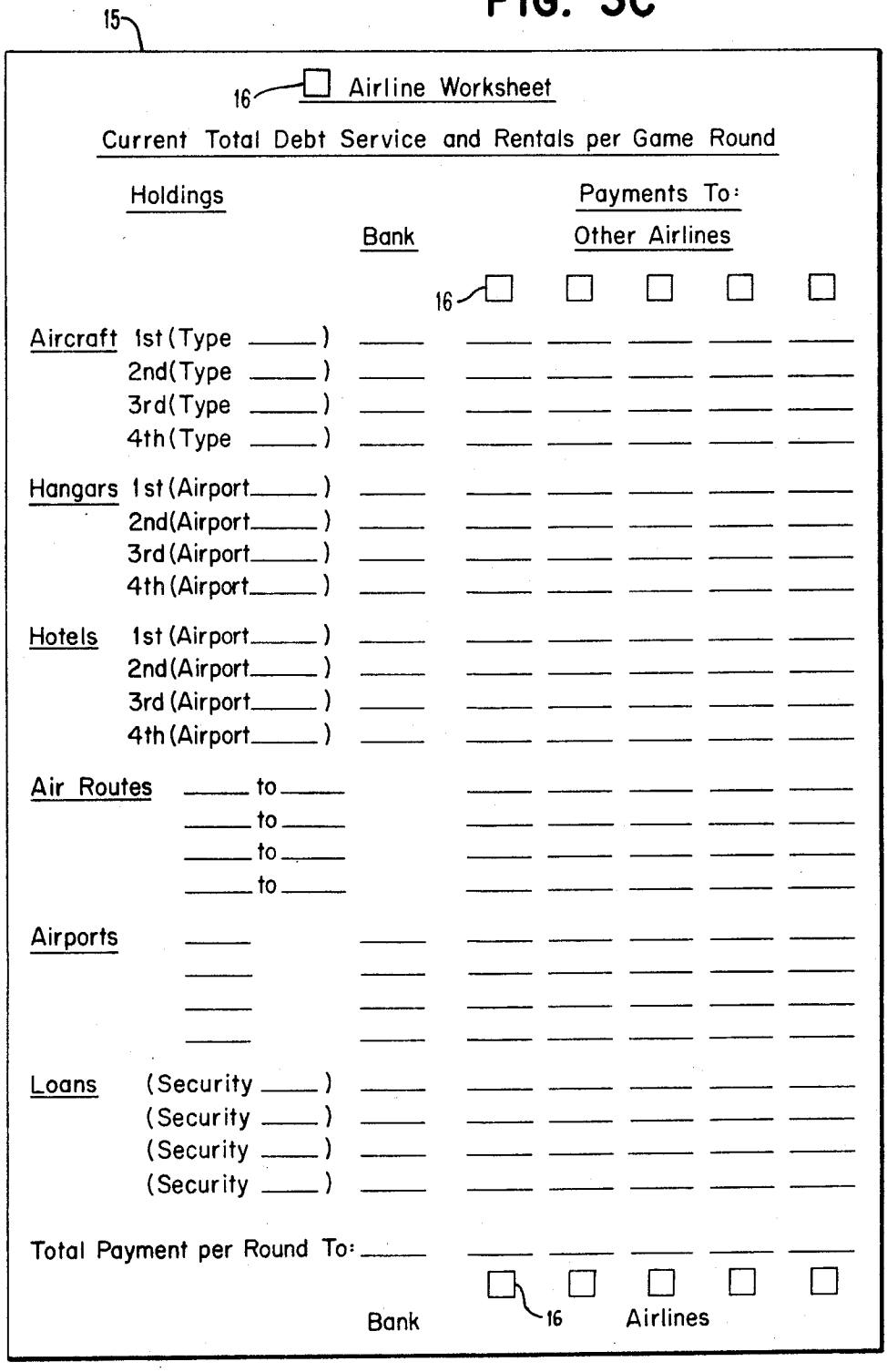

15
16
Airline Worksheet
Current Total Debt Service and Rentals per Game Round
Holdings
Bank
Payments To:
Other Airlines
16
Aircraft 1st (Type ____)
2nd (Type ____)
3rd (Type ____)
4th (Type ____)
Hangars 1st (Airport ____)
2nd (Airport ____)
3rd (Airport ____)
4th (Airport ____)
Hotels 1st (Airport ____)
2nd (Airport ____)
3rd (Airport ____)
4th (Airport ____)
Air Routes ____ to ____
____ to ____
____ to ____
____ to ____
Airports
Loans (Security ____)
(Security ____)
(Security ____)
(Security ____)
Total Payment per Round To:
Bank
16
Airlines

FIG. 3A

13

Aircraft Factor Table

	Aircraft Types A	B	C	Cost/Revenue Changes Double	Half
Debt Service Cost per Game Round	...	...	...	16	
In-Flight Cost per Hour	...	...	...		
On-Ground Cost per Hour	...	...	...		
Net Revenue per Flight					
500 mi	...	...	...		
1000 mi	...	...	...		
1500 mi	...	...	...		
2000 mi	...	...	...		
2500 mi	...	...	...		
3000 mi	...	...	...		
3500 mi	...	...	...		
etc					

FIG. 3B

14

Airport Fee Table

Airport	Aircraft Type	Fees Landing	Parking	Maintenance (per operation)	Crew Overnight	Debt Service Hotel	Hanger (per game round)	Management Rental	Double Fee
									16
AAA	A	...	...	...	...	...	...	...	
	B	...	...	...	...				
	C	...	...	...	...				
BBB	A	...	...	...	...	...	...	...	
	B	...	...	...	...				
	C	...	...	...	...				
CCC	A	...	...	...	...	...	...	...	
	B	...	...	...	...				
	C	...	...	...	...				
DDD	A	...	...	...	...	...	...	...	
	B	...	...	...	...				
	C	...	...	...	...				
EEE	A	...	...	...	...	...	...	...	
	B	...	...	...	...				
	C	...	...	...	...				
etc									

WORLD TRANSPORT GAME APPARATUS

BACKGROUND OF THE INVENTION

The increasing public use of international air and sea transportation indicates a potential widespread interest in games based on this theme. This invention relates to such games, and more particularly to a game in which air or sea transports and related facilities and franchises are acquired and operated in world-wide service, according to instructions derived from a spinner and cards and values derived from tables. The essence of the game lies in the use of each player's business judgement in a succession of choices among various transport-related options with the objective of maximizing his cash balance.

SUMMARY OF THE INVENTION

This game can be played with model air or sea transports which follow great-circle tracks between major international airports or seaports on an inflated plastic globe or a flat world map. The transport movements along these tracks and related actions at these airports or seaports can be determined in part by chance through the use of a radar-screen-facsimile spinner and messages in random-order card decks. Each player, however, can exercise board discretion and business judgement in acquiring, operating and disposing of transports and related facilities, management agreements and route certifications. The financial consequences of all transport movements and related actions, combining these factors of chance and player judgement, can be determined from tables and registered on cash-balance counters; and the game can be won by the player who either first achieves a stated cash balance or has the greatest cash balance at any given moment.

BRIEF DESCRIPTION OF THE DRAWINGS

For a more detailed understanding of the invention, reference is made in the attached description to the drawings in which:

FIG. 1A displays in perspective the inflated plastic globe and airport and air-route arrangement which can constitute the game field;

FIGS. 1B, 1C and 1C*a* display in front and side elevations the model aircraft and ocean liners fitted into tracks on this globe;

FIGS. 2A and 2B display in plan and side elevation the console for the radar-screen-facsimile spinner, card trays and cash-balance counters;

FIGS. 3A and 3B display the aircraft and airport cost and revenue factor tables;

FIG. 3C displays the airline current-fixed-cost work sheet; and

FIG. 3D displays the airline tape for aircraft, hangar, air route, airport, counter, table and work sheet identification.

DESCRIPTION OF ONE EMBODIMENT

One possible game apparatus embodiment is described herewith, simply as a specific example of the general world transport game principle to which the claims relate.

To emphasize the global nature of the subject, the field for this game can be a beach-ball-type inflatable plastic sphere 1 (FIG. 1A) printed as a globe with translucent land and water colors. For convenience in game operations, the globe axis can be vertical, with the south pole fixed to a plastic base 2. (alternatively, the field can be a flat world map printed on a folding rectangular board.)

Several prominent international airport locations can be indicated by rings 3 printed on the face of the globe (or map) — together with the airport name and three-letter international code identification. The distance along the great-circle route between all desired airport pairs can be printed at the halfway point; and graduation marks can be provided for convenient distance blocks (say 500 miles) on each route.

Translucent plastic tracks 4 (FIGS. 1A–C) in distinctive colors can be fixed to the surface of the globe for all such routes — with folded-over flanges 5 which provide a slot 6 at the center of the track.

Small plastic aircraft models 7 in the shape of current jet transports can each be equipped with a nose wheel 8 which fits into the track slot 6 and a T-shaped main landing gear 9 which fits under the folded flanges 5 — permitting the aircraft to be slid along the track and to stop and stay firmly in place at any desired point.

The air-route tracks 4 can be run in a general East-West direction, with airport locations selected to provide a broad band of multiple connecting tracks around the globe. Where a route pattern requires tracks to cross, the flanges on both tracks (and the base on one track) can be interrupted so that an aircraft on either track can be slid smoothly through the intersection. In addition to the colored air-route tracks, each airport ring can have one or two neutral-colored vertical stub tracks 10 for aircraft storage.

Aircraft movements can be initiated by a spinner consisting of a yellow-green radial (antenna-direction) line 21 (FIGS. 2A–B) on a slightly-curved clear plastic disc or bar 22 — suspended, by a pin 23 at its center, over a gray-green circle 24 printed with yellow-green spots and lines to resemble the Plan-Position-Indicator screen of an air-traffic-control radar. A plastic covered ring at the outer edge of this simulated screen can be divided into a large number of equal-sized segments 25 printed in a sequence of colors corresponding to the above-described air-route track colors and assigned a sequence of numbers from 1 to 4 or more. The spinner can be used by a player to determine the air-route track by which his aircraft should depart from an airport and the number of blocks that the aircraft should be advanced along this track. Occasional segments 26 in this ring sequence can be assigned a neutral color (not identified with any track color) and, instead of having a number, can simply direct the player to "Draw a Card."

The introduction of special instructions for aircraft moving along air-route tracks or positioned at airports can be accomplished by means of two decks of cards 27A–B placed face-down in separate card trays 28A–B incorporated in the plastic console 30 for the spinner 21 and designated, respectively, "Flight Deck" and "-Ground Deck."

The individual cards in the "Flight Deck" 27A, totalling 100 or so in number, can be printed on one face with various messages such as:

HIJACKED TO ..... (Forfeit Net Flight Revenue)

AIR TRAFFIC CONTROLLERS' SLOWDOWN (Lose One Turn and Pay for ..... Minutes of In-Flight Cost)

PASSENGER BECOMES SERIOUSLY ILL — LEAVE TRACK IF NECESSARY TO LAND AT NEAREST AIRPORT (Forfeit Net Flight Revenue If Other Than Intended Airport)

YOUR AIRLINE IS CERTIFICATED FOR ROUTE FROM ..... TO ..... (Affix Airline Patch at Route Midpoint)

BABY PASSENGER CHOKES ON GIN BOTTLE CAP. REVIVED BY STEWARDESS. (Airline Receives $..... Donation from Grateful Father)

INTENDED AIRPORT CLOSED BY FOG. PROCEED BY TRACK FROM THERE TO NEAREST AIRPORT (Forfeit Net Flight Revenue for Additional Mileage)

SEVERE TURBULENCE. PASSENGER INJURED (Pay $..... Claim)

ENGINE FIRE WARNING LIGHT — LEAVE TRACK IF NECESSARY TO LAND AT NEAREST AIRPORT (Forfeit Net Flight Revenue If Other Than Intended Airport)

STRONG HEADWIND (Go Back Two Blocks)

BOMB SCARE — LEAVE TRACK IF NECESSARY TO LAND AT NEAREST AIRPORT (Forfeit Net flight Revenue If Other Than Intended Airport)

STRONG TAILWIND (Go Forward Two Blocks)

IN-FLIGHT ENGINE FAILURE — MAKE EMERGENCY LANDING. AIRCRAFT IS COMPLETE LOSS (Forfeit Net Flight Revenue and One Year's Debt Service. Surrender Aircraft.)

LABOR CONTACT RENEGOTIATED FOR YOUR AIRLINE (Pay Double In-Flight and On-Ground Costs and Collect Half In-Flight Revenue Hereafter. Affix Your Airline Patches to Aircraft Table lines for These Factors)

INTERNATIONAL AIR TRANSPORT ASSOCIATION AGREES ON FARE INCREASE FOR ROUTES FROM ..... TO ....., ... TO ..... AND ..... TO ..... (All Airlines Collect Double Net Revenue for Flights on These Routes Hereafter. Affix Neutral-Colored Patch at Midpoint of These Routes).

The individual cards in the similarly-sized "Ground Deck" **27B** can also be printed on one face with various messages such as:

WINGTIP LIGHT NEEDS REPLACEMENT (Lose Turn and Pay Parking and Maintenance Fee)

25% LOAD FACTOR (Collect Half Net Revenue on Next Flight)

AIRCRAFT FAILS AIR-WORTHINESS INSPECTION (Forfeit One Year's Debt Service)

TAKE SPECIAL GEM SHIPMENT TO (Name of Airport) (Collect $..... per mile for shortest track route)

100% LOAD FACTOR (Collect Double Net Revenue on Next Flight)

AIRCRAFT HIT BY FOOD-SERVICE TRUCK (Lose Turn and Pay Parking and Maintenance Fee)

MAINTENANCE FORCE STRIKE (Lose Two Turns and Pay Double Parking Fee and Crew Overnight Charge)

BOMB SCARE — SEARCH AIRCRAFT (Lose Turn and Pay Parking Fee)

TIGHT MONEY MARKET AND INCREASED AIRCRAFT MANUFACTURING COST (All Airlines Pay Double Debt Service Hereafter. Affix Neutral-Colored Patch to debt Service Line on Aircraft Table.)

SIX PIECES OF BAGGAGE LOST (Pay $..... Claim)

TAKE URGENT PHARMACEUTICAL SHIPMENT TO (Name of Airport) (Collect $..... per mile for shortest track route)

AIRLINES AGREEMENT RENEGOTIATED AT ..... AND ..... (All Airlines Pay Double Landing, Parking and Maintenance Fees at these airports Hereafter. Affix Neutral-Colored Patches to Airport Table Lines for these Airports)

A substantial number of cards in each deck can be blank.

The game equipment can also include:

a. A decimally-interlocked digital counter **31** for each player, positioned in the console **30** and provided with squares **32** for airline identification by colored tape patches, each counter drum being equipped with a thumb wheel **33** having **10** teeth **34** which deflect and then release a juxtaposed whisker spring **35**, causing the spring to emit an audio signal for each change in digit position on the drum and thus permitting each player to record his receipts and payments quickly on each turn and maintain a constantly-visible current cash balance;

b. a plastic covered table **13** (FIG. 3A) of aircraft debt-service and in-flight and on-ground cost and net revenue factors;

c. a plastic covered table **14** (FIG. 3B) of airport landing, parking and maintenance and crew-overnight fees, hotel and hangar debt service and management rentals;

d. plastic covered airline worksheets **15** (FIG. 3C) with frosted surfaces on which each player can maintain a current total of fixed payments due on each round to the "bank" or other airlines; and

e. several rolls of adhesive-coated plastic tape **11** (FIG. 3D), perforated for tearing off in short patches **12**, some with distinctive airline colors by which each player's aircraft, hangars, airports, air routes, counters, factor and fee work sheets can be identified, and others simply with a neutral color and serial numbers from **1** to **10**.

The aircraft and airport tables **13**, **14** and airline cards **15** can each have squares **16** in which to indicate, with colored tape patches, the airlines involved in cost and net revenue changes (in accordance with card instructions) and inter-airline payments (in accordance with inter-player agreements).

(As an alternative to the counter thumb wheels **33** (FIGS. 2A–B) for registering cash payments and receipts, this operation can be accomplished by spring-loaded buttons and ratchets on each side of each counter drum; or as a substitute means of financial score keeping, the game equipment can include make-believe money in appropriate denominations.)

The game can be played by any number from two upward, depending on the size of the globe **1** (FIG. 1A), the number of cash-balance counters **31** (FIGS. 2A–B),

and the number of distinctive colors of airline-identification tape **11** (FIG. 3D).

At the beginning of the game, the "Flight" and "-Ground" card decks **27A–B** (FIGS. 2A–B) can be shuffled and placed face down in their respective trays **28A–B**; the starting-point airport **3** (FIG. 1A) and the order of playing can be agreed upon; airline tape colors **11** (FIG. 3D) can be assigned; and all counters **31** (FIGS. 2A–B) can be set with a standard opening cash balance. Each player can then select his first aircraft **7** (FIGS. 1A–C) from among two or more types (with corresponding debt service, in-flight and on-ground cost and net-revenue-per-flight factors as set forth in the aircraft table **13** (FIG. 3A)) and can identify his aircraft and a counter and airline work sheet **15** (FIG. 3C) with colored patches **12** (FIG. 3D) of his airline tape, adding a neutral-colored "**1**" patch to the aircraft.

The first player can spin the radar-screen disc **22** (FIGS. 2A-B), insert his aircraft at the starting-point airport **3** in the air-route track **4** (FIG. 1A) corresponding to the color of the segment **25** (FIG. 2A) at which the radial antenna-direction line **21** stops, move the aircraft along the track a distance (in blocks) corresponding to the number on this segment, draw a face-down "-Flight Deck" card **27A** from its tray **28A**, place it face-up in its discard tray **29A** and follow the instructions (if any). In accordance with the factors for that type of aircraft in the aircraft table **13** (FIG. 3A), the player can thereupon pay the required per-round debt service to the "bank" and collect the appropriate net flight revenue (based on the mileage to the next airport indicated on that track) by a simple net adjustment of his cash-balance counter **31** (FIGS. 2A–B).

If the radial line stops at a neutral-colored (un-numbered) ring segment, the player can simply turn over a card from the face-down "Ground Deck" **27B**, place it face-up in its discard tray **29B** and follow the card's instructions — receiving or making payment as required.

If the player's spin places his aircraft on the first block of a departure track, the aircraft can become subject to departure air-traffic delays and the player must refrain from drawing a card, lose one turn and pay for a specified number of minutes of on-ground cost as set forth for that type of aircraft in the aircraft table **13** (FIG. 3A).

The second and subsequent players can follow this same procedure in turn.

When a player's turn comes again, he can apply his spin to his first aircraft (advancing it by the number of blocks indicated and drawing a card from the "Flight Deck" — or "Ground Deck" if this spin takes him into the next airport); or, if he prefers, he can select a second aircraft (marking it with a "**2**" patch and a patch of his airline tape) and can use the spin to place it in service through the above-described procedure. Thereafter, he can apply his spins to any of his in-service aircraft or introduce additional aircraft at the starting-point airport as he chooses.

As an aircraft approaches an airport, it is subject to arrival air-traffic delays and can land only when the player spins the exact number necessary to take it into (and not beyond) this airport. The player thereupon can insert it in the airport storage track **10** (FIG. 1A) and pay a landing fee, depending upon the airport and type of aircraft, as set forth in the airport table **14** (FIG. 3B). (For each unsuccessful spin, the player can refrain from taking a card and be required to pay for ..... minutes of in-flight cost as set forth in the aircraft table **13** (FIG. 3A).)

For each aircraft that crosses the Equator or the Greenwich Meridian or International Date Line, the player can receive a "line-crossing bonus" of $..... ..... Additional bonuses can be provided for flying over points of particular interest anywhere on the globe. If a player striving for any of these bonuses or for high-revenue routes makes a spin at an airport which directs his aircraft onto an unfavorable track, he can purchase the opportunity to ignore that spin and make an additional spin at a price of $..... per spin.

The passing of two aircraft on one track, going either in the same or in opposite directions, can be accomplished by tilting the passing aircraft upward until its nose wheel **8** (FIGS. 1B–C) is clear of the track slot **6**, rotating it 90°, pulling its T-shaped main landing gear **9** out of the slot and inserting it and rotating it 90° in the slot on the other side of the aircraft being passed. If a player spins a number which would put his aircraft in the same block as another aircraft, he can place his aircraft one block short of this point.

A player who fails to move an aircraft from an airport on his next turn after its arrival can be required to pay a parking fee and crew overnight charge per turn as specified for that size of aircraft at that airport in the airport table **14** (FIG. 3B).

A player can purchase a maintenance hangar at any airport **3** (FIG. 1A) at which he lands an aircraft, at the debt service per round set forth in the airport table **14** (FIG. 3B), and affix a patch **12** (FIG. 3D) of his airline tape next to the storage track **10** (FIG. 1A) for that airport. Thereafter, he need not pay any maintenance fee at that airport in accordance with card instructions and can collect the fee from any other player so instructed who does not have his own hangar at that airport. A similar arrangement (identified by double tape patches) can apply with respect to airport hotels and payment of the crew overnight charge.

A player can also obtain (and subsequently dispose of) a complete management agreement for any airport at which he lands an aircraft, at a rental per game round as specified in the airport table **14** (FIG. 3B). The player can thereupon affix a patch of his airline tape to the center of the airport circle and can collect the landing and parking fees for all aircraft at this airport and the maintenance and crew-overnight fees for all such aircraft except those of airlines with maintenance hangars and hotels at this airport.

When a player turns up a card which awards a particular air-route certification to his airline, he can affix a patch of his tape to the globe at the midpoint of this route **4** (FIG. 1A). Thereafter, he can collect the net flight revenue for any aircraft flying this route without its own certification.

Players can lease aircraft, hangars, hotels, airport-management agreements and air-route certifications to and from each other, and arrange secured or unsecured loans with each other, upon any mutually-agreeable terms. Players can also arrange unsecured loans from the "bank" at an interest rate of .....% per round. A current total of the fixed payments which a player must make on each round to the "bank" and to other air-

lines, based on his current holdings and borrowings, can be conveniently maintained by pencil entries in the frosted blanks on a plastic covered airline work sheet 15 (FIG. 3C).

Players with a substantial cash balance can be assumed to invest these funds and collect $..... in interest on each round for each $..... in unused cash balance. Any player who exhausts his cash balance, and cannot replenish it through loans or leases, must forfeit all of his aircraft, hotels, hangars and franchises and leave the game. (The opening cash-balance allotment can be varied as desired to increase or decrease this likelihood.)

The game can be won by the player whose cash balance first exceeds an agreed-upon figure; or the game can be ended at any agreed-upon point, with the player with the highest cash balance at that point considered the winner.

The above description represents one possible embodiment of the world-transport-game invention. Although specific terms and procedures are described, they are used in a generic and illustrative sense and not for the purpose of limiting the scope of the invention.

As an alternative or supplement, for instance, the game can be played with models of ocean liners 7*a* (FIG. 1C*a*) having brackets 8*a*, 9*a* which permit them to operate along ocean-route tracks between major world ports — with cost and net revenue levels and card instructions appropriate for waterborne commerce.

While a particular embodiment of the invention and certain modifications have been described, other modifications may be made. The following claims are, therefore, intended to cover any such modifications within the true spirit and scope of the invention.

What is claimed is:

1. A world transport game apparatus involving the acquisition and operation of game equipment including air or sea transports, related facilities including hangars or sea transport facilities, and franchises, in accordance with various random-order instructions and the player's business judgement, in such manner as to maximize the player's cash balance —including, in combination:

miniature models of air or sea transports of various types;

distinguishably colored means for guiding said transports in movements along routes interconnecting various airports or seaports disposed about a game field and storing said transports at said airports or seaports;

means for randomly determining the nature and extent of movements and related actions of said transports;

means for specifying the receipts and payments consequent to said movements and related actions;

means for continuously maintaining for each player a current cash balance reflecting said receipts and payments; and

distinguishable patches, to be affixed to said game equipment for identifying each player's game equipment.

2. A work transport game apparatus as recited in claim 1 in which the miniature transports consist of aircraft models fitted with standards which permit them to be held in position on the game field.

3. A work transport game apparatus as recited in claim 1 in which the game field consists of an inflatable plastic sphere showing various international airport locations and inter-connecting great-circle air routes.

4. A world transport game apparatus as recited in claim 1 in which the means for guiding said miniature transports in movements along said routes consist of colored folded-flange plastic tracks fixed to said game field.

5. A world transport game apparatus as recited in claim 1 in which the means for continuously maintaining for each player a current cash balance reflecting said receipts and payments consists of decimally-interlocked digital counters, each having a drum with digit positions, and means for manually introducing individual settings for each drum.

* * * * *