Number 169



March/April, 2011

Notes from Hades

ince the last issue, I have taken one trip, this time to the DC area. I spent the whole time in McLean, Virginia, and didn't really have any time to get into DC itself, so there is not really much to tell.

This issue Robover comes to a close. Congratulations to Chris Geggus on his hard fought victory. The game that will replace it will be the second game for which I receive the necessary game fees.

Which brings me to the topic of game fees. There has been a little confusion. I am not charging any game fees for games currently in progress, only for those games in the Game Openings section. If you want to build up an account for future game openings, that is fine as well, but I am only going to mark the Game Openings section with who has paid. If you have an account, you can contact me at any time and I will be able to tell you how much is in it. However, as it currently stands, there is still quite a ways to go before I get the game fees necessary to replace Boston Terrier and Robover.

The next deadline is **Tuesday, April 19 at 5:00 p.m. Pacific Time. Please do not call or fax orders after 10:00 p.m. Pacific time**. My wife and I tend to retire early. Also, if you want to fax in orders, call first. We hang up on unannounced faxes.

	Contents	
Barking Up	Machiavelli	Page 1
Bolognese	Machiavelli Gamestart	Page 2
Robover	Robo Rally	Page 3
Husky	Power Grid	Page 3
Pateel	Kremlin	Page 4
Frontier Dog	Gunslinger	Page 4
Procyon	Merchant of Venus	Page 6
Basset	Outpost	Page 8
Hunter	Silverton	Page 8
Boston Terrier	New World	Page 9
Dogbreath	History of the World	Page 10
Plantation Dog	Puerto Rico	Page 10
Pedagoguery		Page 11

Game Openings

Purebred. Machiavelli. Have Ward Narhi, Bob Robles(\$), Pasquale Giovine, Dave Partridge, and Walt O'Hara, Mike Scott, Kevin Wilson(\$), Jerry Roalstad,. This game is full.

Golden Retriever. Seafarers of Catan. Have Chris Geggus(\$), Dave Partridge,

Dave Hooton, Mike Scott, Bill Scharf(\$). Will take up to 1 more.

Rottweiler. Industrial Waste. Have Andy York(\$), Dave Partridge, Eric Brosius(\$), Richard Weiss. This game is full.

Pick of the Litter. Silverton. Will start after Hunter ends. Have Dave Partridge, and Dave Hooton, Paul Bolduc(\$), will take up to 3 more.

Russian Wolfhound. Kremlin. Will start after Pateel ends. Have Walt O'Hara, Mike Scott, Bob Robles(\$), Bill Scharf(\$). Will take up to 2 more.

Dog Show. Outpost. Will start after Basset ends. Have Eric Brosius(\$), Andy York(\$), Andy Lewis, Dave Hooton, Dave Partridge, Bill Scharf(\$), Kevin Wilson(\$), Dave Hood, will take up to 2 more.

Players who have paid have a (\$) after their names.

Wish List

Goa. Have Brad Martin, Dave Partridge, will take up to 2 more.

Power Grid. Players will have the choice of 10 maps and several deck options. Have Dave Hooton, Dave Partridge, will take up to 3 more.

Phoenicia. A game similar to Outpost set in ancient times. Have Cary Nichols, Andy York, Dave Partridge, will take up to 7 more.

Age of Renaissance. This will use the EuroGames rules. Have Paul Bolduc, Chris Geggus, Bob Robles, will take up to 3 more.

Puerto Rico. Will start after Plantation Dog ends. Have Dave Partridge, will take up to 4 more.

Machiavelli. This game will start after the next Machiavelli game finishes. Have Bob Robles, will take up to v more.

Gunboat Machiavelli. This game will start after the second Machiavelli game finishes. Have 1, will take up to 7 more. This box ☐ will be checked if you have signed up.

Robo Rally. Map to be decided. Will take up to 8.

In general, game ownership is recommended, but not required.

Note that a subscription to S.O.B. is not required to play in a game run by flier, but that a game fee will be charged to non-subbers.

S.O.B. is a zine of unusual postal games, and anything else I feel like including. Your publisher is:

Chris Hassler a.k.a. Cerberus 2000 S. Armour Court La Habra, CA 90631

Phone: (562) 690-7827, Fax: (562) 690-7827 chassler@roadrunner.com On the Web at: http://www.sob-zine.org

Subscriptions cost \$3.00 per issue (\$4.50 overseas).

Barking Up the Wrong Tree

Summer 1258
Miller Number 2007Bpw10

Advanced Rules, Natural Disasters, Special Military Units, Conquest, Gray Press, Ultimate Victory Deadline Fall 1258 4/19, Tuesday

Venice makes major inroads against Milan, with a little help from Florence and the Pope. Aragon continues to get his fleets into position.

Spring 1258 Retreats

Florence retreats A Lucca to garrison

Milan A Mantua retreats to garrison and A Verona retreats to Treviso

Venice A Milan retreats to Como

Summer 1258 Plague

Poor Year – Column Only: Friuli, Sienna (Florence A destroyed), Albania, Modena, Parma (Milan A destroyed), Urbino (Papal A destroyed), Pistoia

Expenditures

Florence gives 6 ducats to Venice Papacy gives 2 ducats to Venice

Venice spends 12 ducats each to disband Milan A Milan and Treviso

Orders

Aragon (Scharf): F Gulf of Lions supports F Sardinia to Corsica (cut), F

Sardinia to Corsica, F Western Mediterranean supports F

A Como supports A Trent to Milan (cut), A Trent to Milan, A

Verona to Bergamo, A Mantua besiege, A Ferrara to Verona,

Gulf of Lions, F Tyrrhenian Sea supports F Gulf of Lions, F

Palermo supports F Tyrrhenian Sea

FLORENCE (Whyte): G Lucca holds (u)

MILAN (Renken): A MARSEILLES converts to G, A Saluzzo to Trent, A Genoa to

Modena, A Pavia supports A Milan (nsu), A Tyrolea to Como, A Milan supports A Tyrolea to Como (nsu), A Lucca to Bologna, A Treviso holds (nsu), F (EM) Ligurian Sea supports A Genoa to Modena, F Provence to Gulf of Lions,

G Mantua convert to A

Papacy (Robles): A Florence supports A Sienna to Pisa (nsu), A Arezzo to

Sienna, A Spoletto to Urbino, F Bologna holds, F Rome holds

VENICE (Partridge):

Your ducats:

Florence: Lucca burns its bridges, its cornfields, its cattle and its women, and reatreats to a beefless, babe-less boy's own party in a cold, damp dungeon beneath the city in order to play cards in the dark and tell stories about what we'd do to the Milanese if only we had more men, money and military finesse.

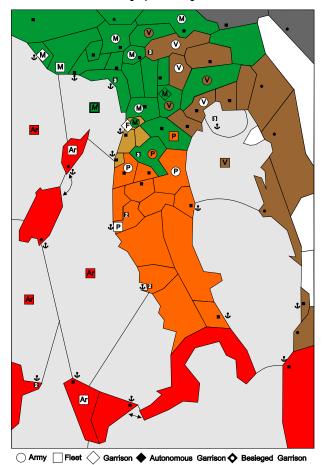
<u>Press</u>

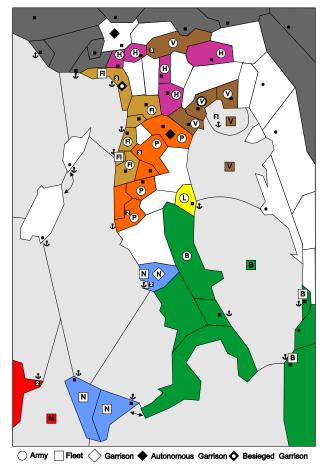
A Padua holds (u), F Upper Adriatic holds

Siennese forces, meanwhile, order Pizza in Pisa, and wish they had some beer as well.

Bolognese

Barking Up the Wrong Tree





Bolognese

Winter 1051
Miller Number 2010?????

Advanced Rules, Special Military Units, Conquest, Gunboat, Gray Press, Ultimate Victory Deadline for Spring 1052 4/19, Tuesday

A pause for builds.

Your treasury:

<u>Builds</u>

	Burus	
		Cost
Byzantines	Maintains F Lower Adriatic, A Aquila, builds F Ragusa, F Durazzo	12
Holy Roman Empire	Maintains all, builds A Cremona, A Pavia	15
Normans	Maintains all, builds F Naples	12
Papacy	Maintains all, builds A Rome	12
Pisa 🗖	Maintains all, builds A Pisa, F Piombino	15
Venice	Maintains all, builds A Treviso, F Venice, A (Elite Mercenary) Padua	21

Robover

Turn 20

End of Game Statements, 4/19 Tuesday

Program Robots

THX 1139 schedules a shut down for next turn. Protomax returns in H7 facing east, and DizzyBot returns in G6 facing north.

Robot	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
DizzyBot	U-Turn (40)	Rotate Left (210)	Rotate Left (190)	Rotate Left (310)	Move 1 (510)
Slambot 9000	Rotate Left (270)	Move 3 (810)	Rotate Right (380)	Move 1 (650)	Rotate Right (120)
Jeeves	Move 3 (790)	Rotate Right (320)	Rotate Right (140)	Move 2 (730)	Rotate Left (350)
THX 1139	Rotate Right (80)	Move 2 (750)	Rotate Left (170)	Back Up (450)	Move 2 (710)
DaleNarbotkbot	Rotate Left (290)	Move 1 (570)	Move 2 (760)	Move 1 (600)	Back Up (480)
100% Robotomy	Move 2 (720)	Rotate Right (420)	U-Turn (50)	Move 1 (540)	Rotate Right (260)
Protomax	Move 1 (620)	U-Turn (10)	Move 3 (830)	Move 1 (660)	Rotate Right (220)

Locked registers are in italics.

Phase 1

Jeeves dashes ahead 3 to L3, 100% Robotomy moves ahead 2 to F9 (flag 3 touched, archive relocated), Protomax moves ahead 1 to I7 (flag 1 touched, archive relocated), Narbot rotates left to face west, Slambot 9000 rotates left to face east, THX 1139 rotates right to face east, and DizzyBot makes a U-turn to face south. The conveyor belt carries Narbot to G1. Slambot 9000 shoots DizzyBot.

Phase 2

Slambot 9000 dashes ahead 3 to G6 (archive relocated), pushing DizzyBot to H6, THX 1139 moves ahead 2 to H8, Narbot moves ahead 1 to F1, 100% Robotomy rotates right to face south, Jeeves rotates right to face south, DizzyBot rotates left to face east, and Protomax makes a U-turn to face west. Slambot 9000 shoots DizzyBot.

Phase 3

Protomax dashes ahead 3 to F7 (archive relocated), Narbot moves ahead 2 to D1, Slambot 9000 rotates right to face south, DizzyBot rotates left to face north, THX 1139 rotates left to face north, Jeeves rotates right to face west, and 100% Robotomy makes a U-turn to face north. 100% Robotomy shoots Protomax, and THX 1139 shoots DizzyBot (registers 4 and 5 locked).

Phase 4

Jeeves moves ahead 2 to J3 (flag 4 touched, archive relocated), Protomax moves ahead 1 to E7, Slambot 9000 moves ahead 1 to G7 (archive relocated), Narbot moves ahead 1 to C1, 100% Robotomy moves ahead 1 to F8, THX 1139 backs up against the wall, and DizzyBot rotates left to face west. THX 1139 shoots DizzyBot (registers 2 and 3 locked). Jeeves wins the game!

<u>Players</u>

#	Player Name	Robot Name	Color	Options	Position	Flags	Lives	Damage
1	Dave Partridge	DizzyBot	Blue	Crab Legs, Conditional Program	H6>W	1	1	8
2	Bill Scharf	Slambot 9000	Pink		G7>S	1, 2	1	1
3	Chris Geggus	Jeeves	Yellow		J3>W	1, 2, 3,	3	3
						4		
4	Dave Hooton	THX 1139	White	Double-Barreled Laser, Radio Control, High-Power Laser	H8>N	1, 2, 3	2	4
5	Andy York	Dalekbot	Silver		N/A	1	0	9
6	Ward Narhi	Narbot	Red	Fourth Gear	C1>W	1	3	4
7	Michael Longdin	100% Robotomy	Dark Green	Scrambler	F8>N	1, 2, 3	1	4
8	Cary Nichols	Protomax	Green	Pressor Beam, Fire Control	E7>W	1	1	3

Notes

Congratulations to Chris Geggus on his victory!

<u>Husky</u> Turn 9, Phase 2

Turn 9, Phases 3 through 5, 4/19 Tuesday

Players

Order	Player Name	Company Name	Color	Power Plant 1	Power Plant 2	Power Plant 3	Cities	Money
4	Michael Longdin	100% Power Mad	Green	04 Coal 2→1	24 Trash 2→4	30 Trash 3→6	12	145
2	Dave Hooton	Volkisch Tzapverein (VolT)	Orange	25 Coal 2→5 (2)	22 Eco X→2	32 Oil 3→6 (3)	13	151
3	Dave Partridge	Spewing Massive Olid Gasses (SMOG)	Red	15 Coal 2→3 (2)	27 Eco X→3	33 Eco X→4	12	172
1	Andy York	Deutsches Elektrisch Arbeit Direktor	Yellow	21 Hybrid 2→4	20 Coal 3→5	29 Hybrid 1→4	14	148
		(DEAD)						
5	Brad Martin	Renewable Energy Matters (REM)	Blue	10 Coal 2→2	28 Nuclear 1→4 (1)	16 Oil 2→3	11	168

Phase 2: Power Plant Bidding

DEAD passes **VolT** passes SMOG passes 100% Power Mad passes

REM passes

Since no new power plants were purchased, power plant 17 is discarded, and the top card is drawn from the deck, which is Step 3. Power plant 18 is then discarded as well. Step 3 is now in effect: 3 players may now build into each city and there is a single power plant market containing 6 plants.

Power Plant Market

19 Trash $2\rightarrow 3$ 23 Nuclear 1→3 26 Oil 2→5 40 Oil 2→6 31 Coal 3→6 34 Nuclear 1→5

<u>Fuel</u>

Price	1	2	3	4	5	6	7	8	10	12	14	16
Uranium			1	1	1	1	1	1	1	1	1	1
Trash					3	3	3	3				
Oil				3	3	3	3	3				
Coal			1	3	3	3	3	3				

Pateel

Turn 7, Cure through Health Turn 7, Funeral Commission through Parade, 4/19 Tuesday

Turn 6 Special Influence Declaration

Zapadniye Front discards Alibi (5)

Cure Phase

Niewitko returns from the Sanatorium. Nikotin ages to 64, Schukrutoff ages to 78, Niewitko ages to 77, Wasolin ages to 55, and Strychnin ages to 78.

Purge Phase

No purges.

Spy Investigation Phase

Talksalott declares a trial on Nikotin. BBC declares 3 IP on Satin. Niewitko, Talksalott, Eatstumuch, Strychnin, and Satin vote guilty, Nikotin votes innocent,

Politburo

Office	Policitian	Condition	Influence
Party Chief			
KGB Head	Lech Schukrutoff (B)	78, +, ?	
Foreign	Petr Niewitko (D)	77, ?, weak	3 (PaH)
Defense	Antonj Talksalott (J)	68	3 (BBC)
Ideology	Victor Wasolin (Z)	55, ?	5 (KMFC)
Industry	Sergei Eatstumuch (M)	64, ?	2 (TCC)
Economy	Mikail Strychnin (T)	78, +	1 (BBC)
Sport	Oleg Satin (O)	62	2 (Fin), 3 (BBC)

Candidates: P, U, V, W, Y and Wasolin abstains. Nikotin is convicted and sent to Siberia. Talksalott opens

Health Phase

an investigation on Eatstumch, aging to 68.

Schukrutoff (dr = 13) remains sick. Niewitko (dr = 19) remains healthy. Talksalot (dr = 16) remains healthy. Wasolin (dr = 8) remains healthy.

Eatstumuch (dr = 13) remains healthy. Strychnin (dr = 18) remains sick. Satin (dr = 10) remains healthy.

People:

Siberia: L (68), X (61, ++), N, R (64) Kremlin Wall: A, E, S, K, H, G, C, Q

<u>Players</u>

Faction Name Player **Bob Robles** Karl Marx Fan Club

Ward Narhi Finlandia

Pasquale Giovine Bolshevics Born in Calabria Mike Scott The California Connection Bill Scharf People are Heroes Zapadniye Front **Brad Martin**

Undeclared Influence

Intrigue Cards

Frontier Dog Turn 15

Banker:

Old Man:

NCO:

Turn 16, 4/19 Tuesday Segment 1 Shaggy:

Old Man: Card 1 - Advance (straight ahead to D19), turn 1 of 2

Shaggy: Delay

Old Man:

Banker: Card 5 - Cock/Aim/Shoot (aim at Shaggy), turn 1 of 2

NCO: Card 5 - Cock/Aim/Shoot (Cock C41), turn 1 of 2

Segment 2

Old Man: Card 1 - Advance (straight ahead to D19), turn 2 of 2 Card (1) - Back Up (straight back to F16), turn 1 of 3 Shaggy: Card 5 - Cock/Aim/Shoot (aim at Shaggy), turn 2 of 2 Banker:

NCO: Card 5 - Cock/Aim/Shoot (Cock C41), turn 2 of 2

Segment 3

Card 8 - Load (C36c), turn 1 of 3

Card 6 - Cock/Aim/Shoot (aim at Shaggy), turn 1 of 2 NCO:

Card 6 - Cock/Aim/Shoot (aim at Shaggy), turn 1 of 2 Segment 4

Card 8 - Load (C36c), turn 2 of 3

Card (1) - Back Up (straight back to F16), turn 2 of 3

Card (1) - Back Up (straight back to F16), turn 3 of 3, draws 4 Shaggy:

delay cards: 76, 55, 37, 48 - 5 delay points.

Banker: Card 6 - Cock/Aim/Shoot (aim at Shaggy), turn 2 of 2 Card 6 - Cock/Aim/Shoot (aim at Shaggy), turn 2 of 2

Segment 5

Old Man: Card 8 - Load (C36c), turn 3 of 3

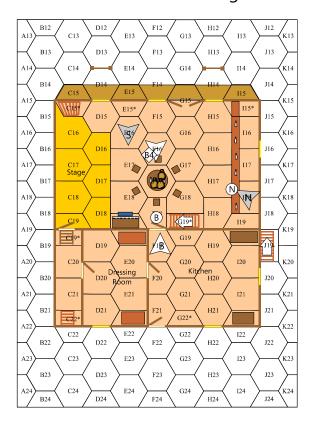
Shaggy: Delay

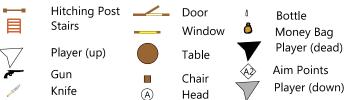
Banker: Card (3) – Turn (straight ahead), turn 1 of 1

NCO: Card 7 – Shoot (at Shaggy), turn 1 of 1, aim time 3, distance 3,

card drawn is 32, MISS

Frontier Dog

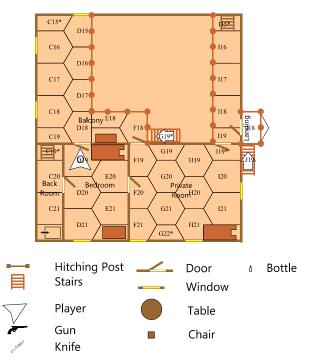




End of Turn

Shaggy loses 3 delay points.

Frontier Dog Second Story



<u>Press</u>

Smith: Nurse, Nurse, dang it where are you when I need you? Can't do anything in the state I'm in! Got to have help!

Westerners

Side	Player	Character	Location	Bonus Cards	Skills	Delay	Endurance	Comments
Α	Paul Bolduc	Old Man (O)	UD19>UD18	5, 7, 8	BR +1		25	
В	Andy Lewis	Shaggy (C)	F16>F17			3	17	
С	James Pratt	Banker (B)	F19>F18				20	HEAD in F18, 4 AIM points in
								F16
D	Mike Scott	Smith (S)	E16>E17	8	BR +2	N/A	0	SERIOUS 3, UNCONSCIOUS
Е	Chris Geggus	NCO (N)	I18>H17	9	BR +1		16	DOWN, HEAD in H17

Weapons

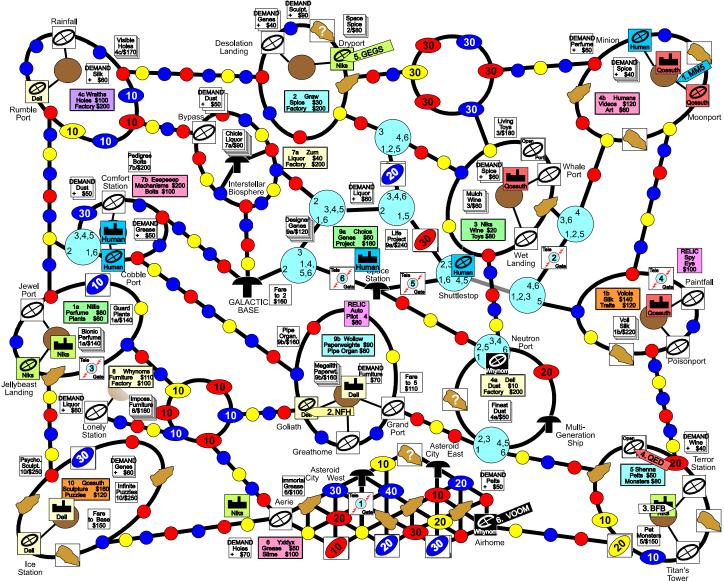
Character	Holstered	Gun Hand	Other Hand	Both Hands	Ammo
Old Man	Knife	Empty	Empty	C36c, cocked	C36c: △△△△△⊗
Shaggy	Knife, Money Bag	C45, uncocked	Empty	Empty	C45: O⊗⊗⊗⊗⊗
Banker	None	SW45, cocked	Empty	Empty	SW45: 000000
Smith	Knife	C45c, cocked	Empty	Empty	C45c: △△△△△△
NCO	SBR	C41, uncocked	Empty	Empty	C41: O⊗⊗⊗⊗⊗

Procyon

Turns 22.3 through 24.3 Turns 24.4 through 26.4, 4/19 Tuesday

Errata

During his turn 22 action, Not for Hire used his IOU to help purchase the Servo-mechanism.



Turn 22

3rd: Bob Robles (Eeepeeep/Bender's Freedom Brigade) Rolls Used: 3 3 6 Multi-Generation Ship.

Buys 2 Finest Dust for \$20.

4th: Andy York (Qossuth/Qossuth Entrepreneur Division) Rolls Used: 56 Moonport(s).

Sells Voll Silk for \$220 (from the cup: Megalith Paperweight at 9b). Sells Voll Silk for \$220 (from the cup: Designer Genes at 9a). Buys Human factory for \$100, two Rock Videos for \$240, Primitive Art for \$60, the Gate Lock relic for \$100, and Moonport for \$200. Receives \$30 in factory commissions.

5th: Chris Geggus (Niks/Ganymede Enterprises Going South) Rolls Used: 3 5

Turn 23

- 1st: Andy Lewis (Humans/Mystery Machine 5) Rolls Used: 123 Multi-Generation Ship - Jump Start to TeleGate 1 - Asteroid City West. Sells Finest Dust for \$50 (from the cup: Voll Silk at 1b). Picks up Fare to 4b.
- 2nd: Paul Bolduc (Dell/Not for Hire) Uses Mulligan Gear: 3 becomes 5, Rolls Used: 5 * 3

- NC3 (R) Y A Dryport(o) Dryport(s). Buys Dryport for \$200.
- 6th: Dave Partridge (Whynoms/Venus-Orion Oligarch Merchantile) Rolls **Used: 36**

Neutron Port – (R20) – Multi-Generation Ship – NC6 – (Y) – B – (R) – A - Open Port.

Sells Finest Dust for \$50 plus \$100 demand (from the cup: Fare to Base at 10 and Pedigree Bolts at 7b). Sells Finest Dust for \$50 plus \$50 demand (from the cup: Finest Dust at 4a and Fare to 2 at Base). Sells Finest Dust for \$50 (from the cup: Psychotic Sculpture at 10). Buys 3 Melf Pelts for \$150.

Cobble Port(s) – Cobble Port(p) – R - Y - B - R - B - Y - B - R - B -Goliath(o) - Goliath(s). Buys Goliath for \$200.

3rd: Bob Robles (Eeepeeep/Bender's Freedom Brigade) Rolls Used: 455 Multi Generation Ship - R20 - NC5 - R - Y - R - Space Station -

7

Pelts for \$50.

TeleGate 5 - TeleGate 4 - Paintfall(o) - B - Poisonport(o) - R - B - Y.

4th: Andy York (Qossuth/Qossuth Entrepreneur Division) Rolls Used: 6 6
Moonport(s) – Moonport(p) – (Y) – B – (R) – B – (Y) – B – (R) – B – (Y) –
A – (R) – B – (Y) – B – (R) – B – (Y) – (R20) – Open Port.

Sells Rock Videos for \$200 (from the cup: Designer Genes at 9a). Buys Melf

5th: Chris Geggus (Niks/Ganymede Enterprises Going South) Rolls Used: 1 4 Dryport(s) – Dryport(p).

Sells Bionic Perfume for \$140 (from the cup: Bionic Perfume at 1a). Dumps Fare to 4a (from the cup: Finest Dust at 4a). Buys 3 Space Spice for \$90.

<u>1u</u>

1st: Andy Lewis (Humans/Mystery Machine 5) Rolls Used: 4 6 6 Asteroid City West – Jump Start to TeleGate 4 – R – B – Y – B – R – B – Y – Moonport(p) – Moonport(s).

Drops off Fare for \$120 (from the cup: Designer Genes at 9a). Buys 3 Rock Videos for \$360 and Minion for \$160.

Current status:

1a (Nillis): 4 Bionic Perfume, Guard Plants

1b (Volois): 3 Voll Silk, Spy Eye Relic

2 (Graw): 3 Space Spice, 2 Demand for Designer Genes (+\$40), Demand for Impossible Sculpture (+\$90)

3 (Niks): 2 Demand for Space Spice (+\$60), 3 Mulch Wine, Living Toys

4a (Dell): 2 Finest Dust

4b (Humans): 4 Demand for Space Spice (+\$40), Demand for Bionic Perfume (+\$60)

4c (Wraiths): Demand for Voll Silk (+\$60), 3 Visible Holes

5 (Shenna): Pet Monsters, 2 Demand for Mulch Wine (+\$40)

6 (Yxklyx): Demand for Visible Holes (+\$70), 1 Immortal Grease, 1 Demand for

S.O.B.

Receives \$23 in port commissions.

6th: Dave Partridge (Whynoms/Venus-Orion Oligarch Merchantile) Rolls
Used: 2 4

Open Port – A - (R) - (Y10) - (Y20) - (R) - B - (Y) - Airhome.

Sells Melf Pelts for \$110 plus \$100 demand (from the cup: Bionic Perfume at 1a and Rock Videos at 4b). Sells Melf Pelts for \$110 plus \$50 demand (from the cup: Mulch Wine at 3 and Designer Genes at 9a). Sells Melf Pelts for \$110 (from the cup: Living Toys at 3). Buys 3 Shining Slime for \$100 and Immortal Grease for \$50. Receives \$63 in port commission. GEGS receives \$50 in factory commission.

Turn 24

Goliath(s) - Goliath(p).

Sells Servo-mechanism for \$300 (from the cup: Immortal Grease at 6). Buys Wollow factory for \$100 and Megalith Paperweights for \$90.

 3^{rd} : Bob Robles (Eeepeeep/Bender's Freedom Brigade) Rolls Used: 1 2 6 Y-B-R-B-Y-R20-Terror Station(o) – Terror Station(s).

Sells Finest Dust for \$50 (from the cup: Demand for Pelts at 6).

Melf Pelts (+\$50)

7a (Zum): 6 Chicle Liquor, 3 Demand for Finest Dust (+\$50)

7b (Eeepeeep): 2 Demand for Immortal Grease (+\$50), 2 Demand for Finest Dust (+\$50), Pedigree Bolts

8 (Whynoms): 5 Impossible Furniture, Demand for Chicle Liquor (+\$60)

9a (Chola): 2 Demand for Chicle Liquor (+\$60), Life Project, 5 Designer Genes

9b (Wollow): 4 Megalith Paperweight, Demand for Impossible Furniture (+\$70), Fare to 5 (\$110), Portable Pipe Organ

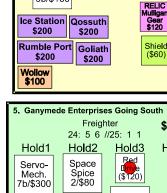
10 (Qossuth): 2 Demand for Designer Genes (+\$60), Infinite Puzzles, Fare to Base (\$150), 1 Psychotic Sculpture

Base: Fare to 2 (\$160)

1000

Hull





2. Not for Hire

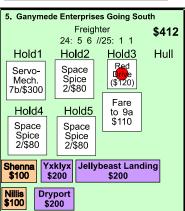
Hold1

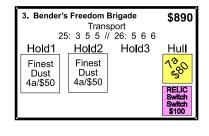
Megalith

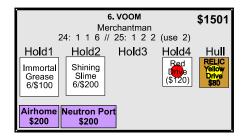
9b/\$160

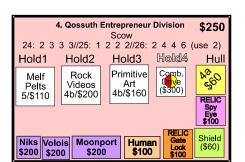
Needle 25: 2 5//25: 1 6 (use 1*3)

Hold2









<u>Basset</u> Turn 13 Turn 14, 4/19 Tuesday

Commander Actions

MMC opens the bidding on a Space Station at 120 and gets it for 141 (Wa6, MWa, MTi, MTi, Mi17) and moves one population factor from an ore factory to man it.

Lowreyville opens the bidding on the Space Station at 120 and gets it (Or2, MWa, MTi, MTi) and moves one population factor from an ore factory to man it.

Little Green Men opens the bidding on a Laboratory at 80 and gets it for 82 (Or3, Wa7, MWa, Re12, Re13, Mi15). Transfers a population factor from an ore factory to man the research factory.

Cosmic Nomads opens the bidding on Scientists at 40 and gets it for 49 (Wa9,

Wa10, Wa10, DL discounts). Opens the bidding on Robots at 50 and gets it (Or2, Wa5, Wa5, Wa8, Wa8, Wa9, Re13).

ShaggyMobile passes

HBDC buys two population factors (Wa8, Ti12)

HOBO passes

BarterTown opens the bidding on a Laboratory at 81 and gets it (Wa6, Wa6, Wa7, Wa8, Ti7, Ti8, Ti8, Ti10, Ti10, Ti11). Transfers a robot from an ore factory to the research factory.

,

The Players

	Outpost Name	Commander	Factories	Upgrades	VP
1	MMC	Eric Brosius	OrF, OrF, WaF, WaF, WaF, WaF, TiF, TiF, TiF	HE, No, 2OL, Ec, Ou, SS	41
2	Lowreyville	Michael Lowrey	OrF, OrF, WaF, WaF, WaF, WaF, TiF, TiF, TiF, NCF	No, HE, Sc, Ou, Ec, SS	40
3	Little Green Men	Dave Partridge	OrF, OrF, WaF, WaF, WaF, WaF, ReF	No, 2Ec, Wa, OL, Sc, La	31
4	Cosmic Nomads	Cary Nichols	OrF, OrF, WaF, WaF, WaF, WaF, ReF	2DL, No, Wa, Ec, La, Sc, Ro	28
5	BarterTown	Andy York	OrF, OrF, WaF, WaF, WaF, WaF, TiF, TiF, TiF, TiF, ReF	HE, Ro, La	26
6	HBDC	Kevin Wilson	OrF, OrF, WaF, WaF, WaF, WaF, TiF, ReF	2DL, Wa, La, Ou	20
7	ShaggyMobile	Andy Lewis	OrF, OrF, WaF, WaF, WaF, WaF, TiF, TiF	2HE, Wa, 2Ou	21
8	НОВО	Dave Hooton	OrF, OrF, WaF, WaF, WaF, ReF, ReF	No, DL, Wa, La, Sc	19

HBDC is Heavenly Bodies Development Corporation. MMC is Mud Mining Corporation. HOBO is High Orbit Biological

Available Upgrades

New Arrivals: Robots, Robots, Orbital Lab, Moon Base, Moon Base, Scientists

Upgrade	Minimum Bid	Available	Not Yet Delivered
Scientists (Sc)	40	1	0
Orbital Lab (OL)	50	1	1
Robots (Ro)	50	3	0
Space Station (SS)	120	0	5
Planetary Cruiser (PC)	160	0	6
Moon Base (MB)	200	3	3

Production Cards

MMC, Lowreyville, LGM, and ShaggyMobile took MegaWater cards. MMC and Lowreyville took MTi cards.

Hunter

Turn 10, Phases IV – VI, Turn 11, Phases I - III Turn 11, Phases IV – VI, Turn 12 Phases I - III, 4/19 Tuesday Turn 10

Operations

Red (Nichols) operates #63 (\$50, 2 lumber), delivers 2 lumber from Lumberton to Pueblo for \$240, gains \$130 in passenger revenues.

Orange (Hooton) operates #47 (\$40, 3 silver) and collects \$400 in passenger revenue.

Green (Longdin) declines claim #40, operates #108 (\$40, 2 copper), #116 (\$60, 2 lumber), #109 (\$20, 1 copper), delivers 1 silver from Hillsboro to El Paso for \$400, collects \$60 in passenger revenue.

Brown (Partridge) does not operate. Gains \$410 in passenger revenue.

Blue (Scharf) operates #86 (\$20, 2 coal), delivers 3 coal from Raton and 4 coal from Canon City to Denver for \$980.

Aqua (Brosius) operates #58 (\$40, 2 lumber), delivers 3 coal from Farmington to Santa Fe for \$360, and collects \$90 in passenger revenue, and buys a +3 snowplow for \$80.

Determine Price Changes

Gold: +1 to \$250 Copper: +1 to \$160 Silver: Remains at \$400

		- FF				
	Denver	Salt Lake City	Pueblo	Santa Fe	El Paso	
Lumber:	+1 to \$200	Remains at \$300	+2 to \$200	Remains at \$160	+2 to \$200	
Coal:	Remains at \$140	Remains at \$100	Remains at \$80	Remains at \$120	Remains at \$140	

Turn 11

Move Prospectors and Surveyors

Red (Nichols) surveys South Fork to Lake City and <u>Trinidad to Raton (already surveyed by Blue)</u>, prospects #53.

Orange (Hooton) surveys Gunnison to Montrose and Glenwood Springs to Rifle, prospects #42.

Green (Longdin) surveys Moriarty to Santa Fe and Whitewater to Silver City, prospects #105.

Brown (Partridge) surveys Provo to Eureka and Montrose to Placerville, prospects #36.

Blue (Scharf) surveys Gunnison to Lake City and prospects #42.

prospecting

Aqua (Brosius) surveys Farmington to Dolores and Lamy to Las Vegas, no

Dispute Resolution

Orange and Brown have a dispute over the Montrose to Placerville line (special dispute rule). Orange dr = 8, Brown dr = 6. Orange wins, surveyor becomes +1. Orange and Blue have a dispute over #42. Orange dr = 6+3, Blue dr = 6+3. Tie, dispute continues next turn. Red spends \$460, Orange spends \$220, Green spends \$240, Brown spends \$240, Blue spends \$140, and Aqua spends \$380.

The Players

Player	Color	Starting Location	Money	Trains	Snowplows	Personnel
Cary Nichols	Red	Denver	\$650	9, 15		S, S, P
Dave Hooton	Orange	Denver	\$440	9	+2	S+1, S, P
Michael Longdin	Green	El Paso	\$3,350	9, 15		S, S, P
Dave Partridge	Brown	Salt Lake City	\$2,655	9, 24		S, S, P+1
Bill Scharf	Blue	Pueblo	\$1,640	9, 15, 24		S+1, S, P
Eric Brosius	Aqua	Santa Fe	\$400	9, 15	+3	S, S, P+1

	<u>Purch</u>	ased Clai	<u>ms</u>	
City	Owner	Type	Goods	Operation
Lumberton	Red	Lumber	0	\$50
Lake City	Red	Silver	N	\$30
Ouray	Orange	Silver	10	\$40
Lordsburg	Green	Copper	11	\$40
Santa Rita	Green	Copper	6	Depleted
Pinos Altos	Green	Lumber	7	\$30
Pinos Altos	Green	Copper	4	\$20
Silver City	Green	Silver	N	\$40
Bingham	Brown	Gold	6	Depleted
Scofield	Brown	Coal	6	Depleted
Marysvale	Brown	Gold	1	Depleted
Craig	Brown	Coal	N	\$20
Eureka	Brown	Silver	N	\$50
Silverton	Blue	Silver	3	Depleted
Canon City	Blue	Coal	0	\$20
	Lumberton Lake City Ouray Lordsburg Santa Rita Pinos Altos Pinos Altos Silver City Bingham Scofield Marysvale Craig Eureka Silverton	City Owner Lumberton Red Lake City Red Ouray Orange Lordsburg Green Santa Rita Green Pinos Altos Green Silver City Green Bingham Brown Scofield Brown Marysvale Brown Craig Brown Eureka Brown Silverton Blue	CityOwnerTypeLumbertonRedLumberLake CityRedSilverOurayOrangeSilverLordsburgGreenCopperSanta RitaGreenCopperPinos AltosGreenLumberPinos AltosGreenCopperSilver CityGreenSilverBinghamBrownGoldScofieldBrownCoalMarysvaleBrownGoldCraigBrownCoalEurekaBrownSilverSilvertonBlueSilver	LumbertonRedLumber0Lake CityRedSilverNOurayOrangeSilver10LordsburgGreenCopper11Santa RitaGreenCopper6Pinos AltosGreenLumber7Pinos AltosGreenCopper4Silver CityGreenSilverNBinghamBrownGold6ScofieldBrownCoal6MarysvaleBrownGold1CraigBrownCoalNEurekaBrownSilverNSilvertonBlueSilver3

Purchased	Passen	ger Lines
-----------	--------	-----------

Silver

Coal

Copper

Coal

Lumber

Blue

Aqua

Aqua

Aqua

Aqua

50

120

106

119

58

Silverton

Cuba

Cuba

Farmington

Dolores

N

1

1

5

2

\$50

\$40

\$40

Depleted

Depleted

	<u>1 urenasea i assenger Eines</u>					
#	Type	Route	Payoff	Owner	Notes	
3	A	Denver – Colorado Springs	\$50	Red		
5	A	Denver – Pueblo	\$80	Red		
1	A	Denver – Boulder	\$20	Orange		
9	В	Denver – Leadville	\$120	Orange		
8	A	Denver – Leadville	\$260	Orange	1	
4	A	El Paso – Deming	\$60	Green		

Available Trains

Type	# Available	Cost
9	0	\$80
15	2	\$120
24	6	\$200

#	Type	Route	Payoff	Owner	Notes
2	Α	Salt Lake City – Provo	\$20	Brown	
16	В	Salt Lake City – Grand Jct.	\$250	Brown	2
11	В	Salt Lake City – Grand Jct.	\$140	Brown	3
6	Α	Santa Fe – Albuquerque	\$90	Agua	

¹Discard after 4 Leadville depletions

Available Claims

		<u>л чини</u>	vie Ciui	<u>ms</u>
#	City	Type	Claim	Operation
42	Leadville	Silver	\$100	\$40
122	Lee Ranch West	Coal	\$60	\$20
75	Rangely	Coal	\$80	\$20
117	Cloudcroft	Lumber	\$120	\$50
40	Aspen	Silver	\$40	\$40
67	Coalville	Coal	\$60	\$30
72	Emery	Coal	\$60	\$30
78	Bowie	Coal	\$80	\$40

Claims in italics are under first right of refusal.

Available Passenger Lines

#	Type	Route	Payoff	Cost	Notes
14	В	El Paso – Albuquerque	\$220	\$405	
21	С	Salt Lake City – Colorado Springs	\$600	\$930	
13	В	El Paso – Santa Fe	\$140	\$320	
10	В	Denver – Aspen	\$130	\$250	
12	В	Pueblo – Grand Jct.	\$150	\$310	4
23	С	Salt Lake City – Santa Fe	\$900	\$1340	
23	С	Salt Lake City – Santa Fe	\$900	\$1340	
7	A	Pueblo – Santa Fe	\$120	\$280	

⁴ Discard when 20 is taken. Good for \$150 toward card 20 or 21.

Available Snowplows

Type	# Available	Cost
Die +2	2	\$40
Die +3	3	\$80

Boston Terrier

End of Game Statements

Dave Hood (Dutch) Well, I guess I did not even realize the game was about to end! Based on the moves of other players I think most of us forgot that Turn 10 was coming. At any rate, the key to New World is to avoid lots of losses because it is hard to recover. If you can keep your colonists alive and avoid big battles you can do well with double resource areas. Enjoyed the game, and thanks for running

it.

Andy Lewis (French) Congrats Dave. I was never a factor after some early bad luck. I didn't know we were playing that a player had to win. I had stopped trying to keep the NP from winning figuring maybe that would slow down some of the players.

² Discard when 22 is taken. Good for \$250 toward card 22.

³ Discard when 20 is taken. Good for \$140 toward card 20 or 21.

Dave Partridge (Swedes) Congratulations to David. One of these days I'll pay attention to the game start and realize we were only playing 10 turns instead of till someone had 5 territories, I wasn't ready for it to end!

Andy York (English) Congrats to Dave for a win, even if the Portuguese snuck by all the human players.... And, as always, thanks to Chris for a great game!

Bob Robles (Spanish) I just never recovered from an ill thought out overcommitment to one area. Congratulations to Dave on a well earned win.

Chis Hassler (GM) This was a strange one. When I started using the Non-Player Nations variant, I never expected one of them to win the game. But, due to a number of factors, mostly coming down to luck and the fact that the other players mostly left it alone, win it did. This left me with a dilemma: do I credit the non-player nation with the victory, or award it to the player who came in second. In the end, I decided to award the "victory" to the highest scoring player. However, I will note in the Best of Show, that the non-player actually scored higher.

Dogbreath

Epoch III Romans and Sassanids Epoch IV Empire Selection, 4/19 Tuesday

Royal Manticoran Historical Society (Wilson) plays Mayans. Capital and 2 armies Central America. ROMANS: Plays Weaponry. Army and Capital Southern Appenines, army Northern Appenines, Central Massif, Northern Gaul, Albion, Lower Rhein, Central Europe (vs. Celts; R: 4+1, 3+1; C: 6; loses), Central Europe (vs. Celts; R: 6+1, 3+1; C: 1; wins), fleet Western Mediterranean, Eastern Mediterranean (vs. Time Traveler; RMHS: 5+1, 1+1; TT: 4; wins), army Morea (vs. Civil War; R: 5+1, 3+1; C: 6, 1; R: 4+1, 1+1; C: 5, 5; R: 4+1, 1+1; C: 5, 2; R: 6+1, 3+1; C: 5, 3; wins), Crete (vs. Minoans; R: 5+1, 3+1; M: 2+1; wins, Capital reduced to city), Levant (vs. Persia; R: 4+1, 2+1; P: 2, 1; wins, city eliminated), Upper Tigris (vs. Persia; R: 3+1, 2+1, P: 4; R: 1+1, 1+1; P: 3; loses), Upper Tigris (vs. Persia; R: 5+1, 1+1, P: 5, wins, city eliminated), Middle Tigris (vs. Macedonia; R: 6+1, 3+1; M: 1; wins), Zagros (vs. Macedonia; R: 6+1, 3+1; M: 3, 1; wins), Persian Plateau (vs. Maurya; R: 3+1, 2+1; M: 3; wins), Hindu Kush (vs. Mauryans; R: 6+1, 4+1; M: 1; wins), Upper Indus (vs. Maurya; R: 4+1, 2+1; M: 4; wins), Ganges Valley (vs. Han Dynasty; R: 5+1, 2+1; H: 2; wins), Ganges Delta (vs. Han Dynasty; R: 6+1, 2+1; H: 1; wins, city eliminated), Malayan Peninsula (vs. Maurya; R: 3+1, 2+1; M: 4, 4; R: 6+1, 5+1; M: 4, 3; wins), Turanian Plain

(vs. Scytheans; R: 6+1, 1+1; S: 6; wins), Tarim Basin (vs. Han Dynasty; R: 6+1, 1+1; H: 3, 1; wins), fleet Black Sea (vs. GEGS; RMHS: 4+1, 1+1; GEGS: 6; loses). Builds Monuments Southern Appenines, Crete, and Albion. Points: Dominance in North Africa (4), Middle East (6), India (6), Southern Europe (6), Northern Europe (2), Presence in China (3), Southeast Asia (1), 3 Capitals (6), 1 city (1), 3 Seas (3), and 11 Monuments (11) for 49 points.

Marching Through the Ages (Lewis) SASSANIDS: Army and Capital Zagros (Roman army retreats to Middle Tigris), army Persian Plateau (vs. Romans; S: 5, 5; R: 1; wins), Hindu Kush (vs. Romans; S: 5; 5; R: 5; S: 3, 1; R: 3; S: 5, 3; R: 5; S: 4, 3; R: 1; wins), Turanian Plain (vs. Romans; S: 2, 1; R: 2; S: 5, 4; R: 4; wins), Tarim Basin (vs. Romans; S: 3, 2; R: 4, 1; loses), Tarim Basin (vs. Romans; S: 5, 3; R: 4, 4; wins), Wei River (vs. Han Dynasty; S: 5, 3; H: 4, 1; wins, city eliminated), Great Plain of China (vs. Han Dynasty; S: 6, 5; H: 5; wins, Capital reduced to city), Upper Tigris (vs. Romans; S: 6, 4; H: 2; wins). Builds Monument Zagros. Points: Dominance in Middle East (6), Presence in India (3), China (3), 1 Capital (2), 1 city (1), and 5 Monuments (5) for 20 points.

Players

Player Name	Player Faction Name/Color	Empire Strength Points	Victory Points		
Andy Lewis	Marching Through the Ages (red)	21	40		
Chris Geggus	Great Explorers Grabbing Samples (yellow)	22	55		
Paul Bolduc	Arachnids (blue)	22	52		
Dave Anderson	Time Traveler (orange)	25	52		
Dave Partridge	The Questioner (green)	31	52		
Kevin Wilson	Royal Manticoran Historical Society (purple)	37	76		

Positions

Arachnids: NILE KINGDOM: Army, city, and fort Upper Nile. SCYTHEANS: Army Western Steppe. CIVIL WAR: Army and city Pindus. MAURYA: Armies Eastern Deccan, Malayan Peninsula, Sumatra, Mekong.

Time Traeler: MACEDONIANS: Army and city Lower Tigris, Lower Indus, armies Eastern Anatoia, Persian Salt Desert, Western Deccan, Western Ghats.

Marching Through the Ages: ASSYRIA: Armies Western Anatolia, Palestine. SASSANIDS: Army, Capital, and Monument Zagros, army, city, and Monument Great Plain of China, army and Monument Upper Tigris, Persian Plateau, Tarim Basin, armies Hindu Kush, Turanian Plain, Wei River.

Royal Manticoran Historical Society: Fleets Red Sea, Western Mediterranean, Eastern Mediterranean. CARTHAGINIA: Army, Capital, and Monument Shatts Plateau, army and Monument Nile Delta, armies Libya, Nubia, Southern Iberia. MAYANS: Two armies and Capital Central America. ROMANS: Army, Capital, and Monument Southern Appenines, army, city, and Monument Crete, two armies and Monument Middle Tigris, army and Monument Albion, Morea, Ganges Delta, armies Northern Appenings, Central Massif, Northern Gaul, Lower Rhein, Central Europe, Levant, Upper Indus, Ganges Plain, Malayan Peninsula.

The Questioner: Fleet South China Sea. PERSIA: Army Eastern Ghats. HAN DYNASTY: Armies Yellow River, Yangtse Kian, Chekiang, Si-Kyang, Szechuan, Irrawaddy.

Great Explorers Grabbing Samples: Fleet Black Sea. GREEK CITY STATES: Two armies Baltic Seaboard, armies Balkans, Danubia. CELTS: Armies Dneipr, Caucuses.

Epoch IV Empire Draw

Event Cards

Plantation Dog

Turn 7 Turn 8, 4/19 Tuesday

Chris selects the Builder and buys a Factory (Builder bonus, 2 doubloons, Quarry, 1VP, 1 Indigo, 1 colonist from Indigo Plant), Richard builds a Harbour (2 Quarries, 6 doubloons), Andy Y. passes, Andy L. passes, and Paul builds a Large Market (3 doubloons plus 2 Quarries).

Richard selects the Settler, gains 2 doubloons, and selects a Coffee plantation, Andy Y. selects a Sugar plantation, Andy L. selects a Sugar plantation, Paul selects a Coffee plantation, and Chris selects an Indigo plantation

Andy Y. selects the Captain, gaining 1 doubloon, and ships 3 Sugar on ship 3 for 4 VP (ship departs), Andy L. ships 4 Corn on ship 2 for 4 VP, Paul ships 1 Indigo on ship 1 for 1 VP (ship departs), Chris ships 2 Corn on ship 2 for 2VP, and Richard ships 1 Corn on ship 2 for 1 VP (ship departs). Richard discards Indigo Andy L. selects the Prospector and gains 3 doubloons.

Paul selects Prospector and gains 1 doubloon.

The Players

Player Name	Role	Plantations	Buildings	San Juan	Doubloons	Stored Production	VP
Paul Bolduc	Prospector	Indigo, Indigo, Quarry,	Connection Hut, Indigo Plant (2),		1	1 Indigo	2
		Quarry, Quarry, Coffee	Small Sugar Mill, Church, Large				
			Market				
Chris Geggus	Builder	Indigo, Quarry, Tobacco,	Indigo Plant (1), Aquaduct, Black		0	1 Indigo	3
		Corn, Sugar, Indigo	Market, Tobacco Storage (1), Small				
			Sugar Mill, Factory				
Richard Weiss	Settler	Indigo, Coffee, Quarry, Corn,	Small Market, Coffee Roaster (2),	1	0	1 Coffee	1
		Quarry, Coffee	Small Indigo Plant, Harbour				
Andy York	Captain	Corn, Sugar, Sugar, Tobacco,	Sugar Mill (3), Small Sugar Mill,		1	1 Sugar	13
		Sugar, Sugar	Small Indigo Plant, Small Warehouse				
Andy Lewis	Prospector	Corn, Coffee, Coffee, Indigo,	Hacienda, Storehouse, Coffee		5		8
		Corn, Quarry, Corn, Corn,	Roaster (2), Small Indigo Plant				
		Sugar					

Player in bold is the Governor for next turn. Plantations and buildings in bold are manned. Buildings that can be manned by more than one colonist will have the number manning them in parentheses after the building name.

Available Items

Colonists: Supply: 38 Colonist Ship: 8 Trading House: Indigo, Sugar, Coffee Victory Points: 95

Cargo Ships: Ship 1 (capacity 6): Ship 2 (capacity 7): Ship 3 (capacity 8):

Commodities

Corn: 11 Indigo: 8 Sugar: 9 Tobacco: 9 Coffee: 7

Buildings

Column 1	Column 2	Column 3	Column 4
Small Indigo Plant (1d, 1VP)	Indigo Plant (3d, 2VP)	Tobacco Storage (5d, 3VP) (x2)	Guild Hall (10d, 4VP)
Small Sugar Mill (2d, 1VP)	Sugar Mill (4d, 2VP) (x2)	Coffee Roaster (6d, 3VP)	Residence (10d, 4VP)
	Hospice (4d, 2VP)	Lighthouse (7d, 3VP)	Fortress (10d, 4VP)
	Guesthouse (4d, 2VP)	University (8d, 3VP)	Customs House (10d, 4VP)
	Office (5d, 2VP)	Library (8d, 3VP)	City Hall (10d, 4VP)
	Trading Post (5d, 2VP)	Specialty Factory (8d, 3VP)	Cloister (10d, 4VP)
Forest House (2d, 1VP)	Small Wharf (6d, 2VP)	Union Hall (9d, 3VP)	Statue (10d, 8VP)
	Large Warehouse (6d, 2VP)	Wharf (9d, 3VP)	
	Large Warehouse (6d, 2VP)	Wharf (9d, 3VP)	

Roles

Builder, Captain, Craftsman (1d), Mayor (1d), Prospector, Prospector, Settler, Trader (1d)

Plantations

Quarry, Forest (x12), Tobacco, Corn, Sugar, Sugar, Sugar, Sugar

Discard Pile: Tobacco, Tobacco, Indigo, Indigo, Indigo, Indigo, Tobacco, Tobacco, Coffee, Indigo, Coffee, Indigo

Pedagoguery

In 1980, the scientists in charge of Voyager 1 had a choice. They could aim for a close flyby of Saturn's moon Titan, or they could aim for an eventual flyby of Pluto. They chose Titan. What they saw was a featureless orange ball. The moon had a thick atmosphere topped by a haze of hydrocarbons bearing a remarkable resemblance to a dense smog. The Voyager 2 team decided to skip Titan altogether.

While Voyager did not have the instruments to penetrate the haze, it did produce some intriguing data. Titan's atmosphere is primarily nitrogen, making it the only other body in the solar system to have a substantial nitrogen atmosphere. Neptune's moon Triton was later found by Voyager 2 to possess a tenuous nitrogen atmosphere, but it is a mere 1/70,000 the pressure of Earth's, while Titan has an atmosphere just under one and a half times Earth's pressure. Voyager also was able to determine that the surface conditions on Titan allow for methane clouds, rain, and even lakes or oceans.

It wasn't until the arrival of Cassini in the Saturnian system in 2004 that we started getting a clearer picture of the mysterious moon. Launched in 1997, after being delayed by the Challenger disaster. Because of the delay, Cassini had to take a circuitous route to Saturn, making two flybys of Venus, one of Earth, and one of Jupiter to finally make it. Cassini carried the Huygens probe, which was destined to land on the surface of Titan. The data returned by Cassini and Huygens has revolutionized our understanding of Titan, and provided a picture of a moon that is remarkably earthlike in many ways.

When they Huygens probe landed on Titan in 2005, it landed on a sandy surface, with fist sized "rocks" lying all around. The rocks were rounded, as if eroded by running water, and the sand was damp. Of course, the sand wasn't sand, the rocks weren't rocks, and the dampness wasn't water. Instead, the sand appeared to be a granulated form of the atmospheric smog. The rocks were chunks of water ice, and the dampness was liquid methane. Nevertheless, while the

materials were different, the overall effect was the same. Titan was the most earthlike body so far explored in the solar system.

Subsequent exploration by Cassini has fleshed out the details more, and has not reduced the similarities. Radar mapping has found huge lakes of liquid ethane and methane at the poles, and huge dune fields at the equator. Radar images of the dune fields show remarkable similarity to dune fields on Earth, such as in the Namib Desert.

In its interior, Titan has a large rock-iron core. The moon may not have gotten hot enough for the iron to separate out from the rock. Above that, is a layer of ice, but not just any ice. It consists of rare, high-pressure phases of ice that are very different from what we encounter on Earth. Above that is a possible ocean of liquid water mixed with ammonia. Above that is a layer of warm, pliable ice, that convects much like Earth's mantle. Finally, you have the crust. The warm mantle can support a form of vulcanism, and there are signs that cryovolcanos have been detected.

However, it is in the hydrological cycle that Titan demonstrates its extremes. On Earth, sunlight is enough to evaporate about one meter of water per year. However, the atmosphere can only hold a couple of centimeters worth of water before it starts to precipitate out. On Titan, however, sunlight can only evaporate about one centimeters of liquid per year, but the atmosphere can hold the equivalent of 10 meters of liquid. The result is long droughts followed by torrential floods, and the landscape shows it.

On Earth, climate is dominated by Hadley circulation. Warm air rises at the equator and heads toward the poles. However, the Earth's rotation shears the circulation, causing it to reach the ground at about 30 degrees of latitude. Since

the air at that point is dry, this is where most of the Earth's deserts are located. Due to Titan's very slow rotation and long seasons, the circulation goes from the summer mid-latitudes all the way to the winter pole, making the equatorial parts permanently dry. This also explains why all of Titan's big lakes are near the poles.

Titan's atmosphere bears other resemblances to Earth's. Both posses weather, which takes place in the lower part of the atmosphere, called the troposphere. The temperature in the troposphere gradually declines with increasing altitude. On Earth, this is where nearly all clouds form. On Titan, methane clouds exist here. Because of Titan's lower gravity, and hence the more gradual decline in atmospheric density with height, Titan's troposphere is deeper. Above the troposphere is the stratosphere, where the decline in temperature suddenly reverses. On Earth, this is due to heating by ultraviolet light being absorbed in the ozone layer. On Titan, this is where ethane clouds form, absorbing sunlight. Solar ultraviolet provides the energy to power some complex organic chemistry, producing a thick haze of smog. Above the stratosphere is the mesosphere, where, on Earth, the temperature starts to decline again. In Titan's mesosphere, the temperature is pretty level with altitude, and there is a thin haze layer at this height. Finally, there is the thermosphere. On Earth, this tenuous layer of atmosphere starts to heat up again, until it is nearly 1000 Kelvins. It is so thin, however, that it does not carry much heat. Titan's thermosphere is distinguishable from its mesosphere only by the absence of any haze.

Cassini continues to make passes of the moon, and as a result, oour understanding of this remarkable place continues to grow.

Next time, how stable are the orbits of the planets in our solar system?

Addresses

	<u></u>	<u>Auul esses</u>		
Dave Anderson	Dennis Cain "Red Dog"	Dale Horsely	Ward Narhi	Bill Scharf "Doge"
20832 Tuck Rd., Site 32	1218 N. 3 rd St.	dale.horsely@yahoo.com	521 Moreley	4814 Walnut Grove Ave.
Farmington Hills, MI 48336	Quincy, IL 62301-1727	Tom Howell "Whippet"	Akron, OH 44320	Rosemead, CA 91770
(248) 473-7482	(217) 223-2284	365 Storm King Road	lurkertv@hotmail.com	(626) 286-4428
ravenclawnerdz@sbcglobal.net	iamthedbear@sbcglobal.net	Port Angeles, WA 98363	(330) 835-4013	bear-hugs@sbcglobal.net
andersond4@michigan.gov	Forest Cole	off-the-shelf@olympus.net	Cary Nichols	Mike Scott
John Biehl	11210 Montverde Ln	(360) 928-9698	756532-938 South FM1673	4040 E. Piedmont Dr.
8809 Delwood Dr.	Houston, TX 7099	Robert Koehler	Snyder, TX 79549-8812	Space 61
Delta, B.C., Canada V4C 4A1	simply4est@yahoo.com	rkhoeler@triad.rr.com	Walt O'Hara	Highland, CA 92346
jrb@dccnet.com	Simply4est@aol.com	Andy Lewis "Marmaduke"	hussar@hotmail.com	mikesmag2@jsbcglobal.net
John Boardman	Caleb Cousins	16 Gossling Dr.	Dave Partridge	(909) 864-4343
Unit 508, 5820 Genesis Lane	96 Cedar St. #4	Lewes, DE 19958	15 Woodland Drive	Gina Teh
Frederick, MD 21703-5103	Bangor, ME 04401	Alewis161@hom.com	Brookline NH, 03033	lone_hammy@yahoo.com.sg
Paul Bolduc	(207) 941-8568	(302) 644-1984	rebhuhn@rocketmail.com	Richard Weiss
203 Devon Court	caleb_cousins@umit.maine.edu	Michael Longdin	James Pratt	Rcweiss@cox.net
FWB, FL 32547-3110	Chris Geggus "Davey Boy	michasel.longdin@virgin.net	prattjames1960@yahoo.com	Brendan Whyte
Prbolduc@aol.com	Smith"	Michael Lowrey	Berend Renken	448 Suriyat Road
bolduc@eglin.af.mil	10 Talbrook, Brentwood	6903 Kentucky Derby Drive	P.O. Box 249	Ubon Ratchathani 34000
(850) 863-9081	Essex, CM14 4PY, UK	Charlotte, NC 28215	Roy, WA 98580-0249	Thailand
Jim Burgess	Geggus@sky.com	Mlowrey@infionline.net	berend02@aol.com	obiwonfive@hotmail.com
664 Smith St.	Pasquale Giovine	(704) 569-4269	Paul Risner	Kevin Wilson
Providence, RI 02908-4327	Via Osanna N.2/e	Brad Martin	10325 NW 63rd Dr.	4758 Doncaster Ct.
jfburgess@gmail.com	I-89127 Reggio Calabria, Italia	180 Peninsula Road	Parkland, FL 33076	Long Grove, IL 60047
Eric Brosius	giovine@unirc.it	Maylands 6051	goeben@aol.com	ckevinw@comcast.net
53 Bird St.	Dave Hood	Western Australia	Jerry Roalstad	Andrew York "Greyhound"
Needham, MA	dhood@phd-law.com	Australia	Gerald.roalstad@ang.af.mil	P.O. Box 201117
Public.brosius@comcast.net	Dave Hooton	Westfront@hotmail.com	Bob Robles "Howler"	Austin, TX 78720-1117
	hootond@yahooc.com	Lynn Mercer	67 Tara Rd.	wandrew88@gmail.com
		hancockfc@yahoo.com	Orinda, CA 94563	
			Rlrobles5@comcast.net	
			(510) 254-6354	

Standby Calls

None this issue! Printed on recycled paper.