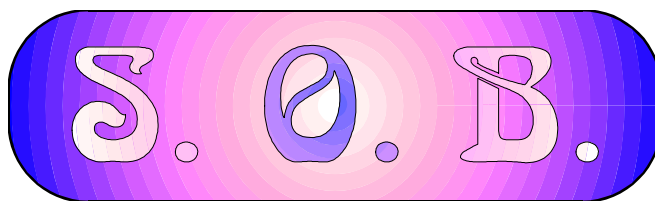


Number 140

November/December,  
2007**Notes from Hades**

**L**ast week, I was in Paris again. In this case, it was for a full week, and we were hosted by the Ministry of Finance. My flight was scheduled to arrive at 6:30 am the prior Sunday, but my connection from Washington D.C. was delayed, so I didn't end up getting there until about 1:00. That seriously cut into my sight seeing time, but I was able to see Notre Dame this time around. It's an impressive structure. It was in use at the time, since they had just finished an Armistice Day ceremony (we saw all the flags of the allied combatants on the Western Front of World War I), and they were preparing for another mass. But, still, it was impressive.

Over the last several months, I have had to bump a couple of deadlines out a week from where they otherwise would have been. To try and compensate, this deadline will be shortened by almost a week. A full week would take us to Christmas day itself, so I will be switching the deadline to a Wednesday for this next issue. Please make a note of the change.

The next deadline is **Wednesday, December 26 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.

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**Game Openings**

**Greyhound.** Age of Renaissance. This game will start when Dog Chow finishes and will use the European rules and alternate map. Have Michael Longdin, Bob Robles, Dave Partridge, Steve Koehler, Dave Hood, and Robert Koehler. This game is full.

**Sand Flea.** Dune. We will use the optional Lansraad, Ixians, and Bene Tleilaxu powers. Have Kevin Wilson, Bob Robles, Paul Bolduc, Michael Longdin, Ward Narhi, and Gina Teh, will take up to 1 more if one player plays the Bene Tleilaxu.

**Frontier Dog.** Gunslinger. Scenario to be determined. Have Paul Bolduc, Chris Geggus, Mike Scott, and Andy Lewis, will take up to 3 more.

**Pateel.** Kremlin. Will start after Flea Collar ends. Have Ward Narhi, Mike Scott, Bill Scharf, Bob Robles, Pasquale Giovine, and Gina Teh. This game is full.

**Hunter.** Silverton. Will start after Terrier ends. Have Dave Partridge, Michael Longdin, Ward Narhi, Cary Nichols, Bill Scharf, and Dave Hooton. This game is full.

**Prosyon.** Merchant of Venus. This game will start when Sirius ends. Have Dave Partridge, Bob Robles, Chris Geggus, Gina the, and Dennis Cain. Will take up to 1 more.

**Robover.** Robo Rally. Have Dave Partridge, Bill Scharf, Chris Geggus, Dave Hooton, Gina the, and Ward Narhi. Will take up to 2 more.

**Wish List**

**History of the World.** Have Chris Geggus, Dave Partridge, and Gina Teh, will take up to 4 more.

**Industrial Waste.** Have Andy York, will take up to 3 more.

**Outpost.** Will start after Hound ends. Have Andy York, take up to 9 more.

**Machiavelli.** This game will start after the next Machiavelli game ends. Have Ward Narhi and Bob Robles, will take up to 6 more.

**Machiavelli.** Gunboat. This game will start after the second Machiavelli game ends. Will take up to 8.

**Puerto Rico.** Will take up to 5.

**Power Grid.** Will take up to 6.

**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-subscribers.

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**  
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**On the Web at: <http://homepages.roadrunner.com/sobhome>**

Subscriptions cost \$2.00 per issue (\$3.00 overseas).

## **Howling at the Moon**

### **The S.O.B. Letter Column**

**Ward Narhi**

My wife and I went to Sweden two years ago so it brought back some nice memories. We also went to Skansen which we thought was a great find. Of particular interest to me was the Vasa Museum - I hope you went to it. My favorite

museum, bar none. We did visit the palace where the Nobel Prize awards are held but did not get to go in so am a bit jealous that you got a dinner there. Very nice. We also got out to one of the islands to experience that too. My wife did a lot of shopping in Gamla Stan which was not cheap, unfortunately.

**Dogfight****Additional End of Game Statements****Statements**

**Dave Partridge (Turks):** This game was quickly over for me and it really all came down to my not paying attention to the rules in play. I've never played a game of Machiavelli without the moneylender rule before, and all of my assumptions were based on that money being available. With it, the advantage

that Naples had gained was manageable, without it, my position was hopeless. Sorry to the rest of you for the leg up I gave to Naples, but he played a good game as well and deserved the win.

## Dog Park

Miller Number 2007???????

Deadline for Spring 1051 12/26, Wednesday

### The Players

BYZANTINES	Pasquale Giovine
HOLY ROMAN EMPIRE	Dave Partridge
MUSLIMS	Berend Renken
NORMANS	Dale Horsely
PAPACY	Jerry Roalstad
PISA	Mike Scott
VENICE	Kevin Wilson
GAME MASTER	Chris Hassler

### The Positions

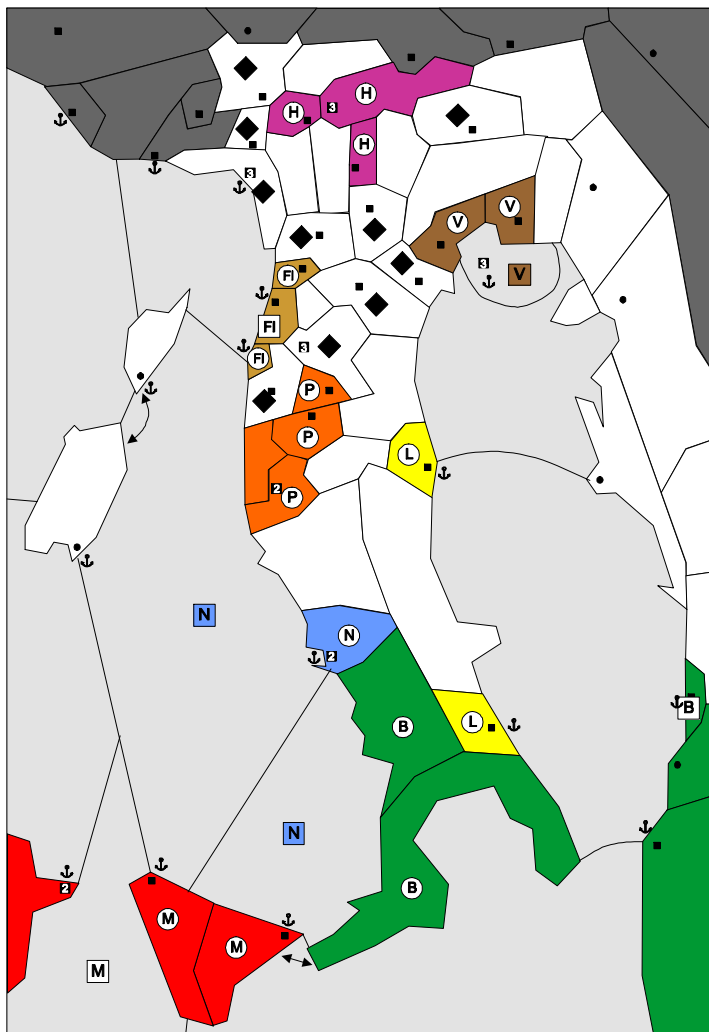
Byzantines:	A Salerno, A Otranto, F Ragusa, 6 ducats
Holy Roman Empire:	A Milan, A Pavia, F Cremona, 5 ducats
Muslims:	A Palermo, A Messina, F Central Mediterranean, 6 ducats
Normans:	A Naples, F Tyrrhenian Sea, F Gulf of Naples, 6 ducats

Papacy:	A Rome, A Perugia, A Arezzo, 3 ducats
Pisa:	A Lucca, A Piombino, F Pisa, 4 ducats
Venice:	A Padua, A Treviso, F Venice, 6 ducats
Lombards:	A Ancona, A Bari
Autonomous Garrisons:	Turin, Montferrat, Genoa, Trent, Mantua, Modena, Ferrara, Bologna, Florence, Sienna

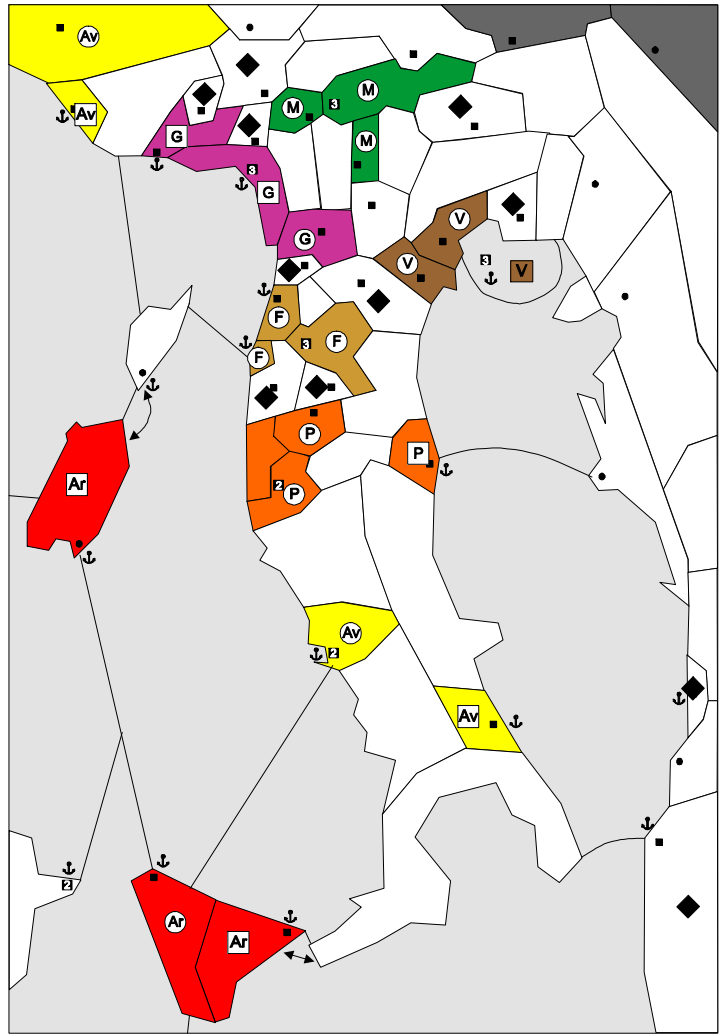
### Notes

As for the rules, here they are. First, all advanced rules are in use, including assassination. Each player starts with one assassination chit for each other player. In addition, the following optional rules are in use: Natural Disasters, Special Military Units, Moneylenders, and Conquest. Press will be Gray. We are playing this one to Ultimate Victory Conditions: 18 cities. The house rules are available on the website. If you have any other questions, feel free to ask. And so, without further ado, I'll let you get on with your dagger work.

Dog Park



Barking Up the Wrong Tree



○ Army □ Fleet ◇ Garrison ◆ Autonomous Garrison ◆ Besieged Garrison

○ Army □ Fleet ◇ Garrison ◆ Autonomous Garrison ◆ Besieged Garrison

**Barking Up the Wrong Tree****Miller Number 2007??????****Deadline for Spring 1250 12/26, Wednesday****The Players**

ARAGON Lynn Mercer  
 AVIGNON Cary Nichols  
 FLORENCE Brendan Whyte  
 GENOA Mike Scott  
 MILAN Berend Renken  
 PAPACY Bob Robles  
 VENICE Dave Partridge  
 GAME MASTER Chris Hassler

Milan: A Milan, A Pavia, A Cremona, 6 ducats  
 Papacy: A Rome, A Perugia, F Ancona, 4 ducats  
 Venice: A Padua, A Ferrara, F Venice, 6 ducats  
 Autonomous Garrisons: Montferrat, Saluzzo, Trent, Lucca, Bologna,  
 Sienna, Arezzo, Sienna, Treviso, Ragusa, Durazzo

**Notes**

Here's a recap of the rules we'll be using. First, all advanced rules are in use, including assassination. Each player starts with one assassination chit for each other player. In addition, the following optional rules are in use: Natural Disasters, Special Military Units, and Conquest. Press will be Gray. We are playing this one to Ultimate Victory Conditions: 21 cities. The house rules are available on the website. If you have any other questions, feel free to ask. And so, without further ado, I'll let you get on with your dagger work.

**The Positions**

Aragon: A Palermo, F Messina, F Sardinia, 6 ducats  
 Avignon: A Avignon, A Naples, F Marseilles, F Bari, 8 ducats  
 Florence: A Florence, A Pisa, A Piombino, 4 ducats  
 Genoa: A Modena, F Genoa, F Savoy, 6 ducats

**Dog Chow****Age of Renaissance****Turn 8, Phases 4 through 6****Deadline Final Card Play 12/26, Wednesday****Phase 4: Purchases**

**London** buys Human Body (B, 20 credit from Science, \$40, Misery reduced to 200) and \$1 for stabilization.

**Venice** buys Institutional Research (X, 10 credit for Civics, \$90), Written Record (N, 10 credit for Institutional Research, \$20), Wind/Watermill (J, 10 credit for Commerce, 10 credit for Institutional Research, \$20).

**Paris** buys Holy Indulgence (F, 20 credit for Religion, \$40, Misery increases to 300), The Heavens (A, 10 credit for Institutional Research, \$20), and \$15 for stabilization.

**Genoa** buys a ship upgrade for \$10, Interest and Profit (L, 30 credit for Commerce, 10 credit for Institutional Research, \$40), Nationalism (W, 80 credit from Civics, free). Misery increases to 125 due to lack of stabilization.

**Hamburg** buys Human Body (B, 20 credit from Science, \$40, Misery reduced to 175), Master Art (P, 20 credit from Communication, \$70), Improved Agriculture (K, 20 credit from Commerce, \$30, Misery reduced to 150), and \$10 for stabilization. One tier plus 40 MR credits reduces Misery to 125.

**Barcelona** buys ship upgrade for \$10, Master Art (P, 20 credit for Communication, 10 credit for Institutional Research, \$60), Cathedral (H, 40 credit for Religion, \$80, Misery increases to 125), Laws of Matter (C, 40 credit from Science, 10 credit from Institutional Research, \$40), and \$10 for stabilization. 3 tiers and 35 MR credits reduces Misery to 90.

**Phase 5: Expansion**

**London** expands to Lubeck (8, vs. Hamburg, dr = 2, 6, 1; wins).

**Venice** expands to Alexandria (4), Suez (2), Acre (4), Cairo (5, vs. Paris, dr = 1, 5, 4; wins), Alepp (5, vs. Genoa, dr = 3, 1, 5; wins), Cyprus (1)

**Hamburg** buys a card (3, ), expands to Angora (4, vs. Barcelona, dr = 5, 5, 4; wins), Constantinople (8, vs. Barcelona, dr = 6, 2, 1; wins), Salonika (5, vs. Genoa, dr = 6, 6, 4; wins), Amsterdam (3, vs. Paris, dr = 3, 2, 1; wins).

**Barcelona** expands to North America (12, vs. Genoa, uses Cathedral; wins), Bourges (9, vs. Paris, uses Cathedral, wins), Adalia (1), Tarsus (1), Oran (1).

**Paris** expands to Bourges (7, vs. Barcelona, dr = 3, 6, 2; wins), Bordeaux (9, vs. Barcelona, dr = 5, 6, 2; wins), Toulouse (2, vs. Barcelona, dr = 1, 4, 3; wins), Basque (6, vs. Barcelona, dr = 6, 2, 2; wins), Nuremburg (5, vs. Hamburg, dr = 3, 6, 6; loses).

**Genoa** expands to East Indies (10, vs. Barcelona, dr = 3, 3, 4; loses), East Indies (10, vs. Barcelona, dr = 5, 2, 1; wins), China (10, vs. Barcelona, dr = 5, 6, 4; wins), Montpellier (4, vs. Barcelona, dr = 2, 6, 4; wins).

Venice gains

. This is the last card, so the game ends this turn after final card play.

**Phase 6: Income**

Interest and Profit: Barcelona gains \$14, Genoa gains \$9, and Paris gains \$17.

**London** gains \$75      **Venice** gains \$87      **Hamburg** gains \$117      **Barcelona** gains \$81      **Paris** gains \$69      **Genoa** gains \$93

Barcelona Misery is reduced to 80 and Genoa Misery is reduced to 100 due to New World.

Shortage of Metal, Shortage of Wine.

**The Players**

Player	Country	Misery	Tokens	Money	Order	Dominance	Ships	Cards	Advances
Paul Bolduc	Barcelona	80		\$109	4	11	O4	4	A, B, C, E, F, H, I, J, K, L, N, O, P, R, S, T, U, V, W, X, Y
Cary Nichols	Hamburg	125		\$157	3	17	O1	5	A, B, E, F, G, I, J, K, N, O, P, R, S, T, V
Bob Robles	London	200		\$147	1	10	8	1	A, B, E, F, G, I, J, V, W
Dennis Cain	Venice	125		\$116	2	12	O1	1	A, B, E, F, I, J, N, R, S, T, V, X

Player	Country	Misery	Tokens	Money	Order	Dominance	Ships	Cards	Advances
Steve Koehler	Genoa	100		\$111	6	13	O3	6	A, B, C, E, F, I, J, K, L, N, O, R, S, T, U, V, W, X, Y
Michael Longdin	Paris	300		\$105	5	9		5	A, E, F, I, J, K, L, V, W, X

Players are listed in reverse tie breaking order.

### Commodity Log

Commodity	Bob	Cary	Michael	Steve	Paul	Dennis
Stone (2)	1	--	2	4	--	1
Wool (3)	4	1	1	1	2	--
Timber (4)	1	3	1	--	1	1
Grain (5)	2	2	1	1	1	1
Cloth (6)	--	1	1	2	1	2
Wine (7)	--	--	1	--	3	1
Metal (8)	1	3	--	1	2	--
Fur (9)	--	3	1	--	1	--
Silk (10)	--	2	--	2	1	1
Spice (11)	--	1	--	2	1	3
Gold (12)	--	1	1	--	1	2
Ivory (12)	1	--	--	1	1	1

### Cards

### Shortage, Surplus

## Sirius

### Merchant of Venus

Turns 25.2 to 27.2

Turns 27.3 to 29.3 12/26, Wednesday

### Turn 25

**2<sup>nd</sup>: Dave Partridge (Whynoms/Venus-Orion Oligarch Merchante) 3 3 (uses Auto Pilot)**

**Asteroid City East – (R10) – (Y20) – (R) – Airhome – (Y) – B – (R) – TeleGate 6 – (Y10) – (R) – A – (Y20) – (R20) – Terror Station (o) – Open Port.**

Drops off Fare for \$120 (from the cup: Melf Pelt at 5). Trades in IOU for \$90 credit, buys Terror Station for credit plus \$110. Agent buys Clipper \$120.

**3<sup>rd</sup>: Paul Bolduc (Eeepeeep/R. Olivaw)**

**Thunderbolt Greaselapper Rolls Used: 3 \* 4**

**Desolation Landing(p) – R – B – (Y) – B – R – (Y) – R – B10 – R10 – B10 – (Y10) – R – Rumble Port(p).**

Sells Bionic Perfume for \$140 plus \$120 demand (from the cup: Fare to 4a at Base and Chicle Liquor at 7a). Sells Bionic Perfume for \$140 plus \$60 demand (from the cup: Demand for Furniture at 9b and Bionic Perfume at 1a). Buys 2 Mulch Wine for \$40. Atlantis gains \$50 in port commissions.

**4<sup>th</sup>: Dennis Cain (Niks)**

**Space Revolver Rolls Used: 5 5 6 6**

**Jewel Port(p) – B – Jellybeast Landing(p) – A – Y – R – B – Y – R – A – Ice Station(p).**

Sells Finest Dust for \$50 plus \$50 demand (from the cup: Demand for Spice at 3 and Psychotic Sculpture at 10). Picks up Fare to Base. Mystery Machine 4 receives \$10 in port commissions.

**Space Howitzer Rolls Used: 4 5**

**Aerie(p) – (Y) – (R20) – (Y) – A – A – (R10) – Asteroid City East.**

Buys Airhome for \$200.

**5<sup>th</sup>: Chris Geggus (Qossuth)**

**Atlantis Rolls Used: 5 \* 3**

**Multi-Generation Ship – R20 – NC5 – R – (Y) – R – Space Station – A – NC5 – NC5 – B – R – TeleGate 1 – TeleGate 5 – R – A – R.**

**Kormoran Rolls Used: 2 \* 3**

**Open Port – Terror Station(o) – R20 – Y – B – R – B.**

**6<sup>th</sup>: Bob Robles (Dell/Dells Without Names) Rolls Used: 4 6**

**Multi-Generation Ship.**

Sells Impossible Furniture for \$180 plus \$70 demand (from the cup: Melf Pelts at 5 and Demand for Dust at 5). Buys Megalith Paperweight for \$90.

### Turn 26

**1<sup>st</sup>: Andy Lewis (Humans/Mystery Machine 4) Rolls Used: 2 4 5**

**Rainfall(p) – B – R – B10 – R10 – Y – B – R – Bypass.**

Sells Mulch Wine for \$60 (from the cup: Servo-Mechanism at 7b). Sells Mulch Wine for \$60 (from the cup: Finest Dust at 4a). Buys 2 Immortal Grease for \$100. VOOM gains \$22 in factory commissions.

**2<sup>nd</sup>: Dave Partridge (Whynoms)**

**ZOOM Rolls Used: 1 2 5 5**

**Terror Station(s) – Terror Station(p) – R20 – Y – B – R – B – Y – B – R – 4<sup>th</sup>:**

**Poisonport(p) – Poisonport(s).**

Buys Paintfall for \$200.

**Venus-Orion Oligarch Merchante 4 4 (uses Auto Pilot)**

**Terror Station(s) – Terror Station(p).**

Buys 3 Rock Videos and Primitive Art for \$420. Gains \$42 in port commissions. Space Revolver gains \$30 in factory commissions.

**3<sup>rd</sup>: Paul Bolduc (Eeepeeep/R. Olivaw)**

**Thunderbolt Greaselapper Rolls Used: 5 \* 4**

**Rumble Port (p) – R – B – (Y) – B – R – B – (Y) – B – R – Jewelpport(p) – B – Jellybeast Landing(p).**

Sells Mulch Wine for \$60 plus \$60 demand (from the cup: Demand for Dust at 7a and Demand for Perfume at 3). Sells Mulch Wine for \$60 (from the cup: Demand for Furniture at 9b). Buys 2 Finest Dust for \$20. Gains \$20 in port commissions.

**Dennis Cain (Niks)**

**Space Revolver Rolls Used: 4 4 6 6**

**Ice Station(p) – A – R – TeleGate 5 – TeleGate 6 – R – B – Y – Airhome.**

Buys Other Shoes for \$80. Receives \$40 in factory commissions and \$8 in port commissions.

**Space Howitzer Rolls Used: 5 6**

**Asteroid City East – (R10) – A – Airhome – (Y) – B – (R) – TeleGate 6 – B10 – Titan's Tower(p).**

5<sup>th</sup>: Chris Geggus (Qossuth)

Atlantis Rolls Used: 1 \* 3

R – B – (Y) – B – R

Kormoran Rolls Used: 3 \* 3

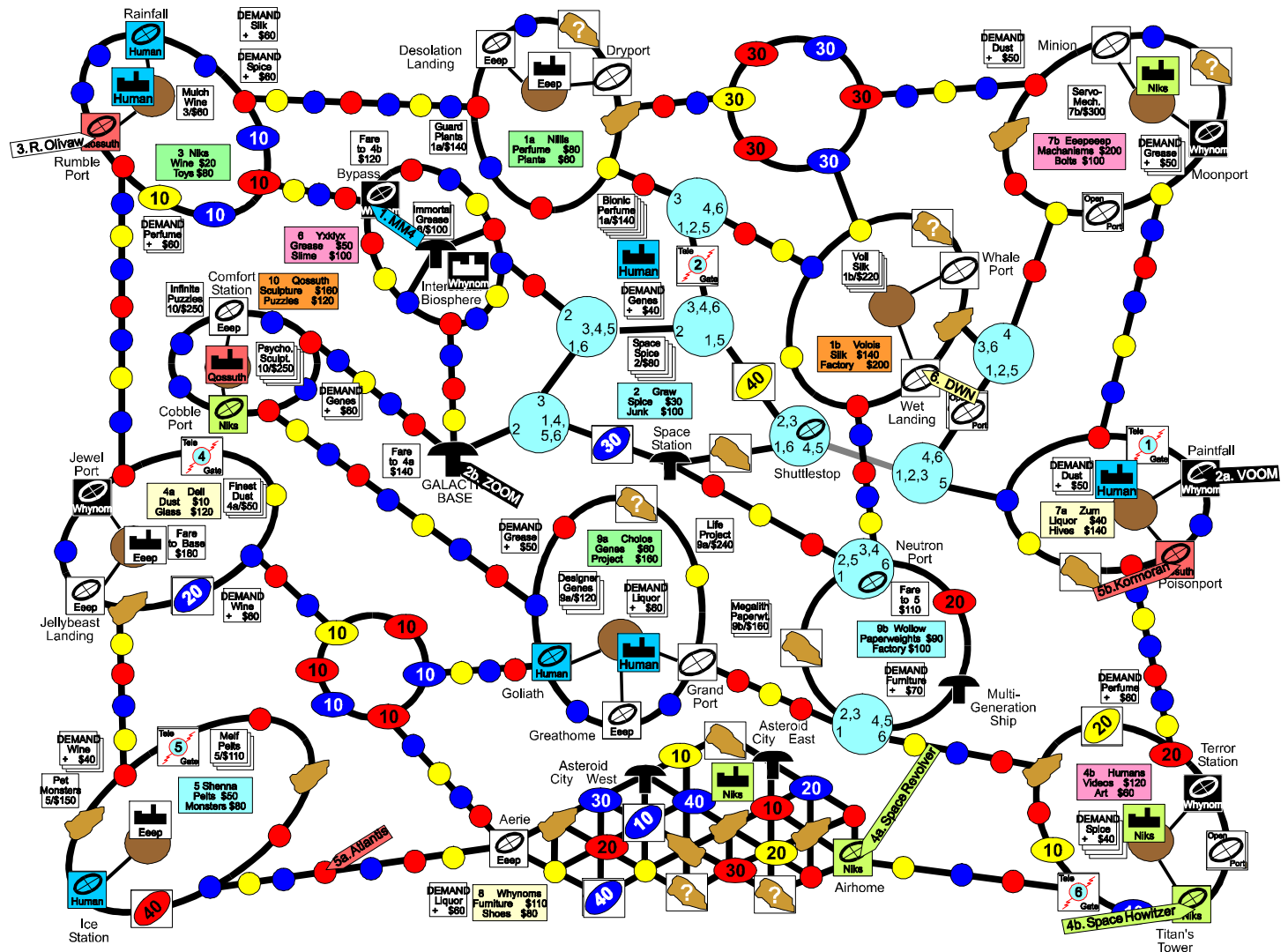
B – Y – B – R – Poisonport(p).

Sells Rock Videos for \$200 (from the cup: Bionic Perfume at 1a). Sells

Rock Videos for \$200 (from the cup: Demand for Perfume at 3). Buys 2 Chiclé Liquor for \$80. Gains \$48 in port commissions.

6<sup>th</sup>: Bob Robles (Dell/Dells Without Names) Rolls Used: 3 6

Multi-Generation Ship – NC3 – A – NC3 – Y – B – R – B – R – Wet Landing(o).



### Turn 27

1<sup>st</sup>: Andy Lewis (Humans/Mystery Machine 4) Rolls Used: 1 3 6

Bypass – R – B – Y – R – B – R – NC3 – NC3 – TeleGate 2 – NC3.

2<sup>nd</sup>: Dave Partridge (Whynoms)

Venus-Orion Oligarch Merchante 4 4 (uses Auto Pilot)

Terror Station(p) – (R20) – (Y) – B – (R) – B – (Y) – B – (R) – Poisonport(p) – B – Paintfall(p).

Sells Rock Videos for \$200 (from the cup: Psychotic Sculpture at 10). Sells Rock Videos for \$200 (from the cup: Fare to 4b at 6). Sells Rock Videos for \$200 (from the cup: Demand for Wine at 5). Sells Primitive Art for \$160

Currently available:

1a (Nillis): 5 Bionic Perfume, Guard Plants

1b (Volois): 4 Voll Silk

2 (Graw): 4 Space Spice, 2 Demand for Designer Genes (+\$40)

3 (Niks): 1 Mulch Wine, 1 Demand for Voll Silk (+\$60), 1 Demand for Space Spice (+\$60), 2 Demand for Bionic Perfume (+\$60)

4a (Dell): Fare to Base (\$180), 3 Finest Dust, 1 Demand for Mulch Wine (+\$60).

4b (Humans): 4 Demand for Space Spice (+\$40), 1 Demand for Bionic Perfume (+\$60)

(from the cup: Demand for Wine at 4a). Buys 3 Chiclé Liquor for \$120 and Custom Hives for \$140. Gains \$92 in port commissions. Mystery Machine 4 gains \$70 in factory commissions.

ZOOM Rolls Used: 2 5 6 6

Paintfall(s) – Paintfall(p) – TeleGate 1 – TeleGate 2 – NC2 – NC2 – R – B – Y – B – R – B – R – Y – Galactic Base.

Drops off Fare to Base for \$110 (from the cup: Psychotic Sculpture at 10). Picks up Fare to 2.

5 (Shenna): 3 Demand for Mulch Wine (+\$50), Pet Monsters, 4 Melf Pelts, 1 Demand for Finest Dust (+\$50)

6 (Yxklyx): 2 Immortal Grease, Fare to 4b (\$120)

7a (Zum): 2 Demand for Finest Dust (+\$50)

7b (Eeepeee): 3 Demand for Immortal Grease (+\$50), 2 Demand for Finest Dust (+\$50), Servo-Mechanism

8 (Whynoms): 1 Demand for Chiclé Liquor (+\$60)

9a (Cholos): 3 Designer Genes, 2 Demand for Chiclé Liquor (+\$60), Life Project,

1 Demand for Immortal Grease (+\$50)

Genes (+\$60)

**9b (Wollow):** 2 Megalith Paperweights, Fare to 5 (\$110), 1 Demand for Impossible Furniture (+\$70)

**Base:** Fare to 4a (\$140)

**10 (Qossuth):** 4 Psychotic Sculpture, Infinite Puzzles, 2 Demand for Designer

**1. Mystery Machine 4** **\$1652**  
Normal Scout  
28: 1 2 2/29: 3 4 4

Hold1	Hold2	Hull
Immortal Grease 6/\$100	Immortal Grease 6/\$100	Shield (\$60)
Graw \$200	Niks \$200	
Zum \$200	Goliath \$200	
Cholos \$200	Rainfall \$200	Ice Station \$200

**2a. VOOM** **\$1659**  
Fast Freighter  
28: 4 4//29: 1 4 (Use 1 x 2)

Hold1	Hold2	Hold3	Hull
Chicle Liquor 7a/\$90	Chicle Liquor 7a/\$90	Chicle Liquor 7a/\$90	RELIC Auto Pilot 4 \$80
Hold4	Hold5		
Custom Hives 7a/\$220	Comb. Hives (\$300)		
Jewelport \$200	Bypass \$200	Yxklyx \$200	Moonport \$200
Terror Station \$200	Paintfall \$200		

**2b. ZOOM**  
Fast Clipper  
28: 2 2 5//29: 4 5 5 (Double 1)

Hold1	Hold2	Hull
	Fare to 2 \$160	

**3. R. Olivaw** **\$1334**  
Rocket Scout  
27: 1 3//28: 1 4//29: 1 5 (Use 1 \* 4)

Hold1	Hold2	Hull
Finest Dust 4a/\$50	Finest Dust 4a/\$50	Shield (\$60)
Shenna \$100		RELIC Yellow Drive \$80
Comfort Station \$200	Desolation Landing \$200	
Dell \$200	Aerie \$200	Jellybeast Landing \$200
Greathome \$200	Nillis \$100	

**4a. Space Revolver** **\$768**  
Sports Clipper  
27: 1 6 6 6//28: 1 1 2 6 (Use 2\*2)

Hold1	Hold2	Hull
Other Shoes 8/\$160	Fare to Base \$140	Shield (\$60)
Cobble Port \$200	Titan's Tower \$200	Airhome \$200
Eeepseep \$100	Human \$100	Whynoms \$100

**4b. Space Howitzer**  
Sport Freighter  
27: 2 5 6//28: 1 3 5 (Use 2)

Hold1	Hold2	Hold3	Hull
Imposs. Furniture 8/\$180			
Hold4	Hold5		
Red Drive (\$120)			
Yellow Drive (\$80)			

**5a. Atlantis** **\$437**  
Torch Scout  
27: 6//27: 5 (Times 3)

Hold1	Hold2	Hull
Chicle Liquor 7a/\$90	Megalith Paperwt. 9b/\$160	Yellow Drive (\$80)
		Shield (\$60)
Rumble Port \$200	Poisonport \$200	

**5b. Kormoran**  
Torch Transport  
27: 2//28: 4 (Times 3)

Hold1	Hold2	Hold3	Hull
Chicle Liquor 7a/\$90	Chicle Liquor 7a/\$90	Fare to Base \$150	Eq.

**6. Dells Without Names** **\$440**  
Scow Scout  
27: 1 2 5 6//28: 2 3 3 6 (Use 2)

Hold1	Hold2	Hull
Megalith Paperwt. 9b/\$160	Megalith Paperwt. 9b/\$160	Relic Shield (\$60)
7b \$100		RELIC Gate Lock \$100

## Doberman

### Turn 7a

Turn 7b due 12/26, Wednesday

### Available Cards

Set 1	Set 2	Set 3	Set 4	Set 5
Waste Disposal	Waste Disposal	Bribery	Waste Removal	Growth
Order	Advisor	Growth	Hiring/Firing	Innovation
Raw Materials	Innovation	Waste Removal	Innovation	Order

PIT takes set 5.

GOO takes set 1.

100% Trash takes set 4.

BIBCO takes set 2

The Players

Player	Company Name	Play Order	Money	Loans	Raw Material Supply	Growth	Co-workers	Saved Card
Michael Longdin	100%Trash	3	\$3	10	4	16	5	
Dave Partridge	BIBCO	4	\$38	0	5	16	5	Hiring/Firing
Richard Weiss	PIT	1	\$15	0	6	19	4	Growth
Eric Brosius	GOO	2	\$13	0	5	15	4	

GOO stands for General Olfactory Organization. BIBCO stands for Big Industry Buying Congressmen Outright

Player	Rationalization	Raw Materials	Waste Reduction	Waste Disposal	Victory Points
Michael Longdin	5/1	1/15	5/1	16	22
Dave Partridge	5/1	4/3	4/3	12	42
Richard Weiss	5/1	5/1	5/1	0	29
Eric Brosius	4/3	4/3	2/10	5	37

Deck will be reshuffled for the turn 8 draw.

Cards

100%Trash	BIBCO	PIT	GOO
Waste Removal	Waste Disposal	Growth	Waste Disposal
Hiring/Firing	Advisor	Innovation	Order
Innovation	Innovation	Order	Raw Materials

Discards

Raw Materials	Advisor	Hiring/Firing	Waste Disposal	Raw Materials	Growth	Order
Waste Removal	Order	Innovation	Order	Bribery	Waste Disposal	Raw Materials
Innovation	Waste Disposal	Growth	Innovation	Accident	Bribery	Growth
Waste Removal						

Flea CollarKremlin**Turn 3 Special Influence Declaration Phase****Turn 4 Cure through Health, 10/2, Tuesday**

HLM plays World Wide Recession (52) allowing double the normal amount of declared influence.

MLI declares 3 IP on Wasolin, putting him to 11+, and takes 1 card:

Must discard one card.

LWT declares 4 IP on Putschnik.

HLM declares 4 IP plus 5 more on Putschnik.

REDS declares 4 IP on Satin.

KGB draws 4 cards:

Must discard one card.

TCC draws 4 cards:

Must discard two cards.

Politburo

Office	Policitian	Condition	Influence
Party Chief	Natasha Nogoodnik (V)	89, ++	<b>3 (MLI)</b>
KGB Head	Anatol Mischif (I)	72, strong, ?	<b>5 (MLI)</b> , 4 (TCC)
Foreign	<b>Lech Schukrutoff (B)</b>	82 +, ?	3 (KGB), 2 (LWT), <b>5 (HLM)</b>

Office	Policitian	Condition	Influence
Defense	Viktor Wasolin (Z)	50, ?	<b>11+ (MLI)</b>
Ideology	Oleg Satin (O)	62, strong	<b>4 (REDS)</b>
Industry	Ulan Putschnik (Y)	52	4 (LWT), <b>9 (HLM)</b>
Economy	Alexej Goferbrok (C)	81, +	2 (MLI), 9 (TCC), <b>10 (LWT)</b>
Sport	Eduard Boremtodev (K)	66, weak, +, ?	4 (MLI), <b>5 (TCC)</b>

Politicians in **bold** are in the sanatorium.

Alexej Goferbrok is currently **Blackmailing (20)** Natasha Nogoodnik.

**Candidates:** Q, T, U, W, X

**People:** D, E, G, H, J, L, M, N, P, R, S (68, +)

**Siberia:**

**Kremlin Wall:** A, G, F

Players

Player	Faction Name
Bob Robles	Hard Line Mencheviks
Brendan Whyte	Left-wing Trendies
Pasquale Giovine	Marxist-Leninist Integralists
Mike Scott	The California Connection
Chris Geggus	King's Gambit for Bishops (KGB)
Cary Nichols	Re-Education Deployment Society (REDS)

Intrigue CardsUndeclared Influence**Terrier****Silverton****Turn 7, Phases IV- VI and Turn 8, Phases I-III****Turn 8, Phases IV- VI and Turn 9, Phases I-III, 12/26, Wednesday****Turn 7**Operations

**Brown** (Partridge) operates #48 (\$40, 2 silver). Gains \$130 from passenger revenue.

**Blue** (Bolduc) operates #88 (\$50, 3 coal). Delivers 3 coal to Denver for \$360. Gains \$20 from passenger revenue.

**Red** (Scharf) operates #98 (\$60, depletes), #102 (\$40, 3 silver), and #108 (\$40, 2 copper). Delivers 3 gold from Pinos Altos to El Paso for \$900. Receives \$60 in passenger revenue.

**Aqua** (Lewis) operates #35 (\$50, 2 silver), #68 (\$20, 2 coal), and #73 (\$20, 4 coal). Gains \$20 from passenger revenue.

**Green** (Longdin) operates #92 (\$40, 4 coal), #47 (\$40, 2 silver), and #41 (\$50, depletes). Deliver 4 coal from Raton to Denver for \$480.

**Orange** (Hooton) operates #106 (\$30, 1 copper) and #113 (\$30, 1 lumber). Delivers 3 lumber from Porter to Santa Fe for \$300. Gains \$90 in passenger revenue. Hires a second Prospector for \$400.

Determine Price Changes

Gold: -1 to \$275

Copper: +3 to \$400

Silver: +5 to \$200

	Denver	Salt Lake City	Pueblo	Santa Fe	El Paso
Lumber:	Remains at \$200	+1 to \$300	Remains at \$200	+2 to \$160	Remains at \$200
Coal:	+2 to \$140	+1 to \$100	+1 to \$30	Remains at \$100	+1 to \$100

**Turn 8**Move Prospectors and Surveyors

**Brown** (Partridge) surveys Montrose to Delta and Montrose to Ouray to Placerville, no prospecting.

**Blue** (Bolduc) surveys Orestad to Glenwood Springs, no prospecting

**Red** (Scharf) surveys Socorro to Magdalena, no prospecting

**Aqua** (Lewis) surveys Mack to Grand Junction and Mack to Rangely, prospect #74.

**Green** (Longdin) no surveying, prospects passenger line 9.

**Orange** (Hooton) surveys Pagosa Springs to Durango, prospects #63 and #65.

Dispute Resolution

No disputes. Brown spends \$180, Blue spends \$120, Red spends \$80, Aqua spends \$300, Green spends \$230, and Orange spends \$440.

The Players

Player	Color	Starting Location	Money	Trains	Snowplows	Personnel
Dave Partridge	Brown	Denver	\$150	9, 15		S, S, P+1
Paul Bolduc	Blue	Denver	\$295	9, 15		S, S+1, P
Bill Scharf	Red	El Paso	\$1105	9		S, P
Andy Lewis	Aqua	Salt Lake City	\$1070	9, 15		S, S, P
Michael Longdin	Green	Pueblo	\$630	9, 15	+2	S+2, S, P
Dave Hooton	Orange	Santa Fe	\$130	9, 15		S, S, P, P

Purchased Claims

#	City	Owner	Type	Goods	Operation
48	Ouray	Brown	Silver	2	\$40
32	Fairplay	Blue	Gold	1	\$50
88	Walsenburg	Blue	Coal	0	\$50
105	Silver City	Red	Silver	1	Depleted
98	Pinos Altos	Red	Gold	2	Depleted
102	Hillsboro	Red	Silver	5	\$40
108	Lordsburg	Red	Copper	2	\$40
36	Eureka	Aqua	Silver	1	Depleted

#	City	Owner			
67	Coalville	Aqua	Coal	1	Depleted
35	Heber City	Aqua	Silver	6	\$50
37	Eureka	Aqua	Silver	4	Depleted
68	Scofield	Aqua	Coal	6	\$20
73	Hiawatha	Aqua	Coal	3	\$20
74	Elk Springs	Aqua	Coal	N	\$20
92	Raton	Green	Coal	9	\$40
81	Crested Butte	Green	Coal	5	\$40
47	Ouray	Green	Silver	2	\$40



#	City	Owner	Type	Goods	Operation
106	Cuba	Orange	Copper	1	\$30
119	Farmington	Orange	Coal	3	\$40
113	Porter	Orange	Lumber	4	\$30
128	South Fork	Orange	Silver	N	\$40
65	El Vado	Orange	Lumber	N	\$30
63	Lumberton	Orange	Lumber	N	\$50

Purchased Passenger Lines

#	Type	Route	Payoff	Owner	Notes
3	A	Denver – Colorado Springs	\$50	Brown	
5	A	Denver – Pueblo	\$80	Brown	
1	A	Denver – Boulder	\$20	Blue	
4	A	El Paso – Deming	\$60	Red	
2	A	Salt Lake City – Provo	\$20	Aqua	
9	B	Denver – Leadville	\$120	Green	
6	A	Santa Fe – Albuquerque	\$90	Orange	

Available Claims

#	City	Type	Claim	Operation
46	Telluride	Silver	\$160	\$40
80	Aspen	Coal	\$60	\$30
121	York Canyon	Coal	\$100	\$30
53	Lake City	Silver	\$60	\$30
51	Silverton	Silver	\$60	\$30
83	Durango	Coal	\$80	\$20
90	Trinidad	Coal	\$80	\$40
101	Lake Valley	Silver	\$140	\$20

Available Passenger Lines

#	Type	Route	Payoff	Cost	Notes
12	B	Pueblo – Grand Jct.	\$150	\$310	Discard when 20 is taken. Good for \$150 toward card 20 or 21
15	B	Denver – Grand Jct.	\$270	\$435	Discard when 22 is taken. Good for \$270 toward card 22
22	C	Denver – Salt Lake City	\$800	\$1100	
11	B	Salt Lake City – Grand Jct.	\$140	\$310	Discard when 20 is taken. Good for \$140 toward card 20 or 21
8	A	Denver – Leadville	\$260	\$500	Discard after 3 more Leadville depletions
10	B	Denver – Aspen	\$130	\$250	
13	B	El Paso – Santa Fe	\$140	\$320	
7	A	Pueblo – Santa Fe	\$120	\$280	

Available Trains

Type	# Available	Cost
9	0	\$80
15	1	\$120
24	8	\$200

Available Snowplows

Type	# Available	Cost
Die +2	2	\$40
Die +3	4	\$70

**Hound**

**Turn 6**

**Deadline Turn 7, 12/26, Wednesday**

Commander Actions

**Roobie-Roo** opens the bidding on a Warehouse at 25 and gets it (Or1, Wa4, Or5, Wa5, Wa5, HE discount).

**Brosiarium** buys a water factory (Or4, Wa8, Wa8) and a population factor (Or4, Wa6)

**FEARLESS** passes.

**BORG** opens the bidding on a Nodule at 26 and gets it (Wa8, Ti13, HE discount). Buys a population factor (Or4, Ti7).

**Miles from Nowhere** buys a titanium factory (Or2, Or3, Or5, Wa6, Wa7, Wa7) and moves a population factor from an ore factory to man it.

**Scharfpost** passes.

**Little Green Men** buys a water factory (Wa6, Wa7, Wa7) and moves a population factor from an ore factory to man it.

**Golden Orb** opens the bidding on Heavy Equipment at 30 and gets it (Or1, Or3, Or4, Wa5, Wa5, Wa6, Wa6).

**Bartertown X** buys a water factory (Wa6, Wa6, Wa8) and a population factor (Or1, Or2, Or2, Wa5)

**HBDC** buys 2 population factors (Wa6, Wa7, Wa7)

The Players

	Outpost Name	Commander	Factories	Upgrades	VP
1	BORG	Dave Hooton	OrF, OrF, WaF, WaF, TiF, TiF	HE, No	10
2	Miles from Nowhere	Michael Longdin	OrF, OrF, WaF, WaF, TiF	HE, No	9
3	Roobie-Roo	Andy Lewis	OrF, OrF, WaF, WaF, WaF	HE, No, Wa	9
4	Brosiarium	Eric Brosius	OrF, OrF, WaF, WaF, WaF, WaF, WaF	No	9
5	Scharfpost	Bill Scharf	OrF, OrF, WaF	3DL, Wa	7
6	FEARLESS	Michael Lowrey	OrF, OrF, WaF, WaF, WaF, WaF	No	7
7	Bartertown X	Andy York	OrF, OrF, WaF, WaF, WaF	2DL	7
8	Little Green Men	Dave Partridge	OrF, OrF, WaF, WaF, WaF, WaF, WaF	No	7
9	Golden Orb	Cary Nichols	OrF, OrF, WaF, WaF	2DL, HE	7
10	HBDC	Kevin Wilson	OrF, OrF, WaF, WaF, WaF	HE, Wa	7

BORG is Basic Orbital Research Group. HBDC is Heavenly Bodies Development Corporation. FEARLESS is Forward Extraction and Resource Location

Exoterrestrial Space Services

Available Upgrades

New Arrival: Laboratory, Ecoplants, Robots

Upgrade	Minimum Bid	Available	Not Yet Delivered
Warehouse (Wa)	25	4	0
Heavy Equipment (HE)	30	2	0
Nodule (No)	25	1	0
Scientists (Sc)	40	0	7
Orbital Lab (OL)	50	0	7
Robots (Ro)	50	1	6
Laboratory (La)	80	1	6

Ecoplants (Ec)	30	1	6
Outpost (Ou)	100	0	7

Income

Bulldog

Turns 1.1 to 2.1

Deadline Turn 2.2 to 3.2, 12/26 Wednesday

Turn 1

Mike rolls an 11. Mike and Andy each gain 1 lumber, Michael and Dave H. each gain 1 wool. Builds a road from E12 to E13.

Dave P. rolls a 6. Dave P., Michael, Dave H., and Chris each gain 1 lumber. Dave P. trades 1 brick to Michael for 1 wool. Builds a ship from C4 to D4. Discovers 5 Field and gains 1 grain.

Michael rolls a 9. Dave P., Michael, and Andy each receive 1 brick. Builds a road from C14 to C13.

Andy rolls a 7. Places the Pirate at D/E16 and steals a wool from Dave H. Builds a ship from D8 to D7.

Dave H. rolls an 11. Mike and Andy each gain 1 lumber, Michael and Dave H. each gain 1 wool. Trades 1 brick to Chris for 1 lumber. Builds a ship from D17 to D18.

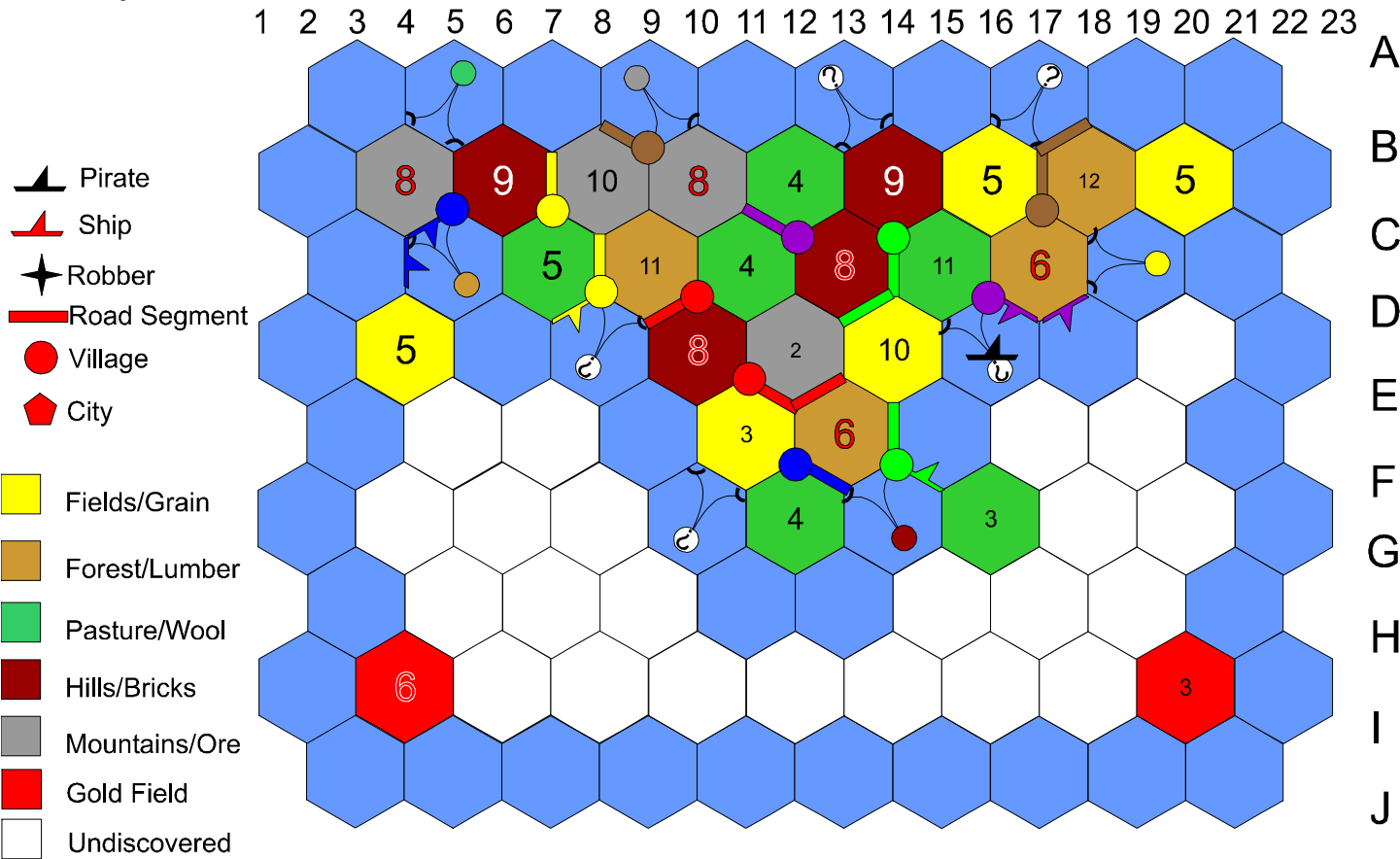
Chris rolls a 9. Dave P., Michael, and Andy each receive 1 brick. Chris trades 1 grain to Dave H. for 1 wool. Builds a road from C17 to C18.

Turn 2

Mike rolls a 3. Mike and Dave P. each gain 1 grain. Passes. During the special build turn, Michael builds a ship from F14 to F15. It's a 3 Pasture and gains 1 wool.

Open Trades

Mike offers 1 grain for 1 wool.



Turn 2 Rolls

Dave P. 10 Michael 8 Andy 6 Dave H. 8 Chris 4

Turn 3 Rolls

Mike 8 Dave P. 6

The Players

Player	Color	Grain	Wool	Lumber	Brick	Ore	Development Cards	VP
Mike Scott	Red	2			1	1		2
Dave Partridge	Blue	2		2		1		2
Michael Longdin	Green		1	2				2
Andy York	Yellow		1	2	2			2
Dave Hooton	Purple	1			1			2
Chris Geggus	Brown		1		1			2

MalamuteTurn 2Deadline Turn 3, 12/26 WednesdayPlanning

**English** maintain 4 ships (\$16), buy a ship (\$12) and 5 soldiers (\$50) for \$78.

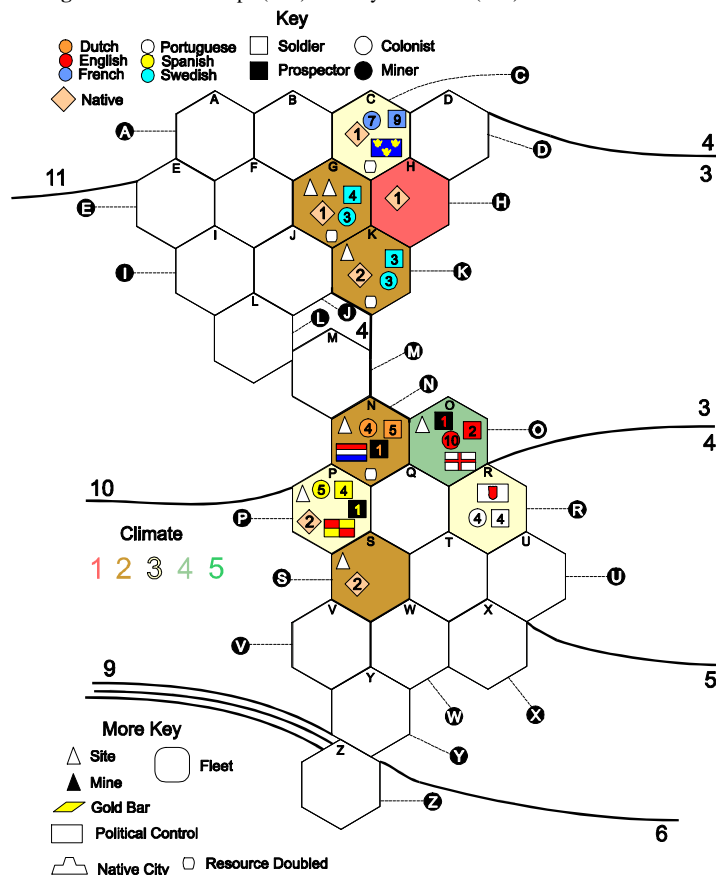
**Swedes** maintains 4 ships (\$16) and buys 4 soldiers (\$40) for \$56.

**Spanish** maintain 3 ships (\$12), buy 1 ship (\$12) and 4 soldiers (\$40) for \$64.

**French** maintain 4 ships (\$16), buy 1 ship (\$12) and 6 soldiers (\$60) for \$88.

**Dutch** maintains 4 ships (\$16) and buys 5 soldiers (\$50) for \$66.

**Portuguese** maintain 5 ships (\$20) and buy 2 soldiers (\$20) for \$40.

Outbound Naval Movement

**English** Move to O. Dice: 5, 6, 6. No losses.

**Swedes** Move to K. Dice: 1, 4, 5. Loses 1 ship containing 1 soldier and 1 colonist..

**Spanish** Move to P. Dice: 1, 1, 2, 2, 4, 5, 5, 5, 6. Loses 2 colonists and 1 soldier. Drops off 2 colonists and 2 soldiers. Move to S. Die: 2. No losses.

**French** Move to C. Dice: 3, 3, 5, 6. No losses.

**Dutch** Move to N. Dice: 3, 4, 6, 6. No losses.

**Portuguese** Move to R. Dice: 1, 4, 5, 5. No losses.

Land Movement

**English** move 5 soldiers and 5 colonists into area O. One soldier prospects.

**Swedes** move 3 colonists and 4 soldiers H to G. It is a resource rich climate 2 area

with 2 sites and 1 native. Move 3 colonists and 3 soldiers to area K. It's a resource rich climate 2 area with 1 site and 2 natives.

**Spanish** move 2 colonists and 2 soldiers into area P. One soldier prospects. Moves 1 soldier into area S.. It is a climate 2 area with 1 site and 2 natives. Soldier prospects.

**French** move 4 colonists and 6 soldiers into area C.

**Dutch** move 5 soldiers and 3 colonists into area N. One soldier prospects.

**Portuguese** move 4 colonists and 2 soldiers into area R.

Native Combat

**English:** 3 natives and 4 soldiers killed.

Native Uprisings

Climate is a 4. No uprisings.

Survival

Climate is a 4.

**French** lose 1 soldier in C. **Dutch** lose 1 colonist in N. **Spanish** lose 1 soldier in P and 1 prospector in S. **Portuguese** lose 1 soldier in R.

Political Control

**French** gain political control of C. **Dutch** gain political control of N. **Spanish** gain political control of P. **Portuguese** gain political control of R.

Homebound Naval Movement

**English:** Dice: 1, 2, 4. No losses.

**Swedes:** Dice: 1, 3, 6. Loses 1 ship.

**Spanish:** Dice: 1, 2, 2, 3, 3, 4, 5, 6, 6. Loses 1 ship.

**French:** Dice: 1, 1, 1, 5. No losses.

**Dutch:** Dice: 1, 4, 5, 6. No losses.

**Portuguese:** Dice: 2, 4, 5, 6. No losses.

Income

**English:** Political Control: \$40, resources: \$10.

**Swedes:** Political Control: \$20, resources: \$12.

**Spanish:** Political Control: \$40, resources: \$5.

**French:** Political Control: \$40, resources: \$14.

**Dutch:** Political Control: \$40, resources: \$16.

**Portuguese:** Political Control: \$40, resources: \$4.

Turn 3 Initiative

Swedes, Dutch, Spanish, English, French, Portuguese

Portuguese attitude is (dr = 8 - 1 = 7) Expansion.

Players

Country	Player	Money	Available Soldiers	Ships	Colonists
French	Dennis Cain	\$64	14	4	4
Swedes	Andy Lewis	\$71	16	2	4
Dutch	Andy York	\$80	14	4	5
English	Dave Partridge	\$99	16	5	5
Spanish	Cary Nichols	\$76	16	3	4
Portuguese	Non-Player	\$67	16	5	4

## Cats and Dogs

### Epoch 1 Egypt, Minoans, and Indus Valley

#### Deadline Epoch I Babylonians, Shang Dynasty, and Aryans, 12/26 Wednesday

#### Epoch I

**100% Pussycats** (Longdin). EGYPT. Army and Capital Nile Delta, ship Eastern Mediterranean, , armies Nubia, Levant, Morea. Builds Monument Nile Delta.

Points: Presence in North Africa (1) and Middle East (2), 1 Capital (2), 1 Sea (1), and 1 Monument (1) for 7 points.

**Marching Through the Ages** (Lewis): MINOANS. Army and Capital Crete, fleet Eastern Mediterranean (vs. 100% Pussycats: MTTA: 5, 1; 100P: 5; MTTA: 3, 2; 100P: 3; MTTA: 5, 3; 100P: 1; wins), army Western Anatolia, Balkans. Plays Engineering and builds forts in Western Anatolia and Crete. Points: Presence in Middle East (2), 1 Capital (2), 1 Sea (1) for 5 points.

**The Time Traveler** (Anderson): Plays Hittites. Army and Capital Eastern Anatolia, army Levant (vs. Egypt: H: 4, 4; E: 5; loses), Zagros (vs. Sumerians: H: 4, 1; S: 2; wins). INDUS VALLEY. Army and Capital Lower Indus (Sumerian army retreats to Hindu Kush), army Western Deccan, Hindu Kush (vs. Sumerians: I: 6, 4; S: 5, 4; I: 1, 1; S: 5, 4; loses), Western Ghats. Points: Dominance in India (2), Presence in Middle East (2), 2 Capitals (4) for 8 points.

#### Players

Player Name	Player Faction Name/Color	Empire Strength Points	Victory Points
Kevin Wilson	Royal Manticoran Historical Society (purple)	0	0
Paul Bolduc	Arachnids (blue)	0	0
Dave Partridge	The Questioner (yellow)	0	0
Dennis Cain	Systematic Chaos (black)	4	9
Dave Anderson	The Time Traveler (orange)	4	8
Andy Lewis	Marching through the Ages (red)	4	5
Michael Longdin	100% Pussycats (green)	5	7

#### Positions

**Systematic Chaos:** SUMERIANS: Army, Capital, and Monument Lower Tigris, armies Persian Plateau, Hindu Kush, Upper Indus.

**100% Pussycats:** EGYPT: Army, Capital, and Monument Nile Delta, armies Morea, Nubia, Levant.

**Marching Through the Ages:** Fleet Eastern Mediterranean. MINOANS: Army, Capital, and Fort in Crete, army and Fort in Western Anatolia, army Balkans.

**The Time Traveler:** HITTITES: Army and Capital Eastern Anatolia, army Zagros. INDUS VALLEY: Army and Capital Lower Indus, armies Western Deccan, Western Ghats.

#### Event Cards

#### Epoch I Empire

## Pedagoguery

I've mentioned many times before in these columns that the two pillars of modern physics, general relativity and quantum mechanics, are mutually exclusive. Evidence of this fact lies in a subtle flaw in Stephen Hawking's explanation of why black holes emit radiation. Hawking's triumph is a partial combination of the two theories. Quantum mechanics states that at small scales, virtual pairs of particles are being created and annihilating in the vacuum all the time. Hawking visualized this process taking place at the event horizon of a black hole. If one of the pairs of virtual particles fell into the black hole before it annihilated with its counterpart, that counterpart would become real, and the energy for it to do so would come from the black hole itself. The problem arises from the fact that any particle traveling from the event horizon of a black hole would have its wavelength redshifted to an infinite extent; so for it to be visible at any distance from the black hole, it would have to start with a wavelength of zero. However, zero is smaller than the Planck length, below which relativity theory is invalid. How to resolve this conflict? Some surprising insights are coming from the study of the flow of sound in a flowing fluid.

There is an acoustic equivalent to a black hole. You take a fluid flowing along in a pipe and you insert something called a Laval nozzle into the pipe. A Laval nozzle is found at the end of rockets. It contains a constriction that forces the fluid to go supersonic as it flows past. That transition where the fluid goes supersonic is analogous to the event horizon of a black hole. In the subsonic portion, sound waves can travel in all directions, but once a sound wave passes through the nozzle into the supersonic region, it cannot travel fast enough to reenter the subsonic

region, since the medium through which its passing is going faster than it is. There is even a region just short of the sonic event horizon where quantum effects produce low volume sound analogous to Hawking radiation. A microphone placed just upstream from the nozzle will pick up a faint hiss, energy that is being drawn from the fluid flow.

The interesting thing about this "Hawking sound" is that the wavelengths produced at the sonic event horizon are very small, comparable to the separation distance between the molecules within the fluid. This tells us that the granularity of the fluid plays an important role.

When sound waves are very short (on the order of the molecular distance), they behave differently than when they are much longer. In particular, their speed of propagation depends on the wavelength. Depending on the specifics of the fluid, the velocity can either decrease with shorter wavelengths, or increase. The first type is referred to as Type II dispersion, and the second as Type III. Type I is the case in a perfect fluid where the speed never changes. In a Type II fluid, if you take the sonic equivalent of a photon, called a phonon, and follow it backwards in time as it travels back to the sonic event horizon. Initially, it simply travels back, its wavelength getting shorter and shorter until dispersion effects start to matter. Then a strange thing happens; it starts to slow down, and eventually reverse direction. In a Type III fluid, they would accelerate, go faster than the local speed of sound, and pass through the event horizon.

What does this tell us about spacetime? We can consider it to be a fluid with particles on the order of the Planck length. When the wavelength of a photon gets

down to that length, dispersion type effects would govern its behavior. This gives us a possible fix for the flaw in Hawking's model. If spacetime exhibits Type II dispersion, then Hawking radiation originates from just outside the event horizon, and one of the photons, curves back and around to escape. If spacetime exhibits Type III dispersion, then Hawking radiation originates from *inside* the event

horizon, and one of the photons momentarily exceeds the velocity of light to escape. Either way, it points to a granular structure for spacetime that meshes nicely with many quantum gravity theories.

Next issue: The origins of brown dwarf stars.

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## House Rules for Power Grid

Power Grid is a game where players build power plants and attempt to supply power to the greatest number of cities.

A Turn

The basic turn order is:

1. Determine Player Order
2. Buy Power Plant
3. Buy Raw Materials
4. Building
5. Bureaucracy

Each game turn will be played in at least two zine turns, with Phase 2 (Buy Power Plant) taking place over at least one zine turn, and the remainder of the turn taking another zine turn. Specifics of each phase are:

### 2. Buy Power Plant

Each player should indicate which of the available power plants they will bid on, and their maximum bid for each one. Keep in mind that as power plants are purchased, new ones will become available, and provide conditionals appropriately. If the GM encounters a situation in which the available conditional orders are not sufficient, he will split the turn at that point. Remember also that each player can purchase only one power plant per turn, and if you pass on your turn to initiate a bid, you may not bid subsequently.

During the first game turn, after all players have had the opportunity to buy a power plant, the GM will re-determine the player order for the subsequent phases.

### 3. Buy Raw Materials

Each player should indicate which raw materials (coal, oil, trash, and uranium) he will buy, and how much of each. Keep in mind that this phase is conducted in the reverse player order, so players connected to fewer cities will tend to get the cheaper raw materials.

### 4. Building

Each player should indicate which cities they will connect to. In the first turn, provide a preference list for your starting city. Provide conditionals in the event that a city you want to connect to is unavailable due to the build of a player who goes before you. Keep in mind that this phase is conducted in the reverse player order. If the build of a player causes available power plants to become obsolete, the GM will adjust the power plant market.

### 5. Bureaucracy

Each player should indicate which power plants will operate to provide power to interconnected cities. The GM will provide money to each player based on that, restock the raw materials, and adjust the power plant market.

### 1. Determine Player Order

The GM will determine the player order for the subsequent turn and let all players know.

Pre-Game

After the initial game announcement, the players will be asked to provide the following:

1. The preference of whether to play on the U.S. or Germany map.
2. For each map, the preference of which regions to use.
3. Power company name and color.

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## House Rules for Puerto Rico

Puerto Rico is a game of colonization and development of the island of Puerto Rico. Players create plantations to create commodities to sell locally or transport back to Europe, and build buildings to give themselves some special capabilities.

At the start of the game, the GM will randomly determine the identity of the Governor and provide the initial list of available plantations.

Each turn, each player should provide a preference list of which role they want to take (Settler, Mayor, Builder, Craftsman, Captain, or Prospector), as well as their orders for their actions for each role except for Prospector.

Some items to keep in mind:

**Settler:** Provide a preference list of plantations, based on those available. If you have a Construction hut, or if you have selected the Settler role, indicate whether you will take a Quarry. If you have a Forest House, indicate if you will take a Forest, and if so, which plantation you will remove from the game. If you selected the Settler role and you have a Library, provide a preference list for your second plantation.

**Mayor:** Indicate where you will place your new settlers.

**Builder:** Please provide a preference list for which building you want.

**Craftsman:** If you selected the Craftsman role, indicate which commodity you will produce for your bonus.

**Captain:** Indicate which commodities you will ship, and which ship you will put them in. If you have a Wharf or Small Wharf, indicate which commodities (if any) you will ship via that route.

Note that I have the expansion set available.

## Addresses

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## Standbys

Anybody who gets onto my standby list automatically receives one free issue of *S.O.B.* In addition, if you actually submit standby orders, you get another free issue. So, let's get those people standing by. The current standby list is:

**Machiavelli (gunboat and regular):** Steve Koehler, Bill Scharf, Bob Robles, Mike Scott, Ward Narhi, Paul Bolduc, Pasquale Giovine, Andy York, Cary Nichols, Lee McConnell, Dave Partridge, Dale Horsely **Dune:** Steve Koehler, Paul Bolduc, Kevin Wilson, Ward Narhi, Andy York, Cary Nichols, Bill Scharf, Dave Partridge **New World:** Andy York, Bill Scharf, Cary Nichols, Dave Partridge **Merchant of Venus:** Paul Bolduc, Carrie Lewis, Bob Robles, Andy York, Cary Nichols, Dave Partridge **Outpost:** Michael Lowrey, Kevin Wilson, Andy York, Cary Nichols, Bill Scharf, Dave Partridge **History of the World:** Andy Lewis, Paul Bolduc, Kevin Wilson, Chris Geggus, Andy York, Cary Nichols, Dave Partridge **Stellar Conquest:** Paul Bolduc, Kevin Wilson, Andy York, Cary Nichols, Dave Partridge **Liftoff!:** Dennis Cain, Andy York, Cary Nichols, Bill Scharf, Dave Partridge **Age of Renaissance:** Bob Robles, Michael Lowrey, Cary Nichols, Dave Partridge, Michael Longdin **Kremlin:** Andy York, Andy Lewis, Pasquale Giovine, Cary Nichols, Bill Scharf, Dave Partridge, Michael Longdin **Silverton:** Cary Nichols, Bill Scharf, Dave Partridge **Settlers of Catan:** Michael Lowrey, Chris Geggus, Cary Nichols, Dave Partridge **Gunslinger:** none **Industrial Waste:** Michael Longdin

## Standby Calls

None this issue.