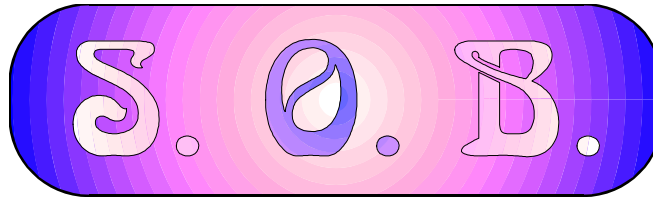


Number 146



August, 2008

Notes from Hades

Another issue is here, and I hope it finds you all well. The only traveling I actually did this past month was a family vacation to Las Vegas. We went there to meet up with some of Celeste's cousins. It was conveniently located for all of us, since we were all traveling in from elsewhere. The ironic thing about the choice is that none of us gamble. I do enjoy the occasional friendly poker game, but I know enough about probability to know that casinos are not a good place to make money, unless you're the house. The last time I had been there was in 1986, and it had changed considerably. Mainly, it had gotten more expensive. However, we did do some things that we enjoyed. The boys liked our tour of Hoover Dam, as well as the Pet Comedy Show. Beyond that, none of us have any real desire to go back.

There is one other event that happened. For the first time, I entered some of my wine into the Orange County Fair Home Wine Competition. I entered four bottles, a dry blackberry wine, a sweet blackberry wine, a peach wine, and a plum wine. The day of the competition, I actually went there and acted as a steward. There were 27 panels of judges, each panel judging a particular varietal of wine. Each panel had two stewards. It was the job of the stewards to pour the wine, take away the empty glasses, and generally keep things running smoothly. The judges rank the wines in double gold, gold, silver, bronze, and honorable mention categories. Double gold wines are eligible for Best of Show. My two blackberry wines got honorable mentions, the peach got a bronze, and the plum got gold.

The next deadline is **Tuesday, September 2 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

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.

Procyon. Merchant of Venus. 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, Ward Narhi, Michael Longdin, and Chris Geggus. This game is full.

Husky. Power Grid. Have Andy York, Michael Longdin, Dave Partridge, Dave Hooton, and Brad Martin, will take up to 1 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 and Dave Partridge, will take up to 2 more.

Outpost. Will start after Hound ends. Have Andy York, Cary Nighols, Dave Partridge, Dave Hooton, and Eric Brosius, will take up to 5 more.

Machiavelli. This game will start after the next Machiavelli game ends. Have Ward Narhi, Bob Robles, and Pasquale Giovine, will take up to 5 more.

Machiavelli. Gunboat. This game will start after the second Machiavelli game ends. Have 4, will take up to 4 more. You are signed up: .

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://homepages.roadrunner.com/sobhome>

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

Dog Park

Summer 1052

Miller Number 20077Apw10

**Advanced Rules, Natural Disasters, Special Military Units, Moneylenders, Conquest, Gray Press, Ultimate Victory
Deadline for Fall 1052 9/2, Tuesday**

The ducats fly as the Holy Roman Empire buys off the Venetian elite mercenary, while Venice reciprocates by disbanding a Holy Roman Empire army. The Pope and the Normans cooperate against the Muslims and Byzantines, while Pisa edges southward.

Expenditures

The Holy Roman Empire borrows 13 ducats for 2 years (20 ducats dur Summer 1054) and buys Venice EM A Verona for 21 ducats.

The Muslims spend 21 ducats to buy Norman EM F Gulf of Naples

The Normans spend the 6 ducats they received from the Pope to counterbribe EM F Gulf of Naples

The Papacy borrows 1 ducat for 2 years (2 ducats due Summer 1054), and gives 6 ducats to the Normans.

Venice borrows 10 ducats for 1 year (12 ducats due Summer 1053), and disbands Holy Roman Empire A Trent for 12 ducats.

Outstanding Loans

Spring 1053: 9 ducats due from the Muslims (6 borrowed)

Summer 1053: 12 ducats due from Venice (10 borrowed)
 Fall 1053: 14 ducats from Pisa (9 borrowed), 18 ducats from Byzantines (12 borrowed)
 Spring 1054: 29 ducats due from the Muslims (19 borrowed), 38 ducats due from the Normans (25 borrowed)
 Summer 1054: 2 ducats due from the Papacy (1 borrowed), 20 ducats due from the Holy Roman Empire (13 borrowed)

Orders

BYZANTINES (Giovine): A CROATIA holds, A Herzegovina to ALBANIA, A Aquila to Spoleto (DISLODGED, retreat Salerno, Bari, OTB), F LOWER ADRIATIC to Ancona, F IONIAN SEA to Palermo

HOLY ROMAN EMPIRE (Partridge): A Montferrat to TURIN, A MANTUA to Ferrara, A Bergamo to MILAN, A Trent to Milan (nsu), A (EM) Verona to TREVISO

MUSLIMS (Robles): F (EM) Gulf of Naples holds (nsu)

NORMANS (Horsley): A NAPLES supports Papal A Ancona to Aquila, F Tyrrhenian Sea to PALERMO, F CENTRAL MEDITERRANEAN supports F Tyrrhenian Sea to Palermo, F (EM) Gulf of Naples to MESSINA

PAPACY (Roalstad): AA Ancona to AQUILA, A SPOLETO supports A

Ancona to Aquila, A CAPUA supports A Ancona to Aquila, A BOLOGNA besieges, G ANCONA convert to F

PISA (Scott):

A GENOA holds, A MODENA besieges, A Pisa to LUCCA, F LIGURIAN SEA supports F Gulf of Lions to Tyrrhenian Sea, F Gulf of Lions to TYRRHENIAN SEA

VENICE (Wilson):

A FERRARA to Mantua, A Treviso to Verona (DISLODGED, retreat Friuli, Padua, garrison, OTB), A Carinthia to TRENTO, A (EM) Verona to Bergamo (nsu)

Your treasury:

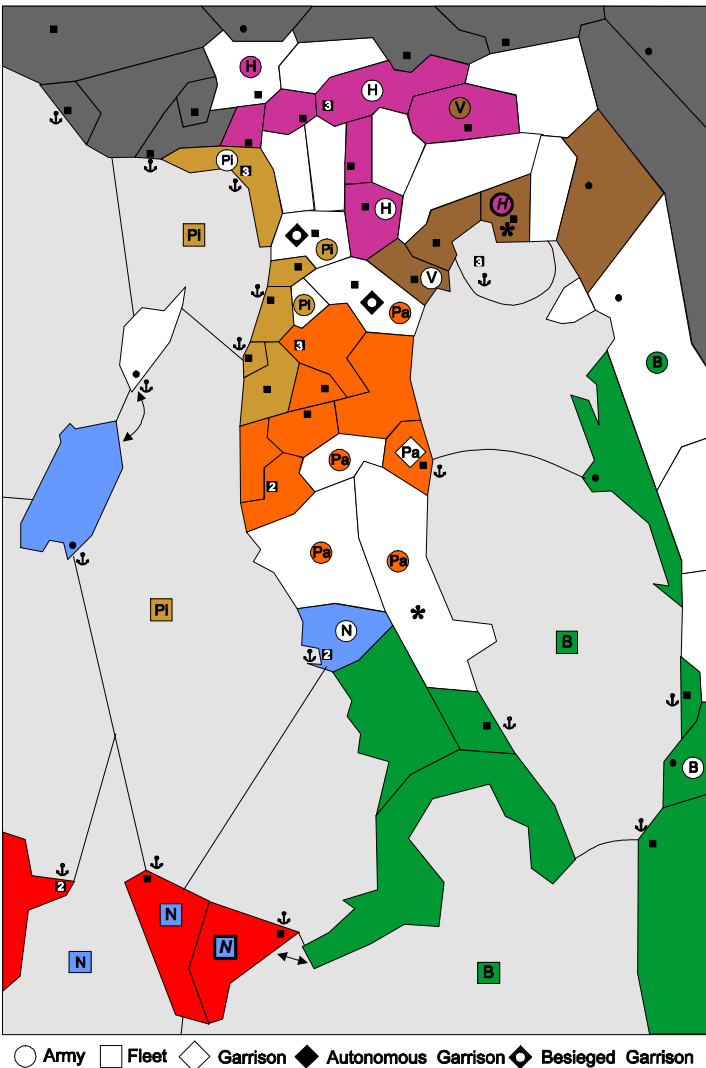
Press

Muslims – Normans: Some retail therapy.

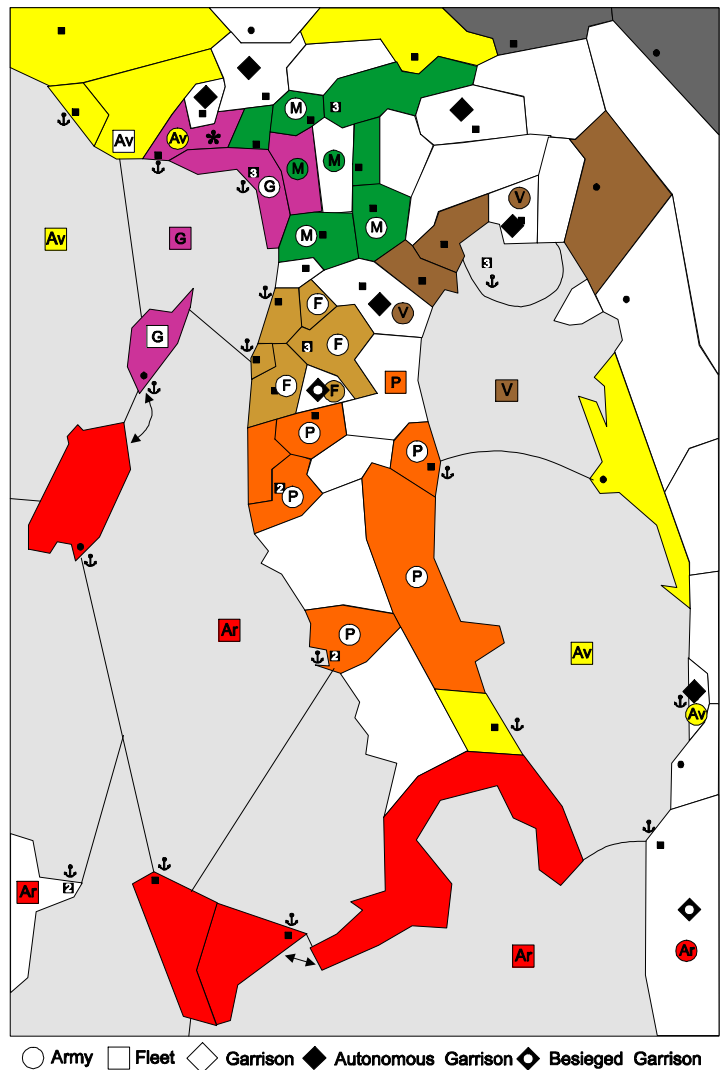
Papacy – Venice & HRE: His Eminence offers you his services to negotiate Peace terms between you two if there a conflict between you. The Holy Father realizes it was the Heretics from the Byzantine Empire who start the conflict and they are the Ones who should pay for the capture of Venice. I will promise you the Ancona Fleet shall try to liberate Venice from the Heretics.

Pisa – Byzantium: Is that you crying and bashing your teeth? I can hear the N O I S E way over here... what's your problem, anyway?

Dog Park



Barking Up the Wrong Tree



Barking Up the Wrong Tree**Summer 1251****Miller Number 2007Bpw10****Advanced Rules, Natural Disasters, Special Military Units, Conquest, Gray Press, Ultimate Victory****Deadline for Fall 1251 9/2, Tuesday**

Avignon moves hard against Genoa, who braces for an attack from Milan that does not materialize. Venice gets help from Milan to finally take Bologna, while Florence suffers a train wreck. The Pope and Aragon consolidate their positions.

Orders

ARAGON (Mercer): A DURAZZO besieges, F IONIAN SEA to Lower Adriatic, F Central Mediterranean to TUNIS, F TYRRHENIAN SEA supports Genoa F Ligurian Sea

AVIGNON (Nichols): A Turin to SAVOY, A Bari to RAGUSA, F PROVENCE supports A Turin to Savoy, F GULF OF LIONS to Ligurian Sea, F LOWER ADRIATIC transports A Bari to Ragusa

FLORENCE (Whyte): A PISTOIA to Lucca, A FLORENCE to Pistoia, A SIENNA to Florence, A AREZZO besieges

GENOA (Scott): A GENOA holds, A SAVOY supports A Genoa (DISLODGED, retreat Saluzzo, Montferrat, garrison, OTB), F LIGURIAN SEA supports A Genoa (cut), F CORSICA supports Aragon F Tyrrhenian Sea to Gulf of Lions (nso)

MILAN (Renken): A Milan to PAVIA, A PARMA supports A Fornova to Modena, A FORNOVA to Modena, A MODENA to Lucca, A MANTUA supports Venetian A Ferrara to Bologna

PAPACY (Robles): A PERUGIA supports A Spoleto to Rome, A Spoleto to ROME, A ANCONA supports A Aquila, A NAPLES holds, A AQUILA holds, F URBINO to Bologna

VENICE (Partridge): A Ferrara to BOLOGNA, A Friuli to TREVISO, F UPPER ADRIATIC supports A Ferrara to Bologna

Treasury:

Press

Florence, feeling the pinch florin-wise, hopes to find lucrative Lucca more liquid in its assets than the sausage-king of Bologna has proved.

Doberman**Turn 10a****Turn 10b due 9/2, Tuesday****Available Cards**

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

BIBCO selects set 5

PIT selects set 1

GOO selects set 2

100%Trash selects set 4

The Players

Player	Company Name	Play Order	Money	Loans	Raw Material Supply	Growth	Co-workers	Saved Card
Michael Longdin	100%Trash	4	\$4	30	4	16	5	Order
Dave Partridge	BIBCO	1	\$39	0	1	16	5	Hiring/Firing
Richard Weiss	PIT	2	\$15	10	14	19	4	Order
Eric Brosius	GOO	3	\$24	0	1	17	4	Order

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	12	5
Dave Partridge	5/1	4/3	2/10	9	49
Richard Weiss	4/3	5/1	2/10	8	30
Eric Brosius	4/3	4/3	1/15	6	50

Cards

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

Discards

Growth Growth Bribery Raw Materials

Flea Collar
Kremlin
Turn 6 Funeral Commission through Parade
Turn 6 Special Influence Declaration, 9/2, Tuesday

Erratum

It turns out that Diwan Palavarian (G) died on turn 2, but was mistakenly kept in the People. His corpse was then promoted to Sport Minister, and the staff in the Ministry were complaining of the smell. Now that the error has been brought to the attention of the proper authorities, they have rectified the situation by burying Palavarian, and promoting Nikolai Shootemdedsky (H) in his place. To fill the vacancy among the Candidates, M has been promoted.

Funeral Commission

REDS declares 4 IP on Krakemheds, 1 IP on Niewitko, and 1 IP on Shootemdedsky. Karel Krakemheds nominates Igor Doberman. Krakemheds, Doberman, Niewitko, and Shootemdedsky all vote in favor, Wasolin votes against. Doberman is the new Party Chief.

Replacement Phase

Doberman moves Krakemheds to KGB chief, promotes Niewitko to Defense Minister, and Shootemdedsky to Foreign Minister, J to Sport Minister, and demotes Wasolin to Candidate. Doberman ages to 69. LWT declares 6 IP on Krakemheds, who then promotes M to Ideology, and S to Candidate and ages to 76. S advances by age to Industry Minister and W to Economy Minister. N and P advance by age to Candidates.

Rehabilitation Phase

KGB declares 5 IP on Doberman, who then rehabilitates B and K and ages to 79.

Parade Phase

Doberman waves

Special Influence Declaration Phase Turn Order

REDS, HLM, LWT, MLI, TCC, KGB

Politburo

Office	Politician	Condition	Influence
Party Chief	Igor Doberman (L)	79	5 (KGB) , 4 (REDS), 3 (HLM), 1 (LWT)
KGB Head	Karel Krakemheds (E)	76, ++	6 (REDS), 1 (HLM), 7 (LWT)
Foreign	Nikolai Shootemdedsky (H)	69, +	1 (REDS)
Defense	Petr Niewitko (D)	73	2 (REDS)
Ideology	Sergei Eatstumuch (M)	64	
Industry	Ludmilla Patina (S)	68, +	
Economy	Leonid Bungaloff (W)	54	
Sport	Antonj Talksallott (J)	67	

Politicians in bold are in the sanatorium.

Candidates: N, P, X, Y (60, 11+ (HLM)), Z (63, ?, 11+ (MLI))

People: B (83 +), K (68 +), R

Siberia: C (81 +), T, U (60 ++), Q (70, +)

Kremlin Wall: A, G, F, V, I, O

Players

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)

TCC has one wave. KGB have one wave.

Intrigue Cards

Undeclared Influence

Terrier
Silverton
Turn 13 Phases IV- VI and Turn 14, Phases I-III
Turn 14, Phases IV- VI and Turn 15, Phases I-III, 9/2, Wednesday
Turn 13

Operations

Brown (Partridge) operates #44 (\$40, 3 silver), delivers 3 silver from Leadville to Denver for \$720. Collects \$550 in passenger revenues.

Blue (Bolduc) no operations. Delivers 4 silver from Aspen to Denver for \$960, and 1 coal from Walsenburg to Santa Fe for \$120. Gains \$150 in passenger revenue.

Red (Scharf) operates #101 (\$20, 5 silver), #126 (\$30, depletes), and #117 (\$50, 4 lumber). Gains \$60 in passenger revenue.

Aqua (Lewis) operates #68 (\$20, 4 coal), #73 (\$20, 3 coal), #74 (\$20, 2 coal), #38 (\$40, 2 silver), and #25 (\$60, 2 gold). Delivers 2 silver from Eureka (#37) to Salt Lake City for \$480, 3 silver from Heber City to Salt Lake City for \$720, and 2 silver from Aspen to Salt Lake City for \$480. Receives passenger revenue of \$410.

Green (Longdin) operates #92 (\$40, 3 coal) and #43 (\$50, 4 silver). Delivers 4 silver from Leadville to Pueblo for \$960 and 5 coal from Raton to Denver for \$500. Gains \$380 in passenger revenue. Buys a 42 train for \$320.

Orange (Hooton) operates #119 (\$40, 3 coal), #63 (\$50, 2 lumber), #100 (\$40, 2 gold), #33 (\$50, 2 gold), #114 (\$30, depletes), #123 (\$40, 3 coal), and #118 (\$20, 2 lumber). Delivers 4 lumber from Porter to El Paso and 3 lumber from El Vado to El Paso for \$1400. Buys a 42 train for \$320. Collects \$90 in passenger revenues.

Determine Price Changes

Gold: Remains at \$325

Copper: Remains at \$280

Silver: -7 to \$100

	Denver	Salt Lake City	Pueblo	Santa Fe	El Paso
Lumber:	Remains at \$200	Remains at \$300	Remains at \$200	+2 to \$60	-3 to \$100
Coal:	Remains at \$100	Remains at \$60	Remains at \$80	Remains at \$120	+1 to \$140

Turn 14

Move Prospectors and Surveyors

Brown (Partridge) surveys Leadville to Dillon (\$200), prospects #27

Blue (Bolduc) surveys Craig to Meeker, prospects passenger line 17.

Red (Scharf) surveys Grants to Thoreau and Belen to Willard, prospect #112.

Aqua (Lewis) surveys Montecello to Dolores, prospects #58

Green (Longdin) surveys Las Vegas to Santa Rosa and Leadville to Dillon (\$160), prospects #27.

Orange (Hooton) surveys Newcombe to Gallup and Carizozo to White Oaks, prospects passenger line 13 and #58

Dispute Resolution

Brown and Green have a dispute over claim #27. Each have a +1 for their prospectors. Brown = 10 + 1, Green = 9 + 1. Brown wins and his prospector improves to +2.

Aqua and Orange have a dispute over #58. Orange has a +3 advantage because his line already is in Dolores. Aqua = 3, Orange = 9 + 3. Orange wins and his prospector improves to +1. Brown spends \$320, Blue spends \$725, Red spends \$420, Aqua spends \$140, Green spends \$360, and Orange spends \$780.

The Players

Player	Color	Starting Location	Money	Trains	Snowplows	Personnel
Dave Partridge	Brown	Denver	\$1615	9, 15		S+1, S, P+2
Paul Bolduc	Blue	Denver	\$510	9, 15		S, S+1, P+2
Bill Scharf	Red	El Paso	\$3805	9, 24		S+1, S, P+1
Andy Lewis	Aqua	Salt Lake City	\$5850	9, 15, 42		S, S, P
Michael Longdin	Green	Pueblo	\$3320	9, 15, 24, 42	+2	S+2, S, P+1
Dave Hooton	Orange	Santa Fe	\$880	9, 15, 24		S, S, P, P+1

Personnel in **Bold** are in jail.

Purchased Claims

#	City	Owner	Type	Goods	Operation
48	Ouray	Brown	Silver	2	Depleted
44	Leadville	Brown	Silver	0	\$40
27	Dillon	Brown	Gold	N	\$40
88	Walsenburg	Blue	Coal	0	\$50
80	Aspen	Blue	Coal	6	\$30
56	Hot Sulphur Springs	Blue	Lumber	N	\$30
105	Silver City	Red	Silver	1	Depleted
102	Hillsboro	Red	Silver	6	Depleted
101	Lake Valley	Red	Silver	14	\$20
125	Capitan	Red	Coal	N	\$20
117	Cloudcroft	Red	Lumber	4	\$50
112	Tyrone	Red	Copper	N	\$20
36	Eureka	Aqua	Silver	1	Depleted
67	Coalville	Aqua	Coal	1	Depleted
68	Scofield	Aqua	Coal	11	\$20
73	Hiawatha	Aqua	Coal	13	\$20
74	Elk Springs	Aqua	Coal	17	\$20
38	Aspen	Aqua	Silver	0	\$40
25	Bingham	Aqua	Gold	2	\$60
92	Raton	Green	Coal	15	\$40
81	Crested Butte	Green	Coal	9	Depleted
47	Ouray	Green	Silver	2	Depleted
43	Leadville	Green	Silver	0	\$50
119	Farmington	Orange	Coal	3	\$40
128	South Fork	Orange	Silver	1	Depleted
63	Lumberton	Orange	Lumber	7	\$50
51	Silverton	Orange	Silver	8	Depleted

#	City	Owner	Type	Goods	Operation
100	White Oaks	Orange	Gold	5	\$40
122	Lee Ranch West	Orange	Coal	4	Depleted
33	Silverton	Orange	Gold	5	\$50
114	McGaffey	Orange	Lumber	1	Depleted
123	Gallup	Orange	Coal	8	\$40
118	Cimarron	Orange	Lumber	2	\$20
58	Dolores	Orange	Lumber	N	\$40

Purchased Passenger Lines

#	Type	Route	Payoff	Owner	Notes
3	A	Denver – Colorado Springs	\$50	Brown	
5	A	Denver – Pueblo	\$80	Brown	
15	B	Denver – Grand Jct.	\$270	Brown	Discard when 22 is taken. Good for \$270 toward card 22
12	B	Pueblo – Grand Jct.	\$150	Brown	Discard when 20 is taken. Good for \$150 toward card 20 or 21
1	A	Denver – Boulder	\$20	Blue	
10	B	Denver – Aspen	\$130	Blue	
17	C	Denver – Santa Fe	\$420	Blue	
4	A	El Paso – Deming	\$60	Red	
2	A	Salt Lake City – Provo	\$20	Aqua	
11	B	Salt Lake City – Grand Jct.	\$140	Aqua	Discard when 20 is taken. Good for \$140 toward card 20 or 21
16	B	Salt Lake City –	\$250	Aqua	Discard when 22 is

#	Type	Route Grand Jct.	Payoff	Owner	Notes
					taken. Good for \$250 toward card 22
9	B	Denver – Leadville	\$120	Green	
8	A	Denver – Leadville	\$260	Green	Discard after 3 more Leadville depletions
6	A	Santa Fe – Albuquerque	\$90	Orange	
13	B	El Paso – Santa Fe	\$140	Orange	

Available Claims

#	City	Type	Claim	Operation
86	Canon City	Coal	\$40	\$20
76	Craig	Coal	\$80	\$20
39	Aspen	Silver	\$60	\$30
85	Canon City	Coal	\$100	\$30

Available Trains

Type	# Available	Cost
9	0	\$80
15	1	\$120
24	5	\$200
42	6	\$320
72	8	\$500

#	City	Type	Claim	Operation
70	Price	Coal	\$80	\$40
109	Pinos Altos	Copper	\$80	\$20
31	Cripple Creek	Gold	\$320	\$80
104	Mogollon	Silver	\$100	\$50

Available Passenger Lines

#	Type	Route	Payoff	Cost	Notes
20	C	Salt Lake City – Pueblo	\$600	\$930	
18	C	Gallup – Santa Rosa	\$500	\$660	
22	C	Denver – Salt Lake City	\$800	\$1100	
24	C	Denver – El Paso	\$1000	\$1380	
19	C	Salt Lake City – Albuquerque	\$600	\$975	
23	C	Salt Lake City – Santa Fe	\$900	\$1340	
7	A	Pueblo – Santa Fe	\$120	\$280	

Available Snowplows

Type	# Available	Cost
Die +2	2	\$40
Die +3	4	\$80
Die +4	5	\$140
Die +5	6	\$200

HoundTurn 12Deadline Turn 13, 9/2, TuesdayCommander Actions

Brosiarium opens the bidding on the Orbital Lab and Roobie-Roo gets it for 77 (Or2, Or3, Or4, MWa, Ti7, Ti7, Ti10). Opens the bidding on Ecoplants at 30 and gets it (MWa). Opens the bidding on Scientists at 40 and gets it for 63 (Wa6, Wa7, Ti13, Re11, Re12, Re15).

Roobie-Roo passes.

Miles from Nowhere buys 3 population factors (Wa5, Ti8, Ti8, Ti9) and a titanium factory (Wa7, Ti11, Ti12).

BORG opens the bidding on the Laboratory at 80 and gets it for 92 (Or3, Or4, Wa7, Wa7, Wa8, Ti7, Ti9, Ti9, Ti10, Ti11, Mi17) and moves a population factor from an ore factory to the research factory.

Little Green Men opens the bidding on the Outpost at 100 and gets it for 110 (Wa6, Wa7, Wa10, MWa, Re10, Re13, Mi17, Mi17). Moves a population factor from a water factory to the titanium factory.

FEARLESS opens the bidding on Scientists at 40 and Bartertown X gets it for 58 (Or3, Or4, Wa5, Wa8, Wa9, Wa9, DL discounts). Opens up the bidding on Robots at 52 and gets it (Or4, MWa, Ti8, Ti10).

HBDC buys a population factor (Ti10).

Scharfpost opens the bidding on Robots for 50 and gets it (Or1, Or1, Or3, Or4, Wa5, Wa6, Re13, Re17).

Bartertown X passes.

Golden Orb buys 2 population factors (Wa4, Wa7, Ti10).

The Players

	Outpost Name	Commander	Factories	Upgrades	VP
1	Brosiarium	Eric Brosius	OrF, OrF, WaF, WaF, WaF, WaF, WaF, WaF, WaF, TiF, ReF	No, 3Sc, La, Ou, Ec	33
2	BORG	Dave Hooton	OrF, OrF, WaF, WaF, TiF, TiF, TiF, TiF, ReF	HE, No, Wa, Ro, OL, La	28
3	Little Green Men	Dave Partridge	OrF, OrF, WaF, WaF, WaF, WaF, WaF, WaF, TiF, ReF	No, 2OL, La, Ou	27
4	Roobie-Roo	Andy Lewis	OrF, OrF, WaF, WaF, WaF, WaF, TiF, TiF	HE, No, Wa, Ec, Ou, OL	27
5	Miles from Nowhere	Michael Longdin	OrF, OrF, WaF, WaF, TiF, TiF, TiF, TiF, TiF, TiF	HE, No, Ou	26
6	FEARLESS	Michael Lowrey	OrF, OrF, WaF, WaF, WaF, WaF, WaF, TiF, TiF	No, HE, Wa, 2OL, Ro	23
7	HBDC	Kevin Wilson	OrF, OrF, WaF, WaF, WaF, TiF, TiF, TiF, TiF, TiF	HE, Wa, Ou	19
8	Scharfpost	Bill Scharf	OrF, OrF, WaF, P	3DL, Wa, 3Sc, Ro	16
9	Bartertown X	Andy York	<i>OrF, OrF</i> , WaF, WaF, WaF, WaF, WaF	2DL, HE, Ro, Sc	15
10	Golden Orb	Cary Nichols	OrF, OrF, WaF, WaF, WaF, WaF, TiF	2DL, HE, Wa, No	13

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

Available Upgrades

Income

New Arrivals: Laboratory, Outpost, Ecoplants, Orbital Lab, Outpost, Ecoplants, Ecoplants, Laboratory

Upgrade	Minimum Bid	Available	Not Yet Delivered
Warehouse (Wa)	25	1	0
Orbital Lab (OL)	50	1	0
Robots (Ro)	50	1	2
Laboratory (La)	80	2	2
Ecoplants (Ec)	30	3	2
Outpost (Ou)	100	2	0

Brosarium, Little Green Men, Roobie-Roo, and FEARLESS all take Mega Water cards.

Bulldog

Turns 8.1 to 9.1

Deadline Turn 9.2 to 10.2, 9/2 Tuesday

Turn 8

Mike rolls a 6. Dave H. and Chris each gain 2 lumber. Trades 3 brick for 1 wool at the ? port and buys a development card (Knight). During the special build turn, Dave H. builds a ship from F18 to F17.

Dave P. rolls a 7. Moves the Robber to the 6 Woods at C17 and steals a wool from Dave H. Passes.

Michael rolls a 5. Dave P. gains 2 grain, Andy gains 2 wool, and Chris gains 3 grain. Passes. During the special build turn, Andy buys a development card (Resource gain).

Andy rolls a 7. Chris discards 3 grain, 1 lumber, and 1 ore. Moves the Robber to

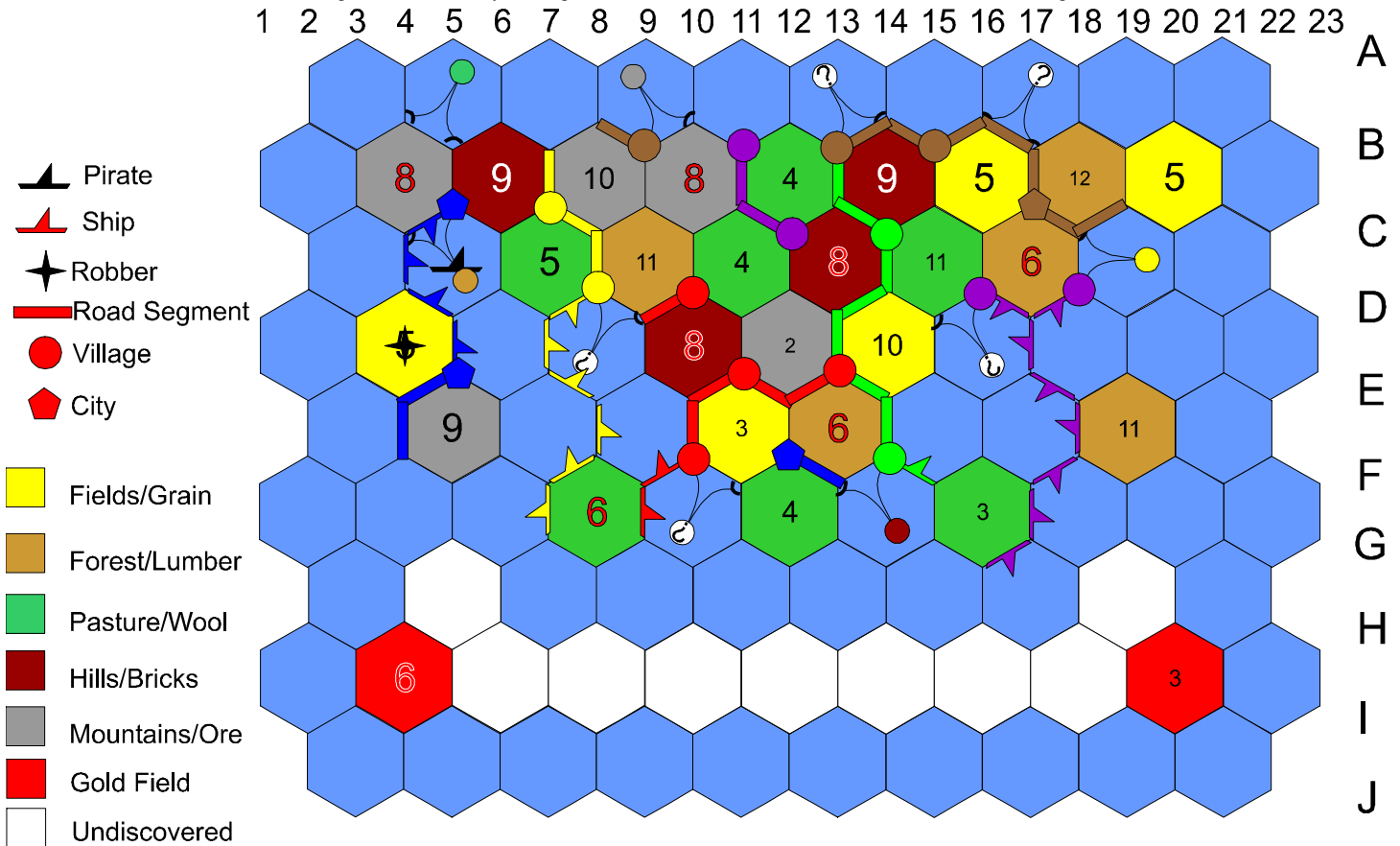
the 6 Woods at E13 and steals a brick from Michael. Plays Resource Gain development card for 1 lumber and 1 wool and builds a ship from F7 to G7 (discovers ocean).

Dave H. rolls a 6. Dave H. and Chris each gain 2 lumber. Moves ship from F18 to F19 to F17 to G17 (discovers ocean). Builds ship at G17 to G16 (discovers ocean).

Chris rolls a 3. Mike and Dave P. each gain 2 grain. Trades 3 lumber for 1 brick at the ? port and builds a settlement at B13.

Turn 9

Mike rolls a 6. Dave H. and Chris each gain 2 lumber. Plays a Knight card, and moves the Robber to 5 Field at D4 and steals a grain from Dave P.



Open Trades

None.

Turn 9 Rolls

Dave P. 7

Michael 4

Andy 11

Dave H. 5

Chris 10

Turn 10 Rolls

Mike 4

Dave P. 5

The Players

Player	Color	Grain	Wool	Brick	Lumber	Ore	Development Cards	VP
Mike Scott	Red	4				2	Knight	4
Dave Partridge	Blue	3	1	1		3		6
Michael Longdin	Green			1	2	1		2
Andy York	Yellow		1	4		1		4*
Dave Hooton	Purple				4	2	1 unknown ()	4
Chris Geggus	Brown				3			5

* Longest trade route.

Malamute

Turn 8

Deadline Turn 9, 9/2 Tuesday

Planning

- Dutch** maintain 5 ships (\$20) and buy 1 soldier (\$10) for \$30.
- English** maintain 5 ships (\$20) and buy 2 soldiers (\$20) for \$40.
- French** maintain 2 ships (\$8), buy 2 ships (\$24) and 3 soldiers (\$30) for \$62.
- Swedes** maintain 4 ships (\$16) and buy 4 soldiers (\$40) for \$56.
- Portuguese** maintain 5 ships (\$20) and buy 6 soldiers (\$60) for \$80.
- Spanish** maintains 4 ships (\$16) for \$16.

Outbound Naval Movement

- Dutch** Move to L. Dice: 1, 2, 4, 4. Loses 1 colonist and 1 soldier.
- English** Move to X. Dice: 1, 2, 5, 5, 6. Loses 1 soldier.
- French** Move to C. Dice: 1, 2, 2, 3. Loses 1 soldier and 1 colonist.
- Swedes** Move to O. Dice: 3, 5, 5. No losses.
- Portuguese** Move to E. Dice: 1, 2, 2, 3, 4, 4, 5, 5, 6, 6. No losses.
- Spanish** Move to S. Dice: 1, 2, 2, 2, 4, 5, 6, 6, 6. Loses 2 colonists.

Mining

- Dutch** mine 1 gold in L. **English** mine 1 gold in O, mine depletes, and 1 gold in W. **Spanish** mine 1 gold each in P.

Discovery

- French** discover a mine in B **Dutch** discover a mine in M.

Land Movement

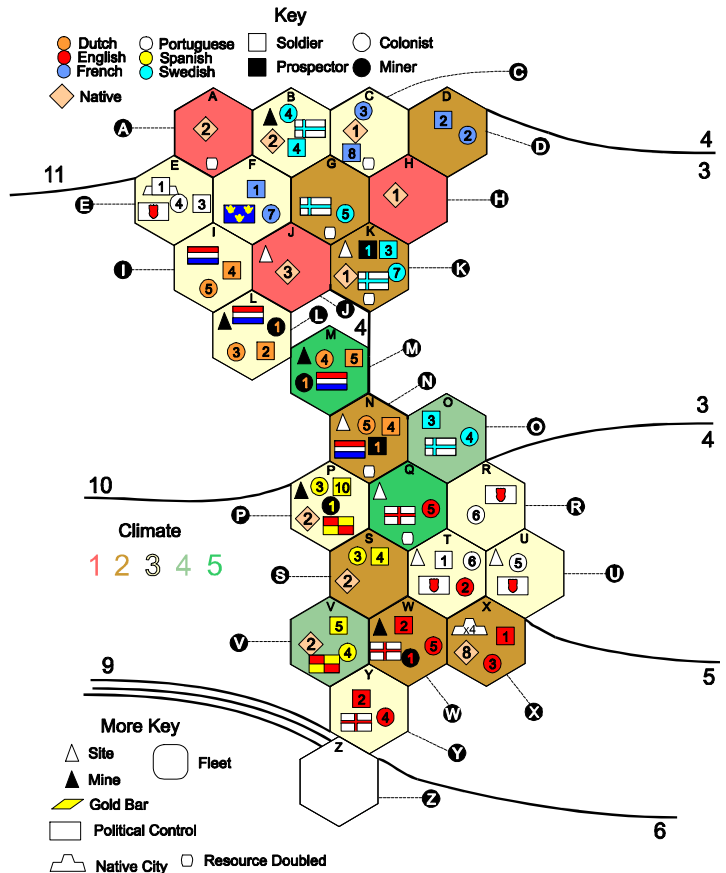
- Dutch** move 1 gold from L to fleet, 3 soldiers and 2 colonists from L to I, 2 colonists from fleet to L, 1 colonist in M mines.
- English** move 1 gold from O to anchorage dot, 8 colonists from R to T, 2 soldiers from Y to W, 2 soldiers from W to T, and 5 colonists and 1 soldier from fleet to X (it's a climate 2 area with the x4 city and 8 natives).
- French** move 6 soldiers from D to C, 1 soldier and 3 colonists from B to F, 4 colonists from A to F, 1 colonist from H to D, and 3 colonists and 2 soldiers from fleet to C.
- Swedes** move one gold from K to anchorage dot, 4 soldiers and 4 colonists from C to B, 3 colonists from K to G, and 4 soldiers and 4 colonists from fleet to O.
- Portuguese** move 2 soldiers from R to T, 2 soldiers from U to T, and 4 colonists and 6 soldiers from fleet to E (it is a climate 3 area with the x2 city and 4 natives).
- Spanish** move gold from P to anchorage dot, move 2 soldiers from V to S, and 2 colonists from fleet to S.

Combat

- English** attack the Portuguese in T. English lose 2 soldiers. **French** attack Swedes in B. French lose 1 soldier. **Swedes** attack the English in O. Swedes lose 1 soldier and English lose 5 colonists. Swedes capture gold. **Portuguese** attack English in T. Portuguese lose 3 soldier and English lose 6 colonists.

Native Combat

- Portuguese:** 4 natives and 2 soldiers killed in E. One soldier moves to loot the city.



Native Uprisings

Climate is a 3. Uprisings in K (2 colonists killed) and X (2 colonists killed).

Survival

Climate is a 6. No losses.

Political Control

French gain political control of F and lose political control of A, **Swedes** gain political control of B and O and lose political control of C, **Dutch** gain political control of I, **English** lose political control of O, and **Portuguese** gain political control of E and R.

Homebound Naval Movement

- Dutch:** Dice: 1, 2, 3, 6. No losses.
- English:** Move to W: Die: 5. No losses, pick up gold. Home: Dice: 1, 2, 2, 2, 6. No losses.
- French:** Dice: 1, 2, 3, 4. No losses..

Swedes: Move to K. Die: 4. No losses, pick up gold.. Home. Dice: 2, 3, 4. No losses.

Portuguese: Dice: 1, 1, 2, 2, 2, 3, 3, 4, 6, 6. No losses.

Spanish: Move to P. Die: 1. No losses, picks up gold. Home: Dice: 1, 2, 3, 3, 3, 4, 5, 6, 6. No losses.

Income

Dutch: Political Control: \$200, resources: \$98.

English: Political Control: \$160, Gold: \$40, resources: \$72.

French: Political Control: \$80, resources: \$45.

Swedes: Political Control: \$200, Gold: \$80, resources: \$96.

Portuguese: Political Control: \$200, resources: \$63.

Spanish: Political Control: \$120, Gold: \$40, resources: \$30.

Turn 9 Initiative

French, Swedes, Dutch, Portuguese, Spanish, English

Portuguese attitude is (dr = 5+1) Expansion.

Players

Country	Player	Money	Available Soldiers	Ships	Colonists
French	Dennis Cain	\$727	3	4	4
Swedes	Andy Lewis	\$915	6	4	4
Dutch	Andy York	\$743	1	5	3
English	Dave Partridge	\$824	3	5	5
Spanish	Cary Nichols	\$441	1	4	4
Portuguese	Non-Player	\$526	9	5	4

Cats and Dogs

Epoch III Macedonia, Maurya, and Han Dynasty

Deadline Epoch III Hsuing-nu, Romans, and Sassanids, 9/2 Tuesday

Epoch III

The Time Traveler (Anderson) plays Empires Revive and places 2 armies in Western Ghats and 2 armies in Shatts Plateau. MACEDONIA: Plays Fanaticism. Army and Capital in Pindus (civil war retreats to Morea), fleet Eastern Mediterranean (vs. Systematic Chaos; TT: 3, 1; SC: 2; wins), army Nile Delta (vs. Persia; M: 6, 3; P: 5, 5; wins), Nubia (vs. Persia; M: 3, 2; P: 6, loses), Nubia (vs. Persia; M: 5, 3; P: 3; wins), Upper Nile (vs. Persia; M: 5, 3; P: 4; wins, fleet Red Sea unsupported), Palestine (vs. Persia; M: 4, 2; P: 2; wins), Levant (vs. Persia; M: 5, 1; P: 1; wins), Upper Tigris (vs. Persia; M: 2, 1; P: 4; loses), Upper Tigris (vs. Persia; M: 4, 1; P: 2; wins), Zagros (vs. Persia; M: 1, 1; P: 6, 5; loses), Zagros (vs. Persia; M: 4, 4; P: 5, 4; loses), Zagros (vs. Persia; M: 4, 2; P: 4, 3; wins), Persian Plateau (vs. Persia; M: 3, 1; P: 5; loses), Persian Plateau (vs. Persia; M: 4, 2; P: 5; loses). Builds Monument Pindus. Points: Control of North Africa (6), Dominance in Middle East (6), Presence in India (3), Southern Europe (3), Northern Europe (1), 2 Capitals (4), 5 Monuments (5), and 2 Seas (2) for 30 points.

Arachnids (Bolduc) MAURYA: Army and Capital Ganges Delta (Vedic army retreats to Ganges Valley), army Malayan Peninsula, Ganges Valley (vs. Vedic City States; M: 6, 6; V: 5; M: 4, 3; V: 1; wins), Upper Indus (vs. Persia; M: 3, 2; P: 4; loses), Upper Indus (vs. Persia; M: 4, 2; P: 2; wins), Hindu Kush (vs. Persia; M: 5, 3; P: 6, 1; loses), Hindu Kush (vs. Persia; M: 6, 3; P: 6, 4; M: 5, 4; P: 5, 3; M: 5, 2; P: 5, 4; M: 6, 4; P: 5, 2; wins), Persian Plateau (vs. Persia; M: 5, 4; P: 1; wins, Capital reduced to city), Zagros (vs. Macedonia; Mau: 5, 4; Mac: 2; wins), Western Deccan (vs. Vedic City States; M: 5, 2; V: 4, 1; wins). Builds Monument Ganges Delta. Points: Dominance in China (6), and India (6), Presence in Middle East (3) and Southeast Asia (1), 1 Capital (2), 1 city (1), and 3 Monuments (3) for 22 points.

Systematic Chaos (Cain) HAN DYNASTY: Army and Capital Great Plain of China (Chou army retreats to Chekiang), army Yellow River (vs. Shang Dynasty; H: 5, 4; S: 2; wins, Capital reduced to city), Wei River (vs. Rebellion; automatic win; city eliminated), Tarim Basin (vs. Chou Dynasty; H: 5, 1; C: 6; loses), Tarim Basin (vs. Chou Dynasty; H: 4, 3; C: 5; loses), Tarim Basin (vs. Chou Dynasty; H: 5, 2; C: 5; H: 6, 4; C: 3; wins), Chekiang (vs. Chou Dynasty; H: 5, 2; C: 5; H: 6, 2; C: 2; H: 4, 1; C: 6; loses), Chekiang (vs. Chou Dynasty; H: 5, 1; C: 4; wins), fleet South China Sea, army East Indies, Yangtse Kian, Szechuan. Builds Monument Great Plain of China. Points: Dominance in China (6), Presence in Southern Europe (3) and Southeast Asia (1), 1 Capital (2), 2 cities (2), 1 Sea (1), and 2 Monuments (2) for 17 points.

Players

Player Name	Player Faction Name/Color	Empire Strength Points	Victory Points
Dave Partridge	The Questioner (yellow)	11	17
Kevin Wilson	Royal Manticoran Historical Society (purple)	12	31
Michael Longdin	100% Pussycats (green)	19	36
Andy Lewis	Marching through the Ages (red)	19	27
Paul Bolduc	Arachnids (blue)	21	38
Dennis Cain	Systematic Chaos (black)	25	46
Dave Anderson	The Time Traveler (orange)	27	53

Positions

Systematic Chaos: Fleet South China Sea. GREEK CITY STATES: Army and city Crete. HAN DYNASTY: Army, Capital and Monument Great Plain of China, army and Monument Wei River, army and city Yellow River, armies Tarim Basin, Yangtse Kian, Chekiang, Szechuan, East Indies.

100% Pussycats: VEDIC CITY STATES: Army and city Lower Indus, armies Eastern Deccan, Eastern Ghats. CIVIL WAR: Two armies and city Morea. CELTS: Army and Monument Central Europe, armies Dalmatia, Northern Apennines, Southern Apennines, Northern Gaul, Albion, Central Massif, Pyrenees.

Marching Through the Ages: MINOANS: Army and Fort in Western Anatolia, army Balkans.

The Time Traveler: Fleets Western Mediterranean, Eastern Mediterranean. INDUS VALLEY: Three armies Western Ghats. CARTHAGINIA: Three armies, Capital, and Fort Shatts Plateau, armies Libya, Arabian Peninsula, Western Gaul. MACEDONIA: Army, Monument, and Capital Pindus, Army and Monument Nile Delta, Levant, Upper Tigris, armies Nubia, Upper Nile, Palestine.

Royal Manticoran Historical Society: None

The Questioner: SHANG DYNASTY: Army Si-Kyang. SCYTHEANS: Army and Monument Lower Tigris, armies Caucuses, Eastern Anatolia, Middle Tigris.

Arachnids: ARYANS: Armies Turanian Plain, Persian Salt Desert NORTH AMERICAN MIGRANTS: Armies Great Lakes, Great Plains. MAURYA: Army, Capital, and Monument Ganges Delta, army, city, and Monument Persian Plateau, army and Monument Zagros, armies Ganges Valley, Upper Indus, Hindu Kush,

Western Deccan.

Event CardsEpoch III Empire**Greyhound**

Turn 1, Phase 7 and Turn 2, Phases 1 through 3
Deadline Turn 2, Phases 3 through 6, 9/2 Tuesday

Turn 1, Phase 7 – Buy Tokens**Hamburg** buys 14 tokens**Venice** buys 22 tokens.**Genoa** buys 12 tokens**Barcelona** buys 15 tokens**London** buys 12 tokens**Paris** buys 10 tokensTurn 2, Phase 1 – Draw Cards

Done

Phase 2 – Buy Cards

None eligible

Phase 3 – Play Cards**Paris** plays Wool (London gain \$18 and Barcelona gains \$8) and Rashid ad Din (10: N, R)**Genoa** passes**London** plays Stone (Genoa gains \$4, Venice, Hamburg, Paris, London, and Barcelona each gain \$1).**Hamburg** plays Rebellion in Lyon.**Barcelona** plays Revolutionary Uprisings (no effect)**Venice** plays Dionysus Exiguus (20: N)Available Leaders

Protected 1: Rashid ad Din (10: N, R) (Paris only)

Protected 2: Dionysus Exiguus (20: N) (Venice and one other)

The Players

Player	Country	Misery	Tokens	Money	Order	Dominance	Ships	Advances
Michael Longdin	Venice	40	22	\$39	6	5	2	
Dave Partridge	Hamburg	50	14	\$39	4	3	2	
Bob Robles	Paris	40	10	\$51	1	6	2	
Dave Hood	London	40	12	\$67	3	6	2	
Steve Koehler	Barcelona	40	15	\$58	5	6	2	
Robert Koehler	Genoa	60	12	\$47	2	3		

Players are listed in reverse tie breaking order.

CardsCommodity Log

Commodity	Michael	Dave P.	Bob	Dave H.	Steve	Robert
Stone (2)	1	1	1	1	1	2
Wool (3)	--	--	--	3	2	--
Timber (4)	1	1	1	--	--	--
Grain (5)	1	--	1	1	--	--
Cloth (6)	2	1	1	--	--	1
Wine (7)	--	--	2	--	1	--
Metal (8)	--	--	--	1	1	--
Fur (9)	--	--	--	--	--	--
Silk (10)	--	--	--	--	1	--
Spice (11)	--	--	--	--	--	--
Gold (12)	--	--	--	--	--	--
Ivory (12)	--	--	--	--	--	--

Shortage, Surplus

Sand Flea

Turn 1 Bidding, Revival, and Movement

Turn 1 Combat, 9/2 Tuesday

Players

ATREIDES: Jerry Roalstad
 EMPEROR: Michael Longdin
 GUILD: Kevin Wilson
 IXIANS: Ward Narhi

BENE TLEILAXU: Bob Robles
 FREMEN: Gina Teh
 HARKONNENS: Paul Bolduc
 GAME MASTER: Chris Hassler

Bidding Round

CARD 1 () goes to the Emperor for 3 spice
 CARD 2 () goes to the Harkonnens for 3 spice (extra card:
)
 CARD 3 () goes to the Emperor for 3 spice.
 CARD 4 () goes to the Atreides for 4 spice
 CARD 5 () goes to the Emperor for 3 spice
 CARD 6 () goes to the Guild for 2 spice

Ixians: 20 tokens off-planet

Your Spice:
 Your Cards:

Your Traitor(s):

Revival and Movement

Guild moves last.

Revival

None

Shipping

Fremen: 4 tokens from Southern Hemisphere to Habbanya Erg
Harkonnens: 5 tokens to Habbanya Ridge Sietch. The Bene Tleilaxu trap is activated, and Captain Nefud is the leader drawn. The Harkonnens play no defense, and the card is revealed to be a Baliset. The Bene Tleilaxu may prevent the Harkonnens from either shipping or moving any token during turn 2 (please submit choice with next turn's orders).

Movement.

Harkonnens: Move 2 tokens from Habbanya Ridge Sietch – Habbanya Ridge Flat – Habbanya Erg (16)

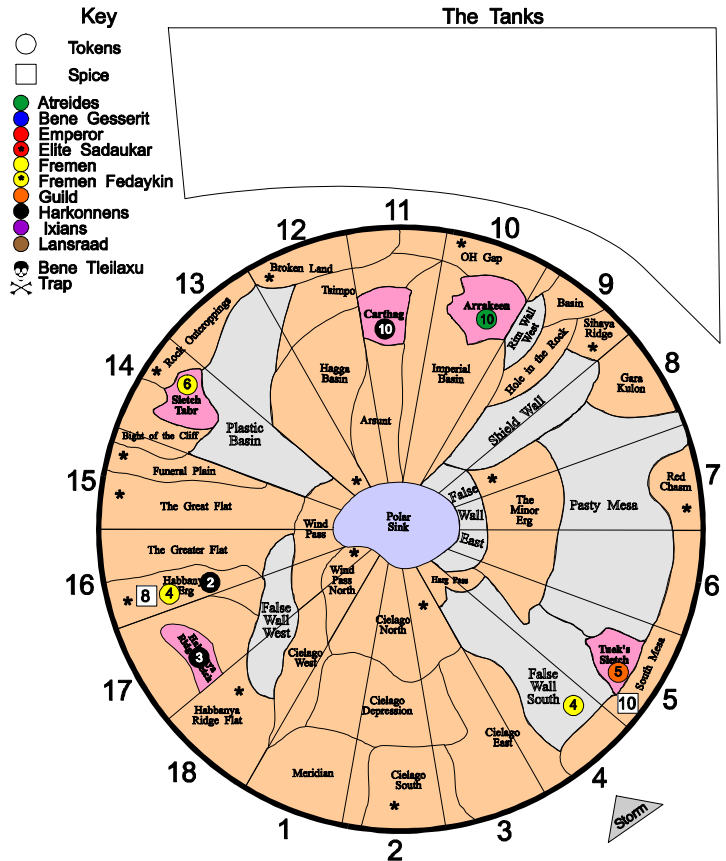
Combat

Fremen versus Harkonnens in Habbanya Erg. Fremen are the aggressors.

Available leaders: Fremen: all, Harkonnens: all.

Positions

Atreides: 10 Arrakeen, 10 tokens off-planet
Bene Tleilaxu: No traps.
Emperor: 20 tokens (5 Elite Sadaukar) off-planet
Fremen: 6 tokens Sietch Tabr, 4 tokens False Wall South (4), 4 tokens Habbanya Erg (16), 6 tokens (3 Fedaykin) Southern Hemisphere
Guild: 5 tokens Tuek's Sietch, 15 tokens off-planet
Harkonnens: 10 tokens Carthag, 3 tokens Habbanya Ridge Sietch, 2 tokens Habbanya Erg (16), 5 tokens off-planet



Gaspode

Turn 3 Turn 4, 9/2 Tuesday

Turn 3

Andy L. chooses the Mayor and places colonists on the Quarry and the Construction Hut. Chris places a colonist on a Tobacco plantation, and moves a colonist from the Corn plantation to the Tobacco Storage. Tom places a colonist on the Quarry, Andy Y. places a colonist on an Indigo plantation, and Dave places a colonist on the Hacienda.

Chris chooses the Settler and takes a Quarry. Tom chooses a Quarry, Andy Y. chooses a Sugar plantation, Dave chooses Indigo, and gains a second Indigo from the Hacienda, and Andy L. chooses a Quarry, and gains a Coffee plantation from the Hacienda.

Tom chooses the Builder and builds a Tobacco Storage for 5 doubloons (1 discount from the Builder, 1 from the quarry). Andy Y. passes, Dave passes, Andy L. passes, Chris passes.

Andy Y. chooses the Prospector (1d), and gains 2 doubloons.

Dave chooses the Captain and gains 2 doubloons. Andy ships his Corn on Ship 3 for 1 VP, Tom ships his Corn on the same ship for 1 VP.

The Players

Player Name	Role	Plantations	Buildings	San Juan	Doubloons	Stored Production	VP
Andy York	Prospector	Indigo, Indigo , Indigo	Indigo Plant (x1) , Small Sugar Mill		4		
Dave Partridge	Captain	Indigo, Quarry , Corn, Indigo, Indigo	Small Indigo Plant, Hacienda		3		
Andy Lewis	Mayor	Indigo, Corn, Quarry , Sugar, Quarry, Coffee	Hacienda, Construction Hut		0		1
Chris Geggus	Settler	Corn, Tobacco , Tobacco, Quarry	Small Market, Tobacco Storage (x1)		0		
Tom Howell	Builder	Corn , Tobacco, Quarry , Quarry	Construction Hut , Small Market, Tobacco Storage		0		1

Player in bold is the Governor. 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: 72 Colonist Ship: 5

Trading House: Corn

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

Victory Points: 120

Commodities

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

Buildings

Column 1	Column 2	Column 3	Column 4
Small Indigo Plant (x3)	Indigo Plant (x2)	Tobacco Storage (x1)	Guild Hall
Small Sugar Mill (x3)	Sugar Mill (x3)	Coffee Roaster (x3)	Residence
	Hospice (x2)	Factory (x2)	Fortress
	Office (x2)	University (x2)	Customs House
	Large Market (x2)	Harbour (x2)	City Hall
Small Warehouse (x2)	Large Warehouse (x2)	Wharf (x2)	

Roles

Builder, Captain, Craftsman (2d), Mayor, Prospector, Prospector (1d), Settler, Trader

Plantations

Quarry (x2), Sugar, Indigo, Indigo, Tobacco, Sugar, Sugar

Discard Pile: Coffee, Corn, Sugar, Coffee, Sugar, Sugar, Tobacco, Indigo, Tobacco

Pedagoguery

The most powerful microscope in the world is set to begin operating later this year. Measuring 8.6 kilometers in diameter, it is a ring of superconducting electromagnets surrounding a circular tube which contains a vacuum situated underground at the border between Switzerland and France near Geneva. It is the Large Hadron Collider, or LHC, and its goal is to plumb the tiniest bits of matter to (among other things) help us explain why mass exists.

The LHC will be the most powerful particle accelerator yet built. It will be the first to be able to accelerate particles into the TeV range (one trillion electron Volts, or 10^{12} electron Volts). To compare, the energy contained within the mass of a proton is about one thousandth of a TeV, while the most massive confirmed particle in the Standard Model is the Top quark, at 0.171 TeV.

The LHC will collide protons. (Protons are in the class of particles called hadrons, thus the name of the collider). Protons are produced and fed into a small accelerator called the Proton Synchrotron. From there, they are fed into a larger accelerator called the Super Proton Synchrotron or SPS. At this point, they will be traveling at 99.99975% of the speed of light. The SPS will feed bunches of protons into opposite directions into the main accelerator, the LHC, which will further boost them to 99.9999991% of the speed of light – a 16-fold increase in energy. Over 2800 bunches of protons will be circulating within the LHC at any one time, and the streams will cross at four different locations within the collider, crossing over 31 million times per second. At each crossing, scientists expect to see about 20 collisions, each generating about 1.5 megabytes of data. That's nearly

one billion MB of data, or one Petabyte per second. As cheap as computer storage is these days, that much will quickly overwhelm available storage, so the biggest challenge the builders of the LHC had to face is how to discard the majority of data that is not of interest. What scientists are really interested is evidence of the Higgs particle, which they expect to produce every 2.5 seconds at full beam intensity.

At each of the four collision points is a detector. These detectors are massive structures, which is necessary for them to detect the high energy particles and decay products produced in the collision. The first one is called the CMS, or Compact Muon Solenoid. It is a general purpose detector. The LHCb, however, is tuned to look for bottom quarks and anti-quarks. Its goal is to try to determine why the universe has a slight overabundance of matter as compared to anti-matter. The ATLAS (A Toroidal LHC AparatuS) is a second general purpose detector, which is based on huge toroidal magnets as opposed to the more standard barrel-shaped solenoid. Finally, there is ALICE (A Large Ion Collider Experiment) studies the proton-proton collisions as a reference point for later studying collisions of lead nuclei. These collisions produce primordial fireballs called a quark-gluon plasma, which mirror conditions in the very early universe.

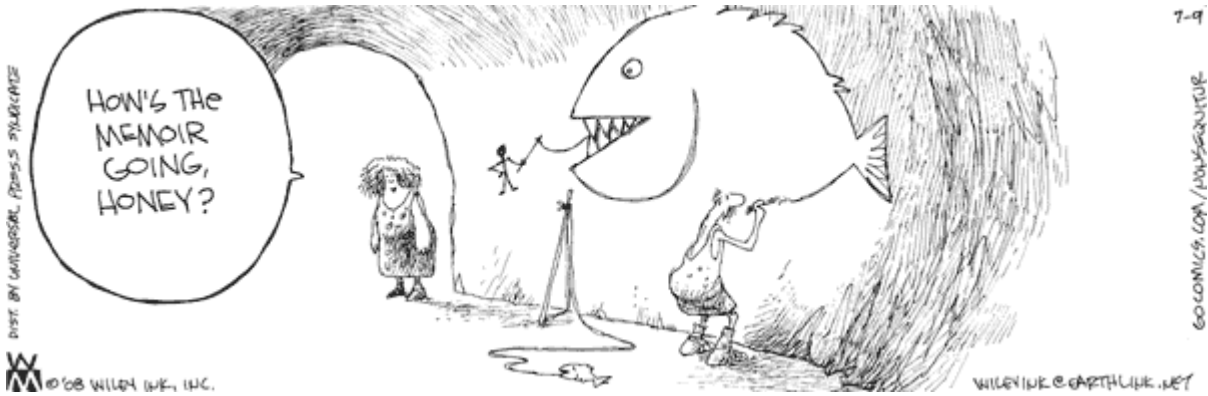
Data is filtered through a sophisticated set of criteria. Of the 31 million events per second, the first trigger selects 100,000 events per second based on isolated features in the data. The rest are discarded. The second trigger looks at the events as a whole and selects 100 events per second and sends those onto the

analysis grid. This grid is a collection of computers, both at CERN (the agency in charge of the LHC), and at universities around the world. The data first hits something called Tier 0, which is a set of thousands of computers at CER, where the data is immediately archived. This data is then made available to the Tier 1 sites over 10-gigabit-per-second optical lines. Tier 1 consists of major laboratories all over the world. The Tier 1 sites then make the data available to the Tier 2 sites

at universities and institutes world over, where data analysis is performed.

The engineering and scientific expertise that went into building the LHC is nothing short of phenomenal, and it will hopefully provide a fount of new information on the fundamental building blocks of matter for some time to come.

Next time, our galaxy is on a collision course with the Andromeda galaxy. What will happen when we get there?



Addresses

Dave Anderson 20832 Tuck Rd., Site 32 Farmington Hills, MI 48336 (248) 473-7482 ravenclawnerdz@sbcglobal.net andersond4@michigan.gov	Forest Cole 11210 Montverde Ln Houston, TX 7099 simply4est@yahoo.com Simply4est@aol.com	Tom Howell "Whippet" 365 Storm King Road Port Angeles, WA 98363 off-the-shelf@olympus.net (360) 928-9698	Ward Narhi 521 Moreley Akron, OH 44320 lurkertv@hotmail.com (330) 835-4013	Bill Scharf "Doge" 4814 Walnut Grove Ave. Rosemead, CA 91770 (626) 286-4428 bear-hugs@sbcglobal.net
John Biehl 8809 Delwood Dr. Delta, B.C., Canada V4C 4A1 jrb@dccnet.com	Caleb Cousins 96 Cedar St. #4 Bangor, ME 04401 (207) 941-8568 caleb_cousins@umit.maine.edu	Robert Koehler rkoehler@triad.rr.com Steve Koehler "Devil Dog" 418 Linderhill Ln. Mathews, NC 28105	Cary Nichols 756532-938 South FM1673 Snyder, TX 79549-8812 Dave Partridge 15 Woodland Drive Brookline NH, 03033 rebhuhn@rocketmail.com	Mike Scott 4040 E. Piedmont Dr. Space 61 Highland, CA 92346 mikesmag2@jsbcglobal.net (909) 864-4343
John Boardman 234 E. 19 th St. Brooklyn, NY 11226-5302	Chris Geggus "Davey Boy Smith" 10 Talbrook, Brentwood Essex, CM14 4PY, UK Chris.Geggus@ukonline.co.uk	Andy Lewis "Marmaduke" 16 Gossling Dr. Lewes, DE 19958 Alewis161@hom.com (302) 644-1984	Berend Renken 10545 Greenwood Ave. N Apt 303 Seattle, WA 98133-8781 berend02@aol.com	Gina Teh lone_hammy@yahoo.com.sg Richard Weiss Rcweiss@cox.net
Paul Bolduc 203 Devon Court FWB, FL 32547-3110 Prbolduc@aol.com bolduc@eglin.af.mil (850) 863-9081	Pasquale Giovine Via Osanna N.2/e I-89127 Reggio Calabria, Italia giovine@unirc.it	Michael Longdin michasel.longdin@virgin.net Michael Lowrey 6903 Kentucky Derby Drive Charlotte, NC 28215 Mlowrey@infionline.net (704) 569-4269	Paul Risner 10325 NW 63rd Dr. Parkland, FL 33076 goeben@aol.com	Brendan Whyte 448 Suriyat Road Ubon Ratchathani 34000 Thailand obiwonfive@hotmail.com
Jim Burgess 664 Smith St. Providence, RI 02908-4327 jfburgess@gmail.com	Tim Haffey 810 53 rd Ave. Oakland, CA 94601 Trhaffey@yahoo.com	Brad Martin 2/14 Joseph Street Maylands 6051 Western Australia Australia Westfront@hotmail.com	Jerry Roalstad Gerald.roalstad@mndulu.ang.a f.mil	Kevin Wilson 18623 Santa Maria Dr. Baton Rouge, LA 70809-6702 ckevinw1@cox.net
Eric Brosius 53 Bird St. Needham, MA Public.brosius@comcast.net	Dave Hood dhood@phd-law.com Dave Hooton hootond@yahoo.com	Lynn Mercer hancockfc@yahoo.com		Andrew York "Greyhound" P.O. Box 201117 Austin, TX 78720-1117 wandrew88@gmail.com
Dennis Cain "Red Dog" 1218 N. 3 rd St. Quincy, IL 62301-1727 (217) 223-2284 iamthedbear@sbcglobal.net	Dale Horsely dhorsely@excite.com			

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