Notes from Hades

Well, I managed to get through a month without suffering a computer catastrophe, so I am hoping things have settled down. We'll see.

Not much to report on the home front. With the advent of spring we are going to do some additional work in the yard. Fortunately, not nearly as much as last year, but we do have one section of the yard that is not finished, plus some refining in other sections of the yard and trying to keep the snails from eating everything we plant.

This issue, we see the completion of two games and the start of another. Rover is over, as Bill Scharf's Penny Pines wins the race for the Moon. In addition, New Tricks finishes up, as Phil Reynolds' Venice surges ahead to a victory. Congratulations to both Bill and Phil on their victories. With the end of New Tricks, that allows me to start up Off the Leash, so please see page 4 for more details.

It is once again Zine Register time, so write up those reviews of the zines you get and send them to Phil Reynolds. See the ad later in the zine for more details.

Speaking of zines, a somewhat new e-zine called Psychopath is now available. Check it out on the web at www.psychozine.co.uk.

This issue's deadline to **Tuesday, May 29 at 5:00 p.m. Pacific Time.** Please note that games that are run by guest GMs or in a subzine could be on a different schedule, so look at the games themselves. **Please do not call or fax orders after 10:00 p.m. Pacific time.** My wife and I tend to retire early.

Contents

Game Openings

Off the Leash. Gunboat Machiavelli**.** This game will start when the next Machiavelli game ends. Scenario and specific rules to be determined at game start by player vote, as usual. Have 8. You are signed up if this box is checked: ❑. **Starts this issue!**

Pavlov. Dune. We will use the three variant powers (Bene Tleilaxu, Ixians, and Lansraad). Have Steve Koehler, Bill Scharf, Ward Narhi, and Kevin Wilson. Will take up to 2 more.

Dog Show. Age of Renaissance. Have Bob Robles, Paul Bolduc, Caleb Cousins, Ward Narhi, and Dennis Cain, will take 1 more. **This game will start next issue with whomever is signed up at that time.**

Wolfhound. Seafarers of Catan. This is a game that expands on the original Settlers of Catan to include sea travel, but is very similar to the original. Exact scenario to be determined. This will start after Fenris has ended. Have Tom Howell, Brendan Whyte, Phil Reynolds, Joe Carl, Ward Narhi, and Kevin Wilson. This game is closed.

Wild Dog. Machiavelli. This game will start when the next game ends after Off the Leash begins. Scenario and specific rules to be determined at game start by player vote, as usual. Have Phil Reynolds, Joe Carl, Bob Robles, Brendan Whyte, Ward Narhi, Kevin Wilson, and John Biehl, will take up to 1 more.

Guard Dog. Kremlin. This game will start when Dog Tired ends. Have Any Lewis, Pasquale Giovine, Mike Scott, Ward Narhi, and Bob Robles, will take 1 more.

Wish List

Liftoff! Will take up to 5.

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.

Howling at the Moon
The S.O.B. Letter Column

Bob Robles

Order time, but first....a book review. "The Handmaid of Desire" by John L'Heureux. This short novel looks at an English department's politics of a "prominent West coast university". If I recall, the reviews of this book were effusive in their praise. I found the book a quick read and of only moderate entertainment value. The writing cannot lift the pettiness of academics, as described, to make the book even remotely engrossing or even worth an occasional laugh. I couldn't care for the characters, with the one exception of a true department asshole (and then only after the author describes a scene where the a-hole lovingly admires his penis). A disappointing book. Just goes to show you to take book reviews wih a grain of salt.

Feral Dogs

Advanced Game, no Optional Rules, Black Press, Ultimate Victory, Gunboat
Spring 1466
Deadline/Summer 1466 5/29 Tuesday

Milan and the Pope have just about taken care of Venice, and Naples is under heavy assault from France and the Pope. The alliance between France, Milan, and the Pope shows no signs of cracking.

Errata

It was pointed out to me that this game is supposedly being played with only the Advanced rules. Since Conquest is an optional rule, the Pope should not have been granted the benefits of the conquest of Florence. Since it is too late to change that, I am granting Milan the benefits of the conquest of Austria. Consequently, he gains 3 ducats from the Austrian variable income die roll and can now build in Austria, Hungary, and Tyrolea.

Winter 1466 Builds

		Treas	Cost	Rem
Fra	Maintains all, builds F Marseilles	47	21	26
Mil	Maintains all except A Friuli and A Istria, builds A Austria	67	24	43
Nap	Maintains all, no new builds	26	12	14
Pap	Maintains A Croatia, A Sienna, A Urbino, F Herzegovina, F Upper Adriatic, F Gulf of Naples, builds A Rome, A Ancona	78	18	60
Ven	Maintains all, no new builds	11	6	5

Expenditures

The Pope spends 15 ducats to disband Venetian A Bosnia.

Orders

France ❏: A AVIGNON to Turin, A PROVENCE to Turin, F Genoa holds, F Corsica holds, F Marseilles to GULF OF LIONS, F Western Mediterranean to CENTRAL MEDITERRANEAN, F Ionian Sea to OTRANTO

Milan ❏: A Hungary to SLAVONIA, A MILAN to Tyrolea, A MODENA supports A Mantua, A MANTUA supports A Modena, A VERONA supports A Padua, A PADUA supports A Verona, A AUSTRIA to Tyrolea, A CARNIOLA supports A Hungary to Slavonia

Naples ❏: A NAPLES supports G Naples, F BARI supports G Bari, G NAPLES supports A Naples, G BARI supports F Bari

Papacy ❏: A Urbino to ANCONA, A Ancona to AQUILA, A Rome to CAPUA, A Croatia to BOSNIA, A SIENNA holds, F Gulf of Naples to SALERNO, F Herzegovina to LOWER ADRIATIC, F Upper Adriatic to VENICE

Venice ❏: A Bosnia to Herzegovina (nsu), G VENICE holds

Notes

France/Milan//Papacy draw has been re-proposed. Please vote with your next set of orders. Remember, NVR = no, NMR = yes.

Press

France – All: We've done pretty good against Venice…check out the other two games to see how ell he normally does! I propose a 3 way draw, Milan/Papacy/France. We've worked hard for it…let's celebrate the victory!

Milan – France and the Pope: I completely agree for a three way win of F/M/P. Venice is gone and Naples isn't able to oppose any resistance to you two (and isn't capable for me).

Milan – Pope: If you leave to me the Lagoon of Venice, I shall prove to take it; on the contrary, as you asked to me, I left Friuli free in order that you can manoeuvre your fleets there to take the Lagoon of Venice. I want back it as soon

as possible. About the agreed three way draw of F/M/P, I must ask you to leave me one city between Croazia, Ferrara or Venice in order to have 15, 15 and 14 cities respectively after your conquer of Naples provinces. I shall occupy it only after your instructions and, in any case, without any force action.

Milan – France: I want what do you want: if you want a triple win, I want a triple win.

Pope – Milan: I have bribed one of Venice's units to disband. If he has a fleet in Venice, will you pay to disband it this season as you implied last season you would. I have disbanded many of my forces on our borders, I would appreciate it if you would do the same.

Pope – France: If you have entered OTR, then I will support you into BARI, even if your press indicates something contrary.

Pope – Naples: If you had done anything but just sit there I'd be inclined to work with you.

Venice – All: Just vote for the draw and get this over with already, please.

"Feral Dogs"

Army ○ Fleet □ Garrison ◇ Autonomous Garrison ◆ Besieged Garrison ◈
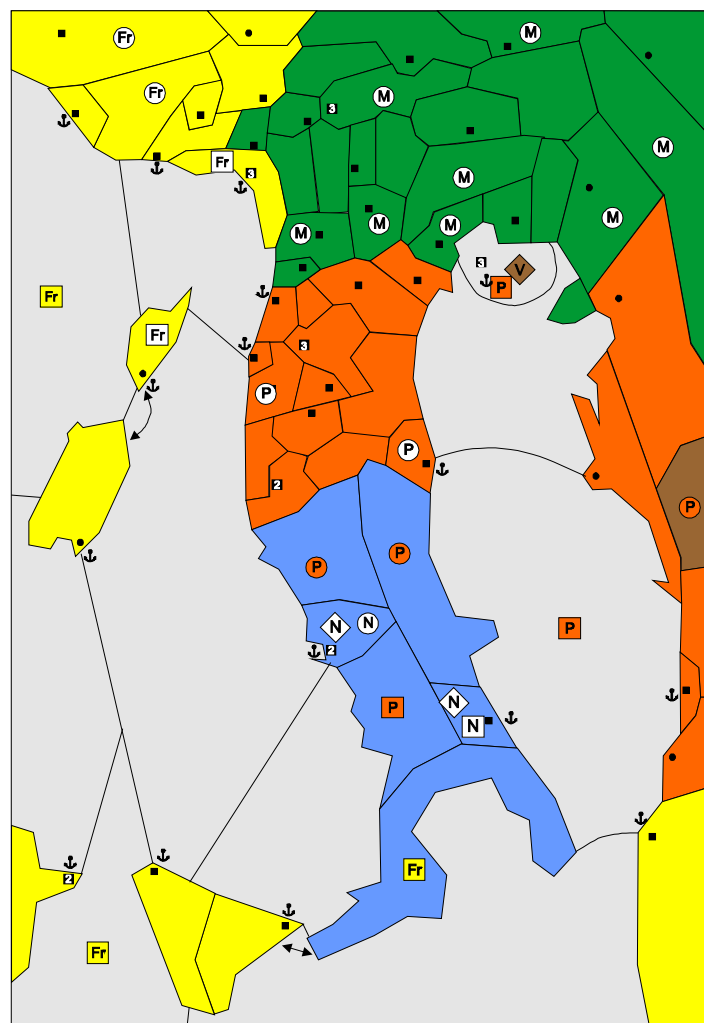
Citizen Dog
Advanced Game, Plague, Famine, Special Military Units, and Conquest, White Press, Ultimate Victory
Spring 1462
Deadline for Summer 1462: 5/29 Tuesday

With France gone, Austria and Milan become concerned with the Neapolitan territory Venice is gaining. Will they be fast enough to save Naples or prevent a Venetian win?

Fall 1461 Retreats

France retreats A Marseilles to garrison

Builds

		Treas	Cost	Rem
Aus	Maintains A Swiss and A Tyrolea, builds A Austria, A (Elite Mercenary) Hungary	24	15	9
Mil	Maintains all except A Marseilles, builds A (Elite Mercenary) Cremona	33	24	9
Nap	Maintain all, build A Rome	46	18	28
Ven	Maintains all, builds A Padua, A Treviso	49	33	16

Expenditures

Milan spends 3 ducats for Famine Relief in Genoa

Orders

AUSTRIA (Robles): A SWISS holds, A TYROLEA supports A Austria to Carinthia, A Austria to CARINTHIA, *A (EM) Hungary to SLAVONIA*

MILAN (Giovine): *A (EM) Cremona to MANTUA*, A Savoy to PROVENCE, A Pavia to MILAN, A Milan to BERGAMO, A Modena to BOLOGNA, A Lucca supports A Modena to Bologna, F Genoa to LIGURIAN SEA

NAPLES (Narhi): A ROME holds, A FLORENCE supports Milan A Modena to Bologna, F Corsica to TYRRHENIAN SEA, F SIENNA supports F Corsica to Tyrrhenian Sea, F Messina to OTRANTO, F Palermo to MESSINA

VENICE (Grib): A Bologna supports A Ancona to Urbino (cut, DISLODGED, retreat Ferrara, garrison, OTB), A Ancona to URBINO, A PERUGIA to Rome, A Padua to ANCONA, A Treviso to PADUA, F (EM) Naples to GULF OF NAPLES, F UPPER ADRIATIC transports A Padua to Ancona, F LOWER ADRIATIC supports F Durazzo to Ionian Sea, F Durazzo to IONIAN SEA, F CENTRAL MEDITERRANEAN supports F Durazzo to Ionian Sea

Press

Austria – Naples: OK, OK..he's got my attention.

Austria – Venice: Oh, we'll fill up that "mailbox"...heh, heh.

Milan – Venice: I hadn't your news and saw that your intentions for a solo win are quite clear. I cannot permit this.

Naples – Austria: Don't just cower in the corner. Do everything you can to stop Vencie from winning.

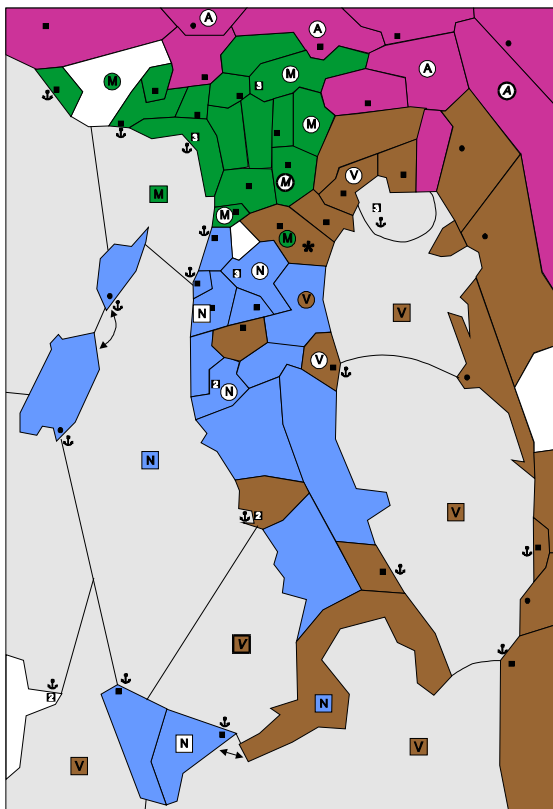**Naples – Milan:** It is now or never. I can't hold out much longer.

Spring 1462 Famine Losses

Venice A Perugia.
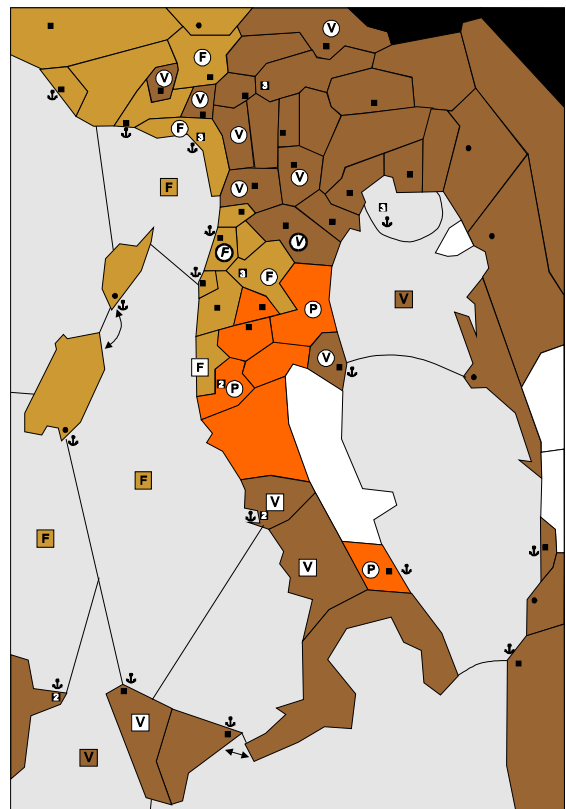
Summer 1462 Plague

Plague results held pending retreats. I will email the plague results out as soon as I receive the retreats.

Citizen Dog

New Tricks

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

New Tricks
Advanced Game, Plague, Famine, Special Military Units and Conquest, Black Press, Ultimate Victory
Fall 1259
Deadline for End of Game Statements: 5/29 Tuesday

Venice pushes on to victory. Florence and the Pope come together too late to stop the Venetian juggernaut.

Expenditures

Florence spends 12 ducats to disband Venetian F Naples

Venice spends 3 ducats each to counterbribe A Pavia and F Upper Adriatic

Orders

FLORENCE (Robles) A Swiss to TURIN, A Montferrat to GENOA, *A (EM) PISA supports A Florence*, A FLORENCE supports Papal A Urbino (cut, nso), F LIGURIAN SEA supports A Montferrat to Genoa, F PATRIMONY supports F Tyrrhenian Sea, F TYRRHENIAN SEA holds, F WESTERN MEDITERRANEAN to Tunis

PAPACY (Narhi) A Aquila to BARI, A Perugia to ROME, A URBINO to ANCONA

VENICE (Reynolds) A Turin to SALUZZO, A Carinthia to TYROLEA, A Pavia to MONTFERRAT, A Fornova supports A Pavia to Montferrat, A Verona to MANTUA, A Mantua to MODENA, *A (EP) BOLOGNA to Florence*, A ANCONA holds, F UPPER ADRIATIC supports F Ancona, F Naples holds (nsu), F SALERNO supports F Gulf of Naples to Naples, F Gulf of Naples to NAPLES, F PALERMO to Tyrrhenian Sea, F CENTRAL MEDITERRANEAN to Tunis

Press

Papacy – Florence: And you trusted this guy?!?!

Papacy – Venice: I have come up with a proposal of my own. Let's just end this one with a 3-way. Florence and I are resolute in this regard.

Venice – Florence and Papacy: Hit me with your best shots, because I'm hitting you with mine!

Venice – Florence: Decisions, decisions! I figure I just have to overwhelm you and counterbribe so your decisions don't matter!

Notes

The Florence/Venice draw has failed with 2 no votes. A concession to Venice and a Florence/Papacy/Venice draw have been proposed, but it doesn't matter because Venice has won. He has gained a total of 24 cities, well over the 22 needed for victory. Congratulations to Phil on his win.

Game Summary

	1253	1254	1255	1256	1257	1258	1259	1260
Ara	3	4	5	8	7	4	0	0
Avi	4	4	0	0	0	0	0	0
Flo	3	4	5	6	9	13	17	13
Gen	3	3	3	2	0	0	0	0
Mil	3	4	5	4	4	0	0	0
Pap	3	5	4	4	3	3	3	4
Ven	3	6	9	12	15	19	21	24

Off the Leash
Gunboat Machiavelli Gamestart
Deadline for Option and Press votes and Preference Lists: 5/29 Tuesday

At long last this game is starting up. What I need from all of you is your votes on the following matters:

Options: Please vote yes or no on each of the following options: Assassination, Natural Disasters, Special Units, Money Lenders, and Conquest. A simple majority of votes submitted is required for an optional rule to be used.

Press: Please express your preference for Black Press (press allowed under another country's byline), Gray Press (anonymous press allowed), or White Press (all press items have their senders identified). The category getting the largest vote will be accepted.

Since we have 8 players, we are playing Scenario I, The Balance of Power. Please submit preference lists.

Doggin' It
Turn 19, Phases IV-VII, Turn 20, Phases I-III
Turn 20, Phases IV-VII, Turn 21, Phases I-III due: 5/29 Tuesday

Turn 19

Construction and Operation

Red (Scharf) operates claims #52 ($100, 4 coal), #53 ($100, 3 coal), and #50 ($100, 3 coal), delivers 6 coal from #53 to Denver for $4200 and 3 silver from #19 to Denver for $12,000. Gains $2700 in passenger revenue.

Green (Narhi) operates claims #20 ($200, depletes). Delivers 1 silver to Denver for $4000. Receives $1400 in passenger revenue.

Brown (Carl) operates claims #60 ($100, 4 coal) and #21 ($150, depletes), delivers 8 coal from Durango to Pueblo for $3200.

Gray (Cain) no activity. Collects $1950 in passenger revenues.

Gold (Bolduc) operates claims #22 ($200, ½ silver), #12 ($250, 1 silver), #39 ($250, 2 lumber), #13 ($200, 2 silver), and #47 ($100, 3 coal). Delivers 2½ silver from #12 and ½ silver from #22 to Salt Lake City for $4800. Collects $100 in passenger revenues.

Blue (Martin) operates claims #66 ($200, 3 coal) and #68 ($200, 1 coal). Delivers 6 coal from Trinidad and 1 coal from Raton to Denver for $4900. Receives $2700 passenger revenue.

Commodity Prices

Gold: $5500

Silver (Denver): $2000

Silver (S.L.C.): $1000

Lumber (Denver): $1000

Lumber (S.L.C.): $1500

Lumber (Pueblo): $1000

Lumber (Santa Fe): $800

Coal (Denver): $500

Coal (S.L.C.): $500

Coal (Pueblo): $400

Coal (Santa Fe): $600

Turn 20

Move Prospectors and Surveyors

Red (Scharf) prospects #31, no surveying.

Green (Narhi) surveys Ouray, UT to Bridgeland, prospects #33

Brown (Carl) no prospecting or no surveying.

Gray (Cain) no prospecting or surveying

Gold (Bolduc) surveys Price to Sunnyside, no prospecting

Blue (Martin) prospects the deck (claim #3, gold at Dillon, $500), no surveying

Dispute Resolution

No disputes. Blue has first right of refusal for claim #3. Red pays $500, Green pays $700, Gold pays $500, and Blue may pay $500.

Press

Red – Brown: I can't think of any way to help you…any suggestions?
Brown – All: Anyone want to deliver my silver in Westcliffe to Denver for me? I'll cut a deal if it gets me out of last place :)

Notes

Remember that turn 20 is a winter turn. No deliveries or passenger runs on winter track.

The Players

Player	Color	Starting Location	Money	Personnel
Bill Scharf	Red	Denver	$82,050	S+1, P
Ward Narhi	Green	Denver	$51,200	S, P+1
Joe Carl	Brown	Pueblo	$21,200	S+1, P
Dennis Cain?	Gray	Salt Lake City	$26,600	S, P+1
Paul Bolduc	Gold	Salt Lake City	$37,050	S+1, P
Brad Martin	Blue	Santa Fe	$78,850	S, P+1

Owned Claims

#	City	Owner	Goods	Type	Operation
18	Leadville	Red	1	Silver	Depleted
52	Craig	Red	4	Coal	$100
53	Craig	Red	0	Coal	$100
50	Elk Spings	Red	3	Coal	$100
31	Walden	Red	N	Lumber	$250
58	Crested Butte	Green	10	Coal	Depleted
29	Lake City	Green	2	Silver	$150
28	Lake City	Green	N	Silver	$200
57	Crested Butte	Green	N	Coal	$200
33	Boulder	Green	N	Lumber	$100
42	Vallecitos	Brown	1	Lumber	Depleted
64	Walsenburg	Brown	0	Coal	$250
24	Ouray	Brown	N	Silver	$200
60	Durango	Brown	1	Coal	$100
21	Westcliffe	Brown	1	Silver	Depleted
63	Alamo	Brown	10	Coal	$150
36	Pagosa Springs	Brown	N	Lumber	$100
54	Bowie	Gray	0	Coal	$200
55	Bowie	Gray	6	Coal	$200
51	Rangely	Gray	5	Coal	$100
46	Price	Gray	N	Coal	$200
44	Scofield	Gold	0	Coal	$100
39	Lumberton	Gold	7	Lumber	$250
12	Eureka	Gold	0	Silver	$250
34	Dolores	Gold	0	Lumber	$200
47	Sunnyside	Gold	10	Coal	$100
35	Dolores	Gold	2	Lumber	$200
22	Telluride	Gold	2	Silver	$200

#	City	Owner	Goods	Type	Operation
13	Eureka	Gold	2	Silver	$200
66	Trinidad	Blue	0	Coal	$200
68	Raton	Blue	0	Coal	$200

Owned Passenger Lines

#	Type	Route	Payoff	Owner	Notes
7	B	Denver – Leadville	$600	Red	
9	B	Denver – Grand Jct.	$1350	Red	Discard when 15 is taken. Good for $1350 toward card 14 or 15
10	B	Pueblo – Grand Jct.	$750	Red	Discard when 17 is taken. Good for $750 toward card 17 or 18
2	A	Denver – Colorado Springs	$250	Green	
3	A	Denver – Pueblo	$400	Green	
8	B	Denver – Aspen	$650	Green	
1	A	Denver – Boulder	$100	Green	
12	B	SLC – Grand Jct.	$1250	Gray	Discard when 15 is taken. Good for $1250 toward card 14 or 15
11	B	Salt Lake City – Grand Jct.	$700	Gray	Discard when 17 is taken. Good for $700 toward card 17 or 18
5	A	SLC – Provo	$100	Gold	
6	A	Pueblo – Santa Fe	$600	Blue	
13	C	Denver – Santa Fe	$2100	Blue	

Available Claims

#	City	Type	Claim	Operation
65	Walsenburg	Coal	$300	$150
61	Canon City	Coal	$500	$150
32	Hot Sulphur Springs	Lumber	$300	$150
62	Canon City	Coal	$200	$100
3	Dillon	Gold	$600	$200
14	Aspen	Silver	$500	$200
59	Durango	Coal	$400	$100

Available Passenger Lines

#	Type	Route	Payoff	Cost	Notes
17	C	SLC – Pueblo	$3000	D x $75	
15	C	Denver – SLC	$4000	D x $100	
16	C	Santa Fe – Leadville	$800	D x $50	
14	C	Denver – Salt Lake City	$2700	D x $75	May not be taken by player who has card 18
18	C	SLC – Colorado Springs	$3000	D x $75	May not be taken by player who has card 14

Rover
1967
End of Game Statements due: 5/29 Tuesday

1967
Saved Cards

Moonshooter Unlimited fortunate accident (satellite or probe)
SCIFI astronauts cost only 1MB each, computer breakthrough
Penny Pines Government order: First 1968 planned launch must be an orbital satellite.

Event Card Actions

Penny Pines (Scharf) accepts the government order.
SCIFI (Cain) lowers Moonshooter Unlimited's three person capsule program to 85%.
Republic of Texas (York) gives the R&D bonus to Penny Pines

Purchases

Penny Pines (Scharf) spends 24 MB for 4 two-person capsules, 16MB for 2 one-person modules, 1MB for 1 orbital satellite, 3MB for 1 liquid fuel strap-on, 6MB for 2 kickers, 30MB for a third launch site, and 84MB for the Three-Stage Rocket program.
Moonshooter Unlimited (Bolduc) spends 24MB for 2 two-stage rockets, 12MB on 2 two-person capsules, 4MB on 2 docking modules, 30MB on Two-Person Module program, and 30MB on a third launch facility.
SCIFI (Cain) spends 4MB on 2 docking modules, 18MB on 1 three-stage rocket, 12MB on 1 three-person capsule, and 3MB on 3 astronauts (Ben Bova, Robert Heinlein, Frank Herbert).
Republic of Texas (York) spends 12MB on 2 lunar probes, 48MB on 4 two-stage rockets, 6MB on 1 two-person capsule, and 6MB on 2 kickers.
Cinnabar (Carl) spends 8MB on 1 one-person module, 12MB on 1 two-stage rocket, and 12MB on 2 two-person capsules.

Research and Development

Penny Pines (Scharf) C: 8 dice (1, 1, 2, 3, 3, 4, 4, 6) = 24% + 8% = 32%. 48MB spent.
Moonshooter Unlimited (Bolduc) c: 2 dice (1, 2) = 3% + 2% = 5% to Max R&D. 10MB spent. d: 8 dice (3, 4, 4, 5, 5, 6, 6, 6) = 39% + 8% = 47%. 16MB spent.

SCIFI (Cain) C: 8 dice (2, 3, 5, 5, 5, 6, 6, 6) = 38% to Max R&D. 48MB spent.
Republic of Texas (York) b: 8 dice (1, 1, 2, 4, 4, 5, 5, 6) = 20% - 8% = 20%. 16MB spent.
Cinnabar (Carl) F: 8 dice (1, 2, 3, 4, 4, 4, 6) = 26%. 8MB spent. e: 8 dice (1, 2, 2, 3, 5, 5, 5, 6) = 29% to Max R&D. 32MB spent. b: 2 dice (2, 2) = 4% to Max R&D. 4MB spent.

Declare Future Missions

Penny Pines (Scharf) declares 3. **Moonshooter Unlimited** (Bolduc) declares 3. **SCIFI** (Cain) declares 2. **Republic of Texas** (York) declares 2. **Cinnabar** (Carl) declares 1.
Your mission(s) are:

Missions

Penny Pines rushes one mission by 1 month. Launch Order: Penny Pines, Cinnabar, Cinnabar, Cinnabar, Republic of Texas, Republic of Texas, Republic of Texas, Moonshooter Unlimited, Moonshooter Unlimited, Penny Pines, Penny Pines.

Penny Pines launches a Manned Lunar Landing (Clifford Russell and Buck Rodgers). −1% on all safety factors due to rushing. Liftoff: 56%<91%, Earth Orbital Burn: 26%<96%, Earth Mision Burn: 77%<96%, In-Route Activities: 05%<86%, Docking Module Power-on: 15%<97%, Docking: 68%<94%, Lunar De-Orbital Burn: 77%<89%, Photo-Reconnaissance: 65%<79%, Lunar Landing: 75%<89%, Moon Walk: 91%<97%, Lunar Launch: 27%<89%, Lunar Orbital Activities: 14%<86%, Docking: 22%<94%, Lunar Mission Burn: 70%<96%, In-Route Activities: 34%<86%, Earth Orbital Burn: 66%<96%, Earth Orbital Activities: 01%<86%, Earth De-Orbital Burn: 89%>86%, crew saves, Re-Entry: 10%<86%, Recovery: 27%<86%. Mission Success! **Penny Pines wins!**

Dog Days
Epoch V Empire Selection and Franks
Deadline for Epoch V Vikings, Holy Roman Empire, and Chola: 5/29 Tuesday

Empire Selection

Amorphous, Cadaverous, and Nebulous (Reynolds) keeps
Gaming Through the Ages (Lewis) keeps
Peoples Who Need Peoples (Cousins) passes to the Royal Manticoran Historical Society

The Triffids (Geggus) passes to Peoples Who Need Peoples
Royal Manticoran Historical Society (Wilson) passes to the Triffids
Kibbles and Bits (Narhi) keeps

Epoch V

Gaming Through the Ages (Lewis) FRANKS: Plays Civil Service. Army and Capital *Northern Gaul* (Celt army retreats to *Albion*), army *Central Europe* (vs. Huns; F: 1, 2; H: 3, 5; loses), *Central Europe* (vs. Huns; F: 3, 5; H: 4, 6; loses), *Central Europe* (vs. Huns; F: 3, 4; H: 1, 5; loses), *Central Europe* (vs. Huns; F: 4, 6; H: 4, 4; wins), *Dalmatia* (vs. Byzantines; F: 1, 6; B: 4, 4; wins), fleet *Western Mediterranean* (vs. Peoples Who Need Peoples; G: 2, 6; P: 3; wins), army *Dnepr* (vs. Huns; F: 4, 6; H: 1; wins), *Western Steppe* (vs. Huns; F: 2, 4; H: 1; wins), *Eastern Steppe* (vs. Hsuing-nu; F: 3, 5; H: 2; wins), *Tarim Basin* (vs. T'ang Dynasty; F: 4, 6; T: 1, 2; wins), *Southern Apennines* (vs. Byzantines; F: 1, 6; B: 1, 1; wins, city destroyed). Builds Monument *Northern Gaul*. Points: Dominance in Southern Europe (6) and Northern Europe (4), Presence in North Africa (2), Middle East (3), China (3), India (3), Southeast Asia (2), Eurasia (1), and North America (1), 2 Capitals (4), 2 cities (2), 1 Sea (1), and 4 Monuments (4) for 36 points.

Players

Player Name	Player Faction Name	Empire Strength Points	Victory Points
Phil Reynolds	Amorphous, Cadaverous, and Nebulous (Black)	27	73
Caleb Cousins	Peoples who Need Peoples (Red)	38	76
Chris Geggus	The Triffids (Green)	39	78
Andy Lewis	Gaming Through the Ages (Purple)	41	106
Kevin Wilson	Royal Manticoran Historical Society (Blue)	43	66
Ward Narhi	Kibbles and Bits (Orange)	46	73

Final Positions

SUMERIANS: Capital and 3 armies in *Lower Tigris*.

Amorphous, Cadaverous, and Nebulous. Fleet *Bay of Bengal*. REBELLION: Army *Ceylon*. CELTS: Three armies, fort, and Monument *Albion*, army and fort *Ireland*, army *Central Massif*. SOUTHERN IBERIAN KINGDOM: Army, fort, and city *Southern Iberia*. GUPTAS: Army and Capital *Eastern Deccan*, army and Monument *Ganges Delta*, two armies *Irrawaddy,* and army *Sumatra*.

The Triffids. MINOANS: Army and fort *Western Anatolia*. SUB-SAHARAN MIGRANTS: Armies *Congo Basin* and *South Africa*. HUNS: Armies *Eastern Anatolia* and *Caucuses*.

Peoples Who Need Peoples. Fleets *Eastern Mediterranean, Black Sea*, and *North Sea*. INDUS VALLEY: Armies *Western Deccan, Western Ghatts*. PERSIA: Army *Turanian Plain.* HSUING-NU: Armies *Mongolia* and *North European Plain*. ANGLO-SAXONS: Armies *Baltic Seaboard* and *Western Gaul*. BYZANTINES: Army and Capital *Balkans*, armies *Northern Apennines, Shatts Plateau,* and *Libya*.

Royal Manticoran Historical Society. Fleet *Red Sea*. SCOTTS: Army, city, and fort *Highlands*. ARABS: Army, Capital, and Monument *Arabian Peninsula*, army and Monument *Nubia, Levant, Upper Tigris, Zagros, Persian Plateau*, and *Upper Indus*, armies *Nile Delta, Palestine, Hindu Kush,* and *Ganges Valley*.

Kibbles and Bits Fleets *Red Sea* and *South China Sea*. VEDIC CITY STATES: Two armies *Eastern Ghats*. ROMANS: Two armies *Western Iberia*, armies *Pyrenees* and *Middle Tigris*. MALAYAN KINGDOM: Army, city, and fort *Malayan Peninsula*. T'ANG DYNASTY: Army, Capital and Monument *Yangtze Kian*, army and Monument *Great Plain of China*, armies *Yellow River, Wei River, Szechwan, Chekiang, Si-Kyang*, and *East Indies*.

Gaming Through the Ages Fleet *Western Mediterranean*. NILE KINGDOM: Army, city, and fort *Upper Nile*. MAYANS: Two armies and a Capital *Central America*. MAURYANS: Armies *Lower Indus, Persian Salt Desert,* and *Mekong*. GOTHS: Army and Monument *Morea*, army and city *Crete*, two armies *Pindus,* armies *Danubia, Lower Rhine,* and *Scandinavia*. FRANKS: Army, Capital, and Monument *Northern Gaul*, army and Monument *Southern Apennines* and *Central Europe*, armies *Dalmatia, Dnepr, Western Steppe, Eastern Steppe*, and *Tarim Basin*.

Event Cards

_____

_____

Epoch V Empire

_____

Fenris
Turns 10.3 to 11.3
Deadline for Turns 11.4 to 12.4: 5/29 Tuesday

Turn 10

Steve Die roll = 9, Ward gains 2 brick, Steve gains 2 lumber, Chris gains a lumber and an ore, and Bill gains 2 ore. Plays roadbuilding, building roads at H4/Sea and H4/Sea. Trades a wheat and a lumber to Chris for 2 bricks.

Chris Plays Soldier, moving the Robber to F6. Steals an ore from Kevin. Die roll = 3, Paul gains 2 brick, Steve gains 1 lumber, and Chris gains 1 wheat. Builds road at F2/Sea. Buys development card (_____).

Kevin Die roll = 8, Ward and Bill each gain 3 lumber, Chris gains 1 wool.

Bill Die roll = 6, Paul gains 2 ore and a wheat, Steve gains 2 ore and 3 wheat.

Turn 11

Paul Die roll = 10, Ward receives 4 ore, Kevin receives 2 ore, and Chris receives 2 brick. Trades 1 wheat to Bill for 1 wool. Builds a settlement at P12/H3/Wasteland.

Ward Die roll = 5, Ward receives 2 wheat and 2 wool, Steve receives 2 wool, Kevin receives 2 wheat, and Bill receives 4 wool. Trades 3 ore for 1 lumber. Upgrades settlement at F2/P5/L11 to a city. During the special build turn, Steve builds a settlement at H4/Sea/Sea. Chris builds a road at F2/Sea. Kevin buys a development card (_____).

Steve Die roll = 5, Ward receives 2 wheat and 3 wool, Steve receives 2 wool, Kevin receives 2 wheat, and Bill receives 4 wool. Trades 3 wool for 1 ore and upgrades F12/F6/L3 to a city.

Open Trade Offers

Steve offers 2 wool for 1 brick

Turn 11 Dice Rolls

Chris	10	**Kevin**	5	**Bill**	10

Turn 12 Dice Rolls

Paul	11	**Ward**	12	**Steve**	7	**Chris**	8

Player	Color	Wheat	Sheep	Brick	Lumber	Ore	Development Cards	VP
Paul Bolduc	Red			1	1	1		4
Ward Narhi	Blue	2	6	2	3	3		8
Steve Koehler	Green	2		1	1		2 Soldiers	7
Chris Geggus	Yellow	1	2	2		1	2 Soldiers, 3 Unplayed	4
Kevin Wilson	Purple	3				3	1 Unplayed	8*
Bill Scharf	Brown	1	7		2	2	Soldier	5

Your unplayed card(s) is(are): _____

* Longest Trade Route
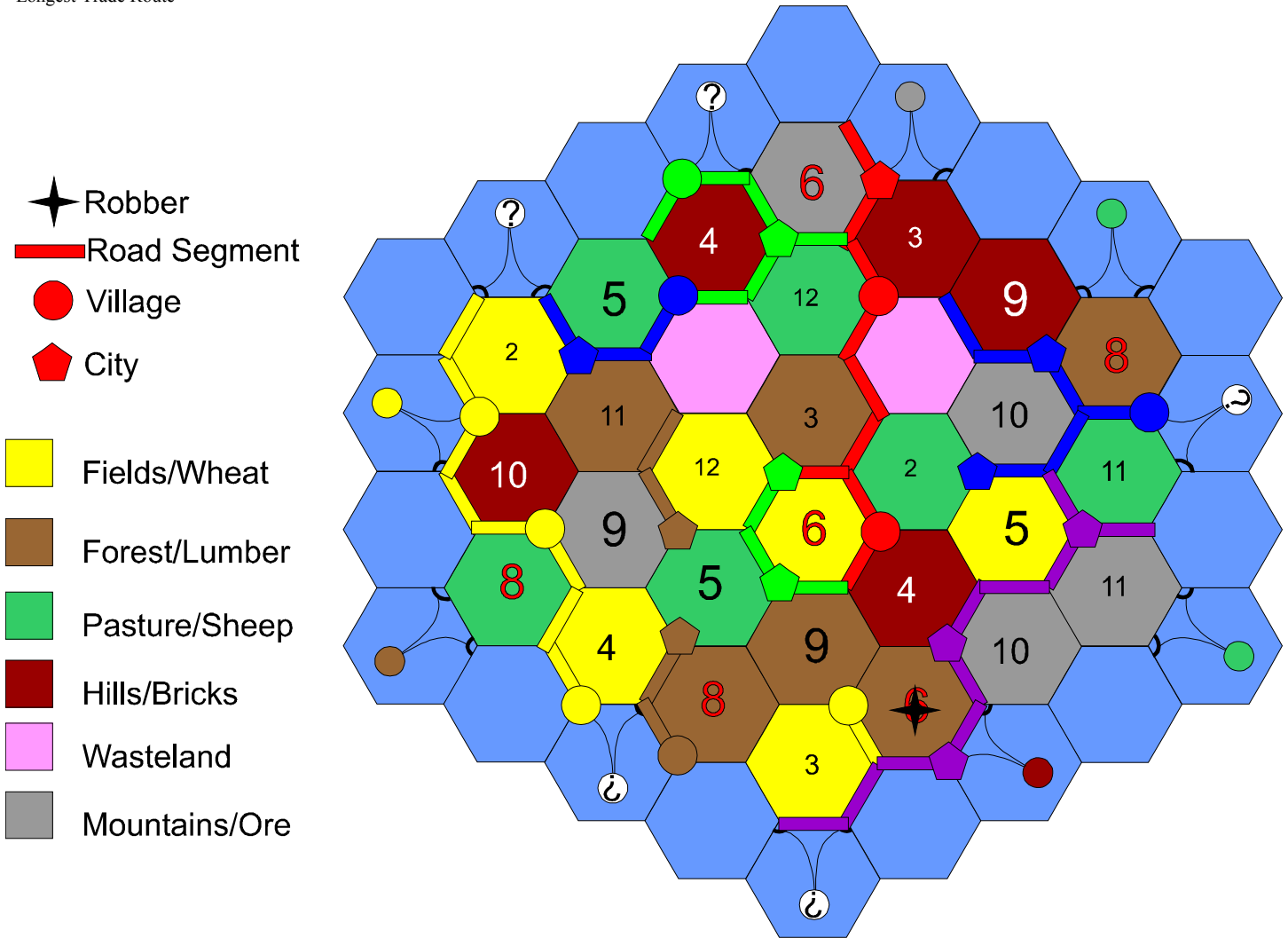
Canes Venatici
Turn 8
Deadline for Turn 9: 5/29 Tuesday

Commander Actions

SUPERB (Lowrey) buys a titanium factory (Or1, Wa8, Wa9, Ti12) and a population factor (Wa5).

Mystery Machine 2 (Lewis) opens the bidding on Ecoplants at 30 and gets it (Or1, Or1, Wa5, Wa7, Wa8, Wa8)

S.A.R.A. (Cousins) opens the bidding on Orbital Labs at 50 and 2113 Corporation gets it at 52 (Or5, Wa5, Wa7, Wa8, Wa8, Ti9, Wa10). Opens the bidding on a second Orbital Labs at 50 and Miller's gets it for 51 (Or4, Or4, Wa7, Wa7, Wa9, Wa10, Wa10). Opens the bidding on the last Orbital Labs at 50 and gets it (Or2, Or4, Or4, Wa4, Or5, Wa7, Wa8, Wa8, Ti8)

BarterTown V (York) passes.

Miller's (Scharf) passes.

HBDC V (Wilson) passes.

2113 Corporation (Cain) buys a titanium factory (Wa6, Wa6, Wa6, Wa6, Wa6) and 2 population factors (Wa4, Wa7, Wa9)

The Players

	Outpost Name	Commander	Factories	Upgrades	VP
1	SUPERB	Michael Lowrey	OrF, **OrF, WaF, WaF, WaF, TiF, TiF**	No, HE, Ec	16
2	Mystery Machine 2	Andy Lewis	**OrF, OrF, WaF, WaF, WaF**	HE, 2No, Wa, Ec	16
3	S.A.R.A.	Caleb Cousins	**OrF, OrF, WaF, WaF, TiF**	HE, No, Wa, OL	13
4	Miller's	Bill Scharf	OrF, **OrF, WaF, WaF, WaF, WaF**	2DL, Wa, OL	11
5	2113 Corporation	Dennis Cain	OrF, **OrF, WaF, WaF, WaF, TiF**	HE, OL	10
6	BarterTown V	Andy York	**OrF, OrF, WaF, WaF, TiF**	HE, No	9
7	HBDC V	Kevin Wilson	**OrF, OrF, WaF, WaF, WaF**	Wa, 3DL	8

SUPERB is Space Urchin Planetary Evaluation and Recovery Board. HBDC V is Heavenly Bodies Development Company V. S.A.R.A. is Supremely Arrogant Republican A@#$^&*!

Available Upgrades

New Arrivals: Scientists, Ecoplants, Ecoplants, and Orbital Lab

Upgrade	Minimum Bid	Available	TBD
Warehouse (Wa)	25	1	0
Heavy Equipment (HE)	30	0	0
Nodule (No)	25	0	0
Scientists (Sc)	40	1	4
Orbital Lab (OL)	50	1	1
Robots (Ro)	50	1	4

Upgrade	Minimum Bid	Available	TBD
Laboratory (La)	80	1	4
Ecoplants (Ec)	30	2	1
Outpost (Ou)	100	0	5

Your Production Cards:

Dog Tired
Turn 3 Funeral Commission through Special Influence Declaration
Turn 4 Cure Phase through Health Phase due: 4/24 Tuesday

Funeral Commission

RE plays Five Year Plan Alteration (59). No effect.

Replacement

ORRP declares 1 IP on Lech Schukrutoff. Lech promotes Z to the Candidates and ages to 76.

Rehabilitation

None.

Parade

Petr attempts to wave and fails (dr = 4). Ages to 89. IP declares 3 IP on Boris Badenuff.

Special Influence Declaration

ORRP plays Your Agends Are Everywhere (54) and dictates the order of influence declaration as: ORRP, TCC, FBI, HLS, RE, and IP. ORRP declares 2 new and 9 predeclared IP on Mikail Strychnin. TCC draws 2 cards. Must discard 1 card. FBI draws 2 cards. HLS draws 2 cards. Must discard 1 card. RE draws 2 cards. IP 2 cards. Must discard 1 card.

Your cards are:_____

_____

Notes

Steve Koehler has NMRed. **Will Pasquale Giovine please submit standby orders for HLS!**

Politburo

Office	Politician	Condition	Influence
Party Chief	Petr Niewitko (D)	89 ? +	3 (HLS)
KGB Head	Karel Krakemheads (E)	78 ++	5 (HLS), 7 (FBI), 8 (IP)

Office	Politician	Condition	Influence
Foreign	Mikail Strychnin (T)	64 ? ++	10+ (ORRP)
Defense	Boris Badenuff (X)	61 ++	10+ (IP)
Ideology	Lech Schukrutoff (B)	76 ++	1 (ORRP)
Industry	Alexej Goferbrok (C)	74	
Economy	Nikolai Shootemdedsky (H)	69 ? ++	
Sport	Antonj Mischif (I)	68 ? +	

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

Candidates: K, N, O, P, Z

People: G, L (++), M, R, S, U, V, W, Y

Siberia: J

Kremlin Wall: A, Q, F

Your cards: _____

_____

_____

Your undeclared influence: _____

_____

_____

Players

Joe Carl	Reform Expansionists
Kevin Wilson	October Revolution Reform Party
Chris Geggus	Floridian Ballot Investigators
Mike Scott	The California Connection
Bill Scharf	Ideological Purists
Steve Koehler	Hard Line Stalinists

HLS have one wave.

Hounds of Tindalos
Turn 4
Turn 5 due: 5/29 Tuesday

Planning

English maintain 4 ships ($16) and buy 4 soldiers ($40) for $56.

French maintain 4 ships ($16) and buy 4 soldiers ($40) for $56.

Portuguese maintain 4 ships ($16) and buy 1 soldiers ($10) for $26.

Spanish maintain 2 ships ($8) buy 1 ship ($12) and 2 soldiers ($20) for $40.

Outbound Naval Movement

English Moves to L. Dice: 1, 1, 4, 5. Loses 2 ships each containing a colonist and a soldier.

French Moves to N. Dice: 3, 4, 4, 4. No losses.

Portuguese Moves to O. Dice: 1, 5, 6. Loses 1 soldier.

Spanish Moves to K. Dice: 2, 2, 6. No losses.

Mining

French loot 2 gold from the city in N.

Discovery

English dicover a mine in L. **Portuguese** discover a mine in R.

Land Movement

Spanish move 3 colonists from K to H. Moves 4 colonists and 2 soldiers from anchorage dot to K.

Portuguese move 3 soldiers from R to O (it is a climate 3 area with 2 natives), moves 2 soldiers and 4 colonists from R to Q (it is a resource rich climate 3 area with 3 natives), moves 3 colonists from R to T, 2 soldiers from T to X (it is a resource rich climate 3 area with 3 natives and a site), moves 4 colonists from anchorage dot to O.

English move 2 soldiers from L to M, moves 2 colonists from L to I, moves 1 soldier from I to E (it is a climate 2 area with 1 site), soldier prospects, 1 soldier in I propects, 1 colonist in L mines, moves 2 soldiers and 2 colonists from anchorage dot to L.

French moves 2 gold from N to fleet, moves 1 soldier and 5 colonists from N to P, moves 4 soldiers and 4 colonists from anchorage dot to N.

Native Combat

Spanish: 1 soldier killed in H, 1 natives killed in K. Soldier loots in K.

Portuguese: 2 natives and 1 soldier killed in O. 1 native and 1 soldier killed in Q. 1 soldier and 1 native killed in X. **French:** 2 natives killed in P.

Native Uprisings

Climate is a 3. Uprisings in H (4 colonists killed) and Q (1 colonist killed).

Survival

Climate is a 5. **English** lose 1 soldier in E.

Political Control

Portuguese gain political control in O and T, lose political control in R.

English gain political control in I. **French** gain political control in P.

Homebound Naval Movement

Spanish: Dice: 3, 3, 4. No losses.

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

English: Dice: 2, 2, 2, 3. No losses.

French: Dice: 2, 5, 6, 6. No losses.

Income

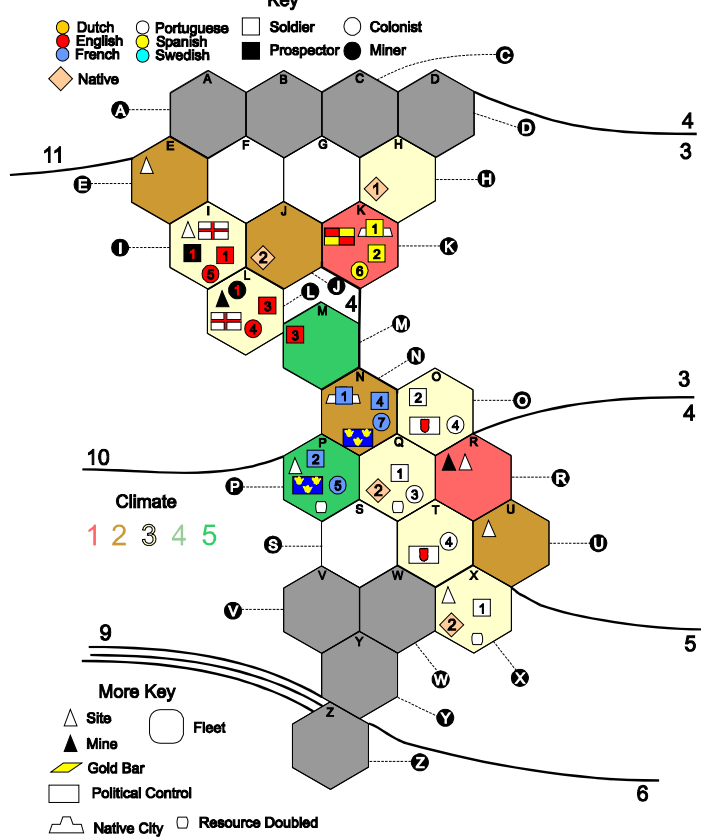**Spanish:** Political Control: $40, resources: $6.

Portuguese: Political Control: $60, resources: $14.

English: Political Control: $60, resources: $11.

French: Political Control: $60, resources: $17, gold: $80.

Turn 5 Initiative

Portuguese, English, French, Spanish

Players

Country	Player	Money	Available Soldiers	Ships	Colonists
English	Andy Lewis	$89	12	2	4
French	Bill Scharf	$175	12	4	4
Portugese	Bob Robles	$116	15	4	4
Spanish	Dennis Cain	$52	12	3	4

Hyena
Gamestart
Deadline for Turn 1: 5/29 Tuesday

1st: Dennis Cain (Dell/NNR)

Has **$84** on hand. Die rolls: **1: 2 2 4 6, 2: 4 4 5 6** (Use 2)

2nd: Chris Geggus (Whynoms/NNR)

Has **$100** on hand. Die rolls: **1 4** (Double one)

3rd: Bob Robles (Humans/NNR)

Has **$100** on hand. Die rolls: **4 5 5**

4th: Andy Lewis (Whynoms/NNR)

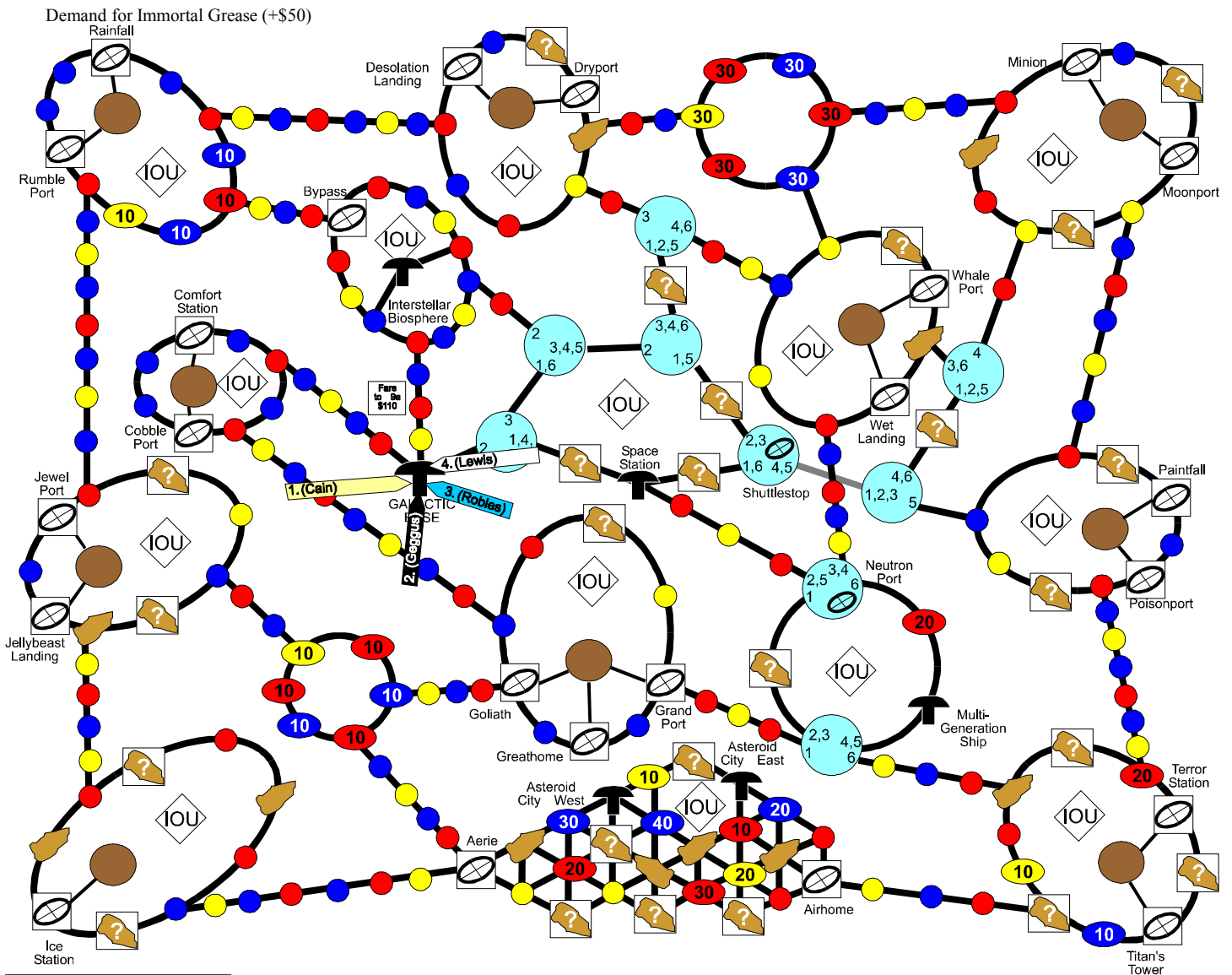Has **$100** on hand. Die rolls: **2 4** (Use 1 * 4)

The first 20 draws from the cup are as follows:

1a (Nillis): Nothing

1b (Volois): 3 Voll Silk

2 (Graw): Nothing

3 (Niks): 2 Mulch Wine

4a (Dell): 1 Finest Dust

4b (Humans): 2 Demand for Space Spice (+$40)

5 (Shenna): 1 Demand for Mulch Wine (+$40)

6 (Yxklyx): 1 Immortal Grease

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

7b (Eeepeeep): 1 Servo-Mechanism, 1 Demand for Finest Dust (+$50), 1 Demand for Immortal Grease (+$50)

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

9a (Chola): 1 Designer Genes, 1 Demand for Immortal Grease (+$50)

9b (Wollow): 1 Demand for Impossible Furniture (+$70)

10 (Qossuth): Nothing

Base: Fare to 9a ($110)

Upon discovery of each new culture, four more chits will be drawn from the cup, until it is its normal size after all cultures have been discovered.

    The use of the Combat rules was voted down 3 votes to 0 with 1 abstention.

Trivia Quiz

You get 2 points for a solo answer, 1 point for sharing the correct answer with one other person, and ½ point for sharing the answer with two or more people. Every 10 points earn you a free issue. Research is allowed. Free issues are credited as they are earned. Players may submit a list of questions (answers must be included.) If used, five points are awarded. In addition, if no correct answers are received for a question, the supplier of the question receives two points.

And so, without further ado, the answers to last issue's questions:

Q1. Why do some people press elevator buttons with their fingers and others with their thumbs?

A1. To make the elevator move.

Paul Bolduc receives 2 points.

Q2. Two sons, two fathers, and a grandfather sat together. How many men were there?

A2. Two men, one of whom was a grandfather, and the other of whom was a father.

Bill Scharf, Paul Bolduc, and Brendan Whyte each receive ½ point.

Q3. A helicopter was hovering 200 feet above the sea when the pilot suddenly turn off the engine. The rotor stopped, but the helicopter did not crash. Why?

A3. The helicopter was hovering just over the helicopter-landing pad on an offshore oil-drilling platform.

Bill Scharf, Chris Geggus, Paul Bolduc, Andy York, and Brendan Whyte all receive ½ point.

Q4. In its day, the Great Wall of China was considered virtually impregnable, yet it was breached within a few years of being built. How?

A4. The guards were bribed.

No correct answers.

Q5. A man was cast adrift in a lifeboat. He was horrified to see that it was letting in water, so he diligently bailed out the water. After two days, he did not bother bailing out the water anymore. Why not?

A5. It was a wooden lifeboat. The wood swelled after two days and sealed its own leaks.

No correct answers.

Current Scores

Chris Geggus	75½	Andy York	60½	Paul Bolduc	56½
Caleb Cousins	52½	Bill Scharf	52	Dennis Cain	47
Joe Carl	42½	Brendan Whyte	40	Andy Lewis	33½
Ward Narhi	29½	Steve Koehler	29	Bob Robles	25
Tom Howell	19½	Brad Martin	16	Kevin Wilson	8
Sean Cousins	7	Sigourney Street	½		

Brendan Whyte each receives a free issue.

New Questions

Topic: Brain Teasers

1. In a heavy fog, there was a serious road crash which involved two trucks and six cars. All the vehicles were severely damaged. Police and ambulances were quickly on the scene, where they found both truck drivers and took them to the hospital for treatment. However, no drivers from any of the cars could be found at the scene of the accident. Why?

2. A man set out for a walk. At the end of his walk his head had traveled 40 feet further then his feet had traveled. He was a healthy man with all his limbs intact before and after the walk. So how did his head travel farther than his feet?

3. A lady has an expensive circular oak table and she wishes to find its exact center. How does she do this without marking the table in any way?

4. What happened in the second half of the 20th century and will not happen again for over 4000 years?

5. Two drivers drove slowly and safely in the correct direction down a wide road before coming to a stop in front of a red stop light. A nearby police officer immediately arrested one of the drivers and let the other one drive off. The police officer had never seen or heard of either driver before. Neither driver had a criminal record. They were both fully dressed and no one had been drinking. Both cars were in excellent roadworthy condition and had not been stolen. The arrested driver was charged and convicted. Of what?

Pedagoguery

By cosmological decade 15, the last stars have lived their lives out, leaving behind a variety of stellar remnants. These fall into four categories: brown dwarves, white dwarves, neutron stars, and black holes. With the exception of black holes, all of these objects resist further contraction due to a quantum mechanical phenomenon called degeneracy pressure. For this reason, this age of the universe is called the Degenerate Era.

By far the vast majority of objects in this age are either brown dwarves or white dwarves. Brown dwarves are failed stars. They have a mass of less than 0.08 times the mass of the sun. This is the threshold below which it is not possible to sustain hydrogen fusion. The density of these objects is extremely high, forcing the atoms at the center of the dwarf so close together that the nuclei are forced to share each other's electrons. This limits the available quantum states, so that the electrons exert pressure and strongly resist further compression. This is called electron degeneracy pressure.

White dwarf stars are also supported by electron degeneracy pressure, but the difference is that white dwarves are the remnants of stars less than 8 times the mass of the sun. They range in size from the largest brown dwarves up to 1.4 times the mass of our sun, all compacted into a sphere about the size of our Earth. White dwarves are the most numerous of the stellar remnants in the degenerate era.

Neutron stars and black holes form the rare elements of this age. Only stars that start out with more than 8 solar masses will become neutron stars or black holes, and such stars are rare themselves.

Those few planets that survived the evolution of their stars have a rather bleak future. During the Degenerate Era, galaxies and galaxy clusters evolve in ways that they couldn't in earlier eras, simply because there wasn't enough time. The primary means of this evolution is through close stellar encounters. These could happen in the Stelliferous Era, but they are extremely rare because stars are so far apart relative to their diameters. In the Degenerate Era, close encounters become more likely because there is so much more time available. During such an encounter, a number of things can happen, depending on the exact dynamics of the encounter. The planet could simply have its orbit altered, it could be transferred to the other star, or it could be thrown clear of both stars. Given enough time, all planets will be thrown free of their parent (or adopted parent) stars, wandering free in space.

Galaxies and galaxy clusters also undergo considerable evolution. First the individual galaxies in a cluster will collide and merge, a process that is occurring today. However, as the number of close encounters between stars increases, the merged galaxies undergo a process called dynamical relaxation. Dynamical relaxation can be thought of in a way similar to evaporation. When two stars have a close encounter, they gravitationally interact, exchanging energy. Frequently, one of the stars will gain enough energy to be thrown clear of the galaxy. This carries energy away from the galaxy, and the remaining star will have a lower orbital energy, and will thus orbit closer to the center. The more this happens, the more crowded the central parts of the galaxy become, and the more frequent stellar encounters become. It becomes a rather vicious cycle that would eventually throw all but the most tightly bound stars out into intergalactic

space. The fate of those tightly bound stars is no better, since they will eventually be absorbed into the central black holes of their galaxies.

Another consequence of the increased chance of stellar encounters is the increase chance of outright stellar collisions. Since most of the objects in this era are brown or white dwarves, these have the highest chance of actually colliding. A collision between two white dwarves, or a white dwarf and a brown dwarf, will either result in a more massive white dwarf, or if the result is greater than the Chandrasekhar limit of 1.4 solar masses, it will result in a supernova explosion, leaving behind either a neutron star, or nothing. If two brown dwarves collide, the result could well be a stable, low-mass star. Such a star would provide a small oasis where life like ours could exist briefly.

In this far future, white dwarves will have cooled down to the temperature of liquid nitrogen. They will not cool any further, however, due to a rather strange energy source. The dark matter that pervades space will tend to collect in such objects, attracted by their gravity. Once inside, the likelihood of collisions between dark matter particles would be vastly greater than in deep space. And, if a dark matter particle meets its anti-particle, it will annihilate, providing energy. For a white dwarf of about one solar mass, this will provide about 10^{15} watts of energy per second. By contrast, our sun puts out 10^{26} watts of energy every second, but after the 20th cosmological decade, this will be the dominant form of energy in the universe, and it will continue to be so as long as the dark matter remains, which would be until about 20 cosmological decades. During this time, white dwarves would maintain a surface temperature of about 63 Kelvins. Life as we know it could use this energy to survive by building immense structures around white dwarves and living there.

One of the primary tenants of physics is that the scales must balance. Since baryonic matter, matter made of protons and neutrons, was created in the early stages of the big bang, it must mean that protons are not forever. Eventually they will decay. Now, that eventually is a very long time, and current experiments have demonstrated that it can be no shorter than 10^{32} years, or 32 cosmological decades. Eventually, however it will happen, and this spells the doom for all degenerate remnants. For our purposes, we will assume a proton decay time of 37 cosmological decades. Protons can decay in a number of ways, but the end result is always a positron, a neutrino, and energy. The energy of this decay will cause a typical white dwarf to emit 400 watts of power a second at a temperature of 0.06 Kelvins. Over time, this decay will disrupt atomic nuclei, eventually transmuting all heavy elements back into hydrogen. Eventually, the white dwarf gradually evaporates away. Neutron stars react similarly, except they are much smaller, and therefore much hotter, a blistering 3 Kelvins. Eventually, when the neutron star's mass drops to less than a 10th of a solar mass, it can no longer maintain neutron degeneracy pressure, and it expands into a small white dwarf, with the neutrons transmuting into protons, electrons, and antineutrinos. By cosmological decade 39, no baryonic matter is left, and the universe is filled with electrons, positrons, neutrinos, and black holes.

Next issue, I will discuss the next age of the universe, the Black Hole Era.

Addresses

Harry Andruschak
20805 Margaret St.
Carson, CA 90745-1224
sarareichert@aol.com

John Biehl
8809 Delwood Dr.
Delta, B.C., Canada V4C
4A1
jeen@telus.net

John Boardman
234 E. 16th St.
Brooklyn, NY 11226-5302

Paul Bolduc
203 Devon Court
FWB, FL 32547-3110
Prbolduc@aol.com
bolduc@eglin.af.mil
(850) 863-9081

Tom Butcher
674 Roanoke Ave.
Coyahoga Falls, OH 44221-1242

Dennis Cain "Red Dog"
1218 N. 3rd St.
Quincy, IL 62301-1727
(217) 223-2284
fax (217) 224-8393
dbear@rnet.com

Joe Carl
302 38th St. NW
Canton, OH 44709
Jcarl@neo.rr.com

Caleb Cousins
96 Cedar St. #4
Bangor, ME 04401
(207) 941-8568
caleb_cousins@umit.maine.edu

Chris Geggus "Davey Boy Smith"
10 Talbrook, Brentwood
Essex, CM14 4PY, UK
Chris@geggus99.freeserve.co.uk

Pasquale Giovine
Via Ulisse Dini, 18
I-56126 Pisa, Italia
giovine@mail.dm.unipi.it

Ray Grib "Ray-Bid Basset"
2424 Penton Ct.
Deltona, FL 32725
(904) 789-7867
raygrib@aol.com

Tom Howell "Whippet"
365 Storm King Road
Port Angeles, WA 98363
off-the-shelf@olympus.net
(360) 928-9698

Steve Koehler "Devil Dog"
418 Linderhill Ln.
Mathews, NC 28105
sdk@Prodigy.com
(704) 544-2849

Andy Lewis "Marmaduke"
16 Gossling Dr.
Lewes, DE 19958
alewis@ispchannel.com
(302) 644-1984

Michael Lowrey
6903 Kentucky Derby Drive
Charlotte, NC 28215
Mlowrey@charlotte.infi.net
(704) 569-4269

Ken Marcinonis
657 Gannet Ln.
Bolingbrook, IL 60440-1245
Kmarc@mediaone.net

Brad Martin
15 Turo Close
Willeton 6155
Western Australia
Australia
Westfront@hotmail.com

Lee McConnell
2023 Stancrest Rd.
Dublin, OH 43016-9546
Bluefalcon@netwalk.com

Ward Narhi
521 Moreley
Akron, OH 44320
Wenarh@aestpe.com
(330) 835-4013

Phil Reynolds
2896 Oak St.
Sarasota, FL 34237
preyno@yahoo.com

Bob Robles "Howler"
67 Tara Rd.
Orinda, CA 94563
76350.2203@compuserve.com
(510) 254-6354

Bill Scharf "Doge"
4814 Walnut Grove Ave.
Rosemead, CA 91770
(626) 286-4428

Mike Scott
5508 Withers Ave.
Fontana, CA 92336
mikesmag2@juno.com
(909) 899-2378

Sigourney Street "Canine Killer"
PO Box 1235
Boston, MA 02130-0011
SigStreet@aol.com

Brendan Whyte
Geography Department
University of Melbourne
Parkville 3052, Australia
Brwhyte@hotmail.com

Kevin Wilson
373 Gateford Dr.
Ballwin, MO 63021
ckevinw@aol.com
(314) 391-9865

Andrew York "Greyhound"
P.O. Box 201117
Austin, TX 78720-1117
73210.3053@compuserve.com
(210) 658-6066

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, Joe Carl, Pasquale Giovine, Andy York, Phil Reynolds **Dune:** Steve Koehler, Paul Bolduc, Kevin Wilson, Ward Narhi, Andy York **New World:** Andy York, Bill Scharf **Merchant of Venus:** Paul Bolduc, Carrie Lewis, Bob Robles, Andy York **Die Macher:** Andy York **Outpost:** Michael Lowrey, Kevin Wilson, Andy York **History of the World:** Andy Lewis, Paul Bolduc, Kevin Wilson, Chris Geggus, Joe Carl, Andy York, Phil Reynolds **Stellar Conquest:** Paul Bolduc, Kevin Wilson, Andy York **Liftoff!:** Dennis Cain, Andy York **SolarQuest:** Andy York, Phil Reynolds **Age of Renaissance:** Bob Robles, Michael Lowrey **Kremlin:** Joe Carl, Andy York, Andy Lewis, Pasquale Giovine **Silverton:** None **Settlers of Catan:** Michael Lowrey

Standby Calls

Pasqule Giovine for HLS in Dog Tired.