

Game Openings

WNotes from Hades
e've had another eventful few weeks. Three weeks ago, my sister-in-law came to visit from New Hampshire. Overall, it was a nice visit. Her son and daughter-in-law also stopped by. He's a Navy lieutenant who is being transferred from the Pentagon to Coronado, in San Diego, so they drove cross-country and stopped here on their way. The next week, my parents came by for my Mom's cousin's wedding, so they got to see their grandchildren for a second week this summer. While they were here, the Prius I ordered six months ago finally arrived and we celebrated my grandfather's 86th birthday. We had fun, but we're glad to be getting back to a more normal schedule.

One more game ends this issue as Mordor wins it in Warg. Congratulations to Dave Partridge for another victory. With that, I will now start up Dogwood next issue. Paul Bolduc has asked if we are interested in making it a 7-player game, and if nobody objects, we will.

The next deadline is **Tuesday, September 28 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. Also, if you want to fax in orders, call first. We hang up on unannounced faxes.

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Contents (cont.)

Dogwood. History of the World. Have Dave Anderson, Kevin Wilson, Andy Lewis, Dennis Cain, Chris Geggus, Cary Nichols, and possibly Paul Boldic. **This game starts next issue!**

Salty Dog. Seafarers of Catan. We will be playing the Oceans scenario. Have Kevin Wilson, Dave Partridge, Cary Nichols, Bill Scharf, Chris Geggus, Ward Narhi, and Mike Scott.

Doberman. Industrial Waste. This game will start after Junk Yard Dog ends. Have Bill Scharf, Eric Brosius, Dave Partridge, and Richard Weiss. Dave is willing to defer to anyone who is not in the Junk Yard Dog.

Dog Chow. Age of Renaissance. Have Bob Robles, Cary Nichols, Caleb Cousins, Steve Koehler, and Paul Bolduc need up to 1 more.

Dogfight. Gunboat Machiavelli. This game will start when the next Machiavelli game finishes. Scenario and rules by player vote. Have 8, this game is closed. This box will be checked if you are signed up.

Outlaw Dogs. Gunslinger. A game of shootouts in the old West. The exact scenario to be determined. Have Chris Geggus, Paul Bolduc, Dave Partridge, and Andy Lewis, need up to 2 more.

Wish List

New World. A game of colonization in the Americas. Have Dave Partridge and Andy Lewis, will take up to 4 more.

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:

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2000 S. Armour Court
La Habra, CA 90631
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On the Web at: <http://home.adelphia.net/~chassler>

Subscriptions cost \$1.50 per issue (\$2.25 overseas).

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

No letters received this issue.

Off the Leash

Advanced Game, Plague, Famine, Special Military Units, Conquest, Moneylenders, Gray Press, Ultimate Victory, Gunboat
Miller Number 2001Fpw10
Spring 1463

Deadline for Summer 1463: 9/28 Tuesday

France makes some gains against Venice in the north, and Naples makes some gains against Florence in the south.

Fall 1462 Retreats

France retreats A Cremona to garrison
 Naples retreats A Rome to Capua

Nap Maintains A Capua, Spoleto, F Ancona, Central 21
 Mediterranean, Tyrrhenian Sea, builds Elite Mercenary Army Naples

Buils

Flo	Maintains A Modena, A Urbino, A Patrimony, A Rome, F Tunis, G Rome, builds A Florence, A Arezzo, A Pisa	Cost 27
Fra	Maintains all, builds A Swiss, G Milan	27

Ven Maintains A Austria, A Carinthia, A Trent, A Friuli, A 27
 Cremona, A Mantua, F Upper Adriatic, builds A Padua, A Treviso

Expenditures

Florence buys Famine Relieve in Rome for 3 ducats.
 France disbands Venice A Carinthia for 12 ducats.

Outstanding Debt

Fall 1463: 12 ducats due from Venice.

Orders

FLORENCE : A MODENA holds, A FLORENCE to SIENNA, A PISA supports A FLORENCE to SIENNA, A AREZZO to PERUGIA, A URBINO to Spoleto, A Patrimony supports A Florence to Sienna (cut, DESTROYED), A ROME supports A Urbino to Spoleto, F TUNIS to Central Mediterranean, G ROME supports A Rome

FRANCE : A SWISS to TYROLEA, A PARMA supports G Cremona convert to A, A PAVIA supports G Milan convert to A, A MILAN to BERGAMO, A (EM) Tyrolea to CARINTHIA, F GENOA holds, F CORSICA to GULF OF LIONS, G MILAN convert to A, G CREMONA convert to A

NAPLES : A CAPUA supports A Spoleto, A SPOLETO supports A Capua (cut), A (EM) Naples to PATRIMONY, F ANCONA to Urbino, F TYRRHENIAN SEA transports A Naples to Patrimony, F CENTRAL MEDITERRANEAN to Tunis

VENICE : A Treviso to VERONA, A FRIULI supports A Carinthia (nsu), A Carinthia supports A Austria (nsu), A AUSTRIA supports A Carinthia (nsu), A TRENT to Milan, A CREMONA besiege, A MANTUA supports A Cremona, A Padua to FERRARA, F UPPER ADRIATIC supports A Padua to Ferrara

Your treasury:

Notes

The draw fails 1 yes to 2 no, with 1 abstention.

Summer 1463 Plague

Poor year: Column Only: Carniola, Dalmatia, Messina, Pisa (Florentine A destroyed), Perugia (Florentine A destroyed)

Press

Florence – Naples: If you disband your fleet I will disband mine.

France – Florence: Dear friend, I hope that you wish to take Mantua: I shall be happy to support you there from Parma.

France – Naples: If you agreed for islands division, I shall not enter in your questions. Any way I hope that you will avoid to leave your south border to Venice, he has 15 cities actually.

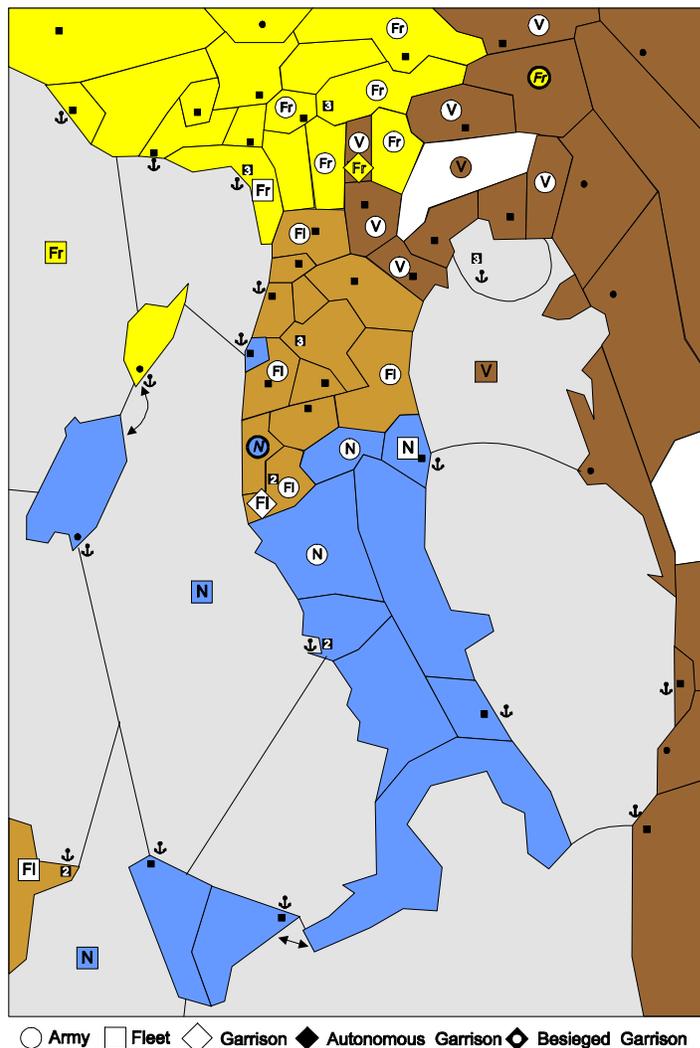
Naples – France and Venice: With Florence being such a thron, I cannot join with either of you to take out the other. Quit asking, work on Florence to change his ways, not me.

Venice – Florence: Our relationship has served us both well. Let us continue it and not covet the other's lands.

Venice – France: Well, it looks like you will be breaking through my lines this year. I shudder to think how many ducats you have saved up.

Venice – Naples: I hope my disbands put your mind at ease regarding our diplomatic state. France will hit me hard this year so I trust you will not aid his victory by attacking me.

Off the Leash



Wild Dog

Miller Number 2002Fpw10

End of Game Statements

Game Summary

	1454	1455	1456	1457	1458	1459	1460	Player	Finish
Austria:	3	4	4	5	3	3	2	Kevin Wilson	4 th place
Florence:	3	1	0	0	0	0	0	John Biehl (out, Fall 1456)	5 th place
France:	3	4	6	7	12	15	23	Dave Partridge	1 st PLACE
Milan:	3	2	0	0	0	0	0	Bob Robles (out, Fall 1456)	5 th place
Naples:	4	4	6	8	8	11	10	Lee McConnell (dropped, Summer 1454), Bill Scharf	2 nd place
Papacy:	4	3	5	0	0	0	0	Joe Carl (out, Fall 1457)	5 th place
Turks:	3	5	8	9	9	9	8	Ward Narhi	3 rd place
Venice:	4	6	6	7	8	4	0	Brendan Whyte (out, Fall 1459)	5 th place

Statements

Kevin Wilson (Austria): It's been apparent for some time in this game that I had no chance. I just seem to plod along in Mach games. I've won a few games of Diplomacy but yet to have a win at Mach. There are obviously nuances to this one that I just seem to miss. At least this time I had a little hand in making a winner. I

didn't have a chance but I could be sure my tormentors paid too. So when the time came to add a little help to Dave to get the win, I helped him. We'd been on pretty good terms throughout the game. Not 100% fully allied but certainly not 100% at war either. Nicely done Dave. I plan to keep trying. I'm sure I'll eventually figure this game out and get a win. I just don't know how long it will take.

Dave Partridge (France): Not surprisingly, I started the game targeting Milan as my first opponent. Austria was willing and able to join in, so the war went fairly smoothly. The Turk and I agreed that we had better things to do than hit each other so I was able to have a one front war and take advantage of my corner position.

After the first campaign, most of the rest of my success is directly attributable to Venice. Brendan distracted Kevin at just the right time for me, allowing me to gain all the fruits of the Milan campaign and eventually conquer the country. He then managed to annoy Naples sufficiently that I was able to avoid any tension on our border. That left me in a good position to pick up neutrals and pieces of Pisa and the Papacy without having any real enemy, and when Brendan decided to attack me as well I was able to prove my bona fides by joining the good fight against Venice.

I'd been considering making the gamble for the win anyway, but when Bill never replied to my email seeking to coordinate this last turn I figured I'd better jump. My position was solid, but getting to 23 would have been a lot harder if Naples had been looking my way.

Thanks to everyone for a fun game. It's been a long time since I'd played Machiavelli and I really enjoyed it. Thanks as always to Chris for his great GM job.

Bill Scharf (Naples): I wasn't the original Naples, I came in as a standby. The Turks (Narhi) seemed to be a good "ally" at the time and we avoided attacking each other the entire game, somewhat difficult when you are in each others back yard.... A solo win in Machiavelli (particularly with moneylenders) is much easier than in Dip....no stalemate lines if you have enough cash....in fact its so easy I prefer an alliance win since its more challenging to set up and bring about. France, Turkey and I had a lot of potential as an alliance, but France was of the "lets have you and him fight" school of logic versus the Turk (yeah....I was between the two....I've heard that song WAY too many times before). And Dave went for the win on his own. Oh well, I could have gone for a solo myself four turns ago (and, as the moves turned out, would have made it too) and I decided not to....my choice....curse my wanting to have a challenge...Congrats to Dave on his win.

Shepherd

Advanced Game, Plague, Famine, Special Military Units, Conquest, Moneylenders, White Press, Standard Victory

Miller Number 2003Epw10

Summer1457

Deadline for Fall 1457 9/28, Tuesday

Milan takes advantage of the assassination of the King of France to retake Genoa and destroy the French army occupying it. Naples creeps northward while Florence and Venice continue to duke it out.

Spring 1457 Retreats

Milan A Genoa retreats to garrison

Venice A Verona retreats to Trent

Summer 1457 Plague

Poor year – Column only: Friuli, Sienna (Florence A destroyed), Albania, Modena (Florence A destroyed), Parma, Urbino (Florence A destroyed), Pistoia

Expenditures

France fails to repay his loan to the moneylenders and is assassinated. All units hold, and no further loans may be taken out. Rebellions in Avignon, Marseilles, Turin, and Sardinia.

Outstanding Debt

Fall 1457: 8 ducats due from Naples

Spring 1458: 20 ducats due from Florence

Spring 1459: 18 ducats from Florence, 11 ducats from France, 12 ducats from Naples

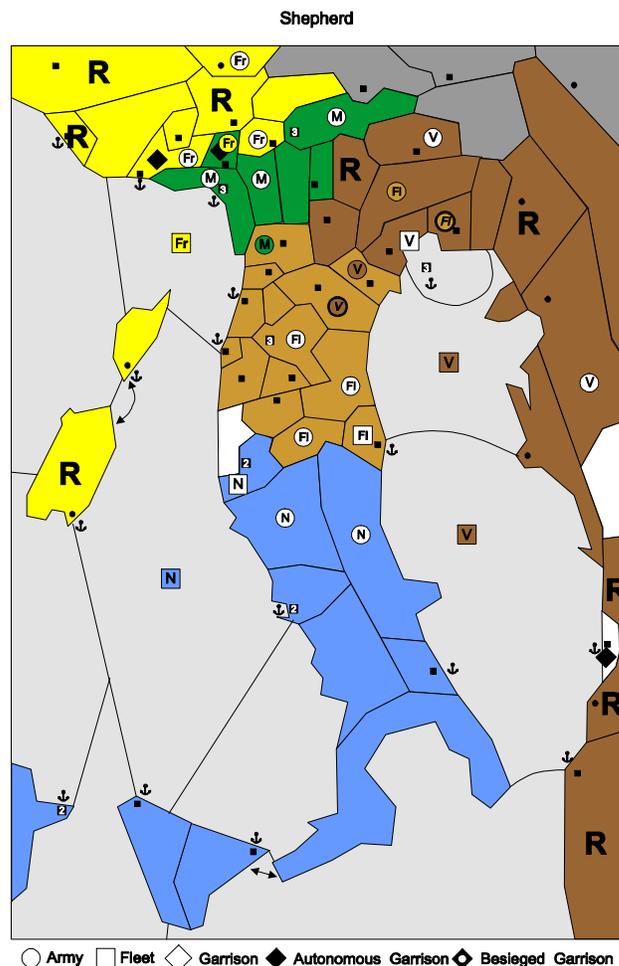
Orders

FLORENCE (McConnell): A (EM) Verona to Treviso, A Mantua to Verona, A Florence to Bologna, A Perugia to Urbino, A Spoleto support A Perugia to Urbino, F Ancona to Upper Adriatic

FRANCE (Scott): A Swiss holds, A Pavia holds, A Montferrat holds, A Genoa holds (DESTROYED), A Savoy holds, F Ligurian Sea holds

MILAN (Roalstad): A Parma to Modena, A Fornova supports G Genoa convert to A, A Milan holds, G Genoa convert to A

NAPLES (Cole): A Bari to Aquila, A Capua supports A Bari to Aquila, F Rome holds, F Tyrrhenian Sea supports F Rome



Orders (cont.)

VENICE (Giovine): A TRENT holds (rebellion suppressed), A CROATIA holds (rebellion suppressed), A (EM) Ferrara to BOLOGNA, E UPPER ADRIATIC supports A Ferrara to Bologna (cut), F LOWER ADRIATIC supports Naples A Bari to Aquila, F Venice to PADUA, G FERRARA convert to A

Your treasury:

Press

Florence – GM: Bad timing at the very least wouldn't you say?

Cerberus – Florence: Disasters are seldom timed well.

Florence – France, Milan, and Naples: Better hurry up...I can't hold him back forever.

Warg

Miller Number 2002Ets33

3019-9-I

Deadline for End of Game Statements 9/28, Tuesday

The gains of the Good players are all for naught, as Sauron regains his lost Ring.

3019-8-II Retreats

Rohan C Wold retreats OTB

Builds

Dwarves	Builds A Blue Hills
Elves	Builds A Imladris
Mordor	Removes A Brownlands
Rohan	Builds C Helms Deep
Umbar	Builds F City of the Corsairs

Orders

DWARVES (Reynolds): Dain leads 3A River Running to Wilderland merge A Wilderland holds: 4A WILDERLAND, A Withered Heath to EOTHED, A FOFochel to NORTH DOWNS, A Blue Hills to FOROCHEL

ELVES (Koehler): A Shire to SOUTH FORD, A Imladris to RHUADUR, A THARBAD to Dunland, A NIN-IN-ELEPH supports A Tharbad to Dunland (cut), 2A Carrock to GLADDEN FIELDS, A Old Forest Road to Carrock merge A Central Mirkwood to Carrock: 2A CARROCK, A Dol Guldur holds (DISLODGED, retreat Southern Mirkwood, OTB), A DRUWAITH Iaur holds, A GULF OF LHUN to Harlindon, A HARLOND supports A Shire to South Ford (imp.)

GANDALF (Bolduc): Fe (Beorn's Marches to FRAMSBURG GAP), Aragorn leads Elvish A DRUWAITH Iaur holds

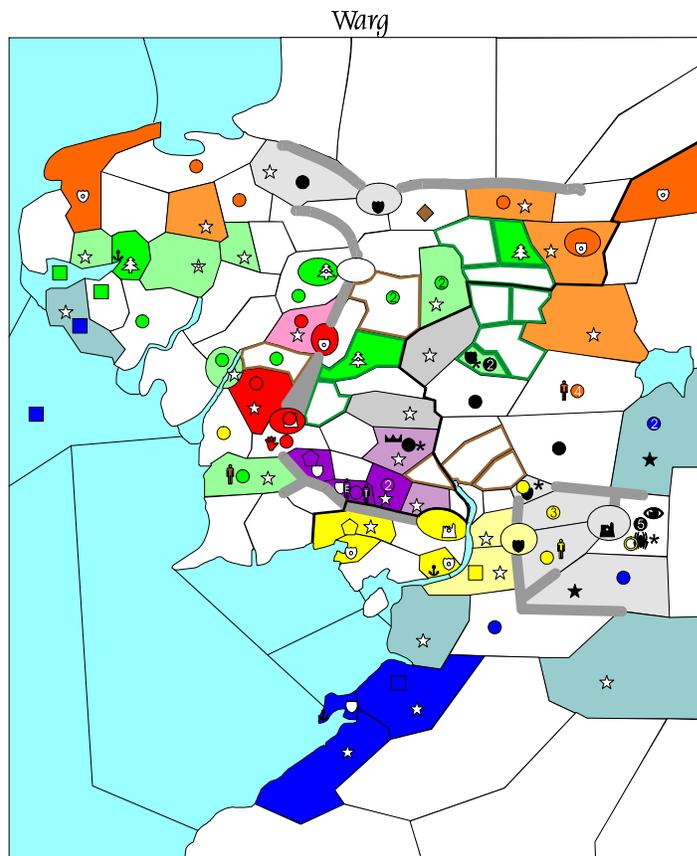
GONDOR (York): Faramir leads A GORGOROTH to Barad-dur, 3A ORODRUIN supports A North Ithilien to Udun, A North Ithilien to UDUN, A ENEDWAITH to Dunland, C Adrast to Anfalas to LAMEDON, F SOUTH ITHILIEH holds

MORDOR (Partridge): Sauron leads 5A Barad-dur to ERED LITHUI, A Gundabad to CARN DUM, 2A Anduin to DOL GULDUR, A WILDERLAND supports 2A Anduin to Dol Guldur, A DAGORLAND to South Rhun, Lord of the Nazgul leads A Wold to EAST EMNET, A Udun to Orodruin (DISLODGED, retreat Dead Marshes, OTB), Nazgul (River Running to South Rhun to ERED LITHUI, gives Ring to Saruon)

ROHAN (Scharf): C HELMS DEEP holds, C East Emnet holds (DISLODGED, retreat Emyn Muil, West Emnet, OTB), A DUNHARROW to Eastfold, 2A EASTFOLD supports C East Emnet (cut), Theoden DUNHARROW holds, Eowyn (DUNHARROW holds)

SARUMAN (Robles): Saruman leads A GAP OF ROHAN support A Dunland, A ISENGARD supports A Dunland, A DUNLAND supports A Hollin to Nin-in-eleph (cut), A HOLLIN to Nin-in-eleph

UMBAR (Nichols): A Nuriad to NURN, 2A SOUTH RHUN supports Dwarvish A Wilderland (cut), A South Gondor to POROS, C Ered Lithui supports A Nuriad to Nurn (cut, DISLODGED, retreat Nuriad, OTB), F HARLINDON holds, F WESTERN SEA supports F Harlindon, F City of the Corsairs to HARAD



- ☆ Supply Center
- ☐ Garrisoned Double Fortress
- ☉ Sauron
- 👤 Dwarves
- 🏰 Fortress
- 👤 Army
- 👤 Gandalf
- 👤 Elves
- 🏰 Garrisoned Fortress
- 🚢 Fleet
- 👤 Fellowship
- 👤 Gandalf
- 🏰 Elvish Fortress
- 👤 Cavalry
- 👤 Lord of the Nazguls
- 👤 Gondor
- 🏰 Garrisoned Elvish Fortress
- 👤 Ranger
- 👤 Other Personality Units
- 👤 Mordor
- 👤 Saruman
- 👤 Rohan
- 👤 Umbar
- 🏰 Double Fortress
- 👤 Saruman
- 👤 The One Ring

Alignment

Good: Dwarves, Elves, Gandalf, Gondor, Rohan

Neutral: Umbar

Evil: Mordor, Saruman

Notes

Sauron at long last gazes upon the One Ring and savors the moment that he regains his full power. He then wears the Ring and his dark influence surges over Middle Earth, binding it to his will. Mordor wins. Congratulations to Dave Partridge on his victory.

Press

Mordor – Dwarves: Did you know I'd leave Barad Dur? That's because I don't need those extra units anymore, because all your people are mine!
BWAAAAHAHAHA.

Mordor – World: I repeat, BWAAAAHAHAHA!

Dogface

End of Game Statements

Kevin Wilson (Royal Manticoran Historical Society) Not my best showing in a game of HotW. I can't really blame it on my empires. I did have the lowest total strength points but only by a little. Nor can I say I had exceptionally bad luck as a few of the empires did fairly well. I think I just kept finding myself in everyone else's way when it came time for the subsequent empires to come along. Not bad luck just no good luck when needed.

Congratulations to Andy. I nice performance without too much excess strength. I don't know if there was a coordinated effort to stop the leader, no one contacted me, but it doesn't appear it would have mattered. Nice showing! Sign me up for the next HotW game.

Paul Bolduc (Arachnids) It's tough winning a six-player game with the Romans. It's not so much the inevitability of the weak Khmers in the 4th Epoch, it's the

carnage wreaked before they come up. I never really recovered from that carnage. Congratulations to Andy Lewis on a strong victory. However, I still resent having to drive up "his" highway (I-81 from the TN line to about Roanoke) to get to WBC. It rankles.

Cary Nichols (Common Cause) Good job, Andy!

Chris Geggus (APA) I really thought I had a chance in HOTW, but the battering I took on epoch 6 really weakened me too much to have any chance on 7, except with GB. I think some of the players were looking at the wrong target. Andy always wins! Well played, yet again, by Andy. One day.....

Andy Lewis (Dogs and Dieties) Thanks again to all for a fun game. Thanks for running this and all the games Chris. My guaranteed time to play games.

Guard Dog

Turn 7 Cure through Health

Turn 7 Funeral Commission through Parade due: 9/28 Tuesday

Turn 6 Special Influence Declaration

Lubianka Visitors Club Discards Hero of the Soviet Union (51) and New Siberian Oil Field (3).

Cure Phase

Niewitko goes to the Sanatorium. Schukrotoff ages to 92, Purgemoff ages to 87, Satin ages to 79, and Boremtodev ages to 67.

Purge Phase

LVC plays 2 IP on Protzky. Protzky attempts to purge Y (dr = 12) and S (dr = 2). Protzky ages to 68.

Spy Investigation

No actions taken.

Health Phase

LVC plays Specialist (11) on Niewitko. Niewitko gets +3 to his health die rolls for as long as he remains in the Sanatorium.

Schukrotoff (dr = 4) dies!

Protzky (dr = 9) gets sick.

Purgemoff (dr = 5) dies!

Niewitko (dr = 17+3) recovers to sick.

Manjak (dr = 12) remains healthy.

Satin (dr = 5) gets sick.

Boremtodev (dr = 20) remains healthy.

Wasoliin (dr = 7) remains healthy.

Politburo

Office	Politician	Condition	Influence
Party Chief			
KGB Head	Wassily Protzky (U)	68, +	9 (MLI), 3 (TCC), 10 (LVC)
Foreign			
Defense	Petr Niewitko (D) ¹	83, +	1 (LVC)
Ideology	Iwan Manjak (P)	63	2 (TCC), 2

Office	Politician	Condition	Influence
			(UNCLE), 1 (HLS)
Industry	Oleg Satin (O)	79, ?, +	1 (HLS)
Economy	Eduard Boremtodev (K)	67, ?	1 (TCC)
Sport	Viktor Wasolin (Z)	55	1 (LVC)

Politicians listed in **bold** are in the sanatorium. Influence in **bold** indicates controlling faction.

¹ Specialist (11) card in effect.

Candidates: E (73), N, R, S

People: M (70, ++), Q (74, +), T (58), V, W, X,

Siberia: J (76, ++), G, H, L, Y

Kremlin Wall: A, I, C, B, F

Notes

Thanks to Andy York for his unused standby orders for LVC. One free issue awarded. Ward Narhi has NMRed. **Will Cary Nichols please submit standby orders for UNCLE.**

Players

Andy Lewis Trotskyite Internationalists
Pasquale Giovine Marxist-Leninists Integralists
Mike Scot The California Connection
Ward Narhi Underground Neo-Communist Liberation Effort
Bob Robles Hard Line Stalinists
Chris Geggus Lubianka Visitors Club

MLI have one wave, TCC have one wave, LVC have one wave.

Intrigue Cards

Undeclared Influence

Dogged

Turn 14, Phases IV-VI and Turn 15, Phases I-III

Turn 15 Phases IV-VI and Turn 16 Phases I-III due: 9/28 Tuesday

Turn 14

Construction and Operation

Red (Scharf) operates claims #85 (\$30, 3 coal), #47 (\$40, 1 silver), and #82 (\$20, 4 coal). Delivers 9 coal from #85 to Denver for \$1260. Gains \$400 in passenger revenue.

Green (Nichols) operates claim #52 (\$40, 3 silver). Gains \$20 in passenger revenue.

Orange (Narhi) NMRs. Gains \$410 in passenger revenue.

Blue (Bolduc) operates claims #130 (\$80, 1 copper), #72 (\$30, depletes), #25 (\$60, depletes), and #56 (\$30, 3 lumber). Delivers 3 lumber from Hot Sulphur Springs to Salt Lake City for \$900 and 1 coal from Emery to Salt Lake City for \$100. Gains \$410 in passenger revenue. Buys a +5 snowplow.

Purple (Carl) operates claims #65 (\$30, 1 lumber), #60 (\$20, 2 lumber), and #27 (\$40, 4 gold). Gains \$1050 in passenger revenue.

Determine Price Changes

Gold: +1 to \$300

Copper: +3 to \$160

Silver: +1 to \$400

	Denver	Salt Lake City	Pueblo	Santa Fe	El Paso
Lumber:	Remains at \$200	-1 to \$240	Remains at \$200	Remains at \$160	-1 to \$160
Coal:	Remains at \$140	Remains at \$100	Remains at \$80	Remains at \$120	Remains at \$140

Turn 15

Move Prospectors and Surveyors

Red (Scharf) surveys Vernal to Bridgeland and Durango to Lumberton, prospects #64.

Green (Nichols) dismantles Bath Divide to Fairplay (gains \$30) and surveys Buena Vista to Leadville, no prospecting.

Orange (Narhi) NMRs, does not survey or prospects.

Blue (Bolduc) surveys Denver to Georgetown and Dolores to Farmington, prospects #22.

Purple (Carl) surveys White Oaks to Carizozo and Alamogordo to El Paso, prospects #99.

Dispute Resolution

No disputes. Red pays \$360, Green pays \$70, Blue pays \$1170, and Purple pays \$460.

The Players

Player	Color	Starting Location	Money	Trains	Snowplows	Personnell
Bill Scharf	Red	Denver	\$4485	9, 15, 42	+4	P+1, S+2, S+1
Cary Nichols	Green	Denver	\$20	9, 15		P+2, S, S
Ward Narhi	Orange	El Paso	\$3840	9, 24, 42		P+1, S, S
Paul Bolduc	Blue	Salt Lake City	\$3455	9, 24	+5	P+1, S, S
Joe Carl	Purple	Pueblo	\$5445	15, 24, 24, 42	+4	P, P+2, S, S

Personnell in **bold** are in jail.

Purchased Claims

Purchased Passenger Lines

#	City	Owner	Type	Goods	Operation	#	Type	Route	Payoff	Owner	Notes
85	Canon City	Red	Coal	4	\$30	3	A	Denver – Colorado Springs	\$50	Red	
48	Ouray	Red	Silver	2	Depleted	5	A	Denver – Pueblo	\$80	Red	
51	Silverton	Red	Silver	1	Depleted	1	A	Denver – Boulder	\$20	Green	
47	Ouray	Red	Silver	7	\$40	4	A	El Paso – Deming	\$60	Orange	
82	Crested Butte	Red	Coal	8	\$20	6	A	Santa Fe – Albuquerque	\$90	Orange	
64	Lumberton	Red	Lumber	N	\$40	14	B	El Paso – Albuquerque	\$220	Orange	
38	Aspen	Green	Silver	N	\$40	13	B	El Paso – Santa Fe	\$140	Orange	
80	Aspen	Green	Coal	N	\$30	2	A	Salt Lake City – Provo	\$20	Blue	
52	Lake City	Green	Silver	3	\$40	22	C	Denver – Salt Lake City	\$800	Blue	
98	Pinos Altos	Orange	Gold	3	Depleted	11	B	Salt Lake City – Grand Jct.	\$140	Blue	Discard when 20 is taken. Good for \$140 toward card 20 or 21
107	Santa Rita	Orange	Copper	5	\$50						
124	Magdalena	Orange	Coal	4	\$40						
122	Lee Ranch West	Orange	Coal	N	\$20						
30	Georgetown	Blue	Gold	4	\$30	8	A	Denver – Leadville	\$260	Purple	Discard after 2 more Leadville depletions
130	Bingham	Blue	Copper	7	\$80						
25	Bingham	Blue	Gold	5	Depleted						
56	Hot Sulphur Springs	Blue	Lumber	0	\$30	10	B	Denver – Aspen	\$130	Purple	
65	El Vado	Purple	Lumber	9	\$30	7	A	Pueblo – Santa Fe	\$120	Purple	
28	Leadville	Purple	Gold	4	Depleted	9	B	Denver – Leadville	\$120	Purple	
60	Pagosa Springs	Purple	Lumber	2	\$20	17	C	Denver – Santa Fe	\$420	Purple	
27	Dillon	Purple	Gold	4	\$40						
99	White Oaks	Purple	Gold	N	\$50						

Available Claims

#	City	Type	Claim	Operation
118	Cimarron	Lumber	\$60	\$20
26	Marysvalle	Gold	\$120	\$40
119	Farmington	Coal	\$80	\$40
61	South Fork	Lumber	\$40	\$20
69	Scofield	Coal	\$40	\$30
77	Craig	Coal	\$40	\$20
97	Elizabethtown	Gold	\$140	\$40
102	Hillsboro	Silver	\$100	\$40

Available Trains

Type	# Available	Cost
9	2	\$80
15	3	\$120
24	4	\$200
42	5	\$320
72	8	\$500

Available Passenger Lines

#	Type	Route	Payoff	Cost	Notes
12	B	Pueblo – Grand Jct.	\$150	\$310	Discard when 20 is taken. Good for \$150 toward card 20 or 21
19	C	Salt Lake City – Albuquerque	\$600	\$975	
20	C	Salt Lake City – Pueblo	\$600	\$930	
21	C	Salt Lake City – Colorado Springs	\$600	\$930	
23	C	Salt Lake City – Santa Fe	\$900	\$1340	
24	C	Denver – El Paso	\$1000	\$1380	

Available Snowplows

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

Notes

Ward Narhi has NMRed. **Will Dave Partridge please submit standby orders for Orange.** In addition, remember that turn 16 is a winter turn. No surveying on winter track.

Junk Yard Dog

Turn 6b

Turn 7a due: 9/28 Tuesday

Cards

Eric	Dave	Andy	Cary
Order	Order	Growth	Innovation
Waste Disposal	Waste Disposal	Order	Growth
Growth	Innovation	Waste Disposal	Advisor

Dave plays Innovation with an Advisor, moving his Raw Materials to 2/10. \$10 paid.

Andy plays Growth, moving his Growth to 18.

Cary plays Innovation with an Advisor, moving Rationalization to 4/3 and Raw Materials to 4/3. \$10 paid.

Eric plays Growth, moving his Growth to 15.

Dave plays an Order, using 2 raw materials, generating 4 waste, and gaining \$16.

Andy plays an Order, using 3 raw materials, generating 3 waste, and gaining \$18.

Cary plays Growth, moving his Growth to 17.

Eric plays an Order, using 5 raw materials, generating 3 waste, and gaining \$15.

Dave plays Waste Disposal, reducing his waste to 2.

Andy plays Waste Disposal, reducing his waste to 8.

Cary passes.

Eric plays Waste Disposal, reducing his waste to 4.

Dave and Eric pay \$4 each, Andy and Cary pay \$5 each.

The Players

Player	Play Order	Money	Loans	Raw Material Supply	Growth	Co-workers	Saved Card
Eric Brosius	3	\$18	0	10	15	4	
Dave Partridge	4	\$15	10	3	16	4	Advisor
Andy York	1	\$33	10	11	18	5	
Cary Nichols	2	\$13	10	5	17	5	

Player	Rationalization	Raw Materials	Waste Reduction	Waste Disposal	Victory Points
Eric Brosius	4/3	5/1	3/6	4	34
Dave Partridge	4/3	2/10	4/3	2	29

Andy York	5/1	3/6	3/6	8	37
Cary Nichols	4/3	4/3	4/3	10	22

Available Cards

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

Discards

Order Order

Hot Dog

Turns 16.1 to 18.1

Turns 18.2 to 20.2 due: 9/28 Tuesday

Turn 16

1st: Cary Nichols (Whynoms/Trade and Transport Unity) Rolls Used: 1 3 3
Jewelport (p).

Buy's Jellybeast Landing for \$200. Receives \$20 in port commissions.

2nd: Andy Lewis (Humans/Mystery Machine 3) Rolls Used: 1 2 2
Space Station – R – B – (Y) – B – R – B.

3rd: Chris Geggus (Dell/Federation Starship Carpathia) Rolls Used: 4 5
Galactic Base – (R) – B – Y – B – (R) – B – (R) – Cobbleport (p).

Sell Mulch Wine for \$60 plus \$60 demand (from the cup: Demand for Spice at 4b and a Megalith Paperweight at 9b). Delivers Fare for \$140 (from the cup: Designer Genes at 9a). Trades in Scout for \$30 credit buys a Freighter

for \$300. Buys 1 Dribble Glass for \$120 and 3 Finest Dust for \$30. Mystery Machine 3 gains \$74 in port commissions and \$60 in factory commissions.

4th: Bob Robles (Eeepoop/Mean Machine) Rolls Used: 2
Poisonport (s) – Poisonport (o) – R – ? (it's the Air Foil relic).
Stops and picks up relic.

5th: Caleb Cousins (Qossuth/Not as we Seem) Rolls Used: 6
Open Port – A – A – (R10) – A – Airhome – Y – B – (R) – Y40 (pays \$20) – B10 – Titan's Tower(o) – Y30 (pays \$10) – Terror Station (o) – Terror Station (s).

Sells Pedegree Bolts for \$200 (from the cup: Designer Genes at 9a). Buys Designer Genes for \$60.

Turn 17

1st: Cary Nichols (Whynoms/Trade and Transport Unity) Rolls Used: 1 3 3
Jewelport (p) – B – Jellybeast Landing (p) – A – Y – R – B – Y.

2nd: Andy Lewis (Humans/Mystery Machine 3) Rolls Used: 1 1 4
B – R – Cobbleport (p).

Buy's Finest Dust for \$10. Gains \$1 in port commissions.

3rd: Chris Geggus (Dell/Federation Starship Carpathia) Rolls Used: 6
Cobbleport (p) – (R) – Y – B – (R) – B – Y – B – (R) – B.

4th: Bob Robles (Eeepoop/Mean Machine) Rolls Used: 4
A – Y – B – R – B – Y – B – R – B – Y – Moonport (o) – Moonport (s).

Buy's a Megalith Paperweight for \$90.

5th: Caleb Cousins (Qossuth/Not as we Seem) Rolls Used: 5
Terror Station (s) – Terror Station (o) – (R20) – TeleGate 5 – A – (R) – B – Y – NC5 – Multi-generaion Ship – (R20) – NC5 – (R) – Y – (R) – Space Station.

Sells Servo-Mechanism for \$300 (from the cup: Designer Genes at 9a). Sells Designer Genes for \$120 plus \$120 demand (from the cup: Rock Videos at 4b and Fare to 4a at Base). Buys 2 Psychotic Sculptures for \$320 and Shuttlestop for \$160.

Turn 18

1st: Cary Nichols (Whynoms/Trade and Transport Unity) Rolls Used: 5 6 6

Y – R – ? (it's TeleGate 3) – R – A – R – B – Y – B – R – B – R – Y – Aerie – Y – ? (it's TeleGate 4) – Y – A

Goods and Demands:

1a (Nillis): 3 Bionic Perfume

1b (Volois): 5 Voll Silk, Relic Shield, Canned Traits

2 (Graw): 5 Space Spice, 1 Demand for Psychotic Sculpture (+\$90), Fare to 10 (\$120), 2 Demand for Designer Genes (+\$40)

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

4a (Dell): 1 Finest Dust

4b (Humans): 1 Demand for Bionic Perfume (+\$60), 5 Rock Videos, 1 Demand for Space Spice (+\$40)

5 (Shenna): 2 Demand for Finest Dust (+\$50), 4 Melf Pelts, 2 Demand for Mulch Wine (+\$40)

6 (Yxklyx): 1 Demand for Melf Pelts (+\$50), 1 Immortal Grease

7a (Zum): 2 Demand for Finest Dust (+\$50), 4 Chicle Liquor

7b (Eeepoop): 1 Servo-Mechanism, 2 Demand for Dust (+\$50), 2 Demand for Immortal Grease (+\$50)

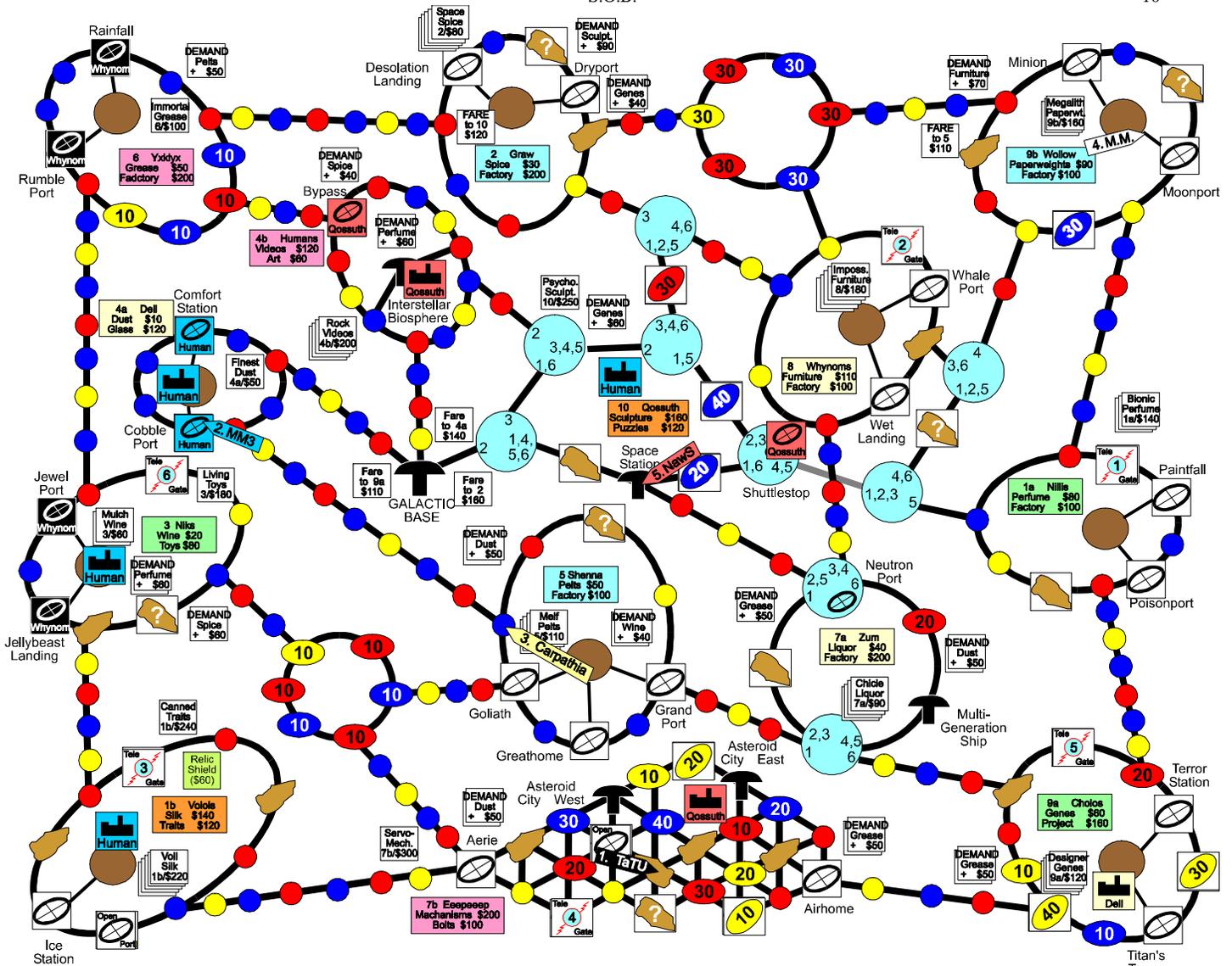
8 (Whynoms): 5 Impossible Furniture

9a (Chola): 4 Designer Genes, 2 Demand for Immortal Grease (+\$50)

9b (Wollow): 1 Demand for Impossible Furniture (+\$70), Fare to 5 (\$110), 3 Megalith Paperweight

10 (Qossuth): 1 Demand for Designer Genes (+\$60), 1 Psychotic Sculpture

Base: Fare to 9a (\$110), Fare to 2 (\$160), Fare to 4a (\$140)



1. Trade and Transport Unity \$225
Fast Scout
19: 2 4//20: 1 3 (Double 1)

Hold1	Hold2	Hull
Immortal Grease 6/\$100	Immortal Grease 6/\$100	4a \$60

Rainfall \$200
JewelPort \$200
Rumble Port \$200
Jellybeast Landing \$200

2. Mystery Machine 3 \$551
Normal Scout
18: 1 2 6 //19: 2 3 5 //20: 2 3 5

Hold1	Hold2	Hull
Finest Dust 4a/\$50	Finest Dust 4a/\$50	Yellow Drive (\$80)

Qossuth \$200
Volois \$200
Niks \$200
Cobbleport \$200
Dell \$200
Comfort Station \$200

3. Carpathia \$70
Scow Freighter
18: 1 4 5 6//19: 2 2 4 4 (Use 1)

Hold1	Hold2	Hold3	Hull
Dribble Glass 4a/\$200	Finest Dust 4a/\$50	Finest Dust 4a/\$50	Good

Hold4: Finest Dust 4a/\$50
Hold5: Red Drive (\$120)
Cholos \$200

4. Mean Machine \$410
Rocket Transport
18: 1 1//19: 5 6 (Use 1 * 4)

Hold1	Hold2	Hold3	Hull
Megalith Paperwt. 9b/\$160			Air Foil (\$80)

5. Not as we Seem \$310
Torch Scout
18: 1//19: 6 (Times 3)

Hold1	Hold2	Hull
Psychotic Sculpture 10/\$250	Psychotic Sculpture 10/\$250	Red Drive (\$120)

Bypass \$200
Human \$100
Eeeppeep \$100
Shuttlestop \$200
Shield (\$60)

Laika

1964

1965 due: 9/28 Tuesday

Event Card Resolution/Saved Cards

Romulus Project: Government Order: Launch a manned space station by 1968.

Purchase Hardware

Republic of Texas buys 2 two stage rockets for 24MB, 1 liquid fuel strap-on for 3MB, the Three Person Capsule program for 36MB, the Two Person Module program for 30MB, and 3 astronauts (Ocnaschek, Simmons, Boyle) for 6MB.

JOE buys 2 interplanetary satellites for 8MB, 1 liquid fuel strap-on for 3MB, 1 kicker for 3MB, 1 docking module for 2MB, 2 one-stage rockets for 9MB, 2 two-stage rockets for 24MB, and 1 two person capsule for 6MB.

Romulus Project buys 2 astronauts (Nero, Brutus) for 4MB, the Three Person Space Station program for 75MB, and the Kicker program for 12MB.

Cain Program buys 2 one person capsules for 4MB and the Three Person Capsule program for 36MB.

Conduct Research

Republic of Texas 2: 1 die (2) +2%. 3MB spent. 3: 1 die (5) +5% to Max R&D. 4MB spent. c: 8 dice (2, 2, 3, 3, 4, 4, 6, 6) +30%. 40MB spent. d: 8 dice (2, 2, 3, 3, 4, 5, 5, 6) +30%. 16MB spent.

JOE D: 6 dice (2, 2, 4, 5, 6, 6) +25% + 6% = +31% to Max R&D. 12MB spent. F: 8 dice (1, 1, 2, 4, 5, 6, 6, 6) +31% + 8% = +39%. 8MB spent. b: 6 dice (3, 3, 3, 4, 6, 6) +25% + 6% = +31% to Max R&D. 12MB spent. e: 8 dice (2, 2, 3, 3, 5, 5, 6, 6) +32% + 8% = +40%. 32MB spent.

Romulus Project F: 8 dice (2, 3, 4, 4, 4, 5, 6, 6) +34%. 8MB spent. i: 2 dice (3, 5) +8%. 16MB spent.

Cain Program C: 8 dice (1, 2, 3, 3, 4, 4, 5, 6) +28%. 48MB spent. c: 8 dice (1, 2, 2, 2, 4, 4, 6, 6) +27%. 40MB spent.

Declare Future Missions

Republic of Texas declares 3 launches, **JOE** declares 3 launches, **Romulus Project** declares 1 launch, and **Cain Program** declares 1 launch.

Your missions are:

Missions

No rushing. Launch order is: Cain Program, Cain Program, Romulus Project, Romulus Project, Romulus Project, JOE, JOE, JOE, Republic of Texas, Republic of Texas

JOE continues a Mars Flyby. Mars Orbital Burn (50%<92%), Mars Orbital Activities (54%<92%). Mission success! +1% to 2, +8MB to budget.

Cain Program launches a Manned Orbital with Docking (Venture). Liftoff (59%<65%), Earth Orbital Burn (58%<82%), Earth Orbital Activities (51%<82%), Docking Module Power-on (43%<98%), Docking (84%>45%), Earth De-orbital Burn (44%<82%), Re-entry (71%<82%), Recovery (81%<82%). Partial mission success! +1% to C and a, +5% to Docking, Venture to 20%, +2MB to budget.

Cain Program launches a Manned Orbital with Docking (Tremere). Liftoff (90%>83%), last second countdown abort, problem resolved, countdown resumes same day, Liftoff (66%<82%), Earth Orbital Burn (05%<83%), Earth Orbital Activities (95%>83%), atmosphere, minor problem, filtering system slightly clogged, Docking Module Power-on (57%<98%), Docking (79%>50%), Earth De-orbital Burn (02%<83%), Re-entry (18%>83%), Recovery (62%<83%). Partial mission success. +1% to A and a, +5% to Docking, Tremere to 20%, +2MB to budget.

Romulus Project launches a Lunar Satellite Flyby. Liftoff (20%<37%), Earth Orbital Burn (08%<68%), Earth Mission Burn (47%<68%), Lunar Orbital Burn (48%<68%), Lunar Orbital Activities (23%<68%). Mission success. +1% to B and 2, +5% to Photoreconnaissance, +4MB to budget.

Romulus Project launches a Lunar Satellite Flyby. Liftoff (36%<38%), Earth Orbital Burn (05%<69%), Earth Mission Burn (09%<69%), Lunar Orbital Burn (58%<69%), Lunar Orbital Activities (19%<69%). Mission success. +1% to B and 2, +5% to Photoreconnaissance, +2MB to budget.

Romulus Project scrubs a Lunar Satellite Flyby due to lack of equipment. -3MB to budget.

JOE launches a Venus Flyby. Liftoff (15%<94%), Earth Orbital Burn (69%<93%), Earth Mission Burn (69%<93%), Mission continued next turn. +1% to B.

JOE launches a Manned Sub-orbital (Manning). Liftoff (24%<95%), Re-entry (48%<87%), Recovery (74%<87%). Mission success. +1% to A and 1, Manning to 60%. +2MB to budget.

JOE launches a Manned Sub-orbital (Rodgers). Liftoff (07%<96%), Re-entry (71%<88%), Recovery (25%<88%). Mission success. +1% to A and a, +15% to Docking, Rodgers to 10%, +2MB to budget.

Republic of Texas launches a Lunar Satellite Flyby. Liftoff (32%<90%), Earth Orbital Burn (43%<89%), Earth Mission Burn (23%<89%), Lunar Orbital Burn (66%<89%), Lunar Orbital Activities (55%<89%). Mission success. +1% to B and 2, +5% to Photoreconnaissance, +3MB to budget.

Republic of Texas launches a Mars Flyby. Liftoff (42%<91%), Earth Orbital Burn (56%<90%), Earth Mission Burn (20%<90%). Mission continues next turn. +1% to B and 2.

Republic of Texas launches a Venus Flyby. Liftoff (38%<92%), Earth Orbital Burn (71%<91%), Earth Mission Burn (93%>91%). Mission failure. +1% to B and 2, -3MB to budget.

Players

Player Name	Dennis Cain	Cary Nichols	Bill Scharf	Andy York
Country	Cain Program	Romulus Project	JOE	Republic of Texas

1964 Budget	82	90	137	146
Cash	76	28	0	18
Launch Facilities	3	3	3	3
Astronauts	3	3	5	7

Astronauts: Cain Program: Ventrue, Tremere (20%), Brujah (0%), **Romulus Project:** Caesar (30%), Nero, Brutus (0%), **JOE:** Roger Manning (60%), Tom Corbett, Astro (40%), Buck Rodgers (10%), Flash Gordon (0%), **Republic of Texas** Travis, Crockett (40%), Bowie (10%), Houston, Ocnaschek, Simmons, Boyle (0%)

Programs and Hardware

Cain Program: Orbital Satellite (1): 3/98%, Docking Module (4): 0/50%, One Stage Rocket (A): 5/84%, Three Stage Rocket (C): 0/66%, One Person Capsule (a): 5/84%, Three Person Capsule (c): 1/47%, EVA: 98%

Romulus Project: Orbital Satellite (1): 2/95%, Interplanetary Satellite (2): 0/70%, One Stage Rocket (A): 1/89%, Two Stage Rocket (B): 0/39%, Liquid Fuel Strap-ons (D): 1/30%, Kicker (F): 1/59%, One Person Capsule (a): 0/82%, Three Person Space Station (i): 1/13%, EVA: 84%, Photorecon: 70%

JOE: Orbital Satellite (1): 0/98%, Interplanetary Satellite (2): 1/93%, Docking Module (4): 1/90%, One Stage Rocket (A): 2/97%, Two Stage Rocket (B): 2/95%, Liquid Fuel Strap-ons (D): 2/85%, Kicker (F): 2/93%, One Person Capsule (a): 1/89%, Two Person Capsule (b): 2/85%, One Person Module (e): 1/50%, EVA: 98%, Photorecon: 70%.

Republic of Texas: Orbital Satellite (1): 1/98%, Interplanetary Satellite (2): 0/92%, Lunar Probe (3): 1/85%, Docking Module (4): 0/98%, One Stage Rocket (A): 1/98%, Two Stage Rocket (B): 2/93%, Liquid Fuel Strap-on (D): 1/86%, Kicker (F): 4/95%, One Person Capsule (a): 1/90%, Three Person Capsule (c): 1/50%, Two Person Module (d): 1/40%, EVA: 98%, Photorecon: 70%

1965

Draw Event Cards

Bill Scharf: Production Delay: May not purchase capsules this turn. -25MB to budget.

Andy York: R&D Bonus. +1% to each R&D die rolled this year. +1MB to budget.

Cary Nichols: Production Delay: May not purchase space stations or habitation modules this turn. -5MB to budget.

Dennis Cain: Engineering Error: Next mission has 50% chance of exploding on the launch pad. +7MB to budget.

Final Positions

Player Name	Dennis Cain	Cary Nichols	Bill Scharf	Andy York
Country	Cain Program	Romulus Project	JOE	Republic of Texas
1965 Budget	96	123	154	126
Cash	30	3	28	6
1966 Budget	103	118	129	127

Retriever

Turn 3

Turn 4 due: 9/28 Tuesday

Commander Actions

Golden Orb Developers opens the bidding on a Nodule at 25 and Little Green Manufacturing gets it for 31 (Or1, Wa5, Wa6, Wa9, Wa10). Opens the bidding on Heavy Equipment at 30 and gets it (Or2, Or2, Or3, Or4, Or4, Wa7, Wa8).

SD, Inc. buys a water factory (Or1, Or2, Or3, Wa5, Wa9) and moves a population factor from an ore factory to man it.

HBDC opens the bidding on a warehouse at 25 and gets it (Or2, Or3, Wa5, Wa5, Wa8)

Mud Mining Corporation buys a water factory (Or4, Wa8, Wa8) and a population factor (Or2, Or4, Wa4)

ORION buys a water factory (Or3, Wa5, Wa5, Wa7) and a population factor (Or3, Or4, Wa4)

Little Green Manufacturing buys a population factor (Or1, Or2, Wa7)

Bartertown buys two population factors (Or3, Wa5, Wa6, Wa7)

ACK! opens the bidding on Heavy Equipment at 30 and gets it (Or3, Wa5, Wa5, Wa7, Wa10)

The Players

	Outpost Name	Commander	Factories	Upgrades	VP
1	LGM	Dave Partridge	OrF, OrF, WaF, WaF	No	6
2	HBDC	Kevin Wilson	OrF, OrF, WaF, WaF	Wa	5
3	Bartertown	Andy York	OrF, OrF, WaF, WaF, WaF		5
4	MMC	Eric Brosius	OrF, OrF, WaF, WaF, WaF		5
5	GOD	Cary Nichols	OrF, OrF, WaF	Wa, HE	5
6	ORION	Michael Lowrey	OrF, OrF, WaF, WaF, WaF		5
7	SD, Inc.	Andy Lewis	OrF, OrF, WaF, WaF, WaF		4
8	ACK!	Bill Scharf	OrF, OrF, WaF, WaF	HE	4

LGM is Little Green Manufacturing, GOD is Golden Orb Developers, HBDC is Heavenly Bodies Development Corp, ORION is Orbital Recovery and Intergalactic Opportunity Network, MMC is Mud Mining Corporation

Available UpgradesResource Cards

New Arrivals: Data Library, Warehouse, Data Library, and Data Library

Upgrade	Minimum Bid	Available	Not Yet Delivered
Data Library (DL)	15	3	2
Warehouse (Wa)	25	3	0
Heavy Equipment (HE)	30	2	1
Nodule (No)	25	0	4

Pedagoguery

The two most powerful and spectacular galactic phenomena are active galactic nuclei (AGNs) and starbursts. AGNs are generally centered around a supermassive black hole that is actively feeding, i.e. sucking in matter. This matter heats up tremendously as it spirals in, and some of its momentum is transferred to jets that shoot out from the poles of the black hole at nearly the speed of light. AGNs are very bright, but also very concentrated, since even the most massive black hole is very small on galactic scales. Starbursts, on the other hand, occur when large numbers of stars are suddenly produced at once. Starburst galaxies are very bright, but they also tend to be somewhat chaotic. The starburst is generally confined to a particular location in that galaxy – typically the core – but it can take place over nearly the entire galaxy in some cases. Whenever large numbers of stars are produced, very massive stars are inevitably part of the package, and they frequently explode as supernovae long before the starburst is complete – further adding to the brilliance of the burst.

As spectacular as they are, it would seem strange to think that they would have any connection with each other. However, as our observations of the universe continue to get better, astronomers have noticed that galaxies undergoing a starburst frequently have an AGN, and vice versa. Why should that be so? Astronomers do not have the answer, but they have come up with four possible explanations.

The first explanation is that we are not seeing an AGN at all, but that there is a starburst going on in the core of the galaxy that is in a small enough area that our telescopes cannot resolve it as anything other than a point. If this is true, then possibly the next generation of telescopes would have sufficient resolution to determine the truth. In addition, telescopes operating at other wavelengths, such as infrared or x-ray, may be able to tell the difference.

The second explanation is that starbursts and AGNs derive from the same source. Astronomers frequently see starbursts in galaxies that are undergoing collision. During a galactic collision, individual stars are generally unaffected,

but the respective gas clouds in each galaxy ram into each other, generating heat and localized concentrations that can form stars. At the same time, the tidal forces can throw stars and gas toward the centers of the galaxies feeding the black holes and creating AGNs. If the galaxies actually merge, eventually the black holes will spiral into each other, during which time they will continue to consume stars and gas.

The third explanation is that perhaps the AGN causes the starburst. Here's how that can happen. Let us suppose that somehow a large amount of gas is thrown into a supermassive black hole. As it spirals down its destruction, it forms an accretion disk, and through a mechanism that is not well understood, but which is readily observed, it forms polar jets. These jets slam into surrounding gas, heating it and disrupting it. These disruptions can collapse to form stars. If there is enough surrounding gas that is disrupted by the AGN's jets, then a full-fledged starburst can be created.

The fourth and final explanation is kind of the mirror image of the previous one. In this scenario, a starburst creates an AGN. Let us suppose that there is a major starburst in the core of a galaxy. During this starburst, many massive stars are formed, which become black holes at the end of their lives. These black holes tend to sink toward the center of the galaxy, and there they combine with each other, forming a supermassive black hole. As they move, they draw gas along with them. In addition, continuing supernovae will throw gas in their direction, providing them a steady diet of gas to create an accretion disk and jets.

At this point, scientists are not at all sure which of these explanations is the correct one. The most likely explanation is probably some combination of the four, but the answer is probably going to have to wait for a combination of better observational instruments and computer models.

Next issue, I will talk about the discovery of some surprisingly young globular clusters.



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Standbys

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

Machiavelli (gunboat and regular): Steve Koehler, Bill Scharf, Bob Robles, Mike Scott, Ward Narhi, Paul Bolduc, Joe Carl, 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, Phil Reynolds, 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 **Kremlin:** Andy York, Andy Lewis, Pasquale Giovine, Cary Nichols, Bill Scharf, Dave Partridge **Silverton:** Cary Nichols, Bill Scharf, Joe Carl, Dave Partridge **Settlers of Catan:** Michael Lowrey, Chris Geggus, Cary Nichols, Joe Carl, Dave Partridge

Standby Calls

Andy York for the Harkonnens in Pavlov
Cary Nichols for UNCLE in Guard Dog
Dave Partridge for Orange in Dogged