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**GLOBAL POSITIONING SYSTEMS DIRECTORATE
SYSTEMS ENGINEERING & INTEGRATION
INTERFACE SPECIFICATION
IS-GPS-200**

NAVSTAR GPS Space Segment/Navigation User Segment Interfaces



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Date

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IS200-1282 :

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Table 6-I Additional C/A-/P-Code Phase Assignments (sheet 1 of 5)						
PRN Signal No.	C/A			P		
	G2 Delay (Chips)	Initial G2 Setting (Octal)*	First 10 Chips (Octal)**	X2 Delay (Chips)	P-code Relative Advance (Hours) **	First 12 Chips (Octal)
64	729	0254	1523	27	P ₂₇ (t+24)	5112
65	695	1602	0175	28	P ₂₈ (t+24)	0667
66	780	1160	0617	29	P ₂₉ (t+24)	2111
67	801	1114	0663	30	P ₃₀ (t+24)	5266
68	788	1342	0435	31	P ₃₁ (t+24)	4711
69	732	0025	1752	32	P ₃₂ (t+24)	4166
70	34	1523	0254	33	P ₃₃ (t+24)	2251
71	320	1046	0731	34	P ₃₄ (t+24)	5306
72	327	0404	1373	35	P ₃₅ (t+24)	4761
73	389	1445	0332	36	P ₃₆ (t+24)	2152
74	407	1054	0723	37	P ₃₇ (t+24)	5247
75	525	0072	1705	1	P ₁ (t+48)	5736
76	405	0262	1515	2	P ₂ (t+48)	2575
77	221	0077	1700	3	P ₃ (t+48)	3054
78	761	0521	1256	4	P ₄ (t+48)	3604
79	260	1400	0377	5	P ₅ (t+48)	3520
80	326	1010	0767	6	P ₆ (t+48)	5472
81	955	1441	0336	7	P ₇ (t+48)	4417
82	653	0365	1412	8	P ₈ (t+48)	2025
83	699	0270	1507	9	P ₉ (t+48)	3230
84	422	0263	1514	10	P ₁₀ (t+48)	5736
85	188	0613	1164	11	P ₁₁ (t+48)	4575
86	438	0277	1500	12	P ₁₂ (t+48)	2054
87	959	1562	0215	13	P ₁₃ (t+48)	3204
88	539	1674	0103	14	P ₁₄ (t+48)	3720
89	879	1113	0664	15	P ₁₅ (t+48)	5572
90	677	1245	0532	16	P ₁₆ (t+48)	4457
91	586	0606	1171	17	P ₁₇ (t+48)	4005
92	153	0136	1641	18	P ₁₈ (t+48)	2220
93	792	0256	1521	19	P ₁₉ (t+48)	3332
94	814	1550	0227	20	P ₂₀ (t+48)	3777
95	446	1234	0543	21	P ₂₁ (t+48)	3555

* In the octal notation for the first 10 chips of the C/A-code or the initial settings as shown in this table, the first digit (1/0) represents a "1" or "0", respectively, for the first chip and the last three digits are the conventional octal representation of the remaining 9 chips. (For example, the first 10 chips of the C/A code for PRN Signal Assembly No. 64 are: 1101010011).

** P_i(t+N): P-code sequence of PRN number i shifted by N hours. See Section 6.3.6.2.1.

NOTE: The code phase assignments constitute inseparable pairs, each consisting of a specific C/A and a specific P code phase, as shown above.

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Table 6-I Additional C/A-/P-Code Phase Assignments (sheet 1 of 5)						
PRN Signal No.	C/A			P		
	G2 Delay (Chips)	Initial G2 Setting (Octal)*	First 10 Chips (Octal)**	X2 Delay (Chips)	P-code Relative Advance (Hours) **	First 12 Chips (Octal)
64	729	0254	1523	27	P ₂₇ (t+24)	5112
65	695	1602	0175	28	P ₂₈ (t+24)	0667
66	780	1160	0617	29	P ₂₉ (t+24)	6111
67	801	1114	0663	30	P ₃₀ (t+24)	5266
68	788	1342	0435	31	P ₃₁ (t+24)	4711
69	732	0025	1752	32	P ₃₂ (t+24)	0166
70	34	1523	0254	33	P ₃₃ (t+24)	6251
71	320	1046	0731	34	P ₃₄ (t+24)	5306
72	327	0404	1373	35	P ₃₅ (t+24)	0761
73	389	1445	0332	36	P ₃₆ (t+24)	6152
74	407	1054	0723	37	P ₃₇ (t+24)	1247
75	525	0072	1705	1	P ₁ (t+48)	1736
76	405	0262	1515	2	P ₂ (t+48)	2575
77	221	0077	1700	3	P ₃ (t+48)	3054
78	761	0521	1256	4	P ₄ (t+48)	3604
79	260	1400	0377	5	P ₅ (t+48)	7520
80	326	1010	0767	6	P ₆ (t+48)	5472
81	955	1441	0336	7	P ₇ (t+48)	0417
82	653	0365	1412	8	P ₈ (t+48)	2025
83	699	0270	1507	9	P ₉ (t+48)	7230
84	422	0263	1514	10	P ₁₀ (t+48)	5736
85	188	0613	1164	11	P ₁₁ (t+48)	0575
86	438	0277	1500	12	P ₁₂ (t+48)	2054
87	959	1562	0215	13	P ₁₃ (t-48)	3204
88	539	1674	0103	14	P ₁₄ (t+48)	7720
89	879	1113	0664	15	P ₁₅ (t+48)	5572
90	677	1245	0532	16	P ₁₆ (t+48)	4457
91	586	0606	1171	17	P ₁₇ (t+48)	0005
92	153	0136	1641	18	P ₁₈ (t+48)	2220
93	792	0256	1521	19	P ₁₉ (t+48)	3332
94	814	1550	0227	20	P ₂₀ (t+48)	3777
95	446	1234	0543	21	P ₂₁ (t+48)	3555

* In the octal notation for the first 10 chips of the C/A-code or the initial settings as shown in this table, the first digit (1/0) represents a "1" or "0", respectively, for the first chip and the last three digits are the conventional octal representation of the remaining 9 chips. (For example, the first 10 chips of the C/A code for PRN Signal Assembly No. 64 are: 1101010011).

** P_i(t+N): P-code sequence of PRN number i shifted by N hours. See Section 6.3.6.2.1.

NOTE: The code phase assignments constitute inseparable pairs, each consisting of a specific C/A and a specific P code phase, as shown above.

Table 6-I Additional C/A-/P-Code Phase Assignments (sheet 2 of 5)						
PRN Signal No.	C/A			P		
	G2 Delay (Chips)	Initial G2 Setting (Octal)*	First 10 Chips (Octal)*	X2 Delay (Chips)	P-code Relative Advance (Hours) **	First 12 Chips (Octal)
96	264	0260	1517	22	P ₂₂ (t+48)	3444
97	1015	1455	0322	23	P ₂₃ (t+48)	7400
98	278	1535	0242	24	P ₂₄ (t+48)	1422
99	536	0746	1031	25	P ₂₅ (t+48)	2433
100	819	1033	0744	26	P ₂₆ (t+48)	7037
101	156	1213	0564	27	P ₂₇ (t+48)	1635
102	957	0710	1067	28	P ₂₈ (t+48)	6534
103	159	0721	1056	29	P ₂₉ (t+48)	5074
104	712	1763	0014	30	P ₃₀ (t+48)	0614
105	885	1751	0026	31	P ₃₁ (t+48)	6124
106	461	0435	1342	32	P ₃₂ (t+48)	1270
107	248	0735	1042	33	P ₃₃ (t+48)	2716
108	713	0771	1006	34	P ₃₄ (t+48)	5165
109	126	0140	1637	35	P ₃₅ (t+48)	0650
110	807	0111	1666	36	P ₃₆ (t+48)	6106
111	279	0656	1121	37	P ₃₇ (t+48)	5261
112	122	1016	0761	1	P ₁ (t+72)	6752
113	197	0462	1315	2	P ₂ (t+72)	5147
114	693	1011	0766	3	P ₃ (t+72)	0641
115	632	0552	1225	4	P ₄ (t+72)	6102
116	771	0045	1732	5	P ₅ (t+72)	1263
117	467	1104	0673	6	P ₆ (t+72)	2713
118	647	0557	1220	7	P ₇ (t+72)	3167
119	203	0364	1413	8	P ₈ (t+72)	3651
120	145	1106	0671	9	P ₉ (t+72)	7506
121	175	1241	0536	10	P ₁₀ (t+72)	5461
122	52	0267	1510	11	P ₁₁ (t+72)	0412
123	21	0232	1545	12	P ₁₂ (t+72)	6027
124	237	1617	0160	13	P ₁₃ (t+72)	1231
125	235	1076	0701	14	P ₁₄ (t+72)	2736

* In the octal notation for the first 10 chips of the C/A-code or the initial settings as shown in this table, the first digit (1/0) represents a "1" or "0", respectively, for the first chip and the last three digits are the conventional octal representation of the remaining 9 chips. (For example, the first 10 chips of the C/A code for PRN Signal Assembly No. 64 are: 1101010011).

** P_i(t+N): P-code sequence of PRN number i shifted by N hours. See Section 6.3.6.2.1.

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Table 6-I Additional C/A-/P-Code Phase Assignments (sheet 2 of 5)						
PRN Signal No.	C/A			P		
	G2 Delay (Chips)	Initial G2 Setting (Octal)*	First 10 Chips (Octal)*	X2 Delay (Chips)	P-code Relative Advance (Hours) **	First 12 Chips (Octal)
96	264	0260	1517	22	P ₂₂ (t+48)	3444
97	1015	1455	0322	23	P ₂₃ (t+48)	7400
98	278	1535	0242	24	P ₂₄ (t+48)	1422
99	536	0746	1031	25	P ₂₅ (t+48)	2433
100	819	1033	0744	26	P ₂₆ (t+48)	7037
101	156	1213	0564	27	P ₂₇ (t+48)	1635
102	957	0710	1067	28	P ₂₈ (t+48)	6534
103	159	0721	1056	29	P ₂₉ (t+48)	5074
104	712	1763	0014	30	P ₃₀ (t+48)	0614
105	885	1751	0026	31	P ₃₁ (t+48)	6124
106	461	0435	1342	32	P ₃₂ (t+48)	1270
107	248	0735	1042	33	P ₃₃ (t+48)	6716
108	713	0771	1006	34	P ₃₄ (t+48)	5165
109	126	0140	1637	35	P ₃₅ (t+48)	0650
110	807	0111	1666	36	P ₃₆ (t+48)	6106
111	279	0656	1121	37	P ₃₇ (t+48)	5261
112	122	1016	0761	1	P ₁ (t+72)	6752
113	197	0462	1315	2	P ₂ (t+72)	5147
114	693	1011	0766	3	P ₃ (t+72)	0641
115	632	0552	1225	4	P ₄ (t+72)	6102
116	771	0045	1732	5	P ₅ (t+72)	1263
117	467	1104	0673	6	P ₆ (t+72)	2713
118	647	0557	1220	7	P ₇ (t+72)	3167
119	203	0364	1413	8	P ₈ (t+72)	3651
120	145	1106	0671	9	P ₉ (t+72)	7506
121	175	1241	0536	10	P ₁₀ (t+72)	5461
122	52	0267	1510	11	P ₁₁ (t+72)	0412
123	21	0232	1545	12	P ₁₂ (t+72)	6027
124	237	1617	0160	13	P ₁₃ (t+72)	1231
125	235	1076	0701	14	P ₁₄ (t+72)	2736

* In the octal notation for the first 10 chips of the C/A-code or the initial settings as shown in this table, the first digit (1/0) represents a "1" or "0", respectively, for the first chip and the last three digits are the conventional octal representation of the remaining 9 chips. (For example, the first 10 chips of the C/A code for PRN Signal Assembly No. 64 are: 1101010011).

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Table 6-I Additional C/A-/P-Code Phase Assignments (sheet 3 of 5)						
PRN Signal No.	C/A			P		
	G2 Delay (Chips)	Initial G2 Setting (Octal)*	First 10 Chips (Octal)*	X2 Delay (Chips)	P-code Relative Advance (Hours) **	First 12 Chips (Octal)
126	886	1764	0013	15	P ₁₅ (t+72)	7175
127	657	0717	1060	16	P ₁₆ (t+72)	1654
128	634	1532	0245	17	P ₁₇ (t+72)	6504
129	762	1250	0527	18	P ₁₈ (t+72)	1060
130	355	0341	1436	19	P ₁₉ (t+72)	2612
131	1012	0551	1226	20	P ₂₀ (t+72)	7127
132	176	0520	1257	21	P ₂₁ (t+72)	5671
133	603	1731	0046	22	P ₂₂ (t+72)	4516
134	130	0706	1071	23	P ₂₃ (t+72)	4065
135	359	1216	0561	24	P ₂₄ (t+72)	4210
136	595	0740	1037	25	P ₂₅ (t+72)	4326
137	68	1007	0770	26	P ₂₆ (t+72)	0371
138	386	0450	1327	27	P ₂₇ (t+72)	6356
139	797	0305	1472	28	P ₂₈ (t+72)	5345
140	456	1653	0124	29	P ₂₉ (t+72)	0740
141	499	1411	0366	30	P ₃₀ (t+72)	6142
142	883	1644	0133	31	P ₃₁ (t+72)	1243
143	307	1312	0465	32	P ₃₂ (t+72)	6703
144	127	1060	0717	33	P ₃₃ (t+72)	5163
145	211	1560	0217	34	P ₃₄ (t+72)	4653
146	121	0035	1742	35	P ₃₅ (t+72)	4107
147	118	0355	1422	36	P ₃₆ (t+72)	4261
148	163	0335	1442	37	P ₃₇ (t+72)	0312
149	628	1254	0523	1	P ₁ (t+96)	2525
150	853	1041	0736	2	P ₂ (t+96)	7070
151	484	0142	1635	3	P ₃ (t+96)	1616
152	289	1641	0136	4	P ₄ (t+96)	2525
153	811	1504	0273	5	P ₅ (t+96)	7070
154	202	0751	1026	6	P ₆ (t+96)	3616
155	1021	1774	0003	7	P ₇ (t+96)	7525

* In the octal notation for the first 10 chips of the C/A-code or the initial settings as shown in this table, the first digit (1/0) represents a "1" or "0", respectively, for the first chip and the last three digits are the conventional octal representation of the remaining 9 chips. (For example, the first 10 chips of the C/A code for PRN Signal Assembly No. 64 are: 1101010011).

** P_i(t+N): P-code sequence of PRN number i shifted by N hours. See Section 6.3.6.2.1.

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PRN Signal No.	C/A			P		
	G2 Delay (Chips)	Initial G2 Setting (Octal)*	First 10 Chips (Octal)*	X2 Delay (Chips)	P-code Relative Advance (Hours) **	First 12 Chips (Octal)
126	886	1764	0013	15	P ₁₅ (t+72)	7175
127	657	0717	1060	16	P ₁₆ (t+72)	1654
128	634	1532	0245	17	P ₁₇ (t+72)	6504
129	762	1250	0527	18	P ₁₈ (t+72)	1060
130	355	0341	1436	19	P ₁₉ (t+72)	2612
131	1012	0551	1226	20	P ₂₀ (t+72)	7127
132	176	0520	1257	21	P ₂₁ (t+72)	5671
133	603	1731	0046	22	P ₂₂ (t+72)	4516
134	130	0706	1071	23	P ₂₃ (t+72)	4065
135	359	1216	0561	24	P ₂₄ (t+72)	4210
136	595	0740	1037	25	P ₂₅ (t+72)	4326
137	68	1007	0770	26	P ₂₆ (t+72)	0371
138	386	0450	1327	27	P ₂₇ (t+72)	6356
139	797	0305	1472	28	P ₂₈ (t+72)	5345
140	456	1653	0124	29	P ₂₉ (t+72)	0740
141	499	1411	0366	30	P ₃₀ (t+72)	6142
142	883	1644	0133	31	P ₃₁ (t+72)	1243
143	307	1312	0465	32	P ₃₂ (t+72)	6703
144	127	1060	0717	33	P ₃₃ (t+72)	5163
145	211	1560	0217	34	P ₃₄ (t+72)	4653
146	121	0035	1742	35	P ₃₅ (t+72)	4107
147	118	0355	1422	36	P ₃₆ (t+72)	4261
148	163	0335	1442	37	P ₃₇ (t+72)	0312
149	628	1254	0523	1	P ₁ (t+96)	2525
150	853	1041	0736	2	P ₂ (t+96)	7070
151	484	0142	1635	3	P ₃ (t+96)	1616
152	289	1641	0136	4	P ₄ (t+96)	2525
153	811	1504	0273	5	P ₅ (t+96)	3070
154	202	0751	1026	6	P ₆ (t+96)	3616
155	1021	1774	0003	7	P ₇ (t+96)	7525

* In the octal notation for the first 10 chips of the C/A-code or the initial settings as shown in this table, the first digit (1/0) represents a "1" or "0", respectively, for the first chip and the last three digits are the conventional octal representation of the remaining 9 chips. (For example, the first 10 chips of the C/A code for PRN Signal Assembly No. 64 are: 1101010011).

** P_i(t+N): P-code sequence of PRN number i shifted by N hours. See Section 6.3.6.2.1.

NOTE: The code phase assignments constitute inseparable pairs, each consisting of a specific C/A and a specific P code phase, as shown above.

Table 6-I Additional C/A-/P-Code Phase Assignments (sheet 4 of 5)						
PRN Signal No.	C/A			P		
	G2 Delay (Chips)	Initial G2 Setting (Octal)*	First 10 Chips (Octal)*	X2 Delay (Chips)	P-code Relative Advance (Hours) **	First 12 Chips (Octal)
156	463	0107	1670	8	P ₈ (t+96)	5470
157	568	1153	0624	9	P ₉ (t+96)	4416
158	904	1542	0235	10	P ₁₀ (t+96)	4025
159	670	1223	0554	11	P ₁₁ (t+96)	4230
160	230	1702	0075	12	P ₁₂ (t+96)	0336
161	911	0436	1341	13	P ₁₃ (t+96)	6375
162	684	1735	0042	14	P ₁₄ (t+96)	1354
163	309	1662	0115	15	P ₁₅ (t+96)	6744
164	644	1570	0207	16	P ₁₆ (t+96)	5140
165	932	1573	0204	17	P ₁₇ (t+96)	4642
166	12	0201	1576	18	P ₁₈ (t+96)	0103
167	314	0635	1142	19	P ₁₉ (t+96)	6263
168	891	1737	0040	20	P ₂₀ (t+96)	1313
169	212	1670	0107	21	P ₂₁ (t+96)	6767
170	185	0134	1643	22	P ₂₂ (t+96)	1151
171	675	1224	0553	23	P ₂₃ (t+96)	2646
172	503	1460	0317	24	P ₂₄ (t+96)	7101
173	150	1362	0415	25	P ₂₅ (t+96)	5662
174	395	1654	0123	26	P ₂₆ (t+96)	0513
175	345	0510	1267	27	P ₂₇ (t+96)	2067
176	846	0242	1535	28	P ₂₈ (t+96)	3211
177	798	1142	0635	29	P ₂₉ (t+96)	3726
178	992	1017	0760	30	P ₃₀ (t+96)	3571
179	357	1070	0707	31	P ₃₁ (t+96)	3456
180	995	0501	1276	32	P ₃₂ (t+96)	3405
181	877	0455	1322	33	P ₃₃ (t+96)	3420
182	112	1566	0211	34	P ₃₄ (t+96)	5432
183	144	0215	1562	35	P ₃₅ (t+96)	0437
184	476	1003	0774	36	P ₃₆ (t+96)	6035
185	193	1454	0323	37	P ₃₇ (t+96)	1234

* In the octal notation for the first 10 chips of the C/A-code or the initial settings as shown in this table, the first digit (1/0) represents a "1" or "0", respectively, for the first chip and the last three digits are the conventional octal representation of the remaining 9 chips. (For example, the first 10 chips of the C/A code for PRN Signal Assembly No. 64 are: 1101010011).

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	G2 Delay (Chips)	Initial G2 Setting (Octal)*	First 10 Chips (Octal)*	X2 Delay (Chips)	P-code Relative Advance (Hours) **	First 12 Chips (Octal)
156	463	0107	1670	8	P ₈ (t+96)	5470
157	568	1153	0624	9	P ₉ (t+96)	4416
158	904	1542	0235	10	P ₁₀ (t+96)	4025
159	670	1223	0554	11	P ₁₁ (t+96)	4230
160	230	1702	0075	12	P ₁₂ (t+96)	0336
161	911	0436	1341	13	P ₁₃ (t+96)	6375
162	684	1735	0042	14	P ₁₄ (t+96)	1354
163	309	1662	0115	15	P ₁₅ (t+96)	6744
164	644	1570	0207	16	P ₁₆ (t+96)	5140
165	932	1573	0204	17	P ₁₇ (t+96)	4642
166	12	0201	1576	18	P ₁₈ (t+96)	0103
167	314	0635	1142	19	P ₁₉ (t+96)	6263
168	891	1737	0040	20	P ₂₀ (t+96)	1313
169	212	1670	0107	21	P ₂₁ (t+96)	6767
170	185	0134	1643	22	P ₂₂ (t+96)	1151
171	675	1224	0553	23	P ₂₃ (t+96)	2646
172	503	1460	0317	24	P ₂₄ (t+96)	7101
173	150	1362	0415	25	P ₂₅ (t+96)	5662
174	395	1654	0123	26	P ₂₆ (t+96)	0513
175	345	0510	1267	27	P ₂₇ (t+96)	2067
176	846	0242	1535	28	P ₂₈ (t+96)	3211
177	798	1142	0635	29	P ₂₉ (t+96)	3726
178	992	1017	0760	30	P ₃₀ (t+96)	3571
179	357	1070	0707	31	P ₃₁ (t+96)	3456
180	995	0501	1276	32	P ₃₂ (t+96)	3405
181	877	0455	1322	33	P ₃₃ (t+96)	7420
182	112	1566	0211	34	P ₃₄ (t+96)	5432
183	144	0215	1562	35	P ₃₅ (t+96)	0437
184	476	1003	0774	36	P ₃₆ (t+96)	6035
185	193	1454	0323	37	P ₃₇ (t+96)	1234

* In the octal notation for the first 10 chips of the C/A-code or the initial settings as shown in this table, the first digit (1/0) represents a "1" or "0", respectively, for the first chip and the last three digits are the conventional octal representation of the remaining 9 chips. (For example, the first 10 chips of the C/A code for PRN Signal Assembly No. 64 are: 1101010011).

** P_i(t+N): P-code sequence of PRN number i shifted by N hours. See Section 6.3.6.2.1.

NOTE: The code phase assignments constitute inseparable pairs, each consisting of a specific C/A and a specific P code phase, as shown above.