

Exhibit C
PETITION FOR WAIVER OF SECTION 25.137 AND 25.114 AND OF
THE U.S. TABLE OF FREQUENCY ALLOCATIONS

I. TO THE EXTENT THEY APPLY, GOOD CAUSE EXISTS FOR A WAIVER OF CERTAIN PORTIONS OF SECTIONS 25.137 AND 25.114

Universal Space Network, Inc. (USN) is provided limited legal and technical information for the Helios-2B Satellite.¹ Pursuant to Section 25.137 of the Federal Communications Commission's ("Commission" or "FCC") rules, the same technical information required by Section 25.114 for U.S.-licensed space station, and certain legal information, must be submitted by earth station applicants "requesting authority to operate with a non-U.S. licensed space station to serve the United States..."² USN seeks authority to support the needed Telemetry, Tracking, and Control ("TT&C") during launch and early orbit support ("LEOP") of the Helios-2B spacecraft from launch to low earth orbit, not commercial service to the United States, and thus believes that Section 25.137 does not apply.

To the extent the Commission determines, however, that USN's request for authority to provide LEOP on a special temporary basis is a request to serve the United States with a non-U.S.-licensed satellite, USN respectfully requests a waiver of Sections 25.137 and 25.114 of the Commission's rules, to the extent that USN has not herein provided the information required by these rules.³ The Commission may grant a waiver for good cause shown.⁴ A waiver is therefore appropriate if special circumstances warrant a deviation from the general rule, and such a deviation will serve the public interest.

In this case, good cause for a waiver of portions of Section 25.114 exists. USN seeks authority only to conduct LEOP support for Helios-2B. Thus, any information sought by Section 25.114 that is not relevant to the LEOP – e.g., antenna patterns, energy and propulsion and orbital debris - USN does not have. In addition, USN would not easily be able to obtain such information because USN is not the operator of the Helios-2B satellite, nor is USN in contractual privity with that operator. Rather, USN has contracted with CNES (France) to support the Launch and Early Orbit (LEOP) portion in S-Band of the satellite prior to its operation.

As evidenced by the Comsearch report attached to this request, USN has coordinated the LEOP of the Helios-2B satellite with potentially affected terrestrial operators. Moreover, as with any STA, USN will conduct the LEOP on an unprotected, non-interference basis to government operations.

¹ FCC Form 312 Section B

² 47 C.F.R. § 25.137(a)

³ 47 C.F.R. §§25.137 and 25.114

⁴ 47 C.F.R. §1.3

Because it is not relevant to the service for which USN seeks authorization, and because obtaining the information would be a hardship, USN seeks a waiver of all the technical and legal information required by Section 25.114, to the extent it is not provided herein. As noted above, USN has provided the required information to the extent that it is relevant to the LEOP service for which USN seeks authorization.

Good cause also exists to waive portions of Section 25.137, to the extent the information required is not herein provided. Section 25.137 is designed to ensure that “U.S.-licensed satellite systems have effective competitive opportunities to provide analogous services” in other countries. Here, there is no service being provided by the satellite; USN is providing TT&C while the satellite is on the way to its low earth orbit and subsequent in orbit testing. Thus, the purpose of the information required by Section 25.137 is not implicated here. For example, Section 25.137(d) requires earth station applicants requesting authority to operate with a non-U.S.-licensed space station that is not in orbit and operating to post a bond.⁵ The underlying purpose in having to post a bond – i.e., to prevent warehousing of orbital locations by operators seeking to serve the United States – would not be served by requiring USN to post a bond in order to conduct 20 days of LEOP support of the Helios-2B satellite.

It is USN’s understanding that Helios-2B is licensed by the French, Italian, and Spanish Ministry’s of Defense. Helios-2B is an optical reconnaissance observation satellite. The spacecraft family is not meant to serve the United States. Thus, the purpose of Section 25.137 – to ensure that U.S. satellite operators enjoy “effective competitive opportunities” to serve foreign markets and to prevent warehousing of orbital locations service the United States – will not be undermined by grant of this waiver request.

Finally, USN notes that it expects to communicate with the Helios-2B satellite using its U.S. earth station for a period of 20 days. Requiring USN to obtain technical and legal information from an unrelated party, where there is no risk of interference and the operation will cease within 20 days would pose undue hardship without serving underlying policy objectives. Given these particular facts, the waiver sought herein is appropriate.

⁵ 47 C.F.R. §25.137(d)(4)

II. GOOD CAUSE EXISTS FOR A WAIVER OF THE UNITED STATES TABLE OF FREQUENCY ALLOCATIONS

USN further requests a waiver of the United States Table of Frequency Allocations ("U.S. Table") as described in section 2.106 of the rules for the frequency bands 2025 – 2110 MHz (Earth-to-Space) and 2200 – 2290 MHz (Space-to-Earth).⁶ Section footnotes allow for non-federal Government use of these bands in the United States on a case-by-case non-interference basis. Such use by USN necessitates a waiver of the U.S. Table.

Good cause exists to grant USN a limited waiver of the U.S. Table to allow LEOP of the Helios-2B satellite. In considering request for case-by-case spectrum uses, the Commission has indicated that it would generally grant such waivers "where there is little potential for interference into any service authorized under the Table of Frequency Allocations and when the case-by-case operator accepts any interference from authorized services."⁷ USN will coordinate with other parties operating communication systems in compliance with the Table of Frequency Allocations to ensure that no harmful interference is caused. USN seeks to operate only pursuant to special temporary authorization and thus agrees to accept any interference from authorized services. In summary, USN's operation on a non-interference, non-protected basis support waiver of the U.S. Table.

⁶ 47 C.F.R. §2.106

⁷ Previously approved STA's for Universal Space Network SES-STA-20020725-01174; SES-STA-20021112-02008; SES-STA-20040315-00475

USN support of Helios-2B from Alaska

Helios-2B is the second in a series of a spacecraft family of European Military observation satellites. Helios-2B launches from French Guyana on an Ariane 5 launch vehicle. Nominal lift-off time is scheduled for: **December 9th, 2009 at 16:26:11 UTC**, the vehicle will directly inject the spacecraft into a LEO orbit. The launch window remains open until approximately 18:00:00 UTC. All analysis is based on a nominal launch at 16:26:11 UTC.

The spacecraft is a Low Earth Orbiting (LEO) in a Sun-synchronous repeating track orbit. This orbit allows a nominal 10 visibilities over the USN Alaska station every day. Each spacecraft contact is on the order of 11 minutes (mean time) each.

The mission consists of a maximum of 202 passes taken from the USN tracking station in Alaska. Not all passes will be taken. The following list contains all possible contacts:

Facility-Alaska-Sensor-13m-To-Satellite-Helios-2B: Access Summary Report

Access	Start Time (UTCG)	Stop Time (UTCG)	Duration (sec)
1	9 Dec 2009 18:29:01.959	9 Dec 2009 18:36:22.163	440.204
2	9 Dec 2009 20:03:34.446	9 Dec 2009 20:13:19.711	585.265
3	9 Dec 2009 21:39:23.621	9 Dec 2009 21:50:32.823	669.202
4	9 Dec 2009 23:17:18.361	9 Dec 2009 23:27:35.719	617.358
5	10 Dec 2009 00:58:43.837	10 Dec 2009 01:03:21.921	278.084
6	10 Dec 2009 09:22:04.871	10 Dec 2009 09:27:37.732	332.861
7	10 Dec 2009 10:58:06.998	10 Dec 2009 11:08:35.562	628.565
8	10 Dec 2009 12:35:11.794	10 Dec 2009 12:46:18.345	666.551
9	10 Dec 2009 14:12:24.685	10 Dec 2009 14:21:59.200	574.515
10	10 Dec 2009 15:49:19.317	10 Dec 2009 15:56:28.587	429.270
11	10 Dec 2009 17:25:05.438	10 Dec 2009 17:31:19.700	374.261
12	10 Dec 2009 18:59:33.703	10 Dec 2009 19:07:41.059	487.355
13	10 Dec 2009 20:34:23.977	10 Dec 2009 20:44:47.216	623.239
14	10 Dec 2009 22:10:49.056	10 Dec 2009 22:21:59.724	670.668
15	10 Dec 2009 23:49:35.641	10 Dec 2009 23:58:51.903	556.262
16	11 Dec 2009 09:52:52.393	11 Dec 2009 10:00:51.246	478.854
17	11 Dec 2009 11:29:29.519	11 Dec 2009 11:40:28.982	659.463
18	11 Dec 2009 13:06:39.687	11 Dec 2009 13:17:27.557	647.870
19	11 Dec 2009 14:43:50.134	11 Dec 2009 14:52:38.450	528.317
20	11 Dec 2009 16:20:29.507	11 Dec 2009 16:27:02.184	392.678
21	11 Dec 2009 17:55:44.277	11 Dec 2009 18:02:21.889	397.612
22	11 Dec 2009 19:30:08.160	11 Dec 2009 19:39:04.131	535.971
23	11 Dec 2009 21:05:23.504	11 Dec 2009 21:16:15.143	651.639
24	11 Dec 2009 22:42:28.847	11 Dec 2009 22:53:24.647	655.799
25	12 Dec 2009 00:22:17.582	12 Dec 2009 00:29:57.843	460.260
26	12 Dec 2009 10:24:00.430	12 Dec 2009 10:33:28.554	568.124
27	12 Dec 2009 12:00:54.730	12 Dec 2009 12:12:06.253	671.522
28	12 Dec 2009 13:38:07.478	12 Dec 2009 13:48:25.251	617.773
29	12 Dec 2009 15:15:12.523	12 Dec 2009 15:23:12.102	479.579
30	12 Dec 2009 16:51:29.877	12 Dec 2009 16:57:42.211	372.334
31	12 Dec 2009 18:26:17.085	12 Dec 2009 18:33:33.242	436.156
32	12 Dec 2009 20:00:48.366	12 Dec 2009 20:10:29.743	581.377
33	12 Dec 2009 21:36:34.476	12 Dec 2009 21:47:42.764	668.287
34	12 Dec 2009 23:14:24.826	12 Dec 2009 23:24:46.346	621.520
35	13 Dec 2009 00:55:39.663	13 Dec 2009 01:00:38.878	299.214
36	13 Dec 2009 09:19:20.423	13 Dec 2009 09:24:34.898	314.475
37	13 Dec 2009 10:55:17.356	13 Dec 2009 11:05:42.093	624.737
38	13 Dec 2009 12:32:21.467	13 Dec 2009 12:43:29.124	667.658
39	13 Dec 2009 14:09:34.426	13 Dec 2009 14:19:12.924	578.498

40	13 Dec 2009 15:46:30.129	13 Dec 2009 15:53:43.321	433.192
41	13 Dec 2009 17:22:19.051	13 Dec 2009 17:28:32.143	373.092
42	13 Dec 2009 18:56:48.330	13 Dec 2009 19:04:51.215	482.885
43	13 Dec 2009 20:31:36.631	13 Dec 2009 20:41:56.726	620.095
44	13 Dec 2009 22:07:58.232	13 Dec 2009 22:19:09.354	671.121
45	13 Dec 2009 23:46:39.729	13 Dec 2009 23:56:02.732	563.003
46	14 Dec 2009 09:50:04.175	14 Dec 2009 09:57:52.751	468.576
47	14 Dec 2009 11:26:39.109	14 Dec 2009 11:37:36.640	657.530
48	14 Dec 2009 13:03:48.886	14 Dec 2009 13:14:39.014	650.128
49	14 Dec 2009 14:40:59.641	14 Dec 2009 14:49:52.383	532.742
50	14 Dec 2009 16:17:40.652	14 Dec 2009 16:24:16.121	395.469
51	14 Dec 2009 17:52:58.217	14 Dec 2009 17:59:32.954	394.737
52	14 Dec 2009 19:27:21.967	14 Dec 2009 19:36:13.540	531.573
53	14 Dec 2009 21:02:34.742	14 Dec 2009 21:13:24.203	649.461
54	14 Dec 2009 22:39:36.196	14 Dec 2009 22:50:34.058	657.862
55	15 Dec 2009 00:19:18.588	15 Dec 2009 00:27:09.500	470.912
56	15 Dec 2009 10:21:10.599	15 Dec 2009 10:30:32.171	561.573
57	15 Dec 2009 11:58:03.685	15 Dec 2009 12:09:14.860	671.175
58	15 Dec 2009 13:35:16.269	15 Dec 2009 13:45:37.266	620.997
59	15 Dec 2009 15:12:21.927	15 Dec 2009 15:20:25.997	484.070
60	15 Dec 2009 16:48:41.567	15 Dec 2009 16:54:54.954	373.386
61	15 Dec 2009 18:23:30.957	15 Dec 2009 18:30:43.131	432.174
62	15 Dec 2009 19:58:01.106	15 Dec 2009 20:07:38.531	577.425
63	15 Dec 2009 21:33:44.168	15 Dec 2009 21:44:51.438	667.269
64	15 Dec 2009 23:11:30.145	15 Dec 2009 23:21:55.679	625.534
65	16 Dec 2009 00:52:35.012	16 Dec 2009 00:57:53.852	318.840
66	16 Dec 2009 09:16:35.407	16 Dec 2009 09:21:29.917	294.510
67	16 Dec 2009 10:52:26.487	16 Dec 2009 11:02:47.178	620.691
68	16 Dec 2009 12:29:29.873	16 Dec 2009 12:40:38.547	668.674
69	16 Dec 2009 14:06:42.881	16 Dec 2009 14:16:25.350	582.468
70	16 Dec 2009 15:43:39.614	16 Dec 2009 15:50:56.854	437.241
71	16 Dec 2009 17:19:31.331	16 Dec 2009 17:25:43.461	372.130
72	16 Dec 2009 18:54:01.736	16 Dec 2009 19:02:00.158	478.422
73	16 Dec 2009 20:28:48.114	16 Dec 2009 20:39:04.985	616.871
74	16 Dec 2009 22:05:06.249	16 Dec 2009 22:16:17.712	671.463
75	16 Dec 2009 23:43:42.695	16 Dec 2009 23:53:12.239	569.544
76	17 Dec 2009 09:47:14.868	17 Dec 2009 09:54:52.646	457.778
77	17 Dec 2009 11:23:47.454	17 Dec 2009 11:34:42.897	655.443
78	17 Dec 2009 13:00:56.813	17 Dec 2009 13:11:49.134	652.320
79	17 Dec 2009 14:38:07.852	17 Dec 2009 14:47:05.047	537.195
80	17 Dec 2009 16:14:50.452	17 Dec 2009 16:21:28.892	398.441
81	17 Dec 2009 17:50:10.857	17 Dec 2009 17:56:42.861	392.005
82	17 Dec 2009 19:24:34.577	17 Dec 2009 19:33:21.719	527.142
83	17 Dec 2009 20:59:44.815	17 Dec 2009 21:10:32.005	647.190
84	17 Dec 2009 22:36:42.389	17 Dec 2009 22:47:42.194	659.805
85	18 Dec 2009 00:16:18.547	18 Dec 2009 00:24:19.758	481.210
86	18 Dec 2009 10:18:19.581	18 Dec 2009 10:27:34.293	554.712
87	18 Dec 2009 11:55:11.382	18 Dec 2009 12:06:22.086	670.704
88	18 Dec 2009 13:32:23.782	18 Dec 2009 13:42:47.963	624.181
89	18 Dec 2009 15:09:30.022	18 Dec 2009 15:17:38.652	488.631
90	18 Dec 2009 16:45:51.903	18 Dec 2009 16:52:06.559	374.656
91	18 Dec 2009 18:20:43.572	18 Dec 2009 18:27:51.836	428.264
92	18 Dec 2009 19:55:12.666	18 Dec 2009 20:04:46.077	573.411
93	18 Dec 2009 21:30:52.699	18 Dec 2009 21:41:58.847	666.149
94	18 Dec 2009 23:08:34.318	18 Dec 2009 23:19:03.723	629.405
95	19 Dec 2009 00:49:29.760	19 Dec 2009 00:55:06.979	337.219
96	19 Dec 2009 09:13:49.993	19 Dec 2009 09:18:22.609	272.616
97	19 Dec 2009 10:49:34.394	19 Dec 2009 10:59:50.824	616.430
98	19 Dec 2009 12:26:37.015	19 Dec 2009 12:37:46.608	669.593

99	19 Dec 2009 14:03:50.051	19 Dec 2009 14:13:36.488	586.436
100	19 Dec 2009 15:40:47.773	19 Dec 2009 15:48:09.182	441.410
101	19 Dec 2009 17:16:42.262	19 Dec 2009 17:22:53.636	371.374
102	19 Dec 2009 18:51:13.920	19 Dec 2009 18:59:07.891	473.971
103	19 Dec 2009 20:25:58.427	19 Dec 2009 20:36:11.992	613.566
104	19 Dec 2009 22:02:13.107	19 Dec 2009 22:13:24.799	671.692
105	19 Dec 2009 23:40:44.539	19 Dec 2009 23:50:20.426	575.887
106	20 Dec 2009 09:44:24.492	20 Dec 2009 09:51:50.908	446.416
107	20 Dec 2009 11:20:54.556	20 Dec 2009 11:31:47.735	653.179
108	20 Dec 2009 12:58:03.471	20 Dec 2009 13:08:57.917	654.446
109	20 Dec 2009 14:35:14.769	20 Dec 2009 14:44:16.437	541.668
110	20 Dec 2009 16:11:58.908	20 Dec 2009 16:18:40.497	401.588
111	20 Dec 2009 17:47:22.188	20 Dec 2009 17:53:51.616	389.428
112	20 Dec 2009 19:21:45.991	20 Dec 2009 19:30:28.669	522.679
113	20 Dec 2009 20:56:53.724	20 Dec 2009 21:07:38.548	644.825
114	20 Dec 2009 22:33:47.429	20 Dec 2009 22:44:49.042	661.613
115	21 Dec 2009 00:13:17.455	21 Dec 2009 00:21:28.625	491.170
116	21 Dec 2009 10:15:27.384	21 Dec 2009 10:24:34.908	547.524
117	21 Dec 2009 11:52:17.826	21 Dec 2009 12:03:27.927	670.101
118	21 Dec 2009 13:29:30.019	21 Dec 2009 13:39:57.342	627.323
119	21 Dec 2009 15:06:36.811	21 Dec 2009 15:14:50.064	493.252
120	21 Dec 2009 16:43:00.881	21 Dec 2009 16:49:17.026	376.146
121	21 Dec 2009 18:17:54.925	21 Dec 2009 18:24:59.358	424.433
122	21 Dec 2009 19:52:23.046	21 Dec 2009 20:01:52.382	569.336
123	21 Dec 2009 21:28:00.069	21 Dec 2009 21:39:04.993	664.925
124	21 Dec 2009 23:05:37.348	21 Dec 2009 23:16:10.467	633.119
125	22 Dec 2009 00:46:23.824	22 Dec 2009 00:52:18.342	354.518
126	22 Dec 2009 09:11:04.447	22 Dec 2009 09:15:12.714	248.267
127	22 Dec 2009 10:46:41.082	22 Dec 2009 10:56:53.019	611.937
128	22 Dec 2009 12:23:42.895	22 Dec 2009 12:34:53.305	670.410
129	22 Dec 2009 14:00:55.939	22 Dec 2009 14:10:46.314	590.375
130	22 Dec 2009 15:37:54.610	22 Dec 2009 15:45:20.302	445.693
131	22 Dec 2009 17:13:51.860	22 Dec 2009 17:20:02.685	370.825
132	22 Dec 2009 18:48:24.879	22 Dec 2009 18:56:14.417	469.538
133	22 Dec 2009 20:23:07.570	22 Dec 2009 20:33:17.750	610.180
134	22 Dec 2009 21:59:18.809	22 Dec 2009 22:10:30.616	671.808
135	22 Dec 2009 23:37:45.263	22 Dec 2009 23:47:27.298	582.034
136	23 Dec 2009 09:41:33.071	23 Dec 2009 09:48:47.509	434.437
137	23 Dec 2009 11:18:00.419	23 Dec 2009 11:28:51.161	650.742
138	23 Dec 2009 12:55:08.860	23 Dec 2009 13:06:05.345	656.485
139	23 Dec 2009 14:32:20.395	23 Dec 2009 14:41:26.550	546.155
140	23 Dec 2009 16:09:06.023	23 Dec 2009 16:15:50.929	404.906
141	23 Dec 2009 17:44:32.218	23 Dec 2009 17:50:59.221	387.003
142	23 Dec 2009 19:18:56.207	23 Dec 2009 19:27:34.394	518.188
143	23 Dec 2009 20:54:01.470	23 Dec 2009 21:04:43.835	642.365
144	23 Dec 2009 22:30:51.317	23 Dec 2009 22:41:54.617	663.300
145	24 Dec 2009 00:10:15.304	24 Dec 2009 00:18:36.110	500.806
146	24 Dec 2009 10:12:34.017	24 Dec 2009 10:21:34.004	539.987
147	24 Dec 2009 11:49:23.019	24 Dec 2009 12:00:32.377	669.358
148	24 Dec 2009 13:26:34.982	24 Dec 2009 13:37:05.384	630.402
149	24 Dec 2009 15:03:42.298	24 Dec 2009 15:12:00.226	497.929
150	24 Dec 2009 16:40:08.515	24 Dec 2009 16:46:26.354	377.839
151	24 Dec 2009 18:15:05.015	24 Dec 2009 18:22:05.703	420.687
152	24 Dec 2009 19:49:32.246	24 Dec 2009 19:58:57.447	565.201
153	24 Dec 2009 21:25:06.281	24 Dec 2009 21:36:09.876	663.595
154	24 Dec 2009 23:02:39.236	24 Dec 2009 23:13:15.925	636.689
155	25 Dec 2009 00:43:17.137	25 Dec 2009 00:49:28.024	370.887
156	25 Dec 2009 09:08:19.177	25 Dec 2009 09:11:59.821	220.644
157	25 Dec 2009 10:43:46.556	25 Dec 2009 10:53:53.756	607.201

158	25 Dec 2009 12:20:47.517	25 Dec 2009 12:31:58.632	671.116
159	25 Dec 2009 13:58:00.546	25 Dec 2009 14:07:54.844	594.298
160	25 Dec 2009 15:35:00.128	25 Dec 2009 15:42:30.206	450.078
161	25 Dec 2009 17:11:00.110	25 Dec 2009 17:17:10.603	370.493
162	25 Dec 2009 18:45:34.613	25 Dec 2009 18:53:19.738	465.126
163	25 Dec 2009 20:20:15.546	25 Dec 2009 20:30:22.259	606.713
164	25 Dec 2009 21:56:23.356	25 Dec 2009 22:07:35.165	671.808
165	25 Dec 2009 23:34:44.867	25 Dec 2009 23:44:32.860	587.993
166	26 Dec 2009 01:18:09.471	26 Dec 2009 01:18:45.167	35.696
167	26 Dec 2009 09:38:40.635	26 Dec 2009 09:45:42.418	421.784
168	26 Dec 2009 11:15:05.047	26 Dec 2009 11:25:53.165	648.118
169	26 Dec 2009 12:52:12.983	26 Dec 2009 13:03:11.426	658.442
170	26 Dec 2009 14:29:24.733	26 Dec 2009 14:38:35.381	550.648
171	26 Dec 2009 16:06:11.800	26 Dec 2009 16:13:00.186	408.386
172	26 Dec 2009 17:41:40.943	26 Dec 2009 17:48:05.679	384.736
173	26 Dec 2009 19:16:05.225	26 Dec 2009 19:24:38.896	513.671
174	26 Dec 2009 20:51:08.056	26 Dec 2009 21:01:47.866	639.809
175	26 Dec 2009 22:27:54.057	26 Dec 2009 22:38:58.914	664.858
176	27 Dec 2009 00:07:12.091	27 Dec 2009 00:15:42.222	510.131
177	27 Dec 2009 10:09:39.490	27 Dec 2009 10:18:31.569	532.079
178	27 Dec 2009 11:46:26.964	27 Dec 2009 11:57:35.431	668.468
179	27 Dec 2009 13:23:38.674	27 Dec 2009 13:34:12.100	633.427
180	27 Dec 2009 15:00:46.484	27 Dec 2009 15:09:09.135	502.651
181	27 Dec 2009 16:37:14.793	27 Dec 2009 16:43:34.539	379.746
182	27 Dec 2009 18:12:13.839	27 Dec 2009 18:19:10.872	417.032
183	27 Dec 2009 19:46:40.268	27 Dec 2009 19:56:01.275	561.007
184	27 Dec 2009 21:22:11.338	27 Dec 2009 21:33:13.497	662.159
185	27 Dec 2009 22:59:39.984	27 Dec 2009 23:10:20.093	640.109
186	28 Dec 2009 00:40:09.632	28 Dec 2009 00:46:36.077	386.446
187	28 Dec 2009 09:05:34.893	28 Dec 2009 09:08:43.208	188.315
188	28 Dec 2009 10:40:50.821	28 Dec 2009 10:50:53.026	602.206
189	28 Dec 2009 12:17:50.881	28 Dec 2009 12:29:02.585	671.703
190	28 Dec 2009 13:55:03.875	28 Dec 2009 14:05:02.053	598.179
191	28 Dec 2009 15:32:04.330	28 Dec 2009 15:39:38.890	454.561
192	28 Dec 2009 17:08:07.011	28 Dec 2009 17:14:17.392	370.381
193	28 Dec 2009 18:42:43.119	28 Dec 2009 18:50:23.857	460.738
194	28 Dec 2009 20:17:22.356	28 Dec 2009 20:27:25.520	603.164
195	28 Dec 2009 21:53:26.752	28 Dec 2009 22:04:38.444	671.692
196	28 Dec 2009 23:31:43.352	28 Dec 2009 23:41:37.105	593.753
197	29 Dec 2009 01:14:24.897	29 Dec 2009 01:16:27.858	122.961
198	29 Dec 2009 09:35:47.215	29 Dec 2009 09:42:35.602	408.387
199	29 Dec 2009 11:12:08.442	29 Dec 2009 11:22:53.740	645.298
200	29 Dec 2009 12:49:15.844	29 Dec 2009 13:00:16.157	660.313
201	29 Dec 2009 14:26:27.784	29 Dec 2009 14:35:42.924	555.140
202	29 Dec 2009 16:03:16.237	29 Dec 2009 16:10:08.262	412.025

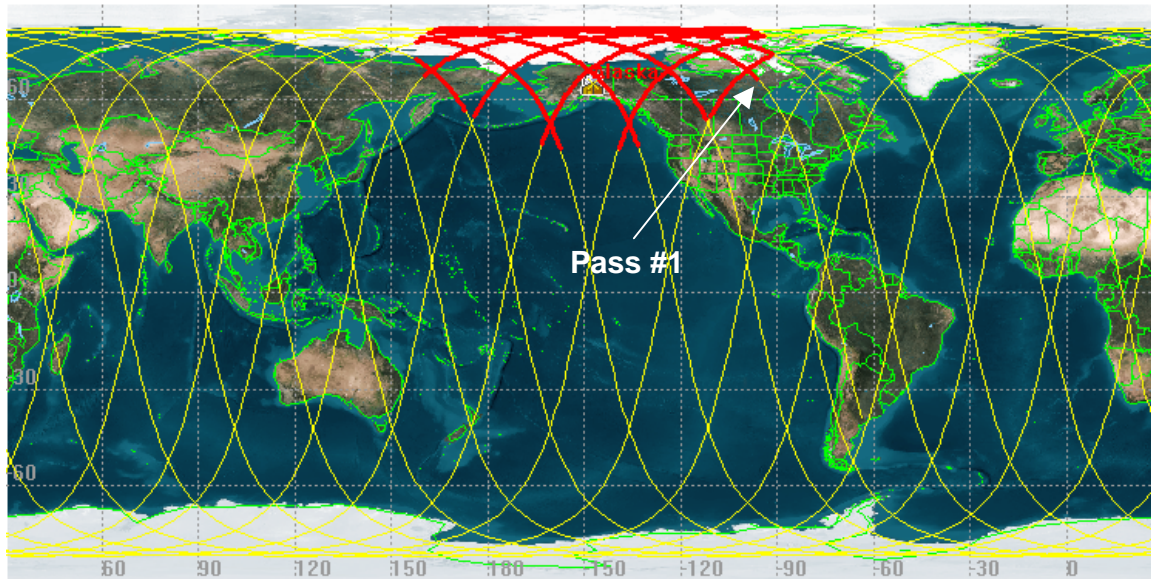
Injection and Pass #1

Access	Start Time (UTCG)	Stop Time (UTCG)	Duration (sec)
-----	-----	-----	-----
1	9 Dec 2009 18:29:01.959	9 Dec 2009 18:36:22.163	440.204

Spacecraft Nominal Two Line elements:

HELIOS-2B

1 99999U 09999X 09343.72608796 +.00000000 +00000-9 +20859-3 2 00006
2 99999 098.0799 278.3331 0001443 090.3562 104.3426 14.68515171000002



USN Alaska coverage of Helios-2B:

Chart shows first day of passes (contacts 1 – 11)