

The following excerpts of the flight recorded data compare the accident flight with the prior flight, which was performed several days prior.

time	alt	pitch	bank	heading	airspeed	vsi	g-force	fuel flow	fuel press	oil temp	oil press	volts	torque	n1	ITT	Prop RPM
14:59:17	6473	-3	-2	194	209	51	1.0	47	41	161	32	28.2	65	95	1142	1801
14:59:18	6475	-3	-2	193	209	60	1.0	46	42	161	31	28.2	65	95	1142	1801
14:59:19	6477	-3	-3	193	210	59	1.0	47	42	161	31	28.2	65	95	1142	1802
14:59:20	6478	-3	-2	193	210	71	1.0	47	43	161	32	28.2	65	95	1142	1802
14:59:21	6487	-4	<b>-3</b>	193	211	<b>68</b>	0.9	46	43	161	32	28.2	65	95	1142	1801
14:59:22	6492	<b>-9</b>	<b>-13</b>	194	211	<b>389</b>	-0.1	46	42	161	31	28.2	65	95	1142	1801
14:59:23	6452	<b>-14</b>	<b>-27</b>	198	212	<b>0</b>	-0.4	<b>46</b>	42	161	30	28.2	<b>64</b>	95	1118	1804
14:59:24	6367	<b>-14</b>	<b>-36</b>	204	213	<b>-884</b>	0.3	<b>28</b>	42	161	<b>25</b>	28.2	<b>55</b>	<b>84</b>	<b>940</b>	1703
14:59:25	6254	<b>-22</b>	<b>-28</b>	207	214	<b>-2509</b>	-0.7	<b>19</b>	41	161	<b>21</b>	28.2	<b>44</b>	<b>76</b>	<b>830</b>	1755
14:59:26	6122	<b>-25</b>	<b>-24</b>	206	219	<b>-4287</b>	0.6	<b>16</b>	41	161	<b>18</b>	28.2	<b>35</b>	<b>72</b>	<b>798</b>	1772
14:59:27	5940	<b>-21</b>	<b>-18</b>	203	225	<b>-5738</b>	1.8	16	40	161	<b>16</b>	28.2	<b>29</b>	<b>71</b>	<b>791</b>	1809
14:59:28	5805	<b>-16</b>	<b>4</b>	206	226	<b>-7012</b>	2.2	16	40	161	<b>15</b>	28.2	<b>24</b>	<b>70</b>	790	1762
14:59:29	5707	<b>-11</b>	12	209	226	<b>-7399</b>	3.0	16	40	161	<b>19</b>	28.2	<b>20</b>	<b>69</b>	790	1788
14:59:30	5681	-4	19	209	224	<b>-6874</b>	3.3	16	39	161	<b>21</b>	28.2	<b>18</b>	<b>68</b>	790	1788
14:59:31	5649	-1	5	209	221	<b>-5401</b>	2.1	16	38	161	<b>23</b>	28.2	<b>16</b>	68	788	1799
14:59:32	5663	1	-5	211	218	<b>-3814</b>	1.5	16	38	161	<b>24</b>	28.2	<b>14</b>	68	786	1790
14:59:33	5687	1	-8	210	213	<b>-1884</b>	1.1	16	38	161	<b>26</b>	28.2	<b>12</b>	67	786	1789
14:59:34	5680	0	-4	210	208	<b>-445</b>	0.9	16	37	161	26	28.2	<b>11</b>	67	786	1787
14:59:35	5743	0	-1	210	206	<b>561</b>	0.8	16	38	161	27	28.2	11	67	786	1790
14:59:36	5736	0	-1	211	201	1215	0.9	16	38	161	27	28.2	10	67	786	1790
14:59:37	5739	-2	2	211	197	1348	0.7	16	38	161	28	28.1	9	66	786	1791

Figure 1: Accident Flight - Time Around In Flight Upset

time	alt	pitch	bank	heading	airspeed	vsi	g-force	fuel flow	fuel press	oil temp	oil press	volts	torque	n1	ITT	Prop RPM
14:59:53	5754	1	-1	217	161	480	1.0	18	39	160	28	27.7	7	68	837	1789
14:59:54	5765	1	4	219	158	581	0.9	16	39	161	28	27.4	7	67	810	1773
14:59:55	5775	0	5	218	155	618	0.8	16	39	161	29	27	8	66	803	1783
14:59:56	5780	0	2	217	154	622	0.9	16	39	162	28	26.8	7	66	801	1785
14:59:57	5782	-1	4	218	152	537	0.9	16	39	164	28	26.5	7	65	801	1782
14:59:58	5779	-2	5	219	150	392	0.9	16	38	165	28	26.3	7	65	801	1783
14:59:59	5777	-3	4	219	149	200	0.8	16	38	167	28	26.2	8	65	803	1783
15:00:00	5768	-4	1	220	148	0	0.7	18	38	168	29	26	7	66	832	1791
15:00:01	5758	-2	2	220	147	-204	1.1	19	38	170	28	25.9	8	68	863	1805
15:00:02	5746	-2	2	220	146	-420	1.1	17	38	171	28	25.8	8	67	835	1785
15:00:03	5736	-2	2	220	145	-540	1.0	16	38	172	29	25.7	8	66	817	1781
15:00:04	5730	-2	2	220	144	-576	1.0	16	38	172	28	25.7	7	65	813	1785
15:00:05	5723	-2	2	220	142	-562	0.9	16	38	172	28	25.6	7	65	813	1785
15:00:06	5715	-2	2	220	141	-539	1.0	16	38	173	28	25.6	8	65	813	1785
15:00:07	5706	-2	3	221	140	-532	1.0	16	38	173	28	25.5	7	64	813	1786
15:00:08	5695	-3	3	221	138	-531	1.0	16	38	173	28	25.5	8	64	813	1786
15:00:09	5686	-3	3	221	138	-545	0.9	16	38	173	28	25.4	8	64	814	1786
15:00:10	5673	-3	3	222	137	-576	0.9	16	38	173	28	25.4	7	64	817	1788
15:00:11	5660	-4	2	222	137	-637	1.0	19	38	173	28	25.4	7	66	865	1812
15:00:12	5645	-3	0	222	137	-694	1.0	21	38	174	28	25.4	8	69	916	1819
15:00:13	5633	-3	-1	221	137	-735	1.0	18	38	175	28	25.4	8	69	879	1782
15:00:14	5623	-2	-2	221	137	-761	1.2	17	38	175	28	25.3	8	68	838	1775
15:00:15	5608	-2	0	222	135	-765	0.9	16	38	175	28	25.3	8	66	818	1777

Figure 2: Accident Flight - Time Around Oil Temp Increase

time	alt	pitch	bank	heading	airspeed	vsi	g-force	fuel flow	fuel press	oil temp	oil press	volts	Torque	n1	ITT	prop
00:26	335	8.1	3.9	306	95	-182	1.3	48	40	137	33	28.2	42	92	1190	1948
37:08	2563	-2.3	-0.2	333	149	-911	1.3	16	44	154	28	28.1	6	61	848	1702
38:16	1760	-3.7	-18.3	264	94	-799	1.3	24	42	154	29	28.2	6	71	990	1650
38:05	1885	-1.4	-24.6	322	98	-756	1.3	18	40	154	28	28.1	6	61	908	1537
00:27	357	10.9	2.9	309	98	24	1.3	48	41	137	33	28.2	43	92	1190	1950
38:12	1814	-3.3	-25.6	284	93	-644	1.2	18	41	154	28	28.1	6	61	928	1494

Figure 3: Prior Flight - Highest G-force

time	alt	pitch	bank	heading	airspeed	vsi	g-force	fuel flow	fuel press	oil temp	oil press	volts	Torque	n1	ITT	prop
36:32	2853	-5.6	2.5	321	187	-757	1.0	16	44	152	28	28.1	7	64	814	1691
36:33	2837	-5.5	2.8	321	187	-800	1.0	16	44	152	28	28.1	7	63	812	1695
36:34	2824	-5.7	3.0	321	186	-837	0.9	16	45	152	28	28.1	7	62	812	1694
36:35	2811	-5.8	3.4	322	185	-845	1.0	16	44	152	28	28.1	7	62	812	1694
36:36	2796	-5.7	3.0	322	184	-858	1.0	16	45	152	28	28.1	7	62	813	1693
36:37	2782	-5.6	3.4	323	183	-850	1.0	16	45	152	28	28.1	7	62	815	1693
36:38	2769	-4.6	2.6	323	182	-830	1.2	16	44	152	28	28.1	7	62	817	1695
36:39	2760	-4.5	2.3	324	180	-782	1.0	16	44	152	28	28.1	7	62	817	1691

Figure 4: Prior Flight - Lowest Fuel Flows

time	alt	pitch	bank	heading	airspeed	vsi	g-force	fuel flow	fuel press	oil temp	oil press	volts	Torque	n1	ITT	prop
06:36	10144	1.5	0.0	325	167	1397	0.9	46	38	168	31	28	65	97	1213	1837
06:38	10184	0.9	-0.5	324	168	1252	0.9	46	38	168	32	28.1	65	97	1213	1837
06:44	10265	-0.3	-0.1	324	171	783	1.0	46	38	168	32	28.1	65	97	1213	1837
06:47	10298	-0.5	-0.4	324	174	665	1.0	46	38	168	32	28.1	65	97	1213	1838
06:49	10318	-0.8	-0.3	324	176	628	1.0	46	38	168	32	28.1	65	97	1213	1838
06:50	10327	-0.9	-1.0	324	177	615	1.0	46	38	168	32	28.1	65	97	1213	1838
06:53	10356	-1.1	-1.4	324	179	547	1.0	46	38	168	31	28.1	65	97	1212	1837
07:02	10421	-2.4	0.0	324	186	355	0.9	46	38	168	32	28.1	65	97	1208	1838
05:44	8560	3.5	0.2	323	166	1756	1.0	48	39	167	32	28.1	67	97	1217	1835
05:46	8625	3.5	-0.5	322	166	1789	1.0	48	38	167	32	28.1	67	97	1216	1836

Figure 5: Prior Flight - Highest Oil Temps

time	alt	pitch	bank	heading	airspeed	vsi	g-force	fuel flow	fuel press	oil temp	oil press	volts	Torque	n1	ITT	prop
36:48	2786	-2.5	2.7	327	161	339	0.9	16	44	152	27	28.1	7	61	831	1694
36:51	2781	-3.0	2.7	328	157	66	0.9	16	44	153	27	28.1	6	61	837	1697
36:56	2737	-4.6	1.7	330	152	-521	0.9	16	44	153	27	28.1	6	61	840	1698
36:57	2722	-4.4	-0.3	331	150	-625	1.0	16	44	153	27	28.1	6	61	840	1694
36:58	2708	-4.6	0.6	331	149	-697	0.9	16	44	153	27	28.1	6	61	841	1696
36:59	2695	-4.6	-0.2	331	149	-750	1.0	16	44	153	27	28.1	6	61	841	1698

Figure 6: Prior Flight - Lowest Oil Pressures

time	alt	pitch	bank	heading	airspeed	vsi	g-force	fuel flow	fuel press	oil temp	oil press	volts	Torque	n1	ITT	prop
41:30	1515	-4.9	0.1	315	0	-47	1.0	19	42	163	27	28.1	11	62	988	582
36:02	3421	-7.3	0.8	315	212	-1291	1.0	23	43	152	30	28.1	12	75	875	1700
36:03	3398	-7.4	0.2	315	212	-1295	1.0	24	44	152	30	28.2	12	75	875	1701
00:05	337	-3.2	2.3	309	0	33	0.9	34	41	134	30	28.1	13	80	1137	1527
36:00	3467	-7.3	0.8	315	213	-1277	0.9	23	44	152	30	28.1	13	75	875	1699
36:01	3443	-7.3	0.7	315	212	-1282	1.0	23	44	152	30	28.1	13	75	875	1699
00:06	339	-2.5	2.6	304	0	27	0.9	36	41	134	31	28.1	14	82	1128	1611
35:59	3495	-7.3	0.7	315	214	-1285	1.0	23	43	152	30	28.2	14	76	875	1701
35:58	3513	-7.2	0.6	315	215	-1308	1.0	23	43	152	30	28.1	15	76	875	1700
00:07	337	-1.2	2.7	303	0	21	1.1	36	41	134	31	28.2	16	83	1116	1651
35:57	3535	-7.3	1.0	315	215	-1323	1.0	23	44	151	30	28.2	16	76	875	1700
00:08	336	-1.9	1.4	304	32	0	1.0	36	41	134	31	28.2	18	83	1115	1682
35:56	3553	-7.3	0.2	315	216	-1332	1.0	23	44	152	30	28.1	18	76	875	1697
00:09	336	-1.6	1.5	306	35	0	1.1	38	41	135	32	28.1	20	85	1131	1727
35:55	3578	-7.3	-1.5	315	218	-1333	1.0	23	44	152	30	28.2	20	76	878	1700
00:10	337	-1.3	1.3	306	38	0	1.0	44	41	135	32	28.2	22	88	1185	1817

Figure 7: Prior Flight - Torques Around 16

time	alt	pitch	bank	heading	airspeed	vsi	g-force	fuel flow	fuel press	oil temp	oil press	volts	Torque	n1	ITT	prop
36:33	2837	-5.5	2.8	321	187	-800	1.0	16	44	152	28	28.1	7	63	812	1695
36:34	2824	-5.7	3.0	321	186	-837	0.9	16	45	152	28	28.1	7	62	812	1694
36:35	2811	-5.8	3.4	322	185	-845	1.0	16	44	152	28	28.1	7	62	812	1694
36:36	2796	-5.7	3.0	322	184	-858	1.0	16	45	152	28	28.1	7	62	813	1693
36:29	2895	-5.4	2.8	320	191	-617	1.0	17	44	152	29	28.1	7	67	814	1692
36:30	2881	-5.4	2.6	320	190	-653	1.0	17	44	152	29	28.1	7	66	814	1691
36:31	2867	-5.6	2.6	320	189	-700	0.9	17	44	152	29	28.1	7	65	814	1690
36:32	2853	-5.6	2.5	321	187	-757	1.0	16	44	152	28	28.1	7	64	814	1691
36:37	2782	-5.6	3.4	323	183	-850	1.0	16	45	152	28	28.1	7	62	815	1693
36:28	2909	-5.7	2.9	319	192	-614	0.9	18	44	152	29	28.1	8	68	817	1688
36:38	2769	-4.6	2.6	323	182	-830	1.2	16	44	152	28	28.1	7	62	817	1695
36:39	2760	-4.5	2.3	324	180	-782	1.0	16	44	152	28	28.1	7	62	817	1691
36:40	2754	-3.6	3.2	323	178	-683	1.1	16	44	152	28	28.1	7	62	819	1695
36:41	2752	-2.0	1.3	324	177	-559	1.2	16	44	152	28	28.1	6	61	820	1692
36:42	2755	-1.5	2.2	325	174	-363	1.1	16	44	152	28	28.1	7	61	822	1690
36:43	2761	-1.5	2.1	325	172	-116	1.0	16	44	152	28	28.1	7	61	824	1691
36:44	2765	-1.6	2.3	326	170	59	1.0	16	44	152	28	28.1	7	61	825	1692
36:45	2772	-1.6	2.5	326	168	221	1.0	16	44	153	28	28.1	6	61	826	1694
36:46	2777	-1.8	1.9	326	166	313	1.0	16	44	153	28	28.1	7	61	827	1694
36:47	2782	-2.1	2.1	327	163	344	0.9	16	45	153	28	28.1	6	61	829	1690
36:48	2786	-2.5	2.7	327	161	339	0.9	16	44	152	27	28.1	7	61	831	1694
36:49	2786	-2.5	2.0	328	159	288	0.9	16	44	153	28	28.1	6	61	833	1692

Figure 8: Prior Flight - Lowest ITTs

time	alt	pitch	bank	heading	airspeed	vsi	g-force	fuel flow	fuel press	oil temp	oil press	volts	Torque	n1	ITT	prop
07:19	10465	-3.2	-0.4	324	200	165	1.0	46	37	167	32	28	67	97	1202	1836
07:20	10469	-3.3	-0.9	324	201	168	1.0	46	38	167	31	28.1	66	96	1194	1833
07:21	10473	-3.4	-0.8	324	202	183	1.0	44	38	167	31	28.1	65	96	1181	1829
07:22	10477	-3.4	-0.6	324	202	200	1.0	44	38	167	32	28.1	64	96	1173	1827
07:23	10480	-3.5	0.2	324	202	207	1.0	44	38	167	32	28	64	95	1165	1824
07:24	10482	-3.5	-1.0	324	203	200	1.0	43	38	167	32	28.1	63	95	1160	1827
07:25	10485	-3.6	-0.5	324	203	177	1.0	43	38	167	32	28.1	62	95	1156	1829
07:26	10485	-3.7	-0.4	324	204	136	0.9	42	38	167	31	28.1	62	95	1151	1827
07:27	10486	-3.8	-0.2	324	205	106	1.0	42	38	167	31	28.1	61	95	1149	1809
07:28	10485	-4.0	-0.4	324	206	62	1.0	42	38	167	31	28.1	61	95	1147	1774
07:29	10483	-4.1	-0.2	324	207	23	1.0	42	38	167	32	28.1	61	95	1146	1772
07:30	10483	-4.2	-0.4	324	208	0	1.0	42	38	167	31	28	61	95	1146	1774
07:31	10484	-4.1	-0.2	324	208	-20	1.0	42	38	167	31	28.1	62	95	1146	1771
07:32	10483	-4.0	-0.3	324	208	-20	1.0	42	38	167	31	28.1	61	95	1144	1771
07:33	10480	-4.5	0.0	324	207	-24	0.9	42	38	167	31	28.1	62	95	1144	1762
07:34	10478	-4.3	0.5	324	207	-54	1.0	42	38	167	31	28.1	61	95	1144	1759
07:35	10477	-4.2	-1.6	324	207	-65	1.0	42	38	167	32	28.1	62	95	1144	1752
07:36	10476	-4.0	-1.8	324	208	-87	1.0	42	38	167	31	28.1	62	95	1144	1738
07:37	10475	-3.9	-1.1	324	208	-82	1.1	42	38	167	32	28.1	62	95	1144	1733
07:38	10477	-4.0	-0.5	324	209	-50	1.1	42	38	167	31	28.1	62	95	1142	1722
07:39	10481	-4.1	-0.4	324	209	0	1.0	42	38	167	32	28	62	95	1141	1715
07:40	10484	-4.1	-0.2	324	209	54	1.0	42	38	167	32	28	63	95	1140	1706
07:41	10490	-4.0	0.6	324	209	129	1.0	42	38	167	32	28.1	63	95	1140	1702
07:42	10492	-4.0	0.4	324	209	194	1.0	42	38	166	32	28.1	63	95	1140	1706
07:43	10500	-4.1	0.2	324	209	237	0.9	42	38	167	32	28.1	62	95	1140	1711

Figure 9: Prior Flight During Level-Off