

Utturn Aerospace Plane: Computational Platform

(UUU77-108)

1	Mp	2000	Lb																Mpr	438.183	18.0	
2	Ms	35000	Lb																Apollo	31.25	HYBRID	
3	Mff	5000	Lb																			
4	Mu	10000	Lb																			
5	Vo	24000	ft/sec																			
6	Vdd	1000	ft/sec																			
7	Eh	61000	Btu/lb	550				Ep prop.eff	P	36/4	(2H2+O2)/2H2											
8																						
9	Muh1	Mu.Vu^2																				
10		-Mu.Vu'^2																				
11		/2g/788/Eh/Ep																				
		(1000.Mu/g.l).(1+Gg/Ag)																	XX	1000	/(32.2.550)	0.06
12	Mup1	Muh1.Rp	Lb																			
13	Mu1	Mup1+Mu	Lb																			
1	Muh2	Mu1.Vu^2																				
2		-Mu1.Vu'^2																				
3		/2g/788/Eh/Ep																				
		(1000.Mu1/g.l).(1+Gg/Ag)																				
4	Mup2	Muh2.Rp	Lb																			
5	M'2	Mup2+Mu	Lb																			
6																						
7	Muh3	Mu2.Vu^2																				
8		-Mu2.Vu'^2																				
9		/2g/788/Eh/Ep																				
		(1000.Mu2/g.l).(1+Gg/Ag)																				
10	Mup3	Muh3.Rp	Lb																			
11	Mu3	Mup3+Mu	Lb																			
12		p1		32.2																		
13	Vu	Ep	Prr	Ag	Gg	Mu	Muh1	Mup1	Mu1	Muh2	Mup2	Mu2	Muh3	Mup3	Mu3							
14	25000	1.00	9.0	2.6	2.5	50000	792	7124	57124	904	8139	58139	920	8284	58284							
15	24000	1.00	9.0	2.5	4.9	87425	1328	11948	99373	1509	13581	101006	1534	13804	101229							
16	23000	1.00	9.0	2.4	7.3	101229	1472	13246	114475	1664	14979	116208	1690	15206	116435							
17	22000	1.00	9.0	2.3	9.5	116435	1618	14559	130994	1820	16379	132814	1845	16607	133042							
18	21000	1.00	9.0	2.2	11.6	133042	1762	15862	148904	1973	17753	150794	1998	17978	151020							
19	20000	1.00	9.0	2.1	13.6	151020	1903	17128	168147	2119	19070	170090	2143	19290	170310							
20	19000	1.00	8.0	2.0	15.5	170310	2036	16289	186599	2231	17847	188156	2249	17996	188305							
21	18000	1.00	6.0	1.9	17.3	282458	3194	19165	301623	3411	20465	302923	3426	20553	303012							
22	17000	1.00	4.0	1.8	19.0	303012	3231	12924	315935	3369	13475	316486	3375	13498	316510							
23	16000	0.99	2.0	1.7	20.6	316510	3202	6405	322914	3267	6534	323044	3268	6537	323047							
24	15000	0.99	2.0	1.6	22.1	323047	3058	6116	329162	3116	6231	329278	3117	6234	329280							
25	14000	0.99	2.0	1.5	23.5	329280	2902	5804	335084	2953	5906	335186	2954	5908	335188							
26	13000	0.99	2.0	1.4	24.8	335188	2735	5471	340659	2780	5560	340748	2781	5562	340750							
27	12000	0.99	2.0	1.3	26.0	340750	2559	5117	345867	2597	5194	345944	2598	5195	345945							
28	11000	0.99	2.0	1.2	27.0	345945	2372	4744	350689	2404	4809	350754	2405	4810	350755							
29	10000	0.99	4.0	1.1	28.0	350755	2176	8705	359459	2230	8920	359675	2231	8926	359680							
30	9000	0.99	6.0	1.0	28.9	359680	1997	11982	371662	2063	12380	372061	2066	12394	372074							
31	8000	0.95	8.0	0.9	29.7	744148	3798	30381	774529	3953	31621	775769	3959	31671	775819							
32	7000	0.96	9.0	0.8	30.3	775819	3396	30565	806384	3530	31768	807587	3535	31816	807635							
33	6000	0.97	9.0	0.7	30.9	807635	2961	26651	834286	3059	27530	835165	3062	27559	835194							
34	5000	0.98	9.0	0.6	31.4	835194	2481	22328	857522	2547	22924	858118	2549	22940	858134							
35	4000	0.98	9.0	0.5	31.7	858134	1984	17854	875988	2025	18225	876359	2026	18233	876367							
36	3000	0.98	9.0	0.4	32.0	876367	1449	13042	889409	1471	13235	889602	1471	13238	889605							
37	2000	0.96	9.0	0.3	32.1	889605	904	8139	897744	913	8213	897818	913	8214	897819							
38	1000	0.94	9.0	0.2	32.2	897819	318	2861	900680	319	2870	900689	319	2870	900689							
39	0	0.9	9.0	0.1	32.2	900689	19	169	900858	19	169	900858	19	169	900858							