"On solutions of the compressible laminar boundary layer equations and their behaviour near separation"
by T. Davies & G. Walker

Tables being held in Editorial files

TABLE 1

Retarded Mainstream with $S_w = 0$, $M_\infty = 0$.

x	τ_w	δ_1	δ_2	S_{L_1}	S_{L_2}	ξ
.00000150	271.12004	.0021	.0008			
.00016000	26.24837	.0218	.0084			
.02397192	2.10513	.2685	.1033			
.1	.96879	.5627	.2145			
.2	.62658	.8248	.3101			
.3	.46281	1.0499	.3885			
.4	.35735	1.2641	.4592			
.5	.27929	1.4800	.5259			
.6	.21625	1.7071	.5907			
.7	.16172	1.9571	.6549			
.8	.11098	2.2498	.7194			
.9	.05721	2.6411	.7851			
.95752771	.00522	3.1026	.8238	1.114	.1150	.1032
.95796393	.00345	3.1190	.8241	1.094	.0926	.0846
.95821841	.00183	3.1340	.8242	1.067	.0666	.0624
.95827294	.00127	3.1391	.8243	1.059	.0553	.0522
.95831838	.00045	3.1466	.8243	1.034	.0325	.0314
.95832406	.00018	3.1491	.8243	1.024	.0208	.0203
.95832506	.00008	3.1500	.8243	1.02	.0133	.0130
.95832523	.00003	3.1505	.8243	.9	.0076	.0081
.95832526	.000005	3.1507	.8243			0

TABLE 2

Retarded Mainstream with $S_w = -1/2$, $M_\infty = 0$.

x	τ_w	Q_s	δ_1	δ_2	δ_T	S_{L_1}	S_{L_2}	H_L	ξ
.00000150	271.12010	-271.12019	.0011	.0008	.0004				
.00016000	26.24928	-26.25083	.0109	.0084	.0042				
.00896502	3.48968	-3.50127	.0817	.0630	.0315				
.1	.99191	-1.0305	.2812	.2137	.1057				
.2	.66003	- .71425	.4115	.3078	.1504				
.3	.50490	- .57095	.5225	.3840	.1854				
.4	.40753	- .48337	.6266	.4520	.2154				
.5	.33759	- .42192	.7290	.5154	.2423				
.6	.28323	- .37508	.8329	.5762	.2671				
.7	.23868	- .33731	.9410	.6356	.2902				
.8	.20069	- .30549	1.0556	.6944	.3121				
.9	.16722	- .27768	1.1796	.7532	.3329				
1.0	.13685	- .25248	1.3166	.8127	.3528				
1.12066980	.10264	- .22387	1.5078	.8859	.3757				
1.23595387	.07043	- .19610	1.7340	.9581	.3964				
1.31391415	.04685	- .17449	1.9341	1.0086	.4097				
1.40023758	.00686	- .12694	2.3372	1.0666	.4232				
1.40147895	.00510	- .12349	2.3556	1.0674	.4234	1.582	.1663	.6986	.1052
1.40241014	.00328	- .11930	2.3744	1.0681	.4235	1.564	.1326	.6750	.0848
1.40272056	.00241	- .11693	2.3833	1.0683	.4236	1.556	.1134	.6615	.0729
1.40295339	.00147	- .11386	2.3928	1.0684	.4236	1.55	.0884	.6441	.0571
1.40305040	.00082	- .11110	2.3994	1.0685	.4236	1.56	.0663	.6285	.0424
1.40407951	.00047	- .10915	2.4029	1.0685	.4236	1.58	.0506	.6175	.0319
1.40309042	.00021	- .10720	2.4054	1.0685	.4236	1.6	.0337	.6064	.0214
1.40309300	.00006	- .10523	2.4069	1.0685	.4236	1.8	.0190	.5953	.0105
1.40309316	.00002	- .10439	2.4073	1.0685	.4236			.5905	0

TABLE 3

Retarded Mainstream with $S_w = 1$, $M_\infty = 0$.

x	τ_w	Q_s	δ_1	δ_2	δ_T	S_{L_1}	S_{L_2}	$-H_L$	ξ
.00000150	271.11992	135.56007	.0042	.0008	-.0008				
.00016000	26.24656	13.12509	.0435	.0084	-.0084				
.01858158	2.38151	1.21031	.4726	.0910	-.0905				
.1	.92177	.50645	1.1337	.2161	-.2102				
.2	.55698	.34335	1.6789	.3148	-.2973				
.3	.37243	.26635	2.1690	.3975	-.3638				
.4	.24426	.21575	2.6727	.4739	-.4190				
.5	.135819	.17429	3.2633	.5479	-.4662				
.58828603	.00737	.11628	4.2315	.6131	-.5009	.875	.0992	.3290	.1134
.58842419	.00642	.11545	4.2397	.6132	-.5009	.866	.0921	.3265	.1064
.58856235	.00533	.11443	4.2490	.6133	-.5010	.854	.0834	.3237	.0976
.58870052	.00402	.11307	4.2604	.6134	-.5010	.839	.0718	.3198	.0855
.58876960	.00320	.11213	4.2674	.6134	-.5010	.828	.0636	.3172	.0768
.58883869	.00213	.11072	4.2767	.6135	-.5011	.808	.0513	.3132	.0635
.58888187	.00109	.10898	4.2856	.6135	-.5011	.78	.0360	.3082	.0462
.58889590	.00042	.10741	4.2913	.6135	-.5011	.73	.0217	.3038	.0296
.58889806	.00020	.10662	4.2933	.6135	-.5011	.71	.0147	.3016	.0208
.58889860	.00009	.10606	4.2942	.6135	-.5011	.68	.0097	.3000	.0142
.58889870	.00005	.10578	4.2946	.6135	-.5011	.66	.0071	.2992	.0108
.58889875	.00000	.10532	4.2950	.6135	-.5011			.2979	0

TABLE 4

Retarded Mainstream with $S_w = -\frac{1}{2}$, $M_\infty = 1$.

x	τ_w	Q_s	δ_1	δ_2	δ_T	S_{L_1}	S_{L_2}	H_L	$\bar{\tau}$
.00000150	271.12013	-271.12023	.0014	.0008	.0002				
.00012000	30.31099	-30.31251	.0128	.0073	.0021				
.1	.99809	-1.04205	.3758	.2123	.0604				
.2	.66792	-.73020	.5429	.3038	.0860				
.3	.51350	-.58991	.6804	.3768	.1060				
.4	.41621	-.50456	.8058	.4408	.1231				
.5	.34587	-.44477	.9261	.4996	.1385				
.6	.29068	-.39913	1.0457	.5553	.1525				
.7	.24489	-.36211	1.1680	.6090	.1655				
.8	.20525	-.33060	1.2960	.6616	.1777				
.9	.16965	-.30257	1.4337	.7138	.1892				
1.0	.13653	-.27650	1.5861	.7660	.1999				
1.10141116	.10395	-.25045	1.7644	.8196	.2101				
1.20189203	.07049	-.22245	1.9834	.8737	.2193				
1.30388053	.02760	-.18089	2.3236	.9304	.2273				
1.32962130	.00443	-.14623	2.5283	.9451	.2289	1.359	.1386	.6322	.1020
1.32992834	.00352	-.14392	2.5362	.9453	.2290	1.355	.1233	.6223	.0910
1.33008186	.00297	-.14238	2.5410	.9454	.2290	1.354	.1133	.6156	.0837
1.33035053	.00162	-.13790	2.5523	.9455	.2290	1.357	.0837	.5962	.0617
1.33040811	.00114	-.13589	2.5568	.9456	.2290	1.36	.0704	.5875	.0517
1.33043690	.00079	-.13418	2.5597	.9456	.2290	1.36	.0586	.5801	.0430
1.33045609	.00043	-.13189	2.5628	.9456	.2290	1.4	.0438	.5702	.0313
1.33046208	.00020	-.12986	2.5647	.9456	.2290	1.5	.0305	.5615	.0210
1.33046347	.00006	-.12798	2.5656	.9456	.2290	1.7	.0187	.5533	.0109
1.33046358	.00003	-.12725	2.5661	.9456	.2290			.5502	0

TABLE 5

Retarded Mainstream with $S_w = 1$, $M_\infty = 1$.

x	τ_w	Q_s	δ_1	δ_2	δ_T	S_{L_1}	S_{L_2}	$-H_L$	ξ_s
.00000150	271.119911	135.56009	.0052	.0008	-.0012				
.00012000	30.30817	15.15592	.0467	.0072	-.0110				
.01030263	3.22871	1.63142	.4340	.0676	-.1019				
.1	.91315	.51031	1.3932	.2152	-.3139				
.2	.54172	.34795	2.0497	.3121	-.4380				
.3	.34884	.27045	2.6377	.3925	-.5287				
.4	.20821	.21741	3.2573	.4661	-.6007				
.5	.06936	.16473	4.1051	.5368	-.6586				
.52369289	.00607	.13110	4.5856	.5535	-.6698	.787	.0817	.3140	.1039
.52376137	.00531	.13035	4.5916	.5536	-.6699	.779	.0761	.3122	.0977
.52386410	.00396	.12889	4.6024	.5536	-.6699	.764	.0651	.3087	.0852
.52396683	.00198	.12627	4.6183	.5537	-.6700	.733	.0450	.3025	.0615
.52398395	.00144	.12537	4.6226	.5537	-.6700	.719	.0381	.3003	.0530
.52399679	.00088	.12424	4.6271	.5537	-.6700	.70	.0293	.2976	.0419
.52400107	.00060	.12355	4.6294	.5537	-.6700	.68	.0219	.2953	.0323
.52400455	.00020	.12223	4.6326	.5537	-.6700	.64	.0135	.2928	.0210
.52400495	.00009	.12166	4.6335	.5537	-.6700	.61	.0089	.2914	.0146
.52400505	.00004	.12125	4.6339	.5537	-.6700	.6	.0056	.2904	.0093
.52400507	.00000	.12089	4.6342	.5537	-.6700			.2896	0

TABLE 6

Circular Cylinder with $S_w = 0$, $M_\infty = 0$.

x	$\tilde{\nu}_w$	δ_1	δ_2	S_{L_1}	S_{1-2}	Ξ
.00122474	.00427	.4582	.2067			
.10060335	.34935	.4591	.2070			
.5	1.57690	.4818	.2164			
1.0	2.25703	.5698	.2516			
1.5	1.56155	.8262	.3412			
$\pi/2$	1.34341	.8999	.3631			
1.6	1.24369	.9362	.3733			
1.7	.84960	1.1029	.4143			
1.8	.29717	1.4268	.4686			
1.82266721	.03016	1.6731	.4835	1.533	.1546	.1008
1.82286547	.02098	1.6825	.4836	1.50	.1275	.0850
1.82296461	.01473	1.6890	.4837	1.47	.1059	.0719
1.82303070	.00868	1.6952	.4838	1.44	.0804	.0558
1.82305548	.00497	1.6991	.4838	1.41	.0603	.0426
1.82306581	.00214	1.7020	.4838	1.38	.0391	.0283
1.82306736	.00130	1.7029	.4838	1.37	.0304	.0221
1.82306813	.000525	1.7037	.4838	1.3	.0190	.0143
1.82306826	.00022	1.7040	.4838	1.3	.0121	.0094
1.82306829	0	1.7041	.4838			0

TABLE 7

Circular Cylinder with $S_w = -\frac{1}{2}$, $M_\infty = 0$.

x	γ_w	Q_s	δ_1	δ_2	δ_T	S_{L_1}	S_{L_2}	H_L	Ξ
.00122474	.00331	-.76657	.1814	.2469	.1916				
.16259364	.43477	-.76360	.1825	.2479	.1922				
.44207299	1.10848	-.74456	.1901	.2546	.1961				
.5	1.22749	-.73841	.1927	.2569	.1974				
1.0	1.79341	-.65333	.2358	.2922	.2165				
1.5	1.35574	-.50386	.3634	.3773	.2560				
$\pi/2$	1.21063	-.47536	.3994	.3972	.2640				
1.6	1.14471	-.46277	.4168	.4063	.2675				
1.7	.89038	-.41476	.4929	.4425	.2807				
1.8	.58042	-.35379	.6131	.4886	.2958				
1.90634284	.03427	-.19845	.9546	.5541	.3136	1.8670	.2042	.4885	.1094
1.90661397	.02769	-.19432	.9601	.5543	.3136	1.844	.1825	.4783	.0989
1.90688513	.01935	-.18840	.9670	.5545	.3136	1.81	.1512	.4638	.0834
1.90705462	.01185	-.18200	.9732	.5546	.3137	1.78	.1174	.4480	.0658
1.90712241	.00711	-.17694	.9771	.5546	.3137	1.76	.0904	.4356	.0513
1.90714784	.00423	-.17302	.9794	.5547	.3137	1.75	.0695	.4259	.0400
1.90715631	.00270	-.17037	.9807	.5547	.3137	1.77	.0558	.4194	.0316
1.90716108	.00109	-.16664	.9820	.5547	.3137	1.78	.0356	.4102	.0200
1.90716174	.00059	-.16492	.9824	.5547	.3137	1.8	.0266	.4060	.0145
1.90716187	.00042	-.16418	.9825	.5547	.3137	1.9	.0228	.4042	.0120
1.90716194	.00030	-.16356	.9826	.5547	.3137	2	.0202	.4026	.0097
1.90716199	.00013	-.16253	.9827	.5547	.3137			.4000	0

TABLE 8
Circular Cylinder with $S_w = 1$, $M_\infty = 0$.

x	τ_w	Q_s	δ_1	δ_2	δ_T	S_{L_1}	S_{L_2}	$-H_L$	Ξ
.00122474	.00602	.43527	.9791	.1245	-.4352				
.10866976	.53123	.43446	.9812	.1249	-.4358				
.21149940	1.02004	.43219	.9871	.1260	-.4374				
.5	2.21199	.41801	1.0260	.1336	-.4479				
1.0	3.10594	.36510	1.2005	.1682	-.4897				
1.5	1.95349	.26570	1.7169	.2661	-.5738				
$\pi/2$	1.60155	.24437	1.8732	.2919	-.5904				
1.6	1.43860	.23439	1.9528	.3041	-.5977				
1.7	.76235	.18970	2.3577	.3548	-.6240				
1.75872735	.04022	.11489	3.0449	.3936	-.6398	1.398	.1529	.1878	.1094
1.75892280	.02708	.11163	3.0622	.3937	-.6398	1.359	.1237	.1824	.0910
1.75902052	.01786	.10891	3.0745	.3938	-.6398	1.325	.0992	.1780	.0749
1.75907753	.00961	.10587	3.0856	.3938	-.6399	1.28	.0716	.1730	.0558
1.75909382	.00564	.10397	3.0910	.3938	-.6399	1.25	.0542	.1699	.0433
1.75909992	.00320	.10247	3.0943	.3938	-.6399	1.22	.0403	.1675	.0330
1.75910196	.00184	.10139	3.0961	.3938	-.6399	1.2	.0302	.1657	.0253
1.75910272	.00096	.10047	3.0973	.3938	-.6399	1.1	.0214	.1642	.0187
1.75910292	.00059	.09997	3.0978	.3938	-.6399	1.1	.0168	.1634	.0146
1.75910301	.00026	.09925	3.0982	.3938	-.6399	1.0	.0105	.1622	.0103
1.75910304	.00001	.09889	3.0986	.3938	-.6399			.1616	0

TABLE 9

Circular Cylinder with $S_w = -\frac{1}{2}$, $M_\infty = 0.4$.

x	τ_w	Q_e	δ_1	δ_2	δ_T	S_{L_1}	S_{L_2}	H_L	Ξ
.00110170	.00281	.77984	.1840	.2504	.1944				
.11025373	.27977	.77704	.1848	.2510	.1946				
.20364210	.51234	.77033	.1868	.2523	.1952				
.5	1.18314	.72432	.2013	.2620	.1993				
1.0	1.88774	.58341	.2610	.3003	.2140				
1.5	1.46617	.40030	.4440	.3907	.2367				
$\pi/2$	1.24002	.37100	.5027	.4127	.2399				
1.6	1.13303	.35802	.5324	.4229	.2411				
1.7	.69633	.30424	.6766	.4643	.2452				
1.78808882	.05296	.18061	1.0177	.5127	-.2482	2.33	.2341	.5649	.1006
1.78855198	.03957	.17498	1.0273	.5130	-.2482	2.28	.2004	.5473	.0878
1.78889941	.02620	.16843	1.0371	.5132	-.2482	2.23	.1613	.5268	.0722
1.78907314	.01646	.16266	1.0442	.5133	-.2482	2.19	.1267	.5088	.0578
1. 8916001	.00855	.15667	1.0500	.5134	-.2482	2.15	.0905	.4900	.0420
1.78918535	.00422	.15217	1.0531	.5134	-.2482	2.1	.0633	.4759	.0296
1.78919169	.00207	.14904	1.0547	.5134	-.2482	2.1	.0444	.4662	.0207
1.78919327	.00096	.14673	1.0555	.5134	-.2482	2.2	.0304	.4589	.0140
1.78919355	.00056	.14557	1.0558	.5134	-.2482	2.2	.0234	.4553	.0107
1.78919369	.00011	.14356	1.0561	.5134	-.2482			.4490	0

TABLE 10

Circular Cylinder with $S_w = 1$, $M_\infty = 0.4$.

x	τ_w	Q_s	δ_1	δ_2	δ_T	S_{L_1}	S_{L_2}	$-H_L$	ξ
.00110170	.00510	.44281	.9932	.1262	-.4415				
.10095184	.46635	.44151	.9960	.1263	-.4432				
.20626886	.94485	.43744	1.0050	.1267	-.4485				
.5	2.16782	.41225	1.0646	.1287	-.4841				
1.0	3.51828	.33390	1.3069	.1373	-.6273				
1.5	2.42803	.21998	2.0013	.2051	-.8817				
$\pi/2$	1.83946	.19694	2.2349	.2356	-.9155				
1.6	1.55020	.18554	2.3630	.2512	-.9281				
1.69464812	.07810	.10078	3.3696	.3181	-.9623	1.881	.2012	.2092	.1070
1.69509781	.04058	.09515	3.4116	.3185	-.9624	1.785	.1413	.1975	.0792
1.69521024	.02541	.09224	3.4290	.3186	-.9624	1.73	.1101	.1915	.0636
1.69525240	.01713	.09032	3.4386	.3187	-.9624	1.70	.0895	.1875	.0528
1.69527348	.01121	.08868	3.4456	.3187	-.9624	1.66	.0717	.1841	.0431
1.69528578	.00572	.08674	3.4520	.3187	-.9624	1.62	.0505	.1801	.0312
1.69528929	.00277	.08530	3.4555	.3187	-.9624	1.6	.0347	.1771	.0220
1.69529017	.00131	.08431	3.4572	.3187	-.9624	1.5	.0236	.1750	.0153
1.69529039	.00057	.08358	3.4581	.3187	-.9624	1.5	.0156	.1735	.0101
1.69529044	.00002	.08275	3.4587	.3187	-.9624			.1718	0