

PŘÍLOHA 5

Tabulky výsledků výpočtů letových výkonů

H [m]	V_{TAS} [m/s] [km/h]	30	35	40	45	50	55	60	65	70	75	80	90	100	110	120
0	V_{TAS} [m/s]	30.00	35.00	40.00	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	90.00	100.00	110.00	120.00
	C_L [-]	3.246	2.385	1.826	1.443	1.169	0.966	0.812	0.692	0.596	0.519	0.457	0.361	0.292	0.241	0.203
	C_D [-]	7.133	0.915	0.239	0.128	0.093	0.074	0.063	0.055	0.050	0.046	0.044	0.041	0.039	0.038	0.038
	F_P [N]	99120	17298	5899	3989	3573	3467	3485	3591	3772	4019	4325	5089	6029	7123	8359
	F_V [N]	14642	13883	13146	12446	11765	11131	10527	9958	9431	8929	8461	7615	6882	6243	5673
1500	V_{TAS} [m/s]	27.88	32.53	37.17	41.82	46.47	51.12	55.76	60.41	65.06	69.70	74.35	83.64	92.94	102.23	111.52
	C_L [-]	3.758	2.761	2.114	1.670	1.353	1.118	0.940	0.801	0.690	0.601	0.529	0.418	0.338	0.280	0.235
	C_D [-]	19.517	2.363	0.459	0.179	0.114	0.088	0.072	0.062	0.055	0.050	0.047	0.042	0.040	0.039	0.038
	F_P [N]	234248	38603	9797	4828	3804	3534	3464	3491	3593	3759	3984	4581	5348	6260	7303
	F_V [N]	14106	13421	12758	12118	11503	10917	10357	9830	9336	8868	8430	7627	6911	6289	5742
3000	V_{TAS} [m/s]	25.84	30.15	34.46	38.77	43.07	47.38	51.69	56.00	60.30	64.61	68.92	77.53	86.15	94.76	103.38
	C_L [-]	4.374	3.214	2.460	1.944	1.575	1.301	1.094	0.932	0.803	0.700	0.615	0.486	0.394	0.325	0.273
	C_D [-]	54.746	6.655	1.111	0.307	0.153	0.107	0.085	0.072	0.062	0.056	0.051	0.045	0.042	0.040	0.039
	F_P [N]	564583	93413	20362	7128	4394	3722	3518	3463	3489	3580	3727	4167	4772	5516	6382
	F_V [N]	12454	11872	11321	10788	10270	9780	9302	8853	8449	8085	7705	7039	6444	5967	5536
4500	V_{TAS} [m/s]	23.89	27.87	31.85	35.83	39.82	43.80	47.78	51.76	55.74	59.72	63.70	71.67	79.63	87.59	95.56
	C_L [-]	5.119	3.761	2.880	2.275	1.843	1.523	1.280	1.091	0.940	0.819	0.720	0.569	0.461	0.381	0.320
	C_D [-]	156.918	19.617	3.139	0.690	0.247	0.142	0.105	0.085	0.072	0.063	0.057	0.049	0.044	0.041	0.040
	F_P [N]	1382889	235274	49165	13672	6050	4213	3693	3517	3464	3482	3556	3847	4301	4888	5591
	F_V [N]	10757	10263	9791	9332	8891	8469	8062	7676	7333	7002	6691	6117	5611	5195	4822
6000	V_{TAS} [m/s]	22.02	25.68	29.35	33.02	36.69	40.36	44.03	47.70	51.37	55.04	58.71	66.05	73.38	80.72	88.06
	C_L [-]	6.028	4.429	3.391	2.679	2.170	1.793	1.507	1.284	1.107	0.964	0.848	0.670	0.543	0.448	0.377
	C_D [-]	460.196	59.519	9.626	1.931	0.528	0.224	0.139	0.105	0.087	0.074	0.065	0.054	0.047	0.043	0.041
	F_P [N]	3443846	606251	128062	32512	10971	5629	4163	3698	3527	3467	3472	3623	3933	4374	4926
	F_V [N]	9228	8811	8409	8017	7642	7281	6936	6610	6317	6034	5767	5276	4849	4489	4166
7500	V_{TAS} [m/s]	20.22	23.59	26.96	30.33	33.70	37.07	40.44	43.82	47.19	50.56	53.93	60.67	67.41	74.15	80.89
	C_L [-]	7.144	5.249	4.019	3.175	2.572	2.126	1.786	1.522	1.312	1.143	1.005	0.794	0.643	0.531	0.447
	C_D [-]	1385.592	185.160	30.821	6.126	1.476	0.472	0.221	0.142	0.109	0.090	0.077	0.061	0.052	0.047	0.043
	F_P [N]	8748900	1591323	345972	87031	25887	10024	5572	4209	3738	3552	3477	3495	3669	3973	4385
	F_V [N]	7820	7468	7124	6768	6468	6158	5863	5589	5340	5099	4872	4455	4103	3801	3530
9000	V_{TAS} [m/s]	18.51	21.60	24.68	27.77	30.85	33.94	37.02	40.11	43.19	46.28	49.36	55.53	61.70	67.87	74.04
	C_L [-]	8.527	6.265	4.797	3.790	3.070	2.537	2.132	1.816	1.566	1.364	1.199	0.947	0.767	0.634	0.533
	C_D [-]	4301.950	591.778	101.675	20.662	4.858	1.351	0.480	0.234	0.151	0.116	0.096	0.073	0.060	0.052	0.047
	F_P [N]	22757904	4261078	956219	245939	71384	24018	10150	5817	4362	3824	3601	3465	3512	3686	3967
	F_V [N]	6165	5884	5613	5350	5098	4857	4625	4419	4227	4045	3874	3559	3308	3091	2900

Tab. 1, Dílčí výsledky výpočtů maximální rychlosti horizontálního letu pro maximální vzletovou hmotnost

Návrh dvoumotorového letounu kategorie pro sběrnou dopravu

H [m]	V_{TAS} [m/s] [km/h]	30	35	40	45	50	55	60	65	70	75	80	90	100	110	120
0	V_{TAS} [m/s]	30.00	35.00	40.00	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	90.00	100.00	110.00	120.00
	C_L [-]	2.160	1.587	1.215	0.960	0.778	0.643	0.540	0.460	0.397	0.346	0.304	0.240	0.194	0.161	0.135
	C_D [-]	0.515	0.156	0.097	0.074	0.060	0.052	0.047	0.044	0.042	0.040	0.039	0.038	0.037	0.037	0.037
	F_P [N]	7154	2956	2407	2307	2332	2442	2623	2864	3158	3499	3883	4766	5790	6946	8228
	F_V [N]	14642	13883	13146	12446	11765	11131	10527	9958	9431	8929	8461	7615	6882	6243	5673
1500	V_{TAS} [m/s]	27.88	32.53	37.17	41.82	46.47	51.12	55.76	60.41	65.06	69.70	74.35	83.64	92.94	102.23	111.52
	C_L [-]	2.501	1.837	1.407	1.112	0.900	0.744	0.625	0.533	0.459	0.400	0.352	0.278	0.225	0.186	0.156
	C_D [-]	1.232	0.244	0.122	0.087	0.069	0.058	0.051	0.047	0.044	0.042	0.040	0.039	0.038	0.037	0.037
	F_P [N]	14788	3993	2600	2349	2304	2350	2465	2640	2867	3139	3452	4187	5052	6036	7133
	F_V [N]	14106	13421	12758	12118	11503	10917	10357	9830	9336	8868	8430	7627	6911	6289	5742
3000	V_{TAS} [m/s]	25.84	30.15	34.46	38.77	43.07	47.38	51.69	56.00	60.30	64.61	68.92	77.53	86.15	94.76	103.38
	C_L [-]	2.911	2.139	1.637	1.294	1.048	0.866	0.728	0.620	0.535	0.466	0.409	0.323	0.262	0.217	0.182
	C_D [-]	3.376	0.488	0.169	0.106	0.081	0.067	0.057	0.051	0.047	0.044	0.042	0.040	0.038	0.038	0.037
	F_P [N]	34816	6846	3102	2470	2325	2307	2361	2473	2636	2843	3090	3688	4408	5236	6166
	F_V [N]	12454	11872	11321	10788	10270	9780	9302	8853	8449	8065	7705	7039	6444	5967	5536
4500	V_{TAS} [m/s]	23.89	27.87	31.85	35.83	39.82	43.80	47.78	51.76	55.74	59.72	63.70	71.67	79.63	87.59	95.56
	C_L [-]	3.407	2.503	1.916	1.514	1.226	1.014	0.852	0.726	0.626	0.545	0.479	0.379	0.307	0.253	0.213
	C_D [-]	9.941	1.238	0.289	0.140	0.099	0.078	0.066	0.057	0.051	0.047	0.045	0.041	0.039	0.038	0.038
	F_P [N]	87595	14848	4524	2785	2415	2316	2309	2362	2465	2611	2796	3267	3853	4540	5318
	F_V [N]	10757	10263	9791	9332	8891	8469	8062	7676	7333	7002	6691	6117	5611	5195	4822
6000	V_{TAS} [m/s]	22.02	25.68	29.35	33.02	36.69	40.36	44.03	47.70	51.37	55.04	58.71	66.05	73.38	80.72	88.06
	C_L [-]	4.011	2.947	2.256	1.783	1.444	1.193	1.003	0.854	0.737	0.642	0.564	0.446	0.361	0.298	0.251
	C_D [-]	30.437	3.674	0.657	0.219	0.128	0.095	0.077	0.066	0.058	0.052	0.048	0.043	0.041	0.039	0.038
	F_P [N]	227773	37420	8739	3691	2656	2392	2314	2309	2355	2443	2570	2921	3384	3942	4583
	F_V [N]	9228	8811	8409	8017	7642	7281	6936	6610	6317	6034	5767	5276	4849	4489	4166
7500	V_{TAS} [m/s]	20.22	23.59	26.96	30.33	33.70	37.07	40.44	43.82	47.19	50.56	53.93	60.67	67.41	74.15	80.89
	C_L [-]	4.754	3.493	2.674	2.113	1.711	1.414	1.189	1.013	0.873	0.761	0.689	0.528	0.428	0.354	0.297
	C_D [-]	95.796	11.803	1.907	0.458	0.192	0.123	0.095	0.078	0.067	0.059	0.054	0.047	0.043	0.040	0.039
	F_P [N]	604873	101436	21409	6504	3368	2611	2389	2316	2306	2341	2412	2652	2999	3438	3955
	F_V [N]	7820	7468	7124	6788	6468	6158	5863	5599	5340	5099	4872	4455	4103	3801	3530
9000	V_{TAS} [m/s]	18.51	21.60	24.68	27.77	30.85	33.94	37.02	40.11	43.19	46.28	49.36	55.53	61.70	67.87	74.04
	C_L [-]	5.674	4.169	3.192	2.522	2.043	1.688	1.419	1.209	1.042	0.908	0.798	0.630	0.511	0.422	0.355
	C_D [-]	309.635	39.549	6.349	1.300	0.386	0.184	0.124	0.097	0.081	0.070	0.062	0.052	0.046	0.043	0.041
	F_P [N]	1638011	284769	59714	15471	5674	3278	2617	2402	2323	2304	2324	2458	2698	3027	3430
	F_V [N]	6165	5884	5613	5350	5098	4857	4625	4419	4227	4045	3874	3559	3308	3091	2900

Tab. 2. Dílčí výsledky výpočtů maximální rychlosti horizontálního letu pro minimální letovou hmotnost

Návrh dvumotorového letounu kategorie pro sběrnou dopravu

H [m]	V_{TRe} [m/s] [km/h]	30	35	40	45	50	55	60	65	70	75	80	90	100	110	120
0	V_{TRe} [m/s] C_L [-] C_D [-] F_P [N] F_V [N]	30.00 3.246 7.133 991.20 1464.2	35.00 2.385 0.915 17.298 1388.3	40.00 1.826 0.239 5899 13146	45.00 1.443 0.128 3889 12446	50.00 1.169 0.093 3573 11765	55.00 0.966 0.074 3467 11131	60.00 0.812 0.063 3485 10527	65.00 0.692 0.055 3591 9958	70.00 0.596 0.050 3772 9431	75.00 0.519 0.046 4019 8929	80.00 0.457 0.044 4325 8461	90.00 0.361 0.041 5089 7615	100.00 0.292 0.039 6029 6882	110.00 0.241 0.038 7123 6243	120.00 0.203 0.038 8359 5673
1500	V_{TRe} [m/s] C_L [-] C_D [-] F_P [N] F_V [N]	27.88 3.758 19.517 234248 13896	32.53 2.761 2.363 38603 13226	37.17 2.114 0.459 9797 12596	41.82 1.670 0.179 4828 11984	46.47 1.353 0.114 3804 11391	51.12 1.118 0.088 3534 10825	55.76 0.940 0.072 3464 10282	60.41 0.801 0.062 3491 9768	65.06 0.690 0.055 3593 9302	69.70 0.601 0.050 3759 8868	74.35 0.529 0.047 3984 8430	83.64 0.418 0.042 4581 7627	92.94 0.338 0.040 5348 6911	102.23 0.280 0.039 6260 6289	111.52 0.235 0.038 7303 5742
3000	V_{TRe} [m/s] C_L [-] C_D [-] F_P [N] F_V [N]	25.84 4.374 54.746 564583 12167	30.15 3.214 6.655 93413 11591	34.46 2.460 1.111 20362 11044	38.77 1.944 0.307 7128 10516	43.07 1.575 0.153 4394 10006	47.38 1.301 0.107 3722 9519	51.69 1.094 0.085 3518 9049	56.00 0.932 0.072 3463 8607	60.30 0.803 0.062 3489 8208	64.61 0.700 0.056 3580 7833	68.92 0.615 0.051 3727 7479	77.53 0.486 0.045 4301 6507	86.15 0.394 0.042 4301 5446	94.76 0.325 0.040 4888 5040	103.38 0.273 0.039 5591 4675
4500	V_{TRe} [m/s] C_L [-] C_D [-] F_P [N] F_V [N]	23.89 5.119 156.918 1382689 10527	27.87 3.761 19.617 235274 9565	31.85 2.880 3.139 49165 8674	35.83 2.275 0.690 13672 9114	39.82 1.843 0.247 6050 8258	43.80 1.523 0.142 4213 8258	47.78 1.280 0.105 3693 7854	51.76 1.091 0.085 3517 7476	55.74 0.940 0.072 3464 7136	59.72 0.819 0.063 3482 6811	63.70 0.720 0.057 3556 6507	71.67 0.569 0.049 3847 5941	79.63 0.461 0.044 4301 5446	87.59 0.381 0.041 4888 5040	95.56 0.320 0.040 5591 4675
6000	V_{TRe} [m/s] C_L [-] C_D [-] F_P [N] F_V [N]	22.02 6.028 460.196 3443846 9040	25.68 4.429 59.519 606251 8623	29.35 3.391 9.626 128062 8225	33.02 2.679 1.931 32512 7839	36.69 2.170 0.528 10971 7465	40.36 1.793 0.224 5629 7110	44.03 1.507 0.139 4163 6765	47.70 1.284 0.105 3698 6445	51.37 1.107 0.087 3527 6155	55.04 0.964 0.074 3467 5877	58.71 0.848 0.065 3472 5616	66.05 0.670 0.054 3623 5133	73.38 0.543 0.047 3933 4716	80.72 0.448 0.043 4374 4365	88.06 0.377 0.041 4926 4049
7500	V_{TRe} [m/s] C_L [-] C_D [-] F_P [N] F_V [N]	20.22 7.144 1385.592 8748900 7679	23.59 5.249 185.160 1591323 7328	26.96 4.019 30.821 345972 6989	30.33 3.175 6.126 87031 6660	33.70 2.572 1.476 25887 6341	37.07 2.126 0.472 10024 6038	40.44 1.786 0.221 5572 5745	43.82 1.522 0.142 4209 5476	47.19 1.312 0.109 3738 5230	50.56 1.143 0.090 3552 4992	53.93 1.005 0.077 3477 4770	60.67 0.794 0.061 3495 4359	67.41 0.643 0.052 3669 4011	74.15 0.531 0.047 3973 3714	80.89 0.447 0.043 4385 3447
9000	V_{TRe} [m/s] C_L [-] C_D [-] F_P [N] F_V [N]	18.51 8.527 2301.950 22757904 6165	21.60 6.265 591.778 4261078 5884	24.68 4.797 101.675 956219 5613	27.77 3.790 20.662 245939 5350	30.85 3.070 4.858 71384 5096	33.94 2.537 1.351 24018 4857	37.02 2.132 0.480 10150 4625	40.11 1.816 0.234 5817 4419	43.19 1.566 0.151 4362 4227	46.28 1.364 0.116 3824 4045	49.36 1.199 0.096 3601 3874	55.53 0.947 0.073 3465 3559	61.70 0.767 0.060 3512 3308	67.87 0.634 0.052 3686 3091	74.04 0.533 0.047 3967 2900

Tab. 3. Dílčí výsledky výpočtů maximální cestovní rychlosti pro maximální vzletovou hmotnost

Návrh dvoumotorového letounu kategorie pro sběrnou dopravu

H [m]	V_{Tne} [m/s] [km/h]	30	35	40	45	50	55	60	65	70	75	80	90	100	110	120
0	V_{Tne} [m/s]	30.00	35.00	40.00	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	90.00	100.00	110.00	120.00
	C_L [-]	3.214	2.361	1.808	1.428	1.157	0.956	0.803	0.685	0.590	0.514	0.452	0.357	0.289	0.239	0.201
	C_D [-]	6.656	0.860	0.230	0.125	0.091	0.073	0.062	0.055	0.050	0.046	0.044	0.041	0.039	0.038	0.038
	F_P [N]	92497	16266	5687	3915	3527	3431	3454	3565	3749	4000	4309	5077	6020	7116	8354
	F_V [N]	14642	13883	13146	12446	11765	11131	10527	9958	9431	8929	8461	7615	6882	6243	5673
1500	V_{Tne} [m/s]	27.88	32.53	37.17	41.82	46.47	51.12	55.76	60.41	65.06	69.70	74.35	83.64	92.94	102.23	111.52
	C_L [-]	3.721	2.734	2.093	1.654	1.340	1.107	0.930	0.793	0.683	0.595	0.523	0.413	0.335	0.277	0.233
	C_D [-]	18.219	2.209	0.436	0.174	0.112	0.087	0.071	0.061	0.055	0.050	0.046	0.042	0.040	0.039	0.038
	F_P [N]	218671	36086	9302	4695	3743	3491	3428	3460	3566	3737	3964	4566	5337	6251	7296
	F_V [N]	13898	13226	12596	11984	11391	10825	10282	9768	9302	8868	8430	7627	6911	6289	5742
3000	V_{Tne} [m/s]	25.84	30.15	34.46	38.77	43.07	47.38	51.69	56.00	60.30	64.61	68.92	77.53	86.15	94.76	103.38
	C_L [-]	4.330	3.182	2.436	1.925	1.559	1.288	1.083	0.922	0.795	0.693	0.609	0.481	0.390	0.322	0.271
	C_D [-]	51.154	6.210	1.043	0.294	0.150	0.106	0.084	0.071	0.062	0.055	0.051	0.045	0.042	0.040	0.039
	F_P [N]	527544	87173	19114	6827	4292	3667	3477	3428	3459	3553	3704	4149	4759	5506	6374
	F_V [N]	12167	11591	11044	10516	10006	9519	9049	8607	8208	7833	7479	6823	6243	5778	5360
4500	V_{Tne} [m/s]	23.89	27.87	31.85	35.83	39.82	43.80	47.78	51.76	55.74	59.72	63.70	71.67	79.63	87.59	95.56
	C_L [-]	5.068	3.724	2.851	2.253	1.825	1.508	1.267	1.080	0.931	0.811	0.713	0.563	0.456	0.377	0.317
	C_D [-]	146.785	18.312	2.932	0.651	0.238	0.139	0.103	0.084	0.071	0.063	0.056	0.048	0.044	0.041	0.040
	F_P [N]	1293399	219629	45923	12898	5827	4124	3639	3475	3428	3451	3529	3826	4284	4875	5581
	F_V [N]	10527	10034	9565	9114	8674	8258	7854	7476	7136	6811	6507	5941	5446	5040	4675
6000	V_{Tne} [m/s]	22.02	25.68	29.35	33.02	36.69	40.36	44.03	47.70	51.37	55.04	58.71	66.05	73.38	80.72	88.06
	C_L [-]	5.968	4.384	3.357	2.652	2.148	1.776	1.492	1.271	1.096	0.955	0.839	0.663	0.537	0.444	0.373
	C_D [-]	430.928	55.619	8.983	1.806	0.500	0.216	0.136	0.104	0.086	0.073	0.065	0.053	0.047	0.043	0.041
	F_P [N]	3224823	566528	119504	30416	10391	5437	4077	3645	3485	3431	3439	3597	3912	4358	4913
	F_V [N]	9040	8623	8225	7839	7465	7110	6765	6445	6155	5877	5616	5133	4716	4365	4049
7500	V_{Tne} [m/s]	20.22	23.59	26.96	30.33	33.70	37.07	40.44	43.82	47.19	50.56	53.93	60.67	67.41	74.15	80.89
	C_L [-]	7.073	5.196	3.978	3.143	2.546	2.104	1.768	1.507	1.299	1.132	0.995	0.786	0.637	0.526	0.442
	C_D [-]	1298.676	173.232	28.783	5.717	1.383	0.448	0.213	0.139	0.107	0.089	0.077	0.061	0.052	0.047	0.043
	F_P [N]	8200100	1488810	323091	81221	24251	9512	5384	4120	3682	3508	3440	3464	3645	3953	4369
	F_V [N]	7679	7328	6989	6660	6341	6038	5745	5476	5230	4992	4770	4359	4011	3714	3447
9000	V_{Tne} [m/s]	18.51	21.60	24.68	27.77	30.85	33.94	37.02	40.11	43.19	46.28	49.36	55.53	61.70	67.87	74.04
	C_L [-]	8.442	6.202	4.749	3.752	3.039	2.512	2.111	1.798	1.551	1.351	1.187	0.938	0.760	0.628	0.528
	C_D [-]	4035.322	554.267	95.066	19.289	4.534	1.266	0.455	0.226	0.148	0.114	0.094	0.072	0.059	0.051	0.047
	F_P [N]	21347407	3909980	894066	229595	66630	22513	9629	5611	4262	3762	3553	3429	3483	3662	3947
	F_V [N]	6165	5884	5613	5350	5098	4857	4625	4419	4227	4045	3874	3559	3308	3091	2900

Tab. 4. Dílčí výsledky výpočtů maximální cestovní rychlosti pro hmotnost 4568 kg

Návrh dvumotorového letounu kategorie pro sběrnou dopravu

H [m]	V _{True} [m/s]	[km/h]	30	35	40	45	50	55	60	65	70	75	80	90	100	110	120
0	V _∞ [m/s]		30.00	35.00	40.00	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	90.00	100.00	110.00	120.00
	F _p [N]		99120	17298	5899	3989	3573	3467	3485	3591	3772	4019	4325	5089	6029	7123	8359
	F _v [N]		14642	13883	13146	12446	11765	11131	10527	9958	9431	8929	8461	7615	6882	6243	5673
	V _z [m/s]		-56.18	-2.65	6.43	8.44	9.08	9.34	9.37	9.17	8.78	8.16	7.33	5.04	1.89	-2.15	-7.15
	γ [°]		-4.34	9.25	10.80	10.80	10.46	9.78	8.98	8.11	7.21	6.25	5.26	3.21	1.08	-1.12	-3.41
1500	V _∞ [m/s]		27.88	32.53	37.17	41.82	46.47	51.12	55.76	60.41	65.06	69.70	74.35	83.64	92.94	102.23	111.52
	F _p [N]		234248	38603	9797	4828	3804	3534	3464	3491	3593	3759	3984	4581	5348	6260	7303
	F _v [N]		14106	13421	12758	12118	11503	10917	10357	9830	9336	8868	8430	7627	6911	6289	5742
	V _z [m/s]		-146.40	-19.54	2.63	7.27	8.53	9.00	9.17	9.13	8.91	8.49	7.89	6.08	3.46	0.07	-4.15
	γ [°]		-33.93	3.76	9.30	9.30	9.83	9.42	8.79	8.08	7.31	6.50	5.66	3.87	1.99	0.04	-1.98
3000	V _∞ [m/s]		25.84	30.15	34.46	38.77	43.07	47.38	51.69	56.00	60.30	64.61	68.92	77.53	86.15	94.76	103.38
	F _p [N]		564583	93413	20362	7128	4394	3722	3518	3463	3489	3580	3727	4167	4772	5516	6382
	F _v [N]		12454	11872	11321	10788	10270	9780	9302	8853	8449	8065	7705	7039	6444	5967	5536
	V _z [m/s]		-367.18	-63.27	-8.02	3.65	6.51	7.39	7.69	7.77	7.70	7.46	7.06	5.73	3.71	1.10	-2.25
	γ [°]		-11.56	4.65	9.30	9.30	9.83	9.42	8.79	8.08	7.31	6.50	5.66	3.87	1.99	0.04	-1.98
4500	V _∞ [m/s]		23.89	27.87	31.85	35.83	39.82	43.80	47.78	51.76	55.74	59.72	63.70	71.67	79.63	87.59	95.56
	F _p [N]		1382689	235274	49165	13672	6050	4213	3693	3517	3464	3482	3556	3847	4301	4888	5591
	F _v [N]		10757	10263	9791	9332	8891	8469	8062	7676	7333	7002	6691	6117	5611	5195	4822
	V _z [m/s]		-912.38	-174.58	-34.91	-4.33	3.15	5.19	5.81	5.99	6.00	5.85	5.56	4.53	2.90	0.75	-2.05
	γ [°]		-60.79	-5.52	9.30	9.30	9.83	9.42	8.79	8.08	7.31	6.50	5.66	3.87	1.99	0.04	-1.98
6000	V _∞ [m/s]		22.02	25.68	29.35	33.02	36.69	40.36	44.03	47.70	51.37	55.04	58.71	66.05	73.38	80.72	88.06
	F _p [N]		3443846	606251	128062	32512	10971	5629	4163	3698	3527	3467	3472	3623	3933	4374	4926
	F _v [N]		9228	8811	8409	8017	7642	7281	6936	6610	6317	6034	5767	5276	4849	4489	4166
	V _z [m/s]		-2284.13	-463.54	-106.10	-24.44	-3.69	2.01	3.69	4.20	4.33	4.27	4.07	3.30	2.03	0.28	-2.02
	γ [°]		-32.89	-32.89	-32.89	-32.89	-4.23	2.10	3.52	3.70	3.55	3.26	2.92	2.10	1.16	0.15	-0.97
7500	V _∞ [m/s]		20.22	23.59	26.96	30.33	33.70	37.07	40.44	43.82	47.19	50.56	53.93	60.67	67.41	74.15	80.89
	F _p [N]		8748900	1591323	345972	87031	25887	10024	5572	4209	3738	3552	3477	3495	3669	3973	4385
	F _v [N]		7820	7468	7124	6788	6468	6158	5863	5589	5340	5099	4872	4455	4103	3801	3530
	V _z [m/s]		-5813.10	-1228.87	-300.46	-80.05	-21.52	-4.71	0.39	1.99	2.48	2.57	2.47	1.92	0.96	-0.42	-2.28
	γ [°]		-25.50	-25.50	-25.50	-25.50	-4.92	2.03	3.52	3.70	3.55	3.26	2.92	2.10	1.16	0.15	-0.97
9000	V _∞ [m/s]		18.51	21.60	24.68	27.77	30.85	33.94	37.02	40.11	43.19	46.28	49.36	55.53	61.70	67.87	74.04
	F _p [N]		22757904	4261078	956219	245939	71384	24018	10150	5817	4362	3824	3601	3465	3512	3686	3967
	F _v [N]		6165	5884	5613	5350	5098	4857	4625	4419	4227	4045	3874	3559	3308	3091	2900
	V _z [m/s]		-15130.64	-3301.48	-842.91	-240.00	-73.47	-23.36	-7.35	-2.01	-0.21	0.37	0.49	0.19	-0.45	-1.45	-2.84
	γ [°]		-25.14	-25.14	-25.14	-25.14	-7.04	-1.78	3.52	3.70	3.55	3.26	2.92	2.10	1.16	0.15	-0.97

Tab. 5. Výsledky výpočtů stoupacích rychlostí a úhlů stoupání pro maximální vzletovou hmotnost

H [m]	V_{TAE} [m/s] [km/h]	30	35	40	45	50	55	60	65	70	75	80	90	100	110	120
0	V_{TAE} [m/s]	30.00	35.00	40.00	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00	90.00	100.00	110.00	120.00
	F_P [N]	7154	2956	2407	2307	2332	2442	2623	2864	3158	3499	3883	4766	5790	6946	8228
	F_V [N]	14642	13883	13146	12446	11765	11131	10527	9958	9431	8929	8461	7615	6882	6243	5673
	V_Z [m/s]	7.48	12.74	14.31	15.20	15.71	15.92	15.80	15.36	14.63	13.57	12.20	8.54	3.64	-2.58	-10.22
	γ [°]	14.44	21.35	20.96	19.74	18.31	16.83	15.27	13.67	12.06	10.42	8.77	5.45	2.09	-1.34	-4.88
1500	V_{TAE} [m/s]	27.88	32.53	37.17	41.82	46.47	51.12	55.76	60.41	65.06	69.70	74.35	83.64	92.94	102.23	111.52
	F_P [N]	14788	3993	2600	2349	2304	2350	2465	2640	2867	3139	3452	4187	5052	6036	7133
	F_V [N]	14106	13421	12758	12118	11503	10917	10357	9830	9336	8868	8430	7627	6911	6289	5742
	V_Z [m/s]	-0.68	10.99	13.53	14.65	15.32	15.70	15.77	15.57	15.08	14.31	13.27	10.31	6.19	0.93	-5.56
	γ [°]	-1.30	18.31	19.78	18.99	17.85	16.58	15.24	13.86	12.44	11.00	9.55	6.58	3.55	0.48	-2.66
3000	V_{TAE} [m/s]	25.84	30.15	34.46	38.77	43.07	47.38	51.69	56.00	60.30	64.61	68.92	77.53	86.15	94.76	103.38
	F_P [N]	34816	6846	3102	2470	2325	2307	2361	2473	2636	2843	3090	3688	4408	5236	6166
	F_V [N]	12454	11872	11321	10788	10270	9780	9302	8853	8449	8065	7705	7039	6444	5967	5536
	V_Z [m/s]	-22.35	5.86	10.95	12.47	13.23	13.69	13.87	13.82	13.56	13.05	12.30	10.05	6.78	2.68	-2.52
	γ [°]	-48.16	9.64	15.89	16.09	15.35	14.42	13.37	12.27	11.17	10.02	8.84	6.41	3.89	1.39	-1.20
4500	V_{TAE} [m/s]	23.89	27.87	31.85	35.83	39.82	43.80	47.78	51.76	55.74	59.72	63.70	71.67	79.63	87.59	95.56
	F_P [N]	87595	14848	4524	2785	2415	2316	2309	2362	2465	2611	2796	3267	3853	4540	5318
	F_V [N]	10757	10263	9791	9332	8891	8469	8062	7676	7333	7002	6691	6117	5611	5195	4822
	V_Z [m/s]	-76.79	-5.35	7.02	9.82	10.79	11.27	11.50	11.51	11.35	10.97	10.38	8.55	5.86	2.40	-1.98
	γ [°]	-8.79	10.11	12.60	12.60	12.46	11.83	11.05	10.20	9.33	8.41	7.45	5.45	3.36	1.25	-0.95
6000	V_{TAE} [m/s]	22.02	25.68	29.35	33.02	36.69	40.36	44.03	47.70	51.37	55.04	58.71	66.05	73.38	80.72	88.06
	F_P [N]	227773	37420	8739	3691	2656	2392	2314	2309	2355	2443	2570	2921	3384	3942	4583
	F_V [N]	9228	8811	8409	8017	7642	7281	6936	6610	6317	6034	5767	5276	4849	4489	4166
	V_Z [m/s]	-218.41	-33.36	-0.44	6.48	8.30	8.96	9.24	9.31	9.24	8.97	8.52	7.06	4.88	2.01	-1.67
	γ [°]	-72.38	-0.63	8.29	8.29	9.56	9.37	8.86	8.24	7.59	6.87	6.11	4.50	2.80	1.05	-0.80
7500	V_{TAE} [m/s]	20.22	23.59	26.96	30.33	33.70	37.07	40.44	43.82	47.19	50.56	53.93	60.67	67.41	74.15	80.89
	F_P [N]	604873	101436	21409	6504	3368	2611	2389	2316	2306	2341	2412	2652	2999	3438	3955
	F_V [N]	7820	7468	7124	6788	6468	6158	5863	5589	5340	5099	4872	4455	4103	3801	3530
	V_Z [m/s]	-596.69	-109.56	-19.04	0.43	5.16	6.50	6.94	7.09	7.07	6.89	6.56	5.41	3.68	1.33	-1.70
	γ [°]	-28.42	0.54	-28.42	0.54	5.93	6.79	6.65	6.26	5.80	5.27	4.70	3.44	2.11	0.69	-0.81
9000	V_{TAE} [m/s]	18.51	21.60	24.68	27.77	30.85	33.94	37.02	40.11	43.19	46.28	49.36	55.53	61.70	67.87	74.04
	F_P [N]	1638011	284769	59714	15471	5674	3278	2617	2402	2323	2304	2324	2458	2698	3027	3430
	F_V [N]	6165	5884	5613	5350	5098	4857	4625	4419	4227	4045	3874	3559	3308	3091	2900
	V_Z [m/s]	-1630.86	-325.17	-72.09	-15.17	-0.96	2.89	4.01	4.37	4.44	4.35	4.13	3.30	2.03	0.24	-2.12
	γ [°]	-19.70	-1.10	3.02	3.84	3.85	3.64	3.32	2.96	2.10	1.16	0.12	-1.01			

Tab. 6. Výsledky výpočtů stoupacích rychlostí a úhlů stoupání pro minimální letovou hmotnost

H [m]	Veličina a jednotka	1	Případ 2	3
0	V_{TAS} [m/s]	104.9	104.9	104.9
	C_{eP} [.10-7 kg/W.s]	1.132	1.132	1.132
	η_{VRT} [%]	88.83	88.83	88.83
	C_{L1} [-]	0.264	0.266	0.266
	R_{REZ0} [m]	2062287	2060426	590720
	R_{REZ30} [m]	1846361	1844660	381761
	R_{REZ45} [m]	1738720	1737102	277702
1500	V_{TAS} [m/s]	110.3	110.1	110.1
	C_{eP} [.10-7 kg/W.s]	1.069	1.069	1.069
	η_{VRT} [%]	89.18	89.18	89.18
	C_{L1} [-]	0.276	0.279	0.279
	R_{REZ0} [m]	2285169	2289550	655298
	R_{REZ30} [m]	2045475	2049320	423383
	R_{REZ45} [m]	1926019	1929603	307937
3000	V_{TAS} [m/s]	112.1	112.0	112.0
	C_{eP} [.10-7 kg/W.s]	1.050	1.050	1.050
	η_{VRT} [%]	89.31	89.31	89.31
	C_{L1} [-]	0.311	0.314	0.314
	R_{REZ0} [m]	2582616	2583450	736021
	R_{REZ30} [m]	2310273	2310934	475197
	R_{REZ45} [m]	2174659	2175241	345498
4500	V_{TAS} [m/s]	111.6	111.5	111.5
	C_{eP} [.10-7 kg/W.s]	1.046	1.046	1.046
	η_{VRT} [%]	89.30	89.29	89.29
	C_{L1} [-]	0.367	0.370	0.370
	R_{REZ0} [m]	2974990	2974389	840352
	R_{REZ30} [m]	2658253	2657589	541860
	R_{REZ45} [m]	2500770	2500085	393710
6000	V_{TAS} [m/s]	110.3	110.0	110.0
	C_{eP} [.10-7 kg/W.s]	1.046	1.047	1.047
	η_{VRT} [%]	89.21	89.20	89.20
	C_{L1} [-]	0.443	0.449	0.449
	R_{REZ0} [m]	3434730	3438238	959044
	R_{REZ30} [m]	3063733	3066568	617198
	R_{REZ45} [m]	2879699	2882226	448015
7500	V_{TAS} [m/s]	106.2	105.9	105.9
	C_{eP} [.10-7 kg/W.s]	1.050	1.050	1.050
	η_{VRT} [%]	88.92	88.89	88.89
	C_{L1} [-]	0.566	0.573	0.573
	R_{REZ0} [m]	4013718	4011202	1094066
	R_{REZ30} [m]	3568947	3566203	701789
	R_{REZ45} [m]	3349258	3346447	508586
9000	V_{TAS} [m/s]	94.5	92.9	92.9
	C_{eP} [.10-7 kg/W.s]	1.064	1.065	1.065
	η_{VRT} [%]	87.82	87.64	87.64
	C_{L1} [-]	0.853	0.890	0.890
	R_{REZ0} [m]	4696554	4695807	1208105
	R_{REZ30} [m]	4142748	4138396	768811
	R_{REZ45} [m]	3872249	3866491	554983

Tab. 7, Výsledky výpočtů doletů při maximální cestovní rychlosti

H [m]		Případ 2
0	V_{TAS} [m/s]	56.5
	C_{eP} [$\cdot 10^{-7}$ kg/W.s]	1.98
	η_{VRT} [%]	78.25
	C_{L1} [-]	0.915
	R_{REZ0} [m]	2269800
	R_{REZ30} [m]	1998996
	R_{REZ45} [m]	1867027
1500	V_{TAS} [m/s]	60.8
	C_{eP} [$\cdot 10^{-7}$ kg/W.s]	1.74
	η_{VRT} [%]	81.28
	C_{L1} [-]	0.915
	R_{REZ0} [m]	2682671
	R_{REZ30} [m]	2362630
	R_{REZ45} [m]	2206666
3000	V_{TAS} [m/s]	65.6
	C_{eP} [$\cdot 10^{-7}$ kg/W.s]	1.54
	η_{VRT} [%]	83.27
	C_{L1} [-]	0.915
	R_{REZ0} [m]	3105570
	R_{REZ30} [m]	2735048
	R_{REZ45} [m]	2554486
4500	V_{TAS} [m/s]	70.9
	C_{eP} [$\cdot 10^{-7}$ kg/W.s]	1.36
	η_{VRT} [%]	84.72
	C_{L1} [-]	0.915
	R_{REZ0} [m]	3577972
	R_{REZ30} [m]	3151075
	R_{REZ45} [m]	2943041
6000	V_{TAS} [m/s]	77.0
	C_{eP} [$\cdot 10^{-7}$ kg/W.s]	1.22
	η_{VRT} [%]	85.98
	C_{L1} [-]	0.915
	R_{REZ0} [m]	4047494
	R_{REZ30} [m]	3564616
	R_{REZ45} [m]	3329299
7500	V_{TAS} [m/s]	83.8
	C_{eP} [$\cdot 10^{-7}$ kg/W.s]	1.12
	η_{VRT} [%]	86.84
	C_{L1} [-]	0.915
	R_{REZ0} [m]	4453453
	R_{REZ30} [m]	3922095
	R_{REZ45} [m]	3663156
9000	V_{TAS} [m/s]	91.6
	C_{eP} [$\cdot 10^{-7}$ kg/W.s]	1.07
	η_{VRT} [%]	87.48
	C_{L1} [-]	0.915
	R_{REZ0} [m]	4695372
	R_{REZ30} [m]	4135205
	R_{REZ45} [m]	3862221

Tab. 8. Výsledky výpočtů doletů při ekonomické cestovní rychlosti