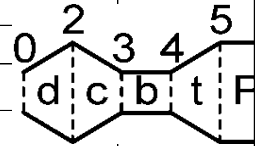
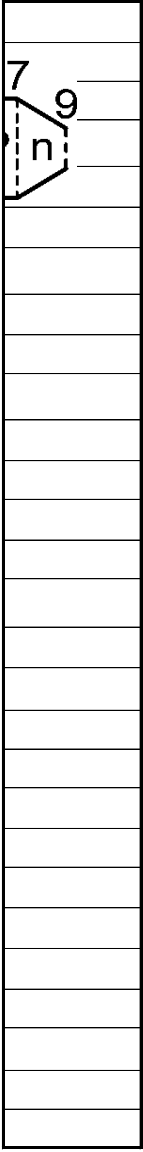
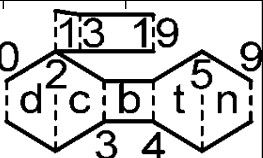


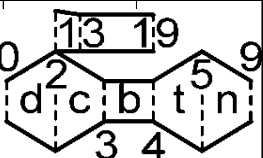
Turbo Jet By TomLevel 4								
	2	3	4	5	7	9		
	diff	comp	CC	Tur	AB	No		
c_p	1004			1152		1243	J/kgK	
γ	1.4			1.33		1.3		
π	0.96	10	0.95		0.98	0.97		
$\eta, e_{c,t}$		0.9	0.99	0.9	0.99			
T_t				1750		2250		
M_0	2		p_0/p_9	1	QR	42800	kJ/kgK	
T_0	250	K	p_0	101,300	Pa	η_m	0.99	
k	0.28571			0.24812		0.23077		
R	286.857			285.835		286.846	kJ/kgK	
a_0	316.86	m/s	V_0	633.719	m/s			
$\tau_r = T_{t0} = 0$	1.8							
Section	c	t	λ				t	
τ	2.07711	0.76251	8.03187			π	0.29696	
Section	0	2	3	4	5	7	9	
T_t	450	450	934.701	1750	1334.4		1334.4	
p_t	792,617	760,912	7.61E+06	7.23E+06	2.15E+06		2.08E+06	
Section	f	P_{t9}/p_9	M_9	T_{t9}/T_9	T_9/T_0	a_9		
3	0.0267	2.06E+01	2.60209	2.11719	2.52107	489.492	m/s	
5	0	V_9		V_9/a_0	V_9/a_0 eff	F/ma_0	Num	
		1273.7	m/s	4.01977	4.01977	2.1271	1.26E+06	
Section	t	th	p	0	TSFC*1e3			
η	0.913	0.55303	0.67581	0.37374	0.039617			
				2.117	630.268			

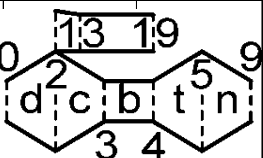




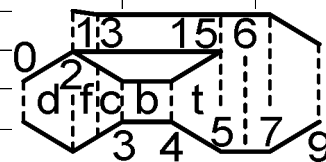
Turbo Jet By TomLevel 4								
	2	3	4	5	7	9		
	diff	comp	CC	Tur	AB	No		
c_p	1004			1152		1243	J/kgK	
γ	1.4			1.33		1.3		
π	0.96	10	0.95		0.98	0.97		
$\eta, e_{c,t}$		0.9	0.99	0.9	0.99			
T_t				1750		2250		
M_0	2		p_0/p_9	1	QR	42800	kJ/kgK	
T_0	250	K	p_0	101,300	Pa	η_m	0.99	
k	0.28571			0.24812		0.23077		
R	286.857			285.835		286.846	kJ/kgK	
a_0	316.86	m/s	V_0	633.719	m/s			
$\tau_r = T_{t0} = 0$	1.8							
Section	c	t	λ	λ_{AB}			t	
τ	2.07711	0.76251	8.03187	11.1424		π	0.29696	
Section	0	2	3	4	5	7	9	
T_t	450	450	934.701	1750	1334.4	2250	2250	
p_t	792,617	760,912	7.61E+06	7.23E+06	2.15E+06	2.10E+06	2.04E+06	
Section	f	P_{t9}/p_9	M_9	T_{t9}/T_9	T_9/T_0	a_9		
3	0.0267	2.01E+01	2.58154	1.99966	4.50078	647.754	m/s	
5	0.03268	V_9		V_9/a_0	V_9/a_0 eff	F/ma_0	Num	
		1672.2	m/s	5.27743	5.27743	3.59079	2.56E+06	
Section	t	th	p	0	TSFC*1e3			
η	0.913	0.50381	0.56315	0.28372	0.052187			

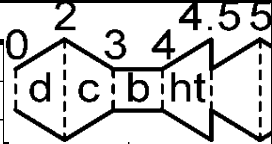
Turbo Fan FaE4.13									
	2	3	4	5	9	13	19		
	diff	comp	CC	Tur	No	Fan	No FAn		
c_p	1004			1152					
γ	1.4			1.33					
π	0.995	40	0.95		0.98	1.6	0.95		
$\eta, e_{c,t}$		0.9	0.992	0.85		0.9			
Tt				1624.5					
M0	0.88				QR	42000	kJ/kgK		
T0	233	K	p0	15,000	Pa	η_m	0.95		
alpha	8								
k	0.28571			0.24812					
R	286.857			285.835	kJ/kgK				
a0	305.9	m/s	V0	269.2	m/s				
$\tau_r = T_{t0} = 0$	1.15488								
Section	c	f	t	λ		t			
τ	3.22545	1.16091	0.47929	7.99986	π	0.03059			
Section	0	2	3	4	5	9	13	19	
Tt	269.1	269.087	867.9	1624.5	778.599	778.599	312.387	312.387	
pt	24,830	24,705	9.88E+05	9.39E+05	28,715	28,140	39,529	37,552	
Core		f	0.02513						
Pt9/p9	M9	M9 Eff	Tt9/T9	P9	po/p9				
	1.87602	1.0119	1	1.165	15206	0.98645			
T9	a9	V9	V9/a0	V9/a0 eff	F/ma0	F/maira0		Fc/Ft	
	668.325	504.054	504.054	1.64779	1.66418	0.826	0.09178	0.22234	
Fan									
Pt19/p19	M19	M19 Eff	Tt19/T19	P19	po/p19				
	2.50349	1.2243	1	1.2	19838.2	0.75612			
T19	a19	V19	V19/a0	V19/a0 ef	F/ma0	F/maira0		FF/Ft	
	260.322	323.335	323.335	1.05701	1.24114	2.88912	0.32101	0.77766	
Num	Section	t	th	p	0	TSFC*1e3	F/ma0	F/maira0	
7.67E+05	η	0.89925	0.36316	0.79808	0.28983	0.0221	3.71513	0.41279	
				7.98E-01					

JT9d By Tom									
	2	3	4	5	9	13	19		
	diff	comp	CC	Tur	No	Fan	No FAn		
c_p	1004			1057					
γ	1.4			1.35					
π	1	21.5	0.955		0.98	1.53	0.99		
$\eta, e_{c,t}$		0.92	0.95	0.9		0.96			
Tt			1349.8						
M0	0				QR	42800	kJ/kgK		
T0	288	K	p0	101,300	Pa	η_m	0.98		
alpha	5.053								
k	0.28571			0.25926					
R	286.857			274.037	kJ/kgK				
a0	340.1	m/s	V0	0.0	m/s				
$\tau_r = T_{t0} = 0$	1								
Section	c	f	t	λ		t			
τ	2.59299	1.13493	0.53755	4.93422	π	0.06993			
Section	0	2	3	4	5	9	13	19	
Tt	288.0	288	746.8	1349.8	725.586	725.586	326.859	326.8588	
pt	101,300	101,300	2.18E+06	2.08E+06	145,448	142,539	154,989	153,439	
Core		f	0.01726						
Pt9/p9	M9	M9 Eff	Tt9/T9	P9	po/p9				
	1.4071	0.72735	0.72735	1.09258	101300	1			
T9	a9	V9	V9/a0	V9/a0 eff	F/ma0	F/maira0		Fc/Ft	
	664.102	495.666	360.524	1.06009	1.06009	1.07838	0.17816	0.211267	
Fan									
Pt19/p19	M19	M19 Eff	Tt19/T19	P19	po/p19				
	1.5147	0.79359	0.79359	1.12596	101300	1			
T19	a19	V19	V19/a0	V19/a0 ef	F/ma0	F/maira0		FF/Ft	
	290.294	341.441	270.965	0.79675	0.79675	4.02595	0.66512	0.788733	
Num	Section	t	th	p	0	TSFC*1e3	F/ma0	F/maira0	
5.03E+05	η	0.9281	0.3407	0	0	0.0099	5.10433	0.843273	

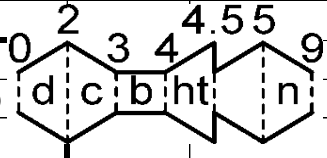
JT9d By Tom									
	2	3	4	5	9	13	19		
	diff	comp	CC	Tur	No	Fan	No FAn		
c_p	1004			1057					
γ	1.4			1.35					
π	1	21.5	0.955		0.98	1.53	0.99		
$\eta, e_{c,t}$		0.92	0.95	0.9		0.96			
Tt			1349.8						
M0	0.85				QR	42800	kJ/kgK		
T0	288	K	p0	101,300	Pa	η_m	0.98		
alpha	5.053								
k	0.28571			0.25926					
R	286.857			274.037	kJ/kgK				
a0	340.1	m/s	V0	289.1	m/s				
$\tau_r = T_{t0} = 0$	1.1445								
Section	c	f	t	λ		t			
τ	2.59299	1.13493	0.46929	4.93422	π	0.03907			
Section	0	2	3	4	5	9	13	19	
Tt	329.6	329.616	854.7	1349.8	633.443	633.443	374.09	374.0899	
pt	162,467	162,467	3.49E+06	3.34E+06	130,342	127,735	248,574	246,089	
Core		f	0.01449						
Pt9/p9	M9	M9 Eff	Tt9/T9	P9	po/p9				
	1.26096	0.59502	0.59502	1.06196	101300	1			
T9	a9	V9	V9/a0	V9/a0 eff	F/ma0	F/maira0		Fc/Ft	
	596.486	469.755	279.513	0.82188	0.82188	-0.01621	-0.00268	-0.00913	
Fan									
Pt19/p19	M19	M19 Eff	Tt19/T19	P19	po/p19				
	2.4293	1.20137	1	1.2	130004	0.77921			
T19	a19	V19	V19/a0	V19/a0 ef	F/ma0	F/maira0		FF/Ft	
	311.742	353.83	353.83	1.0404	1.20448	1.7912	0.29592	1.00913	
Num	Section	t	th	p	0	TSFC*1e3	F/ma0	F/maira0	
4.21E+05	η	0.93345	0.3396	0.82835	0.28131	0.0240	1.775	0.293243	

FaE 4.16									
	2	3	4	5	13	15	6	7	9
	diff	comp	CC	Tur	Fan		Mixer		No
c_p	1004			1152				1241	
γ	1.4			1.33				1.3	
π	0.9	13	0.95		1.9	0.99	0.9709	0.92	0.95
$\eta, e_{c,t}$		0.9	0.98	0.8	0.9			0.98	
Tt			1600					2000	
M0	2.0000				QR	42000	kJ/kgK		
T0	223.0	K	p0	10000.0	Pa	η_m	0.95	p9/p0	3.8
k	0.2857			0.2481				0.2308	
R	286.9			285.8	kJ/kgK			286.4	kJ/kgK
a0	299.3	m/s	V0	598.5	m/s	$\tau_r=(\psi)$	1.8		
Section	c	f	t	λ	M	λ_{AB}			
τ	2.258	1.2260	0.6883	8.233	0.78147	11.0857			
Section	0	2	3	4	5	6	7	9	13
Tt	401.4	401.4	906.2	1600	1101.27	860.61	2000	2000	492.12
pt	78,244	70,420	915,461	869,688	132,460	128,606	118,317	112,401	133,798
π_t	0.15231	f	0.02374	α	0.5707	f_{AB}	0.03912	f_{tot}	0.05424
Pt9/p9	M9	M9 Eff	Tt9/T9	P9	po/p9				
2.958	1.377	1.377	1.28437	38000	0.26316				
T9	a9	V9	V9/a0	V9/a0 eff	F/ma0	F/maira0			
1557.19	761.407	1048.36	3.50318	4.551	4.39376	2.79736			
Num	Section	t	th	p	0	TSFC*e3			
1.6E+06	η	0.83551	0.3505	0.6275	0.21996	0.06479		64.787	



TurboProp FaE4.20									
	2	3	4	4.5	5	9			
	diff	comp	CC	Tur	Tur	No	Prop		
c_p	1004			1152	J/kgK				
γ	1.4			1.33					
π	0.98	30	0.96						
$\eta, e_{c,t}$		0.92	0.99	0.82	0.8533	0.95	0.85		
Tt				1600					
M0	0.7				QR	42000	kJ/kgK		
T0	228	K	p0	16,000	Pa	$\eta_m H$	0.99		
alpha	0.85	m0	10	kg/s		$\eta_m L$	0.99		
k	0.28571			0.24812		η_{gb}	0.995		
R	286.857			285.835	kJ/kgK				
a0	302.6	m/s	V0	211.8	m/s				
$\tau_r = T_{t0} = 0$	1.098								
Section	c	tH	tL	λ		tH	tL		
τ	2.87563	0.74873	0.68053	8.052	π	0.24117	0.16237		
Section	0	2	3	4	4.5	5	9		
Tt	250.3	250.344	719.9	1600	1197.97	815.257	815.257		
pt	22,194	21,750	6.52E+05	6.26E+05	151,065	24,528	23,983		
Core		f	0.0282						
Pt9/p9	M9	M9 Eff	Tt9/T9	P9	po/p9				
1.49896	0.80018	0.80018	1.10565	16000	1				
T9	a9	V9	V9/a0	V9/a0 eff	F/ma0	Fc/Ft			
737.356	529.446	423.653	1.40006	1.40006	0.73953	0.11102			
Prop									
PS/mo					F/ma0	FP/Ft			
446,544	W				5.92184	0.88898			
Num	Section	t	th	p	0	TSFC*1e3	F/ma0		
1.03E+06	η	0.84503	0.43605	0.82684	0.36054	0.01399	6.66137		
Calcolo iterativo rendimento TL partendo da eTL									
p9/pt45	η_{TL}	τ	η_{TL}	τ	η_{TL}	τ	η_{TL}	τ	
0.10591	1	0.63696	0.88424	0.67898	0.88013	0.68048	0.87998	0.68053	
	0.87998	0.68053	0.87998	0.68053	0.87998	0.68053	0.87998	0.68053	
Calcolo π_n partendo da η_n									
Tt5/T0	1.11183	π_n	0.97778						

[illegible]

Turbo Prop FaE4.38									
	2	3	4	4.5	5	9	Prop		
	diff	comp	CC	Tur	Tur	No	Prop		
c_p	1004			1152	J/kgK				
γ	1.4			1.33				$\eta_m H$	0.99
π	0.99	35	0.96					$\eta_m L$	0.99
$\eta, e_{c,t}$		0.92	0.99	0.8	0.859	0.95	0.85	η_{gb}	0.995
Tt				1650					
M0	0.82				QR	42000	kJ/kgK		
T0	258	K	p0	30,000	Pa				
alpha	0.75	m0	50	kg/s					
k	0.28571			0.24812					
R	286.857			285.835	kJ/kgK				
a0	321.9	m/s	V0	263.9	m/s				
$\tau_r = T_{t0} = 0$	1.13448								
Section	c	tH	tL	λ		tH	tL		
τ	3.01665	0.69292	0.73216	7.33809	π	0.15754	0.23161		
Section	0	2	3	4	4.5	5	9		
Tt	292.7	292.696	883.0	1650	1143.32	837.102	837.102		
pt	46,656	46,190	1.62E+06	1.55E+06	244,499	56,629	54,722		
Core		f	0.02556						
Pt9/p9	M9	M9 Eff	Tt9/T9	P9	po/p9				
1.82407	0.98729	0.98729	1.16083	30000	1				
T9	a9	V9	V9/a0	V9/a0 eff	F/ma0	Fc/Ft			
721.122	523.585	516.931	1.60593	1.60593	0.82698	0.18828			
Prop									
PS/mo					F/ma0	FP/Ft			
356,378	J/kg				3.56535	0.81172			
Num	Section	t	th	p	0	TSFC*1e3	F/ma0		
9.17E+05	η	0.83491	0.42712	0.8138	0.34759	0.01808	4.39233		
Calcolo iterativo rendimento TL partendo da eTL									
p9/pt45	η_{TL}	τ	η_{TL}	τ	η_{TL}	τ	η_{TL}	τ	
0.1227	1	0.69564	0.88325	0.73117	0.88008	0.73214	0.88	0.73216	
	0.88	0.73216	0.88	0.73216	0.88	0.73216	0.88	0.73216	
Calcolo π_n partendo da η_n									
Tt5/T0	1.17074	π_n	0.96632						