

RESTRICTED

VULCAN SERVICING SCHOOL

LECTURE NOTES:- 750



ROYAL AIR FORCE FINNINGLEY

FENCINGS

RESTRICTED

VULCAN SERVICING SCHOOL

LECTURE NOTES

PREFACE

1. The object of these Notes, is to supplement the course of Instruction given at the Bomber Command Vulcan Ground Servicing School.
2. These Notes are not intended, and do not take the place of, the official Air publications, which must be used at all times when carrying out all servicing tasks on the aircraft.
3. The contents of these Notes are RESTRICTED matter and are therefore to be safeguarded by the holder.
4. The Notes are not to be taken off the Station and are to be withdrawn from the holder on posting or release from the Service.
5. Every effort is to be made to keep the Notes in a clean and tidy condition to enable re-issue if necessary.
6. Each copy of the Notes is to be serially numbered by the issuing Station and the issue duly recorded.

OLYMPUS 201/301 SERIES

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ALTITUDE CONDITIONS

Height	Height	Pressure	Density	Pressure	Density	Relative Pressure	Relative Density	Temp	Temp	Speed of Sound	Speed of Sound	Unsupercharged Aircraft Engine
Feet	Metres	Lb/sq.in	Lb/cu.ft	Milli bars	Grm. per Cu. metre			°F	°C	M.P.H.	Ft/sec	H.P.
80,000	24,420	0.36	.002	25	35	.0247	.03	-70	-56.5	660	971	20
75	22,830	.50	.003	35	52	.0344	.04	-70	-56.5	660	971	25
70	21,350	.66	.004	46	70	.0414	.05	-70	-56.5	660	971	35
65	19,830	.83	.005	58	87	.0572	.07	-70	-56.5	660	971	45
60	18,310	1.04	.007	72	110	.0711	.09	-70	-56.5	660	971	60
55	16,780	1.31	.009	91	147	.0898	.12	-70	-56.5	660	971	78
50	15,240	1.68	.011	116	184	.1142	.1142	-70	-56.5	660	971	100
45	13,720	2.14	.015	147	233	.1450	.1926	-70	-56.5	660	971	135
40	12,190	2.72	.019	187	307	.1844	.2447	-70	-56.5	660	971	170
35	10,660	3.46	.024	238	381	.2347	.3098	-67	-54.3	661	973	225
30	9,144	4.37	.029	301	460	.2968	.3740	-49	-44.4	677	997	280
25	7,620	5.46	.034	376	552	.3709	.4480	-31	-34.5	693	1,013	360
20	6,096	6.77	.04	465	656	.4594	.5327	-13	-24.6	707	1,035	454
15	4,572	8.31	.048	572	774	.5642	.6291	5	-14.7	725	1,058	567
10	3,048	10.08	.056	697	908	.6876	.7384	23	-4.8	739	1,081	693
5	1,524	12.23	.066	843	1,055	.8320	.8616	1	5.1	755	1,105	838
SEA LEVEL	SEA LEVEL	14.69	.077	1,013	1,226	1.0000	1.0000	59	15.0	771	1,128	1,000

ATMOSPHERIC TEMPERATURE REMAINS A CONSTANT VALUE ABOVE 36,090 FEET

ALTITUDE CONDITIONS

	Height	Pressure	Density	Pressure	Density	Relative Pressure	Relative Density	Temp	Temp	Speed of Sound	Speed of Sound	Unsupercharged Aircraft Engine	Correction to convert I.A.S. to True A.S.
	Metres	Lb/sq.in	Lb/cu.ft	Milli bars	Grm. per Cu. metre			°F	°C	M.P.H.	Ft/sec	H.P.	Multiply by
000	24,420	0.36	.002	25	35	.0247	.03	+70	+56.5	660	971	20	5.775
	22,830	.50	.003	35	52	.0344	.04	-70	-56.5	660	971	25	5.000
	21,350	.66	.004	46	70	.0414	.05	-70	-56.5	660	971	35	4.470
	19,830	.83	.005	58	87	.0572	.07	-70	-56.5	660	971	45	3.782
	18,510	1.04	.007	72	110	.0711	.09	-70	-56.5	660	971	60	3.335
	16,780	1.31	.009	91	147	.0898	.12	-70	-56.5	660	971	78	2.892
	15,240	1.68	.011	116	184	.1142	.1142	-70	-56.5	660	971	100	2.567
	13,720	2.14	.015	147	233	.1450	.1926	-70	-56.5	660	971	135	2.275
	12,190	2.72	.019	187	307	.1844	.2447	-70	-56.5	660	971	170	2.023
	10,660	3.46	.024	238	381	.2347	.3098	-67	-54.3	661	973	225	1.800
	9,144	4.37	.029	301	460	.2968	.3740	-49	-44.4	677	997	280	1.634
	7,620	5.46	.034	376	552	.3709	.4480	-31	-34.5	693	1,013	360	1.494
	6,096	6.77	.04	465	656	.4594	.5327	-13	-24.6	707	1,035	454	1.369
	4,572	8.31	.048	572	774	.5642	.6291	5	-14.7	723	1,058	567	1.261
	3,048	10.08	.056	697	908	.6876	.7384	23	-4.8	739	1,081	693	1.164
	1,524	12.23	.066	843	1,065	.8320	.8616	1	5.1	755	1,105	838	1.077
LEVEL	SEA LEVEL	14.69	.077	1,013	1,226	1.0000	1.0000	59	15.0	771	1,128	1,000	1.000

ATMOSPHERIC TEMPERATURE REMAINS A CONSTANT VALUE ABOVE 36,090 FEET


FRE - 200V CHECKS

1. Pitot head heater switch "OFF" (7P)
2. 28volts D.C supply "ON"
3. T.R.U's "OFF" (50P)
4. T.R's "OFF" (50P)
5. Check 4 Amber lights "ON" (10P)
6. Frequency changers push both "STOP" buttons (12P)
7. Vent: suit master switch to "CLOSE" (7P)
8. All fuel pump switches "OFF" (5P)
9. Check that Air brakes correspond to position of normal selector switch
10. Operate Power pack switch to "STOP" position (1P)
- *11. Ensure emergency bomb door selector switch in normal position (6P)
12. Push all 10 P.F.C stop buttons (6P)
13. Post Mod/1942:- Isolation switches (3 off) set to "OFF" (100P)
14. ECM Heater switch to "OFF" (7P) COM/MOD/0136

BLUE STEEL EXTRAS

*For item 11 above read:-

11. Ensure emergency Fin Gap door switch in MID Position (A.E.O's position)
15. 28volt D.C Master switch to "ON" (9P)
16. Push hydraulic unit "STOP" button (A.E.O's position)
17. Push Refrigerator pack "STOP" button (A.E.O's Position)
18. 28volt D.C Master switch to "OFF" (9P)



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