ENGINE CONDITION MONITORING RECORD - EXAMPLE

Engine General Information	
Engine Type	Continental C90
Engine Serial Number	AS678/00
Installed in aircraft type	Condor D62B
Installed in aircraft registration	G-ASLT
When installed in this airframe	1979

Engine Overhaul/Replacement History	
Engine overhauled	1978 Hants & Sussex
Magneto L	Slick 4002 new in 2002
Magneto R	Slick 4003 O/H in 2003
Carburettor	Marvel-Schebler MA-3SPA O/H 1998
Fuel pump	AC new 1987
other	
other	

Date (DD/MM/YYYY)	10/01/2010	05/02/2011	18/02/2012	04/06/2013	22/04/2014	03/02/2015			
Engine hours SMOH	52	125	207	355	372	393			
Enter each condition monitoring parameter and its unit below	**< For each chosen parameter enter results from each check in cells below >**								
Oil Pressure at 2600 RPM, PSI	40	42	39	40	29	25			
Rate of Climb at MTWA, ft/min	600	590	605	595	575	550			
Max Static Engine RPM	2240	2300	2250	2275	2200	2180			
Fuel Pressure max static RPM, PSI	2.2	2.2	2.1	2.2	2.2	2.05			
Fuel Pressure at idle RPM, PSI	2.2	2.2	2.1	2	1.8	1.6			
Oil Consumption, Lit/hr	0.25	0.22	0.25	0.26	0.3	0.32			
Compression Cyl #1, /80	77	75	76	77	75	68			
Compression Cyl #2, /80	75	76	74	73	72	70			
Compression Cyl #3, /80	76	76	75	70	71	68			
Compression Cyl #4, /80	78	78	75	74	76	75			

Instructions for use:

Enter data into the blue shaded boxes above.

Enter basic engine and airframe data into the first box.

Enter information about engine and anciliary equipment overhaul and installation history into the second box.

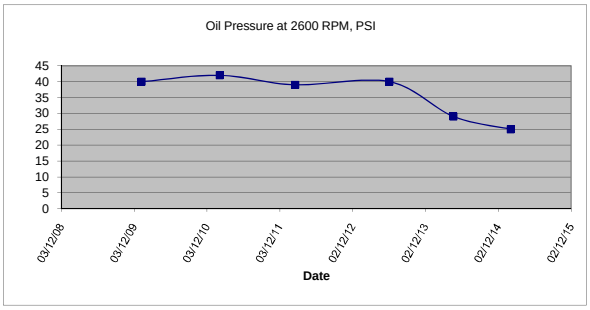
The third box is for recording the time history of parameters. Provision is given for 10 parameters to be tracked over 9 dates. In the first column enter the parameter you want to track, along with its unit of measurement (e.g. "Oil pressure at 2600 RPM, PSI"). In the subsequent columns the date, engine hours and parameter can be recorded.

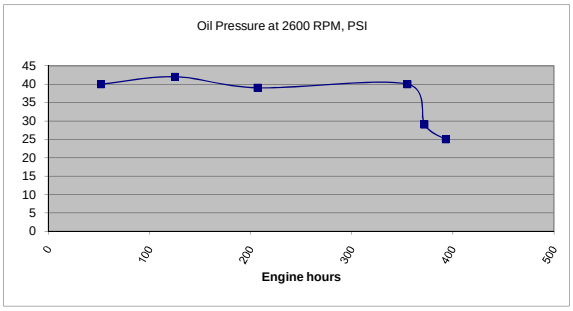
For each parameter, a plot is given that shows the parameter plotted against calendar time (lefthand graph) and engine hours (righthand graph).

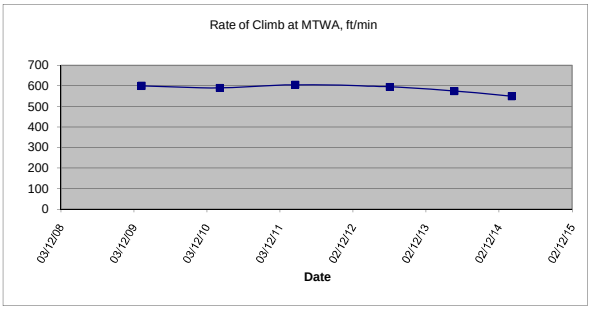
The scale of the graphs can be altered individually to give a better view. By default, the calendar graphs start at one year before the first input date and the engine hour graphs at zero.

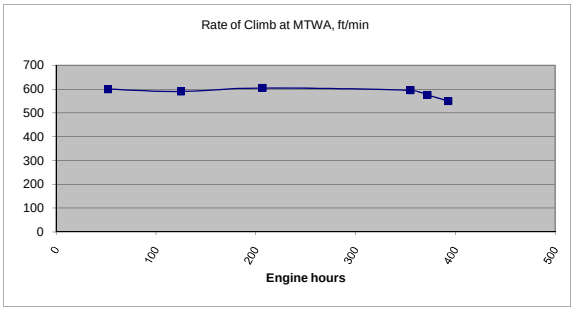
To alter the scale, right-click on the scale of each graph and select 'format axis' and then select the 'scale' tab. Deselect the tick box against 'maximum' and/or 'minimum' and enter new values.

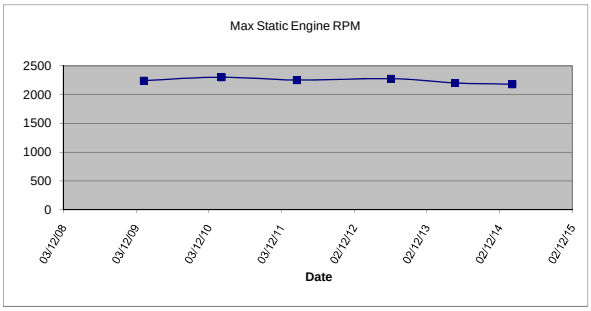
Note that Excel uses a date format that starts at 1 on 1/1/1900 and increments each day: 1/1/2010 equates to 40179, adding 365 give you 1/1/2011.

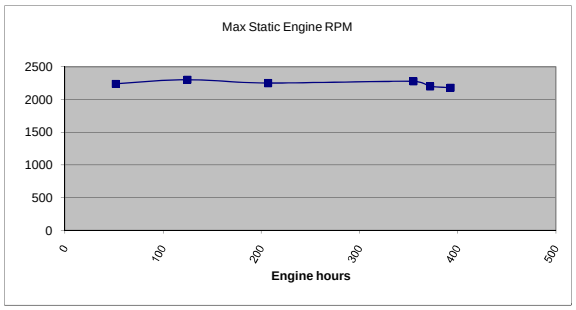

Oil Pressure at 2600 RPM, PSI
45
40
35
30
25
20
15
10
5
0
03/12/08
03/12/09
03/12/10
03/12/11
02/12/12
02/12/13
02/12/14
02/12/15
Date

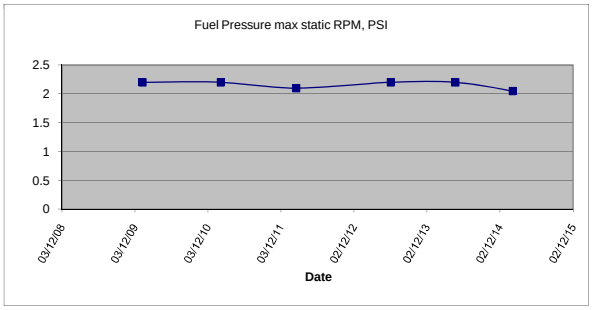

Oil Pressure at 2600 RPM, PSI
45
40
35
30
25
20
15
10
5
0
0
100
200
300
400
500
Engine hours

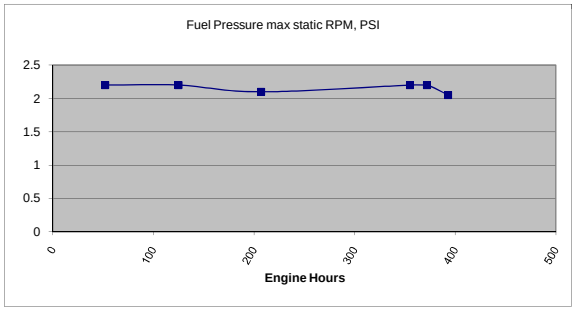

Rate of Climb at MTWA, ft/min
700
600
500
400
300
200
100
0
03/12/08
03/12/09
03/12/10
03/12/11
02/12/12
02/12/13
02/12/14
02/12/15
Date

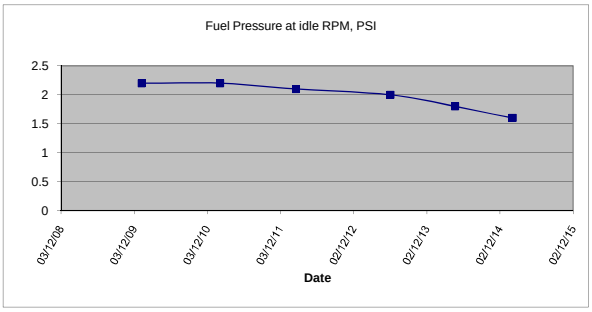

Rate of Climb at MTWA, ft/min
700
600
500
400
300
200
100
0
0
100
200
300
400
500
Engine hours

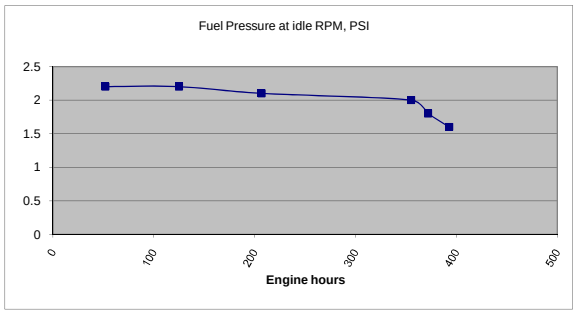

Max Static Engine RPM
2500
2000
1500
1000
500
0
03/12/08
03/12/09
03/12/10
03/12/11
02/12/12
02/12/13
02/12/14
02/12/15
Date

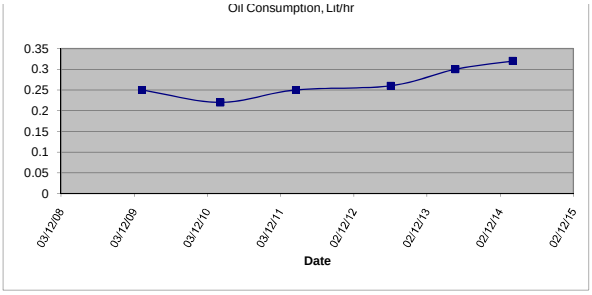

Max Static Engine RPM
2500
2000
1500
1000
500
0
0
100
200
300
400
500
Engine hours

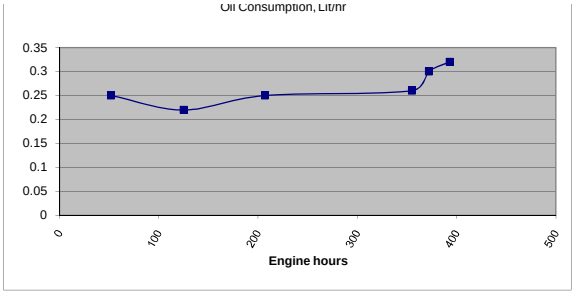

Fuel Pressure max static RPM, PSI
2.5
2
1.5
1
0.5
0
03/12/08
03/12/09
03/12/10
03/12/11
02/12/12
02/12/13
02/12/14
02/12/15
Date

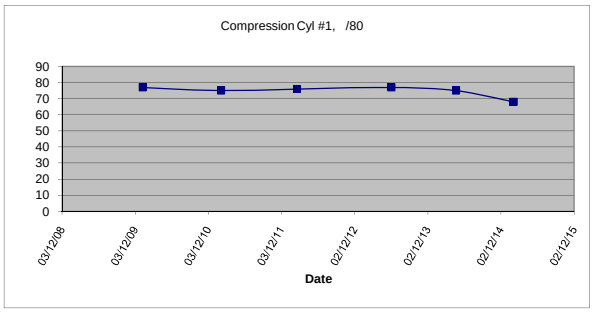

Fuel Pressure max static RPM, PSI
2.5
2
1.5
1
0.5
0
0
100
200
300
400
500
Engine Hours

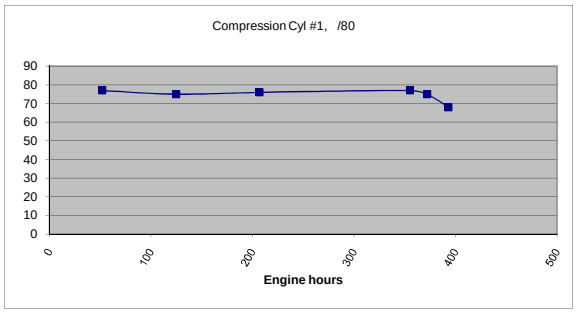

Fuel Pressure at idle RPM, PSI
2.5
2
1.5
1
0.5
0
03/12/08
03/12/09
03/12/10
03/12/11
02/12/12
02/12/13
02/12/14
02/12/15
Date

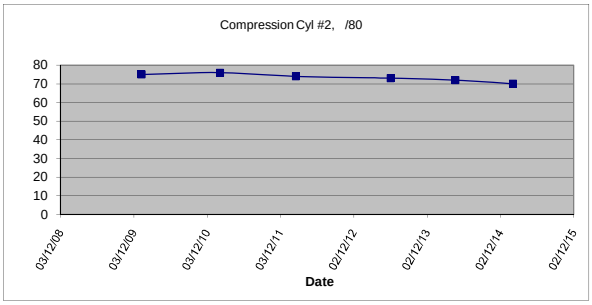

Fuel Pressure at idle RPM, PSI
2.5
2
1.5
1
0.5
0
0
100
200
300
400
500
Engine hours

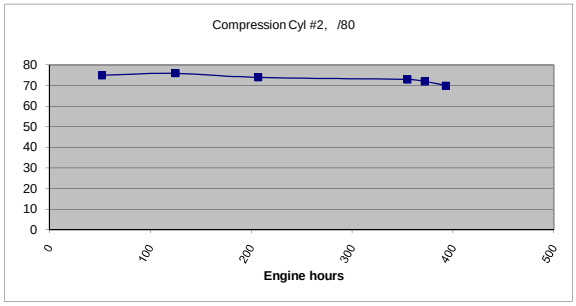

Oil Consumption, Lit/hr
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
03/12/08
03/12/09
03/12/10
03/12/11
02/12/12
02/12/13
02/12/14
02/12/15
Date

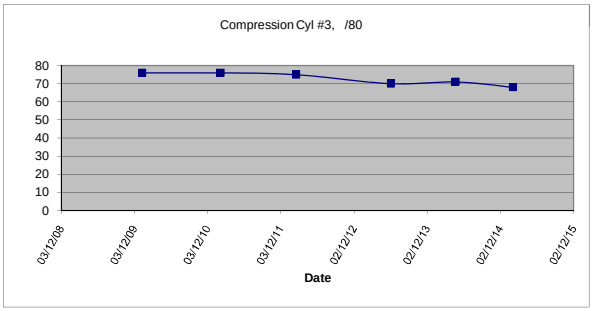

Oil Consumption, Lit/hr
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0
100
200
300
400
500
Engine hours

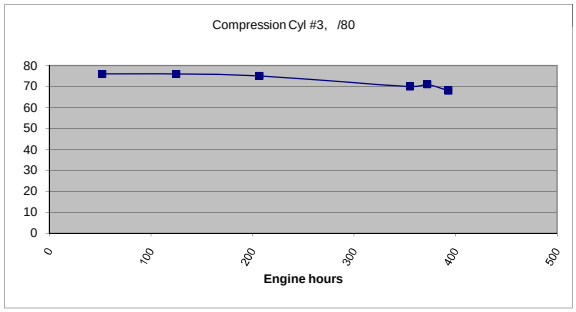

Compression Cyl #1, /80
90
80
70
60
50
40
30
20
10
0
03/12/08
03/12/09
03/12/10
03/12/11
02/12/12
02/12/13
02/12/14
02/12/15
Date

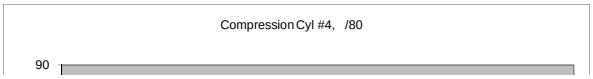

Compression Cyl #1, /80
90
80
70
60
50
40
30
20
10
0
0
100
200
300
400
500
Engine hours


Compression Cyl #2, /80
80
70
60
50
40
30
20
10
0
03/12/08
03/12/09
03/12/10
03/12/11
02/12/12
02/12/13
02/12/14
02/12/15
Date


Compression Cyl #2, /80
80
70
60
50
40
30
20
10
0
0
100
200
300
400
500
Engine hours


Compression Cyl #3, /80
80
70
60
50
40
30
20
10
0
03/12/08
03/12/09
03/12/10
03/12/11
02/12/12
02/12/13
02/12/14
02/12/15
Date


Compression Cyl #3, /80
80
70
60
50
40
30
20
10
0
0
100
200
300
400
500
Engine hours


Compression Cyl #4, /80
90


Compression Cyl #4, /80
90