

# Turbo Cooling Tests: Water Cooled System, Red One

## Air Cooled Ground Run vs. Liquid Cooled Ground Run vs. Liquid Cooled Flight Temperatures

Time After Shutdown minutes	6. System Configuration 4 - New Fan: Flight 02/27/18			5. System Configuration 3: Pump + Fan AUTO, Cowling On (4" dia. vents installed): Ground Run 02/14/18			ACV-SB-091616-18 Configuration: Red One (open-sided Shroud) Ground Run		
	Turbine	Bearing	Ambient	Turbine	Bearing	Ambient	Turbine	Bearing	Ambient
In-Flight, 38" MAP climb	-17	601	180	103					
In-Flight, 25" MAP cruise	-15	688	193	108					
In-Flight, 29" MAP cruise	-11	693	194	119					
At Shutdown	-0.5			760	211				
Shutdown +0	0	173					616	215	144
Shutdown +1	1			745	202	164			
Shutdown +2	2	508	184	139	715	203	164		
Shutdown +3	3				689	209	162		
Shutdown +4	4	479	182	140	644	203	160		
Shutdown +5	5				623	203	158	547	260
Shutdown +6	6	452	173	135	601	196	157		
Shutdown +7	7				574	193	155		
Shutdown +8	8	436	167	133	560	191	151		
Shutdown +9	9	425	171	133	549	191	155		
Shutdown +10	10	401	169	131	535	191	155	473	263
Shutdown +11	11				509	189	151		
Shutdown +12	12				497	180	149		
Shutdown +13	13	364	153	124	482	184	148		
Shutdown +14	14				463	180	151		
Shutdown +15	15	324	146	122	450	175	148	418	270
Shutdown +16	16				428	176	144		
Shutdown +17	17	317	148	115	414	173	142		
Shutdown +18	18				398	167	140		
Shutdown +19	19				380	166	140		
Shutdown +20	20	304	140	124	369	157	139	385	268
Shutdown +21	21								
Shutdown +22	22								
Shutdown +23	23								
Shutdown +24	24								
Shutdown +25	25							346	256
Shutdown +26	26								
Shutdown +27	27								
Shutdown +28	28								
Shutdown +29	29								
Shutdown +30	30							317	245
Shutdown +35	35							277	236
Shutdown +40	40							261	218
Shutdown +45	45							248	212

Fan + Pump AUTO On  
 Fan + Pump AUTO Off

