



Wilson Engineered Systems - Service Success Case Study



The Maven (Mars Atmospheric and Volatile Evolution) Rocket to Mars lifted off as scheduled at 13:30 on Monday, November 18, 2013. All critical support systems needed to be fully operational and ready. Years earlier Wilson Engineered Systems provided the critical power system UPS, related equipment, and configuration assistance for the command center responsible for the launch. The system includes full maintenance bypass and high quality battery impedance monitoring for battery health. The electrical configuration is designed for maximum flexibility to allow service and repair of any component. Multiple battery strings support the UPS. The site has our recommend Level II Service Program. Four days before the launch, Wilson Engineered Systems was on site replacing 6 weak batteries the monitoring system had discovered to ensure full support would be available during the critical launch period. During this work it was noticed there were a couple small drops of what appeared to be oil under the UPS. Further inspection found at least one input filter capacitor had failed. Less than 100 hours before launch, a decision was made that all the AC capacitors in the UPS needed to be replaced immediately to prevent a launch delay. Working with the UPS manufacturer, well past their normal shipping cutoff time, Wilson Engineered Systems and the UPS manufacturer coordinated next day delivery of the specific capacitors needed. Once again on site, Wilson Engineered Systems guided the multi-step transfer MOP (method of procedure) process to allow safe working inside the UPS. The transfer procedure was critical as no power glitch could be introduced during servicing or this too would cause a launch delay. This successfully done, the required parts were replaced, the unit cleaned and a second return to normal MOP was developed and followed for an on time launch.

For similar results in your critical power and service needs, please feel free to contact us.

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