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Abstract

## Advances in aviation battery systems technology

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### Abstract

New aircraft battery systems have almost exclusively changed over to a “maintenance-free” concept and older systems in service are transitioning from the vented high maintenance batteries that were prominent 20 years ago. In addition, new chemistries for aviation batteries, such as nickel/metal hydride and lithium-ion are in the development phase with transitions to operational systems projected within the next 3–5 years.

Charger and transformer/rectifier (T/R) electronic units are becoming more sophisticated (“intelligent”) to function with the tighter controls needed for the advanced chemistries in development. Statistical data are presented on the transition to a maintenance-free aviation fleet.

Details on current developments of new chemistries and chargers, also T/R units will be presented along with some projections of where aviation battery system technology is heading over the next decade. © 2001 Published by Elsevier Science B.V.

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