

# Precision Test Equipment for Aircraft Batteries

We are pleased to present our line of products and services dedicated for the conditioning, testing and certification of aircraft batteries (Battery Charger-Analyzers).

With more than 30 years of expertise in the development of precision test equipment and with the experience of our battery test facility, we can offer resources to simplify the process with emphasis on accuracy and efficiency.

Battery testing is a complex operation but it does not have to be complicated. The manufacturers specify how Nickel-Cadmium cells must perform but they do not provide much detail on how to do it, except that the charge and discharge (capacity) tests must be done with constant current.

JFM Engineering offers state of the art equipment designed to facilitate the battery testing process, using internal intelligence (microprocessors) and external support by way of a computerized system to automate the acquisition of data from batteries under test.

We offer equipment and accessories for the maintenance of any type of rechargeable battery, principally Nickel-Cadmium and Lead-Acid, from small emergency packs to main batteries used for engine starting.

See other side for details on our products.

We also offer training and consulting for the use of our equipment and for battery testing in general.

For further details see our website: [www.jfmeng.com](http://www.jfmeng.com)



**JFM Engineering, Inc.**

8030 N.W. 67th Street

Miami, Florida 33166-3524

TEL +1 (305) 592-2272 – FAX +1 (305) 594-4933

[www.jfmeng.com](http://www.jfmeng.com)



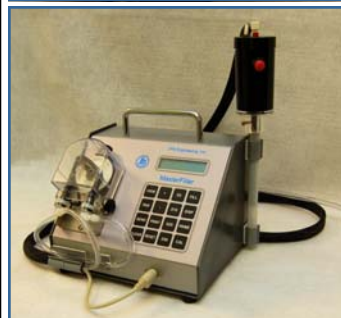
**SuperMasterCharger:** Charger-Analyzer for main batteries (10A-Hr to 100A-Hr)  
For all types of rechargeable batteries (Nickel-Cadmium, Lead-Acid, etc.)  
Charge: 0 to 50A, for one or two batteries (in series)  
Modes: Constant Current and Constant Current/Constant Voltage (automatic cross over)  
Discharge: 0 to 60A for one battery and 0 to 30A for two batteries (in series)  
Operation by way of keypad and LCD readout  
Communication with the BTAS16 (monitoring and control)  
Memory for Test Profiles; Monitoring of battery temperature  
Protected against short circuit, reversed polarity connection, open circuit, power failure, overheating, current fault, and others.  
Simplifies the task of charging/discharging of batteries



**miniMasterCharger:** Charger-Analyzer for emergency batteries (up to 10A-Hr)  
Highlights same as the SuperMasterCharger except:  
Charge: 0 to 2A and Discharge: 0 to 10A



**BTAS16:** Computerized System for the acquisition of data from batteries under test.  
Continuous monitoring of batteries in test (up to 16 terminals)  
Total voltage, individual cell voltage, current and temperature  
Monitoring and control of Charger-Analyzers  
Graphical and numerical analysis; Comparison of data  
Database archival of battery test information  
Printed reports  
Brings accuracy and efficiency in the operation of a battery test facility



**MasterFiller:** Device to deliver water to Nickel-Cadmium cells  
Electronic sensing of electrolyte level  
Automatic recording of water volume delivered to each cell  
Four pre-measured delivery volumes (5, 10, 20 and 50cc)  
Interface for the BTAS16  
Output for an optional ticket printer  
Operation by keypad and LCD readout  
12VDC (optional internal battery)  
Simplifies the task of recording of water levels



**TCS1 Trickle Charger:** Device to maintain the charge on batteries in storage  
Charge Current: 0 to 500mA (internally adjustable)  
Voltage: from 9 to 31 Volts (internally adjustable)  
Automatic crossover from constant current to constant voltage  
Protected against short circuit and reversed polarity



**VCM-100:** Calibrator  
Designed to facilitate the process of verification of performance and calibration of  
Charger-Analyzers  
Current: measurement up to 100A  
Voltage: measurement up to 200V  
Voltage: adjustable output up to 100V