

The Doc's Battery Test Report

Battery Details

Brand	Powertech 650
Size	AAA AA C D 9V 6V
Type	Ni-MH Ni-Cd RAM Alkaline Titanium
Current in mAhs	650
Stated Voltage	1.5 volts 1.2 volts
Number of batteries	Single Set of 2 Set of 4
Battery Set used	Set 1
Times charged before test started	14
Charger used to charge	Rezap RBC883 Vanson Speedy Box UBA4
Time Batteries charged in charger	See UBA graph.

Test Procedures

Spreadsheet name	Powertech800NiMH-AAA-Set1.123 (Discharge data file)
UBA file name	Powertech800NiMH-AAA-Set-11.uba (Charge file)
Select Resistance 5 or 10 ohms	5 ohms 10 ohms
Voltage cut off	3.5 volts 3.6 volts
Date of test	16/01/04

Summary of test

Voltage	Starting voltage 5.4 volts, cut off voltage 3.6 volts
Test duration	5,220 seconds or 87 minutes
Max Battery Temp	31.5 degrees Celsius
Min Battery Temp	28.4 degrees Celsius

Methodology

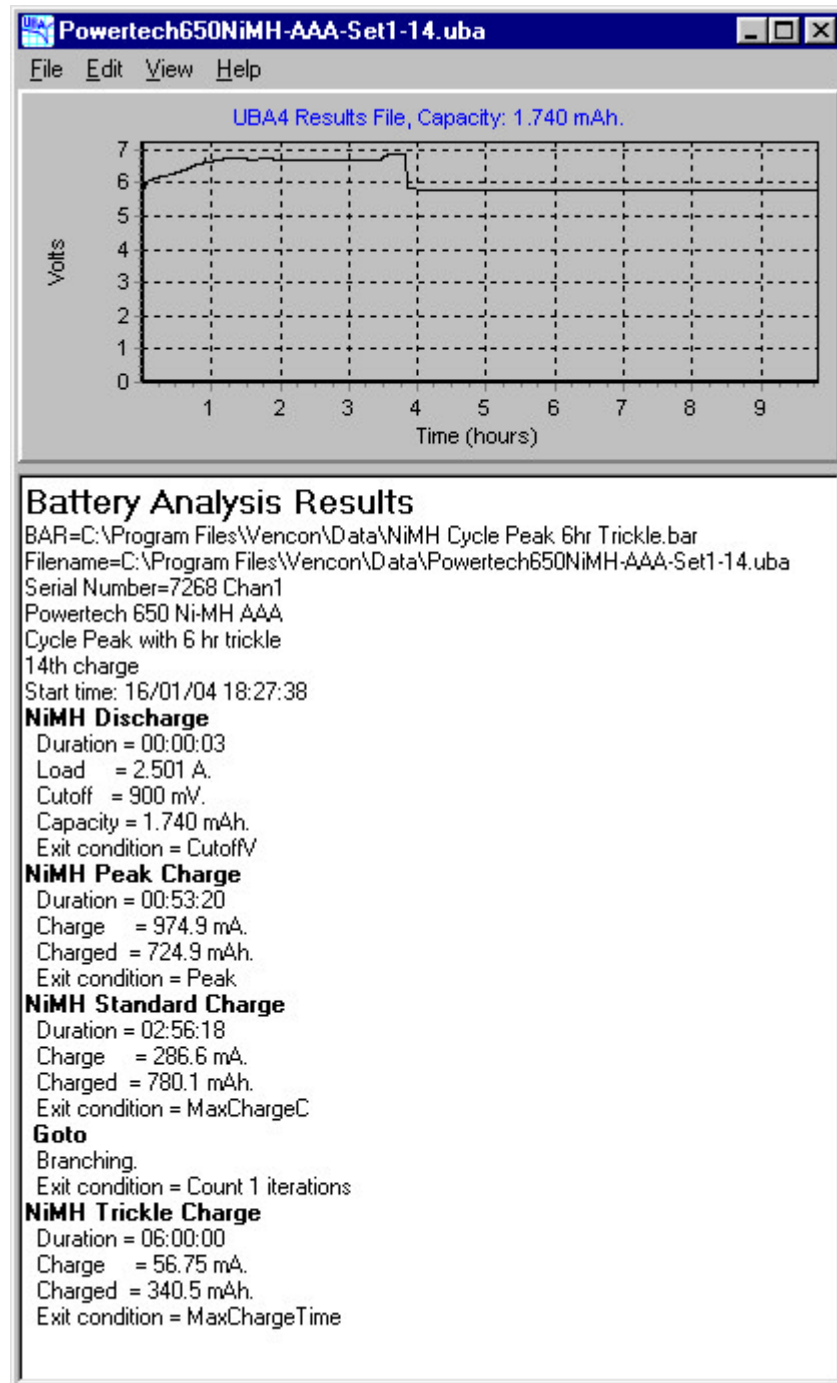
The usual methodology was used here. The following pages give various data, including:

1. charging information from the UBA4;
2. a graph of the voltage during the test (cut off voltage being 3.6 volts);
3. a graph of the battery temperature during the test; and
4. a graph of the battery temperature verse ambient air temperature during the test.

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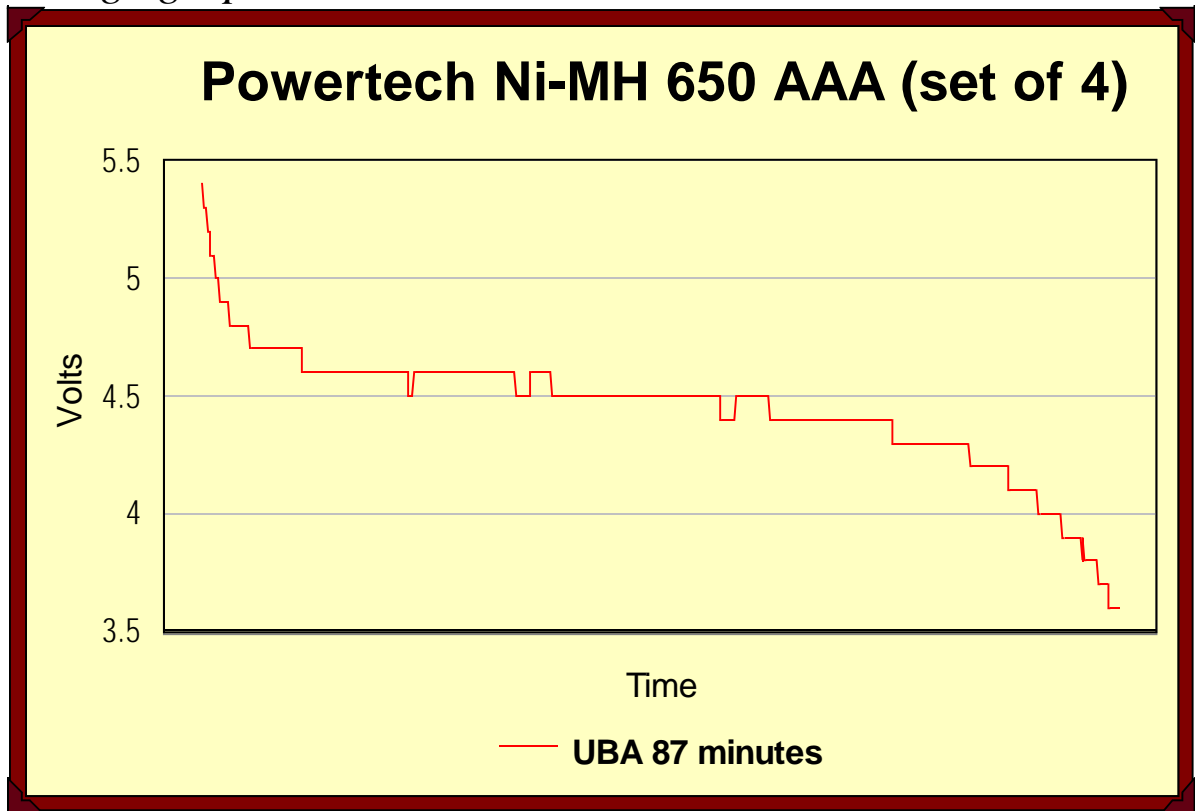
UBA report

The graph and charging information from the UBA4.

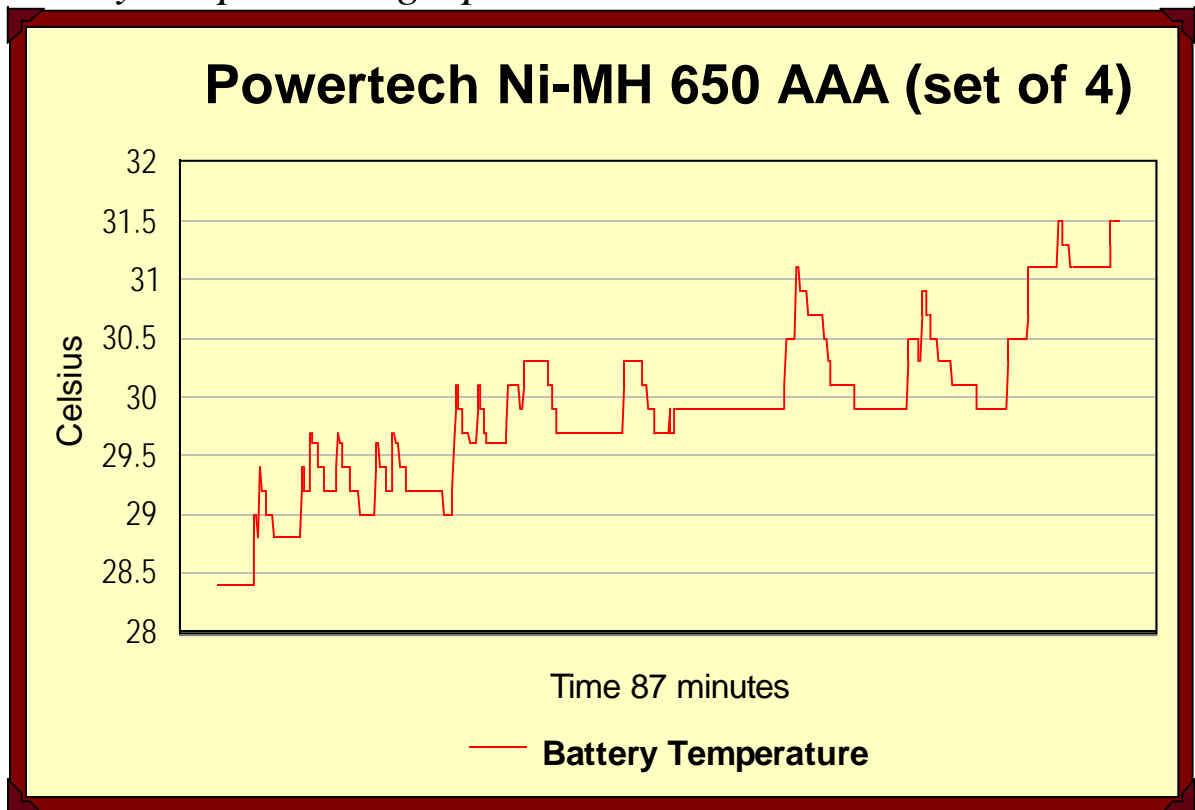


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Voltage graph

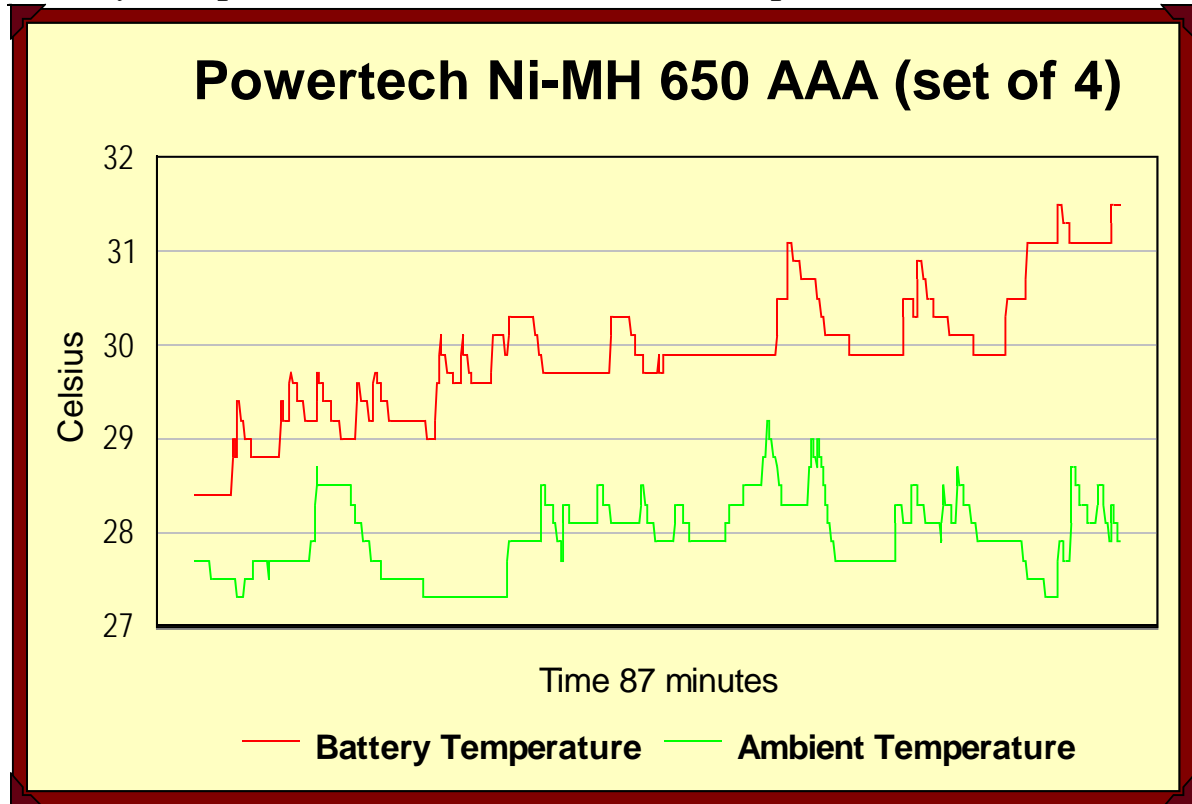


Battery temperature graph



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Battery temperature -v- Ambient air temperature



Conclusion

The performance of Powertech 650 was very good compared to the Energiser 750 and Powertech 800. In fact, a little better than The Doc would normally expect from a 650 mAh rated battery set. But a very good result nonetheless. If you want to save a dollar or two buy the 650's instead of the 800's. Personally The Doc likes a little more power on tap and would buy the 800's.

Run Time (10 ohm)	87 minutes
Battery build quality	Good
Place of Origin	China
Cost (set of 4)	AUD\$12.00

Report date: 21 January 2004

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