Joint Service Power Expo

RENEWABLE POWER IN OIF

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Former Expeditionary Power Systems FSR in Iraq
July 2004 to November 2008
L-3 Communications
May 5-7 2009
Briefing Topics

- Logistics Support for Generators
- Solar Power Equipment Uses
- Adaptive Field Expedient Solutions
# Logistics Support for Generators

<table>
<thead>
<tr>
<th>Commercial Mega Watt</th>
<th>Fuel Capacity</th>
<th>Fuel Consumption</th>
<th>Oil Capacity</th>
<th>Coolant Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>External Tank</td>
<td>41.5 GPH @75% load</td>
<td>58 gal</td>
<td>27.1 gal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power (KW)</th>
<th>Model</th>
<th>Fuel Capacity</th>
<th>Fuel Consumption</th>
<th>Oil Capacity</th>
<th>Coolant Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2KW</td>
<td>Mep 531A</td>
<td>1.6 gal</td>
<td>.33 GPH</td>
<td>.85 qt</td>
<td>Air</td>
</tr>
<tr>
<td>3 KW</td>
<td>Mep 831A</td>
<td>4 gal</td>
<td>.5 GPH</td>
<td>1.2 qt</td>
<td>Air</td>
</tr>
<tr>
<td>10 KW</td>
<td>Mep 803A</td>
<td>9 gal</td>
<td>.97 GPH</td>
<td>5.9 qt</td>
<td>8.2 qt</td>
</tr>
<tr>
<td>20 KW</td>
<td>MMG-25</td>
<td>46 gal</td>
<td>2.1 GPH</td>
<td>8.5 qt</td>
<td>10.4 qt</td>
</tr>
<tr>
<td>30 KW</td>
<td>Mep 805B</td>
<td>23 gal</td>
<td>2.60 GPH</td>
<td>15 qt</td>
<td>15.5 qt</td>
</tr>
<tr>
<td>60 KW</td>
<td>Mep 806B</td>
<td>43 gal</td>
<td>4.7 GPH</td>
<td>18 qt</td>
<td>20.5 qt</td>
</tr>
<tr>
<td>100 KW</td>
<td>Mep 007B</td>
<td>91 gal</td>
<td>12 GPH</td>
<td>30 qt</td>
<td>42.3 qt</td>
</tr>
</tbody>
</table>
Logistics Support for Generators

2 kW

Week (168 Hrs)
Fuel 55 Gal
Oil .85 Qt
JP8 $157.75

Month (672 Hrs)
Fuel 221.7 Gal
Oil 1.2 Gal
JP8 $631.00

6 Months (4032Hrs)
Fuel 1,330.5 Gal
Oil 8.5 Gal
JP8 $3,786.04
Logistics Support for Generators

30 kW

Week (168 Hrs)
- Fuel 436.8 Gal
- $1,364.68
- Oil 3.7 Gal
- Coolant 3.8 Gal

Month (672 Hrs)
- Fuel 1,747.2 Gal
- $5,458.72
- Oil 7.5 Gal
- Coolant 7.7 Gal

6 Months (4,032 Hrs)
- Fuel 10,483.2 Gal
- $32,752.32
- Oil 48 Gal
- Coolant 59 Gal
# Logistics Support for Generators

## 100 kW Performance

<table>
<thead>
<tr>
<th>Component</th>
<th>Week (168 Hr)</th>
<th>Month (672 Hr)</th>
<th>6 Months (4,032 Hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fuel</strong></td>
<td>1,318.8 Gal</td>
<td>5,275.2 Gal</td>
<td>31,651.2 Gal</td>
</tr>
<tr>
<td></td>
<td>$4,125.34</td>
<td>$16,501.36</td>
<td>$99,008.16</td>
</tr>
<tr>
<td><strong>Oil</strong></td>
<td>7.5 Gal</td>
<td>15 Gal</td>
<td>97.5 Gal</td>
</tr>
<tr>
<td><strong>Coolant</strong></td>
<td>9.5 Gal</td>
<td>19 Gal</td>
<td>123.5 Gal</td>
</tr>
</tbody>
</table>
## Logistics Support for Generators

<table>
<thead>
<tr>
<th>Mega watt</th>
<th>Week (168 Hr)</th>
<th>Month (672 Hr)</th>
<th>6 Months (4,032 Hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel</td>
<td>6,972 Gal</td>
<td>27,888 Gal</td>
<td>167,328 Gal</td>
</tr>
<tr>
<td></td>
<td>$21,822.36</td>
<td>$87,289.44</td>
<td>$523,736.64</td>
</tr>
</tbody>
</table>
Solar Power Equipment Uses

Whelen Solar Powered Siren System
Solar Power Equipment Uses

Solar Street Light Fallujah
Solar Power Equipment Uses

Bullet Proof Glass
Solar Power Equipment Uses

World Water & Solar Technologies
Solar Powered Water Purification System
Solar Power Equipment Uses

Flair T-3000 Camera
Solar Power Equipment Uses

Commercial 12VDC Solar Power Supply
Adaptive Field Expedient Solutions

Solar Spotlight and Thermal Camera
Adaptive Field Expedient Solutions
Adaptive Field Expedient Solutions
Adaptive Field Expedient Solutions

Sun Wize 60 Amp Solar Power Supply
Adaptive Field Expedient Solutions
?? Questions ??