CONSERVATION LOWER ZAMBEZI

“9J CLZ” AERIAL MONITORING

Aerial Report 2014
Aerial monitoring and support remains one of the strongest tools for the effective management of Lower Zambezi. Conservation Lower Zambezi (CLZ) and ZAWA are very fortunate to have access to this plane to carry out this monitoring, piloted by CEO Ian Stevenson. CLZ’s Cessna 172 aerial monitoring aircraft is owned by Glenn Goodall, who kindly leases the aircraft to CLZ. In 2012 Glenn Goodall generously agreed to extend the lease of the aircraft for another 3 years which is now due to expire in August 2015.

The aircraft is budgeted to fly 12 hrs/month or 144 hrs for the year. In 2014 the aircraft flew a total of 142.3 hours in the Lower Zambezi on aerial patrols, and an additional 42.7 hours in Kafue National Park carrying out an aerial reconnaissance for ZAWA and Game Rangers International (funded by The Nature Conservancy), which was hugely insightful for those working in wildlife protection in the park, with the results now being used to plan wildlife patrol efforts (See Annexes 1,2,3). The slight shortfall in aerial patrol hours was due to the plane being grounded for repairs for two extended periods, in February and August due to delays with the engineering services provider.
Flight hours for 2014

9J CLZ 2014 Flight hours

<table>
<thead>
<tr>
<th></th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours/Month</td>
<td>15.5</td>
<td>4.4</td>
<td>14.3</td>
<td>12.1</td>
<td>16.0</td>
<td>12.6</td>
<td>18.8</td>
<td>0.0</td>
<td>25.4</td>
<td>32.9</td>
<td>28.7</td>
<td>4.3</td>
<td>185.0 (42.7 in KNP)</td>
</tr>
</tbody>
</table>

Maintenance

- Check 2 carried out 27th March 2014
- C of A completed 19th September 2014
- Check 1 carried out 15th October 2014
- Check 2 carried out February 2015

A number of parts were replaced in 2014 including the nose oleo, exhaust muffler and brakes. Maintenance Log Available on request.

ZAWA Support and Endorsement

43% of poached elephants discovered in 2014 were found by CLZ’s aerial patrols.

Figure 1: A poached elephant carcass, discovered from the air in August 2014 within a week of death.
The plane continues to play a vital role in monitoring the park’s illegal activities and supporting patrol teams. In January 2014 ZAWA issued a support letter for another year request the Zambian DCA to allow the 9J CLZ to continue aerial work over the park and surrounding GMA’s. In 2014, the plane was essential for spotting illegal activity – as indicated below, the plane was responsible for detecting 43% of all poached elephant carcasses found in 2014, and 24% of all elephant carcasses.

Figure 2: Elephant Mortality Data 2014

<table>
<thead>
<tr>
<th>Carcasses Found By</th>
<th>Poached Park</th>
<th>Poached GMA</th>
<th>Percentage of poached carcasses found</th>
<th>Natural/Unknown Park</th>
<th>Natural/Unknown GMA</th>
<th>Total</th>
<th>Percentage of total carcasses found</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZAWA/Patrol</td>
<td>6</td>
<td>1</td>
<td>33%</td>
<td>3</td>
<td>2</td>
<td>12</td>
<td>27%</td>
</tr>
<tr>
<td>Guides/Operator</td>
<td>3</td>
<td>14%</td>
<td>13</td>
<td>1</td>
<td>17</td>
<td>17</td>
<td>38%</td>
</tr>
<tr>
<td>CLZ Staff</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>9J CLZ Plane</td>
<td>8</td>
<td>1</td>
<td>43%</td>
<td>2</td>
<td>11</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td>Community</td>
<td>1</td>
<td>5%</td>
<td>2</td>
<td>3</td>
<td>7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kayila Scouts</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>1</td>
<td>2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td>5%</td>
<td></td>
<td>1</td>
<td>2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>6</td>
<td>100%</td>
<td>18</td>
<td>6</td>
<td>45</td>
<td>100%</td>
</tr>
</tbody>
</table>

Through an aerial patrol in November 2014, a fully established illegal logging operation was discovered inside the National Park in a routine aerial patrol. The LZNP Area Warden and Ranger were immediately notified and shortly after, taken on a flight to assess the area. This discovery led to several arrests, including those of the ZAWA officers responsible for manning the Mukamba Gate, who had been aware of the illegal logging. The settlement was destroyed but this area continues to be a target for illegal logging and will be monitored by air.

Patrol Support

The plane was regularly utilized to support patrol teams in the field, including evacuating scouts for medical reasons, emergencies and delivering urgent packages such as rations or radio batteries. This aerial support is essential, especially in the Eastern end of the Park where the scouts patrol in completely inaccessible by road. The plane lands in open areas of the park when needed for resupplying patrols and picking sick officers. This goes along way with building scouts moral and confidence in the field.
This year, CLZ were requested by The Nature Conservancy to provide technical support, through use of plane, pilot and aerial spotter for three aerial surveillance missions to better understand wildlife population densities and distributions, identify and observe illegal activity evidence and as a result plan more effective law enforcement approaches. The long-term goal of this activity was to demonstrate the utility and effectiveness of aerial support to collect data for ZAWA that will facilitate effective management of the wildlife resources in KNP. Ian Stevenson and Peter Tembo, highly experienced spotter and Assistant Operations Manager, undertook three trips to both carry out patrols and train ZAWA officers and GRI staff on techniques for spotting wildlife and illegal activity, and any activity found was followed up by teams on the ground, notified via air-to ground radio communication.

Please see attached reports from each trip (Annex 1, 2 and 3). These aerial reconnaissance missions were funded by The Nature Conservancy who donated Avgas for the plane totaling $14,503, which will provide enough Avgas for almost 190 hours’ flight in the Lower Zambezi.
Figure 4: Stage 1 – Aerial patrol in Northern KNP

Figure 5: Stage 2 – Aerial Patrol, Southern KNP
**Funding for 2015**

CLZ have secured funding from the African Wildlife Foundation for 2 hours/month aerial patrols (including maintenance costs). Thanks to The Nature Conservancy’s donation for Kafue NP aerial patrols, CLZ also hold enough Avgas to carry out 2015’s aerial patrol hours (excluding maintenance and oil).

See below for patrol tracks for 2014.

A huge thanks to Glenn Goodall for his support to CLZ and wildlife protection in the Lower Zambezi!

All Aerial Patrol Tracks for Chiawa GMA 2014
Appendix 1: Aerial Patrol Tracks by quarter, 2014
Jan - Mar 2014 Aerial Patrols Tracks for Lower Zambezi

Aerial Track Log April-June 2014