Brief of NOAO South A&F FY 2012 Fee Schedule

The A&F budget for the fiscal year 2012 of CL$1,784,238,953.- (US$3,756,293 at CL$475 per US$1) was prepared taking into consideration the financial constraints that are affecting both NOAO and tenant budgets. The budget shows a net increase of 4.2% in relation to the previous fiscal year budget. This increase is mainly explained by the inflation in Chile over the last year (3.2%) and increased labor costs driven in large part by the effect of the collective contract (an additional 1% in labor costs). We have projected cost increases at this level through FY 2012.

The Fees for FY 2012 have been determined by using this budget together with projected demands on per use services to obtain fees that cover the anticipated costs without allowing extreme variations in key fees. Critical fees for most tenants show changes of from 0% to 7%, as described below.

**Key Factors of FY2012 Budget:**

a) **Share Fees:**

In FY 2011, the share fee-related cost centers showed a significant deficit, due in part to the extremely adverse weather we experienced in June and July 2011. For FY 2012, the budget for these areas was reviewed taking into consideration the repair work that needed to be done as well as the realities of facilities maintenance not previously incorporated adequately in the cost models.

The key costs in the share fees are the maintenance of the 43km of road (not including “service roads”) and the maintenance of the 29km of power lines to both Cerro Tololo and Cerro Pachon. Most of the power line maintenance is done through external contractors, and those costs have been rising faster than inflation. Due largely to the rising cost of the maintenance and repair contracts, the power line maintenance costs in FY2012 have increased 7.8% above FY2011. Similarly, the budget for road maintenance shows an 11% increase due to projected work for FY2012. The budget is based on the additional needs for road work experienced last year. If the weather is not as bad, the additional funding will be put into much-needed repairs of key sections of the road.

*Changes in Power Line & Road Maintenance Calculation*

Historically, these maintenance expenses have been spread in three sections taking into consideration the geographical extension of each one but not the necessarily the level of difficulty inherent to performing these activities. Starting in FY2012 we have corrected this criterion, allocating the expense in proportion to the level of effort of the work and basing on the empirical experience of previous years. In any case, the budgeted amount for these areas is only sufficient to fund the current operational expenses, not considering investments such as major equipment replacement nor the execution of significant emergency road repair work.
Similarly, the budget plan for all sections of the electrical grid maintenance of the Mid-Tension mountain electrical grid shows only the plan for general routine maintenance, according to the quarterly power line maintenance schedule. This budget plan does not include funding for emergencies (such as wintertime emergencies), nor the cost upgrading of the mountain Power line to enhanced transmission quality standards.

The new expense distribution for these two operational areas are:

For Power Line Maintenance:

<table>
<thead>
<tr>
<th>Section</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gate to San Carlos</td>
<td>58</td>
</tr>
<tr>
<td>San Carlos to Tololo</td>
<td>16</td>
</tr>
<tr>
<td>San Carlos to Pachon</td>
<td>26</td>
</tr>
</tbody>
</table>

And for Road Maintenance:

<table>
<thead>
<tr>
<th>Section</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gate to Quisco</td>
<td>60</td>
</tr>
<tr>
<td>Pachon to Quisco</td>
<td>30</td>
</tr>
<tr>
<td>Tololo to Quisco</td>
<td>10</td>
</tr>
</tbody>
</table>

Although these values are based on experience over approximately the last five years of operations of both Tololo and Pachon, in FY 2012, the facilities group will begin to use timecards to track by road section or power line section in a systematic manner to provide additional documentation for the expense distribution.

b) Per Use Costs

Per use costs are notoriously difficult to project, given the sometimes large variations year-to-year in use, especially in meals and lodging. We continue our efforts to dampen the swings in these fees using long term historical trends and projections, while taking into account short term impacts such as inflation and specific use patterns driven by observatory engineering or other factors.

*Meal Fees +5%*

Inflation on food in Chile ran 5.8% during the period of FY2011, with increases continuing into FY2012 (annualized Oct-to-Oct increase was 6.6%), significantly higher than the average inflation of 3.2%. This additional cost growth is also reflected in the FY2012 fees for meals on both Cerro Tololo and Cerro Pachon, although we have limited the impact to a 5% increase in these fees and maintained them uniform across the two mountaintops. Of course, this increase comes after two years of constant meal fees, so the long-term trend remains well below inflation values.

As the new phase of the dormitory together with the new Kitchen facility in Cerro Pachon is about to start operating in the coming months, we have incorporated some “start-up” spending that will be
needed to equip these facilities and prepare them to enter into operations phase suitably and efficiently.

Lodging Fees +0%

Lodging fees are held fixed for FY2012. The strong demand for lodging in FY2011 led to a surplus in this area. The surplus, and any additional income from FY2012 (pending similar demand levels in FY2012, which is not assured), will be used to help the ongoing refurbishment of the dorms.

Other Fees +0%

In addition to Lodging, we managed to hold Census fees at 0%, reflecting lower staffing costs despite rising labor costs. Mountain water and Janitorial services were also held at 0%.

Garage and Maintenance Restructuring

The costs and charging of both the Garage and Maintenance groups have been restructured to reflect their increasing focus on facilities infrastructure instead of program hourly use. The staff of both groups has been trimmed, along with their responsibilities to provide hourly program services. A larger percentage overall of their total (albeit decreased) time has been programmed into the Census fee for facilities-specific work. These changes have led to the significant decreases in hourly fees charged to program, but will also lead to decreased availability of these services.

Summary

In the same way as over the last two years, the FY2012 rates were set having in consideration the aim of keeping to the largest possible and reasonable extent, cost stability to allow programs a better control of their costs. Following this direction, many of the rates will remain unchanged (0%), while others will be adjusted based on FY2011 inflation and the expected FY2012 inflation. Other specific items are exceptionally increased beyond the above margins.

Finally it is interesting to note that the rates that have been raised in general do not reflect the full extent of increases of the specific cost-of-living data published by the economic authority of the Government of Chile (such as the cost of food, fuels, etc.)