

Background

GCMRC is proposing to take the \$163,000 for airborne remote sensing in the AMWG approved budget for FY04, and add to that about \$130,000 that carried over from FY03 for a similar purpose. The result would be approximately \$300,000 to be used to conduct an entire canyon remote sensing mission using state-of-the-art multi-spectral digital imagery (NOTE: the estimated cost of doing the entire canyon is about \$330,000 but we will work with the contractor to determine if we can reduce the price or fly most of the canyon). The carryover is a result a failed mission in FY03. Equipment failure caused the contractor to default on a mission to collect analog imagery of the canyon and the money is now available for reprogramming. GCMRC recommends that the FY03 money be reprogrammed to provide the state-of-the-art product this year for the following reasons.

First, the original intent of the FY03 money was to support airborne remote sensing and is thus fully consistent with the intent of the AMWG for continuation of the same activity in FY04.

Second, combining the two sums of money gives the AMP the unprecedented opportunity to conduct a state-of-the-art airborne remote sensing mission of the entire canyon for the first time using multi-spectral digital technology. The AMWG-approved a four year study to evaluate remote sensing technologies in the Grand Canyon that was completed by Phil Davis under contract to GCMRC this year. The study cost about \$1.5 million over the four years of approved work effort and resulted in the strongest recommendation from a leading expert in the field, and GCMRC, that the AMP move to implement multi-spectral digital imagery acquisition immediately and abandon the technologically-inferior analog technology utilized in the past. Digital imagery can be examined the same day it is flown to prevent total mission failures, and it is computer exportable. In contrast, analog imagery (like that taken with a Brownie camera) cannot be examined immediately and requires scanning to convert to digital format. The results of the remote sensing initiative study were presented to the TWG at the October, 2003 meeting and the full report is on the AMP website.

Alternatives

Two alternatives are recommended for AMWG consideration by GCMRC:

- 1) conduct a whole canyon airborne remote sensing mission every other year using the new technology
- 2) conduct a half canyon (upper) airborne remote sensing mission every year using the new technology

GCMRC recommendation to AMWG

GCMRC does not support or advocate the continuation of airborne remote sensing using analog technology. Option number 1 is our preferred alternative. An added

advantage of option number 1 is that it would reduce the number of flights over the park to 50% of that required with an annual approach.

A decision is needed now to allow time for us to work with the contractor to get a contract in place for a spring overflight.