Sherman, Alana

From: Hobson, Brett
Sent: Wednesday, May 25, 2005 10:37 AM
To: Sherman, Alana; McGill, Paul; Cline, Danelle
Subject: Digital stills camera update

- The existing camera draws about 200 mA at 24 volts when operational and 20 mA between power-ups that are initiated by their intervelometer (time-lapse) controller
- USB can remain connected at all times, and is used only for file transfers
- The existing cameras (3.4 MPix, 4000m depth) cost $15k
- The existing camera housing is 5 in diameter and 10" long (the length I reported yesterday was a conservative estimate to account for the rear mounted connectors, cable mounting and 6000m upgrade

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From: Sherman, Alana
Sent: Wednesday, May 25, 2005 10:00 AM
To: Hobson, Brett
Subject: RE: Digital Still Camera for the Rover

How much are the cameras? Sounds pretty good, I am suprised the housing is so long.

Alana

-----Original Message-----
From: Hobson, Brett
Sent: Tuesday, May 24, 2005 5:10 PM
To: Sherman, Alana; McGill, Paul; Cline, Danelle
Subject: Digital Still Camera for the Rover

Hello Rover-ites,
I finally cornered Tom Olkowski at Insite Pacific to find out if they can supply the digital still cameras for the Rover. MBARI has worked with Tom on several imaging applications in the past and in fact, they are sending MBARI a digital still camera from for Ventana next week. Their existing digital still camera is only 3.4 M-pixels, though they have plans to upgrade to a 8 M-pixel camera in the near future. They essentially just re-package commercial cameras (Nikon Coolpix) into a pressure housing, add custom corrected optics and a remote electrical control system. While there may be other options by the time we get around to purchasing cameras for the Rover, I think we can "pencil in" this system to allow us to specify the rest of the control system.

Here are the relevant specifications:

1. Control: RS-232 link between our VCC and a local controller in the camera housing. This controller currently has a sleep mode where it draws 20 mA; I'm still waiting to hear what the estimated power draw is for the camera when it is active. The controller triggers mechanical actuators that manually push buttons on the camera.
2. Data Transfer: USB 1.1 link; I think this connection would have to be connected only when we're

downloading images from the camera to the VCC mass storage.

3. Mechanical: Titanium housing, approximately 5” diameter and 18” long

I’m waiting for them to answer the following questions:

1. Estimated power draw when the camera is active
2. Diameter, length water-weight and depth rating of the current Scorpio camera
3. Does the USB link have to be “open” to operate the camera?

If you have other questions, let me know or fee free to contact Tom directly at:

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From: Sherman, Alana
Sent: Tuesday, May 17, 2005 12:51 PM
To: McGill, Paul; Cline, Danelle; Hobson, Brett
Subject: Rover meeting

Lets meet Wednesday at 2pm in Ocean View to discuss the software aspects of the Rover project. Please let me know if this time is a problem for you and we can reschedule.

Alana