On Monday, June 13, TAAS hosted Steve Cary and Rob Vadurro of New Mexico State Parks on a private tour of two observatories—Tierra Mesa and GNTO.

Steve is Parks Planner and Chief Naturalist for New Mexico State Parks. He is also an advocate for, and the administrator of, an ambitious State Parks initiative to develop astronomy programs and facilities in parks throughout the State. Rob is a staff architect for the Parks, as well as an amateur astronomer.

For the roll-out phase of the aforementioned State Parks initiative, this team is charged with developing observatories in four State Parks, each located in a different quadrant of the State. The first facility to be developed will be City of Rocks State Park in the southwest quadrant. Clayton State Park is the frontrunner candidate for the northeast quadrant. A number of candidates are currently being considered for the other two quadrants.

The TAAS tour began at TAAS member Bob Ritt’s “Tierra Mesa Observatory,” his private imaging ‘pad’ on the east mesa of Belen. Bob had his observatory built to his specifications, and it provided the State Parks folks with a great example of a roll-off roof design. Bob’s observatory is equipped with a permanent pier currently topped with a Paramount mount from Software Bisque and a Celestron C-14 telescope. Bob’s CCD camera of choice these days is an SBIG ST-8. He has a very comfy imaging control room (with all the amenities) adjoining the observatory. The building has been thoughtfully designed, with extra attention given to sealing and ventilation, two major concerns in the hot, dusty high desert.

The inspection continued at GNTO, where Pete Eschman gave a thorough tour and history of our pride and joy, the General Nathan Twining Observatory facility, including both domes and the Ortega Building. The State Parks folks were particularly interested in the power system and impressed with GNTO’s energy self-sufficiency.

Many thanks to Bob Ritt, Pete Eschman, and Carl Frisch for assisting with the hosting and education of our astronomy-supporting brethren at State Parks. We wish them well in their campaign to establish permanent resources for astronomy in the State Parks.
President’s Message

The sky is a very busy place these days. NASA just recently propelled a mass of metal into a comet in order to blast a hole into the “dirty snowball” so that the mother ship can analyze the ejecta and peer into the resulting hole to gather data on the comet’s composition. The data gathered should give scientists information on the formation of the solar system, in effect peering into the distant past to unravel four billion-year-old secrets. Meanwhile the Hubbell telescope silently orbiting earth and is still one of the most productive space based scientific platforms ever in the short history of man’s exploration of space. Mercury and Venus are doing a Waltz in the western skies. There is a supernova lighting up in the Whirlpool Galaxy (M51). Yep lots going on and lots to see but for how long.

The availability of each and every one of these events and events like these are under assault. One would think that an achievement like the comet impact would be welcomed by all as a wonderful event that promises to unveil some of the mysteries of the universe and expand human knowledge. However, this lofty event representing the high achievement of engineering and science has resulted in NASA being threatened by a lawsuit. A Russian astrologer who is claiming the impact has upset the balance of the universe by disturbing the delicate orbit of the comet is filing the suit. Meanwhile the comet impact is filing the suit. Pursuit of Clear Skies” to about 40 an informative talk called “In

Since the comet is a solar system body she reasons (if you can call it that) her astrological chart is not disrupted and is causing her extreme distress. For her disrupted future she is suing NASA for just over $300,000,000. Now I think her chance of winning her case is that of a dirty snowball’s chance that has ventured too near the sun but NASA will have to fight it. I also wonder if she has opened the door to others who will attack scientific endeavors because of some other perceived harm.

Sometimes NASA does not need an enemy like the astrologer because they can be their own worst enemy. By designing the Hubbell space telescope to be serviced by manned flights NASA has doomed this workhorse of astronomical research to a fiery crash years before its usefulness has expired. Perhaps no one could have predicted the tragedies (except for maybe a Russian astrologer before the comet impact, of course) that have grounded the shuttle for so long and caused current NASA management to deem service missions to Hubbell too risky to perform. But NASA could find money to develop a way to service Hubbell by reconsidering the International Space Station or by only slightly slowing the development of the Mars initiative. As inspiring as manned space flight is, the ISS, billed as a highly useful research platform, to date has not lived up to that promise. Currently the ISS limps along barely able to keep the astronauts alive and badly needing a service mission from the shuttle.

The skies over much of the world are rapidly being lost to light pollution. New Mexico and Albuquerque are not immune to this creeping threat to our access to the sights in the sky. While our local car dealers and other business light their businesses at 3:00 AM to attract buyers (yeah, I often do my car shopping in the middle of the night) we are rapidly loosing our ability to see events like the supernova in M51. This event does not require very much light pollution to obscure. And while light pollution may never get so bad as to blank out brilliant Venus there is a real possibility of loosing naked eye visibility of dimmer Mercury and the slow-motion dance could be lost from sight.

What can we do, you ask. We have to stand united against the ever-present forces that would rob us of our ability to explore the heavens or any other realm of science for that matter. We may eventually lose the fight but we will never know if we could have won if we never try. We have to stand toe-to-toe with those who demand their rights by denying everyone else theirs. To do nothing is to lose much of what is dear to us.

Next time I will try to keep this article a little lighter and focus on the happier aspects of amateur astronomy. Sorry for climbing up on my soapbox but I just had to get this off my chest.

June 18 General Meeting Recap

Deirdre Kann of the Albuquerque National Weather Service presented an informative talk called “In Pursuit of Clear Skies” to about 40 TAAS members and guests. Her talk included climatology of cloud cover and weather patterns that are responsible for the cloudiest and clearest of days since public forecasts do not always seem “usable” for astronomers. She suggested online links and resources that could be used by astronomers to forecast their own observing weather. Deirdre also had examples of a radiosonde and balloon that record that the sounding data NOAA obtains from them.

July 23 General Meeting

Got Astro Trash? Want Astro Treasure? Then join TAAS for a swap meet of astronomical goodies, gadgets and gizmos during the July general meeting. Bring your experienced eyepieces, dust off that dormant set of extra star charts, and tote those telescopes and astro accessories on over to Regener Hall on July 23rd for some fun selling and swapping. New stuff is welcome too! The action starts at 7:00 PM. at Regener Hall on the UNM campus. A social hour follows the meeting. See ya there!
**GNTO News & Views**

Peter Eschman

We had a very enthusiastic group and great turnout for our training session on June 4. Although this event started out with us chasing sucker holes, things cleared up after almost everyone had left. Conditions were so good later, that Gordon Pegue stayed until 4 A.M. and I managed to hold out until 5 A.M. Sunday morning. Bob Hufnagel came down just to drag the road but did not have time to bring his scope, so special thanks to Bob for making a special trip to smooth out Twining Lane. Larry Cash brought his powerful yet quiet generator, which helped to ease the power load on our reduced capacity battery bank.

Larry Cash and Karen Keese did an excellent job with dual constellation tours. Larry covered Hercules and Lyra, while Karen covered many of the summer constellations. We had 13 scopes in operation with 25-30 people. Dale Murray and I offered a session on Introduction to GNTO on using the Isengard and GNTO loaner scopes. In the late afternoon, we got reflective tape installed on the new fence posts giving much better driveway visibility.

The GNTO committee met on June 9, at JB’s Restaurant on Eubank and I-40 with Ariel Boston, Larry Cash, Ray Collins, Pete Eschman, Dale Murray, Gordon Pegue, Shane Ramotowski, Alan Scott, Steve Welch and Bill Wallace attending. Topics included the GNTO battery bank status, plans for replacing the main dome flooring, and a discussion of how to distribute the GNTO work load. We will purchase modular flooring like that used in garages and will put down plastic sheeting beneath the new flooring. We decided to change the labels for the various parts of GNTO training to better reflect the goals of the introductory sessions.

In the week following the committee meeting, activity really picked up at GNTO. I will try to provide a brief summary, hoping I can keep the dates, activities, and people straight. On Monday, June 13, Karen Keese, Carl Frisch and I met with Steve Cary and Rob Vadurro from the State Parks Division of the New Mexico Minerals and Natural Resources Department. First we toured Robert Ritt’s fine roll-off roof observatory and then went to GNTO to show how we constructed our observatory. The state plans to build observatories at several state parks soon, and this was a fact finding mission for them. They will probably use a roll-off roof design, but they got a first hand introduction to our off-grid electrical system and other logistical issues at GNTO.

The following day, Tuesday, June 14, I met Dale Murray and Steve Welch at Direct Power and Water in Albuquerque. Dale wrote the big check and helped us load the four new Concorde 12-volt Absorbed Glass Mat (AGM) batteries along with some older used batteries. We intend to use some of the serviceable used L-16 batteries to bridge the gap between the old and new battery systems. Steve and I then took the batteries to GNTO. We relocated the old dead batteries, and moved the new ones into the dome area. All in all, we moved around 1600 pounds of batteries. Our new batteries do not require maintenance, do not produce gases, and have much lower internal resistance, so they will charge faster with less heat production.

On Friday, June 17, Ariel Boston, Dale Murray, Steve Welch and I met at Isengard Telescope and the new floor looks great! On Sunday, June 19, I went down to check on the new battery bank. Steve Welch met me there, and we spent a productive evening testing the GNTO StellaCam EX video camera on the Isengard in preparation for the Deep Impact mission with comet Tempel 1. The new battery bank was charged up, and the camera results were promising.

On Saturday, June 25, Dale Murray and I traveled to GNTO to install new battery cables. The new cables are much more flexible and have lower resistance. Later, Ariel Boston, Carl Frisch, and Steve Welch met us to attempt a “Train the Trainers” session on the GNTO CCD equipment. Unfortunately, we were thoroughly rained out, and left before sundown. Some of the lightning strikes were a little close for comfort, and the northern end of Twining road was quite slippery.

On Sunday, June 26, Dale and I went...
### Full Color Sidereal Times Now Available

**Barry Spletzer**

In a sweeping move to provide top quality communications to our members while conserving our precious resources, TAAS is pleased to re-announce the availability of this newsletter the *Sidereal Times* in full color. That’s right, catch the blush of the monthly speaker, the blue eyes and red hair of that cute 6-year-old at the School Star Party, the depth and vibrance of all the full-color illustrations.

The catch is that the full-color version is only available at our website: www.taas.org. If you prefer to download and read your newsletter on your computer rather than receive a paper copy by mail, please notify the TAAS treasurer, Shannon Mann at treasurer@taas.org to have your name removed from the *Sidereal Times* mailing list. This will provide you with the newsletter of your choice, save TAAS money, and earn you the undying (okay, maybe slowly dying) gratitude of our Sid Times printer – me.

---

**Dark Sky (SIG)**

The following activities are taking place in the Albuquerque area which will impact local astronomy activities (due to their night lighting).

1. **Mesa del Sol**
   - The Mesa del Sol Master Plan will be going to the EPC (City of Albuquerque Environmental Planning Commission) on August 11, 2005. Mesa del Sol is a planned community of nearly 13,000 acres to the west of KAFB.

2. **Oak Flat**
   - TAAS member David Frizzell has appealed a conditional use permit for a church and other facilities located very close to Oak Flat. David’s appeal is based on concerns about inappropriate lighting that will impact our use of Oak Flat for public star parties and informal observing. This is item 6 on July 6 agenda for the County Planning Commission (CPC). The meeting started at 9:00 A.M. and was located in the Vincent E. Griego Chambers, Concourse Level II, One Civic Plaza. (The agenda may be found at: http://www.bernco.gov/live/agendas.asp?agenda_id=6593&meeting_date200506. The hearing on this issue was deferred until the October meeting of the CPC. TAAS members may wish to discuss this issue a bit further, and see what we can do to help.
## August 2005

<table>
<thead>
<tr>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>3 ATM Workshop Valley High School 7 P.M.</td>
<td>4 UNM 22:06</td>
<td>5 UNM</td>
<td>6 GNTO NM</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11 GNTO Committee Meeting 7 P.M.</td>
<td>12 UNM 21:40</td>
<td>13 UNM</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>17 ATM Workshop Valley High School 7 P.M.</td>
<td>18 Board Meeting 7 P.M. (P &amp; A Bldg.)</td>
<td>19 UNM 12:53</td>
<td>20 TAAS General Meeting Full</td>
</tr>
<tr>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25 UNM</td>
<td>26 UNM</td>
<td>27 Oskar Flat</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10:19 Last Qtr</td>
</tr>
<tr>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td>SunRise &amp; SunSet Aug 1, 2005</td>
<td>05:36 / 20:17</td>
<td>Planet Rise &amp; Set for August 15, 2005</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mercury</td>
<td>05:10 / 19:02</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Venus</td>
<td>02:11 / 21:36</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mars</td>
<td>23:41 / 12:31</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Neptune</td>
<td>19:31 / 05:36</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Jupiter</td>
<td>10:38 / 22:06</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pluto</td>
<td>15:32 / 01:36</td>
</tr>
</tbody>
</table>

### ATM Workshop

Ray Collins/Mike Pendley atm@taas.org

The Amateur Telescope Making Workshop meets the first and third Wednesdays of each month at Valley High School, 1505 Candelaria—the north side of Candelaria, just west of 12th street. The meetings begin at 7 P.M. and are in Building E, Room #3.

### TAAS General Meeting

**Saturday, July 23rd, 2005**

**7 P.M.**

Regener Hall, UNM Campus

(see map on back page)

**Subject:**

TAAS Swap Meet

---

**Notes**


GNTO = General Nathan Twining Obs.

GNTO Training = GNTO Observing and Training.

UNM = University of New Mexico Observatory. Call the TAAS hotline @254-8227, or the UNM hotline @277-1446 to confirm, or unm_coordinator@taas.org.

ATM = Amateur Telescope Making. Call Michael Pendley for information @296-0549, or atm@taas.org.

P & A = UNM Physics and Astronomy. Corner of Lomas and Yale.

= School Star Party.
UNM Report

UNM Campus Observatory Coordinator

13 May 05: I didn’t have a chance of going down, but Dale said that there were only about seven visitors, who caught UNMO on a rare, clear night. UNM is in finals week, so the dome was not in operation.

Docents: Just Dale

20 May 05: Another clear night, with as many docents as visitors. Only four folks showed up.

Docents: Dale, Gordon, Ed, and myself

27 May 05: Late afternoon thundershowers, wind, and a high overcast sacked the effort this evening.

03 June 05: Returning to form, a fast moving front passed with clouds and wind, ruining us. I stayed until 8:45, but no one else showed up, so I threw in the towel.

10 June 05: A Rare clear night. The afternoon breezes dropped away at dusk, and what few clouds there were in the sky, stayed to the north. No visitors

Docents: Just Dale

17 June 05: Another clear night with about 25 visitors. Two graduate students brought out their personal telescopes.

Docents: Dale and the grad students. Gordon stepped by for a while, but didn’t set up.

24 June 05: Clouds and high haze made the evening marginal and there were no visitors.

01 July 05: A good night, but I couldn’t attend.

MEMBERSHIP SERVICES

for:
• Membership Inquiries
• Events Information
• Volunteer Opportunities

Contact Ray Collins at
membership@taas.org

for:
• Membership Dues
• Magazine Subscriptions
• Address/e-mail changes

Contact Heather Mann at
treasurer@taas.org

THE OAK FLATS SEASON IS WELL UNDERWAY.
THE DATES FOR THE REMAINING EVENTS ARE AS FOLLOWS:
JULY 30th, AUGUST 27th AND SEPTEMBER 10th.

The September slot is already filled so you must act fast before the rest of the dates fill up. Contact me ASAP. Otherwise, you might not get your first choice of dates and you might be left out! My e-mail address is joneil@earthlink.net or call me at 505.798.1958

Your responsibilities include picking up the keys at the Tijeras Visitors’ Center before 5:00 P.M. on the day of the event; opening both gates; ensuring that you or your designee locks up later that night; dropping off the keys in the Visitor’s Center lock box on the porch near the main entrance; making sure that Karen Keese is reminded of the event so that she can get a notice out to the media in plenty of time; and, finally, writing a report of the event for the Newsletter.

Neil M. Goldberg

The next observing session for the TAAS Messier 2005 SIG will be on Saturday 30 July 05 at Oak Flat. This will be an excellent opportunity for all SIG participants to view the night sky, since Oak Flat is a very dark spot. In Addition, it will be an opportunity for us to share our accomplishments and enthusiasm for the night sky with the public. Saturday is a regularly scheduled TAAS public star party at Oak Flat. Let us plan on arriving at 2000 (8:00 PM) and we will set up our scopes together in one area. This should be a real fun event and I encourage everyone to attend. If you have any questions or need star charts or other info please let me know. You can call me at 856-1593 or email me. I would also encourage you to invite and/or bring along guests, friends, etc.

Dee

The Official Newsletter of The Albuquerque Astronomical Society
Moving a Mountain of a Dish

Patrick L. Barry

Your first reaction: “That’s impossible!”

How on earth could someone simply pick up one of NASA’s giant Deep Space Network (DSN) antennas—a colossal steel dish 12 stories high and 112 feet across that weighs more than 800,000 pounds—move it about 80 yards, and delicately set it down again?

Yet that’s exactly what NASA engineers recently did.

One of the DSN dishes near Madrid, Spain, needed to be moved to a new pad. And it had to be done gingerly; the dish is a sensitive scientific instrument full of delicate electronics. Banging it around would not do.

Because Earth is constantly rotating, a single antenna on the ground can communicate with a probe for only part of the day, when the probe is overhead. By placing large dishes at three locations around the planet—Madrid, California, and Australia—NASA can maintain contact with spacecraft around the clock.

To move the Madrid dish, NASA called in a company from the Netherlands named Mammoet, which specializes in moving massive objects. (Mammoet is the Dutch word for “mammoth.”)

On a clear day (bad weather might blow the dish over!), they began to slowly lift the dish. Hydraulic jacks at all four corners gradually raised the entire dish to a height of about 4.5 feet. Then Mammoet engineers positioned specialized crawlers under each corner. Each crawler looks like a mix between a flatbed trailer and a centipede: a flat, load-bearing surface supported by 24 wheels on 12 independently rotating axes, giving each crawler a maximum load of 194 tons!

One engineer took the master joystick and steered the whole package in its slow crawl to the new pad, never exceeding the glacial speed of 3 feet per minute. The four crawlers automatically stayed aligned with each other, and their independently suspended wheels compensated for unevenness in the ground.

Placement on the new pad had to be perfect, and the alignment was tested with a laser. To position the dish, believe it or not, Mammoet engineers simply followed a length of string tied to the pad’s center pivot where the dish was gently lowered.

It worked. So much for “impossible.”

Find out more about the DSN at http://deepspace.jpl.nasa.gov/dsn/.

Kids can learn about the amazing DSN antennas and make their own “Super Sound Cone” at The Space Place, http://spaceplace.nasa.gov/en/kids/tmodact.shtml.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.

The Official Newsletter of The Albuquerque Astronomical Society
June 16th, 2005
UNM Physics and Astronomy Building Conference Room

MEETING MINUTES

Directors present: Dale Murray (President), Becky Ramotowski (Vice President), Gordon Pegue (Secretary), David Blair, Larry Cash, Ray Collins, Pete Eschman, Dee Friesen, Shannon Mann and Shane Ramotowski. Barry Gordon was in attendance as an observer.

Directors absent: Heather Mann (Treasurer), Ray Collins and Bob Hufnagel.

Meeting called to order at 7:02 P.M.

Corrections to the May Minutes
None to report.

Treasurers Report
As Heather, the Treasurer, was not in attendance, there was no report. However, there was activity by the Board with regards to the Treasurers position. Dale reported that due to personal circumstances, Heather requested an extended leave of absence in a previous conversation with him. The Board recognized the need for Heather to deal with her personal issues and as an interim step, formalized the creation of a committee – the Treasury Committee – composed of Dale, Pete and David. The purpose of this committee is to manage the TAAS accounting and database records until such time as Heather returns to the position. It was noted the email correspondence sent to treasurer@taas.org would be forwarded to Pete.

Correspondence
Dale reported on a message he received from a Tony Allred, a friend of Tim Worrell who is the executive director of the Lone Tree Adventure Camp, a children's summer camp, in Capitan, NM. In his message, Mr. Allred requested a 6” to 8” telescope donation from TAAS to be used at the Adventure Camp for their summer camp activities. The consensus of the Board is that issue should be resolved by the ATM Special Interest Group.

Event Retrospect
a. The May 21st General Meeting featured a Telescope Tune-up / Optics Cleaning Workshop hosted by Shane and Becky Ramotowski in which some 40 TAAS members and guests participated in the activities.
b. The “GNTO Spring Cleaning” event held on Sunday, May 22nd at GNTO was very successful. Refer to the full GNTO report elsewhere in this issue of the newsletter for more details.
c. The outcome of the TAAS Observing Event at Chaco Canyon scheduled for Saturday, May 28th was unknown, as the Board could not obtain a report from anyone who might have attended.
d. The June 4th GNTO observing session featured additional member activities including training sessions and constellation tours and was attended by 25 to 30 members and guests with 13 scopes in operation. Refer to the full GNTO report elsewhere in this issue of the newsletter for more details.
e. A special private TAAS star party at the Manzano Mountain Retreat Center was held on Tuesday, June 7th in cooperation with volunteers from the American Cancer Society. The event was very successful with some 65 special children and 11 adults entertained by the 8 telescopes that the TAAS volunteers setup.
f. Our third Oak Flat Public Star Party of the season scheduled for Saturday, June 11th was rained out.

e. The June 18th General Meeting will feature a presentation titled “In Pursuit of Clear Skies” by Deirdre Kann of NOAA.
f. A special TAAS public star party, “Isotopes and Telescopes”, is scheduled for the evening of Tuesday, June 21st at the Isotopes Park.
g. The July 2nd GNTO observing session will be a “new moon” event.
h. The July 9th GNTO observing session will feature training activities.
i. The regularly scheduled meeting of the GNTO Committee will take place on Thursday, July 14th.
j. The regularly scheduled meeting of the TAAS Board of Directors will take place on Thursday, July 21st at the Physics and Astronomy Building on the campus of UNM.
k. Our fourth Oak Flat Public Star Party of the season is scheduled for Saturday, July 30th. An Event Owner is needed!
l. The August 6th GNTO observing session will be a “new moon” event.
m. The regularly scheduled meeting of the GNTO Committee will take place on Thursday, August 11th.

Old Business
The focus of the Old Business portion of the meeting was dealing with the Action Items delineated during the TAAS Board of Directors meeting back in January. Gordon presented four (4) groups of Action Item issues for resolution:

a. Resolution Actions:
   1. Sanction official status of “Special Projects SIG”
   2. Sanction official status of “Messier SIG”

Shannon motioned to accept, by Board Resolution, the official status of both of these Special Interest Groups (SIGs). David seconded and following a brief discussion of the formation history of TAAS SIGs, the motion passed unanimously.

Committee Reports
a. Membership: No report
b. GNTO: Refer to the full GNTO report by Pete Eschman elsewhere in this issue of the newsletter.
c. Education: Shannon reported that the participants in the Education Committee planned to get together at the Lodestar Planetarium Friday evening, June 17th. The purpose of the meeting was to begin laying out the schedule of school star parties for the upcoming school year. Shannon noted that the school star party schedule should be finalized by August.
d. Grants and Other Income: Larry reported that he has sent a donation request to Meade for a Deep Sky Imager, an entry-level CCD camera. Dee spoke about a possible relationship between TAAS and Don Chalmers Ford that he plans on investigating.
e. Special Projects: No report.
f. Special Interest Groups (SIG’s):
   1. Messier 2005: Dee acknowledged with grateful thanks Larry’s extensive participation in and assistance with the SIG. Dee also noted that he is willing to continue heading up the SIG in 2006.
   2. ATM: David noted at the June 1st get-together, there were 7 members present and that mirror-finishing techniques were discussed. David noted that at the June 15th get-together, there were 7 members who participated in fabricating Coude testing masks. David also noted that ATM participants are checking out the SIG mirror-testing equipment regularly and that this indicates a healthy state of affairs for the SIG.
3. Elimination of “Scout Troop 110 SIG”

Elimination of this SIG was tabled based on the consensus of the Board that there may be interest in continuing this activity in the future. It was also noted by Pete that it is very important that all efforts be made to collect and collate all TAAS Resolution materials in order to streamline the yearly acceptance of extant resolutions that takes place with each yearly change of the Board.

b. Standing Committee Elimination Actions:
1. Eliminate the “Grant Writing Committee”
2. Eliminate the “Light Pollution Committee”
3. Eliminate the “Public Relations Committee”
4. Eliminate the “Scheduling Committee”
5. Eliminate the “Lodestar Committee”

Pete motioned to eliminate all five (5) of these committees as a single member has either assumed the function of each committee or because the committee has served its purpose and is no longer necessary. David seconded and following a brief discussion on the merits of using a Task Force – a temporary organizational instrument that may be created, staffed and disbanded by the will of the Board – to deal with business or activity situations that may arise in the future, the motion passed unanimously.

c. Seated Board Member Requirement Actions:
1. Remove the requirement from the “Newsletter Editor” position
2. Remove the requirement from the “Webmaster” position

A motion on the first item was made by David and seconded by Dee; a motion on the second item was made by Gordon and seconded by Larry and after a brief discussion, both motions passed unanimously.

It was also noted that careful attention to detail would be required when updating our Corporate Bylaws and other reference materials as a result of all of these actions.

d. Appointed Position Elimination / Merge Actions:
1. Merge the “Database Manager” responsibilities into the “Treasurer” position and eliminate the “Database Manager” position
2. Eliminate the “Lodestar Committee”
3. Eliminate the “Planetarium Director” position
4. Eliminate the “Lodestar Ad Hoc Member” position

Pete motioned to eliminate both of these appointed positions. Larry seconded and after a brief discussion, the motion passed unanimously.

New Business

a. Shane reported on a request he has received regarding the participation of TAAS in assisting the Edgewood Parks and Recreation Advisory Commission to organize a star party in Edgewood this fall. The consensus of the Board was that Shane should follow up with his contact, a Mr. Glen Felton, in order to determine the feasibility and possible schedule.

b. Gordon noted that it is time to get started with organizing for the upcoming TAAS Astronomy Day activities planned for Saturday, September 10th at the Coronado Mall. Dee noted that, subject to his schedule commitments, he would be willing to head up the organizing effort.

c. David reported that the plans for the upcoming astro-photography contest at the Lodestar Planetarium are progressing with Karen Keese heading up the effort. Neil Goldberg, David Blair and David Beining – who will coordinate the Lodestar end of things – will assist Karen in her efforts.

d. Dee reported that he had had a meeting recently with David Beining at the Lodestar Planetarium. At the meeting, Mr. Beining raised the question of how many General Meetings TAAS would like to hold at the planetarium in 2006. The consensus of the Board was that no more than two (2) meetings per calendar year would be acceptable. Dee said that he would pass on this information to Mr. Beining.

Meeting adjourned at 9:10 P.M.

Listen up, all astrophotography enthusiasts! It is time to get your submissions ready for the fourth annual Astro-Images of New Mexico: Portraits from the Foothills of Space contest and exhibition. Co-hosted by TAAS and LodeStar, the popular event is a celebration of the beauty of New Mexico’s skies. It is also a rather unique forum for creative expression by amateur astrophotographers.

Up to 30 of the celestial images submitted will be selected for exhibition at the LodeStar Astronomy Center from October 15, 2005 through the end of February 2006. That’s right, tens of thousands of people could see your work hanging in a museum!

Images must have been taken in New Mexico. There is no residency requirement, and it does not matter when the image was taken. There is no admission fee.

The deadline for contest submissions is Friday, September 9, 2005. Like last year, the four submission categories are Land & Sky, CCD, Plate/Film/Digital, and Photo Illustration. Contest rules, including detailed information on the categories, the format requirements, and the submission requirements, can be found on the contest brochure/ application, which will be posted shortly to both www.taas.org/ astroimages.html and www.lodestar.unm.edu/events.html.

As in previous years, the contest will be blind-judged by a well-rounded panel. As before, valuable prizes will be awarded for First and Second Place in each category, and for Best of Show. Honorable Mention certificates will also be given out in each category. This year, we have a very exciting prize lined up for the Best of Show entrant; watch next month’s newsletter for details.

Many thanks to this year’s expanded planning committee of TAAS and LodeStar reps who are hard at work carrying on the tradition of this successful program: David Nelson Blair, David Beining, Neil Goldberg, Sandie Koson, Judy Stanley, Karen Keese, and Bobby Childers.

There are a lot of imagers, both seasoned and novice, who have joined TAAS within the last couple of years. Therefore, we expect to see some new talent infusing the exhibition this year, and we hope to see more TAAS members with their work in the spotlight. No excuses!
It seems that TV needs just one more reality show.

Not some farce like “The Bachelor” or “The Apprentice” but something on the astronomical side. Let’s see….. For un-originalities sake let’s call this one “The Astronomer.”

The winner receives a year-long all inclusive at any large observatory of their choosing anywhere on the planet. Just a few of the amenities included are endless supplies of caffeine, sugar, and other so-called dietary no-no’s that astronomer’s fuel themselves with. No wake up calls before noon, and a stockroom full of charged batteries, Red LED’s, Naglers and emergency liquor.

“Billions and billions” of wannabes have filled out questionnaires and have been individually interviewed by a panel consisting of Steve O’Meara, David Levy and Billy-Bob Thornton. (Yes Billy-Bob, this is a TV show remember) The panel has narrowed the contestants down to 10.

The 10 finalists will compete weekly for the prize.

So what might some of the astro-challenges be? Well, I was thinking of some easy stuff to begin with like:

Week #1: Contestants have to recite from memory, “The Star Splitter” with a red flashlight in their mouth and be understood with-out drooling. That’s simple enough right?

Week #2: Contestants have to find Pluto with 6” of aperture or less and sketch the field for 6 consecutive nights. Piece of cake!

Week #3: Contestants have a race assembling and polar aligning a Losmandy G-11 accurately.

Week #4: Contestants are asked to name all of the constellations in right ascension order.

Week #5: Contestants are given blank star charts and have to plot all of the Messiers within 2 degrees of their correct positions.

Week #6: The five finalists have to hand grind and then figure a 10” mirror to 18th wave.

Week #7: Since 3 contestants were eliminated during last weeks mirror grinding challenge we only have 2 weeks remaining.

Week #8: The last 2 finalists each have to build a telescope with the mirror they made the week prior with additional pieces scavenged from a junkyard. (I could not do a show without incorporating something from junkyard wars.)

In all likelihood, this means there will be secondary mirrors made from rearview mirrors, primary mirror cells made out of hubcaps, truss tube assemblies made out of welded together shock absorbers, and dew shields made with spare tires.

A modified retractable cup holder for drinks and eyepieces would probably show up on at least one if not both of the scopes.

The junkyard scopes might also incorporate self cleaning mirrors using left over windshield wiper blade assemblies. Or maybe not. Perhaps a blinking turn signal light used to indicate which direction of travel the telescope is going next might be a feature.

Of course there’s got to be some built in motorized goto feature. So let’s hope to see at least one of the finalists with a hacked GPS system formerly used in a Hummer. The system could utilize the in-dash map sets except the maps would be replaced with star atlases and by using a scope mounted steering wheel from a wrecked Lexus the astronomer could just steer to the desired coordinates on the chart and the object would be visible through the scope. A voice would dictate driving directions. Hearing “Turn Left at Orion” would not be unusual.

The winning scope might have some fuzzy dice dangling from the finder scope which has been crafted out of a piece of tailpipe.

Oh my gosh! Do I hear a Hemi in one of those beasts? And who found that NASA antennae ball that’s stuck on that dew shield? Look at those astronomers go! And check out that Jaguar hood ornament on top of that guy’s finder!!! And look over there, that guy used a propeller for a mirror cooler and has some wicked looking ground FX neon lights coming out from under the drive platform.

And now as an anticlimactic final week, the first wannabe that discovers a previously unknown asteroid with their junkyard scope wins.

But look, the final two contestants are Barry Spletzer and Pete Eschman and they won’t leave the junkyard because they are each trying to find more red LED’s.

That’s okay guys, I’ll take the prize.

Let’s see…. do I want Keck or Kitt Peak?

* Please note this is what happens when there are more hours of daylight than dark. This astronomer’s brain just doesn’t function properly and it makes them write ridiculous things about telescopes.

* Also note that if “The Donald” is in any way offended by this, then he should just get a real life and buy a telescope. Heck, he should just buy his own observatory.
to GNTO again, to finish recalibrate the charge controller for the new batteries. It turned out that the initial set of values we had used were not quite in line with the manufacturers specs, so we needed to get things properly configured. The new batteries were fully charged when we got there.

Our first July event took place on the 2nd of the month. Again Bob Hufnagle made a special trip down to smooth Twining lane with the road dragger. Bob did not bring his telescope but he did manage to grab a few spare photons in the early evening before returning to town. Once again, thanks Bob for your outstanding dedication! We had a very successful event with a good turnout, and good viewing conditions.

We used this night for final preparation for the Deep Impact mission with comet Tempel 1. Carl Frisch brought the CCD camera back to GNTO and helped Steve Welch get it set up. Steve managed to capture a series of short CCD exposures to document the comet’s pre-impact status. We also had good success using the StellaCam EX with a .6 focal reducer on the Isengard 16”.

We had an informal event on July 3 for the Deep Impact mission. We used 170 amp hours out of our battery bank the night before. I was pleased to see that the system regained a full charge during one sunny day. This event was also well attended, but by a largely different group of folks than the previous evening. We were unable to iron out difficulties with the CCD setup on the Astrophysics scope, but did have the StellaCam EX video camera and .6 focal reducer working well on the Isengard. Steve had the video feed running to a video recorder, so we have a permanent record of the evening’s observations.

I had my 20” f.5 Obsession set up and tracking Tempel 1, and the comet appeared rather small and indistinct prior to the impact. At the time of the impact, Ariel Boston was at the eyepiece of my scope, and at around two minutes after impact, she said the comet appeared brighter. I looked for the first time at around 4 minutes after impact, and indeed, the comet was now sporting an increasingly bright nucleus. I was amazed.

Everyone got a chance to see the comet after impact in my scope, and we tracked it for at least 40 minutes longer, until it merged with the murk near the western horizon. The unprocessed video results from the Isengard look promising as well, showing a definite brightening of the comet.

This was a truly unique event, and if you weren’t there, you missed an historic occasion: the first time we smacked something in the sky so hard that you could see the results in your own telescope!

As far as upcoming events go, our only scheduled event for August is our new moon observing opportunity on August 6. A 4-percent moon will set at 9:16 P.M. If you need more information about the event you can contact me at gnto@taas.org or call 873-1517. If you are calling for information, please do so before 5:00 P.M. on Saturday.

Our next GNTO introduction sessions will be on September 24, in conjunction with our fall GNTO Open House and Equinox Picnic. This event will also feature another of our popular two level Constellation Tours

You really should plan a trip to GNTO soon. We have two great loaner scopes on easy to use dobsonian mounts, and our Isengard 16” is providing some really great views these days. You need to check out the new drive system on the Isengard and the new flooring in the main dome! The comfortable Ortega Building is available for socializing and our Guest Trailer is available for coffee, hot chocolate and any snacks you might want to share. With all this great equipment at GNTO, what are you waiting for?

GNTO committee meetings are open to any interested TAAS members and this is a great way to get more involved with your observatory. We need your help. Our next scheduled meetings are July 14 and August 11. We meet at 6:30 P.M. at JB’s Restaurant on Eubank just north of I-40. If you have questions about access and availability of GNTO, please contact me (Peter Eschman, gnto@taas.org, home phone: 873-1517).

I hope to see you soon at your observatory.
Star Hill Inn
the premiere astronomy retreat
in the country – since 1988

- Charming vacation guest houses with private baths, kitchens and porches, secluded on hundreds of acres of peaceful pines, under 6.5 + magnitude dark, spectacular skies
- Twelve telescopes from 7” to 24”, including 12” LX200 GPS and 16” LX 200, 14” Celestron CompuStar and 24” R/C Cassegrain; CCD cameras: ST-7, ST-8 and STV Digital Video Camera
- Observation deck, Astronomical Library, Personal Guided Star Tours • Close to Santa Fe, Taos, ski resorts, and wildlife refuges.
- Birding, Hiking and Labyrinth. Open all year.
- 7200’ elevation • Ideal for astronomy clubs, retreats, reunions, and holidays.
- Gift Certificates Available.

Star Hill Inn, Sapello, NM 87745
505.425.5605 • www.starhillinn.com

Advanced Telescope Systems
www.AdvancedTelescope.com
Manufacturing Quality Portable and Permanent Telescope Piers

FOR SALE:  13” Coulter Truss (Dob Telescope)  (11/4 inch adapter)
- JMI focuser  • Telrad Finder  • Laser Collimator  • And more....
Asking $800
Contact: Brock Parker    213 Garcia NE    Albuquerque, NM 87102
or Larry Cash  307-1880     lcash16@comcast.net for more pictures.

FOR SALE:  8” Coulter Truss (Dob Telescope)  (11/4 inch adapter)
- JMI focuser  • Telrad Finder  • And more....
Asking $300
Contact: Brock Parker    213 Garcia NE    Albuquerque, NM 87102
or Larry Cash  307-1880     lcash16@comcast.net for more pictures.
2005 TAAS Board of Directors/Staff

**PRESIDENT**
Dale Murray
296-2479(H)
president@taas.org

**VICE PRESIDENT**
Becky Ramotowski
286-8334(H)
vp@taas.org

**SECRETARY**
Gordon Pegue
332-2523(H)
secretary@taas.org

**TREASURER**
Heather Mann
771-0126(H)
treasurer@taas.org

**EDUCATION**
Shannon Mann
771-0126(H)
education_coord@taas.org

**GNTO DIRECTOR**
Pete Eschman
873-1517(H)
gnto@taas.org

**MEMBERSHIP**
Ray Collins
344-9686(H)
membership@taas.org

**DIRECTOR**
David Blair
296-9632(H)
david@taas.org

**DIRECTOR**
Larry Cash
299-4686(H)
larry@taas.org

**DIRECTOR**
Shane Ramotowski
286-8334(H)
shane@taas.org

**Public Relations Officer**
Karen Keese
261-0040(C)
pr@taas.org

**Events Coordinators**
Larry Cash/Shane Ramotowski
299-4686(H)/286-8334(H)
events_coord@taas.org

**TAAS Web Master**
Barry Spletzer
294-4601(H)
webmaster@taas.org

**Newsletter Editor**
Dan Richey
286-7993(H)
editor@taas.org

**Newsletter Printer/Proofing**
Barry Spletzer
294-4601(H)
barry@taas.org

**Grants Coordinator**
Barry Spletzer
294-4601(H)
barry@taas.org

**Telescope Curator**
Dale Murray
296-2479(H)
telescope_loans@taas.org

**TAAS Archivist**
Pat Appel
292-0463(H)
archivist@taas.org

**TAAS Librarian**
Dawn Gray
856-2054(H)
librarian@taas.org

**ATM Coordinator**
Ray Collins
344-9686(H)
atm@taas.org

**ATM Coordinator**
Michael Pendley
296-0549(H)
atm@taas.org

**UNM Observatory Coordinator**
Vacant
unm_coord@taas.org

**Dark Sky Coordinator**
David Penasa
darksky@taas.org
MEMBERSHIP: You may request a membership application by sending e-mail to membership@taas.org or calling (505) 254-TAAS (8227). Applications may also be downloaded from the Web site. Annual dues to The Albuquerque Astronomical Society are $30/year for a full membership and $15/year for a teacher or student (grades K-12). Additional family members may join for $5/each (teacher, student and family memberships are not eligible to vote on society matters). New member information packets can be downloaded from the website or requested from the TAAS Membership Services Director at membership@taas.org You may send your dues by mail to our newsletter return address with your check written out to The Albuquerque Astronomical Society or give your check to the Treasurer at the next meeting.

MAGAZINES: Discount magazine subscriptions to Sky and Telescope and Astronomy as well as discounts on books from Sky Publishing Corporation are available when purchased by TAAS members through our society. Include any of the above magazine renewal mailers and subscription payments as part of your renewal check. Make checks out to TAAS (we will combine and send one check to the publisher). Warning: publishers take several months to process magazine subscriptions.

ARTICLES/ADVERTISEMENTS: Articles, personal astronomical classified advertisements and business card size advertisements for businesses related to astronomy must be submitted by the deadline shown on the Society calendar (generally the Saturday near the new Moon). Rates for commercial ads (per issue) are $120 per page, $60 per half page, $30 per quarter page, $7 for business card size. The newsletter editor reserves the right to include and/or edit any article or advertisement. E-mail attachments in Microsoft Word, 11 point Palatino, justified, no indent at paragraph beginning, one space between paragraphs is preferred. ASCII and RTF are acceptable. One column is approximately 350 words. Contact the Newsletter Editor at editor@taas.org for more information.

CHANGE OF ADDRESS: Note that the Sidereal Times is mailed at a nonprofit organization bulk mail rate. As a result, the newsletter will NOT be forwarded to your new address should you move!! Please provide the Treasurer (treasurer@taas.org) with your new mailing address or e-mail address to ensure that you receive your newsletter.

TAAS LIBRARY: Please contact the Librarian at librarian@taas.org or 856-2054 to check out a book or make a contribution.