AU AstroNews The Newsletter of the Astronomical Unit

#### June 2007

Sponsored by the Santa Barbara Museum of Natural History

# **OUTREACH SUMMARY**

The last month was pretty quiet for outreach. The big new scopes at Westmont are finally in operation, and they will be training us in using them for public nights soon. AU volunteers Andy Allen, Chad Caprio, Bill Clausen, Krissie Cook (and her Quasars), Jason & Tim Crawford, Ruben Gutierrez, Art Harris, Jürgen Hilmer, Tom King, Pat & Chuck McPartlin, Edgar Ocampo, Javier Rivera, Nancy Rohrer, Tom Whittemore, Jim Williams, Tim Wittenburg, and Sean from Valencia showed the sky to <u>523</u> customers.

# **OUTREACH FOR JUNE**

Here are the AU events scheduled so far for June. Events are subject to change, so to get the latest information on schedules, or directions, just contact Chuck at 964-8201 or <u>macpuzl@west.net</u>

# FRIDAY, JUNE 1, 6 PM

Annual AU potluck picnic by the Broder building, across the creek at the Museum.

#### SATURDAY, JUNE 9, 8 PM

Monthly Public Star Party, next to Palmer Observatory at SBMNH. Jupiter and Vesta should get high enough to look at this month.

#### FRIDAY, JUNE 15, 8 PM

Monthly Public Telescope Night at Westmont College, just outside Carroll Observatory.

#### WEDNESDAY, JUNE 20, 8 PM

Telescopes for campers at Refugio State Beach. The skies at Refugio are usually amazingly good for being right on the beach.

# SATURDAY, JUNE 23, 8 PM

Slide show and telescopes for campers at Lopez Lake. Campsites provided for AU volunteers Friday and Saturday nights. **GRIFFITH OBSERVATORY TRIP: RESCHEDULED FOR JULY 11TH** 

Because of the fires near Griffith Park on May 9, the NEW DATE for our trip is WEDNESDAY, JULY 11TH. As before, we will all meet at the Santa Barbara Museum of Natural History parking lot and our trusty airbus will leave at 9:30AM. Please come early to check in and get your shuttle ticket. There's not too many second chances in life for a great thing but here's one of them. The trip is sold out and all of you who paid for a boarding pass are now scheduled to go on the July 11th trip. If anyone has a question, or would like to get on a back up list in case one of the original 40 can't make it, please call Ruben Gutierrez at (805) 450-7451.

### THE COMET THAT ALMOST WAS

by Ed Edwards (adapted from original by Jack Eastman, Michael Gardner and Ed Edwards)

Many, many long years ago there were three high school students; good friends and members of the school astronomy club. They were also members of the Los Angeles Astronomical Society and made mirrors in the basement of the Griffith Observatory, then under the direction of the illustrious lunar astronomer, Dr. Dinsmore Alter. Of these three, the first, Jack Eastman, owned a Unitron 2.4 inch refractor and had ground and polished a 6 inch mirror from which, and a length of galvanized stovepipe, he made a Newtonian reflector telescope. The second, Mike Gardner, similarly completed a 6 inch 'scope, and the third, Ed Edwards, had finished a 4 inch reflector which he had mounted on pipe fittings and a pile of lumber that looked like a genetically malformed saw horse tilted generally towards the north. The year was 1956, and Edwards had obtained that most prized of teen-aged documents, a driver's license. With this, and the loan of his father's 1948 Buick woody station wagon, he invited his friends to leave the murky skies of the Los Angeles Basin's South Bay and travel to the fabled Palomar Observatory for a long weekend of observing. Into the station wagon they piled all the telescopes, evepieces, star charts,

sleeping bags, WWII surplus coats and what passed for food to young men of this age. They traveled along two-lane roads and byways, through vineyards and orange groves (there being no freeways in those days), into the San Diego back country, and up the long, winding grade to the top of Palomar Mountain. There they found a flat area, near a gas station, and within a few miles of the famed observatory proper. They unloaded camping gear, warm coats, telescopes and such, and began assembly of their equipment. As darkness fell they collimated and aligned on north. At this altitude the summer evening was cold. The skies were clear and, in the mid '50's, before the infection of mercury and sodium vapor lamps, very dark. Even the seeing was respectable. After the last glimmers of astronomical twilight, Jack pointed his 6-inch at Antares and nudged it a bit to the west. "Let's have a look at M-4," he said. After a moment he grunted discontentedly. "Well, here it is," he said, "but it's not a whole lot better than back down in sludge basin." Mike worked his way around for a look, but, in the dark, bumped the 'scope slightly. "Wow," Eastman exclaimed, "here's M-4 and it's blowing my eye out!" Sure enough, M-4 was spectacular with the 28mm Orthoscopic in the f/8 6inch. "Well, if that's M-4, what the heck was that other thing?" Jack exclaimed. Back toward Antares, he found the first object again and studied it intently. It was a very faint, fuzzy blob, somewhat elliptical, with an 11<sup>th</sup> magnitude star at its western edge. Averted vision suggested that the unresolved gossamer glow fanned out eastward from the faint star. "You know," Jack said, "that looks for all the world like a comet with a very condensed coma. Somebody get me Norton's". Ed fetched Norton's Star Atlas, 1954 edition, and examined it with a faint red flashlight. "Here, Jack," he said, "Just Antares and M-4, and that's it." Jack looked. "Well, did we bring Webb's?" Mike rummaged and found the hand-drawn atlas by the great variable star observer, Harold Webb. It was verv good for faint stars, but deep sky objects were shown only as small crosses. None-the-less, there was only one cross near Antares and that was M-4. "I guess we'll just have to wait and see if it moves", Jack said. They all took a good look. Besides the object, there were only two field stars in the 28mm, and these were very faint. For a hour or so they looked at all the clusters and galaxies they couldn't see from home, then they went back to the suspect. "I think it's gone a little north," Jack said. Mike

took a look. "Well, it's moved," he said, "but not much, and I actually think it's a little west." Ed took a look, too, and called it maybe a tiny bit north-west. Not very conclusive. After another hour they tried again, and again they agreed on movement but just which direction, exactly, was still in doubt. Finally, Scorpius began to set. To the east, eerie spot lights in the ridge-top forest proved to be the moon rising, and they were no longer able to see the comet, for in their minds, by now, a comet it surely was. "Guys," Jack said, "the moon's up. They can't still be working up at Palomar. Let's run up there and see if we can raise anybody." They jumped in the car and headed for the Observatory. Now today, to think you are going to be admitted at night to the grounds of a working observatory is folly, but in 1956 things were different. The three boys were already part of a group of high-school kids that were sort of pets at Mount Wilson. They knew most of the night assistants there and even served as occasional helpers to the wonderful, old solar observer, Joe Hickox. Even Ira Bowen, Mount Wilson's director, tolerated them. Naturally, with the confidence of youth, they assumed they would be equally welcomed to the world's greatest observatory. It was five miles of winding road to the great domes. and now the steely glimmer of dawn was appearing in the east. During the trip they discussed the naming of their comet. Jack had seen it first, if only by a minute or two, but it seemed appropriate to let him have priority. It was also the case that his name was first alphabetically, so alphabetical order it would be. Comet Eastman-Edwards-Gardner. It sounded good. Parking in the visitor lot, they jumped out and headed up the path toward the 200 inch. In the grey light they met a man bundled in a heavy coat, leaving the huge dome. They explained what they had seen and asked if someone might be able to help them verify their find. The gentleman spoke slowly and in a very thick German accent. He said that if they would return down the path they had come up, they would find a small building, a warming shack, just off to the side, and that a man there, Charlie, would be able to help. This kind German gentleman later proved to be the famous Rudolf Minkowski who, with the equally famous Walter Baade, developed the two-part Type-I, Type-II classification of supernovae still used today, and who was at this time the director of the 48-inch Schmidt camera Palomar Sky Survey. Charlie was Charlie Kerns, night assistant at the 48-

inch Schmidt. He listened to their story. If it is a comet, he said, they could come back the next night and he would take an exposure with the Schmidt camera. In the mean time, would they like a tour of the 48-inch? You bet! And tour they did, up, over, around and through, checking out the plate vault, looking through the loading hatch at the spherical vacuum fitting that deformed the thin glass photographic plates to match the Schmidt's curved focal plane, climbing up the ladder to peer at the aspheric corrector plate. After they had examined all details of the mighty Schmidt, Charlie said "Hey, I've got a new star atlas over here. Maybe it will tell us something about your comet." He pulled out the Atlas Coeli Skalnate Pleso by Antonin Becvar of Czechoslovakia. Published in 1950, it had not yet reached many amateur hands, certainly not those of impoverished high school students. Charlie thumbed through the many pages until he found Scorpius. The three peered over his shoulder as his finger moved up to Antares. There was the star, and there beside it was a large yellow circle with a cross....M-4. But also, between M-4 and Antares, and snuggled tightly up against the bright star, was another, smaller yellow circle, also with a cross. This one bore the label NGC6144. And thus comet Eastman-Edwards-Gardner instantly evaporated into the 6,144<sup>th</sup> object in Dreyer's great New General Catalog of the deep sky objects of Sir William Herschel. They had committed the same blunder that had led Charles Messier to create his famous list of comet frauds in 1774. A faint, obscure globular cluster and a fortuitously placed foreground star had led them astray. Charlie apologized for bursting their balloon, but the three knew the odds were against them. It was hope that created the comet, not logic. At least they had been treated, with courtesy and respect, to a once-in-alifetime tour of the world's greatest observatory by men they most admired....professional astronomers. It was a night they would never forget. Jack Eastman became an optical design engineer, building cameras that have been to Mars and Saturn. He is retired now from Lockheed-Martin and, as the honorary Chief Observer of the Denver Astronomical Society, still studies the moon and planets with the 12 inch Newtonian he built the year after these events. Mike Gardner is retired from bookstore management and still observes from under a roll-off roof in Berkeley, California. Ed Edwards slipped sideways into the sister science of

Geology and is still at labor. He is a member of the Santa Barbara Astronomical Unit and a regular at the Wednesday night meetings of the AU "Rouge Rats" in Broder Hall. The three still meet nearly every May at the Riverside Telescope Makers Conference in Big Bear, California, where, over an occasional beer, they retell the stories of their youth, including this one.

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June 2007							
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
					1 Potluck SBMNH 6PM	2	
3	4	5	6	7	8	9 SBMNH Star Party 8PM	
10	11	12	13	14	15 Westmont 8 PM	16	
17	18	19	20 Refugio State Beach 8PM	21	22	23 Lopez Lake 8PM	
24	25	26	27	28	29	30	

The Astronomical Unit

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