

YEAR 1991

January 8, 1991

FastCad drawings of the Knoll #4 underground utilities were sent to Bob Rigley at S.I Washington for planning purposes.

January 18, 1991

The Iraq War has been underway for a week.

February 1, 1991

The first section of the 11 meter telescope was hauled up hill.

March 1991

Work continues on the Base Camp buildings and the new road to the Elephant Head Bridge.

June 14, 1991

Completed small steel sided building for the 11 meter project.

June 17,1991

Bill Omann started working full time at the MMT mirror project under the University of Arizona Stadium (the mirror lab).

June 24, 1991

Contractors investigated the "oil spilled soil" in the Amado School Yard.

August 1991

SM&R stated enlargement of the 60-inch loading lock. The door to the 48-inch was also enlarged to a 7 foot width.

Mark Calaluca started planting trees around the 11 Meter dish to provide some wind protection.

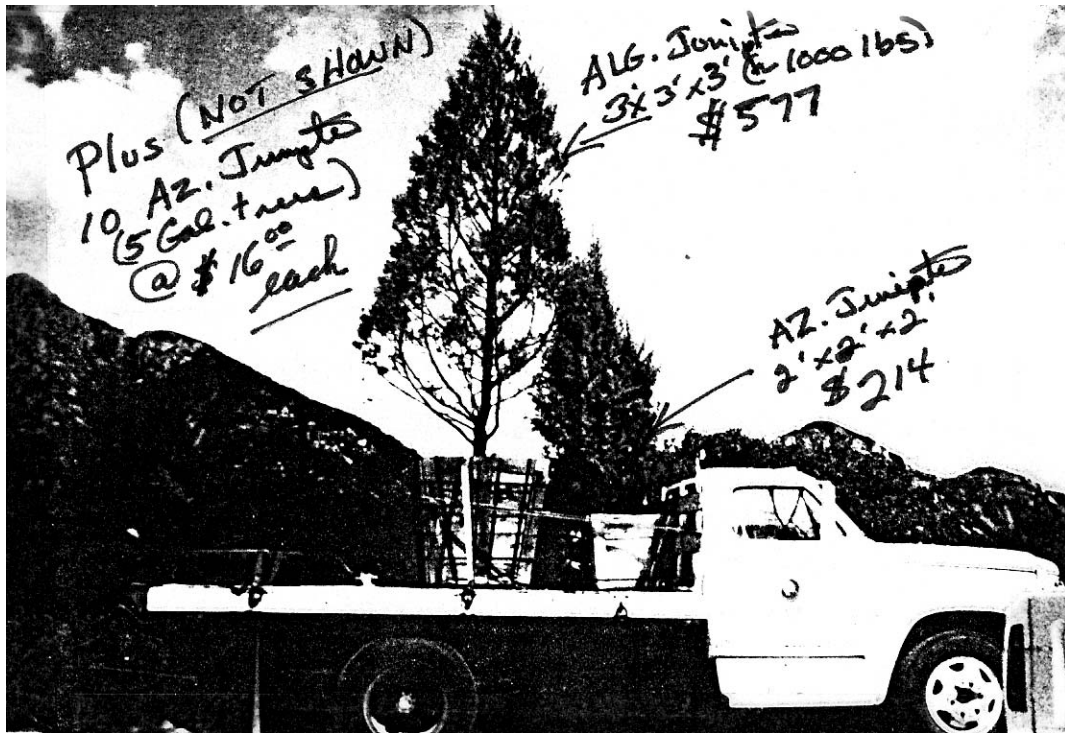
September 4,1991

Marion Aymie, SAO Human Resources Director, made a visit to the Observatory.



MARION AYMIE - KAREN MYERS - DON HOGAN

Marion rode uphill in the tour bus with visitors to the observatory. Simply stated she did not like the road. She requested that she be driven downhill very *slowly*. I did exactly that taking nearly 2 hours to get to the office. A drink at the Cow Place in Amado later helped calm her nerves. Quote "Never Again, Not Me!!!"



September 6, 1991

Trees delivered to the Gamma Ray Site to act as a light shield for years to come.



DAVE FEGAN - TREVOR WEEKES - DON HOGAN

September 10, 1991

Cesar Lopez joined the FLWO motor pool as a mechanic

October 10, 1991

SMITHSONIAN INSTITUTION
ASTROPHYSICAL OBSERVATORY



FAX
2/670-6779
INFORMATION
2/398-2432

BUS
602/6
FTS 7

FRED LAWRENCE WHIPPLE OBSERVATORY

Edward Horine, FLWO Observer, Dies Unexpectedly

It is with great sadness that we announce the death of Edward A. Horine, an observer at the Smithsonian Institution's Whipple Observatory, who had been associated with Harvard and Smithsonian astronomy for nearly forty years. He died unexpectedly at his home in Arivaca, Arizona, on Thursday, October 10. He was 57.

Born in Webb City, Missouri, in 1934, Ed attended New Mexico State University at Las Cruces and, in 1952, while a student there, worked part-time for the Harvard Meteor Program established in New Mexico by Fred Whipple. Four years later, after holding co-op and part-time positions at the White Sands Missile Range and other local research institutions, he joined the Harvard project full-time. In 1959, he transferred to the new Smithsonian Astrophysical Observatory Satellite Tracking Program, which had been established by Whipple and which employed, as some of the first trackers, several veterans of the former meteor project. Ed served as a satellite tracker, station manager, and master observer at several stations in the worldwide network, including Arequipa, Peru. He came to the newly-established Whipple Observatory on Mount Hopkins in southern Arizona in 1968 to work as the field engineer for astrophysicist Trevor Weekes' gamma-ray project.

Since the mid-1970s, Ed had served as a master observer on the Whipple Observatory's 60-inch Tillinghast Reflector Telescope, conducting observations in support of several Center for Astrophysics projects, including the CfA Redshift Survey. During routine observations one night in September 1984, he discovered an unusual gravitational lens (2237+0305) in the constellation Pegasus, subsequently identified as the nearest of these objects ever found.

Ed is survived by his wife, two step-children, and four adult children of a previous marriage. Services will be held at 3 p.m., Saturday, October 12, at the Green Valley Mortuary, 2200 N. La Canada Drive, Green Valley, Ariz. Queries about contributions or remembrances should be directed to Ginnee Larson, Whipple Observatory, 602/670-5701. Condolences can be sent to Mrs. E.A. Horine, P. O. Box 1392, Green Valley, AZ 85622.

October 12,1991

Montosa Canyon Base Camp, new office, visitor center, and motor pool was occupied.



NEW OFFICE/BASE CAMP NEAR ENTRANCE TO MONTOSA CANYON

The interior walls, desks, file cabinets, and other furniture were all painted pink. Everything is pink! I was sternly informed that "it is not pink, Don...it's mauve!" Oh well, it sure looked pink to me!

October 23,1991

Len Maestre died in Concord, Mass. Len helped establish the Laser Ranging System for the Satellite Tracking Station (1968-1970).



THE WICKIUP

This prefabricated metal building was obtained from government surplus. It was originally called a Lewis Building and was recommended for use as an officer's latrine or enlisted man's mess hall.

In an attempt to give this building a southwest flavor it became a Wickiup. The dictionary defines a Wickiup as an American Indian hut made of brushwood or covered with mats or *any rude hut*. I certainly was that!

No matter what we did we could never get the floor to stop squeaking when you walked from one end of the building to the other.

December 9, 1991

Telegram:

From: Don Hogan - FLWO Support Group

To: Mr. Ralph Dumas, SAO Property Control Officer

Subject: AUTHORIZED DESTRUCTION

12/09/91 0847 AM X AGGRESSIVE ATTACK COMMENCED ON WICKIUP BY FORT APACHE AGENCY INDIANS (ESTIMATED 20 TOTAL) X ONLY CASUALTIES - RESIDENT MICE X NO RESISTANCE FROM PASSIVE FLWO STAFF X ASSISTANCE NOT REQUIRED X FINAL REPORT FOLLOWS WHEN STRUCTURE ACTUALLY LEVELED

While the "Wickiup" was dismantled by this Indian crew they stayed at local motels and ate at local restaurants. I had breakfast with them several mornings at the "Cow Palace." They had a U S Government credit card and used it to their advantage. Boy could these guys eat. Unbelievable! They all ordered two selections from the breakfast menu. While they were eating they ordered two box lunches for each man... "to-go"... for lunch later. I suspect they ate the same way at their evening meal.



WICKIUP-UPSTAIRS AND DOWNSTAIRS BEING DEMOLISHED

FLWO LETTERHEAD

To: Mr David Reinhold
Forest Manager
Bureau of Indian Affairs
P.O. Box 560
Whiteriver, Az 85941

Dear Mr. Reinhold

Several weeks ago your crew of twenty men disassembled and hauled away our excessed prefabricated old dormitory.

Under very difficult weather conditions (rain, snow and wind) these people did an outstanding job. They worked hard and

efficiently on the observatory grounds without incident. The leadership of Mr. Joaquin Kessay was obvious and very much appreciated.

I hope the assembly of this building goes as smoothly as the removal went here on Mt. Hopkins and you get many years of service from our old "Wickiup."

It was a pleasure to work with your people.

Thank you,
Steve Criswell
Manager

YEAR 1992



PAVED RIDGE ROAD

The asphalt paving solved the dust problem around the telescope buildings. Please note the guard rails and the bike lane. This place is really becoming civilized.

January 22, 1992



Figure 2-2
Stirling Dish Main Components

83 mirrors

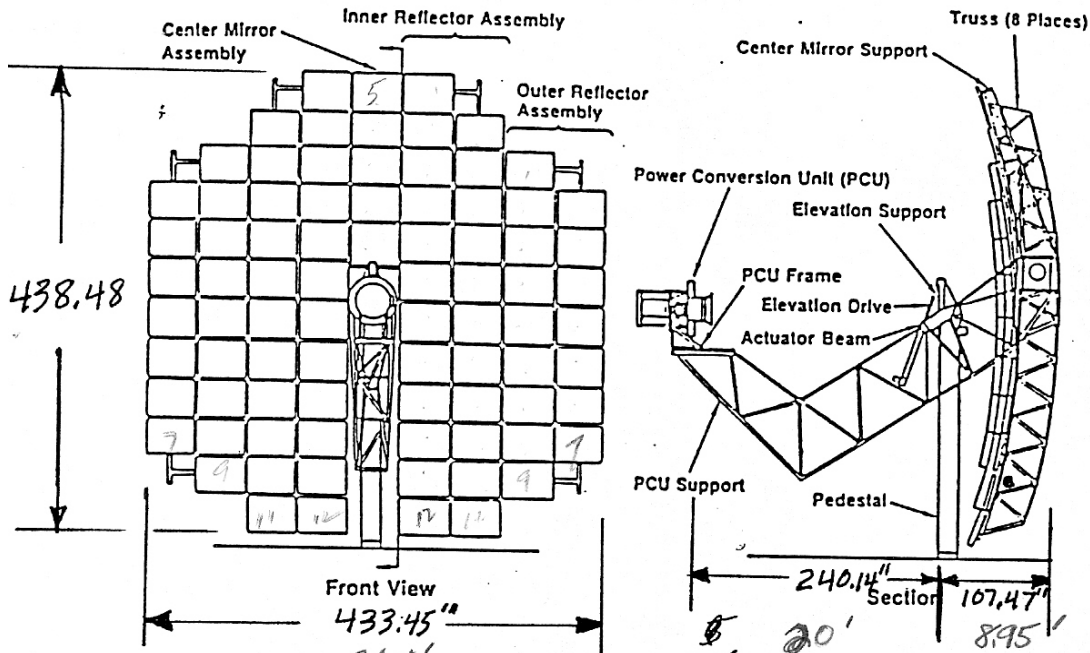
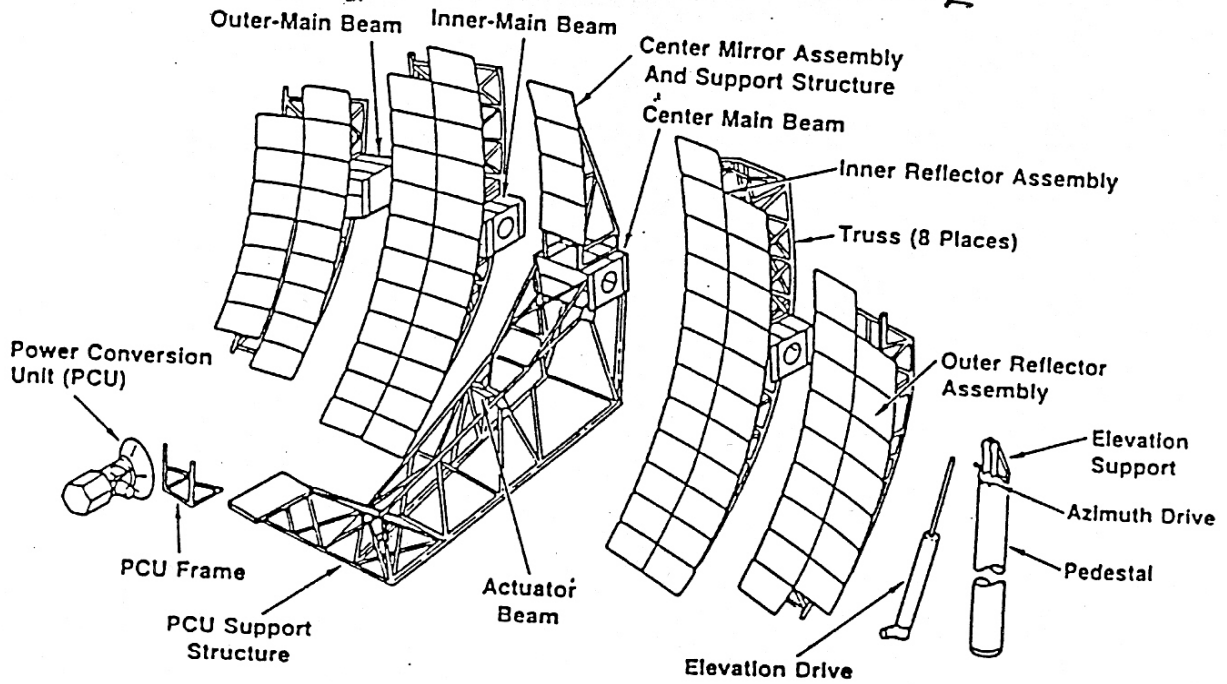


Figure 2-5
Stirling Dish Subassemblies

11 METER - BASE OF KNOLL #2





11 METER TELESCOPE

You're Invited

11-meter Telescope Dedication Dinner

Montura Restaurant
Tubac Golf Resort
(formerly Tubac Country Club)

Wednesday, January 22

7:00 p.m. Cocktails in the lounge
Complimentary sodas, margaritas, beer & wine
Salsa & chips

7:30 Dinner

Montura Salad
Roasted Chicken *Rice Pilaf* *Fresh Vegetables*
Apple Crisp

SMITHSONIAN INSTITUTION
ASTROPHYSICAL OBSERVATORY

Support

FAX
2/670-6779
INFORMATION
2/398-2432



BUS
602/6
FTS 7

FRED LAWRENCE WHIPPLE OBSERVATORY

February 5, 1992

Dear Steve,

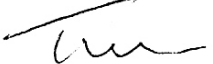
In the rush to get on with playing with our new telescope, we should not neglect to take time to express our thanks for a job well done. Let me stop now and thank you and all the Whipple staff who have helped to bring the 11m gamma-ray telescope into being. In particular I want to express my appreciation for the efforts of everyone who helped make our dedication and workshop an outstanding success.

In my 25 years at the Mount Hopkins/Whipple Observatory I have experienced many emotions. I have never felt such joy in being associated with the observatory as I did on January 22 when the dedication (despite our gamma-ray efforts at organization!) was made to work smoothly by the quiet work of your support staff who really know how to put on a good show.

I know I speak for all members of the collaboration when I ask you to convey our thanks to all members of your staff (and particularly to Karen Myres) for all the effort they expended. I hope that they felt some of the pride in this achievement as we felt. We feel truly fortunate to work with such a great group of people.

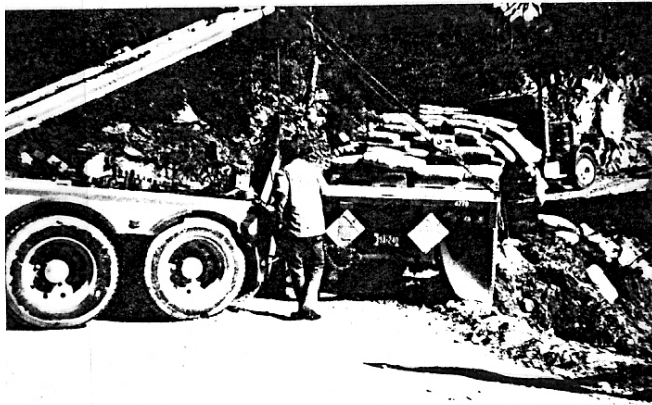
It is up to us now to make the best use of our new instrument; hopefully we can do this without making as large an impact on the support group as we have made in the past few months.

Yours sincerely,


Trevor C. Weekes

cc. J.Huchra
I.Shapiro

April 6, 1992



FLATBED TRUCK WITH CEMENT LOAD

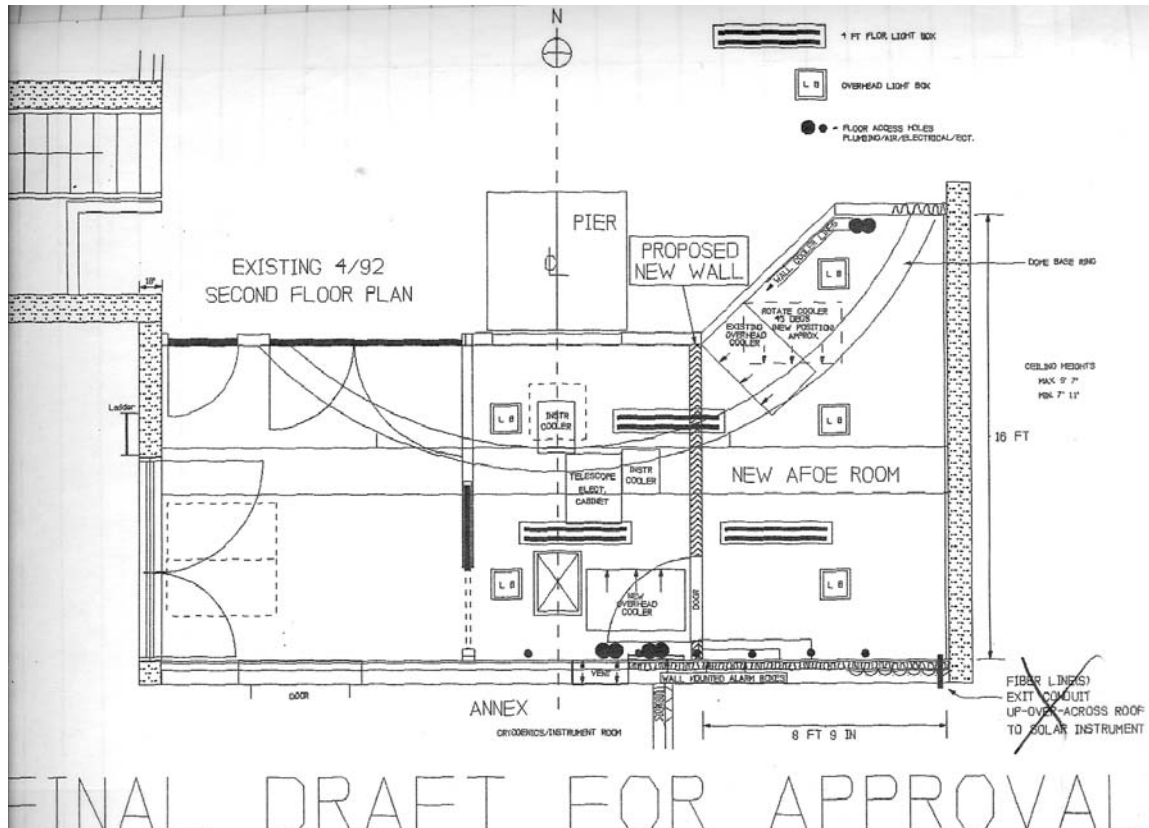
The driver of this flat bed truck misjudged the turn above the observatory's spring. He was hauling 14 pallets with 30 sacks of cement on each pallet. When the flatbed tilted two pallets slid off covering the road edge and the spring area with a thick grey power. He was hopelessly stuck and blocked the road for six hours. A large wrecker arrived from Tucson in the middle of the afternoon. The wrecker lifted the rear of the trailer and put in back on the road. The driver went uphill for about 150 yards and repeated his error. He was again lifted back on the road. The truck was driven to the next wide turn and parked overnight. A different driver delivered the load to the Iota site the next day.

Several days were required to cleanup the mess along the road. The spring was not contaminated.

A second tour bus was dispatched from the Base Camp to bring the visitors down. The same was done with the daily shuttles to get people to and from the telescopes. The road was opened around 5:30 PM. The contractor was not happy about paying overtime to his delayed workers.

The next day the contractor (Soto) poured 26 cubic yards at the IOTA site for the building's floor.

April 7, 1992



The final(FastCAD) draft of the proposed AFOE room in the 60-inch telescope building was faxed and forwarded to interested parties.

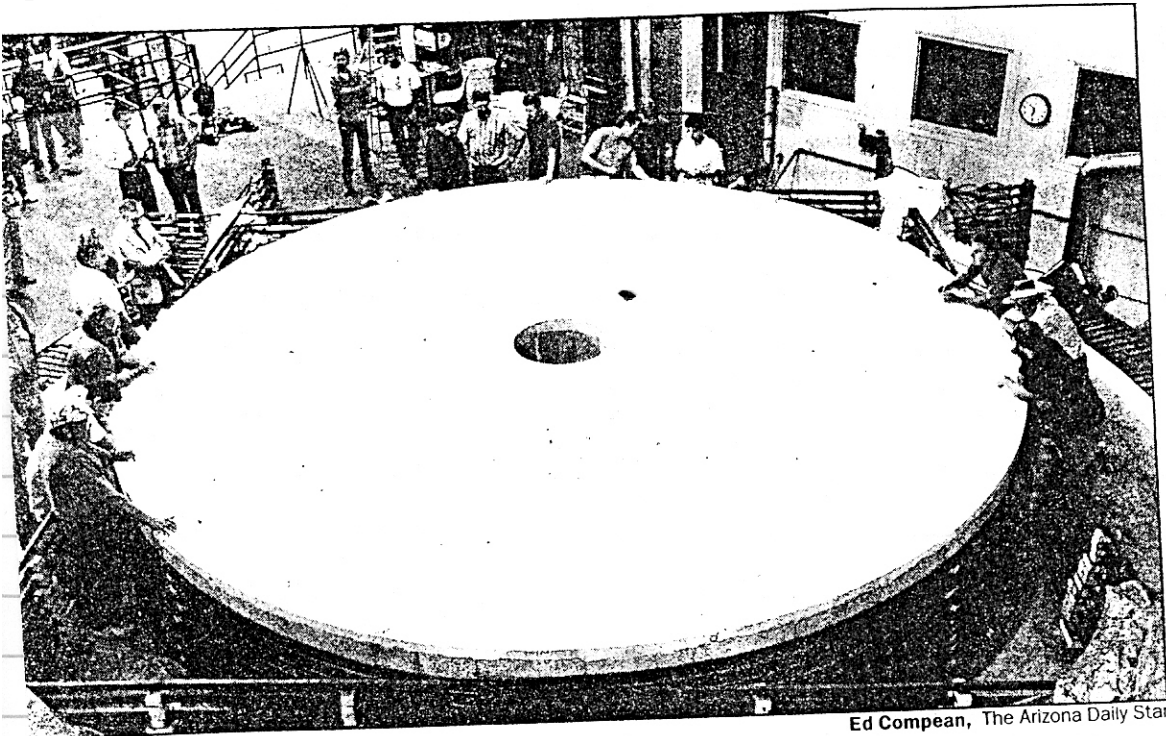
When approved all work will be done in house by Support.

June 12, 1992

The 1000 pound AFOE table was installed in the special room at the 60-inch building.

The first Advanced Fiber Optic Echelle (AFOE) observations were obtained November 5th 1992. The AFOE is expected to measure periodic shifts in radial velocity to a precision of better than 1 m/s on bright stars.

July 14, 1992



Ed Compean, The Arizona Daily Star

6.5-meter telescope mirror is the center of attention at University of Arizona mirror lab

The photo above shows the largest telescope mirror ever cast in the United States. It rests in the lab beneath the Arizona Football Stadium. It was later installed at Mt Hopkins and replaced the six mirrors at the MMT site.

September 1992

FLWO Road Work

From now to December 1992, the following FLWO road projects will occur:

1. Citizens Utilities will replace the power cable under the road from the Ridge to the turn below Gamma Ray and near the Residence area entrance drive. *8/9/16 Completed*
2. *Completed* The existing paved road will be patched at various places. *9/11*
3. The road will be paved from the ridge to the gate and the existing paved road may be chipped and sealed. *Ace Asphalt*

During this period, the road will be open at night and most days. When work is underway, the contractors must open the road at night and allow passage of the scheduled morning, 8:00 am, 8:30 am, 4:00 pm, and evening shuttles. The 11:00 am shuttle will not run on days that the road is closed.

If you want to use the road during the day, contact the Amado Base Camp on 602 670 5701 for the latest road status.

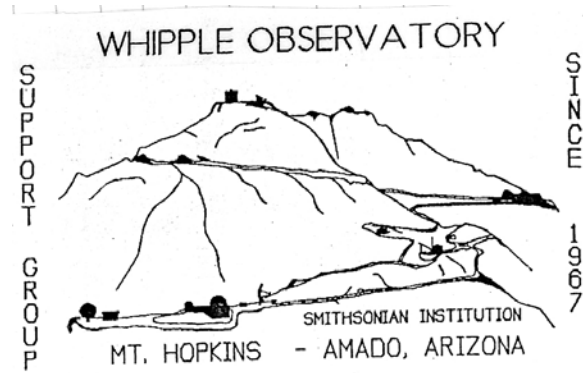
If you must use the road on a day it will be closed, call the base camp in advance. We cannot guarantee access, but you will have a better chance of being able to arrange for an option if we know schedules in advance.

If you try to talk your way through at the work site, the contractor has the last word. Remember, each work stoppage costs the contractor dollars. Although this may not matter to you, it does to the contractor.

It will always be possible to park a vehicle on one side of the work and walk to the other side of the contractor's work site.

August 25, 1992

copies: AT&T, FLWO/MMTO Staff, FLWO Volunteers, Frequent Users, Forest Service, OIR, SAO Travel, U.S. West



October 2, 1992

The Support Group ordered 4-dozen baseball caps with the design shown above to celebrate 25 years on Mt Hopkins. I used a digitizer and FastCAD at home to accomplish this task.

We should have ordered more since they sold out in just a few hours. Eleven caps were given to Volunteers and retired Support people.

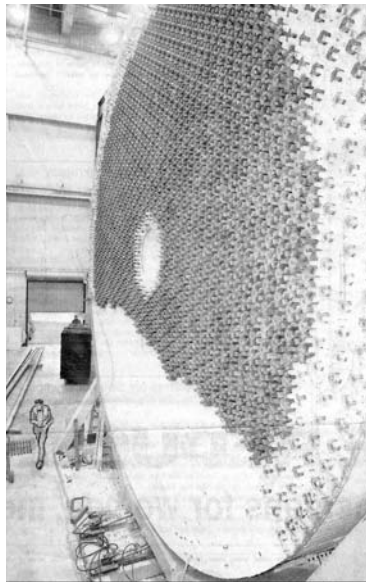
At home and at night I used "Word Perfect" to write a FLWO History using the same logbooks used to write this Event History.

Ordered 3-dozen, more baseball caps from Buffalo Son in Amado to meet demand - Price \$4 each.

November 2, 1992

William Clinton was elected as President.

November 11, 1992



TELESCOPE MIRROR REMOVED FROM OVEN

December 23, 1992

Miles Williams retired after working 5 years in the motor pool. His retirement was celebrated at the annual Christmas Party.

YEAR 1993

January 18, 1993



(News photo by Dave Ricker)

Pecan trees uprooted by the flood waters from FICO's groves are impaled on the south underside of the Continental Road bridge Tuesday morning.

After two days of heavy rain the Amado Crossing and the Elephant Head Bridge was closed. The following day the bridge was opened. Support spent two days plowing snow, sanding, and clearing rocks off the road.

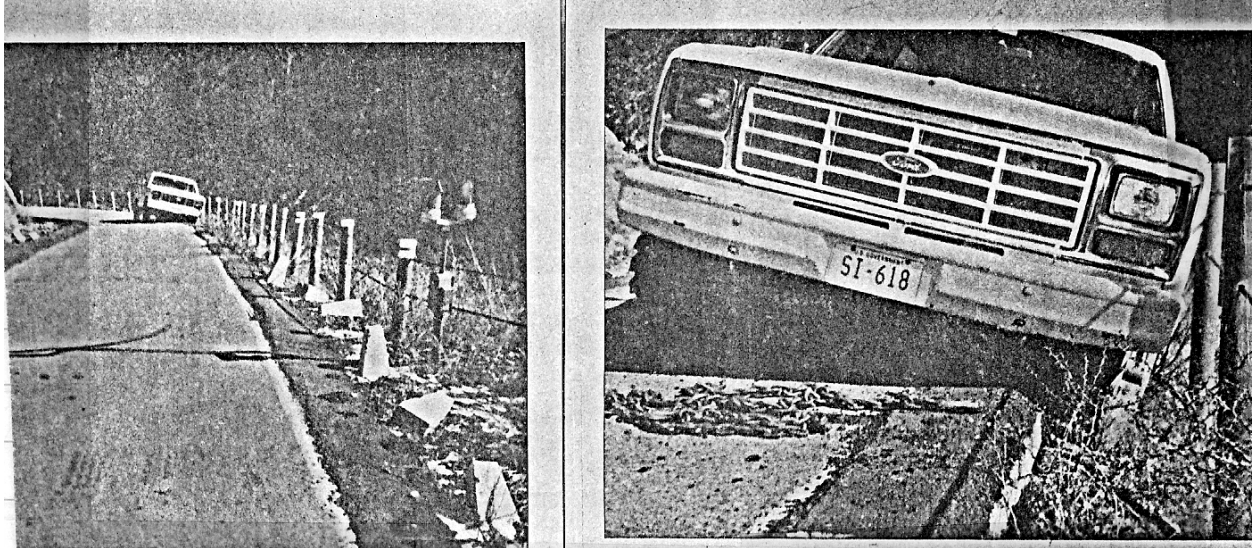
February 7, 1993

Learned today that Jim Jones will be out for the next six weeks. Surgery maybe required if treatments don't work. Dave Martina was sent to Mississippi for military training. The Support Group consists of only two men. A request was made for temporary assistance.

February 15,1993

Myron and I plowed snow for two days. Gary McAninch, the tour bus driver, helped by sanding the icy road. Inquired about getting an equipment operator from Sierrita Mining and Ranching. Myron Clark is scheduled to retire in June. HELP...ASAP!!!

February 25,1993



9 PM an experienced mountain driver, Bill Kindred, drove off the road to the MMT. The next day we used a front end loader to put the vehicle back on the road. Quote..."Stuff happens!!!"

February 23, 1993.

Annual leave donations were requested for Jim Jones. Starting in March NO SMOKING will be allowed in any building and in the shuttles.

March 11, 1993

Many tons of stuff arrived at the base camp for the IOTA project. Assisted by Nat Carlton and his wife Kay the next two days were spent loading and hauling this new equipment.

???? 1993

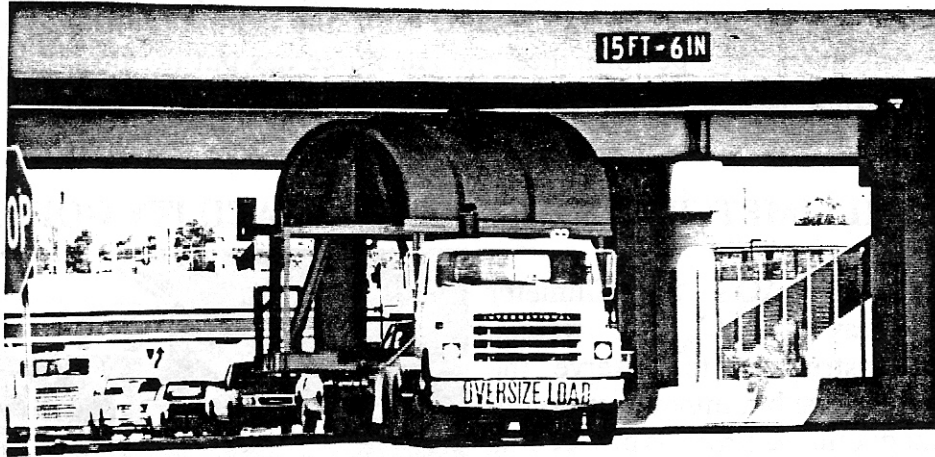
Sometime prior to November 1988 the Observatory obtained a large a 20 Ton crane from the government's excess property list. It was used, mostly at the MMT to lift mirrors and associated equipment in and out of the dome. The maintenance on this machine was a constant problem. Furthermore it had to be inspected and certified for use on a regular basis. Moving it up and down the mountain road and from site to site was a two man operation. One man drove, using all of the road edges on turns, while the second man rode in the "dog-house" steering the boom around and thru trees and other obstacles.



MODEL M 320 T-20 TON TRUCK CRANE - CLASS 10-79

The ultimate test of this crane came during the construction of the IOTA facility at approximately the 8,100 foot level.

IOTA PASSES FIRST BIG TEST--ON THE FREEWAY



An IOTA telescope transporter, en route from Tucson to the top of Mt. Hopkins, barely squeezes through an underpass on US I-10. (Photo by Dan Brocius)



MYRON CLARK CRANE OPERATOR

Myron Clark checking out the crane for use at the IOTA site.

Infrared Optical Telescope Array - IOTA



TELESCOPE SHELTER

PEDESTAL SET ON RAILS

March 5 - 9, 1993

Checked the crane at the Base Camp for the IOTA pedestal lifts. The estimated weight of each telescope base was six tons. The actual measured weight was 11,100 pounds. We used a Dodge 2 ½ ton flatbed truck, maximum payload 11,665 pounds, to haul the pedestal to the site. We needed the A/C Front End loader to pull the truck the last 50 feet to the site on the short steep road.



IOTA PEDESTAL



IOTA SITE ABOVE THE DOMITORY



The crane was then brought up the road to the site. On the last very tight turn to the site the left front wheel lifted off the road for a distance of about 15 feet. Really scary, but it made it to the flat site parking lot.


Setting the pedestals on the rails was accomplished slowly and with great care.

April 16, 1993

Sandy Parker replaced Sandy Mashburn at the MMT.

May 14, 1993

Retirement Dinner
for
MYRON CLARK

FLWO  **FRIDAY**
26 YEARS **May 14 - 6 PM**

COW PALACE

Reservations Required - Contact Jim, Dave or Don for details, etc. SPECIAL MENU w/ Separate Checks
Dinner Follows Base Camp Reception 3 - 5 PM.

After 26 years of driving up and down the mountain this was Myron's last day.

May 17, 1993

Dumped 40,000 gallons of water at the Heliport tanks to weld and repair leaks. These tanks have been holding water since 1973.

The concrete crossing at the Montosa wash was completed.

May 25, 1993

Dane Fancher of Designs In Pine completed the installation of storm doors at the Bowl Dorm.

Installed DOS 6 on the old Support 286 computer.

May 26, 1993

4:30 AM Jim Peters called to report the 60-inch telescope is upside down. The primary mirror is looking into the floor but is still in the mirror cell and the secondary mirror did not hit the floor. Bas van't Sant, Steve Criswell, and I charged up the mountain. Upon arrival we slowly hand-cranked the declination axis to reposition the telescope.

The small "earthquake" stops were the only thing that kept the mirror in the cell. The electronic drive relays failed which caused the problem.

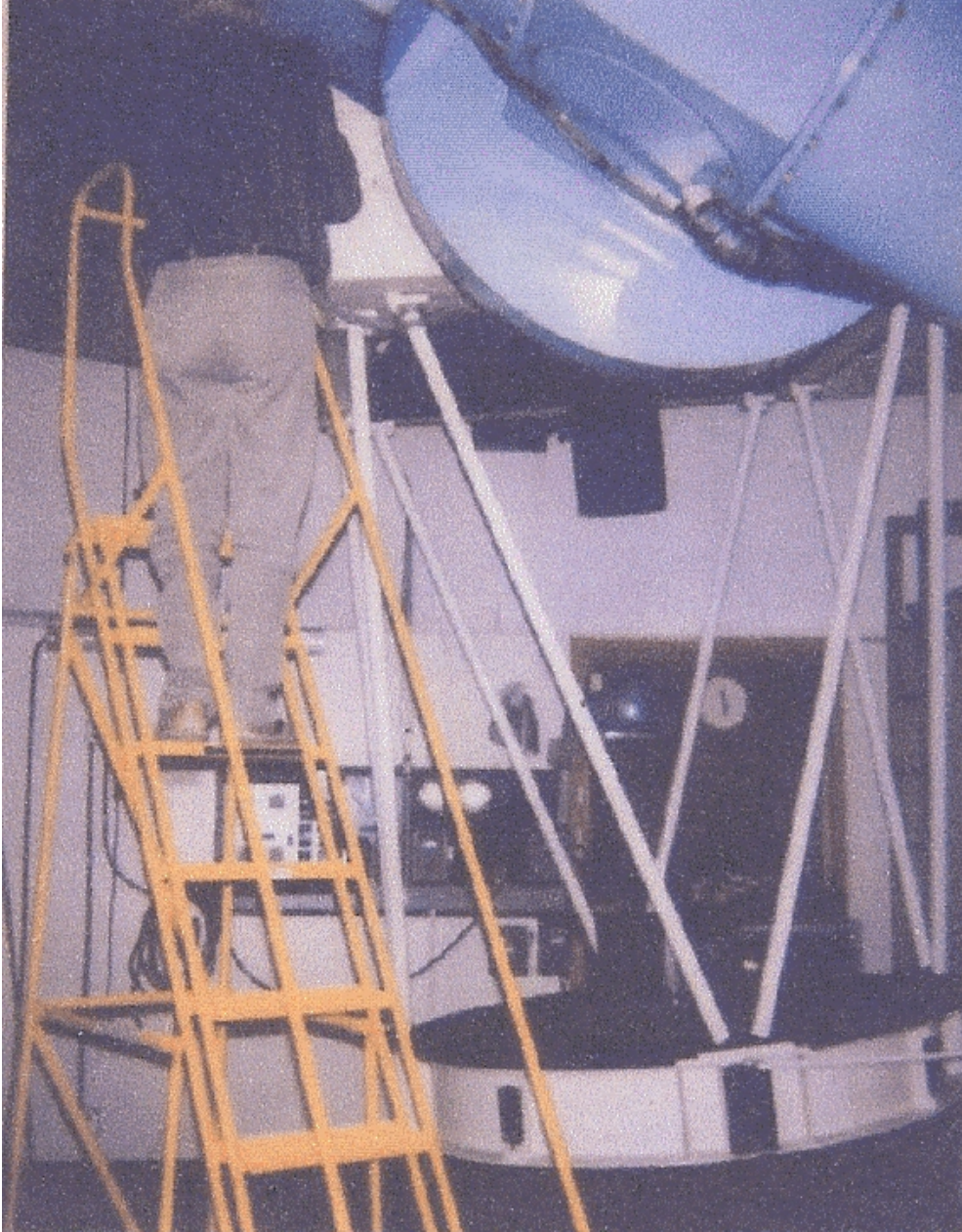


Photo from Bas van't Sant

Paving at FLWO (6/8/93)

Asphalt paving will begin on Monday, June 14 and will take two weeks. The Ridge will be paved first. The paving on the road below the Ridge will probably begin on Wednesday, June 16. Many employees and Observatory users will be inconvenienced. We ask for your cooperation. The following general rules will apply. Call the base camp (602 670 5701) for current information.

- No vehicles (absolutely no exceptions) will be allowed through the work area once the paving machine begins at 7:00 a.m. until the crew stops working at the end of the day, approximately 5:00 p.m. (or possibly later), Monday through Friday.
- Only park in areas directed by the contractor. Wide spots in the road will be used to turn the asphalt trucks around so they can back up to the paving machine.
- A traffic control person will be at the Base Camp entrance to give you information and directions. Monitor traffic with your radio on channel 1. There will be many trucks traveling in both directions on the road.
- You can help reduce damage to the contractor's work by driving slow. When driving on the graded and compacted base or on the warm, compacted asphalt, please refrain from spinning your wheels, sliding to a sudden stop or driving fast on turns.
- All vehicles including rental and personal vehicles must have the keys left in the ignition so the contractor can move them as the work progresses.

Overnight Ridge Observers should not park adjacent to the Ridge dorm. Park near the Support shop building, the large pine tree where the old dorm was located or the generator substation.

Morning and Afternoon Shuttles (8:00 & 8:30 a.m.) will be driven to a point below/above the work designated by the Contractor. All shuttle passengers will walk about 1/4 mile to reach vehicles parked on the other side of the asphalt paving. You will need to carry your own items. The Contractor will designate parking areas in proximity to the sections being paved.

There will be NO 11:00 a.m. shuttle. All shuttle vehicles will be needed to accommodate users reaching the designated areas above and below the paving section.

Evening shuttle at 6:30 p.m. from the Base Camp. This will be a logical time to transport luggage, food, instruments, and large supplies to the mountain when the road will be open to through traffic. The other option is to travel through the work area before 7:00 a.m.

June 24, 1993

We spent the day "Rigging" the telescope shelter at the base camp and checking the crane. At 3:30 PM we made a test lift of the shelter with the boom pointed straight ahead. The load was lifted about 12 inches off the ground using just the cable. We were unable to lift the load when we tried to "Boom-up" at an angle of 47 degrees. The rear out-riggers started to lift off the ground. The crane tables indicated we were within the crane's limits. Much discussion followed! Everything that could be removed from the shelter was set aside. We lifted it the second time to a height of 48 inches and backed the truck under the load never using the boom to lift. We secure the load to the truck and planned to take it to the mountain the next day, Friday. Nat Carlton decided he didn't want to wait and wanted the shelter on

the rails prior to the weekend.

Nat, his wife Kay and Costas Papaliolios drove the shelter to the ridge arriving just before sunset.

Using the crane's lift tables and a FastCAD footprint drawing we carefully and successfully set the shelter on the rails.

These shelters were the heaviest things we ever lifted with this crane. Myron Clark's skill at the controls of this old beast was something to behold---truly remarkable.

We learned that the rated loads and boom limits were not reliable. Perhaps it was the age of the crane? I don't know. The following July we got rid off this old crane by placing it back on the Government Excess Property List.

July 1993

People complained of problem with swarms of 'White Flies" in the summit area. This is the first year that have we experienced this problem.

September 1993

Jim Cornell, Steve Criswell, and Don Hogan received 30 year service awards.

The expansion of the Gamma Ray Building was started. The completion date is November 20th.

Paving to about one half mile below the gate was completed.

The expansion of the MMT shop building started. When finished it will house the rotary Uninterruptible Power Supply (RUPS).

September 10, 1993

OCPM

93 SEP 10 PM 1:45

SMITHSONIAN INSTITUTION
ACQUISITION FOR GOODS OR SERVICES

FUND CONTROL POINT <i>VZ Exnd. 58</i>	APPROPRIATION <i>8520000</i>	ACCOUNTING CLASSIFICATION <i>63100</i>	EST. TOTAL COST <i>2,500</i>
REG. NO. <i>93-506</i>	DATE <i>9/10/93</i>	NO. OF PAGES	Suggested Supplier and Address Gateway 2000 610 Gateway Drive North Sioux City, SD 57049 Attn: Vern Rich Phone: (1-800) 846-2063 ex. 551 Fax: (605) 232-2023
DELIVER TO (Name) (Building) (Room No.) Donald Hogan Whipple Observatory AZ	ADV. PROC. PLAN DATE & ITEM # <i>602-670-5301</i>	FOR INFORMATION CALL (Name) (Tel. Ext.) Matthew Jenkins (202) 287-3580	
PURPOSE (Project, etc.) AND JUSTIFICATION (If this space is inadequate, furnish justification) on a sheet and attach to duplicate NOTE: This equipment is being purchased by ODC for Support Group Whipple Observatory, Amada, AZ for use in developing drawings of facilities and utilities using CAD systems.			
REQUESTED BY: (Name) (Title) (Organizational Title) (Tel. Ext.) Robert Perkins			
APPROVED BY: (Signature and Authorized Official) (Title) (Date) Bill Thomas ODC <i>[Signature]</i> <i>9/10/93</i>			
ORDER FROM: <i>Bob Dillman Helen</i>	SHIP TO VIA	Type of Order <input type="checkbox"/> PURCHASE <input type="checkbox"/> DELIVERY	
F.O.B. POINT	GOVERNMENT B/L NO.		
DELIVERY DATE	DISCOUNT TERMS		

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ITEM NO.	DESCRIPTION	QUANTITY (NO. OF UNITS)	UNITS	UNIT PRICE	AMOUNT	QUANTITY ACCEPTED
1	Computer System: Gateway 2000 486 DX2 Personal Computer 66 MHz 486 DX2 Intel Processor 8 MB RAM; 128 K Cache 3 1/2" HD Diskette Drive as Drive A 5 1/4" HD Diskette Drive as Drive B 340 MB 13ms IDE Hard Drive Local Bus IDE Interface Windows Accelerator w/ 1 MB DRAM on VL Bus 15" NI Super VGA Color Monitor Full-Sized Desktop Case Standard 101 Style Keyboard (NOT Anykey) Microsoft Mouse MS-DOS MS-Windows MS-Excel (as choice of application software) <i>Delivery Charge included</i> Delivery to: Donald Hogan Smithsonian Institution Whipple Observatory, 670 Mt. Hopkins Rd., Amada, AZ	1	UNIT		<i>\$ 2,370.00</i> 2,450	1.00 <i>1.00</i>
ESTIMATE TOTAL COST INCLUDING CONTINUATION PAGE					2,800	
OCPM USE TOTAL					<i>2,370.00</i>	

SIZE CLASSIFICATION (CHECK ONE) Small Business Other than Small Business Minority/Disadvantaged Women-Owned OCPM USE 85645 TOTAL

PROCUREMENT APPROVAL/PROCUREMENT ACTION		RECEIPT ACTION	
<input type="checkbox"/> NOT AVAILABLE IN STOCK/EXCESS	INITIALS	<input type="checkbox"/> NOT AVAILABLE IN STOCK/EXCESS	INITIALS
METHOD OF PROCUREMENT	PROCUREMENT REPORT CODE	RECEIVED BY	CHECKED BY
ORDERED BY	DATE	By: _____ (Signature)	

L4 Rev. 6-15-92 OCPM Stock Number 754-101

Earlier in the year while Bob Perkins was on a visit to the observatory he stopped at the Support Building and saw me working

on an "as built" utilities drawing. I was also working on a
observatory "event history" based on my old logbooks. He obviously
thought this was a worthwhile endeavor and without talking to me
he ordered a new computer for me from his Washington office.

THANK YOU VERY MUCH BOB!!! It sure made the job easier!

October 5, 1993



WOW!!! It arrived! What a great machine. It turns out that it was the newest and fastest computer on the mountain...and it's in the Support Building. More than one staff member was envious and tried to arrange a swap. NO WAY!!!

I immediately transferred my programs and files to this computer and installed my personal FastCad program on it. FastCAD was *really* fast on this machine. There was no waiting for the screen to re-draw like it does on AutoCAD. At a later date I taught other interested members of the staff the program.

Kevin Harris, and I joined the FastCAD Users Group in Phoenix and made monthly evening trips to improve our skills.

October 30, 1993

25th Anniversary Party

This month we celebrated the 25th anniversary of the dedication of the Whipple (then called the Mount Hopkins) Observatory. Although there will probably be no official celebration of this important milestone we would like to mark it with a good old fashion Mount Hopkins Potluck Party (*a feature of life in the early days of the observatory*).

We are inviting all of those working at FLWO and MMTO (and their significant others) to join us; hopefully some of our former colleagues will join us also.

The time is 7.00 PM Saturday, October 30, and the place is the Weekes Homestead in Sahuarita (maps later).

We'll supply beer, wine and soft drinks; you bring your favorite dish that will serve 6-8 people. Let either of us know that you are coming and whether your dish will be an entrée, salad or desert.

We hope to have on hand some early observatory memorabilia.

Highlight of the evening will be the opening of the time capsule recently unearthed during excavations at the Gamma Ray Building.

Don Hogan
Trevor Weekes
Co-Organizers

**A really fine time was had by all, Thank You Trevor and Ann

25th ANNIVERSARY "T" SHIRTS

<p style="text-align: center;">GAMMA RAY ASTRONOMY</p>  <p style="text-align: center;">SMITHSONIAN INSTITUTION F L WHIPPLE OBSERVATORY - AMADO, ARIZONA</p>	<p style="text-align: center;">WHIPPLE OBSERVATORY</p>  <p style="text-align: center;">SMITHSONIAN INSTITUTION MT. HOPKINS - AMADO, ARIZONA</p>
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FRONT SIDE *BACK SIDE*

AVAILABLE IN THE GIFT SHOP

Color BLACK, White Letters, etc., 100% COTTON, Fruit of the Loom

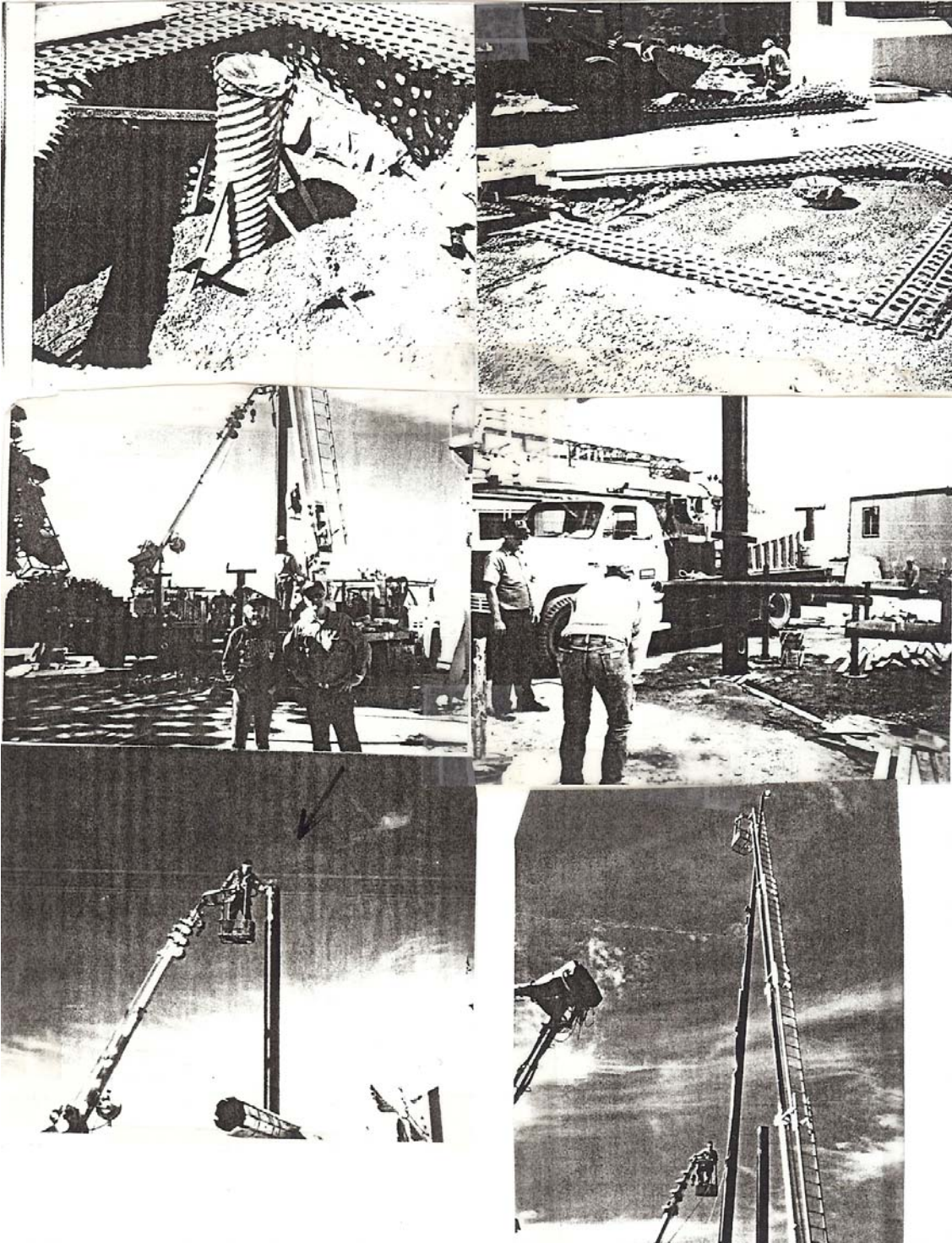
SIZES S, M, L, XL, XXL PRICE \$10.00

*** Baseball CAPS (both designs) also available \$7.50

MT. HOPKINS - AMADO, ARIZONA

DESIGNED WITH FastCAD

November 19, 1993



75 FOOT LIGHTNING ROD (FLAGPOLE) INSTALLED AT KNOLL #1

A time capsule was placed in the base and a green **Irish** flag was flying proudly at the top upon completion. An extensive heavy copper ground field had been completed several months

earlier.

and then from Ireland.....

Physics Department,
University College Dublin,
Dublin 4
IRELAND.

23-11-1993

Dear Don,

I'm sitting at home in my lounge in Dublin on a cold frosty November evening. There's a turf fire burning in the grate and the unique aroma of the burnt peat is permeating the room. My wife is out at a school function. My two boys are busy with their University studies. I have a tape on in the background - a compilation of country, rock and folk, my favourite ~~is~~ *ambinninn* for the time of night. I have just poured a small Irish whiskey (small because it's only Tuesday evening and this really is a self indulgence so early in the week!). However, the celebration is justified. Behind me laid out on the lounge table is a magnificent tee-shirt with a note from TCW which tells me that I am a member of a small and exclusive club. He tells me that only five exist and he has also told me who the other recipients are. I have been elevated to a very exclusive club indeed. Naturally I feel that a 6th shirt should have been made for the *old Bostonian*, without whom our joint research endeavours could never have turned out to have been as successful as now seems to be the case!

Your gesture was an outstandingly magnanimous one and a wonderful way to celebrate the 25th anniversary. I talked to Neil briefly today and he was also visibly touched. Having thought about the potential value of this virtually unique piece of apparel, I have decided to have it mounted in a display frame in our Cosmic ray laboratory so that the gesture can be shared by the post graduates, past, present and future. It can act as an object lesson on just what *tenacity* is about! By that I mean the tenacity of both the scientists and support group at Mt. Hopkins who have worked together in harmony and with much humour and leg-pulling in our efforts to make a modest but hopefully lasting contribution to the question of just how the Cosmos works. I think my students have well and truly learned the lesson as to the importance of support in a project like ours. I salute you and your crew, both present and past members.

Thanks again, I look forward to seeing you in January,

Yours sincerely,

David Fegan.

12/20/93

Started planning to replace the 60-inch dome. Setup a

transit and checked the tie down bolt positions. Plotted results for the contract specifications.

Rain in the afternoon. J. T. Williams reported skidding on the ice on the new asphalt on the APT Building road.

The next morning we received a radio call about a two-wheel drive pickup truck being stuck on the ice and in the ditch just below the ridge. The truck was blocking the road and eight vehicles below it could not get to various work sites. We drove to the blockage, walked around the truck, and walked uphill to the Support Building. The road above the truck was sanded and the A/C front end loader, with a chain, pulled the truck to the ridge. The waiting vehicles in four wheel drive were then able to get to work sites. Sand and sun made the road safer later in the day.

December 27, 1993



PARKING BRAKE DID NOT HOLD

This truck rolled backwards from the summit until it stopped in the ditch.

December 31, 1993

Clinton signs law offering buyouts to federal workers

CORONADO, Calif. (AP) - President Clinton signed legislation yesterday allowing the government to offer its workers buyouts of up to \$25,000 if they resign or retire.

The new law is part of an effort to cut the federal work force by nearly 12 percent over five years.

The law should reduce federal employment by 272,900 by the

end of fiscal 1999, dropping the size of the federal bureaucracy below 2 million for the first time since 1966 and to its lowest level since 1950.

Clinton signed the legislation while vacationing in Southern California.

Under the bill, a federal worker who has completed 12 months of continuous service could take severance pay or a lump sum of

\$25,000 - whichever is less - upon leaving the government.

The employee-buyout plan gained wide bipartisan support after it became evident that the reduction goals would not be reached through other means such as attrition or involuntary dismissals. Congressional investigators concluded that involuntary dismissals would disproportionately affect minorities and women.

YEAR 1994

January 24, 1994

John Huchra met with the staff and announced the Steve Criswell will start working with the MMT 6.5 meter project. Karen will take Steve's job. Kurt, Marion Rice, Dan West and I will now report to Karen. Congratulations and good luck to Karen.

January 26, 1994

The following is brief summary of event that occurred on a terribly cold and nasty night. The under ground powerline to the summit failed. All of the buildings on the summit were without heat, lights, and other things. A large emergency generator was found and hauled from Phoenix.

Jan. 26 - 27, 1994

Support Log Weds.Pm - Thurs AM.

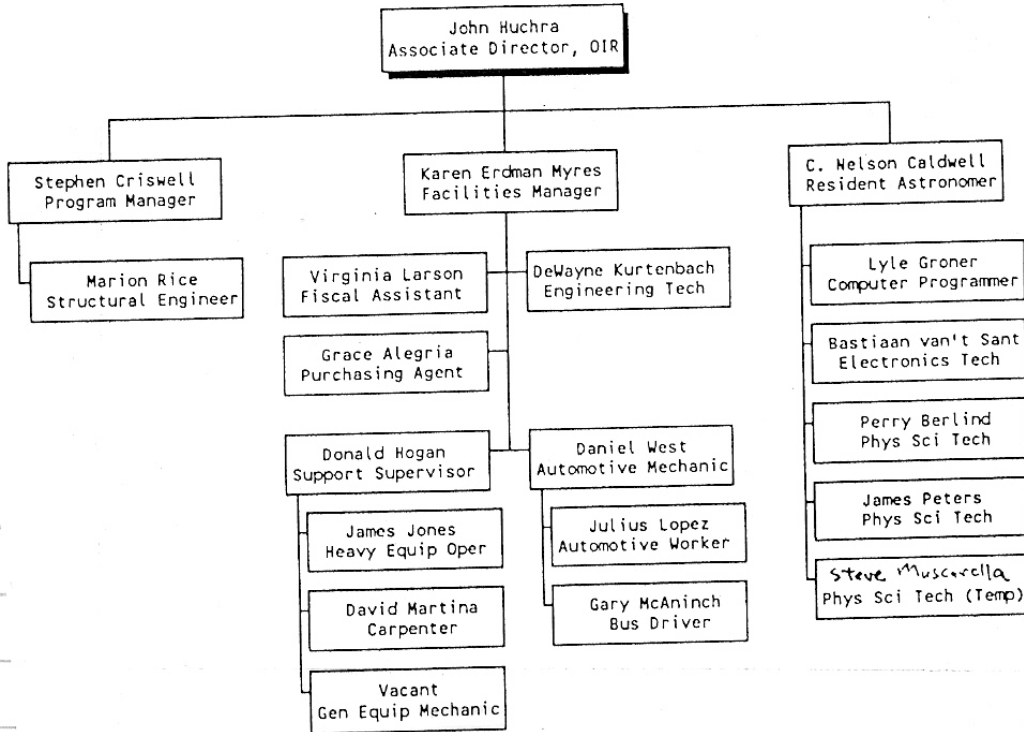
- 5 - 6 PM Loaded Fuel Truck . Prep for tonights return to MT.
Dave, Jim ,Don. (Russ)**
- ~ 8 PM Don called informed that the truck and trailer left Phoenix.**
- ~ 10-15PM Driver reports he is close to Green Valley.
Called via radio Jim, Dave, and Russ.**
- ~ 10-45PM Met truck turning on Elephant Head Rd.
Checked jig proceeded to Base Camp.**
- 11PM Dave and Jim went ahead with loaded fuel truck.
Don followed with pickup. Empire truck (Brad Kohler)
with Russ acting as advisor followed.**
- ~ Midnight Thurs.**
- ~12-30PM Loaded P/U with tools and materials. Jim and Dave started uphill with the A/C loader
and the Fork lift.**
- ~ 1AM TRUCK with TRANSFORMER AND GENERATOR TRAILER STARTED UPHILL
from the ridge.**
- ~ 2AM Site leveled across from Bowl near transformer. Setup , leveled trailer, attempted
start up. would not run! Exciter Problems, etc. Temp 18 degrees in clouds.**
- ~2-15AM Returned to the support building for multimeter, tools, coffee and etc.
Reported problem(s) to Phoenix.**
- ~2-45AM Returned to site. Started Generator. Attempted regulation of voltage, cycle rate,
and engine speed. Unable to regulate engine!!!**
- 4-30AM Returned to Support. Coffee warm -up break. Called Phoenix again. Steve
Criswell waited for technical assistance or instructions.**
- 5AM Returned to Bowl. Loaded, moved, and set transformer between the generator
and the bowl transformer.**
- 6-10AM Returned to Support. Called again for assistance. Called Kurt, Marion, Steve
with info , measurements, ETC. Refueled small generator(RUSS),fueled
Empire truck(JIM), checked Ridge Dorm motor (Dave)....unloaded pickup
ETC.**
- 7AM Dave, Jim, and Don left ridge. Followed later by Empire Truck and Russ.**
- 7-30AM Dave and Jim left the base camp. Total overtime hours _____.**
- 8AM Don left base camp.....Total Comp. Time _____.**

CC: GINNEE, KAREN,DAVE,JIM,RUSS,KURT, DON...SUPPORT LOGBOOK.MMT(DAVE)

February 5, 1994

NEW FLWO ORGANIZATION CHART
Optical & Infrared Astronomy Division

February 4, 1994



February 16, 1994

Don Hogan requested a voluntary (early-out) retirement after more than 31 years of working with Smithsonian. In July I received notification that my request was granted and my retirement start date will be October 1, 1994.

April 14, 1994

POLAND, William Chadwell "Chad", 50, died April 19, 1994 of Cancer. He is survived by his dear friend, Melanie Blythe; his parents, Harold and Mabel Poland; and by his sister, Janet Poland. For over a decade, Chad worked as an electronics engineer to advance astronomy in Arizona, with major contributions to the development of the Multiple Mirror Telescope and many projects for Steward Observatory, including the Mirror Lab. More recently, he was contributing to the WIYN telescope being built on Kitt Peak by NOAO. Chad was an avid pilot who loved flying and soaring, often serving as tow pilot for the Tucson Soaring Club. He has collaborated with sculptor Joe McShane to design and build innovative optical sculptures, the latest of which will soon be installed at the Lunar and Planetary Lab. There will be a memorial service at the Flandrau Planetarium, 10:00 a.m. Saturday, April 23, 1994. Donations in Chad's memory may be made to the Nature Conservancy.

April 27, 1994

Nelson Caldwell drove into the side of Marsha Rieke's UofA van at KM15. Driving too fast?

Marc Calaluca's last day as laborer for the Gamma Ray project. Burton Ramsey joined the Support crew.

May 12, 1994

SMITHSONIAN INSTITUTION
ASTROPHYSICAL OBSERVATORY



FAX
302/670-5713
TELEPHONE INFORMATION
302/670-5707

B
602

FRED LAWRENCE WHIPPLE OBSERVATORY

May 12, 1994

To: Residents of the Old Amado Schoolhouse neighborhood
From: ^{KEM} Karen Myres, Facility Manager, Whipple Observatory
Re: Excavation and noise at the Old Amado Schoolhouse site

The Smithsonian Institution, former renters of the Schoolhouse property, will be cleaning up oily soil in the yard area of the site.

Beginning sometime during the week of May 16, contractors using large machines such as front-end loaders and assorted other equipment will appear at the Schoolhouse site for approximately two weeks of work.

The loaders will scoop up petroleum (diesel) contaminated soil which will be fed to a large soil-cooking machine. Using heat, the soil-cooking machine evaporates the petroleum from the dirt. These fumes enter a catalytic oxidizer much like auto exhaust going into a catalytic converter. The particulate from the process is trapped in filters. The treated soil will then be replaced on the site. An estimated 250 cubic yards of soil will be processed.

The soil-cooking machine is a large (48-foot-long) rotating drum powered by a generator. The contractor advises us that the generator along with the loaders make for quite a noisy operation. The soil-cooker, however, should only be on site for three to four days.

The contractor has offered to show any neighborhood resident how the process works. If any resident is interested, we will arrange a demonstration at a time convenient to the residents and workers.

If things go as planned, the entire operation should take eight working days. The contractor plans to work from 7 a.m. to 7 p.m.

If you have any questions, please call at 670-5703.

Thank you.

May 1994

The fastest and best computer on the mountain, a 486 Gateway,

was returned to Bob Perkins at the Smithsonian Institution, Washington, DC.

A case was made that Support does not need a computer. I was told to take it out of the building after seven months of use.

I called Bob Perkins and told him I was about to retire and Support no longer needed the computer. "Did he have a use for it?" He said, "he could use it." I next called the Property Officer, Ralph Dumas, in Cambridge, and arranged for the paperwork necessary for the transfer. The computer was packed-up in the original boxes and shipped via UPS.

Any further computer drafting was done at my home...as before.

Support removed all the landing mats at the Amado School House yard and hauled them to the Base Camp.

June 1994

Installed a 50-foot lightning rod south of the APT Building.

The mulcher was used to reseed bare areas prior to the anticipated annual rain.

Numerous powerline failures occurred in the next two months. Switching and changing to generator power became a routine matter for the mountain staff.

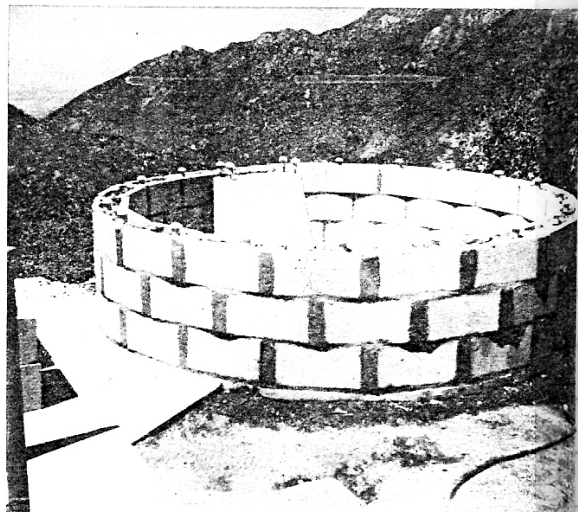
July 29, 1994

The main mountain generator failed. Hans van't Sant, Bas's son, from Empire Machinery found the fault, ordered a new circuit board and put the generator on line the next day.



Burton Ramsey - Don Hogan - Dave Martina - Jim Jones

July 14, 1994



APT SAO 20-INCH TELESCOPE BUILDING UNDER CONSTRUCTION

Shown above is Joel Harris, age 14, my grandson, working during his summer vacation with Sierrita Mining and Ranching. He is the fourth generation of the Harris family to work on the mountain (Lee, Lynn, Norman and Joel). Joel is now a graduate Civil Engineer from the University of Arizona.

This project was never completed. The entire APT project moved to an old Washington Camp mining site east of Nogales and south of Patagonia.



SUPPORT BUILDING COFFEE BREAK

Kevin Harris - Dave Martina - Lou Boyd - Mark Calaluca

This photo was taken prior to the departure of, Kevin, Lou, and Mark.

August 15, 1994

The Federal Times announced that 204 Federal and 22 Trust employees accepted the federal buy-out offer to leave the Smithsonian.

SPECIAL
MENU

COZY
PALACE

(602) 398-2201



Surprise
Retirement Party
for DON HOGAN
Friday September 9, 1994
at 6:00 PM

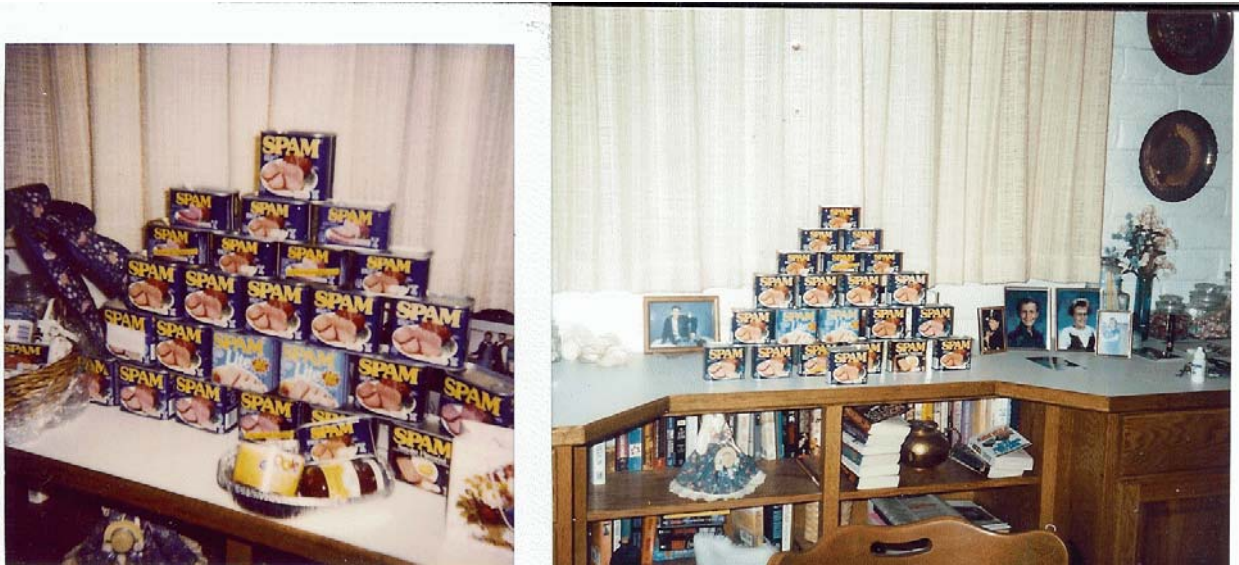


COCKTAILS AND DINNER WILL BE DUTCH TREAT

NOTE: The above was printed on mauve (NOT PINK) paper.

Don Hogan, Support Supervisor retired after almost 32 years with Smithsonian. Twenty-eight years were spent driving up and down the road at Mt Hopkins. Prior to Mt. Hopkins Don served as a Satellite Tracking (Baker/Nunn Camera) Observer in Florida, New Mexico (twice) and Shiraz, Iran (2 years).

My sincere thanks to Karen Myers, Jim Jones, his wife, and others for making this retirement party a very memorable occasion. Among other things I left, after closing the bar at 1 AM, with 49 cans of gift-wrapped SPAM. Thanks to you all!



LOTS AND LOTS OF SPAM ON DISPLAY

FLWO - Reported by Karen Myres

We were honored with a visit from Fred Whipple and his wife, Babette, on Friday, Sept. 9. Since his last visit to FLWO was in the early 80's, he was pleased to see the newer buildings. He and wife toured the mountain with Dan Brocius. Many employees joined them for lunch at the ridge dorm. The primary reason for Fred Whipple's trip was observance of the 40th anniversary of the Tucson Amateur Astronomy Association. He was the featured speaker at TAAA anniversary banquet at the Viscount Suite Hotel in Tucson on Saturday night.

Fred and Babette also participated in the retirement party at the Cow Palace for Don Hogan. About 100 people--employees, former employees, FLWO volunteers, scientists, family and friends of Don Hogan celebrated his upcoming retirement after 31 years of service.

Retirement gifts included dozens of cans of Spam (Don eats Spam sandwiches frequently--believe it?), a large, framed poster of himself next to a cement mixer (I took the photo in August and added a title to it, "My Last Big Job" for the first line and the second line is, "How Many Man Days?"), a color printer, snow boots painted mauve and decorated with sequins by Sandy Parker at MMT because Don made remarks about her shoes several times, a jar of shop dirt, a miniature flagpole and Irish flag from gamma ray, and an album of greetings and photos.

L. Feldman

SMITHSONIAN INSTITUTION

Fred Lawrence Whipple Observatory

September 20, 1994

TO: FLWO/MMTO

FROM: Karen Myres *KEM*

SUBJECT: Don's Last Week

If you did not have a chance to "roast" Don at his retirement party at the Cow Palace on September 9, you have another opportunity.

Come to an informal gathering in the conference room at the Base Camp on Thursday, September 22 at 4:00 p.m. Refreshments will be provided.

Also, Don has made multiple video tapes of the September 9 party and would be "tickled pink" if anyone would like to borrow one.



Ann and Trevor Weekes, Karen Myers and Lou Hogan



At the retirement party Karen Myres had to remind me of this embarrassing incident. Quote "In an attempt to truck diesel to the mountain subsequent to the 1983 flood. Don't tell anyone, but Tino, Tony, and Myron all told Don he would not make it across the river bed without getting stuck. Guess what Don did, he got stuck."

FLWO STAFF AND OTHERS MENTIONED IN THE TEXT



NAT CARLTON
KAREN ERDMAN-MYERS- ROAST MASTER

REBUTTAL



DR. FRED WHIPPLE-WIFE BABETTE-ANN WEEKES
DR. FRED WHIPPLE
DAN WEST- ? -KAY AND NAT CARLETON



RUTH..?..-COSTAS PAPALIOLOS-EMILIO FALCO
ED and NORINE HACKETT



GRACE and PETE ALEGRIA
SANDY PARKER-...?-GARY McANINCH
FRANK SHARP - LOU BOYD



CATHY and BILL OMANN
BETTY and DUANE GINGERICH
BAS and IEN van't SANT



..?...-CATHY and BILL OMANN
DONNA and DAN WEST
VOLUNTEERS ? -TRUDY and BILL KERY



DeWAYNE and CAROLE KURTENBACH
BOBBI and JIM PETERS
BAS and IEN van't SANT



PAT COOVER-FRANK SHARP-LOU BOYD
KEVIN HARRIS-BUZZ COOVER
LOU and DON HOGAN



KATHY and NORMAN HARRIS-DAVID HOGAN
LYNN and JANIE HARRIS
JULIA HORINE-JOEL and LUANN TANNER-JUDY FOX



JUDY and SHELLY FOX
PERRY BERLIND and ...?..
KATHY and MYRON CLARH- ED HACKETT



VOLUNTEERS
VOLUNTEERS
DON HOGAN-JIM JONES



SO LONG
AND
BEST TO
THE TOP OF
THE MOUNTAIN
MAN!
JIM CORNELL
SEPT
1994

Fred Lawrence Whipple

Noted astronomer comments on career

By Robert C. McCormick
Green Valley News

More than 100 members of the Tucson Amateur Astronomy Association heard Fred Lawrence Whipple discuss some of the highlights of his distinguished 67-year career as a pioneering astronomer during their banquet at the Viscount Suite Hotel on Saturday.

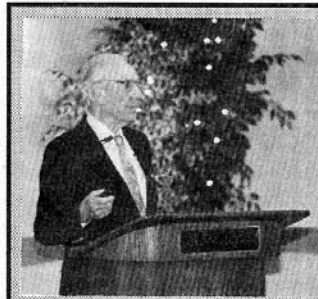
The association, one of the largest and most active in the nation, was observing its 40th anniversary.

The TAAA was founded in 1954, and two years later it became one of the prime members of the Moonwatch Program, an international network of volunteer observers organized by Whipple to support the Smithsonian's international plan to track artificial satellites.

In 1957, as Whipple later explained in his talk, when Sputnik was launched by the Russians, the Smithsonian's optical camera network (which he created), assisted by amateur astronomers such as TAAA members, was one of the few U.S. systems able to track the Sputnik and later satellites.

In an interview with the *Green Valley News and Sun* prior to his talk, Whipple, who will be 88 in November, said he had retired three times, but something always happened to get him involved in astrophysical research again.

This included the reappearance of Comet Halley in 1986



(News photo by Mario Agullar)

The Hubble cost was more than \$2 billion. ... And now the requests for viewing time by astronomers...is about 500 times more than NASA can make available.

—FRED LAWRENCE WHIPPLE

and the recent discovery by Arizona astronomers of Comet Shoemaker-Levy 9, which crashed into Jupiter in July.

Whipple studied the moon, meteors and comets for many years and coined the "dirty snowballs" description of comets because they were hard-packed frozen conglomerates of gas, water and dust.

His description was confirmed by observations of Halley during its last near-Earth visit in 1986, about 76 years after its annual appearance in 1910.

"Compared to Halley, the Shoemaker-Levy 9 event was something that only happened once in 1,000 years," Whipple said.

Earlier in the day, he had gone up to the observatory on Mount Hopkins and later toured the mirror lab facility on the University of Arizona campus.

He said he was highly im-

pressed by the innovative work on larger telescope mirrors being done at the mirror lab.

Whipple explained that the multiple mirror telescope (MMT) on top of Mount Hopkins is scheduled to be converted into an even larger telescope in 1995 by the use of a mirror now being ground at the lab.

The MMT's six mirrors will be replaced with one, lightweight, 6.5-meter diameter spin-cast mirror, making it the second largest telescope in the world, he added.

Whipple noted that it will more than double the MMT's light-gathering capacity and expand its field of view to allow astronomers to see 200 times more sky.

The UA mirror lab is planning to manufacture even larger instruments. We asked Whipple

why it was necessary to keep building larger telescopes when we now have the Hubble space telescope in orbit and orbiting satellites with powerful camera and radio instruments.

"The Hubble cost was more than \$2 billion, and repairs late had to be made by NASA astronauts. And now the requests for viewing time by astronomers all over the world is about 500 times more than NASA can make available," Whipple explained.

A similar problem exists with all ground-based telescopes because there are just not enough to serve the viewing requests of astronomers doing advanced research, he added.

Whipple also explained that Smithsonian astronomers on Mount Hopkins use a variety of instruments in addition to the MMT to carry out their investigations of galaxies, quasars, black holes, interstellar gas and other objects in the solar system.

"I'm glad you are so interested and informed about our work because science usually takes beating from the media," he said.

Whipple added, "About 30 years ago, I tried to warn about the overpopulation of the Earth and its serious damage to our ozone layer, but was mostly ignored by the media. And our political leaders are still downplaying the danger of the increasing ozone problem."