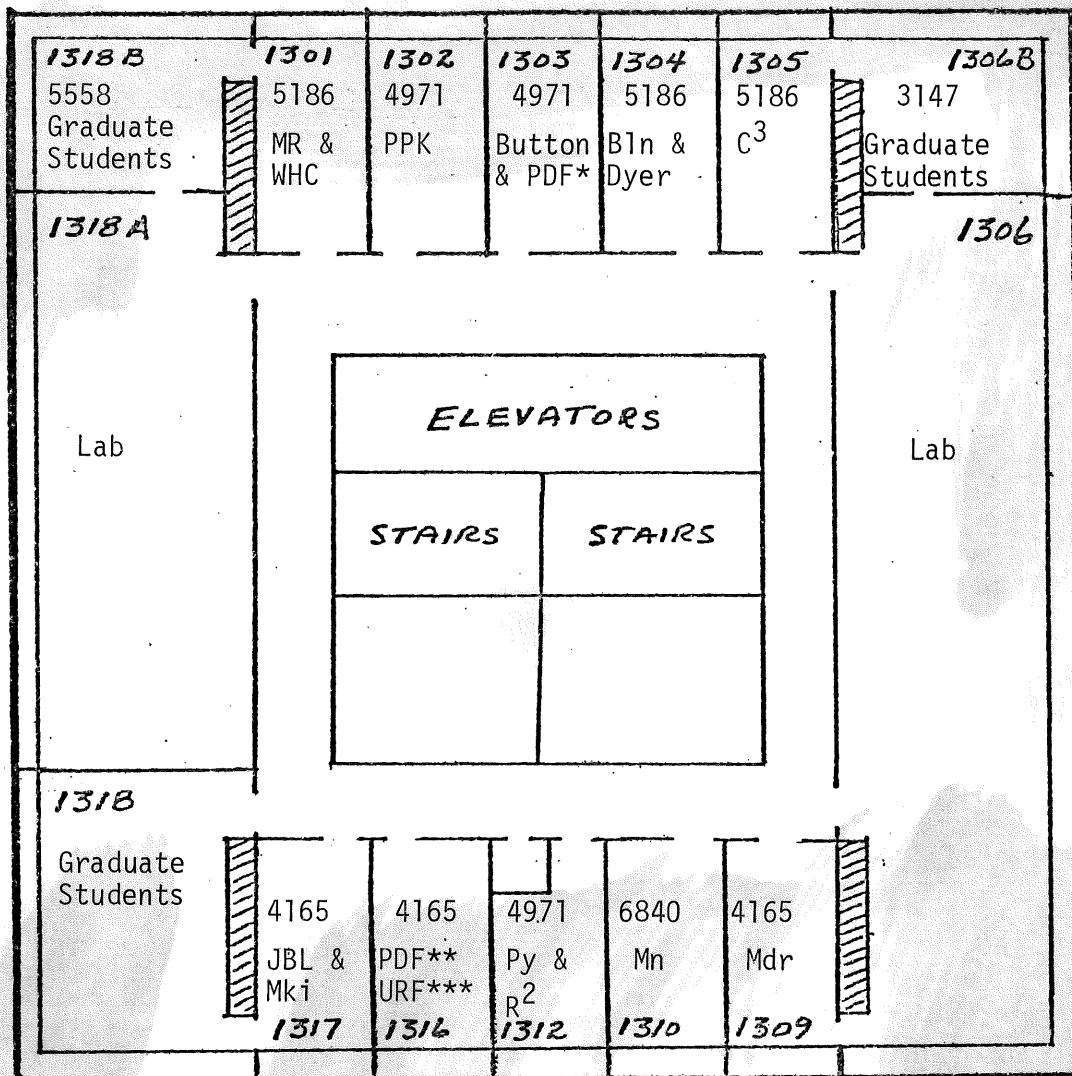


THE DAVID DUNLAP DOINGS

Vol. 15, No. 6

October 4, 1982

THIRTEENTH FLOOR



* Madore's PDF

** Ray Carlberg (Martin's PDF)

*** Martin Duncan (University Research Fellow)

C O N G R A T U L A T I O N S

To *Douglas Welch* who was married to *Carol Gibbons* on August 28, 1982 in Newmarket, Ont. The newly-weds spent their honeymoon in the Virgin Islands and upon their return Doug immediately flew to Hawaii for an observing run on the CFHT. The Welches are now living in Waterloo where Carol is enrolled in a Ph.D. course in Clinical Psychology.

To *Martin* and *Martha Duncan* on the birth of their son, *Alexander*.

* * *

I am very happy to announce that *Lynda Colbeck* has been formally awarded 'permanent status' as a librarian in the University, and at the same time has been promoted to Librarian III. This is the librarian's equivalent of tenure, and while at one time it was perhaps awarded rather casually, more recently it has been tightened up to be the analogue of a full-blown tenure hearing. A committee, itself chosen according to specific rules, had to consider external and internal referees' assessments, as well as other documentation. Lynda received unanimously high praise from all concerned, and is to be congratulated on passing so stringent a test so easily. May she long be with us.

Fe

Cover Story

THE THIRTEENTH FLOOR

It sounds like the title of a thrilling spy novel. It's not quite that, but there were a few exciting moments over the years as we vigilantly maintained our rights, or imagined rights, to space in that area.

Many buildings, particularly those built for rental income, are without thirteenth floors, or sometimes the air-conditioning is located between the 12th and the 14th. In our case, the architects came to us just before the elevators were to go in and asked if we had any objection to that floor being assigned the number 13. I took the trouble to check with Kelly Gotlieb but we both agreed we wouldn't have it otherwise.

Away back in 1957, when the "Users' Committee" for the New Physics Building was set up, we laid out our ambitious plans for laboratory space, office space and the facilities (pretty much as they are now) on the two roof-top floors. At first we hoped to get all of the 13th floor but in the final crunch we had to give up seven offices to the newly established Department of Computer Science. But I wrung a verbal promise in the Users' Committee that we could take over the 13th floor as soon as Computer Science moved out to their promised new quarters.

I should emphasize that, over the many years since, Computer Science has been generous in giving us short term "leases" on various offices to accommodate our temporary overflows. On the other hand, faced with mounting pressure as their department grew, they eyed our laboratory space in 1306 and 1318A. One morning a loyal graduate student tipped me off that a delegation from Sky Jones' office (Sky Jones is the space czar of the university; in spite of his name he had, I knew, no special sympathy for the Department of Astronomy) was coming over to Computer Science and together they were going to look into the availability of our two empty labs. It was summer time and of course the rooms did look rather unused.

Quick as a flash the department was galvanized into action. Before the lunch hour was over we had moved one of our graduate students into 1318A. Only one was needed, for he had reams and reams of chart recorder output- enough to cover all the tables and with some actually hanging from the light fixtures. The student was Hugh Ross. Bless you Hugh, for having accumulated so many scans with the ARO telescope! The proposed take-over was immediately and quietly abandoned.

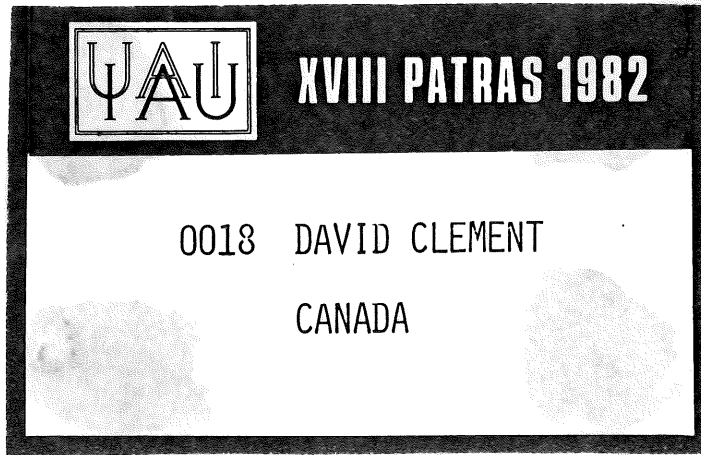
Finally, however, Computer Science did find new quarters and moved out during the month of August. They are now consolidated in the new Sandford Fleming Building while we have in turn officially been assigned the offices we coveted for so long.

The department of course has expanded to fill all the space available. Pamela's final plan of the 13th floor, on the front cover of this issue, shows the occupants of the 10 single offices and their telephone numbers. Several of the latter are new ones. Graduate students are moving about too, and in some ways they are the principal beneficiaries of the whole exercise. But we also have room for our four new PDF/URFs. Changes are taking place on the 14th floor as well and Pamela's chart for that in on the back cover.

It will be a while before all is done and we have become used to the new arrangements. But without a doubt we needed the new space and we'll be able to function more efficiently than before.

Sometime in the future we will no doubt need to expand into the 12th floor. Now there, too, there's a minor bit of history which could be interpreted as giving us a toe-hold. But I'll leave that till later.

MR



WHO WAS WHO AT THE IAU

Seventeen month old David was the youngest Canadian at Patras. His strikingly blonde and curly hair was an unfamiliar sight to delegates and tourists from many countries. His mother and father found that he was often in demand as a model for photographs - sometimes almost snatched away for that purpose.

Commission 27 on Variable Stars had Don Fernie as Chairman and Nancy Evans as Secretary, a role she had also played in Montreal. Nancy also presented a paper on "Observations of the Cepheid variable SU Cassiopeia". John Percy presented an Invited Paper on "Early-type variable Stars" and a contributed paper on "Short-period variability in B stars with emission lines". In Commission 46, Teaching of Astronomy, John, the Canadian representative, spoke on "The training of school teachers in astronomy in Canada"

Phil Kronberg presented the results of two projects at the IAU - the detection of microgauss level magnetic fields in some QSO absorption line clouds at high redshift (with Judith J. Perry) and the recent discovery of very powerful jets in two QSO's (with Govind Swarup). In an article written for "Astrocosmos", the IAU daily, Phil and Margaret Burbidge described recent work on 3C303, including the most recent VLA observations for which Louis Noreau was co-investigator. Phil spent a week observing at the Max-Planck Institute and then went on to Venice for the post-general assembly symposium on supernova remnants. There he described new VLA observations of what may be large numbers of SN remnants in M82, and some results of the very bright variable radio source near M82, the latter work being done with our former colleague (from 1978 to 1979) Peter Biermann.

Other attendees from Toronto were Tom Bolton (who afterwards visited Athens and allowed himself three days of relaxation on a cruise of the Greek Islands), Bob Garrison (who spent a whole month in Greece; rG is the incoming vice-president of Commission 45, Stellar Classification), Barry Madore (who gave an invited talk at Joint Discussion III on "Cepheid variables in nearby galaxies) and Charles Dyer (who attended the post-general assembly symposium in Crete on Cosmology in the early universe).

Three current graduate students were there: Armando Arellano (who had just previously been doing some IUE observing at Villafranca, Wendy Freedman (who had earlier attended IAU Symposium No. 100 in Besançon, France) and Chris Corbally.

Of course there were many other former U of T astronomy graduates in attendance. The list includes, Chris Aikman, Gus Bakos, Carl Bignell, Bruce Campbell (who is now working with Roger Cayrel in Meudon, France), Dave Crampton, Pierre Demarque, Ian Halliday, Dave Hanes, Doug Hube, Colin Keay, John Kormendy, Richard Larson, Kam-Ching Leung, Peter Millman, Tony Moffat, Dan Morton, and Rene Racine.

Greece was hot in August. The next meeting, in 1985 is currently scheduled for New Delhi, but in November.

New Faces

Martin Duncan (B.Sc. McGill, M.Sc. U of T, Ph.D. Texas) recently awarded an NSERC University Research Fellowship, arrived in August from Cornell where he held a PDF. Martin will also have teaching duties at Scarborough College.

Ray Carlberg (B.Sc. Saskatchewan, M.Sc., Ph.D. UBC) has taken up a position as research associate with Mn. Ray is welcomed back to Canada from the Institute of Astronomy, Cambridge where he held a NATO PDF.

Welcome too to nine (9!) new graduate students, surely good grist for the "GASA Gossip" mill. Here we concentrate on a simple biographical fact for each one: Ed Anderson (B.Sc. U of T, M. Sc. UWO), Michael Bietenholz (B.Sc., U. Saskatchewan), Bernard Bois (U of Que., at Chicoutimi), Alex Fullerton (B.Sc., U of T), Richard Gray (M. Sc. U of T, 1975, for the last 7 years teaching in Cameroon), Lee Oattes (Carlton Univ., Ottawa), Michael Rensing (U. Vic., B.C. + Selkirk Coll., Castlegar, B.C.), Fred Schmidt (B.Sc., U of T) and Chris Stagg (B.Sc., U of T, M.Sc. UWO).

*Stay in college
Get the knowledge
Stay there 'till you're through
If they can make penicillin
Out of moldy bread
Think what they can do with you!*

Anon.

Las Campanas News

Karl and Tony have just finished an engineering run in Chile. The telescope optics have received a thorough inspection and realignment. Karl reports that the astigmatism has been reduced to 40% of its previous value simply by rotating the secondary 90° to the position marked years ago. Instrument eyepieces have been repaired, filter and corrector dimensions measured and instructions written out more clearly.

The statistics on our Chile telescope use have just been compiled for the annual report. Since they won't appear until next year, it might be of interest to publish a preview.

Of a total of 3650 dark hours in the year, 2796 (77%) were reported usable during the period from 1 July 1981 to 30 June 1982. Of these, 2250 were photometric (that's 80% of usable hours or 62% of the total hours) and 1990 (71% of usable and 54% of total) were actually used by observers with our 0.6 meter telescope. High winds accounted for the loss of a rather modest 154 hours. The rest of the difference between actual and usable is due to several factors: instrument failure (58 hours, 2% of usable); observer sickness (14 hours, 0.5% of usable); no observer present because of cancellation or Resident Astronomer's time off (275 hours, 7.5% of total); or non-photometric skies for photometrists (459 hours or 16% of usable). This last factor always represents a major loss of time on telescopes and I believe that the effects of non-photometric nights could be minimized if observers were to have backup programs, either using differential photometry in several parts of the sky or using spectroscopy of fairly bright objects. The cost of operating telescopes is so high that we can no longer afford the luxury of letting them sit idle because of thin cirrus here and there or poor seeing conditions. Alternative programs are important and time assignment committees are beginning to favor proposals with backups for less-than-ideal conditions.

rG

Bob Garrison is Associate Director - Chile Operations.

Ian Shelton will be running the telescope from 1-5 October, then Neb Duric takes over, with the image-tube camera, until the 24th, to be followed by rG who will be down there for the following two weeks.

Radial Velocity Standards

At the IAU General Assembly, Alan Batten reported on the analysis of several hundred measures of radial velocity standards compiled from four observatories. The following table shows the corrections that must be applied to each observatory's results to place their measures on the IAU standard velocity system.

<u>Observatory</u>	<u>Bright Stars</u> <u>km s⁻¹</u>	<u>Faint Stars</u> <u>km s⁻¹</u>
Haute-Provence	+0.7	+0.7
DDO	-0.1	+0.2
DAO (RVS*)	+0.7	-0.1
DAO (photographic)	+0.9	+0.5
Fick (RVS*)	-0.1	-0.1

*RVS = radial velocity scanner

Obviously our spectrograph reproduces the standard system very well. Batten also raised the possibility that the IAU velocity system is about 0.5 km s⁻¹ too negative compared to the system defined by asteroids. If that is correct, our results will look even better.

Bln

(The Erwin W. Fick Observatory of Iowa State University is located in Boone, Iowa - Eds)

The following is clipped from a recent abstract from CISTI, NRC Ottawa:

A9720P
P 2102 E03 P8214:A063415 PROC ENG 013
RADIO AND INFRARED EMISSION BY O-TYPE AND RELATED STARS
BARLOW, M.J.; CONTI, P.S.; DE LOORE, C.W.H. (ANGLO-AUSTRALIAN
OBS., EPPING, NSW, AUSTRALIA)
INTERNATIONAL ASTRONOMICAL UNION SYMPOSIUM, NO.83, MASS L...
AND EVOLUTION OF O-TYPE STARS
1979. P: 119-30 REF: 52
HELD: VANCOUVER ISLAND, CANADA, 5-9
RDRECHT, NETHERLANDS. ISBN: 90
STARS; RADIOSOURCE
ICAL); CIRCUM
GIANT

Don Fernie says that if he gets anything on B-type and despondent stars he'll pass it on.

Library News

The David Dunlap Observatory/Department of Astronomy Library will be providing a number of information files on the VAX of interest to astronomy students and staff.

The Library intends to create the following files:

1. libacq.dat - a file containing the WEEKLY ACQUISITIONS LIST that students and staff presently receive. The file will be updated daily. Paper copies will continue to be distributed.
2. preprint.dat - a file containing a list of PREPRINTS received at the DDO Library and the DA Reference Room. A programme created by Dominion Astrophysical Observatory will be mounted soon, providing access to the file by author, title and keyword. The file will be updated daily.
3. journals.dat - a file listing all journals held at the DDO Library and DA Reference Room. Paper copies of the list will be deposited in the DA Reference Room, and at Erindale's and Scarborough's astronomy departments.
4. obspub.dat - a file listing all OBSERVATORY PUBLICATIONS at the DDO Library. Missing issues, gaps in holdings, etc. will be reported. Paper copies will be distributed to the DA Reference Room, and Erindale and Scarborough Colleges.

If anyone has any comments or suggestions regarding the files mentioned above, please contact me.

LaC
(Lynda Colbeck)

TELECOMMUNICATIONS

In the early 1930's the office (singular) of the Department of Astronomy was on the first floor of the Physics Building (now, of course, totally rebuilt inside and known as the Sandford Fleming Building). Directly above it on the second floor was the office of the secretary of the Head of Physics, and there was to be found the only telephone in the building.

When someone phoned and wanted to talk to Dr. Young, a simple procedure was put into effect. Miss Reid would lean over and hammer on the radiator. If Dr. Young was there, and if he wanted to bother taking the call, he'd hammer back, and trot upstairs.

We are reminded of that telecommunication circuit by a notice that was circulated

during the summer involving a parallel link between rG's office at DDO and the one directly below it:

UNIVERSITY OF TORONTO
Memorandum

16 July 1982

To: DIABLO Users and DDO VAX Users

From: MKi

Re: Telephone Patch

For one or two weeks, it will be necessary to use 884-1396 for the acoustic coupler. The telephone in the DIABLO room has been removed and replaced by leased lines for the new (delayed) GRANDALF system.

Directions for Use

1. Connect DIABLO (DIA) jack to Bob Garrison's (rG) jack on switchboard in DIABLO room.
2. Go to window in Rosemary & Esther's office, open it, and connect black cable.
3. Use cream-colored Modem above Rosemary's typewriter as before.

All that is by way of introducing a real bit of news. As of September 24 Bill Weller and Shenton Chew soldered the last connections (at the DA end) of our new high-speed data link between DA and DDO. Bill provides this report:

The DDO-DA Connection

As of 24th September 1982, the high-speed data link between the Department and the Observatory is operational. The link comprises two 9600 baud synchronous modems, and two eight-channel statistical multiplexors, operating over a dedicated telephone line. At each end of the link (room 1408 at the Department, room 110A at the Observatory) the multiplexors are connected to a jack field that allows the user to select a communication line to suit his requirements. At present only two channels are in use, these being 1200 baud lines from DDO to the VAX. By the time that this is in print more channels will be configured, and the system refined to suit the needs of the community.

Many people took part in the realization of the data link, including Mki, Ens, Hr, Sc, Ea and Ri. Enquiries concerning the system can be directed to me at DDO.

Wlr

IUE SOFTWARE ARRIVES

The IUE Regional Data Analysis Facility software package from NASA is now available on our VAX. The package uses the Interactive Data Language (IDL), acquired earlier, to actually manipulate the data. It can be used on Tektronix, HP and VT100 graphics terminals. This package allows interactive reduction and measurement of IUE spectra. It is possible to perform wavelength corrections, eliminate blemishes, normalize the continuum, measure the wavelength, flux, radial velocity and equivalent width of any feature and much, much more. Good documentation is available.

See Tom Bolton for IDL manuals and Ron Lyons or Geoff Clayton for details on the use of IDL and IUEDAF on our VAX.

Ctn, Bln

RENOVATIONISTS'S CORNER

Not all violations of the rules of grammar are made by students. Here's one by the Artistic Director of Toronto Arts Productions in their 82-83 brochure:

Dear Theatregoer:

Following a year-long break for renovations, I am delighted to welcome you to the handsomely transformed St. Lawrence Centre theatre and our richly dramatic 1982/83 season of plays!

When you buy this year's subscription, please immediately reserve your seats for the finest and

STARLAB

Stefan Mochnacki is the Telescope Project Scientist for the proposed STARLAB orbiting astronomical telescope. He has attended several meetings in recent months and is now (Sept. 19-25) in Canberra for the third meeting of the Joint Science Working Group (JSWG).

STARLAB is a joint Canadian-Australian-U.S. project, planned to fly about 1990. It will be a one-metre Ritchey-Chrétien wide-field telescope operating for periods of up to a year while mounted on an orbiting space station. Canada will build the telescope and Australia the instrument package, while the U.S. will put it up. The Australian government has recently granted AUS \$3.15 million for design studies and instrument development. A description of the project as presently conceived will soon be distributed to all members of CAS. Meanwhile more news can be found in recent and current issues of Casseopeia, and Stefan has promised to report regularly in the Doings.

Up, Up and Away

Bill Weller reports

On Sept. 15, 1982 at 12:15 p.m. a Black Brant V sounding rocket lifted off from the White Sands Missile Range, near Las Cruces, New Mexico. On board were three experiments: 1) a set of Langmuir probes, flown by Dr. A. MacNamara, of the Herzberg Institute, Ottawa; 2) an Earth-limb scanning infra-red photometer, flown by Dr. E. Llewelyn, of the University of Saskatchewan, and 3) a coronagraph/u-v spectrometer, flown by Dr. R.W. Nicholls, of York University and the writer.

The rocket and its experiments were the products of several Canadian industries and laboratories. Chief among these were Bristol Aerospace, in Winnipeg, the payload contractor, which was responsible for the building and instrumentation of the payload itself. The infra-red scanner and the electronics for the digitization and pulse code modulation of the uv spectrometer were designed and built by SED systems, of Saskatoon. The uv spectrometer was built at York University. Also on the payload was a Lockheed "SPARCS" attitude control system, which maintained pointing toward the sun for the duration of the flight.

The purpose of the coronagraph/spectrometer was to isolate the inner corona of the sun, along with associated prominences, and to produce spatially resolved ultra-violet spectra of the resultant images. The detector used was a 512 by 320 element CCD array made by RCA. This device was cooled during flight by a thermo-electric cooler to allow a range of exposures to be made. The digitized output was transmitted to ground via an s-band telemetry link and recorded at three ground stations.

Although one telemetry transmitter failed temporarily during the flight, data were recorded from the spectrometer during the entire 7 minute duration of the flight. At the present time the telemetry tapes are being translated into computer compatible digital tapes by the Physical Sciences Laboratory, University of New Mexico, for

delivery to York University, where data reduction is to take place.

This flight was the first all Canadian sounding rocket to be flown from the White Sands Range. We trust it will not be the last

Coming & Goings

Both Pamela Sullivan and Maria Wong are back at their desks, thank goodness, and are showing off photos of their new babies.

Eddie Costa was a member of the cleaning staff who labored to keep us clean and tidy ever since the opening of the building in 1967. He retired from the university on September 5. Eddie told us he wasn't sorry to go off the night shift and that he was looking forward to having closer ties with his family. But we'll miss him and his regular cheerful greeting in the late afternoon or evening.

P O T P O U R R I

Don and Yvonne Fernie gave a party at Observatory House on Saturday September 25 for new comers and all. Though the press didn't show up, it was a gala affair rivalling the opening of Roy Thompson Hall. Reports are that the Grand Marnier cheese was mmmm - delicious and that wine outpoured beer by 2 to 1 - a sign of enhanced maturity on the part of our graduate students?

Gary Ferland, University of Kentucky, spent a week in July at DA working with Mn on the emission-line spectra of novae.

On July 5th, *Mercedes Richards* did a 5 minute interview on Global TV (channel 6/22) for the 12:00 Noon News (live) concerning the lunar eclipse that night. She reported that, despite her having to put on make-up for the interview, it was a good experience.

Phil Kronberg presented his NRAO Visiting Committee Chairman's report to the Board of Trustees of Associated Universities Inc. at their June meeting at Brookhaven National Laboratory.

John Percy reports a very successful observing season - the four months of May through August - with the 16-inch Boller & Chivens atop the Physics Tower here on the St. George Campus. *Robert Spalding*, now in his fourth year, the recipient of an NSERC summer award for last summer, logged 25 partial or total photometric nights at our "Bay Street Observatory". The program was part of Py's long-term study of the variability of Be-stars being carried out in collaboration with colleagues at the Ondřejov Observatory in Czechoslovakia.

Sun Kwok (HIA) visited DA in mid-September for several days (nights) use of the AIPS system in reducing his VLA data.

Allen Yen spent a full month sailing the Atlantic Ocean from New York to Bermuda to Fort Lauderdale. The trip was made in late May and June but even so they encountered the first hurricane of the 1982 season. A noteworthy consequence of his retreat from civilization is the moustache and chin beard he now sports - "to make me look like an opium dealer", he says. *Betty* and *Don MacRae* participated for the second year in the week-long Lake of the Woods International Sailing Association series of races in early August on son Andrew's 30-foot boat. And *Phil Kronberg* spent most of his 2 weeks at his cottage on Lake Paudash, near Bancroft, sailing his CL-16. Not as fortunate as Allen was in the Caribbean hurricane, Phil reports that his boat one day was caught in some fickle Ontario winds and capsized. Nothing serious though, he assures us.

Ernie Seaquist returned from Socorro in mid-July. His duties as CLBA chairman kept him pretty busy and often back in Canada at one longitude or another - and still do. Nevertheless he energetically pursued a variety of research projects in New Mexico which at our request he has listed as follows: (a) Radio recombination lines in M82 and NGC 253 (with C. Bignell) (b) Observations of thermal continuum and OH line in the proto-planetary star Vy2-2 (with L. Davis), (c) A symbiotic star survey - search for radio emission, (d) Search for radio emission in galactic bulge x-ray sources (with Josh Grindlay of Harvard), (e) Radio study of SNR in NGC 4449 (with C. Bignell), and (f) Finished off work on radio and x-ray studies of SS 433 with Grindlay of Harvard and K. Johnston of NRL.

COLLOQUIA*

September 15 Dr. Raymond G. Carlberg, University of Cambridge,
"Transient Spirals and Heating in Disk Galaxies"

September 22 Dr. Hugh Van Horn, University of Rochester,
"Non-Radial Oscillations in White Dwarfs"

*Unless otherwise noted, colloquia are held on Wednesdays at 4:00 P.M. in Room MP 137 with TEA at 3:30 in the Reference Room, MP 1404.

Seven U of T Students Attend VLA Workshop

A course/workshop on the principles of aperture synthesis mapping was held at Socorro, New Mexico, from June 21 to June 25, 1982. There were about 120 attendees (including VLA staff) from several continents. Each day of the workshop (except for Wednesday which consisted of a site tour of the VLA and hands-on computer/data reduction experience) consisted of four sessions. The fifteen formal lectures were designed to take one from an introduction to interferometry through to preparing an observing proposal for the VLA. Besides providing a lot of lecture notes (typed out and distributed free of charge), these lectures allowed one to see twelve of the VLA staff plus some visiting scientists "in action". For instance, Allan Bridle gave a definitive lecture on how to prepare an acceptable VLA observing proposal.

In spite of the hundred or so pages of type-written notes to be read over each night before the following day's lectures (or in some cases without regard to such academic responsibilities), the participants found time for social activities which included an outdoor barbecue on the grounds of the New Mexico Institute of Mining and Technology (where all lectures were held), a house party at the home of one of the local participants, and trips to local restaurants and nightclubs.

The U of T graduate astronomy students who attended the workshop were Al Busch, Neb Duric, Wendy Freedman, Louis Noreau, Raymond Rusk, Joan Wrobel and Ed Zukowski. Al and Wendy arrived in Socorro following their observing run at the CFHT, Raymond attended the workshop on his way to Chile, while Neb and Louis attended during an observing/data reduction run at the VLA. Most of the attendees received financial support in the form of Reinhardt travel grants. Costs for the workshop were minimal because NRAO-VLA provided free registration, and food and accommodation are rather cheap in Socorro. During the last day, free copies of the new "Green Book", the VLA manual, were distributed to all participants. Readers interested in seeing the course notes should contact one of the participants, or wait for the NRAO technical memorandum containing the corrected notes.

Raymond Rusk (Rsk)

PAPERS SUBMITTED

<i>C. Clement P. Panchhi T. Wells</i>	<i>Variable Stars in the Globular Cluster NGC 6293</i>
<i>A. Wehlau M. Liller C. Clement P. Wizinowich</i>	<i>Periods for Newly Discovered Variables in NGC 1851</i>
<i>J.R. Percy</i>	<i>HR 9070: A Non-Radially Pulsating Be Star?</i>
<i>R.F. Garrison R.E. Schild W.A. Hiltner</i>	<i>Massive Eclipsing Binary Candidates</i>

R.E. Schild R.F. Garrison W.A. Hiltner	UBV Photometry for Southern OB Stars
R.E. Schild R.F. Garrison W.A. Hiltner	Variability and Mass Loss in Ia O-B-A Supergiants
J.D. Fernie	New UBVR I Photometry for 900 Supergiants
P.P. Kronberg P. Biermann	Supernova Remnants in M82 as Derived From High Resolution Data
C.T. Bolton M. Bates R. Hurkens	Orbital Elements for the Double-Line Spectroscopic Binaries HD 104451 and HD 141458
S.N. Shore C.T. Bolton	A Study of the Helium-Peculiar Stars of the Upper Main Sequence: I. A Phenomenological Model for the Helium-Rich Stars
E.M. Burbidge P.P. Kronberg	Astronomical Puzzles
G. Clayton P. Martin T. Thompson	Wavelength Dependence of Polarization in the LMC
J.R. Percy	Seventy-five Editions of the Observer's Handbook

GASA Gossip

This summer, while most of the department fanned out across the globe for observing runs and conferences held on the beaches of Greece, Hawaii and California, this reporter remained at his post. There wasn't too much excitement around here but I did get to water Wendy's plants twice a week.

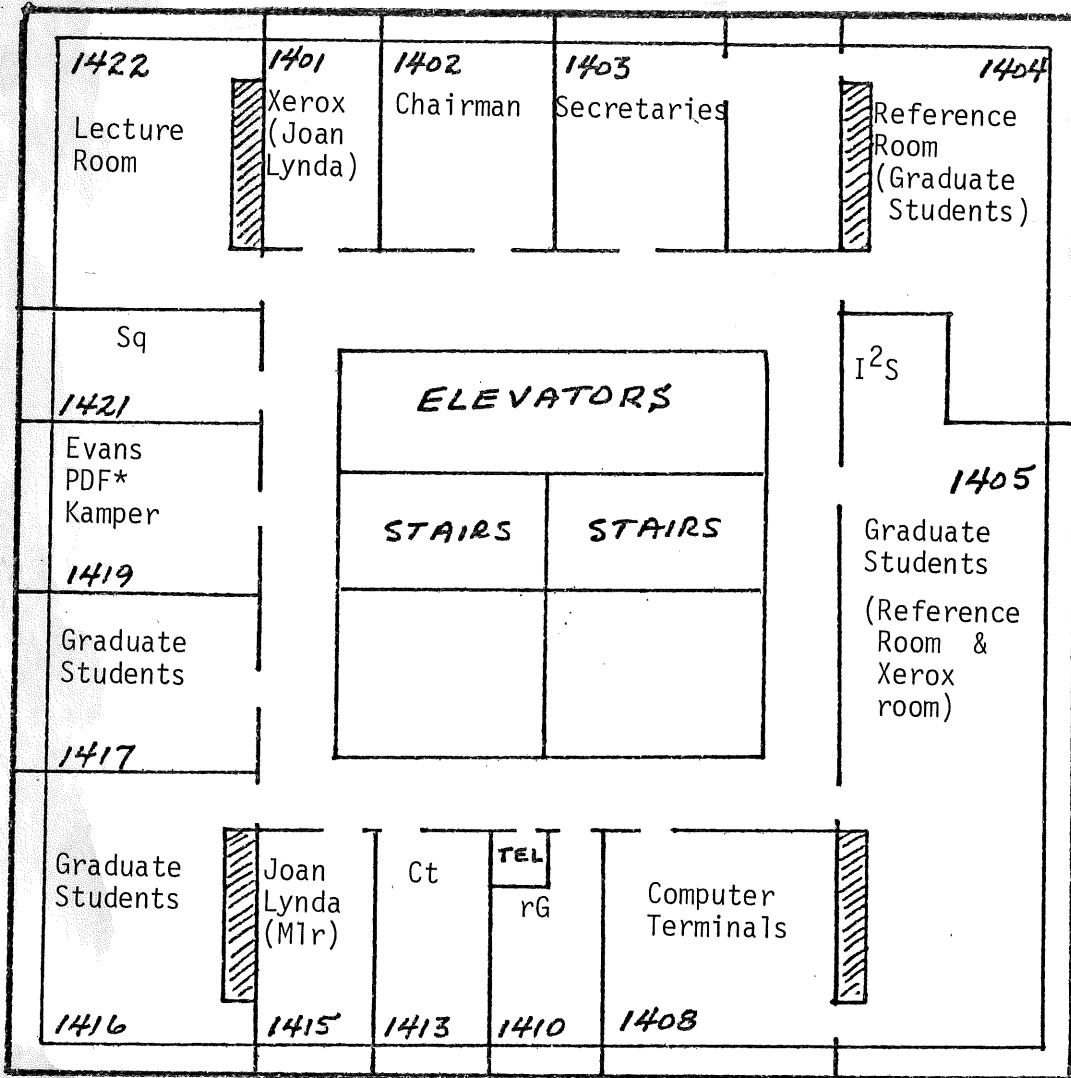
A highlight of the summer was the sophomore season of the Astronomy Supergiants. This was a rebuilding year for our baseball squad after the loss of two of our stars, Chris "Billy Martin" McAlary and Dennis "Mr. Crabby" Crabtree. Rookie replacements such as "Big Al" Busch and our new slugger K.T. "Hank" Kim filled in admirably. Once again we narrowly missed the playoffs but just wait 'till next year.

For many a poor grad student, summer means DDO Tours and this year was no exception as Superchief Chris Corbally and his tribe of Chiefs and Indians valiantly tried to keep people from leaning forward in their chairs. The tours ran smoothly this year except for two Dome Indians (who shall remain nameless) who couldn't find Saturn with the 74". Interacting with and educating the public can be very rewarding as for example when one beautiful young member of the public tried to pick up this reporter as he was chiefing a tour.

The phones also kept us busy, especially around Perseid week. A reporter for the Windsor Star called to ask when (not if) comet Swift-Tuttle was going to hit the Earth. In case you are wondering why these newspapers don't call nearby Astronomy departments, so did we, until we got a call from the Waterloo paper. That reporter had called the department at Waterloo only to be told by the secretary to call Toronto since everyone was on holiday. I wonder if it's too late for me to transfer to Waterloo.

Ctn

FOURTEENTH FLOOR



*Andrew Taylor