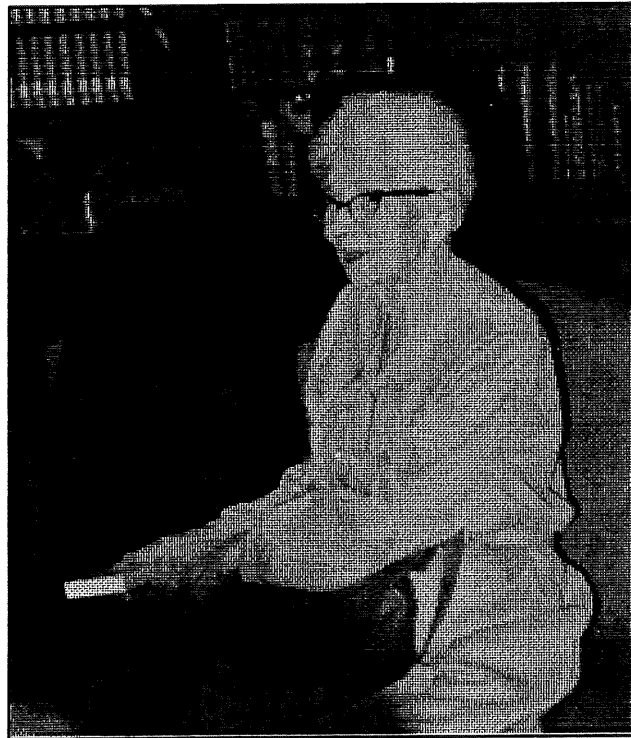


THE DAVID DUNLAP DOINGS

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Helen Sawyer Hogg, May 1992
photo: Karl Kamper

DDO PASSES A MILESTONE

On May 5 the Observatory paused to mark a truly exceptional moment: after fifty-seven years at DDO Helen Hogg had decided the time had come to vacate her office. Her son, David, arrived from Greenbank to help, and in the midst of packing boxes and collecting books and papers, everyone, including the University's archivist and her assistant, repaired to the library for tea and sandwiches, gracious speeches, and a happy celebration of Helen's long tenure as a Dunlap astronomer. Helen had the last word: "I may be giving up my Observatory office," she told the Director firmly, "but I'm not giving up my Observatory keys." We can only hope her visits will often be on days when she won't need her keys.

There will be a more formal recognition of Helen's contributions to University and Observatory life later in the summer, but meanwhile the DDD, on behalf of the department and the many past students, staff, and faculty spread around the world, salutes Helen and wishes her well.

* * *

Welcome to the following summer students:

Allen Attard (Percy/Erindale)
 Denise Giguere (C. Clement)
 Jason Harlow (Kamper)
 Katherine Hayhoe (Percy/St. Geo.)
 Inese Ivans (Lester)
 Sara Seager (Ferne, Kronberg)

CONGRATULATIONS

Congratulations to Tom Bolton on being elected Secretary of the the Mathematics and Physical Sciences Section of Academy III of the Royal Society of Canada.

Congratulations also to John Percy on his appointment as Vice-Chair on the Board of Trustees of the Ontario Science Centre. See his writeup on current activities at the OSC elsewhere in this issue.

Our gossip columnist, Mike Fieldus, received a cheery recognition as such in the May 11 U of T Bulletin. The latter pointed out that the Doings "allows its contributors complete editorial freedom," a policy we may have to revise, starting with Mike.

COMINGS AND GOINGS

Tom Bolton attended the meeting of the Joint Subcommittee on Space Astronomy in Ottawa April 27-28. The major item of discussion was Canadian participation in the Odin project, a small satellite project for submillimeter radio astronomy and aeronomy. Sweden is the lead country for the project.

Susan and Tom attended the Royal Society of Canada meeting in Ottawa May 21-23. The program, on Values in University Education, was very successful. The speakers were, without exception, entertaining, stimulating, and disciplined, and the discussions following the papers were passionate and thought provoking. Astronomers Rene Racine, Georges Michaud, and Gilles Fontaine were inducted as new Fellows of the Society, and Francois Wesemael was awarded the Rutherford Medal in Physics.

Ray Carlberg spoke to the Hamilton Centre of the RASC on Thursday, April 29. The title of his talk was *Too Many Faint Galaxies*.

Christine Clement also gave a talk to the Hamilton Centre of the RASC. The title of her May 7th presentation was *Taking the Pulse of Variable Stars*.

Bob Garrison had an observing run in Mexico 1-10 April, and a second in Chile at UTSO 10-25 May. Prior to the Chile run Bob visited the El Indio gold mine, located east of La Serena in the Andean cordillera. It is a massive operation with 50km of tunnels dug into the side of a mountain at an elevation of 3900m. El Indio produces the highest quality gold ore in the world.

John Percy did two lecture assignments for the AAS Harlow Shapley Visiting Lecturers Program: one to Jackson State University and Tougaloo College (Jackson, MS), where he gave lectures on "The Birth and Death of Stars", "The Search for Extraterrestrial Life", "Astronomy Education" and "Variable Stars and the AAVSO", and a second to Allegheny College (Meadville PA), where he gave lectures on "Variable Stars and Stellar Evolution" and "The Search for Extraterrestrial Life".

John Percy gave a presentation on "Variable Stars and Stellar Evolution" at Marc Garneau Collegiate, where BSc graduate David Leggett gives a full-year course in Astronomy to grade 12 students.

On May 19, the University of Toronto Mentorship Program (which enables exceptional senior high school students to work on research projects with University faculty) held its annual get-together, which this year consisted of a "Show-and-Tell" poster session. Two students working with John Percy presented posters: Andre Chang, on "A Peculiar Variable Star" (U Mon) and Allen Attard, on "The International Photometric Campaign on Be Stars". Both of these projects will be presented as parts of conference papers this summer.

Terence Dickinson, well-known Canadian astronomy writer, was presented with the Royal Canadian Institute's Sandford Fleming Medal on April 25. The medal is awarded for outstanding contributions to public appreciation and understanding of science and technology.

Julietta Fierro, Instituto de Astronomia, UNAM, Mexico, was a visitor to the department (where she gave talks on her research and her educational work), the McLaughlin Planetarium and the Ontario Science Centre (where she was gathering ideas and materials for Mexico City's new science museum), and the RASC (where she gave a talk on "Astronomy in Mexico").

THE ONTARIO SCIENCE CENTRE

John Percy

I have just begun a three-year term as Vice-Chair of the Board of Trustees of the Ontario Science Centre. The Chair is Phyllis Yaffe, who has a strong background in publishing and in fundraising; our strengths and interests are complementary. During my orientation, I have been pleasantly reminded of the achievements, reputation, and potential of the OSC, and I want to bring you up-to-date on some of these.

The OSC's original (1969) space exhibits consisted of Apollo-vintage space artifacts, along with such Canadian content as a model of the Alouette I satellite. In the 1980's, the OSC added a small but effective planetarium, and an extensive set of astronomy exhibits. The astronomer-in-residence is Ivan Semeniuk, a graduate of our astronomy program. Other Toronto astronomy graduates who have worked or are working at the OSC include Katherine Riordan Madore, Matthew Bates and Allan Busch. Katherine and Matthew have gone on to other things, but Allan (who obtained a PhD in physics after completing his MSc with us) is currently a senior scientist at the Centre. Among other things, he is "flight director" for the Challenger Learning Centre. There are about a dozen such Centres across North America; they were established as a memorial to the astronauts who lost their lives in the Challenger disaster, and they are intended to continue the educational work which was one of the objectives of this mission. In the Challenger Learning Centre, two classes of schoolchildren spend several hours "flying" a mission in a realistic simulation of a space shuttle and a mission control centre. They must deal with mission procedures and problems in a creative, cooperative way. (When the facility is not being used for schoolchildren, it can be rented by corporate boards - perhaps even by university administrations!).

The OSC's Challenger Learning Centre opened this past winter. At the same time, the OSC opened a new Space Hall, featuring the type of hands-on exhibits and demonstrations for which it has become famous. These are only the highlights; there have been many other astronomy-related activities at the Science Centre over the past few months: a science-fiction festival during school break (which set an all-time record for attendance in one week), and a series of events connected with International Astronomy Week. Whether or not you have visited the Ontario Science Centre recently, you are sure to find lots which is new and exciting. It's great for children, but it's great for adults, too.

GASA Gossip

Mike Fieldus

Spring has arrived in the department. Most of you know what that means. First, the hottest days so far have arrived, with the heating system still pumping out hot air (or was that from the last course lectures of the year?) and everyone baked. Then the heating was turned off, the air conditioning turned on, and the temperatures returned to seasonal norms, and we all froze. Fortunately spring is very short in Toronto, and we should be in full summer by the time you read this. Of course, that brings it's own set of problems. One discovers that under the many layers of sweaters, shirts, sweatshirts and jackets that are worn all winter, most of the graduate students smell really bad. That must be the reason so many of us crave the outdoors and fresh air all summer.

Courtesy of Omar and Ian Shelton, we had the first beach party of the year. Ian and Omar live in adjoining buildings just off Yonge Street, so they got together and reserved the party rooms in both buildings for a Friday night. Despite the lack of sand (nobody believed the story Shelton gave us about a tornado taking it all away), we managed to have a good time. It was a traveling party, starting in one building, and ending up in another (they only could reserve the "good" room until 10:30, and some of us wanted to stay a bit longer, since it was cloudy and nobody could do work anyway).

Sweeping reform has spread through GASA in the last week. As the elections approached, somebody dug out the GASA constitution and discovered that we were not doing some things correctly, especially with respect to the executive where we were short three officers! The reality of present day GASA is that it is difficult to find three people to serve on the executive for a year, let alone the six required by the constitution. Further, we found there was a lot of confusion regarding the responsibilities of all the GASA officers, and all the other positions as well. So, just before the election, we made some rather significant constitutional amendments, reducing the executive to three, and explicitly making the secretary responsible for writing down and saving everything we do, so that there will be no confusion about it in the future. I don't know why it is taking Canada so long to perform this process, since we managed it in under a week. This reform was followed by the new elections, and in a stunning display of enthusiasm we actually had to vote for a position. Omar and Dan are the new President and Secretary, by acclamation, and James Brown is the new Treasurer, winning a long and hard campaign over Jean-Louis by a narrow two votes. Good luck to the new leaders and the new system they have taken over. I should remind them that it is traditional for the newly elected executive to take the rest of GASA out for a beer/drink after the elections, since they seem to have forgotten this key point.

Last, but not least, is this month's edition of Mike complaining about what's wrong around here. Today, it is the elevators. I realize that the elevators have been a problem in this building since its construction, as they have been discussed in columns even before I arrived in the department (and that is quite a while ago). Everyone jokes about the elevators always stopping on the eighth floor, and about them all riding to the top without you when you press the up button on the ground floor. But recently, things have gotten out of hand. Usually the elevators go into a power saving mode for reduced use at night, and are fairly slow to respond to a call after 8:00pm. Last week this changed to their not responding at all. Anyone working late was forced

to take the stairs down for lack of any elevator service. This seemed to be a popular feature with the maintenance people, since it was expanded into the day time hours this week, and included upward as well as downward travel. The waits for elevators increased to over 15 minutes, and people began walking up as well as down! Everything is not too bad, however, as this morning things seem to have returned to normal (such as that is). I believe this whole episode was staged by the physical plant people to make us appreciate the limited service we do receive.

V'GER TURNS 100,000

Ian Shelton

The Department of Astronomy (DA) van, affectionately known as "V'ger", turned 100,000 kms recently (April 11th, 1992). This mileage comes mostly in the form of student transport between the DDO and the DA, although there have been the occasional "excursions" to as far away as Montreal.

This 1984 Plymouth Voyager should not be confused with two other American-made Voyagers currently accumulating big mileages. The 1977 models (made by the JPL Motor Company) initially displayed rather poor fuel economy, getting only about 0.01 miles to the gallon (using premium gas!), compared to V'ger's 18 mpg (on regular unleaded). And given that the two older vehicles had an almost seven year head- start over V'ger, it's no wonder that they can now boast accumulated mileages of over 6000 Million kms (each). In all fairness, though, the excellent service department at JPL has done wonders keeping these two older Voyagers on the road; they even appear to have fixed whatever was the problem with the gas mileage, as they now report getting something like 200,000 mpg.

Anyway, Happy '100,000', V'ger!

LETTERS

Hi Don,

Big news... We are about to leave Chile, and will be moving to Tucson. I have accepted a job with the Gemini Project, and we will be starting in Tucson in May. Lynda and even Greg are looking forward to the move. (They have never been there, of course.) Please say 'hi' for us to the folks there.

I am sure that Lynda will write when we are settled in.

Hope all is well with you and Yvonne.

Cheers,

Bill [Weller]

FROM THE DOINGS OF TWENTY YEARS AGO:

When the observatory was completed in 1935, Dr Chant retired and Dr Young became his successor as Director and Head of the Department. By that time there were three others on the teaching staff, Frank Hogg, Peter Millman and I; Mrs Hogg was research associate, Miss Northcott was computer, Miss Edna Fuller librarian and secretary, Gerry Longworth machinist and observing assistant. We had more undergraduate courses than now, but very few graduate students. Money was very tight; our salaries were low, there were a few hundred dollars for several summer assistants and occasionally for a winter assistant, and the budget for supplies and equipment was less than \$1000 per year. From his own salary Dr Young equipped the machine shop and bought an electric desk calculator. When the war came three of us were away for a few years, but Dr Young and the others managed to keep the 74-inch working full time and to maintain the plate-measuring schedule.

- J.F. Heard

FROM THE DOINGS OF TEN YEARS AGO:

(A plaque had recently been mounted on the north wall of Elm's Lea (Observatory House) by the Marsh family who had owned the DDO property for generations before the University acquired it.)

Although the plaque commemorates only the house, the Marsh association with the land goes back much further. The first Marsh here was James Robert, an Empire Loyalist who left Pennsylvania in 1776 for Upper Canada. He acquired 400 acres of the dense forest that then mantled the countryside between Lakes Ontario and Simcoe, and in 1802 built the first Marsh home a few hundred yards northwest of the present house.

When James' son died in middle age, James settled 200 acres of the property on his grandson Alexander, and it was the 21-year-old Alexander and his 16-year-old bride, Sarah Adeline, who eventually built today's Elm's Lea.

The elms are now long gone, and the lea is being marched across by housing developments, but it is good to know that the family still cares. On a corner brick a few inches from the plaque, when the afternoon sun is just right, one can barely discern a weatherworn scratching: W.T. Marsh 1906. Whoever he was, W.T. would doubtless be proud. May the plaque long survive.

- Don Fernie

REVISIONIST'S CORNER

From the AST321S final:

"Velocity plays a very important role in maintaining the orbit."

Partial response to a question about models for the formation of comets: "One additional unconventional theory that I conjecture is that the comets are actually a clever marketing scheme by alien beings from A. Centauri. When viewed from A. Centauri with a reasonably strong pair of binoculars, the Oort Cloud, as we refer to it, clearly spells out "DRINK COCA COLA".

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| PAPERS SUBMITTED |
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