



# DAVID DUNLAP DOINGS

VOL. 7, NO. 10

OCTOBER 29, 1974



*Radcliffe Observatory,  
Pretoria, S.A.*

*(See Final Item)*

## EDITORIAL

### The Great TV Dinner Robbery

Tom Bolton has recently taken up the refrain long sung by Don MacRae and me when he pleaded at Countdown with everyone to *please* close the front door firmly whenever leaving the building after lock-up time. The door for nearly forty years has defied every effort by the best locksmiths and engineers to make it self-closing. Meanwhile it stands unlatched many evenings and week-ends in open invitation to vandals and fire-bugs, of which Richmond Hill has always had its share.

Over the years I can recall three break-ins, none with very serious consequences and one with elements of entertainment.

No one can recall the date exactly, but I think it was a February night in 1961 or 1962. Frank Hawker had just finished a last-half observing session at about 6 a.m. Going to the cat-walk door to lock it, he noticed a driver trying to back his car out of a snow-bank in front of the administration building. Frank, always ready to play the Good Samaritan, hurried over to lend a hand. The young fellow in the car was most appreciative, but both their efforts were to no avail. Finally Frank offered to go in and get a shovel. It was only then that Frank did a double-take and began to wonder why a strange youth should be driving away at 6 a.m. He finally decided to phone the police and then engaged in delaying tactics by explaining to the youth that he was having trouble finding a shovel.

When the police officer arrived he began to question the youth, and in a most ingenuous manner the latter admitted that he had stolen a neighbour's car from the garage, driven up to the Observatory at about 1 a.m., broken in the rear basement door, found Frank's pants in the locker room and stole a silver dollar from their pocket, found a TV dinner belonging to David Sher in the refrigerator and cooked it and ate it. Altogether he seemed to have spent a pleasant night in a place which he said he always enjoyed visiting, and with minimal inconvenience to anyone (including the owner of the car who, when phoned by the police, hadn't yet missed it).

The boy's father came with the police to see me the next morning and explained that his son, who was somewhat retarded, had engaged in similar escapades before and that he was having psychiatric treatment. We all agreed that nothing was to be gained by further action. Frank recovered his silver dollar but I can't remember whether or not David Sher was compensated for his TV dinner.

The next incident might not be so harmless and amusing; so, for Goodness' sake, at least *please keep the front door locked*.

J.F.H.

## OBSERVING

The 74-inch primary and the Cassegrain secondary have recently been re-aluminized with good results. The dome has also had a new coat of titanium-oxide paint - this time applied by roller coater except for the cat-walk which was sprayed. Some of us recall the last spray job which was done in a strong north wind and resulted in the speckling of all the cars in the parking lot. As I remember we were supposed to be compensated but never were.

## COMINGS AND GOINGS

Sidney van den Bergh recently talked at DAO on "Stellar Populations and Evolution of the Galaxy and visited KPNO Oct. 4-5 for a Committee meeting. He also attended the Albany photometry conference Oct. 25-26 and will attend an ASP Directors' meeting Nov. 1-2, talking to the Berkeley Astronomy Dept. on Stellar Populations and Galaxy Evolution Oct. 31.

Helen Hogg attended a meeting of the Publications Committee of the Royal Society of Canada on Oct. 10 and a meeting of the Council of the Academy of Science on Oct. 11, both in Ottawa. Helen is chairman of the Publications Committee of the Academy of Science and, as such, is charged with planning a volume of selected papers from the Transactions of the Royal Society of Canada to mark its forthcoming Centennial Year.

Jack Heard attended council meetings of the Royal Society of Canada Oct. 11-12 and a 45th-year reunion of his class of U.W.O. in London Oct. 19-20.

Barry and Kathy Madore sailed for England on the Alexander Pushkin on Oct. 8.

Peter Martin spent four days in late September at the Center for Astrophysics in Cambridge, giving a colloquium entitled "New Developments in Interstellar Polarization". He will be observing with the Steward Observatory 2.3 m telescope in late October, continuing work with Roger Angel on the wavelength dependence of interstellar circular polarization.

René Racine spent the week of Sept. 23 in Paris and Meudon attending meetings of the CFHT Working Groups on Data Acquisitions and Controls, Guiding Assemblies and Correctors, and Photometry.

## SEMINARS

### OCTOBER

As announced with addition of

Mon. 21st  
4 p.m. McL 102

Dr. R.D. Blandford, Inst. for Adv. Studies, Princeton,  
"Models of Extra-Galactic Radio Sources".

NOVEMBER

- Tues. 5th  
4 p.m. DDO Dr. R.N. Henriksen, Queen's, "Recent Advances in the Theory of Pulsar Magnetospheres".
- Mon. 11th  
4 p.m. McL 102 Dr. Sandra Faber, Lick Obs., "Measurements of Velocity Dispersion in Elliptical Galaxies".

PAPERS SUBMITTED IN OCTOBER

- F. Ahern Neon III in Planetary Nebulae  
Absolute Emission Line Intensities for V1016 Cygni
- J.P. Vallee The Rotation Measures of Radio Sources and their Interpretation.  
P.P. Kronberg
- M. Gearhart, J. Kraus,  
P.P. Kronberg, "Optical Identification of Radio Sources from the Ohio Survey"  
T. Edwards, B. Andrew
- G.L. Hagen Evolved Stars in Open Clusters
- S. White UBV Photometry of NGC 2439
- B. Madore UBV Photometry of the Cepheid V367 Scuti in the Open Cluster  
S. van den Bergh NGC 6649.
- S. van den Bergh Stellar Populations in Galaxies
- R. Racine The Apparent Distribution of Globular Clusters
- R. Garrison, On the Physical Association of the Peculiar Emission-Line  
W.H. Hiltner Stars HD 122669 and HD 122691  
N. Sanduleak

LETTER TO THE EDITOR

*In a letter dated Oct. 4, 1974 Tom Clarke draws attention to Solzhenitsyn's references in "The Gulag Archipelago" to the Soviet Astronomer N.A. Kozyrev (well remembered for his somewhat controversial research on lunar volcanic activity) who was a victim of the Soviet penal system between 1937 and 1948. On pages 481 and 484 of the paper-back edition published by Harper and Row, Solzhenitsyn describes the ordeals which Kozyrev underwent during this time, particularly the cruel deprivation by his captors of reading material in astronomy during years of solitary confinement. Tom comments, "To think that some people grumble about the wilds of Algonquin or the remoteness of Las Campanas".*

## P O T P O U R R I

### Andrew Thomson

Dr. Andrew Thomson, 81, died at his home in Orangeville on October 17; burial was on Oct. 19, memorial service at Bloor St. United Church on Oct. 23. Dr. Thomson, a world-famous meteorologist, was Controller of the Canadian Meteorological Service from 1946 till 1959. He was intensely interested in astronomy and a staunch supporter of the Royal Astronomical Society of Canada of which he was National President 1949-50. As expressions of sympathy donations to the Andrew Thomson Memorial Fund will be gratefully received by the Chairman of the Department of Physics of U. of T.

### Helen Hogg Bereaved

Helen Hogg's stepsister, Connie Douglass, died on Oct. 10 in Florida and was buried in Belmont, Mass. on Oct. 15. Dr. Hogg attended the funeral and then remained in Massachusetts to attend a meeting of the AAVSO in Williamston and to spend some time at her home in Dunstable. On Oct. 19th there was an AAVSO banquet marking the retirement of Mrs. Margaret Mayall long-time Director of the Association, at which Helen presided as toastmaster.

### Born

To Robert and Juliana Christy of Pasadena a daughter, Ilia, on Sept. 11.

To Mike and Honey Shara a son, David Jeremy, on Aug. 22 in Tel-Aviv.

To Wayne and Ursula Dewsbury a daughter, Deneen Ursula, on Sept. 11.

### Pompier's Visitants

A number of distinguished French scientists and others visited Toronto for a few days before and after Oct. 4 in connection with the opening of the French Technical and Scientific Exposition held at the Ontario Science Centre Oct. 4 to 14. Advantage was taken of this opportunity to hold a meeting of the Directors of the CFHT at the Science Centre. On Oct. 3 in the evening Don and Betty MacRae entertained the visitors from France, Hawaii, Ottawa, London and Vancouver at Observatory House. On Oct. 4 at 8.00 p.m. there was a conference on the CFHT at which Prof. Ch. Fehrenbach, Dr. Jean Delhaye, Dr. Jack Locke and Dr. John Jefferies spoke, followed by talks on Oct. 8 and 9 on "Cosmology" by Dr. Jean-Loup Puget and "Interstellar Molecules" by Dr. Pierre Encrenaz.

### Third Ph.D.

Andy MacRae, youngest son of Don and Betty, is about to become the third Ph.D. in the family, having successfully defended his University of London thesis in physiology at (of all places) Philadelphia (because his examiners were there).

David MacRae, the Chemistry Ph.D. of the family, has been transferred by his employers (Colgate Palmolive) to Sydney, Australia. David and wife Sheila and son Duncan left for Australia on Oct. 7.

### J.P. Presents

John Percy is conducting a series of three four-hour workshops on "Elementary School Astronomy" for the Board of Education of the Borough of Etobicoke. On Sept. 12, John gave a talk on "Ancient Astronomy - Facts and Fantasies" to about 100 members of "The Associates of Erindale College", a community group interested in the welfare and activities of the College. About 80 members of the same group visited the DDO on Sept. 20, and were entertained by the MacRae's, the Racine's and other helpers.

### Ph.D. Senate Orals

There has been a plethora of senate orals in the Department this month accompanied by a procession of colleagues from other Canadian Universities acting as external examiners. The candidates were Barry Madore on Oct. 1, Bill Harris on Oct. 2, Bill Herbst on Oct. 9 and Nancy Evans on Oct. 16,. All were successful and await the award of their degrees at Fall Convocation.

### Alumnus Visits

Bill Sherwood (M.Sc. 1967), now at Ruhr Universitat, Bochum, visited the Observatory on Oct. 1 on his way home from Chile, where he was Bochum Observer at ESO during the summer.

### Attends Photometry Conference

Don Fernie attended a Conference on Multicolor Photometry and the Theoretical HR Diagram at Albany on Oct. 24-27 and gave a paper.

### New PDF

Dr. David Turner from UWC has arrived to assume a Post-doc Fellowship, working on spectral classification with Bob Garrison.

### NRC Grants Committee

Phil Kronberg has been appointed for a three year period, beginning July 1974, to the Grants Selection Committee of NRC for Astronomy and Space.

### PPK's Summer

During August, Phil Kronberg spent five days at Jodrell Bank analysing combined Jodrell-NRAO observations of M82, which will be published jointly with Dr. Peter Wilkinson of Jodrell Bank. Later in August he spent ten days at the

Leiden Observatory continuing some joint work on extragalactic radio sources, and analysing Westerbork observations made jointly with R.G. Strom of Leiden. Among these are radio maps of 3C123 one of the strongest 3C sources, which shows a very unusual structure when mapped at high resolution (by PPK at NRAO) and with very large dynamic range (by R.G. Strom at Westerbork). Phil also made a brief visit to the Max-Planck-Institut für Radioastronomie at Bonn.

### Intercom

Because of the unfriendly action of Bell Canada in introducing rude recorded comments and other unpleasant noises on the telephone whenever the receiver is left off the "hook", we have been forced to give up our free intercom practice and to pay for a regular Bell intercom system. Admittedly the latter is an improvement, but it lacks that delicious satisfaction of getting something for nothing from Ma Bell.

### FINAL ITEM

#### Hail, and Farewell...

In 1952, as a callow and naive undergraduate, I unwittingly sealed my fate. I knocked on the door of the Radcliffe Observatory and applied for a summer job. The Director, in his kindly way, led me down to a semi-darkened room where one of the radial velocity measuring microscopes was kept, showed me how to operate it, and then happily indicating the inexhaustible supply of spectrograms awaiting my attention, left. B-stars, the worst dogs of all for that sort of thing, but I was buoyed up by the thought that apparently all of mankind's knowledge and understanding of the Galaxy's rotation somehow hinged on my efforts, and besides, I was being paid no less than \$60 a month for those efforts.

All this comes back rather vividly now, because as I write this, give or take a few weeks, the Radcliffe Observatory is coming to an end. David Thackeray, the last of the Radcliffe Observers, has written a little booklet outlining the Observatory's long history over the centuries, but to those of us who once worked there it is, of course, a much more personal and affectionate matter.

Thackeray was always referred to among his staff by his initials. It was "ADT wants you to do...". In fact, there may be some unexplored sociological factor in this, because when I later was associated with the Cape Observatory it seemed natural that its director, whose formal title was Her Majesty's Astronomer to the Cape, should always be referred to as HMA, and his Chief Assistant, David Evans, was always DSE. Perhaps a compromise between the Englishman's customary reticence in using first names and not wanting to appear too formal.

Formality, though, was never a problem at the Radcliffe. The 74-inch, and all other things mechanical and electrical, were presided over by Dennis Pullen, an

ex-patriate Canadian who had early escaped an upbringing in Timmins or Temagami or somesuch. His Canadian ways never quite left him, however, for I once heard him express himself on the subject of what a visiting astronomer had done to the 74-inch with a fluency that could only have come from the lumber camps of Northern Ontario. I think it was on New Year's Eve of that summer that Dennis left Adriaan Wesselink boggle-eyed by pouring beer in AJW's rain-gauge.

There was Mrs. Blore, who Dennis was pleased to refer to as our Celestial Secretary. When I walked into her office on a visit twenty-two years later, she looked up from her typewriter, hesitated only fractionally before saying "Hello, Donald, how are you?", and turned back to complete her sentence.

It was probably from Morrisby that I got my first intimation that there is something strange about astronomers, although, to be fair, Morrisby didn't actually belong to the Radcliffe staff. He was one of that legion for whom the making of afternoon tea is a sacred ritual. The pot had to be pre-heated just so, a precise weight of tea put in before the water (boiled with almost thermometric precision), and then no spoon allowed to enter the elixir. Instead, the pot had to be turned at an exact rate through exactly three-and-a-half rotations. As junior joe-boy this was often my task, and I still recall the horror of seeing Morrisby advancing on me one afternoon, ginger moustache quivering on his apoplectic face, screaming "Anti-clockwise, you bloody fool, not clockwise!" Soon after, Morrisby dropped a flashlight off the Newtonian platform down the tube of the 74-inch, and I later heard with mixed feelings that it had hit a strut above the primary and bounced out of the tube rather than into it. I bet they don't make tea like that in the French Foreign Legion.

No one who was at the Radcliffe in those years will forget Simon John Fairfax Something Archer. (A mutual acquaintance once chided me in mock amazement: "Fancy anyone not remembering Archer's fourth name.") Most of what one would like to say about Archer is beyond printing, but even what could be said would fill volumes. He had a very short astronomical career, although with an interesting bibliography (Archer on 'How I Built a Photoelectric Photometer for My 3-inch Unsilvered Reflector'; Archer on 'The Hitherto Undetected Variability of Many Bright Stars'; Archer on 'M-supergiants as Beta Cephei Stars'; etc., etc.). Like Morrisby, Archer did not actually belong to the Radcliffe, being the junior representative of another observatory; but it was at the Radcliffe that he achieved his finest hour, so to speak. I don't remember now whether it was before or after he ripped up all the electrical dome-rotation track (notation in log book: "Electrical sparks observed. Shut down." - even Pullen's vocabulary failed) that he came to his confrontation with Michael Feast. MWF had taken the better part of a night to get one spectrogram, and at the end of the night he left the plate in its plateholder, wrapped it in a black cloth and placed it in a darkroom drawer clearly labeled with his name. Early next morning Archer appeared, opened the drawer (an act itself recognized as an unspeakable crime), unwrapped the plateholder, opened it, and realizing the situation revealed by the brilliant room lights, put it all back together and said nothing. By early afternoon Michael had incredulously developed his plate, done the necessary detective work, and was



sitting at his desk weighing, I suppose, the relative merits of garotting and disembowelling, when Archer appeared in the doorway. He crossed the room and laid on Michael's desk a dime-store ruler, saying with a giggle in his curiously falsetto voice "Tee-hee, a peace offering", and then, before the bulging-eyed Michael had the presence of mind to leap to his feet and cleave Archer in two with the ruler, fled out the door. When last heard of Simon John etc. was in the Outback somewhere laying waste to Australian geophysics, but to this day there are astronomers all over the world who will quite literally jolt up with white face and thumping heart at the mere mention of his name.

David Evans had already left the Radcliffe staff when I was there, and I was to know him better (much better) in subsequent years at the Cape, but so likeable a character left stories behind him. The one I always enjoyed concerned early days when the Radcliffe was just getting started in South Africa, and David was assigned the task of designing an aluminizing tank. I guess he wasn't too strong on engineering, but he knew one had to have a good vacuum in the tank, so he looked up the catalogue of some British vacuum-pump manufacturer and rather arbitrarily chose two of their heaviest-duty pumps. He wrote to them to check whether these would be sufficient, and back came the answer in dry understated style: "If you intend using our model such-&-such pump, we suggest you consider using your entire dome as the vacuum chamber, while if you use two such pumps you may wish also to leave the slit open...."

We would have been spared all this had people only listened to Professor F.A. Lindemann back in the 1930s. Lindemann, later Lord Cherwell, was Professor of Physics at Oxford University then, and had been violently opposed to the erection of the Radcliffe 74-inch in South Africa. And when Lindemann opposed anything, there were ructions indeed. His biographer has said of him that he 'wielded greater power than any other scientist in history', a situation that came about because not only was he a personal friend of Winston Churchill, but he was almost the only scientist that Churchill really believed in during World War II. Not only did he have this pull, he was a very able and determined political in-fighter, which made it doubly unfortunate that his often bizarre scientific views generally put him in opposition to the scientific establishment. An unhappy man, Lindemann was renowned for his savage and vicious attacks; he once leaned across a committee table and snarled at an adversary "I'd emasculate you", adding, after sitting back, "if I thought it'd make the slightest difference to you." He achieved greatest notoriety in 1938, when the British Government set up a committee under the chairmanship of another physicist, Henry Tizard, to consider methods of defending London against bombing attacks. Despite all efforts to the contrary, Churchill got Lindemann onto this committee, with almost disastrous results. The committee concerned itself mostly with the development of radar, then a new and secret weapon, but Lindemann thought little would come of it, and instead continually and violently advocated a scheme of defence based on aerial mines strung up on wires hanging over London. The meetings became battles of such ferocity that, as P.M.S. Blackett later reported, "on occasion the secretaries had to be asked to leave the room in order that expression could be given free rein". Lindemann and Tizard, who had once been close friends (one was the godfather of the other's child), became utter and implacable foes and remained so to the end of their lives.

Back in the early thirties, then, when Lindemann heard that there was a move afoot to re-site the Radcliffe Observatory in South Africa with a 74-inch telescope, he immediately went into violent opposition. It was far more important, he claimed, to train students in Oxford (the old site of the Observatory) than it was - in his contemptuous phrase - "to take a few more photographs of star clusters in the Southern Hemisphere". He enlisted the help of the incoming Professor of Astronomy, H. H. Plaskett, newly arrived from Canada, and although Plaskett supported Lindemann, he warned him says Lindemann's biographer "that any astronomer, with the single exception of himself, would back the scheme [to have the Observatory in South Africa]". Their problem was that the Observatory had never belonged to or been under the control of Oxford University. Dr. John Radcliffe, a seventeenth century Oxford physician, had left his money in the care of a board of trustees, and it was the latter that was proposing the move to South Africa. Lindemann further enlisted the support of Albert Einstein, who wrote to say that "decay of mental activity of workers in isolated research institutes is a phenomenon that has frequently been observed..." Lindemann induced Oxford University to take the Radcliffe Trustees to court over the matter, where happily sanity finally prevailed and the University's case was dismissed. Having delivered himself of a violent polemic against the incompetent attorney who had handled their case, Lindemann turned to consideration of another possible court case, this time by himself against Christ Church College over a question of his precedence at the College's Head Table.

So the Radcliffe Observatory went to South Africa, where it altered the lives of several like me, and now, in the financial crunch of our times, it has come to an end. As for all those bloody B-star spectrograms, mankind never was all that grateful for my efforts; on the other hand, I have been a happier photometrist ever since.

J. D. F.