



# DAVID DUNLAP DOINGS

VOL 7, No. 12

DEC. 17, 1974



*We all wish one another - and you too out there - a  
MERRY CHRISTMAS AND A HAPPY NEW YEAR (see p. 5)*

## DIRECTOR'S CHRISTMAS MESSAGE

Once again it is time to bid the old year good-bye and usher in the new with greetings and good wishes to all the members of the DDO family.

I suppose everyone will have his own list of high-points for 1974, but many of them must include the progress which is evident on Mauna Kea. The photographs of the concrete foundations and walls for the dome - real concrete rising towards the sky - bring cheer to every astronomer. Other photos which show the mirror blank in the grinding machine at DAO add to our sense of real accomplishment. All in all there is a pleasurable feeling of anticipation as things so long awaited now are seen to be taking shape. The year 1975 promises more progress towards our ultimate goal.

Here at home - at DDO - the year 1975 will mark the 40th anniversary of the opening of the Observatory. We plan to celebrate the occasion in some appropriate fashion at or near the thirty-first of May, and we hope as many as possible of the family will make a pilgrimage for the event. So please keep an eye on DDD for details.

Now, between things past and things to come, all of us at DDO wish the very best to all readers of DDD. And what better omen can we point to than our own Comet van den Bergh streaking through the Christmas sky?

MR

### Other Greetings

*GASA officers Phil Teillet, Bjarne Everson and Shyam Jakate, and DDD staffers Don Fernie, Jack Heard, Dale Ogden, Joan Topley and Linda Twitchin wish everyone a Merry Christmas and a Happy New Year.*

## COMINGS AND GOINGS

Don MacRae left for Paris on the 14th to attend the second Regular Meeting in 1974 of the Board of Directors of the Canada-France-Hawaii Telescope Corporation on Dec. 16-18.

Attending the A.A.S. Meeting Dec. 10-13 in Gainesville, Florida were Sidney van den Bergh, Bob Garrison and Philipp Kronberg.

At "Texas Symposium" in Dallas Dec. 16-20 Dunlap representatives will be Tom Bolton, Maurice Clement, Kayll Lake, Robert Roeder and Steve Shore.

René Racine was at the University of Montreal Nov. 25-29 for a meeting of the Scientific Advisory Committee of the CFHT.

Bob Garrison had a successful observing session at Las Campanas and after a stop-over in Florida for the A.A.S. meeting will enjoy a vacation until after Christmas.

## SEMINARS

### DECEMBER

Kayll Lake's talk on "White Holes" scheduled for Dec. 3 was postponed because of his illness.

The "one and only annual Christmas Countdown" took place as announced on Dec. 10. Our alter ego, the David Dunlap Droppings appeared as usual. There were a few high points: some of the verses were pretty good; and the Guest Editorial was quite funny, but would have been equally so with anyone else on the receiving end; it had no particular relevance to the Director. On stage, MC'd by Dave Hanes, were: a tape of Monty Python announcing an eclipse at Lord's; Jack Heard and Helen Hogg demonstrating some 40 to 50 year old calculators; Steve Shore with a biographical sketch of J.J. Charfman 1809-72; Phil Teillet with a rather nicely presented funny-slide show; Dave Hanes with a profile of the Director (same criticism as above); Gerry Diamond with an original and delightful set of astronomical impersonations; and Tom Bolton with his second (and last) Annual Sirgay Awards for astronomical goofs, among them the Wm. Pickering Award to himself for his discovery earlier this year of a red supernova in exactly the same position as Mars. Many thanks to all who took part and to the ladies of the staff for a wonderful spread of Christmas fare.

### JANUARY

Details are not yet available, except that Karl Kamper will continue his Wednesday talks on Astrometry on January 8 and 22.

PAPERS SUBMITTED IN NOVEMBER

J.F. Heard, R. Hurkens,  
P. Harmanec, P. Koubský  
& J. Krpata

"Re-determination of the Velocity  
Curve of 4 Her".

Wm. Herbst

"R-Associations. II. The Ratio of  
Total to Selective Extinction"

LETTERS TO THE EDITORS

Sir:

I have read with interest your account of the Observatory computing machines in DDD November 26. You have omitted one that to me was all important, namely my own.

This is an Original Odhner, a Swedish machine, which I bought with my own money in 1936 to have at home and to supplement the machines then existing within the DDO walls. If I remember rightly, it cost \$125, a not inappreciable sum in those days. I really preferred a Baby Monroe, but Professor Harry Plaskett had been badly let down in a long computation by a failure in the Monroe, and was very vocal against them.

My Original Odhner has turned out a great deal of period computation. It is still in use. It has never failed me, and has never been back to the company for repairs. The only attention it has needed was some years ago to replace the rubber suction feet which hold it to the desk. As everyone knows, rubber does not keep its resilience forever.

Yours faithfully,

Dec. 8, 1974.

Helen Sawyer Hogg

Dr. J.D. Fernie,  
Final Item, DDD.

Dear Dr. Fernie:

I always read Jack Heard's Foreword and your Finale in D.D.Doings with the greatest interest and enjoyment.

Your account of astronomical datings of ancient monuments in the Nov. 26 issue reminded me of 1922-23 session in Cambridge when I was working

partly at the Cavendish and partly at the Observatory. Sir William Ridgeway gave a lecture on ages of Egyptian Pyramids and Stonehenge. He was a tall, impressive, dominating figure, very certain of the correctness of his views. He was convinced these monuments were far less ancient than generally believed and he poured scorn and ridicule on the work of Piazzzi Smith and Norman Lockyer.

I was sceptical of Sir William and certainly biased in favour of the astronomical approach to the problem, so I was happy when radio carbon dating strongly supported Lockyer.

With kindest regards,

Sincerely yours,

Kingston, Ont.  
Nov. 30, 1974.

A. Vibert Douglas

### ON OUR COVER



- |                     |                       |                        |
|---------------------|-----------------------|------------------------|
| 1. Margaret Buckby  | 18. Helen Hogg        | 35. Austin Gulliver    |
| 2. Warren Magill    | 19. Frank McDonald    | 36. Dieter Brueckner   |
| 3. Dave Hanes       | 20. Martine Normandin | 37. Donald MacRae      |
| 4. Maurice Clement  | 21. Gerald Diamond    | 38. Ruta Caune         |
| 5. Phil Teillet     | 22. Dave Blyth        | 39. Margaret Gallagher |
| 6. Dave Earlam      | 23. Steve Shore       | 40. Susan Clarke       |
| 7. Shyam Jakate     | 24. Gilles Ménard     | 41. Al Hay             |
| 8. Jim Thomson      | 25. Jack Heard        | 42. Esther Salve       |
| 9. Don Fernie       | 26. Tom Bolton        | 43. Ihor Prociuk       |
| 10. Bob Chambers    | 27. Karl Kamper       | 44. Tony Estevens      |
| 11. Chris Pritchett | 28. Gerry Longworth   | 45. Pamela Evans       |
| 12. Frank Hawker    | 29. Bjarne Everson    | 46. Dorothy Fraquelli  |
| 13. Richard Gray    | 30. Christine Coutts  | 47. Bill Herbst        |
| 14. Serge Pineault  | 31. Andrew Leir       | 48. Joan Topley        |
| 15. Bill Clarke     | 32. Peter Martin      | 49. Jose Maza          |
| 16. Archie Ridder   | 33. René Racine       | 50. Dale Ogden         |
| 17. Mary Magill     | 34. Bruce Campbell    | 51. John Percy         |
|                     |                       | 52. Linda Twitchin     |

Among those absent: Sidney van den Bergh, Bob Garrison, Eli Honig, Philipp Kronberg, Robert Roeder, David Turner, Elizabeth Barnes, Betty Herbst, George Watson, Ted Bednarek, Alan Irwin, Kayll Lake, Jurg Pfund.

(Photograph by Warren Magill)

## P O T P O U R R I

### Born

To David and Sheila MacRae a second son in Sydney, Australia on Dec. 3  
- second grandson of Don and Betty.

### Christmas Parties

Betty and Don MacRae held their traditional staff and student party on Sunday Dec. 8 at Observatory House. The total count this year was 73 including the usual complement of wives and husbands, girl- and boy-friends, children and grandchildren. It's the one time in the year when we all (or nearly) see one another - and we love it.

As we go to press GASA are entertaining everyone-and-friend at a meet-the-new-students-say-goodbye-to-Trish party - on Dec. 13 at 496 Huron.

### Saturday Science

Tom Bolton and John Percy gave talks at the "Physical Sciences Saturday", held on Nov. 23 and 30 by the physical science departments in the Faculty of Arts and Science, and by the Faculty of Applied Science and Engineering. The campus observers arranged tours of the campus observatory, and astronomy films were shown during the lunch hour. All of the astronomical presentations were well-attended and well-received.

### Gerald Clemence

Sad word came last week from Pierre Demarque of Yale that Professor Gerald Clemence died on Nov. 22 at age 67 in Providence, Rhode Island. A classical astronomer in the tradition of Newcombe, Gerald Clemence had joined the staff of the U.S. Naval Observatory in 1930 and served as its Scientific Director from 1958 to 63 when he "retired" to join the staff at Yale. He was well known to us in Toronto where he visited and gave talks to the R.A.S.C. and the Department and when he was President of the A.A.S. at its Toronto 1959 meeting, and again in 1964 when he accepted honorary membership in the R.A.S.C.

### Librarians Meet

Ruta Caune visited Ottawa Nov. 22-24 to attend a workshop of the Canadian Library Association.

### Graduate Degrees

Graduate degrees in astronomy were awarded at the Dec. 6 convocation as follows: M.Sc. Simon White; Ph.D. Nancy Evans, William Harris, William Herbst, Barry Madore, Robert Deupree. At the same convocation the degree of M.B.A. was awarded to Charles MacRae, son of Don and Betty. Also Claude Faubert (M.Sc. astr., 1972) received the degree of Master of Museology.

## FINAL ITEM

### Year's - End Miscellany

What with church-music rampant on the airwaves at this time of year, I, church-organist that I once was, cannot resist this version of a fine old hymn that appeared recently in The Observatory:

*Through the night of doubt and sorrow  
Onward goes the pilgrim band,  
Counting photons, oh so slowly,  
On the fingers of one hand.*

If I recall correctly, the original version wasn't all that inappropriate either; I think the last two lines go

*Singing songs of expectation,  
Marching to the Promised Land.*

Doubt and sorrow, not to mention downright exasperation, were frequently on John Flamsteed's mind back around three hundred years ago. There were a lot of characters around then who kept claiming to have detected stellar parallax, and invariably, when fiery John checked into these claims, they turned out to be spurious. This led him, in writing a short autobiographical sketch in 1685, to offer the following rebuke:

*Coarse observations, made by honest and well-meaning men, have more perplexed the astronomer than all their labors and dreams upon them can make him satisfaction for. Their pretty thoughts and conceits in the theories are always excusable and sometimes to be commended: but when rude and ill-managed observations and experiments are brought to confirm them, though they may serve the author's present turn, yet they become a load on the science, and at last turn to his shame and reproach....*

On the other hand, a century-and-a-half later, when stellar parallax had finally been detected, John Herschel took a rather different view:

*When once an observation has been thoroughly ascertained, and carefully recorded, the brazen circle with which that useful work was done may moulder, the marble pillar totter on its base, and the astronomer himself survive only in the gratitude of his posterity; but the record remains, and transfuses all its own exactness into every determination which takes it for a groundwork.*

You may note Flamsteed's spelling of the word 'labor'. I point it out because there is a widespread misconception that the British have always spelled words like 'labor' and 'color' with a 'u' in them, and that it was the Americans, with their love of efficiency, who dropped the 'u' as redundant. Not so. In Flamsteed's day, as in Shakespeare's before him, while everyone took a much more casual view of spelling than they do today, the consensus among the British was to spell such words without the 'u'. It was Samuel Johnson who had a personal preference for putting in the 'u', and such was his prestige and authority in Britain, that -our subsequently became the standard there. But that was late in the eighteenth century, and by then it was too late to impose British opinions on the Americans, who went gaily on without the 'u'. Likewise, the British affectation of spelling 'program' as 'programme' is as recent as the nineteenth century. It has no justification, since the word has the same roots as 'diagram', 'telegram', etc, and even Fowler doesn't like it. And finally, did you know that the U.S. gallon is a similar British archaism? It was a measure originally known as Queen Anne's wine gallon, widely used in Britain in that Queen's day, and adopted in the early colonies. Later the British decided to re-define their gallon as the volume of 10 lbs. of water, but the ex-colonies went on as before with the old gallon.

Class dismissed.

I recently had an all too vivid demonstration of how bad our light pollution problem is becoming at DDO: I had been working on FG Sge in Chile, and had become accustomed to its field in the finder telescope. Within a week of my last night in Chile I had a night at the DDO, and despite a very similar finder, I simply couldn't believe I was looking at the same star. Could these faint splotches against a grey background be the same as those brilliant pinpoints on black velvet I had been looking at only days before? All the more reason to feel grateful to Tom Bolton, finger in the dyke, for his continuing battle against the forces of lightness and evil. But just in case you thought this a recent problem, hear this from the annual report of the Harvard College Observatory for the year 1905:

*Measures of the photographic brightness of the sky, due to electric lights, have been made at Ossipee, North Lexington, Concord, Waverly, Arlington Heights, Cambridge, and Boston Common, with results that may be expressed by the numbers 23, 33, 36, 50, 52, 100, and 242 respectively. The fact that the sky at Cambridge is three times as bright as at points only a few miles distant, suggests that it may be necessary in the future to establish an auxiliary station for the northern stars.*

Bob Garrison will hear no carping about Chile, of course, but there comes a time, after the umpteenth consecutive clear night, when you look out at sunset and feel like that character reported by Homer in the Iliad, iii, 364:

"And the son of Atreus said 'Damn' when he saw that the sky was clear."



I've never been all that wildly enthusiastic about rushing out to observe lunar eclipses, and now I find that instinct has served me well, witness this report from the Japan Weekly Chronicle of October 14, 1903:

*Tuesday's eclipse of the Moon resulted in at least the death of one foreigner, and it is appalling to contemplate the number of fatalities that might occur in the foreign community of Kobe if the practice of gazing at the Moon is persisted in. On Tuesday evening a foreigner went into his garden with the object of looking at the Moon. Having cleared away the stones and snakes in his immediate vicinity, he lay down in a blanket and got up with a cold. From the post-mortem examination it was elucidated that the deceased died through laboured respiration and shock, and at the inquest Dr. Frederick Augustus Guppy testified that craning his neck to look at the Moon was the direct cause of the man's death, the deceased never having had occasion to look in that direction since he came to Kobe.*

How about that construction in the first sentence: "resulted in at least the death of"? Poor guy, death was just for openers!

As Sidney (Kissinger) van den Bergh bounds from jet to jet, he should give some thought to what the travelling astronomer had to put up with in bygone days. Back in the early years of the century that redoubtable Oxford don, H. H. Turner, travelled across the United States, visiting major observatories. Pickering and the lads at Harvard took him to see what an actual 'base-ball' game was like, and then, pausing to decry the commercialism of Niagara Falls, he passed on for a game of golf at Yerkes ("...the Engineer-in-charge-of-the-40-inch failed with his putt on the 17th hole..."). Chicago was pretty liberated, what with "ladies often riding astride", but on the other hand the water supply from Lake Michigan was so polluted that there were daily bulletins in the morning papers telling people when it was necessary to boil the drinking water. His American friend graciously explained "They look for bugs, and when they find them they tell us to fry them." But then came the hairy part, the train journey out West, although in retrospect Turner concluded that "no doubt we were exceptionally lucky". Thus "The first part of the programme was carried out with tolerable fidelity, the journey to Flagstaff being varied by nothing more noteworthy than half the train running off the line. Novices like ourselves could scarcely avoid some little alarm.... The journey to the Grand Cañon ... was richer in incident, for the train caught fire at least four separate times. Buckets were filled at the engine and carried by willing hands to the flames, while [the rest of us] stood in the forest and watched. Each time the fire was got under the train started with no particular warning, and in climbing hastily in on one occasion a man dropped his hat.... At the next stop he ran back for it, and triumphantly returned with it before we had moved on. But soon the fire-fighters became so skilled that it was no longer necessary to stop for them to work, and we steamed quietly along, with our busy corps of firemen pattering to and fro on the roof of the train with their buckets...."

There's a great deal more, all about the floods and washouts in California, how they ran out of food, etc, etc, but Turner did finally make it to Mount Wilson, mostly by taking the proper philosophical attitude. Somewhere in the middle of the floods one of his fellow-passengers remarked " 'If this goes on we shall have to do what they do down in Arkansaw when it rains.' 'What is that?' said I. 'Why, they just let it rain.' And so did we."

So what are you doing for New Years? Can't afford the \$200-a-couple tab for a night out at the Hyatt-Regency? Why not have a telescope party? No, not one of those dreadful ones where you look through the telescope, I mean one in a telescope. That was what the Herschel family did just a hundred-and-thirty-five years ago. Grandpa Willy's old forty-foot reflector had been mouldering away, so the family had the superstructure dismantled, and with the tube horizontal on the ground proceeded to hold a New Year's Eve party in it. John, as was his wont, whipped up a dozen or so verses for the occasion. The first of them will suffice:

*In the old Telescope's tube we sit,  
And the shades of the past around us flit,  
His requiem sing we with shout and din,  
While the old year goes out and the new comes in.  
Merrily, merrily, let us all sing,  
And make the old telescope rattle and ring.*

*Merry Christmas!*

J.D.F.