

17/6/93

Molly King Guy
700 Oxford Road
Waukesha, Wisconsin
U. S. A., 53186

Greetings Molly:

Yours of 4th March 93 plus

interesting enclosures arrived on 12/3/93.

Thanks very much. I found the gossip pages informative. Most of the contents are new to me. I wrote to Helen on 16/3/93. She did not reply, so I deduced Helen knows very little about Mrytle. It is not a great matter.

Recently the british magazine "Astronomy Now" carried a story about me and my activities by Jim Luty in April 1993 issue on pages 42-43. It is in a folksy manner. I'm well pleased and flattered. Suggest you locate a copy at library.

Recently I've been examined by a geriatric (old people) specialist. He says I'm good for another ten, probably fifteen, and maybe twenty years. Provided I don't do anything foolish. I can still put palms of my hands flat on floor without bending my knees. Can you? Winter is beginning here. We had an inch of snow on 12th and 13th. Gone now. Let us keep in touch.

Best wishes,

Grote Reber
Grote Reber
General Delivery
Bothwell, Tasmania
Australia 7030

Posted 15/3/96 60¢, Recd 2/4/96

Mrs. John R. Guy
700 Oxford Road
Waukesha, Wisconsin 53186

March 14, 1996

Dear Grate,

Don't know if this old
address will reach you - hope so.
Our son, Ted, just sent us a copy
of an article about you from
Tasmania - "Notebook" by Tom Moffat.

Ted's friend, Dave Lamert, just
came back from Tasmania and
brought Ted the article -

We enjoyed reading about
you - and, of course, are very
proud of you - We wish you
every kind of good fortune -

Jack is retired - a former
pediatrician - we travel, have a
dog - Jack hunts - enjoy our

cottage on Lake Michigan - have
five grandchildren - are very involved
with our sister city in Kazakhstan -
We've sent several containers of
medical equipment, etc - have been
over there twice - They are so poor
and the medical situation is awful.

Anyway, I just wanted to
say hello -

Fondly,

Melby King Gray

10/4/96

Greetings Molly:

Your note posted on 15/3/96 arrived on 2/4/96. Thanks a lot. I'm always pleased to hear from a friend of long standing.

I know Tom Moffat. He sometimes is rather imaginative. If possible, please have xerox copies of his article about me and send same to me. I'm curious what he says.

If you are interested, I suggest you borrow from library a copy of Journal Franklin Institute, Jan 1968, p 1-12. It contains an article by me which discusses my activities here. This experiment is finished. However, I like it here, so I stayed. Land is readily available and cheap. Population density is low. Bothwell County has an area of 1070 square miles, and population is less than 700 people. The sheep ranch I worked on named Dennistoun has an area of about 16000 acres. If I want to come and play on 350 acres the owner has no objection. My activities improve his land construction sheds, roads, fences, drains, etc.

Last 22/12/95 I was 84 years young. I'm quite in good health, free of aches, pains and stiffness. My hearing has not gotten worse. I use an aid. Being deaf is not all bad. I put my aid in my good ear and turn it off. This shuts out the noise.

During northern summer 1996 I may go on a scientific lecture tour of North America. If so, I'll hunt you up.

I question the wisdom of pumping our resources into a place like Kazakhstan. All we are going to get is a lot more of same. The first thing to do is shut down the people. Let us keep in touch.

Best wishes,

Grote Reber
Grote Reber
Michael Street
Bothwell, Tasmania
Australia 7030

Posted 16/4/96 \$1.00 Recd 26/4/96

April 16, 1996

Dear Gatz -

Received your letter yesterday - Enclosed is the article I wrote you about -

If you come this summer on a scientific lecture tour of the states, we'd love to have you look us up - If you aren't coming near Chicago or Milwaukee, perhaps we could meet you where ever you are.

Going to look up the 1968 article at the library -

Spring slow in coming this year - Snow the past two nights - Luckily, it melts quickly - Hope to meet you -
Wally

over

P.S. I ordered article from the
Journal of the Franklin Institute -
will come from library of the
University of Wisconsin, Milwaukee -
I was told it would take four
to six weeks -! The University is
only 20 miles away -

Our Grote Reber

Tasmania has been the home of many people of international renown, such as Errol Flynn, Merle Oberon, and Grote Reber. Grote Reber? Well, you may not have heard of him, but he is world-famous.

Sitting next to me are two current overseas magazines, one about astronomy and the other about technology in general, which mention Grote Reber.

In the State Library of Tasmania there are many books describing Grote Reber's contribution to science.

One author only got as far as page six before finding it necessary to publish a full-page photo of a young Grote Reber.

Now an older Grote Reber, 82 years or thereabouts, is one of the town "identities" at Bothwell in central Tasmania.

He moved there many years ago because it was the most "radio quiet" site, free of electrical interference, in the Southern Hemisphere. Grote Reber's passion, you see, is radio astronomy—the science where he made his mark as a pioneer in the early 1930s.

Back in those days a fellow named Karl Jansky, while trying to track down the source of some radio interference, found that it appeared to be coming from straight up—from the heavens. He originally thought it

was caused by the sun. But that idea was soon shot to pieces when Jansky found that the radio noise was starting six hours before the sun came up.

Where was it coming from then? It was pretty hard to pinpoint. And this is

of pretty much the same stuff as light.

So Grote Reber built this enormous mirror for radio waves in his backyard in Wheaton, Illinois, in the US of A.

The thing was in the shape of a dish 9m in diameter. It would have been bigger

focal point of the "mirror".

And there was machinery that could make the thing aim at any part of the sky.

If that description sounds familiar, it is. What Reber built was the world's first radio telescope, and his design is used to this very day, virtually unchanged.

Near Hobart there is a dish just like Grote Reber's, only three times as big, planted on a small hilltop at Cambridge.

When this monster appeared, it gave the locals the heebie-jeebies too; they thought the thing was going to zap them.

But over the years it's proved a totally harmless scientific vacuum cleaner, quietly sucking in knowledge from the heavens.

Smaller versions of the parabolic dish, as the design has come to be known, now reside on top of just about every pub in the land. And before long, especially when pay-TV really gets going, they will be in many back yards as well. We now know them as "satellite dishes" but they are basically the same thing Grote Reber built in his own backyard 60 years ago.

Back in Bothwell, Grote Reber left the parabolic dish to other radio astronomers; he'd already been there and done that.

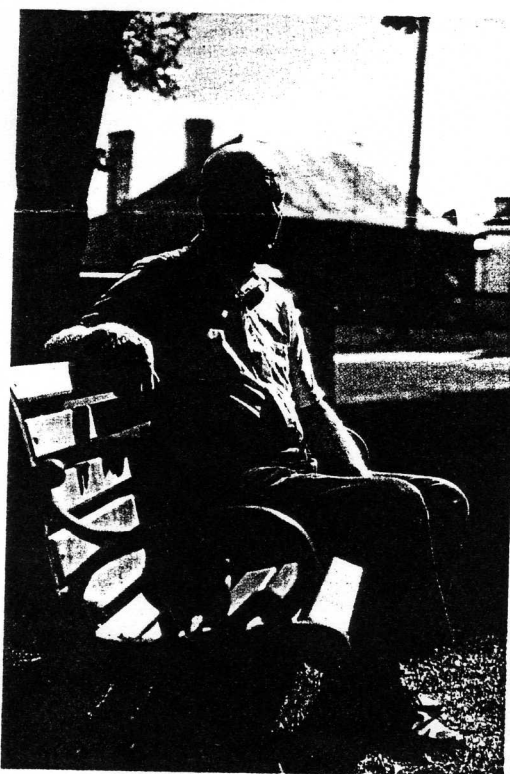
Because of the difficulty of aiming it, there was a practical



where Grote Reber came into the picture. He reasoned that if you could use a mirror to focus light into a sharp point, as in a reflecting optical telescope, the same idea might work with radio waves which are made

than his house, and it surely would have given the local council the heebie-jeebies.

It was like a big searchlight in reverse, concentrating energy from a small area where it was pointing, into a receiver at the



TOM MOFFAT

makes his mark

limit to its size. So the dish could only be used for detecting radio energy of fairly short wavelengths which would fit within its mouth. Reber wanted to see what was happening on lower radio frequencies where the wavelength was about 150m, many times the size of a movable dish.

So Grote Reber built another antenna, this time several kilometres in diameter, made of masses of wire suspended from strategically placed light poles. This thing obviously could not be moved, but Reber noted that if it was pointing straight up, the rotation of the earth would change where it was aiming. So all you had to do was wait for the right time. No problem!

The result of Grote Reber's Bothwell observations was a "radio map" of the southern sky, showing the hot-spots where low-frequency energy was coming from, pinpointed to within a couple of degrees.

This might sound somewhat esoteric, but it has raised some embarrassing questions about the origins of the universe.

For a long time two theories fought for acceptance. The Big Bang theory says that the universe began with one almighty wallop and it's been expanding, and slowly dying, ever since. On the other hand the Steady State theory

claims that the universe is being continuously created at the centre and destroyed at the edges, but the whole system somehow wraps back on itself so everything is, and always was, in existence. However (getting deep and meaningful here) the Big Bang implies that beyond an expanding universe there is nothing. But Grote Reber has detected low-frequency energy from outside the accepted limits, and radio waves don't just come from nothing.

Therefore, Eureka! There must be something. And now he questions previous theories of why the wavelength of light from the heavens becomes longer,

shifting toward the red hues. Perhaps, then, Grote Reber's experiments have wrecked a perfectly good Big Bang theory. Here's how he explains the radio energy he's observed, in his own words: "It appears that it's generated in intergalactic space; that is, the region between the galaxies. This mixes up with another dogma. The dogma is that space is expanding, the Big Bang. That's a pure myth that's generated by inadequate evidence and plenty of imagination. And it's caused by another assumption that intergalactic space is empty, a void. Well if it's empty, and is a void, there's nothing there for light to interact with. So the only

thing left to explain the red shifts is Doppler phenomena, relative motion, see.

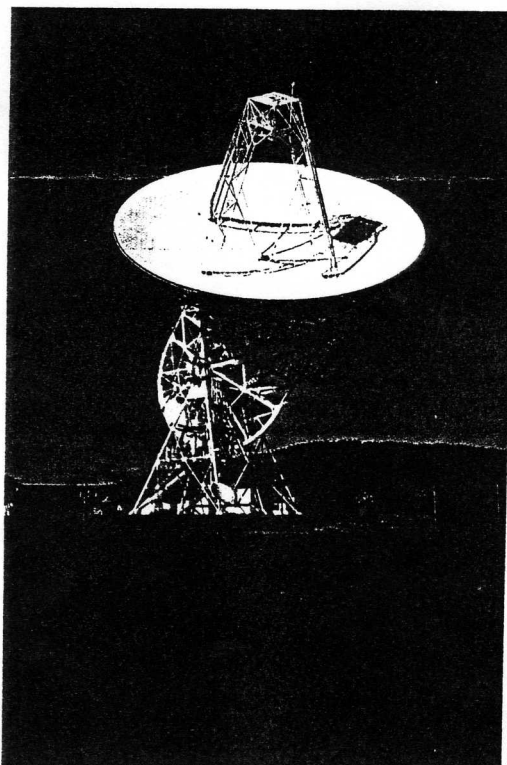
"But, supposing intergalactic space is NOT empty, it has material in it. Then this material can be used to explain the red shifts. That's what this whole thing turned up. There's background radiation from material in intergalactic space and there's charged particles there, and the charged particles produce these radio waves.

There's a lot of people who have become dissenters but you have to remember that a large part of the establishment have got this thing which they thoroughly believe in, and they can't think, so they're stuck!

"This is what's turning up: in the optical region the universe is running down, but in the radio region it's winding up. And so the universe DOESN'T have any beginning and it DOESN'T have any end. Get it?"

Not completely, no. But that's why Grote Reber is Grote Reber and you are you and I am me. HE can reason that way. WE can only marvel at it. But don't forget that this guy has been rattling scientific cages all over the world for 60 years and he's showing no sign of stopping now.

Just remember, when you hear of more Reber discoveries, that it's all coming from Bothwell!



DR GRANT GUISSE

ORCHIDS OF TASMANIA



The Society for Growing Australian Plants has launched its "Orchids of Tasmania" a pocket-sized volume in the popular Identikit Series. Artists from the Society have lovingly detailed these exquisite flowers in their subtly-coloured illustrations for this fine new book by Phil Collier. Collier, an expert on native plants, has selected about 100 common Tasmanian orchids. It's well written, easy to read and comprehensive—

with description and colourful illustrations placed together to simplify the task of identification. Orchid seekers will welcome the descriptions of the habit and conditions for each species, their flowering times, and for some, the particular localities where they thrive. Each flower is described clearly, its distinguishing features highlighted. Some newly recognised species have been included and all names are brought up to date.

This excellent little book will delight all who walk in the wild, eyes down, intent on discovering these small wild beauties.

Look for it in bookshops and wilderness outlets.

6/5/96

Greetings Molly:

Yours of 16/4/96 arrived on 26/4/96. Thanks. That is an excellent foto of you and Jack. Currently, my trip seems to be--leave Pheonix, Arizona on 4th, 5th, or 6th June and head for Waukesha. We can spend a day or two with Jack, going over old times and new.

My flite plan is being organized by:

Sue Ann Heatherly
National Radio Astronomy Observatory
P. O. Box 2
Green Bank, West Virginia 24944-002
Fone is (304) 456-2011
FAX is (304) 456-2200

I suggest you ring her and explain what is most convenient airport, date, and time for you to pick me up. Let mee know what your come up with.

C. U. Anon,

Grote Reber

Grote Reber
Michael Street
Bothwell, Tasmania
Australia 7030

12-11-96

9067 THE RAIDER
An Evergreen Original by Lewis T. Johnson
Printed in USA

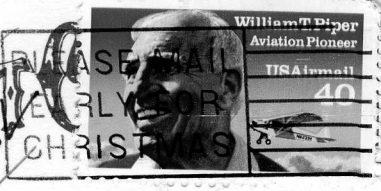
Dear Grate -

Sorry we were not
able to connect last
summer - We would
really like to meet
you -

Have great holidays
down there where it
is summer - Snowy
here -

As ever
Mully King Guy

MILWAUKEE WI
POST
AIRMAIL



Rec'd 27/12/96

Grate Reher.
General Delivery.
Bothwell, Tasmania
Australia 7411

AIRMAIL