

# Reaching for the stars

By **KIRSTEN WARD**

● Russia's space rocket now hurtling towards Venus is of special interest to a 13-year-old Newcastle boy — Algy Butkus.

ONE of the things the Russians hope to learn from the rocket is the depth of the atmosphere which shrouds the planet—and Algy, a young astronomer, once thought he had discovered a way to measure Venus' atmosphere through a telescope.

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"I thought I had made a tremendous discovery," he told me. "I was doing routine observations of Venus, and just to see what would happen I put the telescope out of focus.

"Suddenly I saw two concentric circles around the planet. I got terribly excited—I thought that if I measured the first circle and the second circle and took the second away from the

took the second away from the first I'd get the depth of the atmosphere.

"I tried the same idea to measure the atmospheres on Mars and Saturn—but got the same answer. Astronomers know already that the atmospheres on these planets can't have the same depth—so my theory was wrong, but it was exciting while I thought I was on to something new."

But false alarms don't worry Algy. If a theory doesn't work this time, another might next time.

And it's people like Algy — the ones who find it so interesting they can take set-backs philosophically—that have become the great inventors, scientists, and astronomers of the world.

### **Early start**

Algy says his interest in astronomy goes back to the time he was first allowed up after dark—and saw the night sky.

For the last six years he has watched the heavens almost every night. He has recorded positions of the stars and planets, their color detail, and identified the craters and seas on the moon.

Algy's parents gave him a 2½ in. telescope last Christmas, and Algy plans to make another

and Algy plans to make another one, a fully astronomical telescope, himself — including the lens, a long job of grinding glass to microscopic exactness.

But Algy doesn't shy away from work or responsibilities.

Only two months ago he started his own society — The Newcastle Junior Astronomical

Society—and already he has a member in Fiji, four in America, 11 in Newcastle, and one in Sydney.

The overseas members were Algy's pen-friends, who've also become interested in astronomy. Of the Newcastle members, one is only 12 and nine are 13. The other is an honorary member, Mr. W. J. Parsons, who is Algy's science teacher at the Cook's Hill High School.

And the society is really reaching for the stars.

### **Big plans**

They're already in the process of bringing out a small magazine which will contain the latest astronomical news, star data, and new ideas.

They are also arranging for a complete survey of the eclipse of the moon next August.

Members meet regularly and each has a special project to

each has a special project to study.

Being a keen reader of the stars (to find what fate has in store for us), I asked Algy about astrology.

He looked at me in silent horror.

So I quickly switched to Men-from-Mars.

"If there is life on other planets," Algy said, "it's impossible for it to be life in the way we know it. Certainly not human life. Their atmospheres and temperatures are too different."

But he does agree there might be something.

"You never can be sure, you know. I saw a U.F.O. one night when I was photographing the moon with a couple of other kids."

"U.F.O.?" I asked.

"Unidentified flying object. They were moving too fast to be satellites and too slow to be meteors. They were not high-altitude planes — and not opti-

cal illusions, because several of us saw them and we couldn't all need glasses.

"The first one appeared in the north-east sky, moving fast southward. The second one

southward. The second one came in at right-angles to the first, moving just as fast, and disappeared at exactly the same point."

No one quite knows what it was Algy saw, but there's no proof they WEREN'T spaceships.

Any observations such as this will go down in the records of the Unidentified Flying Object and Satellite Tracking Section of the society.

### **Box camera**

When Algy started talking about photographing the moon, I asked him how he raised the money to buy the necessary equipment.

"Money?" he said. "I started with a box camera, and we are still experimenting with them. However, I'm now using a 35mm. camera, and this is much more satisfactory."

The society has just established a Rockets and Chemistry Section, and if they get permission they plan to launch their rockets (they'll make them themselves) at a deserted granite quarry surrounded by walls of up to about 200 feet.

Algy and a friend, a retired man also interested in astron-

man also interested in astronomy, are working together on a new principle for rocket propulsion.

"Liquid or solid fuels are not going to be good enough—they take up too much space and are heavy," Algy said.

"Maybe we can create a centrifugal force by having two blades rotating at angles in opposite directions inclined to each other . . ."

It all sounded so complicated that I stopped taking notes, but Algy assured me it wasn't as difficult as it sounded.

"We're experimenting with small models — just at the rubber - band - and - balsa - wood standard," he said. "Nothing much — and nothing might come of it. It's just an idea."

But then again something **MIGHT**.

It's an absorbing hobby, but both Algy and his father agree it mustn't interfere with his schoolwork.

Algy's in second year at Cook's Hill High School, and so far he has thought of becoming either a journalist or following in his father's footsteps and becoming a doctor.

"Astronomy will always be more of a hobby, I think," Algy said. "It has the one defect of being very expensive. Instru

being very expensive. Instruments, books — they cost the moon!"



ALGY BUTKUS, the 13-year-old Newcastle astronomer, with his 2½ in. telescope.