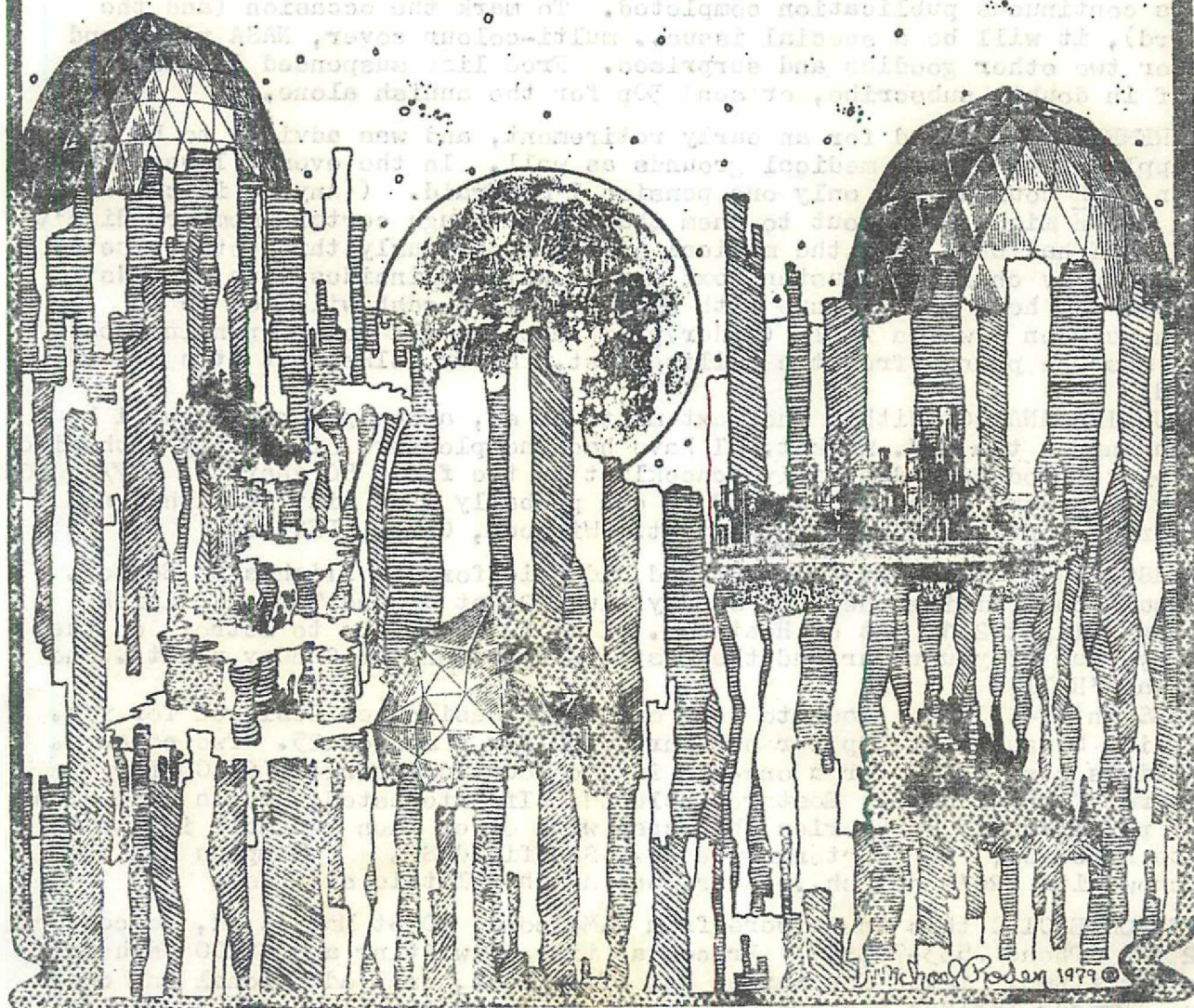
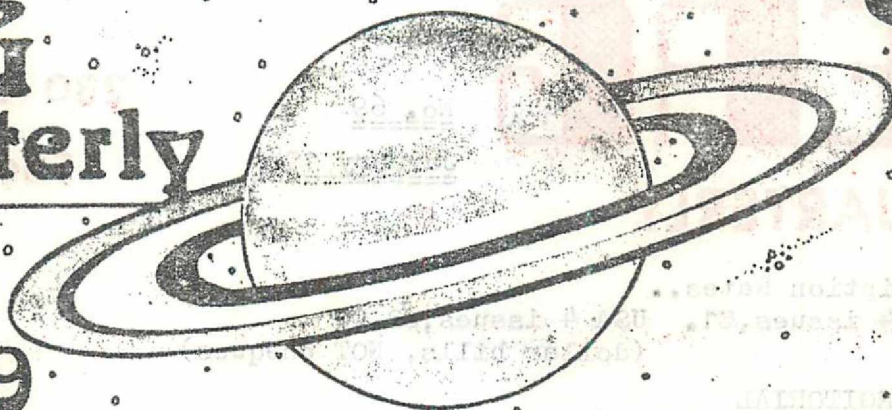


ERG Quarterly

JAN.
NO. 69



ERG

QUARTERLY

No. 69

January 1980

B. T. Jeeves,

230 Bannerdale Rd.,

Sheffield S11. 9FE.

Ph. 53791

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(dollar bills, NOT cheques)

MINI-ERGITORIAL

Greetings Ergbods,

With the next issue (No.70) ERG comes of age with 21 years continuous publication completed. To mark the occasion (and the record), it will be a special issue.. multi-colour cover, NASA pics, and one or two other goodies and surprises. Free list suspended I'M afraid, so if in doubt..subscribe, or send 30p for the annish alone.

RETIREMENT..I applied for an early retirement, and was advised to be sure by applying for it on medical grounds as well. In the event, I was granted it on both counts..but only one pension I'm afraid. ((Anyone in contact with APA-H might point out to them that even though certain members didn't believe I had been ill...the medical officers obviously think otherwise)). I hang up my chalk and suster next April..which coincides with the 21st annish. I hope to continue with ERG..but since cash will not be so flush as when I was a fully (under)paid teacher, all non responding dead wood must be pruned from the mailing list. Sorry folks, but it's a hard world.

ASTOUNDING/ANALOG Within the next month or so, a new paper back will be appearing on the U.S. market. I have had the pleasure of working with Mike Ashley to produce a definitive checklist to the first 50 years of ASF/ANALOG. Get your orders in now...UK readers can probably want list it with Ken Slater of Fantast Medway, 39 West St., Wisbech, Cambs PE13 2LX

NOREASCON Val and I have now booked and paid for our flights to Boston. We shall be arriving there on Sunday, Aug.22, at around 7pm on British Airways Flight 271K out of Heathrow. I'll be moving on to Detroit on the Monday, but if you're around the Boston Airport on the Sunday night..come and say 'Hello'

BADGES and T-SHIRTS. Made to your order and design..or designed for you. 2" dia. badges cost 30p for one, or £6.50 for a min of 25. Two colours. T-Shirts cost £3.00 for a one-off in 1 colour..dropping to £2.00 for orders of 25 or more. Postage included. If interested, drop a line with your requirements or queries (but cash with order when you mail it) to Keith R Jeeves, 5A Cartersknowle Rd., Sheffield S7. Samples will be on show with ERG's annish...cover..and another little surprise.

ELECTROSTENCILS this issue were from J.Malcolm, 10 St Mary's Rd, Leicester, LE2 1XA (Phone 0533-703959) Prices at time of writing are £1.00 each for the first two, £2.62 for three, and after that, each additional one costs 87p. Prices include postage, and are for vinyl stencils. I'd appreciate your mentioning ERG if you contact him.

...and now on to work on the Annish..... all the best,

Terry

EDITORIAL

'Build Your Own Spaceship'

First the good news....

Have you ever wanted to press a button and see your own Saturn V lift skyward on a tongue of flame? .. or perhaps you'd rather start your own version of the boldly-going Enterprise on another of its missions? .. Alternatively, how about setting off a rocket-propelled R2-D2 ??? or putting a Space Shuttle through its paces ??

O.K., so your chances of doing this with the real birds may be minimal; but, if you build your own model of any of the above..or of any of the dozens of the other kits available, then the sky is literally the limit. At this stage, many people will throw up their hands in horror and give vent to cries of, "I can't even put two parts of a matchbox together!". Relax and be thou not afraid. There are kits on the market from manufacturers such as Estes and Centuri, so graded in skill requirements, that anyone from absolute beginner to experienced builder may select a suitable kit and create a flying model.

The basic rocket kit consists of a rocket engine, its mount, a rocket body, nose cone, tail fins and a recovery system. To this must be added - when you're ready for blast-off, a battery and igniter unit. If you just want a static model, then don't buy those last bits.

To construct your rocket, simply cut the fins from a sheet of balsa (template supplied), sand smooth and stick them on to the rocket body (a prefabricated tube). Glue a launch guide (thin tube) on the side of the body, assemble the engine mount and install. Attach the parachute, stuff it in the body, plug in the pre-shaped nosecone and your rocket is finished and ready for painting in whatever fancy colours take your fancy. Should you want to fly it, stuff in a motor and igniter, clip on the battery wires, retire to a safe distance and begin your countdown. Naturally, as you gain experience..and become more ambitious, you will need to do a little more than the above, but that is just how easy the first grades of kit make the assembly job.

On the right is a (catalogue-filched) launch-flight sequence diagram. On pressing the launch button, the battery touches off the igniter, up goes the bird and at apogee, out pops the parachute (or other recovery system), and down floats your model ready to be re-loaded and flown again.

Now let's back-pedal a bit and have a closer look at the power system employed by these model high-flyers.....the 'engines'.

HOW DOES IT WORK?

5 APOGEE - as rocket reaches peak altitude and begins descent.



4 COASTING PERIOD - allows rocket to gain altitude while delay material burns.

3 BURN OUT - of the engine propellant.

2 LIFT OFF - of the rocket from launch pad.

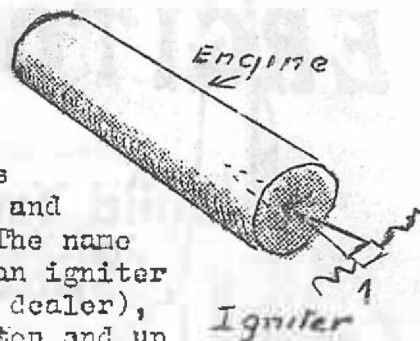
1 IGNITION - by remote control electrical launch system.

6 RECOVERY SYSTEM - activated by engine's ejection charge.

7 SOFT LANDING - of undamaged rocket, ready for another flight.

The engines come in the form of slim cylinders graded in a variety of thrusts, duration and purpose... don't panic, the very comprehensive manufacturer's instructions tell you exactly what type to use..and how to use it.

When the time comes for blastoff, there's no need to play around with matches, burnt fingers and the danger of the thing taking off up your nose. The name of this game is electrical ignition. Simply push an igniter into the base of the engine (you buy both from the dealer), string two wires back to a dry-cell, press the button and up she goes...and if you can't even wire up that simple set-up, you can even buy complete launch bases, ready wired.



On reaching 'brenschluss' (or engine burn-out to the plebs), the recovery system is activated. In the simpler models, this is usually a small plastic parachute, but other methods employ streamers, rotating vanes operating like an autogyro, or even glide-wing systems. Each system brings your model back in good condition for another flight.

If you want to do a bit more than simple ups-and-downs, you can organise competitions with your friends -- spot landings, flight duration or even 'highest flight'..the handbooks show you easy methods of calculating this. As your skill develops, you can move along to more advanced multi-stage rockets, scale models of real 'birds', or instrumented flights. Estes market a camera-carrying model kit with camera included. For the more ambitious, they offer simple telemetry packages for radioing back temperatures at altitude or whatever else you may dream up.

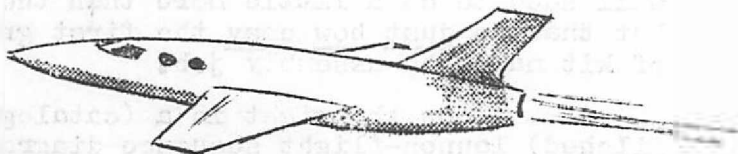
Just to get you reaching for your piggy bank, here is a tiny segment of what is available :-

Estes offer.. X-15 rocket plane, Cylon Raider and Colonial Viper from Battlestar Galactica. From 'Star Wars'.. Proton Torpedo and the X-wing fighter, R2-D2, T.I.E. Fighter, Astrocan, Saturn V, Klingon Battle Cruiser and the Star Ship Enterprise, Bonarc, Honest John,

V-2, Space Shuttle ..etc.

Centuri have.. Flying Saucer, the F-4 Phantom, the Israeli 'Mirage' Boeing Cruise Missile, Buck Rogers kits, Saturns 1B and V, Mercury Redstone, F-104 and many others.

In addition to the above scale models, both manufacturers have a bewildering range of other kits, all neatly graded according to their level of constructional difficulty...ranging from a basic Level 1 up to Level 5. For those wishing to advance a step further and design their own rockets, you can also choose from a vast range of 'spares' in the shape of bodies, nose cones, mating sections and engines.



Thanks to Mike Banks, I have had the pleasure of building the ESTES 'CONSTELLATION'.. a skill level 3 kit. I can state quite definitely that not only is the work involved extremely easy, but also very clearly explained. Any twelve-year-old could have waltzed through the job. The average plastic kit demands far more skill from its builders.

If you want to read more about all the assorted models which are on the market, along with details of how to build and fly them, why not send off a few cents, dollars or what-have-you, for one of the very comprehensive catalogues. Jan-packed with colour photographs, drawings and diagrams..but you can't flick through one without getting the bug.

The ESTES catalogue for 1979 (No. 791P) costs 50c for its 66 colour pages. The Estes distributor's address is:-
ESTES Industries, Penrose, CO 81240.

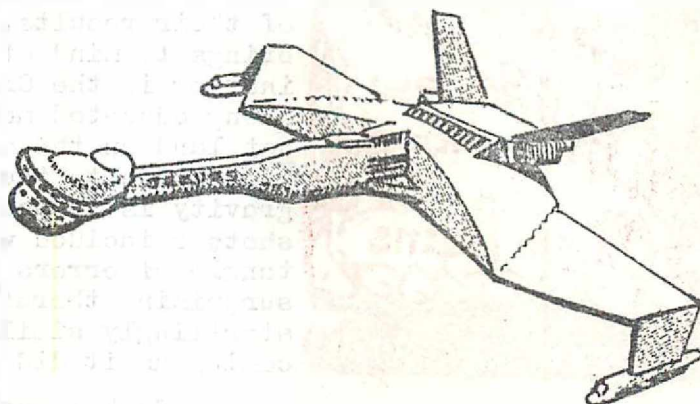
The CENTURI catalogue, also costs 50c, and runs to 64 colour pages. Their address is:- Box 1988, Phoenix, Arizona 85001

....and now for the bad news.

My Constellation has to remain unpowered... to the best of my knowledge, the engines may not be bought, imported, or operated in the United Kingdom.

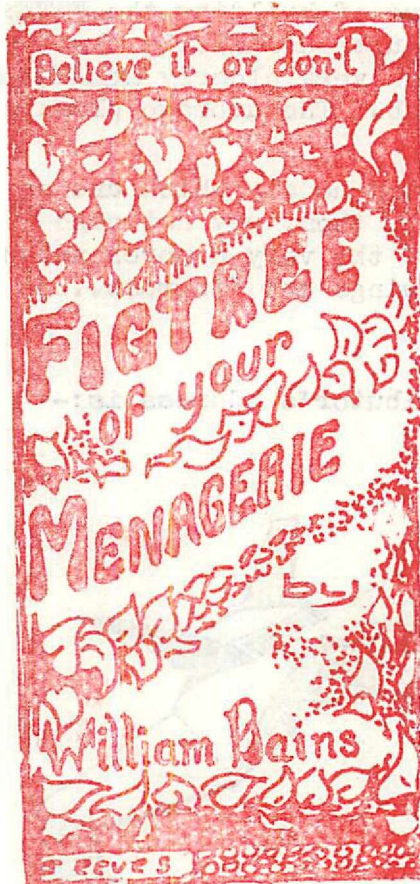
However, there is yet hope for all the would-be rocketeers in this island as I gather from Mike Banks that negotiations are underway to import the motors and legalise their use over here. When that happens, I reckon we shall see Saturn Vs, boost-glide rockets and multi-stage models shooting skyward from every available launch area ... oh yes, and thanks to those recovery systems, and in many cases to the extreme lightness of the models, those returning birds present less of a hazard than any diesel-powered aircraft model. Get in line for that day...and enjoy!

Of course, anybody in the UK who has Stateside contacts or funds may import, or have mailed to them.. a basic kit, as the engines are sold separately. If you just want to build and display...got somebody to send off 50c for you.



On a slightly different line, I have to hand a leaflet advertising the SCIENCE FICTION TAPE CLUB...readings and dramatisations of SF classics recorded on cassettes and priced at £3.99 a tape. Initial Club Membership will cost you £2..and from there on, you get the Club's bi-monthly news letter and discount details. First titles are.. DONOVAN'S BRAIN, 1984, THE KRAKEN WAKES DAY OF THE TRIFFIDS, HALLUCINATION ORBIT, JUNKYARD, THE STARS ARE THE STYX, ALMOST HUMAN, and many others.. If you want to know more, write to:- Moonlight Productions Ltd. P.O. Box 47, Bedford MK40 3HD ...and it wouldn't hurt if you mentioned ERG when writing..either to them, or to Estes and Centuri.

Bestest, Terry



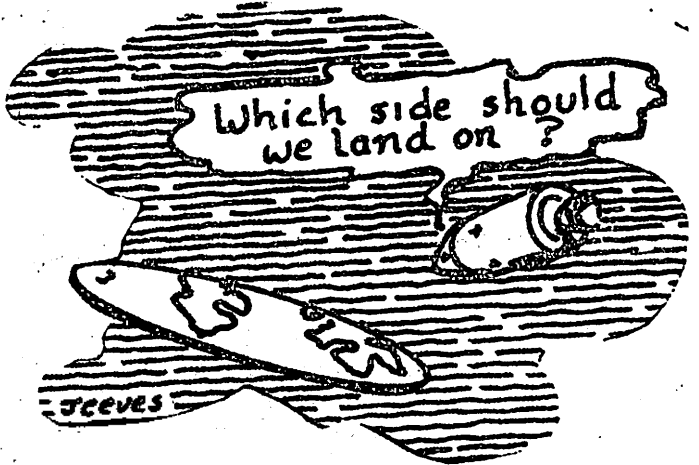
Recent moans in the press bewailed the falling standards of numeracy in schools. The did not mention that similar standards have obtained in Geography for many years, and that nowadays probably not one adult in ten, even among readers of this magazine, knows the true shape of the Earth.

For example, many observations are quoted as supporting the theory that the Earth is spherical. The differing angle made by the sun in different places at the same time, argued the classical Greeks, points to the curvature of the Earth's surface. They ignore their unlikely assumption of a vast and enormously distant sun, and that a small sun circling over a flat Earth is just as accurate a description of their results. Speaking of circling the Earth brings to mind other circumpolar phenomena, culminating in the Great Apollo Farce. It is well known among educated men that the Apollo astronauts did not land on the moon, but in the remote Himalayas where, due to the increased distance from the Earth, gravity is reduced and air is thin. Had the Apollo shots coincided with an Everest climb, the whole tangle of errors would be revealed. It is not too surprising therefore, that the 'moon rock' was startlingly similar to the Earth's crustal material coming as it did from terrestrial rocks.

Such negative evidence, while showing we do not live on the surface of a sphere, does not show what we do live on. Strangely, the strongest indication is what at first sight appears to be a cast-iron support for a spherical planet. This is the disappearing ship trick. The disappearance of the hull, then deck and finally the funnels as it 'crosses the horizon' cause many to believe devoutly in a curved Earth. The real explanation is simple. The eye can only resolve objects above a certain minimum size: below this size the distance between the edges of the image cast on the retina is less than the average distance between the receptor cells and so the object is perceived as a dot, and so disappears as an object, becoming, in the case of a non-radiating object against the sky, quite invisible. As a ship retreats across the 'horizon' the apparent space between the lower parts of it and the surface of the sea, as seen by an observer on the shore, decreases below this minimum resolvable limit and so all features in that space become invisible. Increase the difference between the ship and shore and the amount of ship that is unresolvable increases until the entire thing vanishes. The effect is the same as that which would be produced on a curved world, with one difference; alter the resolution of the eye and the horizon effect should move. And it does! Dogs, animals with less accurate eyes than ourselves, are notoriously short-sighted, not in the sense that they see objects out of focus, but that they are unable to see to the human horizon at all. A canine curved world would therefore have a radius of only a few hundred miles. Increasing the resolution should move the horizon further out to sea, so what do we find on every promenade to allow holidaymakers to see ships invisible to the naked eye? Telescopes! A telescope could not possibly see over a curved horizon, but that is just the effect observed. Ergo, the horizon is not curved.

Consider also that the horizon at sea is not curved, but, waves excepted, is geometrically level all round. On a curved Earth, the horizon should curve too. Similar observations on land require greater heights to cancel the greater altitude of the hills compared with the waves, but reports from aircraft, balloons and parachutists repeatedly show that the Earth is not a sphere, but a plane whose almost infinitely distant edges appear always level with the observer. This again, is an effect of parallax. An infinitely distant object on a flat plane, no matter how far below or above the observer, will always subtend a negligible angle with the observer if it is far enough away, and so will be interpreted by the eye as being level with it. It is only when high altitude aircraft and rockets leave the atmosphere behind, that the refraction of light caused by gradients of air density high above the Earth produce the illusion of curvature.

In extremes, this results in those beautiful but totally misleading photographs taken from Earth 'orbit'. Direct observation under more normal conditions reveals the true state of affairs.



For far-wandering colleagues, other proofs are available. Polaris can be seen South of the Equator, although because of the amount of air in the way, it is not visible from the far South. The reason for bizarre magnetic effects found by early explorers trying to find the South Pole is, of course, that there is no South Pole. When satellite navigation systems are set up using a curved world model, these will be similarly unhelpful.

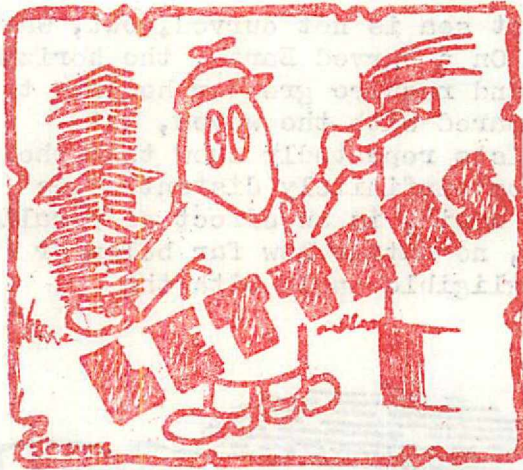
The list goes on, but I must stop. No doubt the percentage of the geotopically ignorant will continue to be more than 99 percent as at present; but at least, you know better.

Don't You ?

~~~~~ William Bains ~~~~~

((EDITORIAL NOTE.. This of course explains why gravity always pulls straight down, and why we don't 'fall off'. It could also explain mythological references to the 'Underworld' as being mention of dwellers on the other side. Now just supposing the 'Mohole' goes right through..it will solve all our current resources problems if we get another half to go at. )))

~~~~~  
SEATTLE IN '81 is the slogan. WESTWIND is the superbly produced fanzine produced by the bidding committee. Currently to hand are issues for May/June..28/29 and July 1979, No.30. Jam-packed with artwork, articles and convention news..plus of course details of how to become a pre-supporting member for Seattle in '81. Send a dollar to Lauraine Miranda C/O NWSFS, P.O. Box 24207, Seattle, Washington 98124. UK supprters can send money orders, etc. If you want WESTWIND (which is actually the NWSFS mag. Write to NWSFS PO Box 24207, Seattle, WA 98124 and ask to join.. the annual dues for the Northwest Science Fiction Society are seven dollars.



ALAN BURNS

19 The Crescent
Wallsend NE28 7NE

Definitely one of
the better ERGS, but
please don't ask me

why. It might be the presentation, or the articles-- with emphasis on your scholarly book reviews. However, I do take exception to your wasting valuable ERGitorial space on answering that idiot who seems suspiciously like the current neos who replace brains with ordure (((No, it was not Joe Nicholas, but actually a fan of pre-war standing))) and think that they are manly when they use dirty words, with a snigger like schoolboys which is probably all they are mentally.

Michael Banks has gone through the mill much the way I did, if you want to destroy your soul, try selling encyclopedias! (((Most of today's neos are OK Alan..it is only a small minority which give the rest a bad name. As for their use of four-letter words..be patient, they'll eventually learn to spell longer ones)))

E.C.TUBB
London

Oct. ERG received for which much thanks and you've a superb back cover - the front one isn't bad either. Of your Ergitorial, full marks for straight speaking and to say much more would be to repeat what you've said, but with added vituperation. At times I think the only explanation for the daft things supposedly intelligent people say and do is that they are the unwitting victims of a form of cultural insanity which is destroying everything which once made for stability and security. How else to explain the 'Alice In Wonderland' allegory, the gobbledygook and claptrap which now passes for informed opinion? It's the Decline of the Roman Empire all over again, but this time it's happening in decades instead of centuries - and the barbarians are already within the gates. (((Yes, and dressed as 'protestors', 'Civil rights supporters', peaceful (he heh) picketers and all that ilk)))

2 Maxwell Close
Buckley
Clwyd

ERG 68. How can they say ERG never alters (((Easy, They shut their eyes and flap their lips as the hot air comes out))) This is a damn' fine issue for me. Great front cover, clear layout and artwork from other than Jeeves (((Er, is that a compliment ???))) Who wrote your ERGitorial letter - your 'alter-ego' ? (((Nope, a genuine, now Gafiated fan of many years standing))) I agree with all your points, even the ones on India. Interesting discussion going on here...Yes or No' for Nuclear power stations. Reflections of 'Three Mile Island' and all that. (((Well, (a) we need power, and (b) Ignoring the press and 'protestors' hoo-haw.. the facts are that the nuclear power industry as the best safety record of any power industry)))

Roger Waddington
4 Commercial St.,
Norton, Malton.
N. Yorks

Point.1. surely expertise can't be channeled, and that most of the great discoveries (or at least, most that you would consider advancing the human race) weren't made with their particular effect in mind, that like most of us, they were happy accidents... Oh there's research going on daily into the inescapable problems of living, into cancer, into aging; but there is no way that you can devote the whole researches of a nation to this end. If we were all robots, if we were merely relays in a circuit, why, it

happen; but living in an all-too-human world, such things cannot be ... and even when they have been tried - the Cultural Revolution in China, the various Five Year Plans in Russia - they too have faltered and failed.

Point 2. The last time the Third World was exploited was when they built the Pyramids...well, there have been the more recent evils of the Slave Trade; though contrasting the present state of independent Africa compared with the lot of the American Negro, are there any that wish they had been born free ?

Point 3. surely progress is an escapable part of living, that curiosity is built into the human animal, and if a society loses this gift, it grows stagnant and dies...certainly, if your correspondent wants to opt out of living this way, with the rest of us, the way is always open; that is, if as I take it, he's living in a country where he has the choice, instead of being forced to work for the glory of the state.... (((Roger had several other good comments which space prevents me from including..but the thing which has surprised..and delighted me, is the fact that so far every letter has taken a similar viewpoint. I was beginning to think I was a lonely supporter of the views expressed in ERG 68)))

DAVE GRIFFITHS Mike Banks', 'Thoughts That Go Bump In The Night' is the
Hale Rd kind of anecdote/informal type piece that I'd like to see
Erith, KENT more of -- same goes for his follow up to it. I thought
 the Ergitorial was superb. Frankly I'm sick of all these
20th Century Luddites constantly pointing at technology and the decadent
West as the sources of the world's problems. I wonder how long these people
would continue carping about our screwed-up priorities if they had any
conception of the alternatives. If it were left to them, we'd still be
getting about in large wooden galleys rowed by slaves. (((Presumably they
would be emancipated slaves ?))). Progress is not only necessary, but it
is inevitable. The idea that scientific research must produce results with
an immediately practical and beneficial application is just not facing
reality. (((Since when did that stop Luddites ?))). The number of (ultimately)
beneficial discoveries that come apart by accident as a result of related or
unrelated research must be staggering. My attitude is, "If you want to be
in misery and poverty with people who won't help themselves - fine, here's
your plane ticket. Just don't try to make it like that here, because for
the most part, I'm pretty damn' well happy with Western culture."
(((Dave also pointed out that I incorrectly labelled the original aero-space
concept as 'Dynosaur'..when it should of course have been 'Dynoscar' derived
from 'Dynamic Soaring'. Sheer carelessness, I knew better, but fell into
the spelling trap)))

PAUL RYAN
10 Springwood Rd The views in your Ergitorial certainly made my little
Oakwood neurons flow (((Neurons don't flow do they ?.. I thought
Leeds LS8 it was neural currents which flowed along 'em..quibble)))
 Strangely, I found myself to be a middle-man in the two
opposing factions. I agree with most of your level-headed comments, but
find that whilst I stand with you, my aims and ideals are light-years apart.
You mentioned briefly that a century ago, mankind was living in intolerable
conditions, no medicare, transport etc. But I think to see that such
conditions were caused by the Industrial Revolution in the first place. Go
backwards in time and you find the medicare of herbalism which is basically
the same as today's medicare. (((Sorry, can't agree. The Black Death killed
thousands..but it wouldn't to-day. As for conditions...pity the poor
dweller in the area where William built his New Forest..or where anyone
killed the King's deer..or had a hand chopped off for stealing bread..etc)))

(PAUL RYAN Contd.) Let me state that I am not against progress and technology. yourself, I believe that it should benefit Mankind as a whole, but I sadly turn my back on the dangerous way it is handled. The childishness of all Government policies and the conceit, selfishness and lust for power, never ceases to amaze me. ((Agreed..Personally, I summarise all political policies as.. "What the Part wants, first. Second, individual MPs (if that doesn't conflict with item 1), then 3, What the Unions will let us get away with. 4. What the Country needs..if we can fit it in. 5. Must remember the Common man..if we happen to be near an election.)) I'm afraid I'm one of those pitiful chaps from the Nuclear Brigade. To be perfectly frank, I'm scared of the whole thing. I feel the decision for nuclear power has been far too hurried by government officials. ((Will you say that when we have NO power in fifty to a hundred years time ?)). A hole in the ground and a glass block, is not my idea of a satisfactory method of ridding ourselves of such an awesome and deadly power. ((Now there, I agree wholeheartedly..but there are other methods...such as dumping 'em in the Sun..the wastes I mean, not the politicians...H'n, must think about the latter.))

KEITH FREEMAN
269 Wykeham Rd
Reading RG6 1PL

Michael Banks is in great form-- just think if he'd started earning \$300 a week, he'd never have got around to putting down those entertaining thoughts... My own experience with encyclopedia salespersons is from the other side of the fence. Some years ago, Wendy and I decided to buy a set of encyclopedias. We bought (and are quite happy with) a set of Colliers. Several years later, we'd moved houses and a knock came at the door. Two people stood there. They made some pitch, to which I replied, "What are you selling?". "Oh no," they said, "we're not selling anything - just carrying out this survey... can we come in ?". In a moment of weakness I said yes. In they came, and as I expected, before long the survey led into a discussion of knowledge and encyclopedias... and out popped their sample. At this point, Wendy nearly gave the game away..but I averted that and had a pleasant half hour

being coerced into the position where the inevitable sales form was produced and I was asked how I could not want their set of encyclopedias. I said I agreed wholeheartedly, that I thought their product was good, was as up-to-date as could be expected, but I didn't think a second set would do me much good...then I showed them our set. They were very annoyed (obviously thought their commission was as good as in the bank). WHY, they asked, had I let them waste their time ? I pointed out that I'd asked them if they were selling anything and they had answered no. I therefore considered I'd been as honest with them as they had with me..... ((Which is the kind of story I love to hear..the bitter bit, or hoist with his own bootlaces))

Won't say much about the main ERGitorial as you're preaching to the converted in my case..but you appear to equate India (solely) with the third world. As you (and the person you quote) have personal knowledge of India, it's probably fair enough. ((Well, as you say, the writer cited India as a classic case..as do so many others..and having experienced it myself, I tended to concentrate on that particular place...but did you see a recent newspaper bit about a woman who resigned from Orfan..because of the fiddles by the Indians at the receiving end ?))



First Decade... Lunar Landing 1969-1979



CAPCOM

I fall about a lot when there's snow on the ground, so the growing chill in the morning air is being greeted by me with somewhat less than wild enthusiasm. The same can be said of the growing uncertainty surrounding the Space Shuttle.

Already its launch schedule has slipped from March of this year to June, then to September and to November and on to mid 1980. Technical problems have been responsible in part for these delays, but I imagine there are few of you who don't realise by now that funding is the major hitch. The cool attitude from those responsible for NASA's budgetary position is fairly irksome when you consider that for want of what amounts to an insignificant increase in funding (in terms of gross national product) the space shuttle Columbia could easily have been aloft by Christmas.

This would seem to be a good time to recall the adage that those who forget their history are doomed to repeat it. At the IAF Congress back in 1956, the Soviet delegates were continually dropping thinly disguised hints about the possibility of them launching an artificial satellite in the near future. I'm sure it's not necessary to remind you what happened the following year. Now, at the latest IAF Congress they have been dropping hints about their shuttle programme. It is not at all inconceivable that with the smaller and less sophisticated Space Transportation System they are credited as having under development, they could just possibly beat NASA's Shuttle into space.

Remember how their Tu-144 supersonic airliner despite being started later, beat Concorde into the air? It wasn't the result of superior engineering, simply the result of a rush. Subsequently the aircraft crashed twice, was withdrawn from service and forced the Soviets into publicly asking the West for technical assistance in correcting its flaws. If the Soviet Shuttle gets into space first I have no doubt that a great deal of fanfare will accompany it. The media has a short memory and has chosen to forget how convincingly NASA demonstrated its superiority ten years ago. Admittedly, it probably won't matter too much in the long run if they do succeed first, it's just galling to see an inferior product taking most of the acclaim. It's by no means too late for Columbia to fly first, but a definite chill is in the air and the steady pounding of pursuit is growing stronger.

MINIMUM IMPULSES

The next step in the U.S. Space programme according to Neil Armstrong, should be the development of a permanent, manned space station. Armstrong believes that it would be affordable, productive and comparable with the Shuttle. In addition it would provide the practical experience necessary for future manned, planetary expeditions. Recalling the events which eventually condemned the orbital workshop SKYLAB, Armstrong said that its problems could have been solved if the U.S. had a more active space programme. America, he said, needed a new commitment to space, adding that it would take something significant to reverse the disenchantment the general public feels towards space.

Technology exists to develop turbine engines inexpensive enough for light aircraft, according to a study sponsored by NASA. Powerplants of this nature would cost 25% less to operate, 15% less to purchase and would use 10% less fuel than pistone engine equivalents.

XXX

In 1985-86, Halley's comet will return to the vicinity of the Earth for a visit that is expected to be one of the least spectacular in its history. At perihelion, when it reaches its brightest, it will be on the opposite side of the Sun and invisible to Earthbound viewers. NASA's Jet Propulsion Laboratory has plans to remedy this situation however. In mid 1985, JPL hopes to launch an instrument probe into the halo of dust and gases surrounding the nucleus. In addition to this the spacecraft will continue on to rendezvous, three years later, with a smaller and older comet, Tempel 2. Coasting along with the comet for a year or so, the spacecraft will probe its characteristics as they continue around the Sun and the comet fades towards the orbit of Jupiter.

Although still in the planning stage, such a flyby mission holds a number of attractions, not the least of which is the opportunity to see two shows for the price of one. Tempel 2 will also give scientists their first close look at a comet throughout the majority of its dynamic range of activity. Ultimately, NASA hopes to learn more about comets during this mission, than at any other time in recorded history.

=====Dave Griffiths 1979

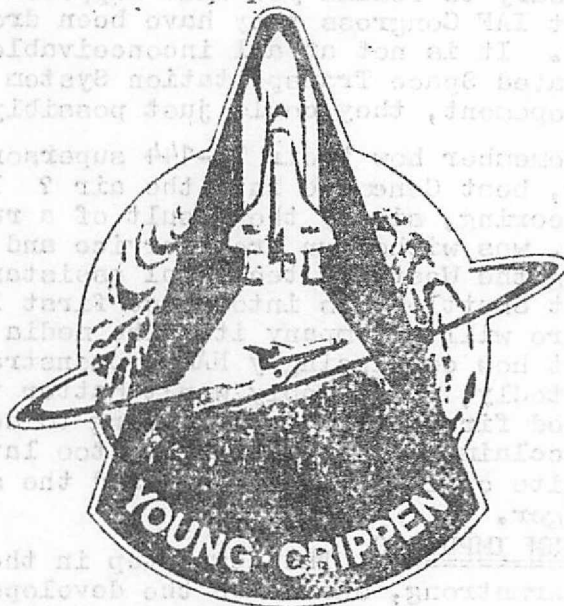
NEWSFLASH

The bacover of ERG 68 is now obsolete as far as information on the Galileo mission goes. The 1982 launch has been cancelled due to Shuttle problems. We are now scheduled for two launches in 1984, one for the orbiter and another for the probe. This will add at least 150 million dollars to the cost of the mission. Things are getting sad at JPL.

Harry Andruschak.

P.S. One of these months, my article on the 1985 Comet Mission will be published by Stellar Fantasy Newsletter.. you may reprint it in ERG if you wish. H.A.

((Ta, Harry...now is there anyone out there can send me a copy of Stellar Fantasy Newsletter ?? T.J.))



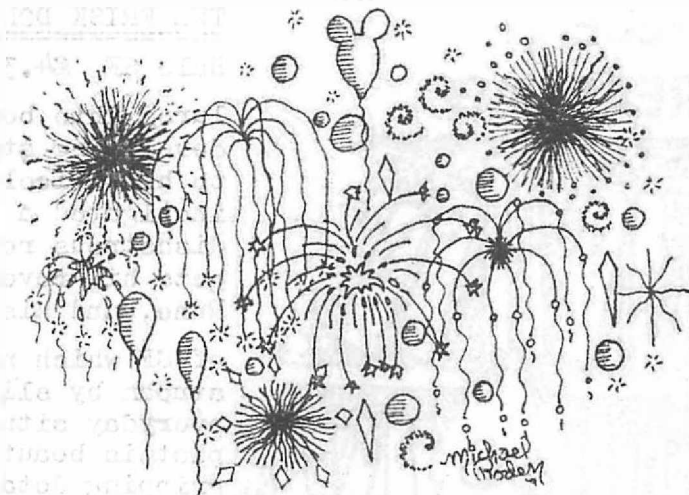
New Shuttle Patch—The official insigna for the first Space Shuttle orbital flight test was recently issued. Crewmen for the Columbia (orbiter 102) will be Astronauts John W. Young (commander) and Robert L. Crippen (pilot).

Still More...

THOUGHTS THAT GO BUMP
IN THE NIGHT

by

Michael A. Banks



I've noticed lately that quite a few new organisations of very specialised types have been springing up; that is, people who have a common interest or situation have been taking the lead of.

Fandom and organising, with newsletters, conventions, and all of the accompanying necessities of organisations. (Of course, they'll never have as much fun as we fan do, not without the Great Fannish Secret!).

There are, for example, organisations for people who are left-handed, clubs for those afflicted with colour-blindness, and even a nationwide society of short people. All well and good, but that last bothers me a bit. Why? Well, I have nothing against short people, but I think they have been over-doing the publicity on their problems a bit. After all, how can their problems compare with those of tall people? Being a tall person myself (6'3"), I can well attest to the fact that we have problems of a very special nature.

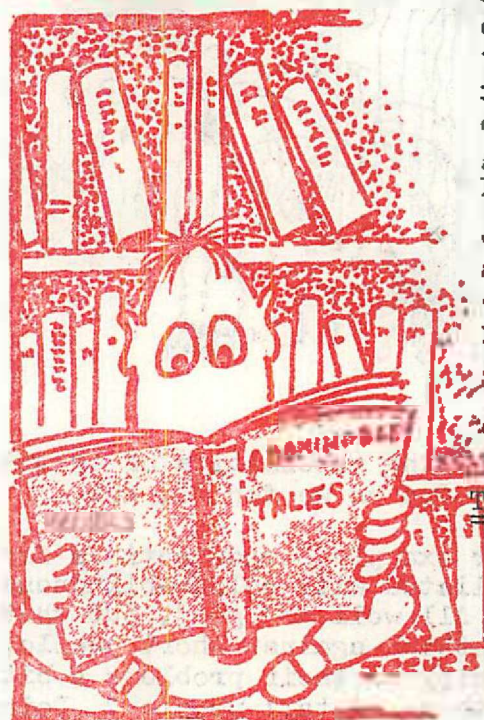
If you're not a tall person, you're probably saying, "Hell, what kind of problems could a tall person possibly have?"

Well, for starters, consider the fact that we live in a world that is designed for (and probably, by) people who are under 6 feet tall! Car roofs are too short; beds are the wrong size -- a King size is long enough, but too narrow, and a Queen size is wide enough, but too short! Our very existence costs more, because we have to eat more. We bump our heads on chandeliers and other oddments hanging from ceilings which were hung there by those of average height. As if that weren't enough, we have to put up with unprovoked attacks by short drunks who need to 'prove' themselves.

I suppose there are compensations, however. Aside from the short drunks, no one messes with a large person, and it is nice to be able to reach things without having to climb on ladders. ..And, there is a certain myth attached to height which I won't go into here... But, hell's bells, ..have you ever tried to buy a pair of slacks with 36" legs?

I propose that this matter be looked into by world governments, or at least town councils, and that resolutions be made to create legislation on matters affecting tall people. Building codes, for instance, need to be revised so that a minimum height of doorways would be required, to prevent the thousands of head wounds suffered by unobservant tall people each year. Manufacturers should be required to make clothing, beds, chairs, cars, and other affected items in either larger standard sizes, or in special "extra large" sizes. Sadly, I don't think we tall people will get any progress, we are in a minority, and as you know, the minority always gets the "short" and of the stick . . . and that's the long and short of it. M.A.B.

RECENT READING



THE FRISK DONATION

Robert Hendrie Wilson

Hale SF \$4.35

Once Robert Frisk has been lured into becoming an AID donor, he finds he is developing strange tastes and phobias. Unknown to him, Nicola Rune, the operating doctor has instigated a side experiment of her own with disastrous results for Frisk. However, Frisk gets his revenge in a most unusual way, on both Rune, and his business partner. This is the type of SF which neatly bridges the gap from main stream by sliding almost imperceptibly from an everyday situation to a chilling denouement. The plot is beautifully intricate and developed in gripping detail, with no annoying loose ends or "but what about..." questions left unanswered. Once I began to read, I simply had to keep going to finish the tale in one sitting. Very good.

THE PRISONER 2 'A Day In The Life'

Frank Stine

Dobson \$4.75

Spin-off from the famous TV series which starred Patrick McGooghan and set in the artificial Italian village of Portmeirion. Thomas Disch wrote the opener in this series (also obtainable from Dobson) and now Stine brings us a second adventure.

Once again, the un-named 'Number Six' is imprisoned in 'The Village' because he will not reveal his reasons for resigning from the Secret Service. We follow the placid, almost idyllic, but fully supervised life of the tiny community. 'Six' refuses to conform, is arrested, sentenced to death and begins another escape attempt -- and must fight to determine just what is reality. More peaceful than 'The Prisoner', but still full of interest and if you enjoyed the former..then this follow-up is meant for you. I must admit to kicking myself more and more for missing the original TV run.

THE HORDE

Joseph Green

Dobson \$4.25

The Shensi have a tri-mother, hive culture with telepathic overtones. When Leo Volz and his wife/partner encounter them on a new planet, Misty is captured and shipped back to the home planet. Aided by one of the Shensi, Leo sets off to rescue her and makes one of those long 'journeys against all odds', first across the new planet, then through space, and finally across the Shensi world. The ending is rather 'deus-ex-machina', but otherwise one goes along for the ride. Incidentally, the Shensi..although described in detail, never seemed really plausible...particularly the segregation of developing stages and the largely off-stage revolt against the mothers. There are some similarities to a de Camp, 'Viagens Interplanetarias' tale..or maybe even John Varley's 'Titan', but without the former's humour, or the latter's scope of imagination.

THE TRIUNE MAN

Richard A Lupoff

Dobson \$4.25

Light years from Earth, on the artificial memory-bank world of Sravasti, the synthetic beings the Yakshi have observed a strange phenomena slowly destroying the whole universe. Their machines and computers single out and snatch one being who can halt the catastrophe. They collect comic-strip

'Buddy' Satvan, a multi-phase schizophrenic, currently institutionalised for a murder committed by another of his personalities. These include Roland Washburn, would-be Nazi fuhrer and the engineering genius Auburn Satro. All these alternate without warning with the added problem arising when they get duplicated..and triplicated by the Yakshi machine. On top of this, Satvan's top strip, 'Diamond Satro' is being considered for TV; provided Satvan can be eased out. Things may seem confusing at first, but gradually Lupoff brings all the threads together so that the universe..and Satvan are saved.

ANDROMEDA 3

Ed. P. Weston Once again, Peter Weston has assembled nine original stories without once sirking into the mud left by the 'New Wave'
Dobson \$4.25 Here you will read of the killing of anyone connected with the discovery of FTL; why matter transmission needs suppressing and a battle between two kinds of city dwellers. There are oppressive aliens killing intelligent apes; an adultere and his punishment. You meet time reversed, a leap in time and extended time via FTL, and finally, the life forms on Harlan's world. As Peter says in his introduction..a critic wrote.."send all your good, solid, well constructed, tightly-plotted, grammatically correct..... etc. to Peter". He meant it as a slur..but what an indictment of 'modern New Wave' ? Nevertheless, it sums up the contents...real stories. Long may Andromeda continue to print 'em.

SPACEWRECK

Stewart Cowley Latest in the 'Terran Trade Authority Handbook' series. It is large-sized (24 x 30 cms) and crammed with superb paintings
Hanlyn \$3.50 of space and spaceships in various states of repair by a variety of artists. There are numerous line drawings giving 3 view plans of some of the craft..useful if you want to scratch-build a few models. The text takes the form of authentic accounts of each disaster and the circumstances surrounding it. The whole package being presented as a historical record of past events in the development of space travel as seen from a viewpoint in the remote future. The attraction for me, is the artwork, and I would prefer less text and more paintings..with details of their origins. Quibbling apart, the format makes for easy and interesting reading, and at the low price, an ideal present for anyone with an interest in SF or space travel. Incidentally, Hanlyn also issue 'The Space Shuttle Handbook' in similar format...an utterly invaluable collection of articles, photographs, drawings and facts for any modeller, space buff, Shuttle follower etc. ..and at the low, low price of £2.95.

ARENA

Julian Jay Savarin Basically, this is a three-vignette story with the parts tenuously linked by the background of a Galactic
Hale. \$4.35 observer and Earth as a sentient planet. Each section deals with conflict; a Dawn Age man against a beast and his environment; an educated slave against a brutish master; and finally, guerillas against an oppressive, anarchistic State in Britain. Individually, each part is well-written, gripping and brings its theme alive and capable of standing on its own. However, despite a very tenuous 'racial-memory' and occasional notes by the 'observer', the gestalt never really merges into a complete whole. The moral of the tale..if one stands out, is that mankind refuses to learn from history, and will continue to thwart, spoil and struggle his way through life. Britain/The Empire comes in for a bit of bashing...but were we any worse than any other country ? Personally, I feel we were quite a bit better...and by dropping this angle and building up the Galactic supervision I feel this would have made a winner.

THE GUARDIAN AT SUNSET

Alan Bracley
Robert Hale £4.35

Colonists settled on Caria, some 4,000 years ago and their society has become decadent. Janar, half-brother of the King, (who sees him as a potential usurper) survives an assassination attempt and accepts the aid of an unusual robot mentor. Janar changes his lifestyle, rises in Carian society and tries to guide the people through an impending energy crisis. At this point a counterthread is introduced, leading to a minor 'twist' ending.

Unfortunately, we never see Carian society in any detail. Despite the duelling and plotting, this is essentially a gently-written tale in the very credible style made popular in Jack Vance's alien yarns. Pace is smooth and steady as we follow Janar's career. Not a block-buster, but a pleasing, entertaining story which also manages to point up the real problems in our own energy crisis.

TRIPS IN TIME

Ed. R. Silverberg. Hale £4.35

A collection of nine, time yarns. Priest tells of the 'freezers' who petrify critical incidents and people. Sheckley describes a hardware pinching demon; Peter Phillips' gem from Asf is here..the monks who haunt a food factory. Anderson tells of the penalties of time-hopping and its converse comes from Zelazny as he relates a second chance arising from time-reversal. Silverberg appears with an innocent caught in a time loop. From Marta Randall comes a space/time hunt for a lost love and to wind up, van Vogt's 'Seesaw' sees a reporter doomed to oscillate through time.

Each brings a new twist to one of SF's oldest themes, with the variety and pace keeping it fresh throughout. One of the better recent anthologies.

THE TOLKIEN SCRAPBOOK

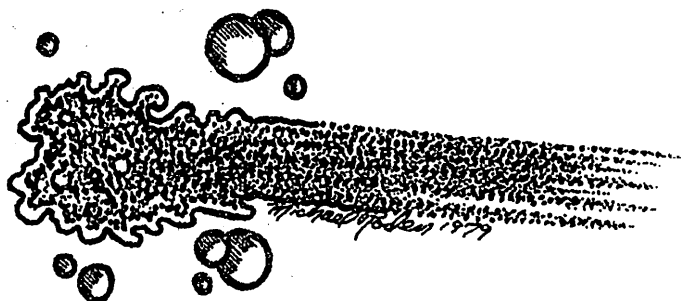
Ed. Alida Becker
Running Press \$7.95

The paperback version of Grosset & Dunlap's superb hardcover and still boasting 190 large-size pages, packed with illustrations and 8 terrific colour plates by Tin Kirk. The written part consists of a series of collected articles (including one from 'Triodo'). The first half gives a Tolkien biography and examinations of his work and aims. Next you drool over the Kirk portfolio before moving on to examine Tolkien fandom via fanz. puzzles, writings, poems and even Hobbit recipes for you to try. There is Elvish writing (Do people really use this for communication?); lists of societies, fanzines and books. The layout is clear, attractive and the book simply exudes enthusiasm. For Tolkien lovers, a real treat..and made easier on the pocket by this soft cover edition.

BEASTS OF GOR

John Norman
Wyndham 'Star'
£1.50

The barbarian world of Gor is Earth's counter planet round the sun. Its men are bold, strong-willed and masterful, its women, beautiful sex-slaves. The alien Kurrii prepare to invade and their advance agent sends a challenge to Tarl Cabot, a mercenary. He sets off to prevent the attack and meets an assortment of adventures as he leaves a trail of raped (and therefore, utterly abject and sex-craving) maidens along the way. The author's premise is that women need and want subjugation and sex. Smoothly written and a hilarious 'courting' incident. Any chauvinist, male sex-fiend out there will be delighted with all the nude and nubile, tastefully chained females.



JUPITER LAUGHS

Edmund Cooper
Hodder & Stoughton
£5.50

A 15-story collection in
a variety of styles
ranging from the lyrical
and serious to the flipp-

antly comical. Those familiar with the author
longer works will be surprised to know that no
one gets raped on stage, even in the barbaric,
Biblical, baby-killing off the title story. We
hear of the off-beat fate of alien visitors
and the trials of a BMEWS operator closely
followed by the 'death' of a puppet named
Plunk Goo. There's a new use (in the far
future) for Nelson's column; the invention of
peace-bringing Doomsday weapons and a return
to the pyramids of Mars. Cooper ranges from
deadly butterflies, via star-travel to the
problems created by a computer-taught prodigy.

There are a few 'unsecured endings', but
also a sufficient number of neatly rounded-off
yarns to ensure that this collection should go
down well with each and every breed of reader.

A CIRCUS OF HELL

Poul Anderson
Hale £4.75

Lieutenant Flandry is bribed to check out a rediscovered
mining world. Partnered by beautiful prostitute Djana
he soon finds himself involved in a deadly chess game
in a warren of hostile robots. Then, betrayed into
enemy hands, Flandry finally escapes by virtue of Djan exercising mental
powers developed under the tuition of their Merseian captor. Less facile
and with greater depth and insight than the average Kinnison, Rottief, or,
Flandry, the brave lieutenant is often off-stage while other aspects of the
background are filled in. We also get a more detailed look at the Merseians
themselves, so that although the plot is flimsy, we get a more richly rounded
yarn...with Djan winning more sympathy than Flandry, and even the Merseians
coming across as nicer and more honourable characters than the humans.

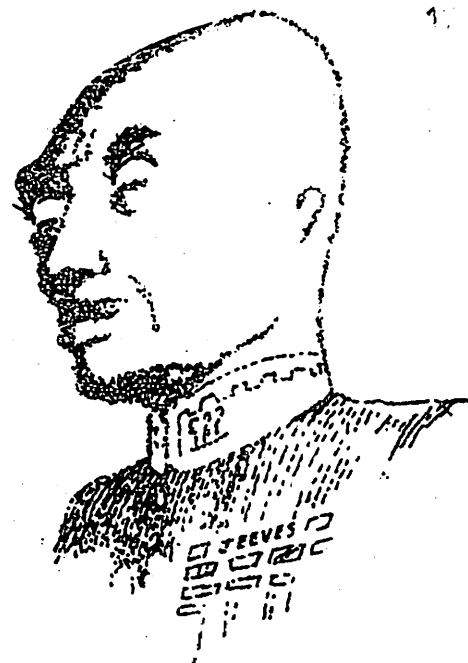
HALLIWELL'S FILM GUIDE * Over 1,000 pages, jam-packed with details of some
Granada 'Paladin' £3.95 * 8,000 English Language films. Directors, actors,
***** producers, companies, gauges, special effects men,
music, etc, plus a brief plot synopsis, and in many cases, critics' comments.
There is also a listing of alternate titles for those films which acquired a
second name, and a refreshingly candid look at the changes in the cinema, its
standards, and the posturings of certain critics.

Next time you want to settle an argument over when a film was made, who
directed it, or who did the music...or even when booking films for a
Convention, simply look in the 'Guide'. This is fascinating if you only
want to browse or perhaps indulge your nostalgia; but, beyond this, if you
have more than a passing interest in films, then this is one of those utterly
indispensable books which you must have on your shelves. Highly Recommended.

ADD SOUND TO YOUR MOVIES

Mike Kent
Papezmac £3.95

I couldn't resist buying this one. If like me, you
get a kick out of adding sound to your own movies, this
well-illustrated book is for you. It covers basic, non-
synch sound, and on up to multi track, lip-synch and
single sound systems. How to make your own sound mixer, striping, editing,
commentary, effects, wiring, home shows and many other items. I've been
adding sound for years..but I still learned a lot from this one. Another
good buy.



THE RINGS OF TANTALUS

Edmund Cooper
Coronet 85p

A re-issue of this second tale of 'The Expendables'. The team of seven misfits (which includes four replacements) explore strange rings on Tantalus. Tension is heightened, as one of the seven is a saboteur. They locate a derelict ship orbiting the planet, and once down, their camp is attacked by simian-like robots. Plenty of hectic action, blood and thunder before it is all sorted out. All good clean escapist fun. This time it is issued under the author's real name, rather than 'Richard Avery!.

SEX IN THE 21st. CENTURY

Ed. M. Parry & M. Subotsky
Panther 95p

The editors have assembled a dozen items bearing on SF and sex, opening with a teenager who craves it and develops psi powers. There's a neat yarn about a man who can make clothes vanish; a robot device which falls in love; group sex by remote control, and even heterosexuality as a crime. There is an alien breeding attempt plus many others including a section of 'small ads'. I'd rate it ten hits out of 12..with the two under par being the 'ads' and the implausibly constructed 'Vana'. Good stuff!

EYE TEASERS

C.H. Paraquin
Dragon 50p

A juvenile collection of optical illusions which amply demonstrated the truth that, "Things are not always what they seen". Close on 100 pages of line drawings guaranteed to doubt your own senses. Certain types such as 'which is the longer?', appear in different guises, but there is still plenty of variety. This is a book ideally suited to capturing the interest of any bright youngster, at home or in school..so why not make it a surprise gift for someone?

ROADSIDE PICNIC

Arkady & Boris Strugatsky
Penguin 80p

Aliens have made a brief landing and left behind a strange, deadly area known as 'The Zone'. Red Schuhart is one of the 'stalkers' who venture in searching for weird gadgets left there. How he and others brave the 'witches jelly', the 'black lamps' and high-g traps makes for one of the most gripping yarns that I have had come my way from the Strugatskys. Both they, and their translator are to be praised on a masterly job of menace and suspense.

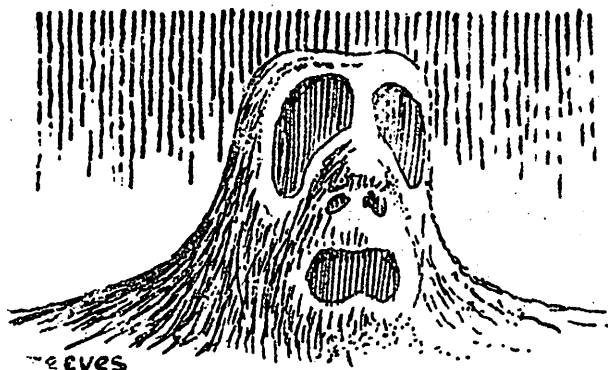
FIFTH PLANET

Fred & Geoffrey Hoyle
Penguin 85p

The year 2087 (which sounds exactly like the present, right down to petrol-driven cars), the wandering sun, Helios-- half as large again as Sol, together with its planets, is passing through our Solar system. (Swallow that, and the rest is easy).

Two expeditions are mounted to the planets, one Russian, one American. On landing, strange events and hallucinations are experienced on the apparently uninhabited world...and then the survivors return to Earth....!

Someone should tell the Hoyles that the Russians put a woman (Tereskova) into space years ago..they seem surprised when it happens in 2087. Otherwise, once you get into the yarn it moves along at a rattling good pace and holds one's interest in good old, 'what-will-happen-next' style. Apart from the quibbles, it's the best Hoyle I've read.



reves

SEARCH THE SKY

Pohl & Kornbluth
Penguin 80p

Ross, a bored shipping clerk on a decaying world accepts the job of flitting round the Galaxy in a FTL ship to find out and halt, the cause of the creeping decadence. He meets an age-oriented society, a matriarchal one, a world of Joneses, and eventually an Earth populated by morons. The tale is lightweight but amusing but never really comes alive as have previous yarns by this team.

THE CHRYSALIDS

John Wyndham
Penguin 80p

A post-atomic-war tale, back to nature and the ruthless elimination of any form of mutant. Young David Strom, son of the local, bigoted preacher has a secret mutant friend.. until she is discovered. David too, has his differences, he can read minds. How it all works out, makes for another of Wyndham's slowly developing and chillingly worked out epics..ignore the irrelevant cover, just enjoy the yarn.

THE EARTHSEA TRILOGY

Ursula le Guin
Penguin £1.75

Containing, 'Wizard Of Earthsea', 'The Tombs of Atuan' and 'The Farthest Shore', each a highly acclaimed novel of magic and heroism in the community of islands which makes up Earthsea. The thread follows the rise of the young goatherd Ged, as he discovers his own magic and rises in power and authority to become a Master Magician and battler against powers of evil.

A blockbuster of a book..both in story..and in size, with close on 500 large-sized pages. If you haven't all ready encountered 'Earthsea' and are a lover of the ancient magics, then rush out right away and snap up your own copy. At this price, they'll not stay long in the shops.

THE FATE OF THE PHOENIX

Sondra Marshak & Myrna Culbreath
Bantam 85p.

Being a sequel to 'Price of The Phoenix' makes it difficult to find what has gone before in the his Star Trek novel. The purple prose and vanVogtian introspection of the opening doesn't help. Onne, enemy of Spock and Kirk, has been killed once, but has been re-born to plot against them and the Foundation. Kirk has been duplicated; one persona staying to run the Enterprise, the other accompanying a Ronulan Commander as her lover. Complicated rituals form a counterpoint to Onne's plots in a yarn which should be a delight to all ST fans..although there is little 'Star Trek' activity of the kind we all know.

THE MASTERS OF SOLITUDE

Marvin Kaye & Parke Godwin
Methuen Magnum £1.50

Another post-atomic-war setting, this time populated by a bucolic, agrarian society in which both 'magic' and telepathy are everyday facts of life. There is also a 'City' protected by a 'Self Gate' which kills anyone unfit to enter. No communication exists between city and country, but when plague threatens, Garick, the King/God appeals to the City for help. When he is ignored, he sets out to raise an army to gain his ends. A delicately crafted yarn, with touches of 'Earth Abides'. It is all the more powerful for the slow, steady build up and an absence of the stereotyped sex, sadism, blood and gore so prevalent these days. Read it and savour.

CONFESSIONS OF A CRAP ARTIST

P.K. Dick
Methuen Magnum £1.25

Not SF, but just Dick writing from beneath his main-stream hat. Jack Isidore is a believer in Shaver caverns, Mu, and a first-rate schmuck. His story intertwines with those of his sister, her husband, and Claudia Hambro, a UFO nut. Each has problems, sister has eyes on a young student and her husband wants to kill her for making him do her shopping. No crises, just everyday events seen from varying viewpoints.

DREAMSNAKE

Vanda McIntyre
Pan 95p

Sometimes I wonder what SF authors would do without a post-holocaust world for their stage. Here we have 'Snake', a healer who uses a trio of snakes to aid in her cures. When one of them is killed, she must go in search of a replacement;..Not an easy task on a dusty world of nomadic peoples who fear the Healer as much as they respect her. Really a tale of people and their reactions to the strange. Parts of the yarn originally appeared in Analog and here is the book length version which is a Nebula and Hugo Award winner into the bargain.

THE HITCH-HIKER'S GUIDE TO THE GALAXY

Douglas Adams
Pan 80p

Based on the radio series, Arthur Dent is opposing the demolition of his house to make way for a by-pass. Then the Earth gets demolished as a FTL route cones through. Dent is saved by Ford Prefect (an alien in disguise) who is researching a new 'Guide'. Together they embark on a serendipitous tour of the Galaxy, aided..and hindered by quotes from the original edition. Entertaining throughout and extremely funny in parts..I found the book version far more amusing than the radio show.

STARBRIDGE

Jack Williamson
& James Gunn
Methuen Magnum 95p

Interstellar civilisation is linked by 'The Tubes' with all of them centring on Eron..which therefore has a lovely tax setup. Then adventurer Horn accepts the job of assassinating the head man and is immediately involved in a power struggle and an uprising. Something of a potboiler, but still a rattling good adventure yarn. I enjoyed it, but can't help wondering just how many permutations on 'Star Thingsys' we may expect to see in the future.

THE CITY AND THE STARS

Arthur C. Clarke
Corgi 95p

Diaspar is Earth's ultimate city with inhabitants enjoying a hedonistic life and a thousand year lifespan followed by repeated rebirth. Machines answer the lightest thought in this veritable but enclosed Utopia...but newly of age Alvin wants more and sets out to escape the city. He reaches the telepasts of Lys, the fortress of Shalminane, then on to the stars and an encounter with an entity of pure thought. A classic of SF, still one of Clarke's most poetic works possessing a strange, dreamlike quality which lures you throughout. If you haven't read this before..grab this chance with both hands.

GET OFF THE UNICORN

Anne McCaffrey
Corgi £1.25

Fourteen stories, some with explanatory notes. Mainly on the 'speculative' side, and often downright tales of romance. There's interstellar transport by telekin-esis and an alien attack by mental power. Future farming, a homosexual wanting a son; some soft porn, a spot of male maternity and a boy who 'finds' lost things. A child criminal telepath, another youngster's first dragon, even Helva is here with her singing ship. Feminists may howl over Ms. McCaffrey's frequent assumption that most women want netes and mating, but overlook this (and a support for homosexuality which niggles me) and you have as good and varied a collection as ever came down the road.

HOFFNUNG'S HARLEQUINADE

Gerard Hoffnung
Dobson £1.25 hardcover
95p paper.

Rather a slim little book, but packed with those delightfully off-beat Hoffnung cartoons which twist reality just enough to produce a laugh from just a little more than the everyday. If, like me, you go for a good cartoon collection, try this..and for the price difference, make it the hardcover. (My own favourite is the one about the robot tea making machine...lovely stuff!)

PLAGUE SHIP

Andre Norton
Methuen Magnet 70p

Second in the Dan Thorson series of the adventures of a young cargo apprentice on the trader Solar Queen. This time the traders set down to deal with the Salariki and find a rival Inter Solar team horning in. The poachers are seen off by the honest traders, a good trade is effected, but as the 'Queen' journeys home, a strange plague begins to strike down the crew..

All good, standard adventure stuff with baddies v goodies and perhaps a bit more gory detail than the average juvenile/teenager tale. I must admit I much prefer Dane's black and white escapades to the posturing of that other fictional trader, Nicholas van Rijn. This one would make a good post Xmas present if you're too late for the 25th

THE GLITTERBALL

Howard Thompson
Methuen Magnet 65p

Another juvenile, this time the tale of a melon-sized starship which crashes on Earth. Its pilot, a steel manne hunts for fuel and is found by a youngster named Max. There are plenty of incidents to keep the pot boiling with plenty of aircraft and bike, name-dropping..there's even a nasty villain in the form of a smelly old tramp. Suitable for the lower age range, easy reading and nice clear print...also some illustrations.

A HERITAGE OF STARS

C.D.Simak
Methuen Magnum 95p

30th. Century Luddites have destroyed every vestige of technology and left a back-to-nature America. Tom Cushing reads of a "Place Of Going To The Stars" and sets off to find it, on the way acquiring companions in the form of Rollo, the lost robot; a 'sentient', a man who talks to plants, and a mindless girl. They meet 'ghosts' nomadic bands, intelligent stones, plants and aliens before reaching their goal. Virtually fantasy and with that gentle 'other days' style which Simak does so well..and sadly, so often. Therein lies its weakness...a good read, but like so many recent Simaks.

THE AGE OF THE PUSSYFOOT

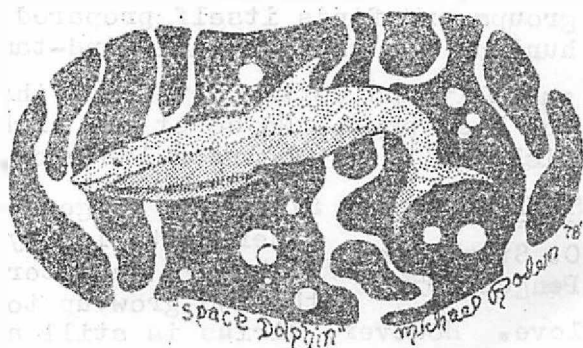
Frederik Pohl
Panther 95p

Charles Forrester, a deep-freeze accident case, is revived in the 26th Century to a world in which his million dollar savings are quickly eroded by inflation. Helped by his joymaker (a computer-linked device with enhancements) he finds a job aiding a Sirian prisoner but then falls foul of murder and a Sirian plot, before he manages to pull off a quick-fix ending. I found Forrester pig-headed in avoiding every chance to learn about his new environment, but otherwise, this is a light-hearted and enjoyable yarn....and maybe 'joymakers' aren't that far in the future.

THE VOYAGE OF THE SPACE BEAGLE

A.E. van Vogt
Panther 75p

The classic collection of space exploration yarns from van Vogt's formative (and best) years in Asf. Extra linking material has been added in the form of a neglected expert in the field of 'Nexialism' (the science of joined disciplines). The voyagers encounter alien beasts, and intelligent but malevolent galaxy, hypnotic light patterns and others. I suspect the film 'ALIEN' owes much to 'Coeurl' and likewise Shaw's 'Ship Of Strangers'.



All in all, an excellent 'read'

THE VORT PROGRAMME

Agent Cain of the Atlantic Federation is sent to enrol John Rankine for a psychology course, but is given no set mission. Then, Dobson £4.25 an attempt is made on his life and he encounters androids replacing human beings. Southern Hemisphere agents link up with master criminal Vort in a bid to infiltrate and take over the Federation. The action is never allowed to flag. It grips you from the start and never lets go as Cain works deeper into the mystery. The action culminates with a one-man blitz on Vort underground hideaway. Substitute Bond for Cain, and this yarn would fit superbly into the long line of highly successful and spectacular 007 films. If you like a good action-agent yarn, this is for you.

THE BOOK OF ALIEN

Paul Scanlon and Michael Gross * A large sized, beautifully produced paperback collection
Wyndham £2.50 * of stills, pen-and-wash drawings, paintings, design
* sketches, model photos, production shots together with
* several descriptive essays giving background detail as
* to who did what, the problems which arose and how they
Recommended ***** were solved.

The whole package forms a superb account of how the film grew from the germ of an idea into a spectacular film. The meticulous detail is staggering, no atmospheric or credibility detail being overlooked. If you haven't seen the film, this must be the next best thing. If you have had the pleasure, then you'll want the book as a souvenir and visual treat. Unlike most 'arty' books with contrived themes, this volume has all its colour, art and expertise channelled into one direction...the film ALIEN...and this makes it a winner. Highly recommended.

THE UNORTHODOX ENGINEERS

Fritz van Noon specialises in solving impossible problems by unorthodox means. Here, in five highly Colin Kapp improbable and implausible situations he pulls the Dobson £4.50 rabbit out of the hat to build volcano based railways on Cannis, and piezo-electric powered subways on Tazoo. Then he destroys a force wall and a load of aliens; scrubs out a variable-gravity planet and winds up using a black hole as a king-sized lathe tool. His problems are not of Analog calibre, being very much 'straw men' set up to be knocked down. Otherwise, if you suspend your critical faculties the yarns are plain entertainment with no ideas above their station. Good light reading.

BLINDFOLD FROM THE STARS

An alien race sets out to take over Earth by first spreading a virus designed to attack brain Philip E. H. gh cells. The plan goes astray when instead of killing Dobson £4.95 off humanity, the virus removes a mind-block installed millennia ago by an even more powerful (and fearful) galactic race. As a result, humankind acquires vast parapsychical powers, contacts other galactic groups and finds itself prepared to deal with the aggressor - and then to go hunting for the original mind-tamperers. Sheer wish-fulfilment, but so smoothly and deftly developed that I just couldn't put the thing down until the last page. No doubt the high brows and motivation-analysis pushers will dislike it, but being a low brow, I enjoyed it immensely.

SIRIUS

Sirius, a large sheep dog, is the culmination of many years' experimentation by Thomas Trelone. Born at the same time as O. Stapledon Trelone's daughter Plaxy, it has human intelligence so that as Penguir 85p the two grow up together, their relationship strengthens into love. However, Sirius is still a dog, with a dog's instincts and their closeness brings hostility and suspicion. A classic of SF and probably the nearest Stapledon has come to a 'human' story in a tale of beauty and pathos.

THE STRAYED SHEEP OF CHARUN

John Maddox Roberts
Dobson £4.95

In the far future, the churches have prospered and the planets of the galaxy are governed by the United Faith. When the Roman-style planet, Charun is re-discovered, it is an abomination for its slavery, its gladiatorial arenas and above all, for its genetically-warped 'constructs'. Militant Father Miles and gentle Franciscan Jeremiah are sent to change the regime, and are aided by Parma, a warrior who sold himself into slavery to aid his tribe. Essentially a 'near-invulnerable' agent tale against the rich background of the United Faiths. SF seldom tackles religion, here the theme is handled well and with dignity as the yarn develops smoothly and the characters and background come alive. I fancy it might even get Award nomination..it deserves it, as it's a rattling good tale.

PULSAR 2

Ed. George Hay.
Penguin 75p

A collection of stories and articles opening with undersea colonisation, followed by a tale of a casualty of an inter stellar war. Alien mating ceremonies, participation TV and an interview with A.E.van Vogt (saying his first story was 'Vault Of The Beast', when in fact three others preceded it). Then you get a future African war, a 'murder' in space and finally an excellent article on atomic bombs and energy..both of fact and fiction. Good value.

APEMAN. SPACEMAN

Ed. L.E.Stover &
Harry Harrison
Penguin £1.25

A more ambitious collection, this time of anthropological SF. There's a spot of verse, a cartoon and an essay which links each tale into the overall theme of humanity, its meaning and possible offshoots. There are more than 20 items, including such goodies as Clarke's 'Nine Billion Names Of God' and Heinlein's 'Goldfish Bowl'. You will also meet Neanderthal footballers, intelligent apes, dolphins and humans as experimental animals. In short something for every palate and enough variety to make it all interesting...with the co-editor's essay arguably the best item.

THE INFERNO

F & G Hoyle
Penguin 85p

When nuclear physicist Cameron travels to Australia to settle details of a new radio telescope, he happens to spot a nova in the galactic centre. He realises its potential and proceeds to make his own arrangements for survival. Rather slow to get under way, and with as many facts and figures as a Gernsback yarn..but once it gets going the tale builds into a near-classic of disaster as the nova's radiation reaches Earth. One of Hoyle's F & G's better stories.

THE KRAKEN WAKES

John Wyndham
Penguin 95p

Another disaster novel, this time a classic re-issued. Glowing objects are seen in the sky, they fall into the oceans and vanish. Time passes and ships begin to vanish. Steps are taken and the menace escalates as littoral villages are cleared of people. After nearly thirty years, this still reads well as tension mounts bit by bit. To be honest, I enjoyed it better at this second reading than when I first read the tale way back in the fifties.

THE DEMOLISHED MAN

Alfred Bester
Penguin 85p

In the world of the 24th Century, telepathy and its use in crime detection make premeditated crimes impossible. Then, Ben Reich sets out to commit the perfect, undetected murder. How he commits the deed, and how he is traced and caught, make this a classic of the genre. The tale first appeared in Galaxy in '53, and is still as fresh, compelling and top level science fiction as it was then. If you haven't read it...treat yourself to a treat.

SEED OF THE GODS

Zach Hughes
Hale \$.80

A mining ship from the Ankari natriarchy ("snug in its orbit behind the satellite". sic) has established a base near a small American town. The operations begin to attract attention from a minor big-wig and Toby, one of the aliens falls in love with a local girl. To complicate matters his partner Jay dabbles in genetic engineering with the aim of increasing his life span. Things come to a head when their discretions are uncovered; racial memory is brought in and also an interstellar quest before all is resolved. The ending tails a bit, but otherwise, good, light escapist fiction with a well-detailed background.

THE ION WAR

Colin Kapp
Dobson \$4.95

Terra is oppressing its colony worlds, and when Major Dam (would you believe), Stormdragon is called for tithe service (just how does Terra rely on tithe space forces from colonies it is oppressing?) he is framed for murder and made into a superhuman 'ion-warrior'. Trained by the beautiful, sadistic Absolute, his story is paralleled by that of cardboard Liam Liam who is leading the colonists in revolt. Plenty of thirties style action cum space opera with the valiant colonists knocking hell out of the cruel Terrans as Stormdragon survives fiendish tortures to save everything in the last reel. A real pot-boiler, jam-packed with escapism. If action, high, wide and handsome is your bag, then this is for you.

THE WORLD'S BEST SF 4

Ed. D.A. Wollheim
Dobson \$5.25

A large-sized anthology of ten stories opening with Brian Aldiss detailing a meeting and conversation between two holocubes. John Varley tells of a man losing his identity in a computer; then there's a tale of lost youth and spaceship-spotting. A sequel to Wells' Time Machine is followed by a recreation of an old-style alien visit and world saving. Then there's Asimov's superb tale of a robot in search of humanity, 'Bicentennial Man'. Bayley has an indescribable space romp; Russ produces a story of strange mental powers. Jame Tiptree supplies a New-Wavish and rather heavy going bit of space adventure and the volume winds up with Damon Knight's yarn of the invention of a time viewer. I'd rate this as the best 'World's Best', so far and excellent value at the price.

EARTH CULT

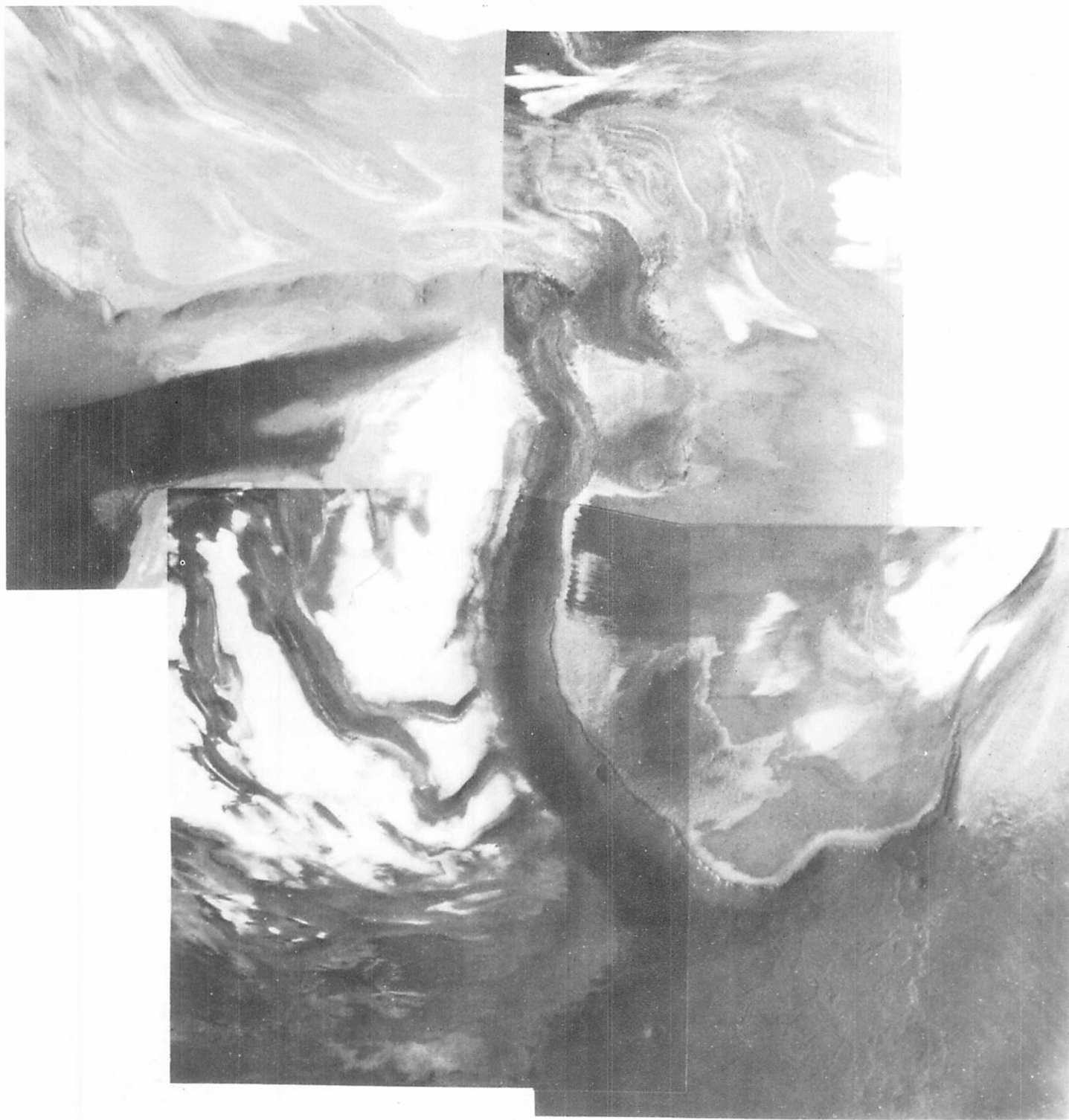
Trevor Hoyle
Panther 95p

Holy Cross Mountain holds a deep mine neutrino detector and is also a focal point for the Telluric Faith Society..whose members don't take kindly to the scientists..or to writer Frank Kersh. They blame the project for bad weather, strange babies and earth tremors. Kersh investigates and the mystery comes to a head. This holds you and has you guessing throughout..then Hoyle loses his grip, slips into a hoary old SF gimmick and hangs things in the air... but if you don't mind such endings, then you'll probably go for this tale.

THE BLACK LION

Patricia & Lionel
Fanthorpe
Greystoke Mowbray
95p

By a rare coincidence, I had the very great pleasure of hearing Mr. Fanthorpe speak in Sheffield, the day before this book arrived. Older readers will remember him as the power behind several dozen pen-names and writer of such gems as 'Tales Of The Spaceways', etc. This time, with some seven years of writing and revision invested he and his wife have produced this heroic fantasy in which Mark Sable, ex-con and misfit is transported to the planet Derl, where he had been in a previous incarnation. You will meet barbarism, torture, magic and arch-villains in abundance. Not being a fantasy lover myself, I hesitate to rate this one, but if you like the field, then I fancy this will appeal..and if you can get the author to speak at you club...don't miss the chance.





Viking News Center
Pasadena, California
(213) 354-6000

Viking 2-39
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July 31, 1978

A LAST VIKING LOOK AT THE NORTH POLE OF MARS — This four-frame mosaic is made up of the last pictures transmitted from Mars to Earth by NASA's Viking Orbiter 2 before engineers at the Jet Propulsion Laboratory shut it down July 24, 1978. The region photographed is between 79 and 84 degrees north latitude near the edge of the north polar cap, and it reveals a broad plateau dissected by a canyon. The plateau is formed of many individual layers, and these are exposed where erosion has uncovered distinctive patterns of roughly parallel stripes as evidence of the layering. The season is mid-summer on Mars, and strong solar heating has caused winter deposits of condensed, frozen carbon dioxide (dry ice) to sublime back into the atmosphere — leaving behind bright patches of water ice. The ice clings preferentially to flat or slightly north-sloping areas, while slopes with southern inclinations are defrosted by the greater amount of sunlight they receive. A comparison of these recent Martian-summer Viking Orbiter 2 pictures of the north polar region with those taken during the last Martian summer (1976, also by VO-2), indicate that the north polar cap had significantly less ice cover during the 1978 summer than during the previous summer.