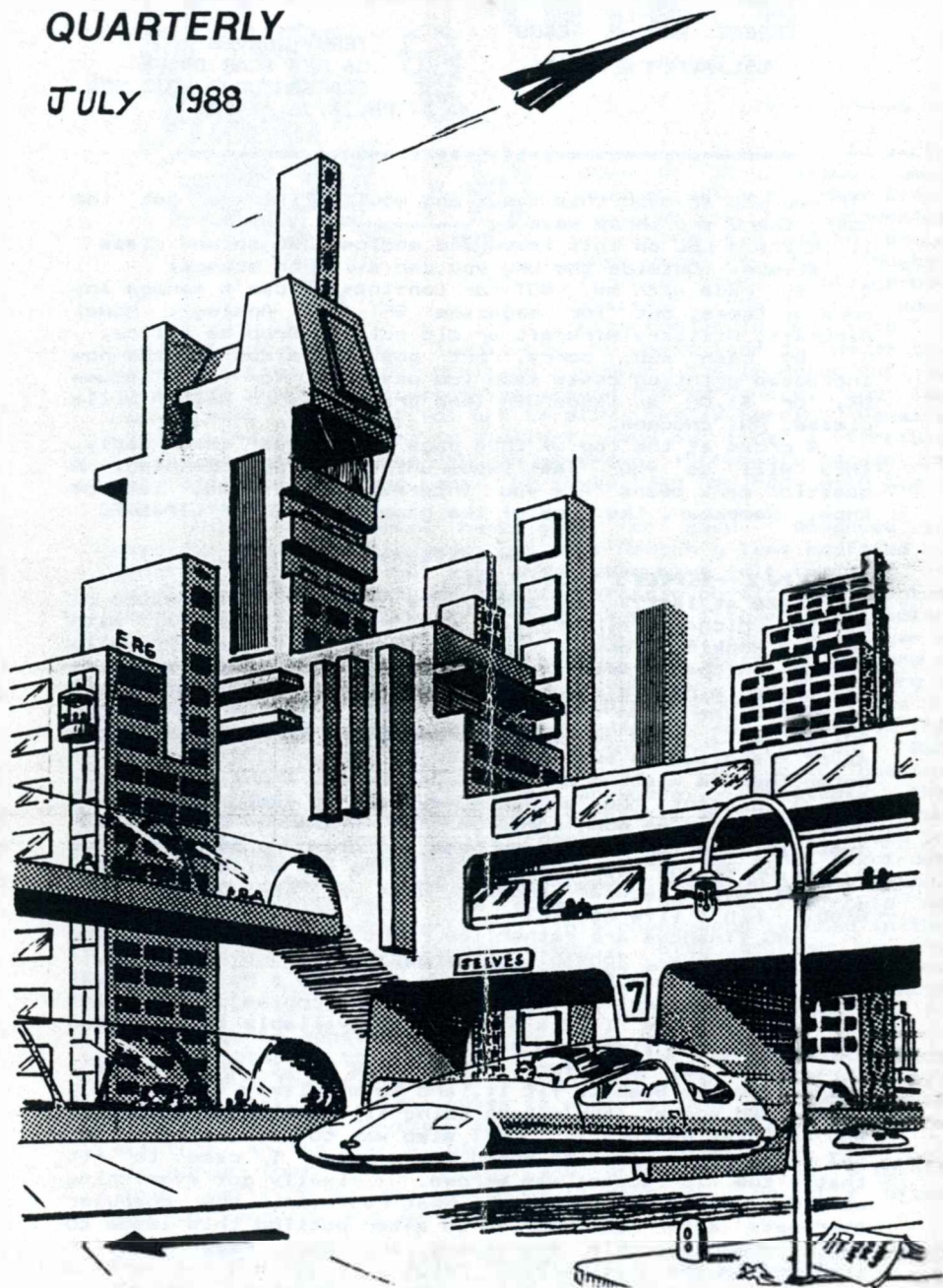


# ERG 103

QUARTERLY

JULY 1988





## QUARTERLY

No. 103  
JULY 1988

TERRY JEEVES  
56 RED SCAR DRIVE  
SCARBOROUGH YO12 5RQ  
Ph. (0723) 376817

=====5555555555=====

IF you you enjoyed this issue and would like to get the next, there are three ways :-

1. Write a LOC on this issue and enclose TWO second class stamps. (Outside the UK, you can skip the stamps)
2. By trade with me. NOT for fanzines, I can't manage any more of those, but for magazine SF (not Analog), Model Aircraft, Military Aircraft or old pulps. Drop me a line.
3. By cash sub. Sorry, but postal raises and the now increased printing costs mean you pay £2.00 for four issues UK, or \$1.00 an issue USA (and pro rata), in dollar bills please, NOT cheques.

A cross at the top of this page indicates that sadly, this will be your last issue unless you *DO* something. A question mark means "Are you interested? if so, let me know. Remember, the name of the game is **RESPONSE**

====555555====

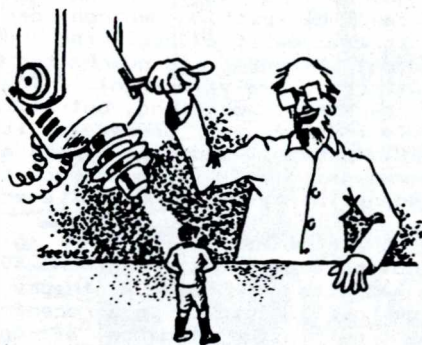
## MINI-ERGITORIAL

Fame at last?? Val and I have just had the pleasure of helping Michael Winner film 'A Chorus Of Disapproval' with Anthony Hopkins, Sheila Syms, Lionel Jeffries, Prunella Scales, Richard Briers and Gareth Hunt. All very nice approachable people and not 'standoffish'. Watch out for us as extras among the theatre going crowd. IF we don't get edited out, we:- Cross road and enter theatre before the mayor - applaud in audience close-up - rush to stage-door - enter theatre - stand on balcony as Jeremy Irons passes us - and I present the back of my neck to camera as Prunella Scales follows me down corridor. We finished one session just in time for me to rush home and clean up before giving a talk on SF and Desk Top Publishing to the Writer's Circle.

I also have a regular snooker date at the Conservative Club. Ain't life hectic?

ERG finances are rather low right now, so if any of you want to buy (cheap) paperbacks, hardcovers, fanstuff magazines, astronautics, fag cards and even a Hotspur Annual and old newspapers, ask for the relevant copies of my sales lists. ERGtapes 1, 2 & 3 are still available at £2.00 and other items are listed on page 9.

I lashed out £80 for STOP PRESS unit and 'mouse', dismantled the Beeb to fit it, and to my dismay found only 1 spare RAM socket (the others being filled with my Wordwise+ and Solidisk RAM/DFS.) NEXT step was to lash out a further £63 for a 256K expansion board.. and when I came to fit that, the IC socket was warped. I finally got everything working, but thanks to a loose heat radiator, the computer overheats after an hour -- so after putting this issue to bed, I must dismantle everything and bung heat transfer compound on the heat shield. Maybe I'll get the lot working in time for the next issue -- maybe. Bestest, Terry



## SMALL

## MATTER

Terry Jeeves

In the good old early days of SF, atoms were simple affairs. Prof Ettic could devise his wonderful shrinking ray and so reduce the size of his husky, football-star college-boy assistant that the poor blighter could drop into

the world of the atom. Inevitably, he would land on one of the many electron 'worlds' orbiting a proton, busily doing duty as a central sun. After wandering around for a while, the lad would meet the beautiful but totally insipid heroine (usually called Lona, Nola, Olma or similar), save her from a terrible fate and then when the ray was reversed, (Strangely enough, it only affected hero and Lona), he could take her back with him.

Sadly, those times have gone for good. Advances in physical science have seen not only Newton's laws modified by Einstein's theories, but even the latter have felt the wind of change from the latest advances in particle physics and quantum theory. Banished forever is that innocent little atomic solar system. Take that electron world. Nowadays, it is no longer a nice hard little ball, but a sort of fuzzy area where a 'probability wave' hangs out. According to Heisenberg's Uncertainty Principle, you can never pin one down exactly as to position and velocity. Measure one quantity and you change the other, the amount of error hingeing on Planck's constant. Bad enough? hang on, there's worse to come. According to quantum theory, that electron could be anywhere. Admittedly, the chances are very high statistically that it will be where you expect .. but there is a remote chance that it could be somewhere quite unexpected - and with so many electrons drifting around, that 'somewhere' occasionally happens. Imagine a barrier round the atom .. the electron could be outside, and sometimes it is. This phenomenon is used in the real world in the 'tunnel diode'. Even weirder is the supercooled Josephson junction whereby electrons move from one side of an insulator to the other (just because of a remote possibility that they could be there) and current flows only if NO voltage is applied.

Another little quirk of the electron is that quantum theory says that everything is quantised, i.e. comes in small, discrete packets. Light comes in photons, and electrons have quantised energy levels. Shove in a quantum of energy and the electron shifts to a higher level. Eventually, it will discharge that extra energy and drop back to its original level, emitting a light photon as it does so. Do this often and fast enough, and you have a laser.

Then there's the famous 'two-hole' experiment whereby electrons fired through a screen with two holes will produce either an 'interference' pattern OR a 'shot' pattern. Which you get seems dependent on what the observer has in mind.

Even that sunlike proton turns out to be made from three smaller particles called 'quarks' (2 of 'em 'up' and one 'down') and so far, these can't be split. Neutrons can decay into protons and other particles, now it's beginning to seem that even the proton can decay if one of its quarks turns into a pion (pi meson) and a positron (+ve electron). The time before this happens may be very very long, but if it *does* happen, then given the lifetime of the universe, it will eventually happen to EVERY proton, and this offers another alternative to the eternal expansion heat death or back to the original 'Cosmic Egg' scenarios -- one where everything crumbles into quarks.

Not to worry, we'll not be around that long. However one of the most mind boggling aspects of quantum theory is a seeming ability to indulge in FTL antics. In a recent French experiment using a photon pair, two photons of opposite polarisation were fired off in differing directions. One of them was then passed through a polarising crystal lattice and had its wave front shifted. Instantaneously, the other photon shifted its polarisation to match! ...and this happened faster than any light speed signal could have passed between them!

Not only did this experiment verify quantum theory, it also poses two interesting points:-

1. How can a signal travel FTL?
2. What sort of signal could it be?

Before you start thinking of FTL communication, there's a snag (which will no doubt soon be solved in fiction). The original photon pair polarisation is a heads or tails proposition. They can be alike, or opposed .. randomly. Now if you alter a random sequence .. you still get a random sequence and so you can't impose a message on it. Oh well, back to the drawing board, after all it's only a very small matter.

R.T.J.

=====

SUGGESTED READING :-

IN SEARCH OF SCHRÖDINGER'S CAT	J.Gribbin	Corgi	£2.95	1984
IN SEARCH OF THE BIG BANG	J.Gribbin	Corgi	£5.95	1987
THE COSMIC CODE	Heinz R. Pagels	Pelican	£4.95	1984
QUARKS	Harald Fritsch	Pelican	£4.95	1984

=====

WANTED BY THE EDITOR Trade or buy

ASTOUNDING STORIES (USA)

1930..JAN, MAR, MAY, JLY, AUG, SEP, OCT, NOV, DEC.  
 1931..JAN, FEB, JLY, OCT, DEC.  
 1933..OCT, DEC.  
 1934.. , FEB.

BOOKS THE PULP JUNGLE Frank Gruber 1967

CHEAP THRILLS: An Informal History of the

Pulp Magazines Ron Goulart 1972

OF WORLDS BEYOND The science of SF writing

L.A.Esbach Advent 1964 USA

SF BY GASLIGHT Sam Moskowitz

World 1968 USA

THE UNIVERSE MAKERS D.Wollheim

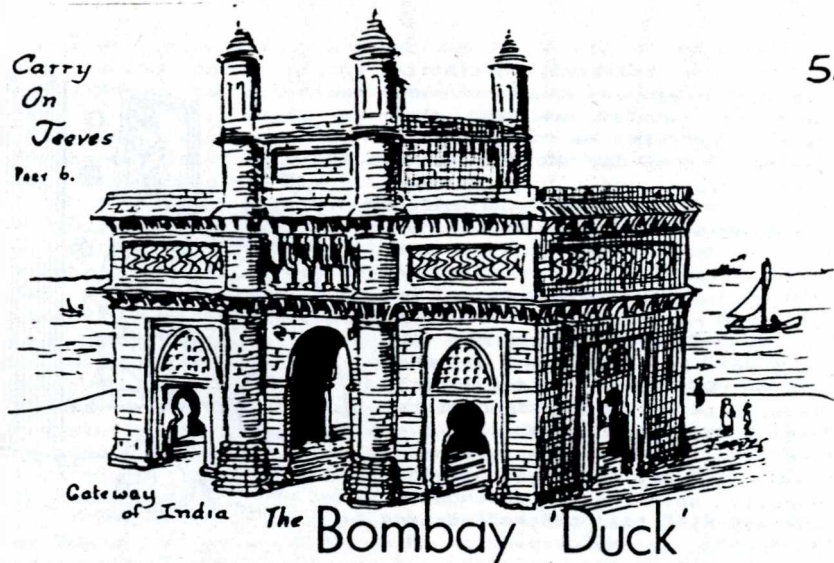
Harper & Row 1971USA

ALL OUR YESTERDAYS H.Warner

Advent 1969 USA

SEEKERS OF TOMORROW Sam Moskowitz





Our stay in the Astoria flats proved short-lived. We were transferred into tents at the end of Marine Drive and about 100 yards from the sea. After the ease of Juhu's huts and the relative comfort of the bleak Astoria, the tents proved a nightmare. Set out higgledy piggledy in available space, tent ropes intertwined with no concept of 'lines' so that getting back to your tent after nightfall was like running an assault course.

Once back in the tent, the RAF had not considered any form of lighting might be necessary. so hurricane lamps and paraffin were not available. I solved that problem one quiet afternoon, as our tent backed onto the rear wall of a brick built storehouse. A quick shin up the wall, and lo, as suspected, a power line ran along the top. A few minutes work with pliers, wire and insulating tape, and a connection was made. I ran the cable down the wall, scooped a shallow trench in the ground and led the cable into our tent. Wonderful, we had a nice bright light to read by.

Naturally, the occupants of the adjoining tent were envious, but were appeased by extending the power line to them --- and then to their neighbours --- etc. By the time I finally left Bombay, ten tents were lit by my illicit wire tap, the cable grew warm every night, and I dread to think what happened to that thinly buried wire when the monsoon rains came.

My daytime job was in our newly built Transmitting Station in the Military Car Park behind Church Gate Station. Greatly expanded as Bombay's main Radio link, we now boasted eleven 1190s, the venerable 1087 and an ex-aircraft, battery powered T1154 (The pretty one with all the coloured knobs). I nearly creased myself changing the accumulator on this one day. I often smoked cigars (half Coronas were only 2 annas each), but this time, had just lit an eight inch long Manilla cheroot, one inch square in cross section, black as hell and twice as strong. It was sticking out of my mouth as I hoisted up a heavy 12v 90AH battery. I heaved and drew in a deep breath -- of Manilla cigar smoke. I barely managed to drop the accumulator and sat gasping for ten minutes before normal service was resumed.

6.

The transmitting station was kept clean by a bearer who wandered around now and then gently flicking a twig broom. However, one day he decided to spring clean, and I just stopoed him in time as he raised a dripping wet rag to swirl out the 0.500v power unit on one of the transmitters.

On another occasion, we had a right roval Christmas Booze-up in the Transmitting Station. All went well until around 1 am when one of the operators rang up from Receivers to say his Transmitter was drifting frequency all over the place. I investigated and found a very kettled mechanic happily spinning the tuning dial and watching the little numbers go round as he tried to win a "Jackpot".

Night duty was usually peaceful, around 10pm the duty mechanic would be kept very busy changing all aeriails and transmitters over to night frequency, then back again to day frequency around 6 am. Otherwise, there was little to do apart from shift frequency and retune from time to time if the remote Operator rang up to request it. Very occasionally, a loud bang would betoken a burnt out bias resistor -- whereupon panic would ensue. First to shift control to a stand by transmitter, then spend an hour or so on repairing the damage.

Apart from this, we had the perk of night rations which took the form of lashings of bacon and eggs. On one particular night, I fried up bacon and two (duck) eggs, three times during the night. By morning, I felt ill, reported sick and was immediately whisked into Colaba hospital on the Southern tip of Bombay peninsula with yellow jaundice. The treatment was a two week loaf on a fat free diet, and I was then discharged with a document saving, "Medicine and Light Duties" ... hollow laugh!

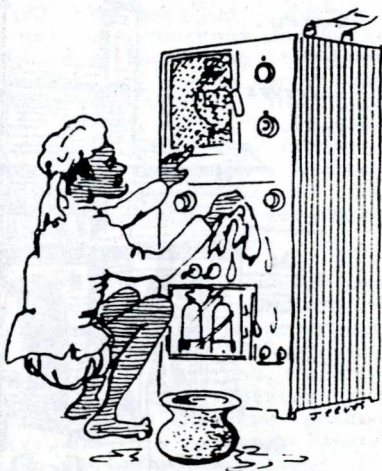
Good old RAF, they promptly sent me on an assault course! Actually, I rather enjoyed playing around with Sten, Bren and Lewis guns, and even chucking dummy Mills bombs wasn't too onerous. But if you think dummy bombs are safe, think again. The system was to form two ranks about fifty yards apart. Rank 1 would hurl its dummy Mills bombs (which were solid metal

weighing a pound or two) and retreat a safe distance.

Then Rank 2 would come forward, pick up the dummy bombs and hurl them back again before they too retreated.

Either one Officer didn't retreat far enough, or his opposite number had a strong arm, but either way, he collected the chunk of metal behind his neck and was rushed off to hospital.

Then we came under fire. Typical SNAFU. We had knocked off for lunch and were sitting on the top of a palm covered hill. The Officer in charge took his pistol.



went wandering off .. and decided to collect a few coconuts .. by shooting 'em out of the palm trees. Not being a navigator, he managed to get himself on the opposite side of his target from the hill where we sat. Result, pistol rounds came whistling past our ears. That was when we found a new meaning for Bombay *DUCK!* Someone courageously dashed down and politely told him he was being a silly bugger.

I think my spell in Hospital must have elevated my name on to the list of people who should be made to do queer things, as following the Assault Course, and a week prior to my 21st birthday in 1943, I was posted to Delhi on a Type X Course. The kind organisers gave me a travel warrant valid from Bombay Central Station to Delhi. This involved hauling my kit to Churchgate Station, taking the electric line via Marine Lines, Charni Road, and the infamous Grant Road to Bombay Central, at my own expense. Then I had to fight my way through hordes of troops, travellers, beggars, bearers and purveyors of native foodstuffs which resembled marmalade covered tobacco leaves. My nose was already inured to India's pong, and I eventually located my bed space on the legendary 'Frontier Mail' It was to be my home for the next 24 hours.

Punctually at four pm, the 3-35pm Frontier Mail pulled out of Bombay, accompanied by much whistle blowing, the excited screaming of numerous minor officials and the cursing of a char wallah who hadn't got paid for selling several 'chattis' of tea. Since the Mail has no corridors you couldn't nip to the restaurant car for a drink. Refreshment came either from one's water bottle, or you waited until the train stopped at a halt, and then bought a chatti of tea from the nearest vendor. These chattis were small earthenware pots holding about a cupful of tea. Pot and contents cost two annas, and you kept the pot.

These occasional halts along the way were usually at some single platform 'station' sited on a huge dusty and featureless plain. Inevitably, they were pervaded with the smell of wood smoke, populated by several char wallahs and infested with hordes of small, chattering monkeys. Once the train was under way, any nature calls involved using the small telephone-box like cabinet in each compartment. This boasted a 4 inch diameter hole in the floor, so you hoped the other five people sharing your journey were all good shots.

Came bedtime, and three further bunks swung down from above the three permanent ones, and if you were acrobatic enough, up you went.

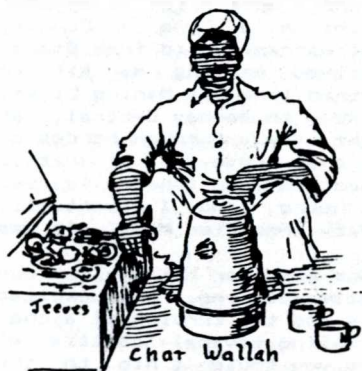
Morning, and as with all other meal times, the 'Mail' would stop, passengers would alight, tramp along to the dining car and board again whilst the train resumed its journey. An hour later, another stop allowed you to return to your compartment. One interesting facet of breakfast on the Frontier Mail was the fact that during the night, the staff acquired the latest news and produced a single sheet, mimeed newsletter for each passenger.

Twenty four hours after leaving Bombay, the train reached Delhi and after the usual hassling with RTOs and a wheezing, springless three-ton lorry, I wound up in a hutment several miles outside New Delhi. Again, chaos ruled. The cookhouse was two miles away, and Delhi itself, a further four.

This meant that you either forfeited breakfast and caught the wagon into Delhi, or walked two miles for a meal and caught transport there. The return journey involved the same decision .. walk two extra miles, or miss evening meal. Since that walk was through two miles of cane and snake filled fields, it wasn't fun after dark, so I usually missed the meal and relied on tea and cakes from the char wallah.

8.

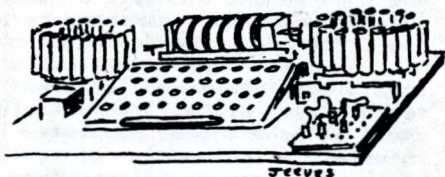
This was the thrilling setting for my 21st birthday celebration .. me, a pot of tea and two fly-spattered wads ofbeside something resembling an Eccles cake beside me in the wilderness. Big Deal! Not exactly Omar Khayam like.



The normal camp char wallah didn't dispense free mugs, he filled yours for the same two annas. Wandering around under the burden of a milkmaid type yoke bearing a tin trunk of cakes, buns etc and a charcoal heated urn of hot tea, his cry of "Chaaar Wallaaaah", meant a welcome break.

The Type X course itself was in the huge and palatial Imperial Secretariat Building, outside as imposing as the Pentagon, but inside it was as labyrinthine as the Minotaur's maze. I finally threaded the levels and corridors, located the classroom and discovered what Type X was all about.

The Typex proved to be a monstrous machine (built by Creed). It comprised a typewriter keyboard flanked by two electric printing heads and with a cylindrical set of five drums behind .. as well as a plugboard to one side.



The drums had different sets of inserts which could be put in, and likewise the plugboard links could be shifted around. All of which clever stuff was changed around each day and meant that internal electrical connections were varied daily in a totally unpredictable manner. To make things even more complicated, the drums rotated at different rates, the first moved each time a key was pressed, the second at every fifth press and so on.

All of this meant that if you sat and repeatedly pressed 'A' on the keyboard with the machine set to encode, the right hand print head produced a healthy string of AAAAAA, whilst the left hand head could produce ANY character or number - and thanks to a further bit of craftiness, a space would be added after every five. Thus if you typed in AAAAAAAAAAAAAA, the machine would produce (on a narrow strip of adhesive paper) something like, KPX4T DD2K7 B3LMN. This encoded strip could then be stuck on a message form, radioed elsewhere and at the other end, using a machine set to 'DECODE', the jumble would be typed in and out would come the original message. Based on the German 'Enigma' code and cypher machine, its innards were complicated as all get out. My job was to learn how it all worked (or didn't) so I could service any recalcitrant machine.

Work began. We had to memorise everything, as note taking was verboten. Gradually we learned first how everything fastened together, and then the weak spots. The instructors threw all sorts of crafty problems at us .. inserts open circuited by slips of paper, loosened clutches on the drum



drive, shorted contacts on the connecting links and many others. To my amazement, I graduated as 'Qualified Instructor' with some 90% of the marks.

Then it was back to Bombay on the Mail once again. This time, one of my travelling companions was a pretty European girl rejoining her family .. and as had happened to me on the Juhu line, her officer chaperone decided I was the most innocuous passenger handy, so asked me to see her safely back to Bombay. On the journey, she kept telling me how lost she was going to be in the big city as she didn't know anyone there to take her around. I was so India Service conditioned to the fact that common rankers like me were not intended to escort English girls, that I never realised she was angling for a date. It wouldn't have been practical anyway, Service democracy decreed that all decent entertainment places were 'Officers Only'. Oh well, c'est la guerre and all that.

I had been back in Bombay for a month before duty called. I was hauled out of bed at 11-30 one dark night, loaded into a chauffeur driven car and ferried twenty miles to Santa Cruz aerodrome where a Typex machine was refusing to work. Not surprisingly either. The Indian Signals Officer had managed to spill a pot of glue inside the poor thing. The repair involved wiping everything clean, whereupon I was no longer important, so was left to find a bed for the night and my own way back to Bombay next morning.

That was my only call to work on a Typex, a few days later, my promotion to Corporal came through and I was posted away from Bombay to a Heavy Bomber Squadron.

=====

## ERG SALE LIST

DOWN MEMORY BANK LANE 84 Qto pages. My memories of Cons, films, magazines, fanzines, flying, the 'pulp', superheroes, comics etc. plus stories 'G-8 AND HIS BOTTLE ACES' and 'LAST STAGE REFLECTORMAN' Fully illustrated £2.50 inclusive of post & packing.

ERG QUARTERLY 18 issues, Nos.80-97 Containing all above instalments of DMBL plus the final six instalments and all the other stories, articles etc. Appx. 450pp £5.00

BACK ISSUES 50p each, or 5 for £2.00

Number 70	Apr.80	21st annish	Number 94	Apr.86	27th annish
... 86	Apr.84	25th annish	... 95	Jly.86	
... 87	Jan.85		... 96	Oct.86	
... 90	Apr.85	26th annish	... 97	Jan.87	
... 91	Jly.85				

PRINTED A5 issues

No.98 Apr.87...28th Annish No.99 Jly.88

No.100.Oct.87 No.101 Jan.88 No.102 Apr.88 29th Annish

ERG 1984 Calendar has 12 cover illustrations without ERG titling. Qto free with order for £5.00 or over while stocks last



'FAN' had to be drooped last issue for reasons of space (and yes, I know I boobed by running two review pages the same) Meanwhile, let's open with a winner - DELINEATOR #5 comes from Alan White, 455 E.7th. St. #4, San Jacinto, CA 92383-8401 boasts a striking multi-colour cover, excellent artwork and no less than 98 Qto pages plus oodles of photographs. Contents include an article on 3D films, reviews, LOCs, very good Con nattering etc. \$5.00 an issue, not cheap, but worth it.

CATALOGUES received from.. Fantast Medway Ltd., PO Box 23, Upwell, Wisbech, Cambs PE14 9BU. Ken Slater is offering books, paperbacks and magazines and a page of CON listings (Who wants a World Fantasy Con, at £45 attending ??)

Simon Gosden, 25 Avondale Rd, Rayleigh, Essex SS6 8JN has a 14 page

catalogue of books and paperbacks. I fancy an A5 SAE to Ken or Simon would get you copies.

AIR-GLOW.2 comes from T.L. Bohman (address in LOCcol) and has 10pp A5 on interesting personal natter on cats, snow, ski snags, rescue operations and suchlike. Nice and friendly .. get it for 'the usual' or 2 for \$1.00

MAINSTREAM 12 has 46 superbly mimeod pages of comment, Con news, LOCs, fmz, astral travel etc. but not much art. Get it for \$2 a copy or.. from Jerry Kaufman & Suzle Tompkins, 8738 1st Ave NW, Seattle, WA 98117, USA

NOWHERE FAST #3 56pp. A4 mimeo, from Harry Bond, 6 Elizabeth Ave. Bagshot, Surrey GU19 5NX, for the usual. Crammed with lighthearted natter, locs, reviews, fmz, fiction verse and so on. Nice, cheerful and non-feuding. Nice one.

NIEKAS.36 from Ed Meskys, RFD.1, Box 63 Center Harbor, NH 03226-9729, USA is a totally professional style fanzine, slick paper, superbly produced, good art and 62pp of top-notch material, yet retaining the fannish touch. Highly recommended.

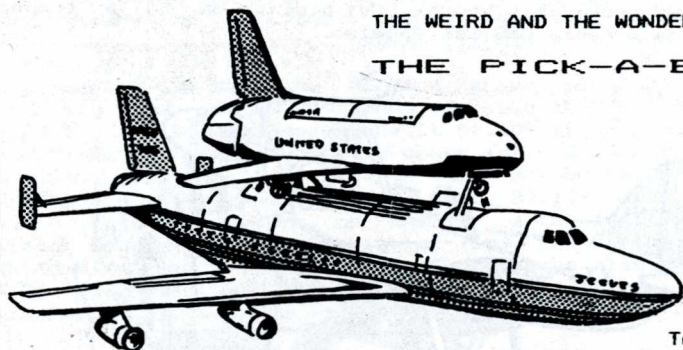
Roger Waddington, 4 Commercial, Norton, Malton, Yorks is agent, price \$10.00 4 issues plus a further \$3.00 to UK.

CRYSTAL SHIP.14 from John Owen, 4 Highfield Close, Newport Pagnell, Bucks MK16 9AZ has 58pp and is a more serious zine with top notch artwork and near professional layout and approach. No rates, but a faunching letter may get you a copy.

MENTOR 63 (62 really) from Ron & Sue Clarke, 6 Bellevue Rd., Faulconbridge, NSW 2776, Australia was safely redirected here from my old address (HINT, Ron). It has 40pp A4 crammed with a piece on Chinese ideographs, fiction, a Coulson column, verse, Russian SF, Locs, reviews and some excellent artwork. Get it for \$2 or the usual.

MATALAN RAVE, M Hailstone, 204 Station St., Box Hill Vic.3128, Australia has 30pp A4 of personal comment, reviews, Michael's original spelling, and LOCs. For the usual??

# THE PICK-A-BACKS



Terry Jeeves

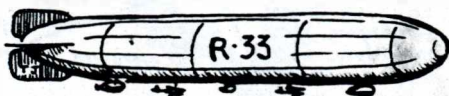
In case you thought that the first pick-a-back aircraft flights occurred when the Space Shuttle was carted across America aboard a specially modified Boeing 747, let me offer a few earlier versions of this unusual mode of transport. I must admit that I got quite a few surprises whilst doing the research.

There are various reasons for one flying machine hoisting another into the sky, but the most common ones seem to be:-

1. Bomber interception. By having the fighter up there, its response time is reduced and its fuel saved. It is also ideal for long range bomber escort
2. Getting an overloaded aircraft airborne
3. Ferrying or air-testing an unpowered machine or glider.
4. Guiding an expendable bomber or suicide aircraft to its target.

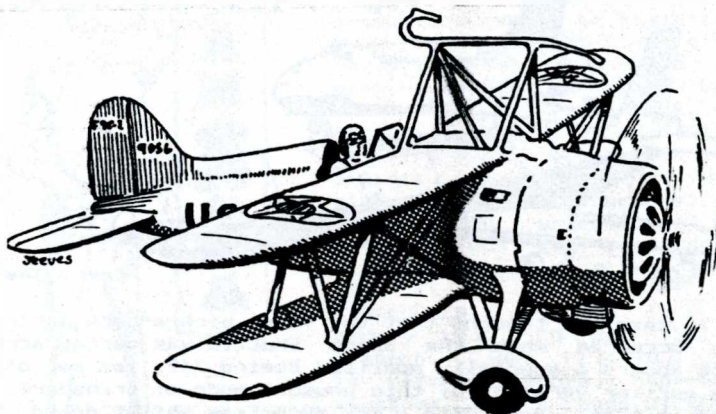
There are probably quite a few other reasons, but these seem the main ones, either singly or together, so let's see where they have led.

The very first pick-a-back flight I've been able to discover happened way back in 1916 when a Bristol Scout aircraft was launched from a Porte-designed flying boat, built I suspect by the Gosport Aviation Company. In 1924, in the USA, a Sperry 'Messenger' of the USAAS made the first known airship to aeroplane hookup with the blimp TC-3. Then in 1925, a pilotless Sopwith Camel was given a trial launch from beneath the R-33 airship by the RAF - presumably to test the feasibility of giving fighter defence to the airship. In October of that year, Sqdn. Ldr. Havy made a hazardous scramble down a makeshift ladder from the R-33 into the cockpit of a De Havilland 'Humming Bird' monoplane before a successful air-launch and recovery by the R-33. However, on a second test, he managed to shatter his airscrew against the pick-up gear and had to make a forced landing. The re-engagement trapeze was modified and further successful tests carried out ... including the dropping of two Gloster Grebes from the airship before the project was abandoned.



12.

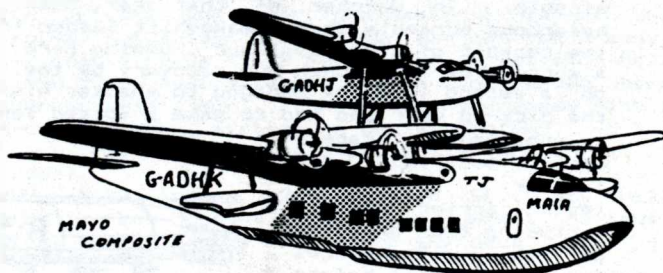
It was the turn of the United States in 1929, when Lt. Gorton, USN hooked his Vought UO-1 biplane on to a trapeze beneath the airship USS Los Angeles.



This was 'Operation Skyhook' a large scale evaluation of the feasibility. At one time, three special aircraft were built for the job, the Berliner Joyce XFJ-1, Fokker XFA-1 and a Curtiss XF9C-1. Only the Curtiss proved suitable, six were built and the USS Akron took over the testing and actually operated an official 'Heavier Than Air' biplane unit until 1932. On top of this, the USS Macon had a built in hangar form four aircraft and when its aircraft had their undercarriages removed, they were the only squadron to operate regularly without landing gear. They could thus gain 14mph in speed and carry extra fuel. The Macon's activities ended in 1935 when it crashed into the Pacific along with its four aircraft.

Meanwhile, in 1931, the Russians got into the act - with a vengeance. One of their giant (for that era) biplane bombers, a twin-engined Tupolev TB-1 carried up and air-launched two Ilyushin-4 fighters. Before you say 'Gosh wow', wait for the next bit. They then set a record, still unequalled, of loading FIVE fighters aboard a four-engined TB-3 and successfully air launched all five. I remember seeing a photograph of this achievement in Flying Review; sadly, I can't find it now. Three fighters were carried along the upper wing, and one each under the lower port and starboard wings.

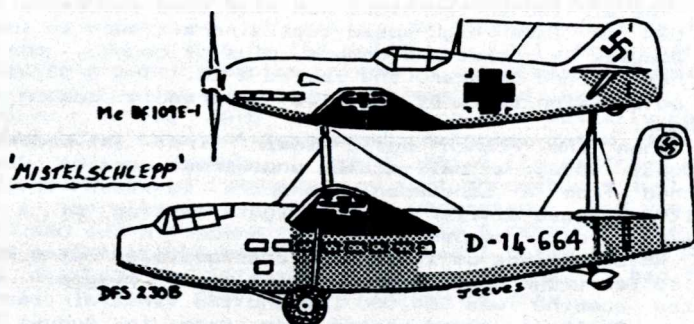
1937 saw a gallant experiment by Imperial Airways who wanted a long range, mail-plane. Their solution was to talk Short Brothers into building a wide-beam version of their 4 engine





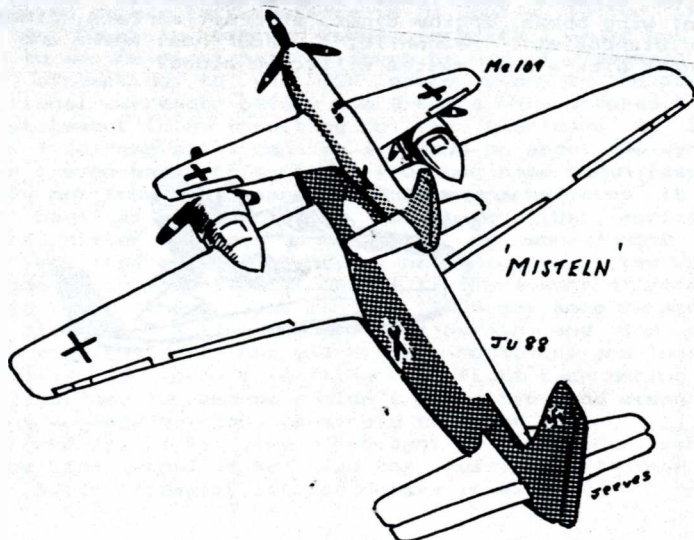
C class - flying boat, Maia, and to mount on top of it, a sleek, 4 engine monoplane, Mercury. The flying boat carried the Mercury up to flying altitude, launched it, and away it went. Many completely successful flights were made including a record of 6,000 miles.

During the War, the Germans tried several composite aircraft, one of the most unusual being the 'Mistelschlepp' project. In 1943, a Messerschmitt Bf.109 fighter was mounted above (and supplied the motive power for) a modified troop carrying glider - which also boasted a brake 'chute and a machine gun. It isn't clear if the Bf.109 also supplied enough take-off power, or whether a tug assisted at this point. Once airborne, the fighter flew the glider to its destination and released it. Experiments also tried out a FW.56 'Glosser' monoplane as a glider lifter. Though successful, these ideas were never used operationally.



Then there was a project for a parasite fighter - the Me-328. This should have seen four versions, but only the first was tested above a Dornier 217. A two-seater, it boasted 2 pulse-jets, a pair of machine guns and could do 343 mph. The idea worked, but the machine proved aerodynamically poor and the pulse-jet caused noise and vibration problems.

The Nazis also worked on a 'Mistel' project which involved packing a JU-88 with explosives.



A Bf.109 or FW.190 was mounted above it. The Ju.88 was pilotless and was steered to its target before release. by the pilot of the fighter, who then released it to crash somewhere near its aiming point.

Meanwhile, the Americans were working on a parasite fighter that could be launched and retrieved by its parent bomber. The Mc.Donnell XF-85 Goblin, was a stubby, ugly little machine being designed to fit inside the new giant B-36. The idea was to carry one, though the bomber did have room for three, and plans were even mooted for a 'mother' B-36 carrying no bombs, simply an arsenal of fighters. First engagement tests led to a shattered cockpit canopy on the XF-85 and a forced landing on Muroc dry salt lake. Some months later a successful hook-on to a B-29 was achieved, but further snags developed and the project abandoned.

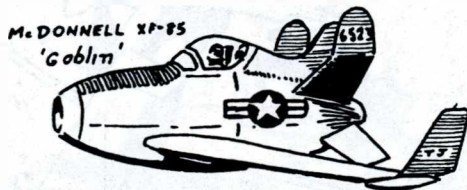
The air-launch technique was also used successfully by the USA on later high-speed test aircraft such as the Bell X-1, Douglas Skyrocket and others, plus of course, the B-52 launched record breaker, the fabled X-15. The B-52 was also used on occasion to ferry the B-58 supersonic bomber (sans engines).

When the French built their first jet bomber, the Sud-Ouest 4000, a half-scale unpowered version was air launched from a Languedoc transport to test its gliding ability -- a use similar to the flight testing of a model Grumman Bearcat from beneath a B-17 bomber in the USA.

Which brings us finally to that modified Boeing 747-123 used to ferry the Space Shuttle. The total take-off weight of the combine was 584,000 lbs and the first air launch to test the Shuttle's aerodynamics was made in August 1977. Modifications to the 747 included mounting and release gear, intercom equipment and the addition of outrigger fins on the tailplane. So successful has this pickaback system become, it is now taken for granted and never even gets a mention in the TV news programmes.

This compilation is as complete as I can make it, but if you have details of anything I missed, please let me know.

The same applies if you would like any further details of the schemes described. I have deliberately omitted lengthy of wing spans, engine types, aircraft serials, times, speeds, distances etc. Meanwhile, I wonder how, where and when the next pick-a-back system will come along?



# LETTERS



15

ERGITORIAL INTERJECTIONS are in italics within these pretty little symbols .. @> .. and we open with..

ERIC BENTCLIFFE

17 RIVERSIDE CRESS. HOLMES CHAPEL, LINES CV4 7NR

Things here have been somewhat turgid of late with Only Daughter producing a grandson for us .. he finally arrived March 8th, sensibly, he seems to sleep a lot. He's called Adam Edwin though he

doesn't answer to it yet, @> Congratulations to Alan and Lindsey, another fan to the fold! @ All the chat about aircraft in your memoirs triggered a few similar ones of mine. I suspect the jet-Lysander Vince mentioned was one of those adopted to use JATO units (which were actually rockets) to enable it to take off from small Belgian cafés during 'Ello, Ello' days. Somehow I don't think its airframe would have stood much else - I once put my foot through one just climbing in -- only to have a look, you understand. Did you know that Goodyear (USA) produced an Inflatable Aircraft in the mid 50's with an inflatable wing? @> Yes, and I think it was Westland who designed two inflatables here in the UK. I had thought of HAW-ing 'em, but they weren't pretty to draw.

@

GEORGE BRIEFF 1030 MASON WOODS DRIVE, ATLANTA, GA 30329, USA

I've wanted to respond to Pam Boal's charges about the atomic bombing of Hiroshima and Nagasaki. She seems to be a decent, well-meaning person, but I find her remarks intensely distasteful, and I've been trying to figure out a way to reply without stirring up a feud that doesn't really belong in your columns. All I can figure out is simply to state the facts. What angered me was this sentence in Ms Boal's letter in ERG 100. "An American officer whose veracity I would not doubt related to me the first hand evidence he had of Japanese high command attempting to sue for peace even to the point of unconditional surrender before the A-bombs were dropped."

This statement is as insulting to the Americans as it is untrue. I've read all I can lay my hands on about the war, and I haven't even heard this charge from our home grown fascists, certainly not from the Japanese. Anyone who believes it must already have a predisposition to prefer the fascists of Mussolini, Hitler and Togo to those of us who fought them. Believe me, there are plenty of neo-fascists in the USA who would jump on to this kind of charge if there were a shred of truth in it. There just isn't. I've got more German than British blood, but I flew bombers over Germany and I'd do it again to stop the evil that was Hitler, Mussolini and Togo. If people like us weren't willing to fight back during WWII, people like Pam, you and me wouldn't be writing and disagreeing right now -- we'd be dead, or afraid to speak out.

@> Personally, I've always thought that rumour ranked alongside the Angel of Mons and the 'Russians with snow still on their boots' tramping through Sussex in WW1 @

MIKE ASHLEY 4 THISTLEBANK. WALDESLADE. CHATHAM. KENT

You're asking for something in your ERGitorial aren't you? I imagine you'll get a hostile response. I find myself agreeing with all you say, but not the way you say it. In general, I'm against all censorship, but I also qualify it because I don't think most people have the common sense or moral control to limit their own viewing/reading/listening let alone those of their children. I'm convinced TV violence influences people. I'm also not greatly in favour of homosexuals preaching their wares. But I would hate to live in a society that saw fit to ban it all, and if you don't ban it all, where do you draw the line?  $\Rightarrow$  THAT was exactly my point. I DID NOT advocate ANYTHING, but said we all have our own lines and THAT is where argument starts.  $\leftarrow$

TERRY L BOHMAN, BOX.14, E.THETFORD, VERMONT 05043-0014, USA

"Carry On Jeeves" was a romp. Was the RAF really that much fun?  $\Rightarrow$  Only now and then  $\leftarrow$  Did 'prop wash' exist in the RAF? A standard USAF stunt was to tell the new recruit that "It looks like we're out of prop wash, go get a bucketful from the 84th." Of course, the 84th would be out too, so the fellow would be sent on to the 33rd and so on.  $\Rightarrow$  Over here it was (and is) "We need a long stand, go and ask Flight if you can have a long stand" On arrival, the poor sucker is told, "Just wait over there" ... $\leftarrow$  The "Weird and Wonderful" recalled a TV documentary I once saw on the 'flying wing' bombers produced over here as prototype war planes. Despite some disadvantages, they had a number of handling characteristics advantageous to bombers. The reason they were never seriously considered was apparently due to influence and politics. The prototypes were destroyed and even the plans disappeared under somewhat mysterious circumstances.  $\Rightarrow$  I believe there is now a book about them on the market in the USA  $\leftarrow$

PETE SMITH 16 TRESTA WALK, WOKING, SURREY GU21 4XF

'Recent Reading' is OK as it stands. Unless one feels obliged to adopt the opinion of an accredited critic/reviewer, reviews of books only serve to inform of what is around. What one needs to know are the title, author and genre style outline. That 'RR' provides. I prefer to form my own opinions of books and films without being spoon-fed. Reading through RR, I wonder if there's a fantasy novel in which the bad guys win?  $\Rightarrow$  You put in a nutshell the idea behind 'RR', As for baddies winning, How about Hubbard's 'Death's Deputy' and I think it was 'But Without Horns' by Norvell W Page - but I agree in S&S Evil always gets its comeuppance - pity, just once I'd like to see the hero electrocuted by his 'Object of Power'  $\leftarrow$

MILTON F STEVENS 7234 CAPPS AVE. RESEDA, CA 91335, USA

You ask about the fate of the Ackerman Museum, I'd say it was a dead idea. In 1983, Forrie offered to donate his collection to the City of Los Angeles with a three year period for the city to build or acquire suitable premises. By my calculations, it would have taken around \$2,000,000 to do an adequate job, unlikely but possible. I talked my way onto the Citizens' Advisory Committee and one woman expressed the opinion that at least \$5M would have to be raised. As far as I know, no fund raising effort was ever made. At the end of three years, the City offered to house the collection in part of an existing library facility. The offer was declined. Noises were made in Cleveland, and Beaumont, Texas but I don't know whether either of those offers was ever really feasible.





HARRY BOND 3 ELIZABETH AVE. BARNSTAPLE, DEVON PL3 9NJ

17

I'm with you all the way over the Official Secrets Act. It is an anachronism, but as it stands, the man signed the form and he should have held to the letter of it. It's a shame the rules can be so easily flouted by going to other countries. Have you read it by the way? I perused it a few months back and it's DULL. ~~But~~ I haven't read it, but I bet you're right. ~~But~~ The feminists have a right to 'censor' in the awarding of the Prometheus. After all, the BSFA censor too, inasmuch as the BSFA award is for stuff published in the UK only. ~~But~~ Sorry, Harry, but you're reading me wrong. I didn't say they had no right .. I didn't support OR oppose. My point was (and is) that there is censorship all round us in various forms, so it is daft to argue that one is against it in every shape or form instead of picking a specific case and arguing over that. ~~But~~

ROGER WADDINGTON 4 COMMERCIAL ST. NOTION, WILTEN, YORKS YO17 9ES

Some idle thoughts have made it unscathed across my mind; notably when CND recently celebrated its 30th anniversary, I was amused to see that among all the self celebration, nobody pointed out the obvious (and awkward) thought, just how had they been able to mark thirty years of protest; that without the protection of the Bomb, they wouldn't have enjoyed such freedom. Indeed, if the first year had met their aims, a defenceless Britain would have been invaded by America or Russia; and protest in any form would have been violently suppressed.

Indeed, for all that we're now living under a Fascist dictatorship according to the Socialist literature I've been perusing, it seems a remarkably inefficient regime as far as repression and censorship go.; in fact, those in opposition seem to be exercising it most; apparently in perfect freedom. ~~But~~ Ah, but the opposition doesn't have anyone to answer to. ~~But~~ Oh I don't object to most censorship, that designed to save us from ourselves, what I view with dismay is the increasing hate and violence of it all. I suppose the Animal Liberation Front must be an extreme example with their members going on record as saying that even murder is justified, if experiments on animals are to be banned; but apparently debate is no longer allowed anywhere, contrary views are either silenced or drowned in abuse, and we're told with threats what to do, whether to give up smoking or embrace homosexuality. ~~But~~ I agree with you entirely. Whatever has happened to the idea that people could hold different views without hostility and abuse. You're allowed to say you support such things, but heaven help you if you say you don't like 'em. ~~But~~ Well here's one vote for your bulletin board approach to books. Writing reviews is a marvellous practice for the higher criticism, but telling people what they should and should not read seems to be a form of censorship in itself! But then I'm a firm believer in letting people find out for themselves, whether fire burns etc. as an education for life; and surely, the sheer variety of SF proves that all our interests are not the same.

ONE LOCer wrote to say he wore an ERG badge, and was rebuked by three fens (JH, GP, & GW) "Oh God, you don't read ERG do you? He hasn't done anything new in 30 years and his art's all the same". I checked my files, the first 2 fens have been sent a total of 10 ERGs in 5 years, the third fan has never been sent a copy. What it is to have such expert knowledge going way back before they even heard of fandom! I gather from other sources, that these nice people specialise in bad mouthing - what happened to friendly fannishness?

# RECENT READING



## KING OF THE MURGOS

David Eddings

Bantam £11.95

The Second Book of

Mallorleon

IN 'Guardians Of The West', the infant son of Garion and Ce'Nedra was kidnapped by the evil Zandramas. Here, they seek the child, accompanied by Sorcerers Belgarath and Polgara. Along with Prince Keldar ('Silk') their quest takes

them through caverns, the Snake Queen's swamps and the lands of the human - sacrificing Murgos to a confrontation between the Child of Light and Zandramas to save humanity from Forces of Darkness. A Prologue encapsulates the earlier tales and sets the scene for further adventures. If you enjoyed the Belgariad, here's more of the same.

## THE ALIENS AMONG US James White Futura £2.95

Seven short stories detailing the further adventures of Star Surgeon Conway on the giant, multi-species space hospital Sector General. The usual goodly mix of alien problems to be solved by unusual treatments, but spread your reading or they tend to develop a certain sameness.

## THE HUB Chris Beebee Futura £2.95

By 2031AD, the world is a mess of crime, violence and anything-goes. Turner, (who reclaims religious captives) is rather paranoid. He has a new ailment and its medication kills his sex drive. Elsewhere, a 'Prankster' has stolen a 'Conjecture Probe', World Ruler Madame Feng schemes to use the orbital space complexes in her plans and Dralon, the Space Magician conducts an experiment. Involved, multi-layered and chaotic, but excellent fun reading.

## DAD'S NUKE Marc Laidlaw Grafton £2.95

In an isolated, community, paranoid over self-defence, 'Dad' Johnson sabotages his neighbour's missile launcher and has his own reactor in the garage. His baby daughter has been genetically altered to eat its ashes - and the local boy genius uses her wastes to make a bomb. A reality bending satire of an incredible, Dick-like future.

## THE CANNIBAL Stuart Kinder Grafton £2.50

A pornographic opening and abnormal act introduce journalist Gary Mitchell. While in Africa, he was forced into an abominable fealty rite so that when he writes an expose, nightmares follow -- and gradually merge with reality as he is driven to unspeakable crimes... Enough sex, sadism and horror for anyone.

THE HAMMER OF THE SUN Michael Scott Rohan Macdonald £11.95

After triumphing over the evil Power in Morvannec, Mastermind Elof and his Kara have enjoyed seven good years - broken when Elof seeks to bind Kara more tightly to him. She flees and accompanied by the faithful Roche, he is forced to follow a trail leading to his destiny in the lands of the Ice Powers who seek to destroy all life. This epic of Sword & Sorcery is Book 3 of the Winter of The World trilogy and includes an appendix on peoples, lands, customs etc in its mammoth 500 pages.

DEMON'S LAW: Tales Of The Bard Vol.2 Michael Scott, Sphere £3.99

Paedar The Bard, possessor of power, walks through Death's Kingdom along with dead warrior-maid Katani. He seeks to win back the lives of two friends, on a journey beset by encounters with living dead, monsters and magic before a final battle. Episodic adventures by fascinating characters in a world controlled by Death.

LEGACY OF HEOROT Niven, Pournelle & Barnes Sphere £3.50

Colonists are settling Tau Ceti IV - a seeming Paradise, yet against ridicule, Cadman insists on strong defences - which are soon assaulted by a fantastic creature. The fight against an ecological menace begins. A terrific yarn of colonists v environment and an escalating menace unequalled since 'WHO GOES THERE?' Highly recommended

A CHOICE OF NIGHTMARES Marjorie Dorner Sphere £2.99

Linda Hammond's 11 year old daughter escapes child molestor, Ryter. Arrested, he is let out on bail, whereupon a reign of terror and intimidation begins and leads to murder. A yarn of taut, brooding fear as Ryter piles on the tension.

CONSIDER PHLEBAS Iain M. Banks Orbit £4.95

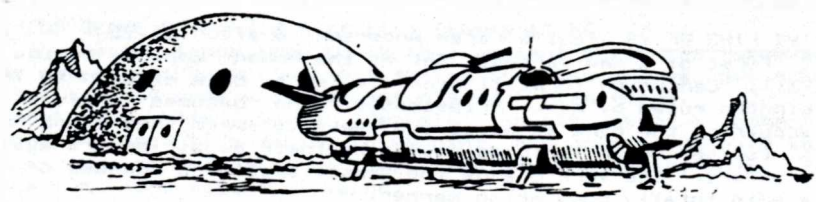
Galactic war between Idirans and The Cluster, a synthetic 'Mind' escapes to take refuge on Shar's world. Horza, a Shape Changer of unusual abilities is sent to get it. Acquiring a band of mercenaries and the Cluster Agent Balveda, he survives a series of adventures as his saga progresses. Fast moving space opera with plenty of cliff-hanging reprieves along the way.

STRATA Terry Pratchett Corgi £2.50

Kin Adar finds herself lured to a flat Earth construct along with the bear-like Silver and four-armed Marco. They rescue Leiv Eriksson, encounters warriors, monsters and magic items from Arabian Nights as they seek the world's creators .. and nice sting in the tail. A super blend of SF and Fantasy.

THE DARK SIDE OF THE SUN Terry Pratchett Corgi 2.50

Probability math says Dom will be killed the day he becomes Chairman. He survives to set out on a search for Joker's World - a journey beset by strange creatures, an assassination robot and further attempts on his life. Light enjoyable stuff, but Dom is little more than a pawn to move against a richly varied background. Not as good as 'STRATA'.



WEDNESDAY Chet Williamson Headline £3.50

Ghastly, naked corpses appear all over the small town of Merridale and stir up guilt in some inhabitants. Ex Nam veteran Meyers is tipped into madness, revenge and sadism and journalist Callander wallows in remorse before the violent conclusion. I'm not sure where the ghosts came from.

THE NIMROD HUNT Charles Sheffield: Headline £3.50

Morgan Constructs are made to defend the ever-expanding Federation borders, but they turn on their makers and escape. Four-species teams are created to hunt them down the near invincible creatures, but the rivalry of commanders Brachis and Mondrian complicates things. Fascinating, multi-layered and un-put-downable, for my money, this is one of Sheffield's best.

TWISTED CIRCUITS Ed. Mick Gowar Beaver £1.75

Eight stories for youngsters based on the theme that the new technology can be perverse. A lovely, Adrian-Mole-like tale of a micro achieving A.I. is the lead, followed by the sidetracking of computer rule; a touch of horror; a game with reality; an April Fool joke and others. Juvenile or not, I enjoyed this collection far more than the seemingly endless flood of sword, sorcery and the overthrow of evil.

SHOCKWAVE RIDER John Brunner Methuen £3.50

In an over-computerised society, Halflinger can outfool the computers and keep ahead of culture changes, beat the system, and denounce the Governmental follies. Some horrible puns, but so fast paced, you never notice the holes as it's such a hell of a good read.

AFTER ALICE DIED Margaret Bingley Grafton £2.95

The day Allan Firmager weds Julie, a ghostly blonde begins to haunt him. She pushes Julie downstairs, killing their unborn child, then seduces and enthralls Allan, before leading him on in a saga of explicit sex, illicit love and horror until she achieves her ends.

BURNING CHROME William Gibson Grafton £2.95

In a versatile, 10 story collection, Gibson examines a down-beat future of drugs, crime, computer control and surgical mutations. There are shape-changers, sensory machines, industrial spies, Russians in space, and FTL grab bag, and even a pulp era hallucination. Written with verve and style despite the sleazy world it depicts.

A FEAST UNKNOWN Philip José Farmer Grafton £2/95

Farmer pursues his fascination with Tarzan and Doc Savage, both of them still alive and immortal thanks to an elixir supplied by 'The Nine'. After Tarzan massacres a small army (between orgasms), he finds himself pitted again a Doc Savage gone bad. Their conflict is set up by the Nine after a revolting ceremony, but Tarzan must first rush to save his wife in a Rambo style shoot out. Crammed with sex, sadism and violence in never slackening pace.

THE KING OF YS Poul & Karen Anderson Grafton £3.95

First of a new series. Set as the Roman Empire begins to fall, Centurion Gratillonius is sent on a mission to Ys, a Kingdom ruled by nine Priestesses. He becomes their King, acquiring the nine as wives and seeks to serve them - and Rome; a course which includes utilising their magaic powers against invaders. The yarn grasps the sense, smell and nuances of the era in totally convincing manner.



THE INTREPID ENCHANTER L.S.De Camp & F. Pratt Sphere £4.50

Drcool time's here folks. Remember those gorgeous yarns which first surfaced in the early Unknown wherein psychologist Shea finds that magic works once he sorts out its whacky laws and he and Dr Chalmers travel to fantasy worlds - Norse sagas, Finnish myths etc.? Here are all five of the lovely, rollicking, fun tales - 'The Roaring Trumpet', 'Mathematics of Magic', 'Castle of Iron', 'Wall Of Serpents' and 'The Green Magician'. Read, enjoy and DON'T MISS this Collector's Item!!!

LYTHANDE Marion Zimmer Bradley Sphere £2.99

Magic Adept, Lythande must guard her Secret or lose her power. In this collection (5 by Bradley, 1 by Voda McIntyre) In a world of inns, thieves and olde worlde speech, she undergoes sundry adventures with spell beasts, sword, sorcery and interfering gods. A nice character, but the stories are a bit flat.

WATCHERS Dean R Koontz Headline £3.50

Paperback edition of the tale covered in ERG101 about the intelligent dog and deadly creature which escape from research lab. The dog aids Travis against the beast and a sadistic hit man. Gripping, real-time terror.

THE STAINLESS STEEL RAT GETS DRAFTED H.Harrison Bantam £2.95

Now in paperback (see ERG.100). Young Jim DiGriz sets off on a revenge trail, is yanked into the Army, encounters a computer operated MYOB society and staves off a revolution. Fast moving, 007-style fun

THE BIRD OF TIME G.A.Effinger N.E.L. £2.50

Hartstein takes a tourist trip to ancient Egypt and finds it different as the past is only a consensus opinion. Then, coerced into the Agency in its battle against the Temporal Underground, he undergoes various frenetic time trips and adventures before reaching the ultimate Bureau Of Standards.

LIGHTNING Dean R Koontz Headline £11.95

Violent thunderstorms betoken a time trip. At the height of such a storm a drunken doctor is prevented from handling the birth of the child Laura, by the stranger, Stefan - who keeps a protective watch as she grows to womanhood. But there is also the killer Kojoscha, agent from a totalitarian future who has his sights on them both. A gripping time travel yarn which will hold you from the opening lines.1

THE GENESIS QUEST Donald Moffitt Sphere £3.50

In a distant Galaxy, the ten-limbed Nar receive Earth's last message enabling them to bio-construct a human enclave. Bram grows up with the ambition to visit Earth, becomes involved in politics and discovers the Nar have a way to make humans immortal, all of which leads to a human exodus.

SECOND GENESIS Donald Moffitt Sphere £3.50

The hegira leads them to Earth's ancient treasures, uncovers the reason for humanity's extinction and also traces of other intelligences --as well as less pleasant life forms.

Between them, these 'Genesis' novels make a powerful hard-core saga of humanity triumphant, and unless you have some anti-jingoist objection to that, read and thoroughly enjoy two excellent (and separate) yarns.

THE SENSITIVES Herbert Burkholz Headline £10.95

Gambler Ben Slade is a 'sensitive', one of the U.S team of telepaths whose life expectancy is only 32 years before death from a psi-related disease. Falling in love with his Russian counterpart, Nadia, he goes on an unsavoury mission which leads to tragedy, escape and the terrible truth about the sensitives. 'Real world' SF using only one 'impossible' as a base for a taut, suspenseful and gripping narrative.

THE SHATTERED HORSE S.P.Somtow Headline £3.50

Set in ancient Greece, six year old Prince Astynax escapes the fall of Troy, grows up as a shepherd, then returns to rebuild the city and win vengeance - but gets involved in a conflict of gods. Magic (and the gods) are both fading as the author (Somtom Sacharitkul in SF garb) rewrites Greek history into a fantasy mould. Read the appendix first for the background.

ENCOUNTERS Ed. Isaac Asimov Headline £3.50

Greenberg and Waugh also have a hand in this excellent, 16 piece anthology of first contacts. Included are such goodies as Knight's 'CABIN BOY', Tenn's 'FIREWATER' and 'NOT FINAL' by Asimov as well as yarns from a veritable 'Who's Who' of SF. There's enough sparkle and variety for any but those who suffer from xenophobia. Recommended.

ARAMINTA STATION Jack Vance New English Library £6.95

Araminta Station administers the planet Cadwal which has a stratified society with the untrustworthy Yips at the bottom. Glawal Cladduc's girl Sessily vanishes in strange circumstances, investigations lead to an attempted rape, assorted vicious crimes and preparations for a Yip uprising. The 480 large sized pages are crammed with Vance's delightful characters, customs, activities and anecdotes. Always good, I'd rate this as one of his best.

THE ALIEN DEBT FM.Busby Orbit £2.95

Third in the saga of Bran and Rissa. This time, along with two daughters and others they set off aboard a starship to aid the Shrakken in the war against the telepathic Tsa, only to run into trouble along the way.

YAKUZA A.Dubro & D.E.Kaplan Futura £3.50

An in-depth investigation into the sinister international crime society, Yakuza, Japanese equivalent to the Mafia. A frightening, facts and figures exposé of crime, cruelty and coercion - which makes me wonder what may happen to those listed in the several pages of credits. There's also a character list, glossary and bibliography to help you keep track.

THE INFLUENCE Ramsey Campbell Century Hutchinson £11.95

When her tyrannical grandmother Queenie (real name 'Victoria') dies, Alison and her husband Derek think they can now live peacefully with their daughter Rowan. But then the mysterious Vicky (who seems invisible to most people) appears. She seems possessed of Queenie's spirit, and brings trouble to the family. The menace escalates, causes two deaths and takes over Rowan's place as events reach a frightening climax. An excellent 'frightener' which may well make the big screen.

THE HIDDEN WORLD Stuart Gordon MacDonald £12.95

Second Book of 'The Watchers' in which the evil Azazel plans a final onslaught on the World. The only one to foil his plans is Sam Joyce, transported to the distant past, and who must fight in a Battle of The Gods to defeat the Beast. He has little aid, save for his daughter Chrissa (trapped in mediaeval France) and Dion, the enigmatic lute player. Highly involved and verbose, this yarn takes some getting into. Manage that, and then it is one for the devoted fantasy buff.

THE AWAKENERS Sheri S Tepper Bantam £12.95

After nearly extinguishing each other, Humans and Thraish now have a Contract whereby some humans get immortality in exchange for allowing the Thraish to eat their dead. Against this background, Riverman Tharne encounters Parma Don, a rebel 'Awakener' whose job was to revive zombie workers. Now she is hunted by agents of the aliens as part of a suspected rebellion. A superbly crafted tale of a 'lost' human colony, its deviant lifestyle and the hidden horror of the Covenant. Recommended.

SHARDS OF HONOUR Lois McMaster Bujold Headline £2.99

Betan, Cordelia Naismith's camp is wiped out as a side effect of a Barrayaran mutiny, but its Commander escapes and joins with her to regain control of his ship. Cordelia finds herself dragged into the middle of a threatening war, treachery and intrigue. Entertaining space opera.

SLOW FALL TO DAWN Stephen Leigh Headline £2.50

On Neweden, the powerful Vingi hires the Assassin's Guild to kill his political rival Gunnar. Things go awry and the Guild finds itself faced with a struggle to survive - and expand to other worlds. A good yarn hampered by the unsatisfactory, empathy-stopping premise. First in a trilogy I believe.

HUNTER VICTIM Robert Sheckley Methuen £10.95

Frank Blackwell's wife is killed by fanatics; wanting revenge, he joins 'The Hunt' and is assigned to slay top terrorist GUZman. He is trained in sundry skills, but Guzman has top level protection - and also a warning from the Huntmaster who has plans of his own - which are revealed after much hectic action. Sheckley moves his macabre theme along at a high pace and adds plenty of light humour in this send up of spy movies, thus making for an entertaining yarn.

MYTHIC BEASTS Asimov, Greenberg & Waugh. Robinson £3.50

Asimov claims some 300+ books, but I often wonder how much work he puts into such tripartite titles. Certainly, someone has done a grand job of assembling this 10 story anthology of 'monsters'. Authors include Sturgeon, Scortia Vance and even Hans Anderson ('The Little Mermaid') and range from SF to fairy tale. There are ice dragons, fire dragons, a baseball playing centaur, a flying horse, interstellar travel and more in a highly enjoyable and well-balanced collection.

SKYFIRE Bernard King Sphere £3.50

Third in trilogy, the long-lived Keepers are guided by the seven mysterious 'Starfires' from the domain of Thule. The immortal Erzebet seeks to activate the device which will release the evil forces to take over the world. Against her, Inspector Ferrow, the current Keeper and the strange beast, the glebula. A wide-ranging fantasy with a modern setting.

## LAST MINUTE QUICKIES

### THE MISENCHANTED SWORD Lawrence Watt-Evans Grafton £2.95

Fleeing pursuers, Valder encounters a wizard who enchants his sword to make him almost invulnerable - but the weapon must kill each time it is unsheathed - and the 100th time it will kill Valder. After a spell as an assassin, he must seek to avoid final retribution.

### THE PALACE OF LOVE Jack Vance Grafton £2.95

Third in the Kirth Gersen saga wherein he seeks out, one by one the five Demon Princes who slew his parents. This time it's the turn of Viole Falushe and the locale, the infamous 'Palace of Love'. Another of Vance's excellent fantasies.

### 1998 Richard Turner & William Osborne Sphere £2.99

By 1998, and amidst sporadic bombing, everyone seems crazy to win instant fame and fortune via TV. Ed Wilson gets enmeshed with sex-bomb Tabafa and a made world of super hype. I gather this is based on a radio show - happily, I missed it.

### THE GREY HORSE R.A. MacAvoy Bantam £2.95

A fantasy set in an ancient, bucolic Ireland where Anrai finds a grey stallion - which changes into the heroic Ruari MacEibhir of fairy origin who sets out on a long involved road to win the fair Maire.

### KENDER, GULLY DWARVES & GNOMES Ed. Weis & Hickman Bantam £3.50

Vol. 2 of Dragon Lance tales. A collection of 10 yarns by various writers, set on the world of Krynn created by the editors and using all its trappings of sword, sorcery, innis, dragons, witches and excellent art by Steve Fabian. I much prefer this format to longer yarns.

### CHRONICLES OF THE KENCYRATH P.C. Hodgell N.E.L. £4.50

Jaime flees the Haunted Lands, becomes a thief's apprentice. A member of an unusual species, using her powers, she sets out in search of her lost twin brother Torison - search which includes raising aid against the ultimate evil of the Perimal Darkness. This whacking, 600pp fantasy includes maps, an appendix section on Kencyrathian society and a striking cover reminiscent of 'Redeek Of The Outlands'.

### ENIGMA Michael P. Kube-McDowell Legend £2.99

Second in the Trigon Disunity series. Merritt Thackrey joins the Space Survey to aid in their hunt for intelligent life - and to find why every such find proves to be of Earth stock. No solution to the enigma can be found until they encounter the enigmatic Sennifi and Merritt learns of the D'Shanna, the greatest puzzle/enigma of all. Excellent, well characterised space opera. Recommended

### CLAN GROUND Clare Bell Grafton £2.95

Sequel to 'Ratha's Creature' about the 'Named' - intelligent cats of pre-history to which Ratha introduced fire. This time, the opportunist 'Orange Eyes' joins the clan and brings intrigue, rivalry and danger to the tribe. Great for cat lovers

### THE BEST SCIENCE FICTION OF ISAAC ASIMOV Grafton £3.50

No less than 28 stories and poems culled from sundry magazines over a thirty year period. Travel in time and space, puns, satire, space opera and humour are all here, each with a brief Asimovian introduction. 'BEST' is a subjective term, but this collection is varied enough for all tastes and makes an excellent 'dip and enjoy' bedside or an ideal gift for a newcomer to SF

### FIEND Guy N. Smith Sphere £2.99

Soviet Ruler Keschev dies and is resuscitated by black magic - with Ivan the Terrible in the body. A policy leading to nuclear war begins and attempts to assassinate Keschev lead to grisly murders and escalating terror.

### ALPHA BUG M.E. Morris Grafton £2.95

One-eyed, ex-astronaut Joe Dover is given an implanted camera-eye and sent on a spy mission to check the latest Soviet spaceplane. Problems arise leading to a hectic saga of intrigue, sadism and violence culminating in a hazardous space mission. A gripping, (not so) cold-war espionage thriller.

### KITELAND Keith Roberts Penguin £3.85

Re-issue of the tales of a feudal world ruled by the Church Variant and man-carrying kites are flown to keep watch for imaginary Demons. Well plotted and intriguing.