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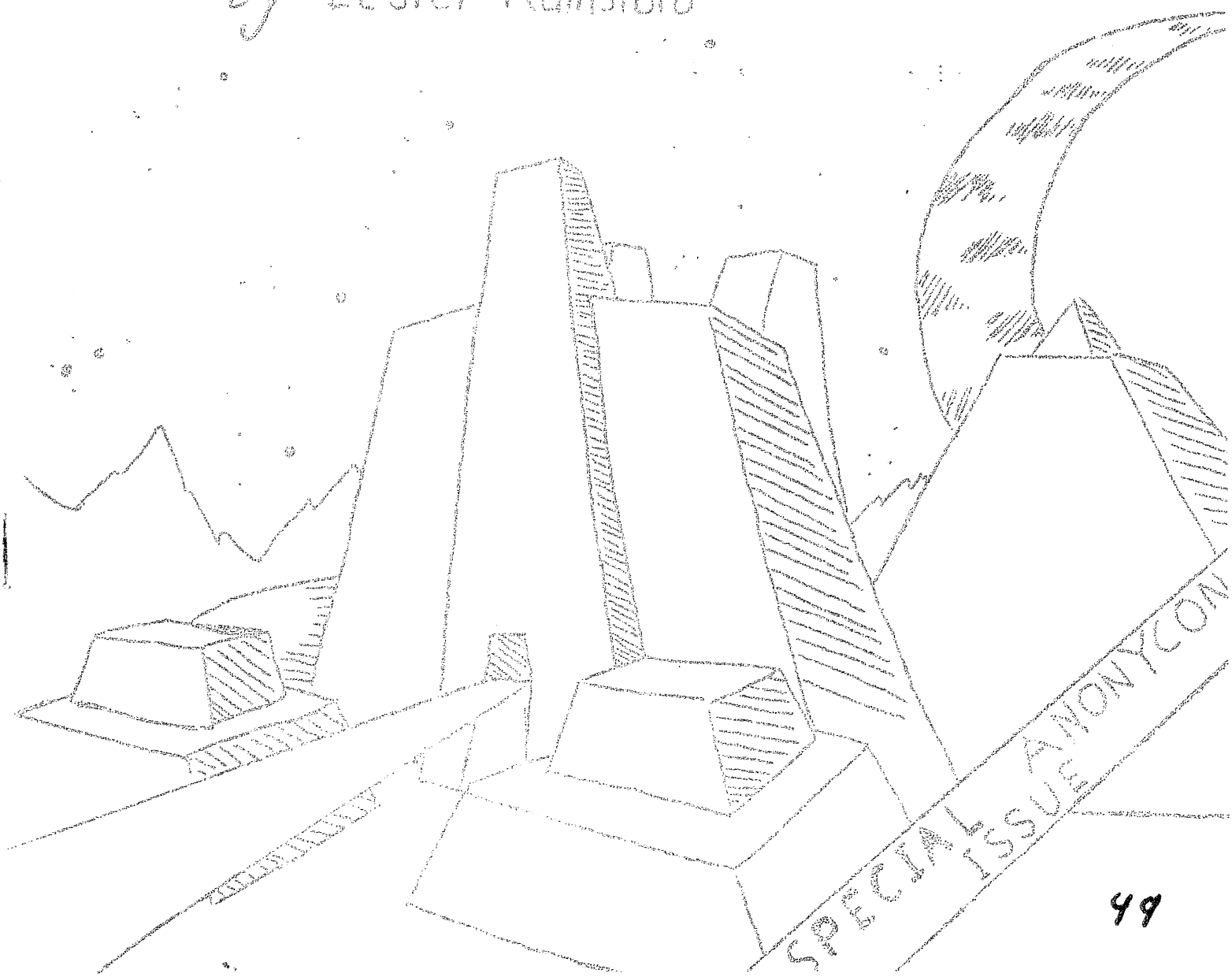
FINAL ISSU

SIRIUS

SCIENCE FICTION

THE FORGOTTON PROJET

by Lester Rainsford



FEATURES

STORIES

STAFF

Editor.....Neil Williams
Ass. Editor.....Ed Dreiks
Con. Editor.....IBM/3BM 150
Artwork.....Robert Murray, Barb Winkler

. . . . . .
. This is our final issue. In January 76 Sirius shall rem.
. Surn under the name Sirius D or still just Sirius. It
. shall be under new editorship and will have a new format
. So until then...
. FIAWOL (Fandom It's A Way Of Life)
. . . . . .

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Special Anonycon Issue
Circulation: 60
FINAL ISSUE

EDITORIAL

RED TAPE!!! GRRRRRR!!!!!!!!

Aside of Sirius I also co-edit a school fanzine called The Reticulum. When I was made an editor of this 'zine I signed a constitution of some sorts. At this moment I deeply regret signing that damned piece of fealsomp. You see in this so called constitution is a line that goes something like this;"No editor can do something concerning the magazine without approval of the other editor". This is a piece of BS, in my mind at least. My co-editor is very conservitive; he is also very busy. He doesn't have enough time for the magazine though he always seems to be around to say, "No", to everything I plan. I can't get anything done. The whole magazine is ready to be run off aside of two pages, the first and the last, but he won't let me. Damnit, can't he see the logic. If one has 15 pages run off now and set aside then he only has to run off the other two pages then staple them together, rather than sit and wait for the other two to be ready. It does save time. Also our publicity manager and ass. editor to Sirius says there are typing errors in some of the dittos. Good god, even Algol has typing errors, and besides they're all his. Well I've bitched enough, on to more pleasent things.

As you will notice Sirius is also on ditto this time. The reason being simple is, we can not afford proffessional printing. Besides, I'm told the blue is easier to read. Hopefully we will have a mimeograph machine for next issue.

Now in respect to last issue's editorial. This was your typical graveyard shift potboile editorial designed to get reaction from the readers. We did get a reaction from the readers, they didn't buy the magazine. Believe it or not this was not the reaction we expected. Pleas next time just send us a letter to voice your opinion.

As promised I'll talk about CAN FAN III. This was my first convention and thus my first introduction to fandom. It was great! I met all kinds of fans and writers(well not all kinds of writers, but a couple) I found out one major fact about writers, they're not demigods. They get as drunk, tired, and bored as the rest of us. Anyway, the main part of the con was banquet night were the guests of honor gave their speeches. The speeches were good but what really stole the show was a dramatic slide show where aliens captured all the sf writers in america. It was very humourous. Aside of that there wasn't really much. I enjoyed myself anyway. For a first con it was ok.

For those of you who bought Sirius#1 you may have noticed my assistant editor IBM/BEM 16 Now for those of you not familiar with what IBM/BEM 160 would stand for I'll tell you. It means, International Bussiness Machines/Bug Eyed Monster 160 Series. You may all groan. And without further ado I'll let him say whatever he has to say.

THIS IS IBM/BEM 160...IBM/BEM 160.. SOME TIME HAS PASSED SINCE THE EDITOR WROTE THE ABOVE SPIEL...DURING THIS TIME SOME CHANGES HAVE BEEN MADE...THE MOST MAJOR OF ALL IS THAT THERE WILL BE NO NEXT ISSUE...FINANCIAL PROBLEMS HAVE LEFT UPON US AND LEFT US WITH JUST EN OUGH MONEY TO PUT OUT THIS ANONICON ONESHOT...BUT THAT WON'T STOP US BUT IT SURE WILL DELAY US...WE HOPE TO TAKE ANOTHER TRY AT A FANZINE IN A COUPLE OF MONTHS OR SO...THERE WAS POTEN' TIAL IN SIRIUS BUT IT WAS TOO MUCH WORK FOR ONE MAN...I MUST SAY IN ALL HONESTY THAT I WAS NOT MUCH HELP AS AN ASSISTANT EDITOR OR A CONTRIBUTING EDITOR AS I WAS IN THIS ISSUE...THIS WAS POOR OF MY PART BUT I NOW REGRET IT... SO AS SIRIUS GOES TO THE BIG PULP PILE IN THE SKY I WISH YOU ALL A FOND FAREWELL, NEIL AND COMPANY...IBM/BEM 160 SIGNING OFF

FIAWOL, IBM/BEM 160

And that about wraps us up. We hope you enjoy The Forgotten Project by Lester Rainsford. Lester hopefully will be contributing to our next fansine,(if there ever is one), for he is a good writter. We would also like to thank Nivek Lee Apkin for The Hideous Singularity and our little artist friends Bob Murry and Barb Winkler for their work. And on that note we bid you adieu.

FIAWOL, Neil

THE FORGOTTEN PROJECT

Each generation has its own impossibilities. The [illegible] generation considered travel to the stars impossible, and the next thought use of Lorenz Accumulators impracticable. Both generations were wrong. Each was not impossible, but impractical to a degree verging on impossible. No one had the foresight to realize that to someone, sometime, impracticality would cease to be a factor. Both developments were similar, in that each required a tremendous (some said inordinate) amount of theory work, just to evolve the basic concept. The Lorenz Accumulator was built within the structure of contemporary physics, while the star-drive created its own physics as it went along. Paradoxically, while Science accepted each individually, together they were impossible.

The Lorenz Accumulator was the last major product of 'classical physics' (ie. physics before the star-drive). It utilized almost every aspect of the old physics, including the Lorenz Transformation--hence the name. Classical physics said it ought to work, and it did. That was fine. But after the star-drive had wreaked its havoc, and physics had been decisively changed, it was found that by the new rules, the Lorenz Accumulator oughtn't to work. It still did. Ergo, the star-drive wouldn't work, and all the new theories, rules, constants, and measurements were false. But they weren't, and the first star-drive-equipped spaceship returned from a round trip to Altair in exactly two weeks and three days. It was a mutual impossibility, now: neither the star-drive nor the Lorenz Accumulator were possible. Learned Authorities searched their souls, but no answers came. So, with singleminded precision, they decided that the Lorenz Accumulator was the easiest of the two to ignore, and they carried the plan through with magnificent enthusiasm. Lorenz Accumulators still existed, of course, but that was outside the hallowed walls of Science. If the properties of Lorenz Accumulators hadn't been so spectacular, Learned Authorities wouldn't have lost sleep over them, having never heard of them. Still, it ought to be pointed out that they were lucky. If Lorenz Accumulators had been easier to make and use, there would have been no end to problems.

The recipe for making Lorenz Accumulators includes the following ingredients: silver by the ton (as electrical conductors), mercury by the gallon, a few thousand dollars worth of xenon, and fair amounts of osmium, tantalum, scandium, fluorine. It was no small wonder that very few were built. Lorenz Accumulators were actually distant relatives of electrolytic capacitors, but in this case the term distant is perhaps an understatement. It is significant that electronics experts, shown one for the first time, usually didn't have the faintest idea that the nightmare of busbars, leads, knobs, and [illegible] was actually a capacitor. Only one in twenty-seven finally decided that it was a capacitor, after all. Other guesses included coffee machine, transformer, and monorail engine. [illegible] has only [illegible] difference. When an ordinary capacitor is hooked up to a suitable power source, the amount of power it takes in [illegible] slowly declines, and hits

zero when it is fully charged. When a Lorenz Accumulator is hooked up, however, the power it uses--and stores--never declines. Capacitors are designed for storing electrical energy; some are good at it, some are bad at it. The Lorenz Accumulator was the best. It could hold as much power as was pumped into it. It was, in effect, a capacitor with an infinite microfarad rating. There were many applications where one Lorenz Accumulator might have taken the place of many cranky, temperamental, and breakdown-prone high-rating electrolytic capacitors. Unfortunately--and this was predicted in its theory of operations--a Lorenz Accumulator has a fixed rate of charge, that is far too low to make use of its high capacity --a rate somewhere in the region of a hundred watts a minute. The independence of this figure from applied voltage was puzzling, and the exact rate was worked out to fifteen decimal places by several institutions. But it is enough to say that charged at maximum rate for a minute, the Accumulator could light up a hundred-watt light bulb for the same length of time, which was far too little. The Learned Authorities had washed their hands of the matter, and the electron-jockeys couldn't think of a way to use Lorenz Accumulators either, and so things remained--for a while.

Ironically, the star-drive was a major (albeit indirect) cause in the discovery of a method for the useful application of a Lorenz Accumulator. The star-drive was cheap and efficient. The Solar System was polluted, overcrowded, running out of mineral resources, and generally in a mess. Even the politicians saw what was about to happen, but they, and all the other Powers That Be, couldn't prevent it. The Solar System became virtually deserted. It may seem strange that people would want to go to worlds worlds where gas masks have to be worn outside, to worlds where there are wild climates and weather, to worlds with dangerous indigneous life, and to a host of other seemingly inhospitable places. But it must be remembered that at that time, conditions in the Solar System were worse than those on even the most ill-suited planets beyond. On Earth, one lived underground in tiny cubicles. On the other planets of the Solar System and the various planetary satellites, it was worse. Only a few remained behind; the psychologically unfit, the genetically unfit, the cripples--and the few self-proclaimed smart ones who saw that if the largely machine-run and labour-independent civilization of the Solar System ceould actually keep the former hordes alive, why then the remaining meager millions could live in the lap of luxury! To a degree, they were right.

The civilization left in the Solar Syst em was a strange one. For almost two hundred years people lived, enjoyed, and did nothing much else. But after two hundred and five years, a powerful, nameless leader arose. He saw that the world was decaying, and that the people had already exceeded all fromer records for decadence. So in the best traditions of bureaucracy, he set up the most colossal make-work program in human history. Its ultimate aim was to stop the end of time itself--at least for the Solar System. If nothing was done, in four-and-a-half billion years the Sun would expand into a red giant, killing the descendants of those who had remained behind. Therefore: Something must be done!

It is a measure of the age's decay, and the leader's power of oratory, that the proposal was accepted. Yet there was a certain inevitability of acceptance. Those who could imagine going to the stars, already had. Now, those who remained couldn't think of leav-

ing the Solar System. This was coupled with the innate belief of every race that the race will go on. Thus, it was obvious to the Solar System's remnant of humanity that their descendants would not only survive, but do so on Earth.

The project, apart from its scale, was simplicity itself. With the coming of the star-drive physics also had come new knowledge of the nuclear processes that take place in stellar cores. It had been found that, with the right application of the right power, a star could be prevented from going red giant for a time. If enough power exsisted, the red-giant phase could be deterred frever. True, eventually hydrogen will run out, but the Sun can shine for ten billion years without using up more than ten percent of its hydrogen. And after all the hydrogen is used up, a greater energy expenditure every now and then could keep it steadily burning helium. In fact, the Sun could be kept burning, unchanged (except for a slight decrease in angular diameter), for about two hundred billion years. Then, the ultimate sources could be tapped, by allowing the Sun to slowly collapse into a neutron star, which has more energy available to it from sheer angular momentum and gravitational power than hydrogen fusion could ever have given it. The neutron star that had once been the Sun would shine for such a length of time, that it must be called indefinite.

Indeed, the end of time itself was to be stopped!

The energy required to keep the Sun shining almost forever is not much on the astronomical scale, if applied properly. A couple billion kilowatts for a few seconds was all that was required. A capacitor was needed, and the Lorenz Accumulator came into its own. Both star-travel and use of Lorenz Accumulators were once considered impossible, on grounds of impracticality. Who wanted to spend years in space, just to reach the nearest stars? The star-drive took care of that. And who could wait for a Lorenz Accumulator to charge up to a reasonably high figure? In ordinary applications it was far too slow. But for the purpose of preventing the Sun from going red giant, it was perfect. It had at least four and a half billion years to charge itself.

The project went into effect. The last traces of half-a-dozen rare metals were found and mined. Mundane, everyday materials were produced--plastics for insulation, ceramics for fittings, steel for the framework, chemicals for the electrolyte, complicated circuits for controls. A huge installation began to form on Oberon, the second-largest moon of Uranus. The complex included: the Lorenz Accumulator, astronomical instruments which would detect any change in the Sun, the gigantic broadcasters that would channel the energy and apply it on the nineteen-AU distant Sun, banks of solar cells for power, and, to coordinate all the operations, a great, self-repairing, superconductiong computer.

Two hundred years passed. The great complex grew, and grew, until it covered forty thousand acres. At last, it was finished. In the dim, greenish Uranuslight the last weld had been produced, the last silver contact molecularized into place. And the civilization that had produced the greatest engineering feat of humanity collapsed. The effort had been too great. It had not been a make-work program, but an ego-work program.

Beyond the Solar System, Homo Galactica makes new compacts with almien races, and the Galactic Federation, already partially existing before humanity came, reaches its definitive style. As the thousands of years pass, humanity splits apart, into new races, and the new races themselves split. The Galactic Federation also splits,

into Leagues, Protectorates, Confederations, Associations, Clusters. Though there are many races, species, and orders, soon there is only one Kingdom: Kingdom Galactica. All are included: space-dwellers, chlorine breathers, sentient groupings of electrons, the multifaceted remains of humanity...

On Earth, the descendants of the collapsed civilization had degenerated into savages, beyond. They had devolved. Theyre were no longer strictly warm-blooded; their temperatures could range from 80 degrees F in winter, to 99 degrees in hot summers. Some still retained their rudimentary embryonic gills after birth. Hair was replaced by scales.

Then came the New Ice Ages. The degenerate humans almost died off then, but not quite. Slowly, painfully, under the lash of the advancing glaciers, they re-evolved. But they were no longer human. They had slid down, and when they rose again, they rose to a different place; not higher than before, nor lower, but beyond, in a different direction, from humanity. With strange speed, they discovered the Galactic Federation, before it had split. They were accepted, but not recognized as of human stock. Earth had been frogotten by Homo Galactica. Titania is landed on, once, by a scientific expedition, but the huge installation on nearby Oberon is not noticed.

The Universe grows old. The splinters of the anceint Galactic Federation coalesce again. The new Federation moves to younger galaxies. At last, when even the youngest galaxy grows old, they leave this Universe for other, richer grounds. Again, the Federation splinters, perhaps forever, as different groups choose different cosmos. A steady inter-dimensional stream of trade flows between the Universes populated by Kingdom Galactica, but the old, home Universe is rarely visited. The complex on Oberon is never found; now has anyone ever looked for it.

In all the Universes, time passes. In the Universe that was the birthplace of humanity, it moves with perhaps a quicker pace than in most. And as the great clock that was the Galaxy turned, marking off two hundred and twenty million years with each revolution, the Lorenz Accumulator drank in power. As the number of revolutions climbed beyond one hundred, the Accumulator became the most powerful potential energy source in the entire aging Universe. It had nowhere near the amount of energy radiated b the smallest star in its lifespan, but what it did have it could give off in one powerful surge, and during that brief instant of time, it could put a supernova to shame.

The Galaxy passed through its two hundredth year since the Lorenz Accumulator's inception, and the Sun still shone bright and yellow. But sensitive instruments detected a slight increase in its luminosity, a slow shift in its spectrum, a slight structural change in its arching prominences, a small irregularity in its sunspot cycle, all foreshadowing the red giant phase. The giant computer, dormant for billions of years, became almost alive. Its instructions now were to find and protect all the human beings in the Solar System.

Bound by a program written by people four and a half billion years dead, it started a vast search over the entire System as far out as the comet halo, two light years distant. Probes were launched from buried silos, where machinery still worked, and would continue to work as long as an electron still had the energy to circle a proton.

The search lasted for eight thousand years. At its end, there

was one inarguable fact: No humans remained.

The computer searched for instructions--and found none. Its designers had not even considered the possibility that, four and a half billion years hence, there might not be any humans left to protect. To them, the possibility had been an impossibility. They had looked far ahead, all the way to the death of the Sun, but had not seen that, even as the Sucn changes and evolves, so decraces. They may change up or down, but change always occurs. Instead of preserving the human race, those long-dead builders had left the greatest possible monument to the perennial human belief that tomorrow will always be the same as today.

The computer had been left in the lurch. In every cycle it registered an unexplained systems error. Bound by its program, its design, its hardware, it could do nothing but search for the cause, which by the nature of things could never be found.

It was still cycling through its troubleshooting program, two hundred thousand years later, when something gave. Its processing section consisted of nothing but free electrons, unable to wear out, so it seems likely that some portion of its ancillary equipment, made of mere matter, malfunctioned. Somehow, a random flow of stamic closed the neutrino relay for the Lorenz Accumulator.

Over the ages, the giant capacitor had gathered some 7.0×10^{30} kilowatt-hours of energy, and now, in a matter of nanoseconds, four and a half billion years of stored energy discharged.

A wavefront of sheer energy raced out from the cloud of gases that had been Oberon. Uranus was vaporized, followed by Jupiter, three hours later, but the fates of the planets don not concern us here; rather, the effect of the sudden pulse of energy on the Sun.

The corona was ripped away, and the photosphere followed a billionth of a second later. The Sun's inner layers, no longer held down by pressure from above, blew open all the way down to the infant neutronium core.

The Solar System had begun as a cloud of gas; it returned to a cloud of gas. Matter from the nine planets mingled with that of the Sun and with each other, and a sphere of superhot plasma expanded at the speed of light outwards, towards infinity.

And for the first time in a million years, a supernova shone forth in the Galaxy.