



Science-Fiction Fanzine

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The Israeli Society for Science Fiction and Fantasy

**Fan.Con – about fans, for fans, by fans! - July 31 and August 1**

The Society, together with Starbase 972 (*Star Trek* fans in Israel), invites you to Fan.Con, the first fan convention, which will take place in

**Mofet Hall, 13 Herzl St., Ramat Gan, Wednesday July 31 and Thursday August 1.**

Fan.Con is dedicated to sf and fantasy fans in Israel, and will include a variety of fan activities.

The **first day** will be focused on fans of *Star Trek*, and will include films, parodies on the series, and the best episodes, and will permit participation in Live Action Role Playing (LARP) in the *Star Trek* world (by prior request, because the number of places is limited).

The **second day** will be dedicated to all sf and fantasy fans, and will include folk singing (fictional folk songs), learning about Israeli and world fandom, viewing episodes from *Mystery Theater 3000* and *Futurama*, discovering what George Lucas did in college, what Bibi Netanyahu did with Joan Sheridan, and more. The capstone of the second day will be a participatory showing of the film *Galaxy Quest*.

More information is available (in Hebrew) at the Society's site: <http://www.sf-f.org.il>

**More Nasty Debate about NASA**

**From Dotan Dimet:**

In response to your exchange of letters with Amnon Stupp in the June *CyberCozen*: I just started reading Stephen Baxter's *Time*, but I already found the NASA quote. I'll have to agree with Amnon, really -- it's not NASA's job to put people in space, and it's not the scientists' interest either. All past colonization efforts were driven far more by greed than by political friction, and for people to move into space there need to be good economic reasons. Until people see the money in asteroids, they're not moving out, until technology (or a far-seeing administration - maybe in India, Pakistan or China?) gets us out of the local optimum the free market is stuck in.

Now why am I saying gloomy things I read in 1970's *Analogs*?

Dotan Dimet [dotan@compugen.co.il](mailto:dotan@compugen.co.il)

**Dotan -**

A guy is willing to pay \$20 million just to spend a few days in orbit around the earth. What would he pay to go to an asteroid? But as Baxter points out, if you try to go to an asteroid on your own, NASA will shoot you down. That's certainly not for economic reasons.

**Aharon**

P.S. Maybe it's the aliens working behind the scenes? But don't quote me.

**From Shmuel Kahn:**

**Aharon,**

The situation with NASA is even worse than you suggest. Even if the stupid homebody academics were all for manned missions, NASA just can't do it. Today NASA is incapable of putting a man on the moon again. Could the ISS [International Space Station] have been placed on the Moon out of reach of the regular supply lines? They would have to start the Apollo program mostly from the ground up.

Yes, the remote controlled space probes are getting better, cheaper and farther away. But the data they beam back is of little practical use.

NASA has even finally gone so far as to test some real nifty "new" technologies - nothing earth shaking. They just got around to implementing stuff that has been known for years, such as the Ion drive used in Deep Space 1 [1], which is based on technology from the '60s!!

The competition (ESA and Russia) has better and more reliable satellite launchers. The shuttle fleet is almost 20 years old, going nowhere, and a maintenance nightmare (when was a mission last NOT delayed?). NASA has spent many billions of dollars looking for a replacement, but one after another has axed them all. Today this project is being attempted by Sweden. Wouldn't that make NASA look really pathetic? Even technologically backward China has a ten year plan to reach the moon. Welcome to Celestial City?

It is far more likely that some garage rocket scientist with a rich-daddy will claim the X-Prize [2] years before NASA has a working reusable space vehicle program.

The only type of originality still seen at NASA is the various forms of "McGiverism" used to get the most of ancient probes still out there, 25 year-old Voyager-1 [3] for instance, or fix probes with problems such as the guidance system devised for FUSE [4], which truly IS "science-fiction" - electro-magnets in the satellite push/pull against the earth's magnetic field to point it [4].

NASA has little interest to "get out there". They spent 1.4 BILLION dollars on the Cassini probe to Saturn, which WILL send back lovely pictures and other interesting (but highly unpractical) data.

Instead, for a fraction of the investment, NASA could have made itself self-funding to eternity. How? It's not Rocket Science (well it is, but...): Go for a NEO [Near Earth Orbit] mining mission. For a fraction of the price (say 400 M\$ = 4 NEAR like probes), you identify a 1 Km wide, metallic asteroid. Let's be lazy, as we like to work near home, put the rock in orbit around Earth (L4 is still "mostly" vacant) by mounting a bunch of sun-powered Ion drives (at 10 M\$ apiece), the move would take about a year or two. Mine the thing in orbit (free power and no mess), and parachute the goods directly to the customer. Mine the rock correctly and you have a nice BIG space habitat (forget the "we're committed to build the now worthless" ISS).

A 1Km wide asteroid is about a billion tons of extremely refined ores. Such an asteroid is worth about a trillion dollars. You could redefine the entire world industry with only ONE such rock. Just think of it. NASA can't, but private industry is giving it a try [6].

NASA has a stranglehold on Space (for the USA, and for now by implication the world). They like it that way. Though no fault of NASA, the silly US-Gov has even created "Administration for Commercial Space Transportation" [7], as part of the FAA, with detailed plans for commercial spaceports all over the USA. Hello? There is NO "commercial" space flight, thanks to NASA. At NASA's 10,000 dollar per kilo into orbit, who can afford the prices?

**Shmuel Kahn** [Shmuel@Kam-motion.com](mailto:Shmuel@Kam-motion.com)

[1] Deep Space 1 - <http://nmp.jpl.nasa.gov/ds1/>

[2] X-Prize - <http://www.xprize.org/>

[3] Voyager 1 - <http://voyager.jpl.nasa.gov/>

[4] FUSE satellite lit again -

<http://spaceflightnow.com/news/n0203/07fuse/>

[5] <http://www.space-frontier.org/PROJECTS/ASTEROIDS/>

[6] [http://www.spacedev.com/media/papers/97-05-22\\_ISDC\\_Speech.html](http://www.spacedev.com/media/papers/97-05-22_ISDC_Speech.html)

[7] FAA - AST - <http://ast.faa.gov/>

## Movie Reviews

### **Minority Report (מיון מיון)** -- Reviewed by Neale Creamer

Directed by Stephen Spielberg. Based on a short story by Philip K. Dick. Starring Tom Cruise and Max Von Sydow. 144 minutes. **I enjoyed it.** The special effects were not gross or so fantastical that I could not accept that the year 2054 would be like it was represented. The influence of late director Stanley Kubrick is striking. I just recently saw a new 35mm print of Kubrick's **2001 Space Odyssey**. Many Kubrick touches were incorporated into **Minority Report** - classical music more as choreography than background, conversation with a child like Kubrick's telephone call from space to home in **2001**, using current commercial product names not so much as product placements but to show continuity of life 50 years hence, even an eye ball scene right out of **Clockwork Orange**. **Minority Report** asks the viewer to think about human frailty vs. technological perfection (wasn't it the human element programmed into **2001's** HAL that caused it to fail?). The movie is getting a lot of press due to its star cast (Tom Cruise) and director. (By the way, I just learned that IBM did not allow Kubrick to use its name in **2001**, so he used the next letter earlier in the alphabet for each of the letters of IBM, and came up with HAL.)

### **Spiderman** - Reviewed by Aharon Sheer

Written by Stan Lee (comic book) and Steve Ditko (comic book). A fabulous comic strip. Yes, Spiderman is an excellent realization of all the absurdities of a super-hero comic strip; well done indeed. This is a science fiction film in the style of the 50s. Remember in the 50s they had super-beings (giant ants, etc.) which resulted from the mutational effects of atomic testing. Nowadays our great fear of mutations comes from the possible misuse of genetic engineering - in this case on spiders. One of these genetically engineered spiders, with the best genes from dozens of different spiders, bites our high-school hero (played by Tobey Maguire), giving him super-powers. He can be smashed over the head with a metal chair and it hardly affects him, shot at (he ducks the bullets), thrown against walls and through windows, and no harm comes to him. Best of all, he can walk up walls using strange extrusions on his fingers (presumably taken from the genetics of some insect that can walk on vertical walls), and extrude a super-strong giant spider web which will support him and simultaneously numerous other people, as he and they dangle from dangerous heights. The scientific basis of these super-powers (like those of the giant ants in the wonderful movie **Them** (1954)) is highly doubtful, and for the same reasons. A giant ant would have to look like an elephant - otherwise its legs could not support its weight. This is because weight goes up by eight (2 to the 3<sup>rd</sup> power) when height is doubled. So that would have to be some spider web to support all that weight. It's true that even today there are people who can climb up and down the walls of buildings using their fingers and toes only (a remarkable ability), but they usually do not do it while carrying a beautiful woman over their shoulder.

The acting, as expected in such a movie, is atrocious. Even the mature villain, the mad scientist (played by Willem Dafoe), who has been affected badly by an experimental chemical which increases his physical powers but regrettably drives him nuts, is in my view not sufficiently evil for his job.

And these days when computer modification of voices should be straightforward, why should the now graduated high-school boy, playing his role as Spiderman and rescuing the girl he loves, be able to speak to her in his own boyish voice, and not be recognized by her, even though, we, the viewers, can hear clearly that he is him. Couldn't they have modified the hero's voice a little so that his next door neighbor might really have trouble recognizing him? Couldn't they have modified the villain's voice a little so that his own son might really have trouble recognizing his father's voice? You'd think that people with super-powers could disguise their voices.

The special effects are beautiful, the music convincing, and the story is as realistic as only a good comic book can be. Absolutely absurd, great fun, and highly recommended.

## DARK BEGINNING OF THE SPACE AGE

### Book Review: *The Rocket and the Reich* by Michael Neufeld

Published by Free Press, available at [www.amazon.com](http://www.amazon.com)

Reviewed by **Yaakov Macales**

On October 3, 1942, the first man-made object ever reached the very edge of outer space. It was an A4 rocket, built by a group of German engineers at Peenemunde, on the Baltic Sea. The head of the project, Wehrmacht General Walther Dornberger, addressed those present and told them this was the beginning of a new era. In 1944, the first operational version of this rocket, renamed by Nazi Propaganda Minister Josef Goebbels as the V2, hit London. 3200 of these rockets ended up being fired in anger, mostly at London and Antwerp. These rockets were designed by a group of men who later became famous in the United States space program, such as Wernher von Braun, later head of the Marshall Space Center; Kurt Debus, subsequently head of the Kennedy Space Center launch facility at Cape Canaveral; Arthur Rudolph, later head of the Saturn V booster project; Eberhard Rees and Krafft Ehrlicke. These names are well known within the United States space community and some of them even to the public at large. What is less well known is that the people who actually produced the operational versions of the A4 rocket were part of an army of slaves who were terrorized, brutalized, starved and murdered under the watchful eye of the dreaded SS.

This book by **Michael Neufeld**, historian for the Smithsonian Air and Space Museum, describes the history of the German rocket program which did so much to change world history, for good and for bad, enabling men to walk on the moon or (G-d forbid) to launch ICBM's with nuclear warheads with the power to kill millions of people.

The requirements for the A4 rocket were drawn up in 1935. These included propelling a ¾ ton warhead as far as England and yet be small enough to be transported through the railroad tunnels of Germany. Given the fact that it took seven years before they were able to carry out a successful test flight and another two years to become operational, one becomes aware of the immense difficulties, both technical and political, von Braun's group faced. Neufeld describes these in the book. At first, Hitler and the other German military leaders planned only for a short war and so didn't invest that many resources into the rocket program (or, for that matter, into a heavy bomber program which could have made a big difference in the disastrous Battle of Britain and subsequently).

After the Soviet blunting of the German offensive in December 1941, it became clear that Germany was in for a long war and so the decision was made to accelerate the rocket program. However, the dreaded head of the SS, Heinrich Himmler, tried to get control of the rocket program, leading to the famous incident of Wernher von Braun's short arrest which his apologists in the US later pointed to in order to "whitewash" his checkered background. Neufeld shows that the reasons for his arrest had nothing to do with his being an "ant-Nazi", but was part of Himmler's power play. Von Braun, like many of his colleagues, was not an ideological Nazi, but they decided to go along with the regime either out of misguided patriotism, or simply in order to advance their own careers and their beloved interest in rocketry.

A significant exception was Arthur Rudolph who joined the Nazi Party and its SA Brownshirt terror organization in 1931, two years BEFORE Hitler came to power. (Von Braun, like many others joined after the Nazis came to power). Rudolph was the one who first suggested using slave labor to build the rockets. Rudolph also witnessed a mass hanging of prisoners who were trying to rebel against the horrific conditions in the hellish Dora Mittelwerk facility where the rockets were produced (Neufeld has written a separate book describing the Mittelwerk). In a television interview made after Rudolph left the United States in the 1980's as a result of his Nazi connections being revealed, he was asked why the prisoners were hanged. He replied that they were trying to kill their overseers. When asked why they would want to do that, Rudolph said that he couldn't imagine why. Neufeld brings statistics that show that around 5000 people were killed by use of the V2, but 10,000 died building the rockets, possibly the first time in history that a weapon's lethality was more pronounced on the side that used it than on the enemy.

One of the most interesting things in the book is Neufeld's explanation of how the V2 rocket program ended up being a disaster for Germany. The program was equivalent in size (relative to the size of the German war economy) to the American Manhattan Project which led to the development of the atomic bomb which enabled the Allies to bring about the surrender of Japan without an invasion of the Home Islands, whereas the entire weight of explosives sent to their targets by all the V2's fired in anger was no greater than the weight of bombs dropped in the average single large RAF Bomber Command raid. The rocket program ate up scarce resources that

could have been better invested in other types of armaments.

The unwise decision by the German Army to invest so much in the V2 was due to the fact that the top generals of the Wehrmacht came from the artillery (which had been so dominant in the First World War) so they naturally wanted the fanciest weapons for their own branch and since there was no real civilian oversight as there is in a democratic country, they were able to get away with it. The important lesson is that, in general, democratic countries should not let career military men run the government (Eisenhower was an exception, being a good President, but he was basically a politician even when he was in uniform and was wary of the military establishment). This is important food for thought for a country like Israel where three of the last five Prime Ministers and almost all of the Defense Ministers are Generals.

The book also describes other projects von Braun's group worked on such as the "Wasserfall" anti-aircraft rocket developed jointly with the Luftwaffe and the multi-stage A9 "Amerika" rocket which was supposed to fulfill one of Hitler's fantasies and bomb New York but never got off the drawing board.

The only criticism I have of the book is that it is written in a rather dry style and occasionally gets bogged down in descriptions of organizational matters. However, this book is an important addition not only to understanding the history of Nazi Germany and its horrors, but also the murky origins of the space age, and contains important lessons for the future regarding the relationship of governments with large-scale technological and especially military programs.

### Quote of the Month:

"Universities are very familiar with bright, qualified school-leavers who arrive and then go into shock on finding that biology or physics isn't quite what they've been taught so far... [This demonstrates] why universities are truly storehouses of knowledge: students arrive from school confident that they know very nearly everything, and they leave years later certain that they know practically nothing. Where did the knowledge go in the meantime? Into the university, of course, where it is carefully dried and stored."

From *The Science of Discworld* by Terry Pratchett, Ian Stewart and Jack Cohen, p. 42

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