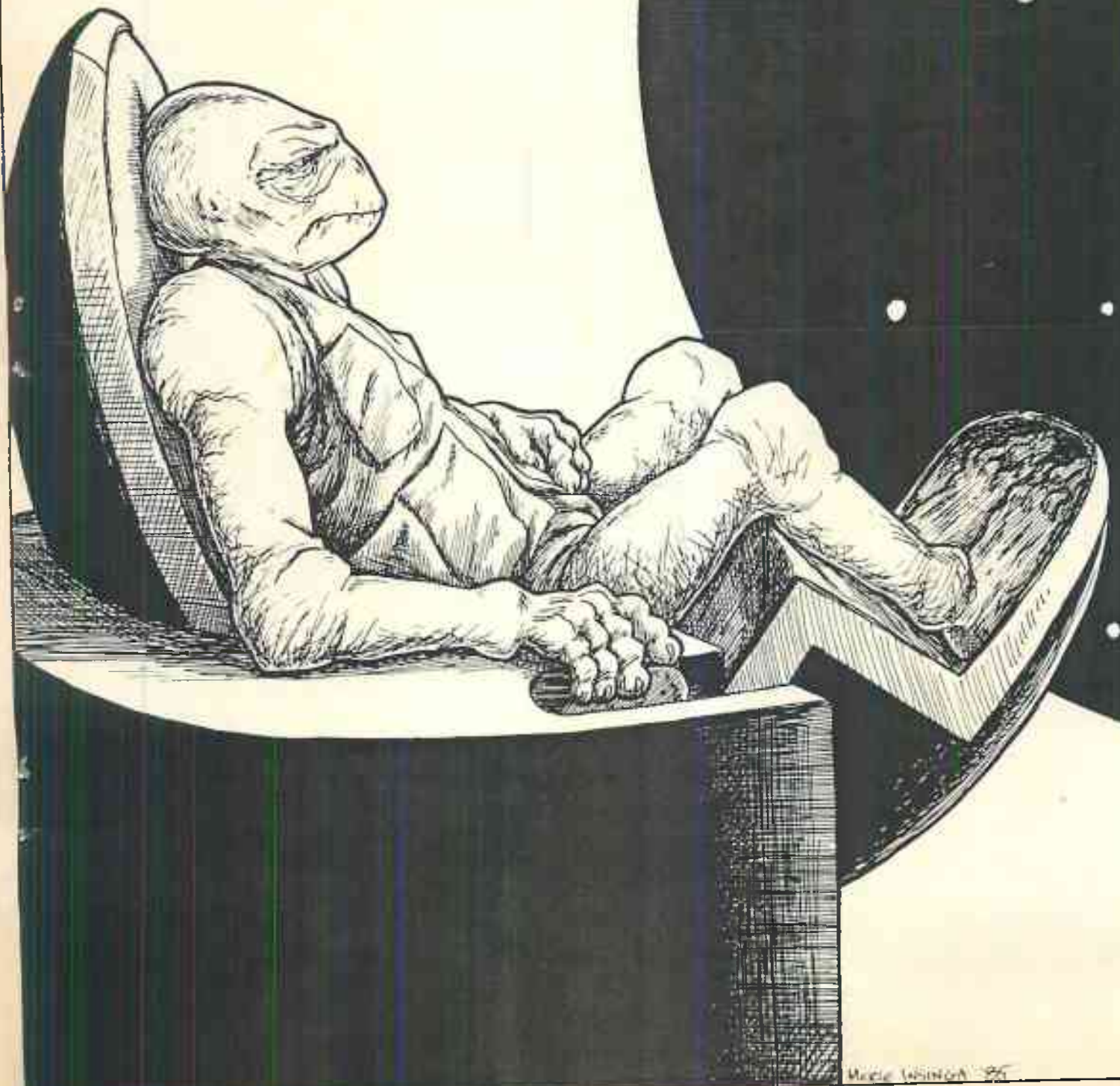


**proper
Boskonian
no. 26**



THE PROPER BOSKONIAN 26
December 1985

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TRADITION

The Editor Speaks
by
Joe Rico

"Why do we do this? I tell you; nobody knows. Is Tradition." -- Tevye in Fiddler on the Roof.

So we did it. We finally got out an issue of Proper Boskonian. With feelings of dread and hope, I awaited the comments and reviews of my zine. Will they like it? Was the cover too daring? Will they clamor for more? Could it be possible, you think, that maybe Glycer will review it?

Instead I received few comments about the zine and all of those have been curiously similar. Such as:

"What do you mean you are using different color paper? That was never done before."
"Hey, you don't have a back cover! Your last page is text; no other PB did that."
"For Ghu's sake why couldn't you have typed all the articles in the same format?"
"You got to stick to Tradition."

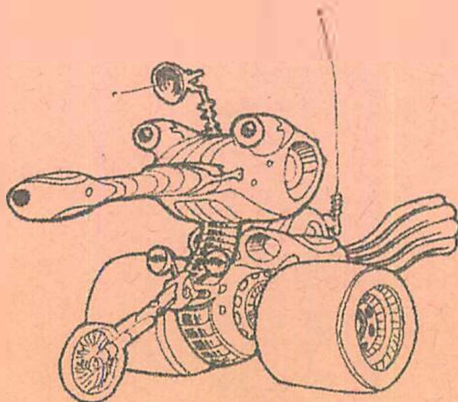
Why is it that fen who are supposed to be the forefront of a constantly changing society are so hidebound when it comes to their own traditions? This is not just confined to fanzines either. At a meeting of another local fannish group, I heard some woman state that she would like to be the "Chairperson" of a worldcon in 1989. She is a sane person and so of course was joking when she said this. But instantly an explosion took place as one of the Keepers of the True Path erupted into a tirade.

"No, NO, L--rie!" exclaimed R--k, "the Chair of N--eascon is called the Chairman, no matter what the gender. We did it in '71, and we went all through this in 1980. It's a tradition."

(Notice, by the way, the clever way I have hidden the identity of the principals. Unlike your usual fanzine editor who "traditionally" encourages fan feuds, I am the soul of discretion.)

I say the time has come for fandom to throw off its fetters of conventions. It's time for the Neofan to boldly brush aside the moths of the SMOFs. I say that we must each of us go forward and confront the gnomes of tradition in whatever guise they may assume. And I will be proud to lead you wonderful guys every step of the way.

By the way, this issue of PB is mimeographed, not photocopied; it is typed in the same format throughout, on the same color paper, and has a back cover. Why did I do this? I don't know; it's a Tradition.

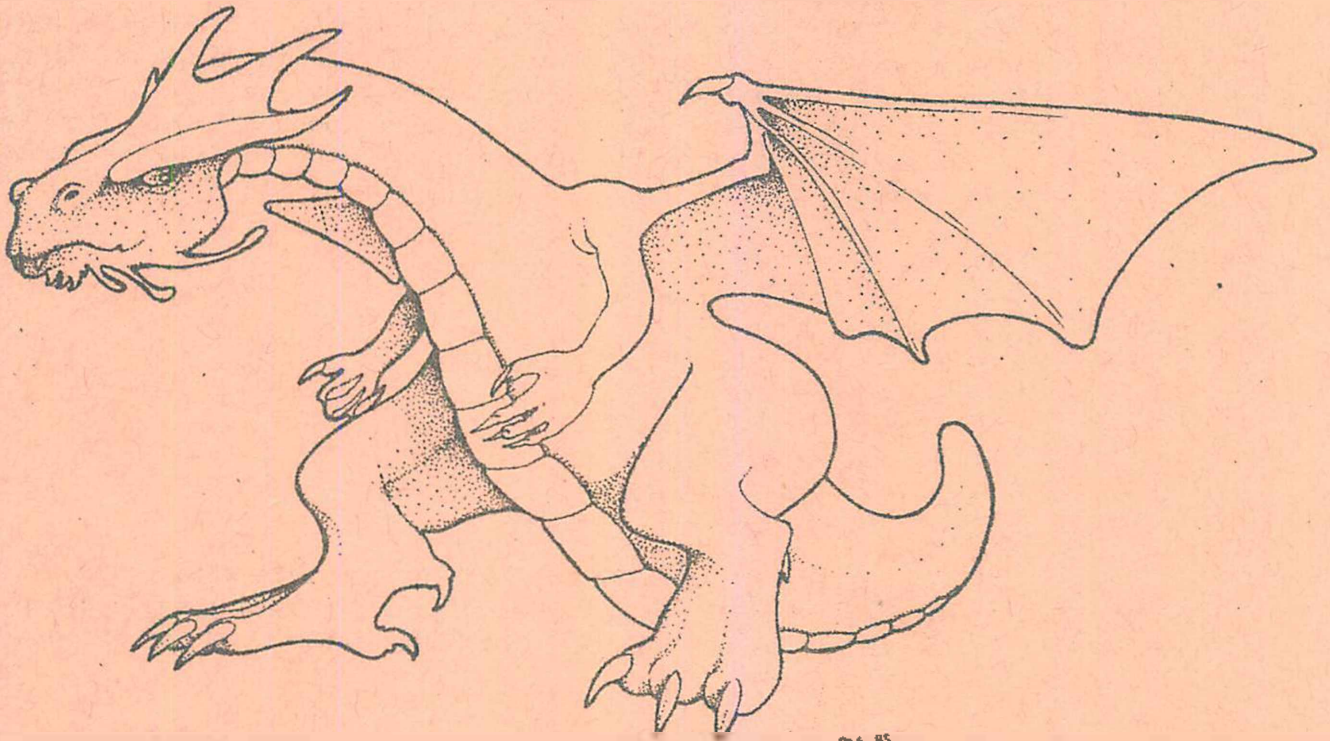


In this Issue

We have In the Card, the winner of the 1985 NESFA Short Story Contest. It's a fine work by D.J. Zauner, and it is available for publication. Interested publishers should contact the author, who has all rights to the story. I would be glad to facilitate that contact.

The article on Strategic Defence by Mark Keller was originally designed to be part of a point-counter point debate - unfortunately, though Mark leapt to the challenge, no one who was pro-SDI stepped forward. The article does not necessarily represent the views of the New England Science Fiction Association as a whole, or Proper Boskonian in particular. We encourage the submission of articles with opposing points of view.

Also, we have a Delphi Poll like piece that requires your participation, and usual articles and reviews. Grateful acknowledgements to Sue Lichauco and Claire Anderson, FN, for their work on this issue.



LOC

Greetings!

And my gratitude for the Proper Boskonian #25. It really helps to educate me concerning New England fandom, which I sort of lost track of around the time of Cotton Mather and the witchcraft trials. Lots of interesting items, but I found Mark Keller's "What if Hitler Got the Bomb?" an absolutely brilliant contribution, and one which deserves an award for its insights.

All the best,

Robert Bloch

Dear Editor and PB Contributors and Collators,

So this is PB! Thank you. I dove in as soon as it arrived and I've waded through most of it, merely getting my toes wet in some places and in others I was up to my eyeballs. My faves have to be the TOC and the Silliest of A:N, especially the signs of the zodiac piece. Thank you, Claire and Laurie. May I pass out copies of Leslie's horoscope, giving her full credit of course? Thanks, James Mann, for the positive review of Voyager in Night. May I copy that and send it to the C.J. Cherryh fan club I belong to? (I tire of hearing "I find C.J. Cherry's (sic) books to be difficult to follow or understand; clearly a sign of poor writing." Might one consider that a sign of poor READING??) Mr. D'Amassa, is Katherine Woodiwiss a Harlequin Romance writer? If not for the illo on p. 61, I wouldn't even be able to guess. (But I did like your column.) Thanks for the page numbers. In apas, I'm always going a little crazy trying to find certain remarks. Okay, someone tell me quick while he's out of the room: does Tony Lewis really read all those books himself, or does he hire unemployed college students to stand in line at B. Dalton's or Waldenbooks all day when the new books come in, and read them for him? Shhh, here he comes.

Best wishes to you all,

Monica Sharp
2422 E. Verde Sch. Box 95
Holtville, CA 92250

Dear NESFA,

While paying my dues, I'd like to compliment all those involved with producing the latest (first ever for me) issue of "Proper Boskonian". It is a large endeavor and they are to be congratulated not only for the sheer labor, but for the overall high quality of the articles.

I would like to make some comments on two of the articles. The comments are not at first glance related, although I, while making them, feel the philosophical nexus that underlies them.

Joe Rico's "Death and Science Fiction" was, frankly, great. It expressed feelings long held by myself that I was unable to codify. He is absolutely correct in his assertion that as long as the denial of death - or the treating of it in childish

ways - continues, Science Fiction will continue to be viewed as escapist as a genre. (Now let's be careful here! I want Science Fiction always to have a good quantity of escapist material around, in this world I need it. I'd just like the field to expand.) This will stay true as long as it denies or fails to deal with other tragic events in life. I'd love, for instance, to see Heinlein have his trendy little libertarian utopias rocked by having someone (perhaps the pontificating L Long) have to deal with the agonies of having a youngest child with Down's Syndrome - remember, in his worlds "Social Services" always equal "Satanic Socialism". Or let him deal realistically with old age. All his characters seem either to develop into wise, tough old grannies or the Pepperidge Farms man. Unless Science Fiction assumes the end of all disease, deformity and death, it must begin dealing with these issues in an adult way. One can tell Mr. Rico has had experience with human beings attempting to cope while being human beings and this has sharpened and matured his thought.

"What if Hitler Got the Bomb" by Mark M. Keller was also a very good article. It was detailed and thorough. I enjoyed it very much. However, during his admirable discussion he indulges in a bit of revisionist history that should be corrected. He, in detailing one of the works, touches on the fact that several crackpot theories flourished in Germany in the 30's. He goes on to decry the fact that public notice of these crackpot theories might lead people to think ... "The Nazis were a freak one-time aberration rather than the prototype for a congenial cancer of bureaucratic states." Really?

Really. I mean I have no trouble at all with the sentiment that nothing should ever lead people to think that Nazism could not come again - indeed has in less efficient guise (a rose by any other name...); however, to lay the fault on "the bureaucrats" is absurd. Large bureaucracies don't put people into ovens, people do. Nor is there any reason, or proof, to support the notion that a large organization of the state leads to some variant of Nazism. What leads to Nazism is a breakdown in respect for pluralism and democratic principles coupled with a desire for simple solutions and a scapegoat for your troubles to be blamed on. It is not bureaucracy that is the problem; it is the absence of checks and balances that are exercised on and in the state that allows Nazism. Don't think for a moment that if the House and Senate gave over all their power to the President and the Armed Forces kept obeying, it could not happen here - even without a large bureaucracy.

Why do I stress this point? It is imperative that it never does happen again and only attention to the real causes of Nazism will prevent it. The fact that totalitarian governments generally create bureaucracies to enforce their evil policies should not distract from the defence of democratic values.

I again want to thank all those involved with "Proper Boskonian." It was a delight to read.

Yours,

Robert Gaspari
50 Parkman St., B3
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THE TORTOISE IS A MAMMAL

A Brief, Perverted, Inverted, and Somewhat Convoluted Attempt at Defense

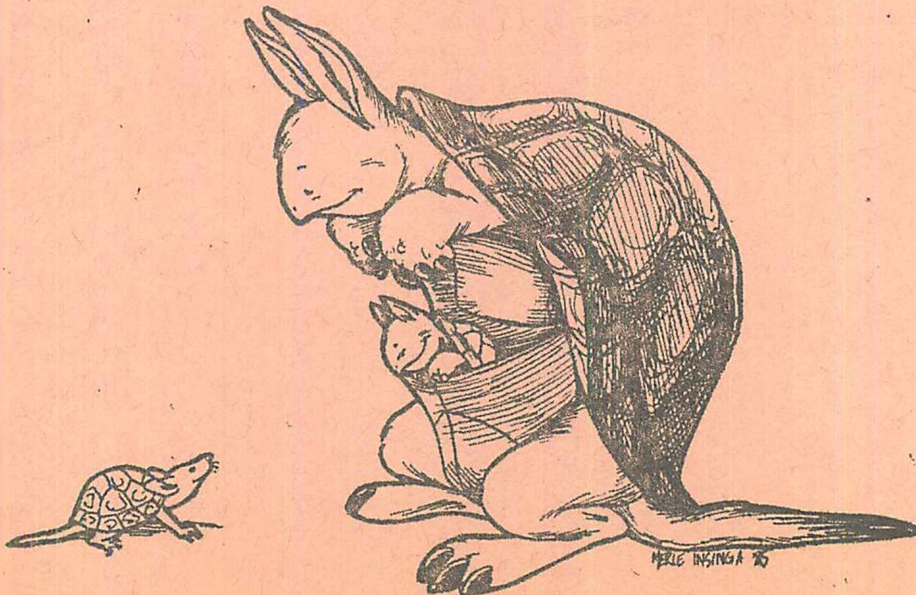
By Priscilla Pollner

At a long past Botticelli game, someone who most of us know defined a tortoise (actually, The Tortoise) as a furry meat-eating animal that lived in the ocean. There might have been additional errors, but that was enough to convince me to either: a) leave this mad fannish life behind, or b) try to rationalize this classification. Well, I'll do my best on the latter in fact, by turning the title statement around to "mammals are tortoises," it (almost) makes sense. (By the same reasoning, birds are dinosaurs if anyone is still reading this, congratulations. You can stop now, if you want, because I'm going to get "scientific.")

Reptilian subclasses are defined (in part) by the presence (and position) of fenestrae in the skull (in other words, whether or not they have holes in their head. Very fannish). The subclass Anapsida (captorhinomorphs, cotylosaurs, and chelonians; the last group is a fancy word for turtles. Tortoises are a special type of turtle, OK?) lacks openings in the temporal region of the skull.

The subclass Synapsida (pelycosaurs and therapsids; the latter turned into mammals by evolutionary magic, sort of) arose directly from the Anapsids. Synapsid reptiles are characterized by a single fenestra bounded dorsally by the postorbital and squamosal bones. All other (living) reptiles are diapsid - they have two holes in their heads. Lepidosauria (snakes, lizards, amphisbaenians, and rhynchocephalians) and Archosauria (crocodilians, assorted dinosaurs, pterosaurs, and a variety of other forms - some of which gave rise to birds) both have two fenestrae, one above and one below the postorbital-squamosal junction. That's probably all you want to know about that. But, from the facts given here, it should be obvious to the reader (I hope) that mammals are more closely related to tortoises than tortoises are related to other reptiles.

If you don't believe that, blame Rick.



In the Card

by

D.J. Zauner

"I fake you out. You can't nail it down, I'm too fast. Follow the card, keep you' eye on the Red, watch the Red. I fake you any time." The black man in rags was gleefully handling three playing cards, switching them with a speed that was fast, but not baffling. Michael smiled. The trick was when he had two cards in the same hand, and made it seem as if the bottom card was the one he placed down, but Michael knew it was the top card sliding into position.

Mike had been watching the three card Monte player for the past few minutes, and he guessed every time where the ace of hearts would come up in the line of three cards. He stood in the back of the crowd, letting the ones who put up money in front of him, smiling when the black man laughed and lifted either one of the two black cards, the ace of clubs or spades.

"Twenty will get you forty, forty will get you a hundred. I fake you out ever' time!" He laughed loudly into the peoples' faces, uncaring.

Michael looked about him on the sunny street. People went by with only a glance at the crowd, expecting it to be some break dancers or a quick hot sale of gold necklaces. He glanced at his watch; ten minutes before he was supposed to meet his brother at Penn Station. He decided to stick around and watch the suckers lose their money, and listen to the black man laugh at the greatness of it all.

Another forty disappeared into the black man's rags. He laughed. The woman who lost the money cursed and stormed away.

The Monte player had no shills, Mike thought. It was true, now that he noticed; there was no give and take going on here, no familiar face up front to keep the game interesting. Just the old black man taking the peoples' money and laughing like the man from the Seven-Up commercial.

And getting paid damn near as much, Mike thought with a grin as the black man made twenty more dollars go away, lifting the ace of clubs with a laugh that contorted the other player's face into a mask of fury.

"You ripped me off!" the guy shouted, digging his hand into his back pocket. Mike thought there was going to be trouble, but the black man kept laughing, and the other man, in a three piece rage, produced a wallet. He took out two twenties and held them up. "Lemme try that again. Lemme pick the card up and see it. I don' wan' you to touch the card afte' you mix 'em."

The black man laughed and nodded, switching the cards with the same speed as always. "You can't guess where it's at, because it goes away until I pick it. It's always red, always red, always red, when I picks it. You always get black." His voice was meant as hypnosis, to try to draw the player's concentration from the shuffling three cards atop the torn box half resting on a wire garbage can. He performed his magic between a touristy stationery store, and a t.v. and radio place. They were on the Avenue of Americas, between Thirty-seventh and Thirty-sixth. The man in the three piece suit picked up the ace of spades, cursed, and flung it down.

Mike saw that the ace of hearts was the one right next to it, the middle. The black man picked that one up, laughing. "You can't find it cause it go away an' don't come back until I gets it. Twenty will get you forty, forty will get you a hundred." The black man laughed his laugh into the peoples' faces and glanced about him, casually, for a cop. None had shown yet.

Mike felt the money in his wallet suddenly become hot. He just had to.

Mike shouldered his way closer to the Monte player. When the black man grinned, there was blackness beyond the gap of three missing upper teeth. Wrinkles of age surrounded his eyes, and the black of the pupils looked a bit rheumy. The whites were yellowed.

His hands seemed to move faster over the cards when Mike came closer. He could almost smell the breath of decay coming from the black man. "Fake you all out. Any one? Any of you tell me where it is?" He pointed a weathered finger at one card, then another, then the third.

"There," a teenaged boy said.

"You gots to put up yo' money to find out," the black man said. When the boy shrugged, he laughed and picked up the cards, mixed them around in his hand a moment, and then chuckled. "Never know now for sure."

Mike reached for his wallet. He took out two ten dollar bills. Replacing the wallet, he gripped the two bills in his hand. The palm had suddenly gone sweaty. He always felt like this before he made a bet or asked a girl out, or did anything where he wasn't certain of the outcome.

"I fake you out for sho'." The black man was looking at him. Looking into him, Mike thought for a moment. He shuddered in the heat. Mike showed the money through his fist, the bills sticking between two fingers, and the black man nodded and grinned, his ancient eyes never leaving Mike's face. Mike looked down at the hands as they moved and switched the cards.

"You gots to get the red," the black man said quietly, confidentially, as if he were letting Mike in on a secret. The others around him were drifting off, bored, one by one. The black man lifted a card, the ace of hearts. "This the card you gots to find," he mixed a bit and produced the card again from the three. Mike nodded, following the path the concealed ace took. "But you can't evah get it cause I hide it somewhere until I wan' it back." The black man chuckled at this and stopped mixing the cards. "But maybe you get it," he whispered.

Mike had his eye on the card. He knew which one it was. He had noticed a small wrinkle on the corner of one of the black cards, so he knew that one wasn't it. And the one in the middle was the last one the black man had thrown down. Mike knew that wasn't the red card because he was standing at a good angle to see what the cards were before they landed on the wrinkled cardboard box top. It had been black.

"Now you gots to put up the money to see the show."

Mike was just about to hand the black man the money when a movement caused both to look quickly to the side. A policeman was heading for them, at a leisurely pace, giving them plenty of time to break it up. The black man smiled and winked at Mike, bowed his head and whispered, "Which one is she, boy? No money heah. If you win, we even. If you lose, we still square. Now which one?"

Mike stuffed his hand into his pocket to hide the money; the rest of the crowd had milled away when the cop had begun his approach. Mike put his finger down, without hesitation on the card --

And saw red' falling into a starless night, he saw the red where no one could live and Man's pain all stood out in the wrinkles around their eyes or in the laughter of a black man winning, always winning.

But the black man had run away, trotting at a lope more than sprinting. He disappeared into the crowd instantly. And Mike stood there, lost for the moment. When the policeman was almost on top of him, Mike picked up the three cards, pocketed them. He didn't look at any of them, but made sure that the card he had chosen was separated from the other two. He wandered away; the policeman ignored him, looked at the box top and the garbage can. Shrugged and turned around.

Mike shuddered once more in the warm city street and headed toward Penn Station, ignoring everything about him, thinking of what just happened. Wondering whether the cards he had made him have that vision, or whether he was just flipping out. On the escalator down to the ticket lobby, he took out the card he had chosen. It was the ace of hearts.

He had been right. The thought stunned him, making him remember all the others who had not guessed right, and what had happened when Mike had guessed and put his finger on the cards. And he had been right.

Thinking about the old eyes the black man had looked at him through made Mike feel sick to his stomach. He pocketed the card and went to the amusement station where he met Chris at a Robotron game. He let Chris play his men out before he spoke to him.

"Hey, what's up? You can do better than that," Mike pointed and grimaced at the score. "You're supposed to be the Bang-Bang Robotron hero."

"Screw off." Chris smiled and bent for his backpack. "What happened? The memory of what took place minutes before ran through Mike's mind like a high voltage shock. "I-uh-was watching some Monte player win big bread." Mike shrugged, throwing the memory from his mind, and added, "A lot more than any engineer is going to make."

"Does he get time off with pay? Sick days?" Chris laughed as they left the video arcade, and Mike shrugged. "The money he makes, he doesn't have to worry. He can afford to spend a couple of days off. No boss, no nine to five." Why was he arguing for a black man in rags, he wondered.

"You know, I'm in the mood to hoof it to your place. Been a while since I've breathed city air." Chris had his eyes everywhere but on Mike. Looking for action, for something going on.

The two brothers looked alike, but would never be labeled twins. And their mannerisms were totally dissimilar. Both smart, Chris tended toward the mathematical aspect, while Mike wanted to be the actor and writer. Both had confidence in their fields, and both were tall, blonde, blue-eyed, and handsome. When they were younger, they fought rarely and usually with a good reason. Mike and Chris Rivenwood were close.

"Yeah, that sounds o.k." Mike headed for the up escalator, across the fan cooled expanse of the waiting area, dodging between people casually, thinking only about what he was doing at that moment. Chris followed close behind, having a bit more trouble with the blue pack on his back. Twice, he bumped a person he had thought he cleared. No words were passed.

Upstairs, past the rose sellers who tried to peddle their wares, and an elderly nun with Mona Lisa eyes and a tattered habit sitting in a chair with a white mug out for quarters, Mike and Chris looked about them. Mike pointed toward the lower numbered streets, and he and Chris walked on.

"So how are your studies going?" Mike asked, falling in line with his younger brother. Both had begun to sweat.

"Great. I'm going to hang out at home for the summer. Stick around with Botman and Sloane. You know, the guys."

"Yeah. Sloane visited me a while back. Still out of school." They walked along Eighth Avenue until Fourteenth Street, talking about school and girls and home. Mike forgot about the Monte player for a time.

Until he saw the black man standing on the corner of Fourteenth and Fifth Avenue, his setup made of a spaghetti sauce box on top of a Pampers box, with another cut off box top for the table. When Mike and Chris approached, Mike saw three cards shuffling around on the table top, looking exactly like the ones in Mike's pocket.

Mike stopped in his tracks, reaching with panic into his pocket. The cards were gone.

"Gone," Mike muttered with eyes agape, saying nothing when Chris turned to see why he wasn't following. Chris turned to look at the Monte player. His hands went to his hips. Mike, stunned, walked next to Chris, paused, and then walked several more steps until he was on the edge of a group of people who were formed in a crescent about the black man in rags as he performed. Mike jerked when he felt a finger tapping his shoulder. "The Monte player?" Chris asked, his expression strange.

Mike swallowed, nodded. The hot air in the streets was swept in torrents by the cars that buzzed past in a steady, uncaring stream. The changing lights only stopped the traffic after a fashion, and then the knot of people on the corners were able to cross, a patchwork of colored clothing and expressions. Mike ignored it all, looking at the cards that had been in his pocket as they shuffled about on the cardboard box top.

"...Fake you all out. My cards'll catch you all. You can put up twenty and maybe get forty back. Or forty'll get you a hundred." His laugh cut through Mike, drawing another shiver out of him.

"You all right, man?" Chris asked.

"Jesus, you'd think I was faking you out." Mike shook his head at what he'd just said. The voice sounded to him just like the black man's scratchy drawl. Chris didn't notice the similarity.

"What?"

"That's the same guy. But when he was near the station a while ago, a cop chased him away."

Chris didn't see his point. "So?"

"A cop chased him away, damn it! The guy took off without his cards. I was betting on him. I had the right one. Shit, Chris, I had my finger on the card and it was the right one. But the cop... the cop. I had the card!" Mike gestured furtively to the black man who had just scooped up the cards and a twenty dollar bill laying on a face up black card. The ace of clubs. He laughed and shuffled, ignoring Mike. "Holy shit," Chris wiped his hand over his face slowly. "Holy shit, you're lying."

"No!"

Chris looked at the black man and back at Mike. He opened his mouth to tell his brother he was lying again, but the look on Mike's face stopped him. He looked back at the black man. The man laughed again at a cursing woman.

"You gots to get the red one, not the black. Dere's two black, and sometimes dere's three of 'em. That's when I make the red one go away. Twenty will get you forty and forty will get you a hundred." He laughed, the sound of carelessness, a life of winning and never losing. Always winning. Chris took a step forward, reaching beneath his blue backpack into his Lee's, coming out with a wallet.

No, don't Mike felt himself wanting to shout, taking a small step forward and reaching out toward Chris' back. But he didn't say anything, didn't touch his brother. It was like letting himself touch the red coil on the stove, to let him find out for himself.

"Twenty will get you forthy." Chris held out the twenty dollar bill, putting his wallet into his front pocket. The black man began his switching. His hands were weaving a mystery, a cabalistic ritual that would cause blindness in his brother. Mike saw the red card as if it were face up, no matter where it went. The old man was looking about him, into the faces of all the people gathered around him. He chuckled when he looked at Mike.

"There," Chris pointed. That was where the red ace was supposed to be, Mike thought, to everyone else. But as soon as Chris cocked his finger over the card, Mike saw (felt?) the card's face switch with the one next to it. The black man laughed and flipped over an ace of spaces.

"Damn it!" Chris shouted, his hand instinctively reaching again toward his wallet. Mike knew that Chris was liable to play again and again, unwilling to be beaten. That's how he always was. "Aw now, you was suppos' to find the red. Got to get the red, the red." His hands wove their illusion, and Chris took out his wallet. The black man tossed the twenty into his pocket.

Mike stepped forward and touched Chris' shoulder. His brother wheeled around, his hand without the wallet cocked into a fist.

"What is it?"

"Don't. You can't win."

"Yeah, right? I saw what he did. He changed the card and only made it look like he switched it. I'll get him this time." Chris turned back to the black man. "Again," he said, he one word making Mike's stomach turn.

"This time the red. I fake you out. It goes away. I make it switch or go away until I pick it up. Then it's red." He demonstrated by picking up and showing around the ace of hearts. The color was dull, and there were spots where a bit of the red had been abraded off. He began switching again without missing stride. The people gathered about were silent; Monte players always managed to keep their crowd quiet by their non-stop pitch. But this old man didn't keep talking as he shuffled, neither did he always look at the cards when he moved them.

"That one!" Chris shouted, putting his finger this time on the card. But Mike saw it just go away that time, and when the black man laughed and picked it up, for a split second -- only to Mike's eyes -- it was blank, a white void that ate people's souls. Then it was the ace of clubs.

"It's gots to be red," the black man laughed.

"Sonofabitch!: Chris' hand went to his wallet again, his whole frame tensing, his hand fumbling with the unsureness of his outrage.

"Just forget it, Chris." Mike pleaded. His brother shrugged his hand off of his shoulder.

"Don't touch me, man. Just don't. I know where you live; you go ahead and I'll catch up with a hundred dollars. You goddamn well see if I don't have a hundred more than I started with. Chris smiled down at his wallet -- a humorless pull back of his lips -- and pulled two twenties.

"Forty'll get you a hundred," the black man agreed.

The crowd bristled at the two brothers. "Don't do it, Chris. You won't win." Mike spread his arms, but it was pointless.

"Mind your own business, Mike. I'm warning you."

"Hey, why don't you let the kid play," one of the people in the crowd said.

Mike bit off a sharp retort. This was going bad, and that black man was having a ball. It was him and those cards. Something was making Chris go wacky. Mike wondered for a moment if he was going crazy, too. But the evidence of the cards in his pocket, the way he felt when he had touched one of the cards, that they were gone --

"What if I put up fifty?" Mike asked, shouldering in front of his brother.

"Hey!" Chris said. He was about to push Mike out of the way, but the black man stopped him by saying in a quiet voice, "I don't do this with people pushin' each other. Let you' brother go, then you can go again if that's what you want." The smile was still there, and the black man looked about him before he looked back at Mike. Chris stood behind him, his hand still holding the wallet and the forty dollars.

"Let's get this over with," Mike said, his voice also quiet, but strained with fear.

"You put up fifty an' I'll give you a hunnerd an' fifty." He bent close to Mike and winked. "I'll let you keep the cards this time," he whispered. Mike recoiled at the reek in the black man's breath. Like a coffin opening to accept another body, not yet rotted.

Mike took out his wallet again and withdrew three tens and a twenty. He had a five and a few singles left. He held the money up.

"You gets to get the red, boy," the black man laughed. He switched the cards, switched the cards. "The red, no matter where she go. You got to bring it back and you can have her. The red's your ticket, boy." He kept switching and reswitching, and Mike felt his stomach reel, threatening to spill the cereal he had for breakfast. Instead of looking at the cards, he looked into the black man's eyes. The people around him muttered.

Mike saw the cards in the black man's eyes, but the dealer wasn't looking at the cards he was shuffling, he was looking into Mike. Why me? Mike asked in silent demand at the eyes. They showed the red one moving on the cardboard, moving in a vast emptiness, always moving. Then it slowed and came to a halt like the wheel of fortune hitching to a stop on Fate. Your answer is there, the eyes said to him. Take the card.

In the hot street, on the corner of Fifth and Fourteenth, Mike reached out without looking down and picked up a card. He flipped it over. It was the ace of hearts.

A car swerved through the light, careening wildly in the intersection, gaining speed. It headed straight for the group standing around the black Monte player in rags and the boy who stood across from him, his hand holding up the ace of hearts for all to see. The driver's head lolled on a rubber neck, his hands were sliding in his lap, his eyes were open and sightless. Beads of blood unseen trickled from his ears. The car was black death, a Galaxie.

As if in a trance, Mike rotated his arm up and out, so that the card was between the black man's gaze and his own. He saw the ace of hearts on the card, and then he saw a black car moving like an arrow to pierce the heart, coming from the left and then traveling through, making bloody tracks on the white surface at the other end. It was heading for him.

Still wooden, he pushed away from the group, knocking Chris backward, away from the corner. The car bumped up the curb, and that's when the rest of the crowd noticed. They flung away from its course, some too late. The momentum of the Black Galaxie took it through the crowd, through the boxes where the cards and the black man had been, and over the other curb. There were screams and the crash and tinkle of metal on metal and glass breaking. The car came to rest, buried in the front bumper of a taxi cab. The driver of the cab was hurled through the side window, and he bounced off of a Volkswagen Bug in the next lane with a sickening thud. The passengers in the back seat of the taxi were buffeted into each other. A horn was stuck, whining over the people's moans and cries.

In the confusion, a black figure swept past Mike, thrusting three cards and several bills into his shocked and numb hands. Chris had been knocked over by Mike's advance, and did not see the exchange.

The black man had moved his face close to Mike's an instant before he whisked away and winked, "It's yo' show now, boy." And was gone. Mike saw his own heart trapped in a piece of plastic laminated paper, and he knew the full name of blind malignant fate; the dealer had no choice but to deal -- the game didn't matter.

The newspapers and news stations featured it as top story feature. The driver of the black Galaxie had suffered a cerebral hemorrhage and died nearly instantly, somewhere between Twelfth and Fourteenth. His vehicle swerved out of control and ran through a crowd of people who were playing a game of Monte. Three were killed, including the unidentified dealer, and five were injured. Plenty of witnesses were on the scene --

But not Chris or Mike. Mike had hustled his younger brother from the scene, tears running from his eyes.

They sat at one of the chess tables in Washington Square Park, Chris shaking his head and saying nothing, Mike whispering over and over again what had happened.

"All right, will you knock it off already. I'm scared shitless as it is." Chris took out a comb and ran it through his short hair several times, grimacing when he passed it with a yank through a knot.

"Now I'm lost." Mike produced the cards, face down, as if they were always there. He pointed to one, flipped it. A bright red ace of hearts. He flipped it back over. Switched it slowly, without rush, with another card next to it. "Which one is the red?"

"Jesus, Mike, you got his cards?"

"Which one is the red?"

"But I saw you mix them," Chris protested.

"Which one is the red?"

"That one, goddam it! That one." Chris flipped the card over that had been red. It was the ace of spades. "No oh no oh no." A Puerto Rican walked by whispering "Smoke, smoke, coke, hashish..."

Mike felt the urge to belly-laugh rise in him, but he managed to keep it down. A troupe of street performers practiced their break dancing near the Arches, and a pair of old men played chess by the clock several boards away. Pigeons shitted on the statues, the sidewalks, the Arch.

"What the hell happened?" Chris asked, looking up at his brother.

"No one knew. I saw it. I knew wherever the red went, I followed it. And now it's got me." Mike picked up the card next to the one Chris had chosen. The bright red ace of Hearts.

"Man, couldn't you tear it up or something?" Chris reached out to take it, but Mike pulled it away, startled out of his dulled state.

"No! Jesus, Chris, this card is my heart. Before the black man went away," Mike gulped. "Before he went and laid down and turned to blood and pulp behind a wheel of the car, he gave them to me. I felt his heart go and mine take its place.

"Can't you see how bright this one is?" The card looked new.

"That's crazy," Chris hissed, holding onto the blue pack next to his as if it were a lover consoling him.

"So was the rest of it." Mike collected the cards. "I don't know what I'm going to do."

"Let's go get some coffee or something. We'll figure it out somehow."

#

Mike flunked out of school.

He studied his eyes bleary every night, practiced his acting in front of friends, his other teachers, in front of a mirror. He was satisfied. In front of class, he blanked. The three cards he always carried around with him, wrapped in plastic from a sandwich he had bought a while back, seemed to burn. Mike flunked out of school.

He called his brother. But there was nothing to do. The line went dead in his hand.

His scholarships gave out, and his rent was due. He was evicted. His key no longer fit the lock. The landlord wanted three hundred dollars. He was almost broke. He tried to call his parents, but the lines were either busy or dead.

He couldn't get a train or a bus or a subway toward home, no matter what he tried. The doors would close when he wanted to get on, and the bus, subway, or train would go away. No taxis stopped for him. No one would lend him money. He lost his friends. The cards burned in his pocket.

He threw them out. The cards burned in his pocket. He tore them to shreds, not caring what would happen. He threw them into a puddle and tried to hitchhike home. No one would pick him up. The cards burned in his pocket.

He cried in the darkness, walking ignored among bums and bagladies, his clothing becoming ragged, holes appearing in his sneakers.

He tried to throw himself in front of a subway train. He tripped on an unseen foot and fell before he reached the edge.

He tried pills.

He tried a piece of glass on his wrist.

He tried Jesus. The cards burned in his pocket.

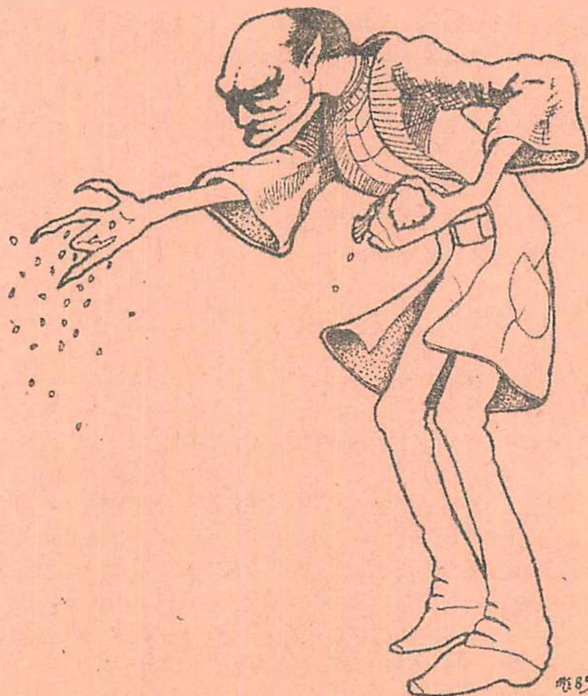
The weather was becoming cooler. When Mike tried to walk out of the city, he found that he couldn't go past any of the bridges that led to the Island. It felt as if a force field was stopping him. No matter how much he tried to pass, it was a wall. The cards burned in his pocket. No one he used to know recognized him. When he thought he saw his brother one time, he tripped before he could reach him, and Chris (he was sure it was Chris) had stepped in the train and was gone.

Mike wanted the laugh to come, wanted to make the red do what he wanted. No. No! Mike cried in one of the Penn Station bathrooms until a policeman threw him out, calling him a bum. In the mirror, Mike was.

He found a garbage can on Avenue of the Americas. He was so hungry, so tired. He found a shred of cardboard nearby. Without hurry, with the resignation of a man sworn to a slow death, Mike set up his altar and prayed to his god.

"I'll fake you out. The idea is to get the red. Once you get the red, you're home free." A couple of people stopped to watch. One put up a twenty after a while. Mike pocketed the money, and a laugh ripped out of his body, alien to him, but the beginnings of a familiar sound. "Twenty'll get you forty, forty'll get you a hundred." He didn't have the money to cover the bet, but he didn't care.

He was looking a little darker and was laughing a lot when the snow fell.



IN THE FRINGE

By Joe Rico .

Not too long ago, I received a very rude shock; someone, in all seriousness, characterized me as being "eccentric". Eccentric? Me?! Was he serious in suggesting that just because I went to SF conventions, read "that stuff", and journeyed forty miles or more three times a month to NESFA functions, people considered me, well, not "normal". It was then I realized that I had made it into fandom. I had crossed a line that fixes the boundary between fandom and the mundane world more surely than the first time one attends a con, writes an apazine, becomes a club member, or actually starts to write a science fiction story with an eye to getting it published. I had been classified by the mundane as one of "them".

For most of you that experience came sooner in your life. I can't imagine what it would be like to become a fan in one's adolescence. Perhaps being younger would have made the acceptance of a new way of life easier; or perhaps rejection, even ostracism, would have been more sensitively felt by a youth. In any event, it has happened to me. "They" not only think I'm different but "they" feel strongly enough to say so to my face.

That's all right. To "us", "they" are strange, the outsiders, the different. "We" are understanding, non-judgmental, and willing to embrace all of "us".

Aren't we? Or do we too have our own levels of acceptance, respectability; our own definition of deviant behavior in fandom?

"Deviant behavior". Just hearing that term raises hackles in many people. In today's pluralistic society, to classify someone or some behavior as "deviant" is considered to be unacceptable (or deviant) behavior. The reason for this is that we have associated the term "deviant" with the making of a negative moral judgment. Stripped of our emotional reaction, however, the term deviant behavior simply means that behavior deviates from the normal accepted standards.

To say that there is deviant behavior in fandom, then, is to imply two things: there is a norm in fandom and there are people who are concerned with the maintenance of the norm. These implications seem anathema to fandom. Fen are known for their toleration of some truly bizarre behavior.

"You want to have an orgy? Don't start without me."

"You're gay. I'm a computer programmer myself."

"You worship Diana and I'll worship Roscoe."

Indeed one person once defined fandom as a society which is only intolerant of the mundane. If that statement was ever true (and I doubt that it was), it is certainly not true today.

The growth of fandom has been accompanied by a proliferation of fringe fandoms such as gaming, films, trek, filkers, and even "Battlestar Galactica" fandom. Going from a small town-like society, fandom is becoming a sprawling city with its own ghettos and jealous neighborhoods. This development saddens those who once knew the joys of 200-person Boskones, and the camaraderie of being on a first-name basis with everyone in fandom. Sadness often gives way to anger and therefore to acts of revenge. This is a natural and human reaction. But the quandary of the outraged trufan is that they cannot bar persons from fandom without violating the basic ethic of toleration that makes fandom fandom.

Therefore the trufen's reaction to the invading hordes has been masked, repressed if you will, by this constraint.

For this reason, there will never be any list of those to be barred from conventions. Instead, there will be attempts to bar behavior from conventions, deviant behaviors, of course. Weapons will be excluded in the hope that the turkeys wielding swords in the corridors will stay away. Films will be trimmed down to keep the media freaks away. The wearing of hall costumes will be discouraged to make the costume fans know that they are not welcome.

The trufen have also sniped at the horde by defining "them" as not part of "us". The more proper definition of SF fan now is dependent on actions (such as writing for or at least subscribing to a fanzine) that require more initiative than simply showing up and shelling out lucre. Most disturbing is the practice among some to judge the fannishness of a person by his length of experience in fandom. Sometimes this is done explicitly ("if you weren't a fan when Chalker was a fan, you aren't a fan"), with the Keepers of Fandom's Right Stuff stating a line of demarcation which they of course are safely over. Usually, this judgment is made implicitly; the look of disgust upon hearing of the neo's wry comments about calling in an air strike to clear the film room, etc. Of course, the result of this line of reasoning is that all neofans are assumed to be fringe fans and are therefore treated as such. This is a great disservice to the neofan.

Put yourself in the neofan's place for a moment. STOP! Not the neofan that you were, but the neofan of today whose exposure to the genre might well have been through the filmed media and who may have heard about the con through a source as mundane as a newspaper. You were totally unprepared for your first con, and the amount of things happening were overloading your senses. You want to know what's going on; you want to belong but you don't know how. Who can you turn to?

Trufen can't be bothered with you. You're a neo; to them that says it all. Come back in a few years when you get a staff ribbon and we may deign to note your presence. You get the idea that these people with the committee ribbons are a close-knit group, too busy or too stuck up to talk with the likes of you.

Your conception of fandom is dim at best. You think that the convention is run by some company that is making lots of profit from its activity. The staff and the committee must be paid employees. The Dealers' Room is full of people making thousands of dollars profit and the film industry is paying for the right to promote its offerings. The "real fans" from your viewpoint are the guys who spend their time in the film room and the game room, i.e., the consumers of the service.

Trufen are losing to the fringe fan the fight to integrate the neofan into the mainstream of con activity. (In fact, it can be argued that the trufen are deliberately losing this contest by default.) The fringe fans are extrovert in the extreme at cons. They will gladly show off their costumes, comics, weapons, etc., to the neo. They will talk to and, even more importantly, with the neofan. The neo learns that to win acceptance in the fringe it is only necessary to wear a costume, sit in the film room for ten hours at a stretch, and play D & D.

And acceptance is something that the neo wants. If he spends even as little time in fandom as one con a year, he will want to have some type of "base" in fandom. It is this need that will drive him into the fringe.

Once in the fringe, the neo is identified as deviant by the mainstream fan and is therefore shunned. There is no attempt to convert him back. No one goes up to him and recommends a good zine to read or invites him on a dinner

expedition. Once in the fringe the neo is trapped. In this manner the "we" that was once fandom became the "us" and "them".

What to do about this? There would appear to be three possible avenues of actions to deal with the fringe fandom.

I. Get rid of them. Cut out the film program. No game room at cons. No masquerade. Program items reduced in number and confined to the mainstream. In effect, turn the clock back twenty years. Conventions will become smaller. Fanac will become less convention-oriented.

This solution looks possible. If it were implemented overnight, I would imagine that the average con would soon be reduced to around five hundred attendees; Worldcons would shrink to around two thousand. (Yes, I think cons would still be that large because the trufen numbers have also grown, albeit not so much as the fringe.) However, this solution will never be implemented.

The numbers of the con attendees have had a narcotic effect on con committees. In part, our addiction is monetary. At first, large surpluses from a convention were a welcome surprise; today, clubs that put on conventions are beginning to count on the surplus as the major fund-raising project of their fiscal year. (Certainly, this is true with NESFA and Boskone.)

We are also hooked on the big cons because of our need for status. After someone has run a four-minute mile, on one will be satisfied with running a five-minute mile. No member of a Boskone committee will want to be working on the first one not to break the attendance record. Let's face it. We moan about these big numbers but we also consider them our trophies; they are our goals. We are not going back to the small town after being the mayors of the big city.

II. Ignore the problem and do nothing. This line of reasoning goes like this. We are having our own convention and a good time. The neos are having their own convention and a good time. Never mind them. We take their money and throw them some program items and forget them.

This is what we are doing today and I can't knock it entirely. The record shows that conventions are still the gathering place of trufen; they have not yet deserted cons for fanzines. One could argue that fandom as a whole is richer for the diversity that the fringe brings. But though I do not doubt that special interests have a place in fandom, there are times that I am saddened by the volume of neofans who have chosen to enter the fringe.

One of the most poignant moments in fandom this year came at Boskone XXII. There NESFA awarded its annual Skylark award (for significant contributions to science fiction) to Jack Williamson. Jack was not at Boskone due to the recent death of his wife. Therefore, Gene Wolfe accepted the award from presenter Hal Clement, both of whom gave emotional speeches. Next door to the hall where the awards were given was the film room; a cartoon was being shown. About a hundred fans attended the award ceremony. Bugs Bunny had a standing-room-only audience.

III. We could try to integrate the masses into the mainstream. In fact, we are trying that now. When we make certain that one program item is given little competition at a con, we are trying to focus attention on it. When we bar weapons from all but the masquerade, we are trying to get people to accept them only as props for costumes (the original idea). A standard program item should be a "This IS Your First Con" event and panel to aid neofans in enjoying not just the convention but fandom. An introduction-to-fandom pamphlet is another good idea to bring neos into the mainstream.

The main thing which we all could do is to have a change of attitude towards the neofan. Start thinking of him as a future trufan rather than as a future fringe fan. This is going to mean, if not active acceptance, then at least the end of active disgust. This will be the hardest thing for many fans to do because of who they are and what fandom is.

You see, fandom is a deviant subculture and all fen are deviants. Before you gather the rocks for my stoning, remember how I defined "deviants". Deviants are those who do not conform to the norm of a culture. They are not necessarily evil, immoral, or even particularly strange. No one could possibly argue that fen conform to the norm.

All deviant subcultures have some features in common. They tend to develop their own jargon. They tend to develop counter-norms in dress and behavior, which make their contrast with the mainstream of society even greater. Deviants become insular. At first they avoid others because they fear rejection. After a while, they tend to stay with their own kind out of preference. Differences with the mainstream become celebrated by the deviant. The deviant begins to feel superior to the mainstream members (or mundanes). With this feeling of superiority comes the belief that the deviant did not become different but was in fact born different (or superior). Read any autobiography of a deviant and he will almost certainly begin by telling how even at a tender age he knew he was different.

What does this have to do with trufen talking with neos? Well, if fen are born and not made, then the implication is that no amount of indoctrination will help someone become a fan. Therefore, our deviant subculture has a tendency to refrain from active recruiting.

I believe there is some truth in the idea that you have to be born with a certain mindset to become a fan. (Of course I do, I was born with it, wasn't I?) However, I do not think that all the potential fen have found fandom. How many times have you said, "If only we could get so and so to a con, then he would become a fan"? I take that point one step further; I don't feel that just getting a potential fan to a con is enough. The conventions have become far too big for a neo to find fandom in them. We need to take some active measures to attract them.

I do not propose sweeping reforms. I do not pretend to have a plan of action to address the problem of the growing fringe. A change of attitude on the part of fandom would be the most effective measure that could be implemented. Of course, this is the one thing that is difficult to effect and quite impossible to legislate.

PROCYON'S PROMISE, by Michael McCollum (Del Rey/Ballantine)

Reviewed by Joe Rico

Procyon's Promise is the sequel to Life Probe (Del Rey, 1983), Michael McCollum's novel of an automated but intelligent alien probe's visit to our own solar system. Life Probe was sent out by the Makers, an ancient race, who over the course of several million years of high-tech civilization were on the verge of exhausting their own solar system's resources. They needed Faster-Than-Light travel to bring in new resources, but their own science seemed incapable of solving the problem of FTL. Therefore, the life probes were sent out to the distant reaches of the cosmos with an offer to trade the Makers' knowledge to any intelligent race that will promise to aid the Makers in discovering FTL.

This premise seems reasonable at first glance, but after some thought, I found McCollum's Makers to be rather foolish aliens. First of all, why trade information by slower-than-light ships at all when electromagnetic radiation travels at light speed? Second, though a race that is as old as the Makers has a logical economic reason for wanting natural resources from another system, why do they need FTL travel? After all, a race that can foresee shortages hundreds of thousands of years in the future can afford to haul resources at a below-C-rate.

Bearing in mind that I am an old-fashioned reader who considers the idea as the real hero of any SF tale, I still enjoyed both Life Probe and Procyon's Promise despite the holes I found in the premise. Why? Because McCollum is that good a wordsmith. His stories are excellently paced; the pages seem to turn by themselves. His descriptions and character development are a cut above most of the field.

Procyon's Promise deals with the return to Earth of the descendents of a group of explorers who took a damaged Probe's computer on a slower-than-light expedition to Procyon, where the Probe had detected evidence of an FTL ship. (Probe had stopped at Earth primarily for fuel and to aid in a course change.) Probe and its human helpers found the base of the Star Travelers at Procyon, but it was deserted. Nonetheless, using information left behind by the Star Travelers, they constructed an FTL starship. Now they have returned to Earth for aid in building a fleet of starships to find the Makers and fulfill Earth's end of the deal.

Earth's reluctance to fulfill the Promise, the clash of the hedonistic Earth culture with the Frontier Explorers' culture, and the eventual quest for the Makers form the basis of Procyon's Promise. Again, I question some of McCollum's logic; it is extremely doubtful that Earth in the 25th century is going to be paranoid about being discovered by B.E.M.s when every race within 500 light years of us will have heard our radio signals by then. I also wish more attention had been paid to the cultural clash as symbolized by the relationship between Chryse Haller and Robert Braedon. But the book provided me with an entertaining read and I do recommend it to any lover of hard SF.

EON, by Greg Bear. (Bluejay Books, \$16.95, August 1985)

Reviewed by Jim Mann

Greg Bear has quietly but steadily been establishing himself as one of the best writers in SF and fantasy today. He has now written nearly ten books, some of them outstanding, and has won the Hugo and Nebula Awards (for his short works "Blood Music" and "Hardfought"). His *THE INFINITY CONCERTO*, published last year, was one of the best and most original fantasy novels in several years. *BLOODMUSIC*, published earlier this year, should be a contender for Hugo and Nebula awards. His latest, *EON*, should firmly establish him as one of our best.

EON is a rich, involved novel, that works well in a number of ways. Early in the twenty-first century, a large asteroid is detected approaching earth orbit. On closer examination, it turns out not to be just an asteroid, but a modified one: an asteroid that has been hollowed out and turned into a space ship. Those who enter the asteroid discover something even more surprising: it was modified by human beings several centuries in the future.

This is only the beginning. Although it now seems to be empty, the asteroid contains libraries that document the nuclear war that almost destroyed mankind -- several months in the future for the characters. It also contains a corridor leading from one of the chambers seemingly to infinity. This strange distortion of space time is the reason one of the main characters -- Patricia Vasquez -- is brought to the Stone, as the asteroid comes to be called.

As I noted above, the novel works well in a number of ways. Part of it is a superb thriller, as the characters try to prevent a nuclear war amidst political intrigue. The situation is further complicated when the Russians try to take over because the Americans won't allow them access to the libraries. Other parts contain very believable pictures of a human race with super technology. The society (a future version of the Naderite/Geshel society in Bear's "The Wind from a Burning Woman"), is well done and more believable than the similar types of societies John Varley has included in his books. The well-integrated technology itself ranges from the vehicles which travel along the singularity that stretches down the corridor (the singularity produces a tangential force component), to genetics that enable people to take what shape they want, and to computer technology (some people are not corporal, but rather are stored in data banks. They can still, however, interact with other characters).

Yet, despite all the marvels, Bear also makes *EON* a human story. The characters are believable and interesting. Although personally dwarfed by the incredible technology, they are not lost to the reader. Even the people from the Stone, the descendents of the current day humans, are human; though often inscrutable, they remain accessible to the reader. Overall, *EON* is a marvelous novel. It should be a strong contender for next year's major awards.

A PLIOCENE COMPANION, by Julian May

Reviewed by Priscilla Pollner

A guide to May's four novels of the Pliocene (The Many-Colored Land, The Golden Torc, The Nonborn King, and The Adversary) is (basically) what this is being billed as. In fact, it seemed to be more concerned with aspects of a thus-far unpublished series (of the future -- actually an important part of the Pliocene books too). May herself seems to be prefer this future series, which leads to my uneasiness about A "Pliocene" Companion. Ah, well -- I really do prefer the Pleistocene

Seriously, I found this book to be generally interesting, even though it seemed to be padded out with several (overlapping) interviews, maps (better ones can be found in the books themselves), and (basically) author's notes. Overall, it was a potentially useful volume, especially if you really liked the "Pliocene Saga," and are looking forward to the next (future) episodes.

With Malice to All and Charity to None

Reviews by Rick Katze

Frank Frazetta: Book Five edited by Betty Ballantine. A Peacock Press/Bantam. Book. June, 1985. \$12.95. There are 86 pages of pictures, half of which are in color, covering the years 1976-84 with a few exceptions. Except for the fact that the book was published in June, one would think that it was aimed at the Christmas gift market.

The Proteus Operation by James P. Hogan. A Bantam Spectra Book. October 1985. \$16.95. 416 pages. In 1974 President John F. Kennedy authorizes a time travel operation. The US is beset by enemies everywhere. Nazi Germany controls most of the world having defeated England in 1940 and having destroyed Russia several years later with atomic weapons. South America has gone "Fascist". The team "lands" in 1939 where they meet Winston Churchill, Albert Einstein and others. The rest is history. This may be Hogan's best book. It is tightly written, quite logical in its development, and very entertaining. Instead of spending many pages attempting to justify the scientific theory or theories as he has done in previous works, he has concentrated on the story and the result justifies the decision. I understand that this is the book which Del Rey refused to buy. Unless Hogan did a massive rewrite, I don't understand their decision. HIGHLY RECOMMENDED.

Young Adults by Daniel M. Pinkwater. A Tor Book. November, 1985. Price Unknown. 222 pages. I was sent an uncorrected proof for reading. While I have heard people discuss Pinkwater, I had never read any of his works. YOU SHOULD BUY THIS BOOK. Pinkwater is outrageous, funny, strange, weird, and, most definitely, ENJOYABLE. I am not sure that I can even describe this book. Pinkwater lives in his own little world where "Charles the Cat", the "Wild Dada Ducks", and "Kevin Shapiro, Boy Orphan" make sense. You should also locate his other books which are in the Young Adult section of your library.

On a negative note, even now, two years after White Gold Wielder by Stephen R. Donaldson was published, I find that I cannot review it because I have been unable to read it. The characters are depressing and repugnant, the story line is slow and uneven, and yet, the books do sell. If you liked the other books in the series, you will most likely like this one.

Other Fen, Other Clubs

This is what I hope will be a continuing column, highlighting the Affiliate members of NESFA (i.e., the clubs who trade their zines for Instant Message). In this column we learn what the Holmdel S.F. Discussion Group is: an intricate part in the Master Plan of Corporate America to subvert Fandom via E-mail.

Science Fiction at AT&T

An article by
Mark R. Leeper

Science fiction at AT&T? It seems like a natural, doesn't it? AT&T are the people who build those impressive bulbous buildings at World's Fairs and places like the Epcot Center. Bell Laboratories has a reputation for being the starting point of the future with the invention of nice little gizmos like the transistor and the laser and discoveries like the background radiation from the Big Bang. Well, in 1978 when Mark and Evelyn Leeper (your humble authors) came to Bell Labs, science fiction activity was a handful of people who shared a subscription to the Science Fiction Book Club and traded off books. It wasn't that there was a lack of interest, but nobody wanted to take on the awesome responsibility of organizing a club for AT&T employees. It was something of a struggle to find ten people to say they were interested.

Today the "Holmdel-Lincroft Science Fiction Club" is, as far as we know, the largest science fiction society in New Jersey (please hold your applause till the end) with over 160 members. Sponsored by AT&T, through good times and divestiture, as an unadvertized fringe benefit for its employees (AT&T, incidentally, contributes only money and space -- they take no responsibility for the actions of the Science Fiction Club, just as the Club takes no responsibility for the actions of AT&T -- it's a comfortable relationship), the Club has members at 19 AT&T locations and activities at two (Holmdel and Lincroft, New Jersey). At each location there is an active science fiction lending library packed into whatever spare office space we can muster. There are also tri-weekly meetings, typically to discuss a book chosen at a previous meeting, but we also show videotapes, sponsor book exchange, listen to radio recordings, and generally do what we can to keep out of mischief over lunch hour.

The binding thread of the Club is the weekly science fiction notice, which features slanted editorials, more slanted book and film reviews by members, tidbits of juicy gossip gleaned from members attending science fiction conventions, arguments between members, and reprints of articles of science fiction interest from an electronic bulletin board. AT&T employees wishing to be absorbed into this organism may do so by sending their name, company mailing address, electronic mail address (if you wish to receive the Notice electronically) and phone number to Mark Leeper, HO 1E-412 (electronic address: ihnp4!mtgzz!leeper).

"It Even Beats Fifth-Order Rays":
a look at Reagan's Star Wars

by, Mark M. Keller

ANDERSON, Poul. "Star Peace?": Viewpoint. IASFM, September 1985.

ASIMOV, Isaac. "Star Wars!": Editorial. IASFM, September 1985.

BOVA, Ben. Assured Survival: Putting the Star Wars defense in perspective.
(Houghton-Mifflin, 1984).

FORD, Daniel. The Button: The Pentagon's strategic command and control system.
(S & S, 1985).

FRANKLIN, H. Bruce. "Don't Worry, It's Only Science Fiction." IASFM,
Mid-December 1984.

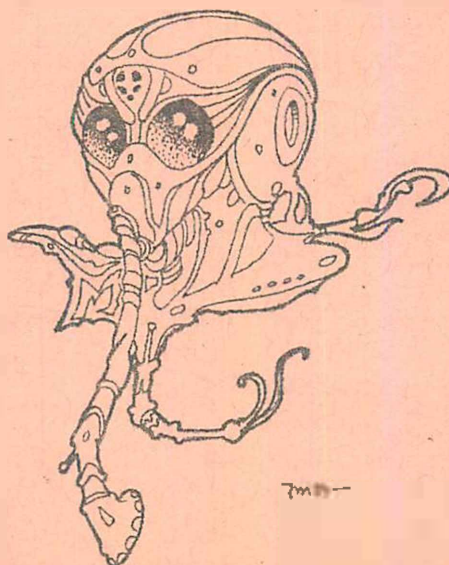
GRAHAM, Gen'l. Daniel O. High Frontier. (Tor, 1983).

HECHT, Jeff. Beam Weapons: The next arms race. (Plenum, 1984).

POURNELLE, Dr. Jerry E., PhD. and INC, Dean. Mutual Assured Survival. (Baen, 1984).

TSIPIS, Kosta. Arsenal: Understanding weapons in the nuclear age. (S & S, 1984).

UNION OF CONCERNED SCIENTISTS. The Fallacy of Star Wars. (Vintage, 1984).



DOME OVER AMERICA

The perfect defensive shield, a force dome covering all of North America fifty miles up so that incoming missiles and occasional meteors just bounce off: yes, it is a standard s-f pulp device. Plain old Fortress America wears out pretty fast as a plot, so the authors try to find something else to do with the idea. Thus, James Blish used "The Box", an impenetrable shield over Manhattan, as an enemy weapon rather than a friendly defense; Verner Vinge had the widespread use of force bubbles cause the collapse of Western civilization in Peace War. But it is (so far) just fantasy.

Those of us who live on the real Earth of 1985 realize there is not now any device to block incoming missiles if they are launched, that we are in truth open to attack from the sky at any moment. Most face this terrible fact by ignoring it and acting as though the Mutual Assured Destruction atom bombs don't exist ... or what amounts to the same thing: saying that our leaders in Washington must know what they're doing so the bombs will never be used. A small minority worries about it and makes plans to insure personal safety by moving out to some isolated rural hideaway far from the fallout zones and the inevitable horde of city refugees. A slightly larger minority sees personal survival as mere selfishness and wants to increase the survival chances of all humanity by making sure the weapons are never used, eliminating them. And in the past decade we have a third group that seeks not a social or political solution to the threat of atomic war, but a technical one. It's the ultimate technical fix: a gimmick that will render the atom bomb useless as a weapon and so return us to the world of 1940.

We have books like Graham's High Frontier, which is about how to build a quick missile-killing system of space stations using off-the-shelf 1980s equipment. We have Pournelle & Ing's Mutual Assured Survival, which compiles the findings of a Citizen's Committee on Space which was assembled to find evidence that maybe beam weapons in orbit could kill incoming missiles. To nobody's surprise, they found the evidence they were looking for. All of these describe the fear that hangs over Earth from the danger of nuclear missiles ... well, more accurately, describes the fear that comes from Russian missiles. Neither Pournelle nor Graham shows any slightest worry that American missiles, or British or French, might somehow menace the existence of humanity by (for example) an accidental launch that triggers World War Three. It's the Russians we have to worry about. And now, just maybe, new techniques will allow America to build that imaginary "dome" to block Russian missiles and in the process get a start on the colonization of space as a bonus.

There are variants of this. Bova, for example, suggests that such a missile-killing system could be international, set up in orbit under United Nations auspices to block the missiles of any side that tries to start nuclear war. Certainly the Pentagon might be starting to take the idea seriously, now that President Reagan has made the March 1983 speech urging the development of a space-based missile stopping shield: what the P.R. flacks dubbed the Strategic Defense Initiative, but which quickly became widely known as the Star Wars Defense.

Would it be a safer world than our current Mutual Assured Destruction world where there are over 30,000 nukes ready to go?

FROM MASSIVE RETALIATION TO M.A.D.

Pournelle and Graham and their followers agree that the concept of Mutual Assured Destruction is a dangerous and unstable one. Oddly enough, this is also the feeling of almost all the anti-nuclear and anti-war groups in the West: North America, Europe, Australasia. How to get out of the bind ... that is where the disagreements

come in. People from SANE and Physicians for Social Responsibility regard the planners of nuclear war strategies as dangerous dreamers who have no grasp of the suffering their projects are bound to cause; it must be possible to take control out of the hands of the technocrats and give it to a more widely based popular movement. This will in turn work out ways to reduce the arsenals, use less engineering skill and more social awareness to build down the arms depots.

Fans of High Frontier or M.A.S. do not feel this way at all. They like high tech, and want to keep power in the hands of the engineers and technocrats: the right ones, of course. Those popular masses, the more widely based popular movement ... they can have nothing worthwhile to say on the topic. How could they say anything worthwhile when many of them don't even know BASIC, let alone calculus? No, leave the power with the engineers, who will build a perfect shield over our country and trap the Reds with no way to attack us. It is not the method that is wrong, just the ways in which it has been used. Maybe the marchers in the street want to abolish the military, but what the High Frontier people want is to make the military do the plan right, a very different proposal. The anti-nuclear marchers say we have to learn to live with the Russians; the Pournelle group says, get the shield in place and you won't have to care what the Russians think.

The peace movement worries about changing the intentions of the rulers in the Kremlin, and in the White House, too. The Graham fans, or the Pournelle & Ing fans, do not care much about the intentions of the Kremlin, but about the capabilities of the Red Air Force. Assume the Reds hate us and want to kill us; how much capacity do they have to do that? How can we stop the worst blow they could swing at us? This is closer to the "pessimistic realism" of the career military officer: always expect the worst from your enemy.

Notice two things. First, Pournelle and Graham have no fears that there is any danger from the US side, just from the Kremlin. They assume that Reagan is the good guy, that he would never start a war with nukes because he is, after all, someone raised in the "Judeo-Christian tradition" of "Western Civilization" and so just wouldn't do such a thing. The admiration is mutual: the back of Graham's book displays a letter from Reagan to Graham dated June 1983 saying "God Bless You". That's okay, since Graham dedicates his book to R. Reagan in honor of the famous Star Wars speech of March 1983.

So, according to Pournelle or Graham, the attitude of Gorbachov must be changed (from aggression to fear or at least respect) but the attitude of Reagan doesn't have to be changed at all, since it is just fine the way it is now. On the other hand, the Peace Movement wants to make major changes in the attitude of both Gorbachov and Reagan. Failing that, it should be possible to get them out of office, or at least neutralize their influence ... a different program entirely.

Second, notice the strictly "hardware" orientation of the Pournelle and Graham approach. What people think or desire doesn't matter, if you have technical superiority over them; you can make them do what you want. To quote former White House aide Chuck Colson, "Never mind winning the hearts and minds of the people. Grab 'em by the balls and their hearts and minds will follow." (You remember Colson, don't you? Hatchet man for Richard Nixon, he claimed he'd stomp his grandmother if RMN asked it of him. Came Watergate and a long jail term for Chuck. He then changed his tune, became a loud born-again Christian, and is now doing his lying strictly for Christ.)

If both the anti-nuclear peace activists and the high-tech Star Wars fans hate the concept of "mutual assured destruction", it must be pretty bad. Where did it come from, in the first place?

We have to go back to the early 1960's for that one. M.A.D. did not emerge from a theoretical study; rather, it evolved step by step out of unsolvable conflicts. During the Eisenhower years 1955-1960 the Pentagon had no special theory of how to fight a nuclear stalemate. The idea was to handle a nuclear war just like World War Two or Korea had been handled; go in and take territory until the enemy sues for peace or knuckles under. Fission-fusion weapons were just bigger versions of World War Two blockbusters. The fleets of strategic bombers would take off from America, drop their ordnance on Russia, and then fly back home to load up again. Meanwhile, U.S. interceptor planes would keep the Russians from dropping bombs on our military bases or cities. Maybe some Russians would get through and there'd be some bomb damage in America, but hell, there was always damage in war.

So the Pentagon set up plans under the philosophy (sic) of "massive retaliation", often enunciated in the 1950's by Secretary of State John Foster Dulles. This proclaimed that if any country angered the United States too much, invaded our allies or kidnapped our citizens, we would hit them with a full-scale nuclear attack, nothing held back, everything we had. This tied in with another Dulles concept, "brinkmanship": That is, walking along the edge of the abyss of full nuclear exchange to prove that the U.S. was tough and daring. It was a gigantic game of "chicken" in which so far nobody had called the bluff.

When Robert MacNamara came in as Secretary of Defense under John Kennedy in 1961, he asked to see the Pentagon war plans. What they had to show him was just the "massive retaliation" lists, stuff like Operation Dropshot, which was a design for a 1957 SAC first strike against the USSR if Russian troops moved into Germany. Every A-bomb and H-bomb in the American arsenal was assigned to a particular target in Russia or China. And what of the aftermath? How badly would Western Europe or North America be damaged in the process? That was not something the Pentagon planners had really worked on; not their department.

"This isn't a war plan, this is a 24-hour spasm", MacNamara is supposed to have said. He wanted to make things more explicit.

His idea was to say to the Russians: "You don't trust our word and we don't trust yours either. So let's just look at the cold facts. Attack us and we will respond with enough nuclear force to destroy your country; an attack would result in your destruction. No way you could stop enough of our bombers to prevent the annihilation of Russia. It works the other way too. We would not use A-bombs on you first, but even if you don't believe that, you don't have to trust us. Your bombers could destroy the United States if we started a war, as ours could destroy you if you started one. Rational self-interest will tell you the best way to survive is to stay out of a nuclear conflict. Begin a fight and your society is blown away."

This was codified as the doctrine of Assured Destruction, Mutual Assured Destruction. It became the official policy of the United States military establishment. Start a war and nobody gets out alive. Therefore, don't start a war.

Lots of folks were unhappy with the promise. The peace groups (and there were some even in 1961) were scared by the threat of whole continents being laid waste by nuclear assault. Many old-line Pentagon staffers felt there had to be something wrong with institutionalizing stalemate: there had to be some way to win a war, and not just a way to avoid getting into one. In Moscow, the Kremlin never did formally accept the notion of MAD, although they act as if they did. Handbooks of doctrine for the Red Army to this day state the formal strategy of nuclear war

to be "counterforce", that is, to wipe out the enemy's ability to fight a war by hitting enemy military targets. No doubt the Kremlin knows this won't work, that once a nuclear war starts there will be no limits on target selection. But in their official statements they talk as if they think it can still work.

The concept of deterrence was not a new one, of course. Many commentators had never heard of it before, but that just shows their ignorance of military history. Through the late 19th and early 20th centuries, the Great Battleship Race was in one sense an exercise in mutual deterrence: dreadnoughts were more for show and for threat than for actual use in combat. (See Luttwak's Political Use of Sea Power, 1967, for details.) Admirals were in fact reluctant to send their prized capital ships into a situation where they might actually be sunk, and standing policy of both British and German navies was to accept battle only with an enemy force inferior in numbers, so as to avoid any chance of the big battleships getting hurt. Keeping the menace of a "fleet in being" hanging over an enemy shore was more desirable than actually risking a big expensive capital ship close to the fire of enemy guns. The major dreadnought battles of World War One came about by accident, because neither side realized the enemy fleet was out there; had they done so, both sides would have run for home at top speed.

Similarly, the nuclear "fleets" of the 1960's became political weapons, for show and threat but not for use, bargaining chips. A war could still start by accident, but more sophisticated control systems and better communication should reduce that chance.

Still, the risk ... the risk was great. How to reduce it? Peace groups said, build down. Reduce the number of nuclear weapons in small stages until both sides are down to near zero, or zero. Old-line military planners had another approach: find some way to get around the stalemate. If a way could be found to block enemy bombs, while your own got through, why in effect you would be the only nuclear power in the world. Only your desires would count.

THE BALLISTIC MISSILE THREAT

By 1965 the danger from nuclear weapons was shifting from manned bomber attacks (taking ten hours over the poles) to ballistic missile attacks (taking thirty minutes to target). America still had the circa-1955 Stratofortress bomber, the B-52, to carry massive hydrogen bombs, but the planned follow-up Mach 3 supersonic bomber called XB-70 was reduced to test status in 1961 and cancelled entirely in 1963. No supersonic bombers for SAC: missiles instead.

This made MAD more frightening and more stable, since missiles could not be called back as manned bombers could. You had to be very certain before you shot them off. This could be expected to produce a bit more hesitance, a bit more reluctance, in using them. Thinkers who wanted "victory not stalemate" faced a new and serious problem. One could imagine an anti-bomber defense that would keep Russian aircraft from getting too far into American airspace: guns, rocket AA batteries, interceptor planes, radar pickets .. an expansion of the air defense systems of World War Two. But how could one defend against a warhead coming from 600 miles up, at five times the speed of sound?

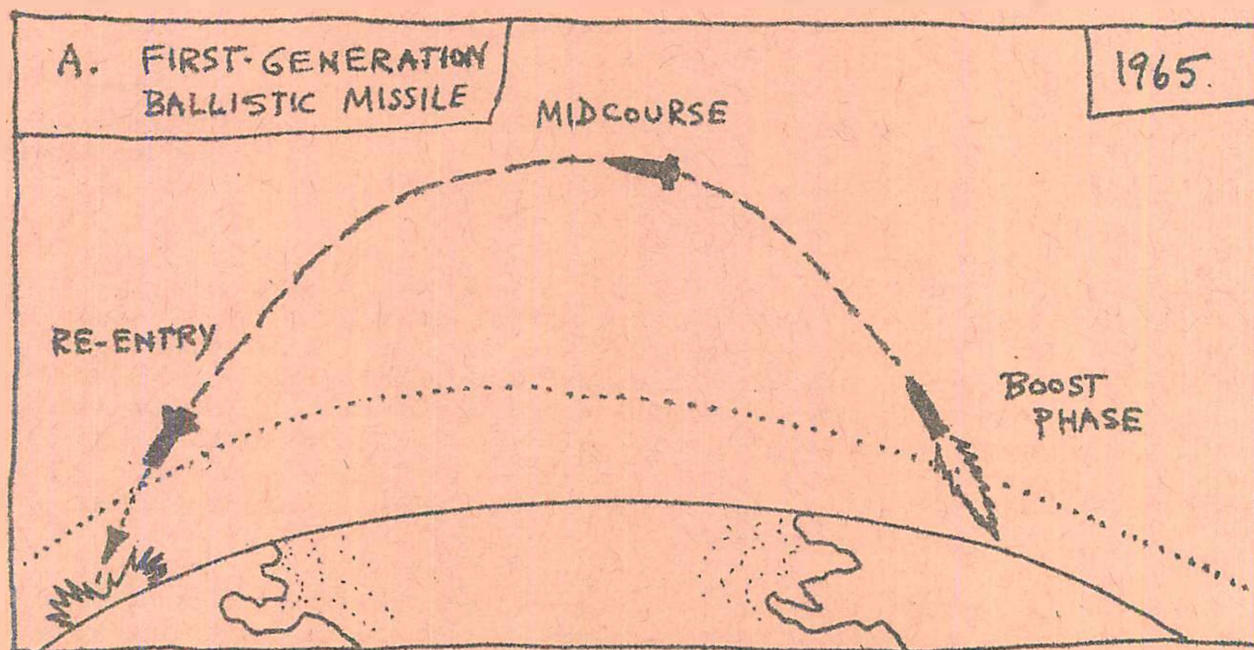
The offense looked stronger than ever, which meant that only the threat of Mutual Assured Destruction could keep it from being used: just the opposite of what the "victory" planners wanted.

A closer look at the first generation of ballistic missiles is in order here. Imagine a large multi-stage liquid fueled rocket on its launch pad in 1965, either in North Dakota or in Irkutsk. If the order is given, this rocket will be launched within minutes. Let's keep to the mood of the Pournelle and Graham books and assume it is a Russian missile aimed at the United States, first strike without warning. The switch is closed, the rocket ignites and lifts off. It is fairly simple, a first-generation device consisting of two stages of booster and a warhead with one (1) hydrogen bomb.

First: boost phase. The rockets fire for several minutes pushing the whole device up past 100 km (last vestiges of atmosphere) and past 200 km (open space). They can be steered a little to right or left, pitch or yaw a little while in powered flight.

Second: midflight. The rocket engines run out of fuel, shut off and fall away; now the warhead alone counts. It moves up in a vast elliptical orbit around the center of the Earth, which will touch the surface again a quarter way around the world, ten thousand kilometers ahead. In open space, coasting along a Newtonian orbit that will rise to 1000 km before arcing downward, the missile is beyond further human control. It is in essence a cannon shell, fired from an artillery piece with a barrel 200 km long: pushed by hot expanding gases, and with the invisible barrel made of inertia and momentum.

Third: re-entry phase. Half an hour after launch, the missile comes back into Earth's atmosphere at 100 km up: moving at Mach 7 at a shallow angle toward the ground, close to horizontal (say 20° to 30°). The ablative skin will protect it from re-entry heat, and a fuse will detonate the bomb at a pre-chosen altitude. How close to the assigned target will it hit? For the mid-1960's, accuracy of 1 in 100,000 isn't easy to reach (as it is in 1985) so let's say 1 in 20,000: for a 10 million meter flight, within 800 meters.



Even if the bomb is a kilometer off target, it will suffice to destroy a city or an oil refinery: X-ray flash and firestorm will be enough. But what of military targets? Suppose the U.S. missile forces give up their bulky liquid-fuel boosters, sitting exposed on the surface, and replace them with solid-fuel rockets kept in "silos" underground. The silo is simply a deep well, lined with steel and concrete, with a steel sliding door to cover it. Walls are lined with springs and insulation to reduce the ground shock of nearby blasts; missile fits snugly into the well.

Land-based missiles were moved down into silos by the U.S. in the late 1960's. Now a megaton blast one kilometer away wouldn't hurt them ... flash and heat wouldn't penetrate the earth, shock waves would be absorbed in the walls. Once the rumbling died away, the steel door would slide back and the missile would be launched. Any buildings above ground would be reduced to powder by an H-bomb that close, any trees burned and splintered, any people of course turned to ash. But the missile would survive and launch.

First strike would be useless; the American missiles could still hit back. Mutual Assured Destruction would still tell the Kremlin: don't start a war, you'd never survive it.

More accurate missiles, say the Russian engineers. If we could guarantee to hit within 100 meters of each American silo, the U.S. missiles would be vaporized, or in the crater, or buried under ten meters of soil dumped on top of their steel doors. Victory.

STRATEGIC DEFENSE, ROUND ONE: THE ABM

Putting the missiles in silos will protect land-based ICBM forces until the enemy warheads get very accurate, enough to slam down right on top of the buried launchers. Moving other missiles to submarines out at sea, or onto bombers ready to roll at five minutes notice ... that also makes a first strike more difficult. So the military gear can be hardened (as they say) to be fairly secure from enemy missile attack. But what about the cities? What about all those civilians? Are they just hostages to MAD?

In the late sixties, dreamers in the Pentagon thought they had a way to protect U.S. cities as well as U.S. missiles: the equivalent of the s-f "dome over America". The plan was to use special interceptor rockets to blow away the incoming missiles, to cover the whole continent of North America with clusters of interceptor rockets. As the cities can't move, and are big targets even for inaccurate enemy missiles, the interceptor system must be very good: stopping not 90% of incoming missiles, not 99%, but all of them.

One story goes that the system was to be called Defense Against Ballistic Missiles, or DABM. But a Pentagon flack objected. "Dab 'em? That sounds too weak and wishy-washy." So the system was re-named just ABM, for Anti-Ballistic Missile. Too bad nobody thought of calling it Zone Area Protection Missiles.

Critics complained, "It's like hitting a bullet with another bullet. It's impossible." Maybe not impossible, but at the very least it would be quite difficult. Here is how that first proposal for a Strategic Defense Initiative was supposed to work: Infra-red spotters in U.S. satellites pick up the heat from hundreds of rising Russian missiles, leaving their launch pads at bases scattered near the Trans-Siberian Railroad. This gives about a twenty-minute warning to the ABM that danger is coming. No method is available in 1968 to hit the Russian missiles in boost phase or in midcourse coast.

As they near re-entry, though, the Russian missiles can be seen by powerful U.S. radar sets and can be (maybe) intercepted by U.S. ABM rockets, since the missiles are now over North America and in range. Two ABM layers are planned. First, the high-altitude Spartan rockets are launched, to rise high above the atmosphere and meet the Russian intruders at 150-200 kilometers above the Earth. "Bullet hitting a bullet"? The Russian missiles are smaller than a Detroit car in 1968, each one maybe the size of a home refrigerator: small package for ten megatons of fusion bomb. But the Spartans don't have to hit the small targets directly.

Each Spartan has its own nuclear warhead, which will detonate if a Russian missile is close enough: several hundred meters. The flash of X-rays in space could knock the missile off course, or could blow off chunks of its skin so the missile tumbles and burns up in the atmosphere on its way down. At the least, such a flash would ruin the delicate electronics inside the missile, so it becomes just a falling dud no longer able to explode. Perhaps several Spartans could go off in the path of the incoming missiles so that the clouds of fission products would be an added barrier; again, not to stop the missiles but to scramble their electronic circuitry. Estimates were that the Spartans would be able to stop or inactivate 90% of the attacking warheads.

If the Reds throw 500 H-bombs at us, then fifty of them can get past the Spartan screen, and are now plummeting into the fringes of the upper atmosphere, two minutes from impact. Fifty bombs can cause totally unacceptable damage if they hit the cities, killing a quarter of the U.S. population in less than one hour. Even if they ground burst on top of American missile silos away from urban areas, the massive dust clouds will poison the land for hundreds of miles downwind. But there is a backup to catch the missiles that get past the Spartan defenses.

The lower layer of the ABM was to be the Sprint rocket: a cluster of small, very high acceleration interceptors that worked inside the atmosphere, 10-25 km above the base. The Sprint would take off like a cannon shot (50 G?) and be at altitude in less than a minute: no slow dignified lift-off, there wasn't time. Sprint, like Spartan, had a nuclear warhead that would detonate on proximity to incoming missiles. Once again, this gave leeway to accuracy of aim.

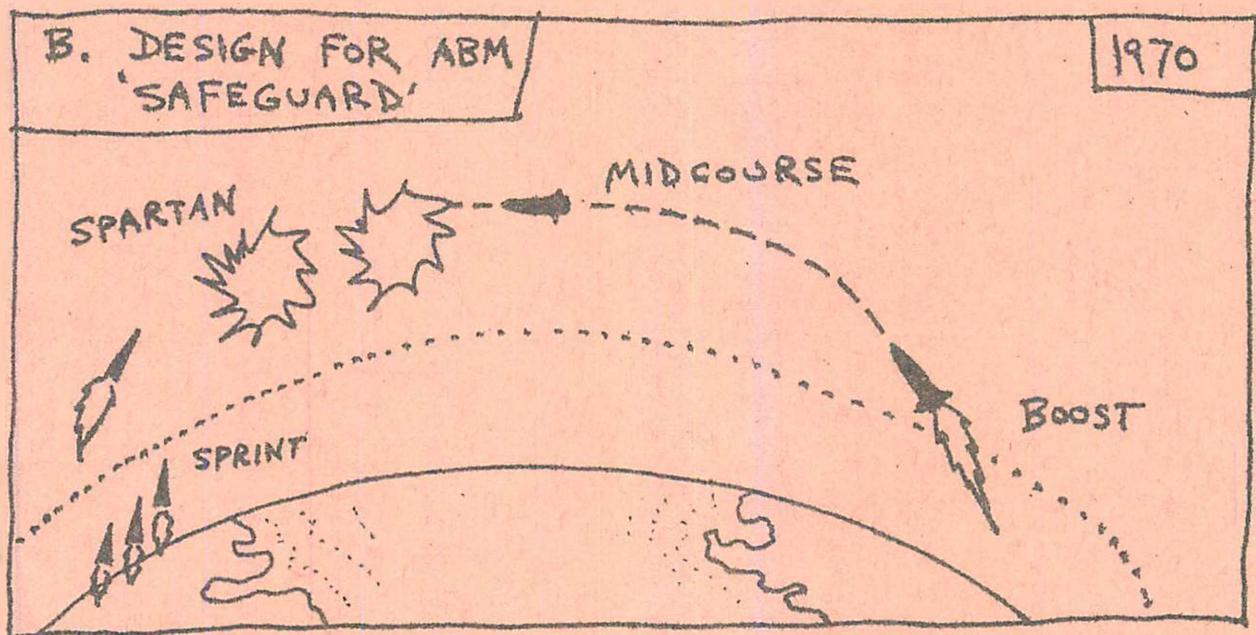
The combined Spartan-Sprint ABM was offered to the American public under the name "Safeguard", and Congress was urged by the Pentagon to appropriate money for the whole system. Between 1968 and 1972 there was loud debate in Congress and in public journals over whether to buy Safeguard, the first SDI. Books appeared with titles like ABM: For and Against or The ABM Debate. It would be expensive, no doubt about that ... at least \$50 billion to cover the whole continent with a Safeguard shield, that was the estimate. There would be arrays of radars, a dozen Spartan bases, several score Sprint bases for point defense of silos and military fields.

Compare that with other projects of the sixties. It was more than the Apollo program to put men on the Moon; as much as the Interstate Highway System or Lyndon Johnson's "Great Society" social programs: Safeguard would be very big and very expensive. Only the ongoing war in Vietnam would cost the U.S. more, over \$100 billion.

But ABM's worth it, said the pro-ABM speakers, if it saves the cities of America from Russian hydrogen bombs. Yes indeed, if ... Something odd happened, though. Congress voted against the full Safeguard project, and the military unaccountably did not protest very loudly. It was as if they had found a flaw in the project and decided they didn't want it now after all ... but would not come out and say so

openly. Even the news that the Russians had developed a version of the short-range Sprint rocket to defend Moscow did not arouse much interest or enthusiasm from the Pentagon. In 1972 the U.S. and the Soviet Union signed an ABM Treaty in which both sides agreed not to build any extensive defense system against ICBM's, although as a gesture the U.S. and the Soviets were allowed to finish one small installation each: demonstration of capacity, no more.

Is this what ABM came to in the end? One U.S. base in North Dakota, and 64 Russian ABM-1 Galosh missiles near Moscow? All that debate about how important the ABM was, and how it would save the West ... it sure sounds like what I hear fifteen years later about Star Wars. As soon emerged, the ABM had a fatal flaw called EMP, and it had a fatal vulnerability called MIRV.



GOODBYE, S.D.I. --- PART ONE

The Spartan missiles were not too accurate so they relied on nuclear blasts to hit their targets: the incoming ICBM's. There's a problem with shooting off A-bombs above the atmosphere, a problem that first appeared back in 1962 but wasn't admitted by the Pentagon, at least in public, until twenty years later.

Consider a 500-kiloton blast at 200 km altitude: easy for the U.S. or USSR to achieve. Half the energy of the fireball goes into radiation, mostly X-rays that slam down onto the thin wisps of the upper air and sweep away the electron shells of the oxygen and nitrogen atoms. The driven electrons in turn collide with thousands of other atoms as they carom Earthward, producing a cascade of maybe 30,000 downward-showering electrons for each X-ray quantum that hit the top of the atmosphere. Imagine a vast pancake-shaped slab of air kilometers deep and hundreds of kilometers across, filled with those electrons all moving downward at once. Okay, flow of electrons equals electric current, and in the Earth's magnetic field ... that's right, you get one huge electro-magnetic pulse (EMP) that has a value of 10,000 volts per meter as it touches Earth's surface.

The U.S. high-altitude tests of 1962, Project Starfish, detonated bombs 100 km over Johnston Island in the Pacific; the unexpected pulse blew out power stations and telephone exchanges in Hawaii far away. Still, the equipment in Hawaii was mostly old vacuum-tube or mechanical relay stuff: mostly immune to EMP, mostly unaffected.

Transistors are about 10,000 times more sensitive to EMP than vacuum tubes are, so imagine a nuke set off high over modern America. The power lines and telephone cables would gather the pulse; expect immediate loss of electric power, telephones, cable TV, and any appliance with a microprocessor: radios, car ignitions, burglar alarms. Flashlights and CB radios would still function, but little else. Oh, and all computer systems would crash. (You know how sensitive they are: it's possible to scramble the data on a floppy disk just by using an electric pencil sharpener in the same room.)

"Still worth it to save the cities," say stubborn ABM fans. But you won't save the cities either, since the electronics in the Spartan control station will blink out as well. The first Spartan you shoot off will detonate and blind all the others still rising. In come the Russian warheads with nothing to stop them.

No wonder the Pentagon put Safeguard on hold.

Maybe it's possible to toughen up the electronics in the radar stations and ABM guidance, so that it isn't hurt by EMP. During the 1970's there were many tests of new equipment by Defense Department scientists, exposing silicon chips to mini-EMP produced by underground nuclear explosions and by detonating deuterium drops in laser fusion labs. We can assume they know by now how to make EMP-proof electronic gear, but nobody is saying. In fact, the Pentagon would not even admit that EMP existed until 1981, when a number of stories about the phenomenon appeared in Science and in Science News.

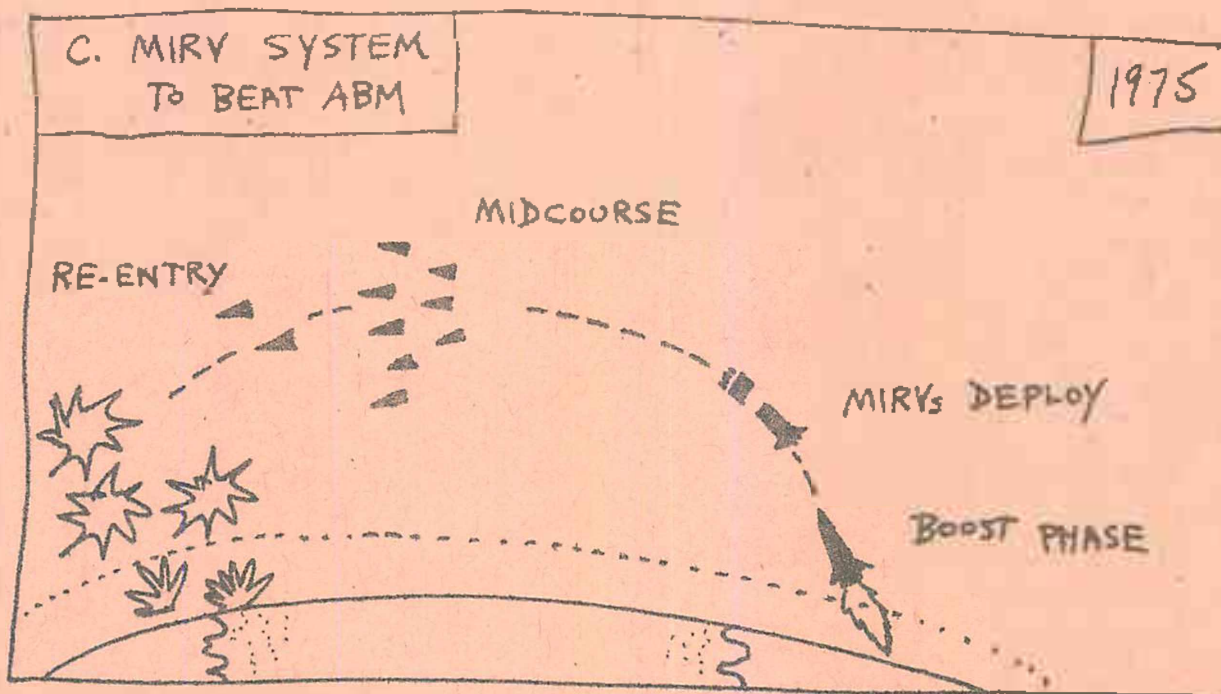
So we can now build an ABM system fifteen years late? Not quite.

That cloud of electrons produced by orbital blasts: it can act as a reflecting mirror at most radar wave-lengths. Point your beam at it and you get a blank shining screen. The cloud dissipates quickly, and the mirror effect fades: a minute for Spartan radar, 15 seconds for shorter-wavelength Sprint radar. Still, that is a long time when you are trying to track an object 1 meter across that is coming toward you at 7 kps. A series of Spartan explosions thirty seconds apart could blind the radar for minutes, long enough to let the Russian warheads hit the ground.

And of course the Russians could set off their own orbital explosions above America. One wave of ten Soviet missiles detonates at 200 km, crippling the U.S. civilian electronic net, and blinding the ABM radars. A second wave of missiles comes in two minutes later, this time aimed at ground targets. There goes the whole \$50 billion, ten-year defense system: defeated by the simplest Russian method. Why didn't the Russians do this already? Fear of U.S. counterstrike: we were back to MAD again.

The arguments in favor of ABM we are hearing again today for Star Wars (aka SDI-2). The technology changes but the hopes of techno-fans remain the same.

By the way, has anyone noticed that the EMP is kind of a reverse neutron bomb? It doesn't hurt people, but it destroys (silicon) property.



SNEAKING PAST THE DEFENSE, PART ONE: MIRV

Military planners in the Pentagon are worrywarts by training; they always anticipate the greatest possible enemy threat. As the Mel Brooks song says, "Hope for the best; expect the worst." Even as the flaws of ABM became visible in the late 1960's, the planners asked, what if the Russians find a way to make it work? What if they make EMP-immune hardware and find some radar frequency-switching gimmick to avoid being blinded by high-altitude blasts? Then they are protected from our ICBM's while we are naked to theirs.

The solution was pretty clear. If the ABM is hitting a bullet with a bullet ... keep firing until the defense runs out of bullets. If the Russian system is 50% effective, and America wants to hit 1000 targets in the USSR, just fire 2000 warheads. Even if the Russian ABM is 80% effective, America can fire 5000 warheads and still get a thousand through the defenses. Brute force is the way to go.

Atom bombs are assembly-line products, one per day as long as the plutonium and the money hold out. But missiles take a while to design and to get Congressional approval; land-based silos and ballistic-missile submarines can take 3-5 years to complete. So the obvious solution is to place several warheads on top of each rocket boost vehicle: three bombs, five bombs, maybe ten bombs.

Final design is called MIRV, Multiple Independent Re-Entry Vehicles. (A "re-entry vehicle" is a warhead: sounds better). Boost is the same as the 1965 primitive ICBM, 200 km of rocket thrust pushing the final stage upward. But in midcourse, the cluster of warheads can separate, nudged slightly to right or left by small steering rockets: a threat cloud when it hits re-entry, ten bombs arriving.

So in one sense the MIRV system is a response to the first try at a Strategic Defense Initiative: overwhelm the defenses with a huge number of warheads, all coming in at once. Planned by 1970 and in place by 1980, the American MIRV fleet was designed to penetrate the hundreds of Galosh anti-missile sites scattered across

the northern rim of Asia by the Soviet Union. Conversely, the Soviet MIRV's could get past the dozens of Safeguard bases in the United States, overloading the high-altitude Spartans and the low-altitude Sprints.

But wait a minute, you say. There aren't any continent-wide Galosh bases in Russia, and there certainly aren't any Safeguard bases all across the USA. The Russians have one ABM site near Moscow. The U.S. had a site in North Dakota to defend a missile farm -- built it in 1972, took it apart again in 1976.

Was the MIRV built to penetrate a defense system that doesn't even exist? Isn't that a real waste of effort?

The answer is yes to both questions. What you have here is the working of an 'autonomous' procurement process -- once the contract for a weapons system is in the pipeline, it is very difficult to stop the program and cancel the weapon, even if new information tells you that it was never needed in the first place.

Your armed forces may end up saddled with a big expensive collection of hardware that does them no real good at all.

No ABM, but MIRV's to defeat the ABM: just another example. There are plenty of previous ones you could choose. Rather than pick on the Pentagon again, try an example of Russian miscalculation: the MiG-25. See the Appendix for details.

STRATEGIC DEFENSE, PART TWO: R.R. STAR WARS

The warheads on a MIRV missile will spread out from the original point of aim, depending on how the platform-steering rockets fire during midcourse: 25 km to right or left, 50 km long or short, an extensive footprint (to use the jargon). This adds uncertainty to the watchers on the ground trying to guess impact points. And for the military, uncertainty is a good thing ... if it afflicts the enemy. Numbers can also be made uncertain. Enemy satellites overhead can count how many missile silos you have, therefore how many land-based launchers. But does each launcher carry three bombs, or five, or ten? Do those 500 holes in the ground mean the attack will be 1500 bombs, or 2500, or 5000? How many ABM rockets would you need?

A justification for "overkill" creeps in here. The peace marcher says, "For total destruction of Russia, the U.S. only needs 1000 bombs. So why have we stockpiled 10,000 of them? This seems irrational, to say the least."

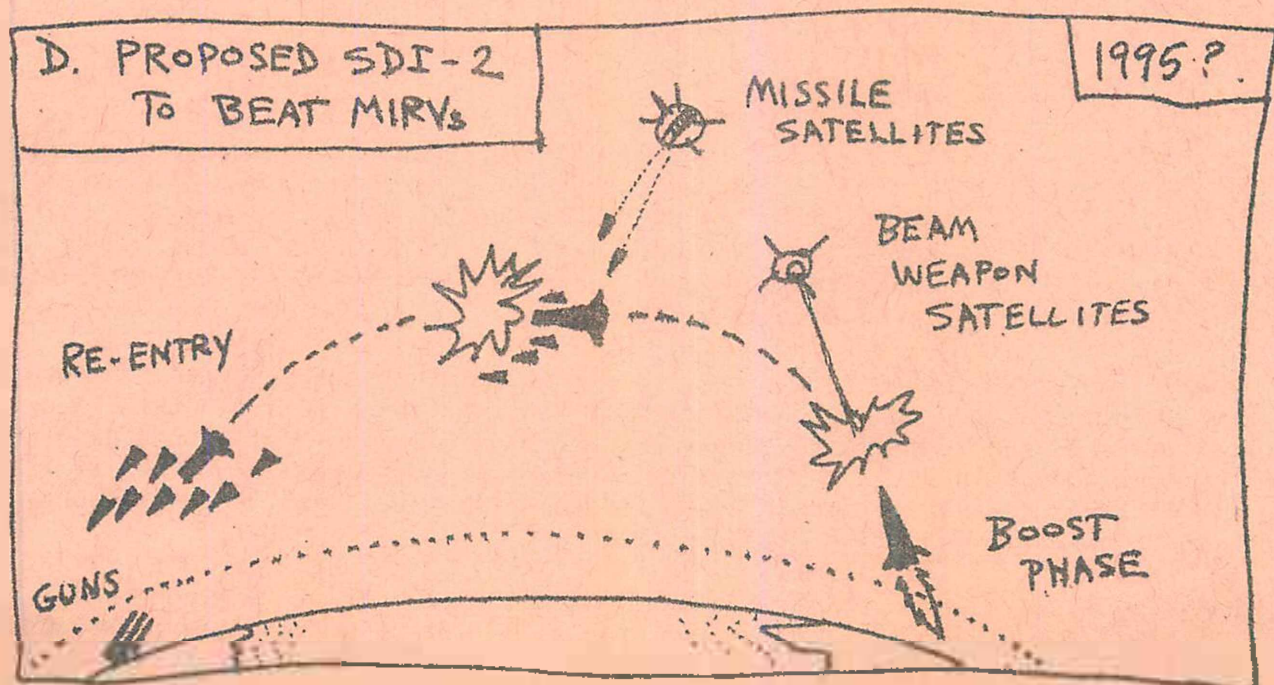
The Pentagon Planner replies, "We worry about the chance that Russians may secretly invent a shield that will stop 90% of our RVs. Hope for the best, expect the worst, you know. We must convince them that no matter how good their shield is, we will get through it with enough megatons to obliterate their society."

Sounds like the Pentagon is worried the Russians will invent Star Wars, doesn't it? Certainly when Secretary of Defense Caspar Weinberger testified before Congress, he said that a USSR defense shield would be very threatening and hostile to the United States. The development of an American shield is, of course, a step forward toward world peace. The Russians have no reason to fear it; President Reagan said so himself. To use the metaphor of Robert A. Heinlein in his introduction to Pournelle's book, imagine two naked men locked in a cellar each with a loaded pistol to the other's chest, and then give one of them (the Good Guy) a bulletproof vest. Neither Heinlein nor Pournelle wants the Bad Guy to get the vest first. My own choice for metaphor would be the same two naked men in a cellar, ankle-deep in a pool of gasoline ... and each man has a book of matches. The Reagan Star Wars defense? Give one of the men a bulletproof vest.

BY 1980, several space fans were thinking about using "space power" to intercept ballistic missiles, and by 1982 some of their speculations were seeing print. That was where (presumably) Prez. Reagan heard about it; somebody read Graham's plan to him, maybe. But now, what exactly is the Star Wars defense?

It is an upgrade of the old ABM. You recall that Safeguard used interceptors only during the last phase of a missile attack, during the re-entry; there was no way of reaching enemy missiles during boost phase or midcourse. Twenty years after Safeguard, we have much more space capacity, and better guidance systems, and beam weapons in prospect. The Graham proposal uses orbiting satellites to hit Russian warheads in midcourse: no beam weapons, but little solid pellets fired from mass-drivers, or tiny homing target-seeking rockets. The satellites would have to be in pretty low orbit to have a chance at the Russian warheads going by, so the U.S. would have to launch quite a number of them, in order to make sure that there was a satellite in position at any time of day or night the Russians sent up their missiles.

Using energy beams would give the U.S. satellites a bit more leeway, since the beams (laser, particle, maybe microwave) travel at light-speed and could hit the rising missile with repeated pulses several times a second. The best time to hit a missile is during the boost, when all the warheads are still attached to a big tin-skinned rocket filled with explosive fuel. Wait until midcourse after the MIRV's separate, and you have ten targets to hit instead of one ... with the added problem that cold warheads are much harder to detect than a hot blazing rocket. So, Star Wars means hit 'em at boost and hit 'em again (the survivors) at midcourse, with beam weapons if we can make them in time. As to the warheads that escape getting zapped by the satellites and head down toward the United States, there could be a point-defense at our silos, to blow up the incoming RV's only a few kilometers above the surface: rapid-fire cannon like in World War Two. Pournelle suggests the GAU-8 "gatling gun", which can fire 6000 rounds per minute and was designed to kill tanks.



The question is, can our guidance systems hold a laser beam steady on a target 1000 km away and moving at 7 kps, for long enough to damage that target? How can you tell when the target has been inactivated, anyway? (They blow up only in movies.) And is it within our capacity to build and fuel a laser powerful enough to do this?

Technical details are disputed, but that will have to wait for a follow-up article, perhaps. The Air Force is preparing to test a small space-based homing missile, and many companies are working on the very large chemical lasers (or particle beam generators) that would have to be orbited if the scheme is to work.

SNEAKING PAST THE DEFENSE, PART TWO

Star Wars is a continuation of the forty-year-old arms race, so naturally if one side builds a defense, the other side tries to get around it. If beam weapons work best in space, and cannot get through the atmosphere ... shorten the vulnerable boost phase so that it takes place in the lower 100 km of the trajectory. This does require somewhat more powerful rocket engines.

Separate the MIRV's in the atmosphere, too, on the way upward. Give the beam weapons no clear shot at a big vulnerable target. And once you get to midcourse, have your warheads release a dozen decoys apiece: maybe just 1-meter diameter metallic balloons. Out in space, they move along at the same speed as the heavier warheads. The satellite radar watching you will see not ten warheads, but 100 (or 1000) indistinguishable objects in the threat cloud. Even if the beams hit one per second, time to aim and to move the beam will mean that the defense can't get all the targets before re-entry.

Ah yes, technical details ... I could spend another 10,000 words discussing those, but let us postpone that for a while. Just remember that the Star Wars defense is not the solution to the arms race. It is not the end of MAD. It is just another problem to be solved by the offense, and it may be another dodo like Safeguard or the MiG-25.

APPENDIX: THE FOXBAT GAP

Voices in the USA in the late 1950's complained that the B-52 bomber was getting old and obsolete, that the U.S. needed a new and bigger supersonic bombing plane to attack targets in the Soviet Union. A design was settled on: the B-70 Valkyrie, which was in some ways a military version of the (expected) civilian SST, very large and with a massive payload. Two prototype Valkyries were built and they flew high and fast, looking very impressive in photos.

Presumably there was consternation over in the Kremlin. Did the Soviet air-defense command have anything that could reliably stop an American B-70 from flying into Soviet airspace? Could the air-defense command stop a whole fleet of the damn things if Johnson launched them against the Soviet Union without warning? -- The answer was no, not really. Russian radar was not quite up to it, and there were not enough interceptor planes of the right type.

The Mikoyan-Gurevitch design institute was given the job: build a plane that can stop the B-70, top priority. So the MiG people did it, using the flight characteristics of the Valkyrie as they could get them from Aviation Week and any resident KGB spies in the U.S., then designing an interceptor specifically anti-Valkyrie. Their plane was the MiG-25, called "Foxbat" by NATO.

Foxbat was a large fighter with ample fuel reserves. It had two huge engines that could push it to Mach 2.5 at high altitude cruise, and briefly up past Mach 3.0 at the cost of burning out the whole engine system in a half hour of flight. This meant taking apart the jet pods and replacing the turbines each time: blades pitted and corroded from going too fast too long, supports heat-softened.

Of course the Foxbat was not very maneuverable at low altitudes, where it was also a real fuel hog. Couldn't use it as a ground-attack plane or as a low-level fighter: too hard to turn. But above 50,000 feet where the Valkyries flew, it was a terror.

Or it would have been a terror if there were any Valkyries for it to go against. Over in the USA, the Pentagon decided not to build the B-70 after all. There was no real need for such a plane. Those old tired B-52's could be upgraded to meet requirements: what the military calls CILOP, or "conversion in lieu of procurement". Fixing up older planes can be cheaper than buying new ones, and by 1970 the Pentagon was having to scratch a little harder for money as the failure of the Vietnam effort began to show.

One of the prototype Valkyries collided with a chase plane during a photo flight; it was destroyed. The other prototype is on the ground permanently in an air museum in the midwest.

The modified B-52 bombers were not planned to penetrate the Soviet Union high and fast like the aborted B-70. No, they would go in very low, just above ground level, hugging the surface of the Earth and relying on terrain-following radar to keep from slamming into a hillside on the way. The Russian MiG-25 interceptors simply could not operate in that environment so close to the ground. And Russian radar did not at that time have adequate look-down capacity to detect the American B-52 intruder from high altitudes.

The Red Air Force was left with this turkey, the MiG-25; dozens of them came off the production lines because the process once in gear was not stopped. What was there to use them against? Where?

MiG-25 squadrons were sent to the coastal defense bases anyway, and a modified version of the plane was made into a photo-reconnaissance platform. In 1971 there were a number of MiG-25 photo flights that took off from Egypt, flew over Israel four miles higher than Israeli Phantoms could reach and then landed in Egypt. (The engines had to be replaced after each flight, but the Israelis didn't find that out until much later.) You can well imagine the Israel Air Force was disturbed by this "super-plane" that blithely zoomed over their airspace. The U.S. Air Force liaison team was also worried.

What was the MiG-25? Had the Soviets jumped ahead to a new higher level of airplane technology far beyond anything the U.S. could do? You could find all kinds of articles about the new Russian super-plane in American aircraft journals at the time: worrying, pondering, guessing. The CIA let it be known that it would pay \$500,000 in gold, Swiss accounts, to anyone who brought in a MiG-25 for U.S. experts to study.

In 1976, someone did just that. A Russian pilot flew his MiG-25 from Kamchatka to a field in northern Japan, and asked for asylum. He was debriefed by U.S.-Japanese officers, paid the money, and hustled away. The Russians demanded their plane back; after 24 hours they began to insist on getting it back immediately or Japan would suffer. As the request rolled through Japanese government offices in the Foreign Ministry, American and Japanese engineers swarmed over the grounded MiG-25, taking photos and measurements as fast as possible. Well, the Russians were allowed onto the field after two days. They took apart the fighter, packed it in crates, and rode with them all the way to the coast where the boxes were loaded on board a specially chartered Russian freighter. Incident officially closed.

As the American engineers looked over the data from the plane, it slowly dawned on them that maybe the Russians wanted the MiG-25 back so badly because of embarrassment. The Red Air Force wanted to maintain an aura of power and mystery ... which they couldn't well do if outsiders knew how much a white elephant the MiG-25 was. Usual aluminum aircraft skins would soften at speeds of Mach 3, that much was well-known. So the U.S. journals had guessed that the skin of the MiG-25 was made of special heat-resistant titanium/magnesium alloy, very advanced and very difficult to work. A quick test of the real plane gave a different answer: steel.

The skin of the MiG-25 was old-fashioned low tech steel, just like fifty years ago. Heat-resistant but very heavy ... OK, so you have these two big engines to push the extra weight. It cuts down the payload capacity drastically, but it's a quick emergency way to get a plane in production fast to meet the Valkyrie Menace. Similarly, the avionics were very basic: little vacuum tubes instead of fancy IC micro-processors. Not elegant, downright primitive in fact, but it's right off the shelf and available in quantity now, not five years from now. All those American experts who said how advanced the MiG-25 was, all the prophets who warned that the West must rush to catch up with MiG-25 technology ... what did they do when the word got out?

Some of them changed the subject quickly. Others still held on to their fears: the MiG-25 had vacuum tubes because those were more resistant to EMP than transistors were, so the Russians had built their plane to survive close exposure to a nuclear blast. Could it be said that the Russians were not super-smart and super-crafty, that the MiG-25 was evidence that the Kremlin had goofed and spent millions of rubles for a useless project?

The MiG-25 is still used as a reconnaissance plane by the Soviets, though it is not as fast or as high-flying as the American SR-71. As an interceptor, it is capable of shooting down civilian airliners (Korean, for example) though it hasn't done so; not much beyond that. More details if you like on how the Red Air Force tried to find a job for the MiG-25: the ghosted autobiography of Viktor Belenko, the pilot who flew his plane to Japan, published as MiG Pilot.

What this episode can tell us is, "Don't believe all the panicky warnings you hear about how far ahead the Russians are." There was great worry in 1954 about a "bomber gap", that the U.S. had only 300 long-range strategic bombers while the Russians had over a thousand. (They actually had less than 80.) In 1960 came the "missile gap", the fear that Soviet long-range rockets could blast the U.S. and we did not have enough Atlas or Titan missiles to strike back. That was a charge that came out in the 1960 elections, with Kennedy accusing the Republicans of neglecting our defenses against the Reds. Once Kennedy was in office, the missile gap was discovered to be non-existent. In fact, it went the other way; the Russians were caught in 1962 trying to put medium-range missiles in Cuba, since they did not have enough ICBM's back in Siberia to effectively threaten the United States.

I must quickly pass (with regret) the great fuss in the late 1950's over the "nuclear-powered airplane gap". This is a great story in itself, but alas! no time to tell it all. Basically, the designers had specs for an airborne nuclear reactor, similar to the one used for nuclear-powered submarines of which the first was launched in 1954. In the sub, heat from the reactor boiled sea-water to steam which ran standard turbines, for propulsion and electricity.

In the nuclear-powered aircraft, a similar light water reactor would presumably flash-heat streams of air coming through the intake valves, filling the chamber with

super-heated gases which then would blast out the exhaust, propelling the craft like a giant ramjet. This plane could cruise for a few days or a few weeks in the stratosphere without running out of fuel, on its mission of ... of what?

That was the major problem: figuring out why the U.S. needed a nuclear-powered aircraft. There were also a few technical difficulties involved in making the power source workable (just a few), but though the project ran from 1954 to 1961, nobody could ever quite explain why it was needed. Still, when things looked bad for the project, an article would always appear warning that the Russians were on the way to flying a nuclear airplane, and the U.S. couldn't let them do it first. Early in the Kennedy administration, this tactic failed also, and the whole idea was dropped. Some years later, a modified version appeared in the form of a nuclear-powered spaceship design: the hollow-core reactor would heat and expel vast quantities of hydrogen gas to push a spacecraft around the solar system. That idea was also cancelled when the U.S. signed a treaty banning nuclear explosives in orbit, a move that ended Freeman Dyson's Project Orion as well.

Has there been anything lately as unlikely as the "nuclear-powered Russian airplane" scare of thirty years ago? I might mention a little goblin called "window of vulnerability" which Mr. Reagan tried to scare us with a year or so back ... exactly as believable and exactly as dangerous as the specter of a Red nuclear-powered airplane.

Again, don't believe all the scare stories you hear.

HOW TO FEED A FAN

By Susan Hammond

FAN: Although an individual of the species when totally isolated from fandom may be a "traditional" eater, the FAN in a group (plural: FEN) has omnivorous habits. FEN are often nocturnal feeders and may go to great lengths to be sure of an adequate 2am food supply.

Fandom is a group with broad eating habits. Fen will eat almost anything they can get to. (Evidence exists to show they will eat two year old pretzels, even if other food is available!) Examples of the extremes that occur when a horde of fans descend on an area range from McDonald's running out of CUPS (not to mention food), to certain (unnamed) restaurants losing much revenue by not understanding that they should admit the fan in "casual" dress.

One of the fan's earliest exposures to food seems to be Chinese food. In fact, an ability to tolerate, if not enjoy, Chinese food (usually spicy) seems to be a basic prerequisite to true Fandom. Another common food is the professional pizza. (Home-prepared is less popular.) With a little thought to toppings, pizza can be made to fit almost any fan's taste: even those who regard the tomato as deadly poison will eat pizza, as they believe the process of cooking and adding cheese to neutralize the toxicity.

Fen also have a remarkable collective "sweet tooth" (they've been collecting it for years) -- ice cream, cake, and cookies are difficult to preserve in an uneaten state around fen. George Flynn has noted that the way NESFA made a gingerbread clubhouse dissolve meant that we were solvent

If you are one of those fen who views the kitchen as wasted space in your home (one famous SMOF had his entire kitchen replaced by bookshelves, except for the refrigerator where he stores his Pepsi), then you have two choices to feed your hungry fen.

#1. Take the FOOD to the FEN: Takeout

The easiest way to feed a fan -- or a small group, say up to 30 or so -- is TAKEOUT. Proper preparation of fannish takeout includes locating a restaurant that can properly take your ~~order~~ order over the phone, has parking or other pick-up provisions, can total a large bill correctly, and is open to suitable hours -- often past midnite is ideal.

A special requirement for Chinese restaurants is that they will believe you when you say spicy. This is best established by eating there before your first takeout order and gaining a reputation for repeatedly sending the food back to the kitchen as "not spicy enough." One fan did this in a chili restaurant in Austin, TX, and was ceremoniously presented with a dish of ground hot chilis for his use -- and even water.

For eating the basic fannish takeout dinner, Chinese style, sturdy paper or plastic products are usually acceptable, but the true gourmet fan will insist on a tasteful mix (per setting) of stoneware, china, and at least three melamine patterns. Silverware should coordinate with this eclectic look.

Takeout pizza should be ordered from an establishment with enough oven space to cook your order all at once, not serially, or most of you will get stuck with cold pizza. The order should be picked up, not ~~dropped~~ delivered. A delivery van will: 1) get lost, 2) break down, 3) take 45 minutes to go three blocks, resulting in cold food, 4) unload part of your order somewhere else (but charge you for it anyway), and 5) expect a fat tip on top of a delivery charge. Pick it up yourself. Don't forget to take along your calculator and your Italian-English dictionary (in some areas you should substitute Armenian for Italian).

While you get the pizza, have someone prepare your home for its arrival by moving breakables and clearing a number of large flat surfaces. A stack of about two dozen books arrayed into an 18" by 18" stack will work well. As a proper host, don't forget to have napkins, paper towels, ~~old fashioned~~, newspaper, cats, and dogs available for your guests to wipe fingers on and clean up with.

#2. Take the FANS to the FOOD: Restaurants

Taking a large group of fen to a restaurant can cause difficulty for all concerned. A little preplanning will go a long way toward ensuring a good time for all, or at least for all the fen. Pick your establishment carefully: it is not a good idea for you to bring 30 people to a restaurant that seats 15. Those who sit on the floor may become annoyed. A reservation is also a good idea. Caution should be exercised in asking for special seating "because we're a loud group" lest you find your dinner taking place on fold-out tables in the parking lot, but if possible, have the fen isolated from any mundanes who might be shocked by their eating habits. Breaking in a restaurant so they automatically give you a separate room, or put you "upstairs", is a worthwhile investment of time. If you are going to a "new restaurant" and they do not honor your reservation for the stated time, standing around blocking the door may speed things up. If you see plenty of empty tables but are still not being seated, start a few folksongs going and you will be amazed at how quickly you can be seated. (Don't plan on returning to such a restaurant, however.)

With a large group, a lifesaving feature of a restaurant can be the Buffet. Usually found in Chinese restaurants, it helps eliminate the chronic problems of insufficient ravs, who-gets-the-last-shrimp, etc. Fans tend to consume a HUGE volume of food, so some wait while the restaurant scrambles to refill the buffet may be necessary. Be patient. You are not paying extra for that tenth ravioli, after all.

Buffets also simplify the two most difficult items of eating with fen: ordering and paying. Even the most experienced waiter will quail when faced by a table of fen, all of whom want something strange. While you have the waiter, get a pitcher of water for the table: you may have terrified him so much that he won't return for quite a while. If you are ordering individual meals for each person, hang onto a menu so you can figure out the check at the end. (You will discover that there are about five ways of figuring out 5% tax and tip, and none of them are right.) If you are ordering family-style, as is done at most fannish Chinese expeditions, be prepared for: a) an argument over the price of drinks, etc., and b) that no matter how careful the math is, you may come up short. Just kick in a little more each (kicking in the person who figured the check is usually not helpful). One

issue you will rarely face with fen is who gets the doggie bag: there are usually no leftovers to worry about after we are done eating.

Above all, relax and enjoy your fannish meal. At least, you didn't have to cook it.

---- next time: FANS in the Kitchen --- Cooks come out of the closet (but they still haven't found the eggbeater!)

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PROPER BOSKONIAN CONTEST NO. 1 RESULTS

The winner of Contest Number One is Monica Sharp. Monica continued the chant:

Not to shrink
From beer for breakfast
That is the Law
Are we not fen?

with

To carry weapons to blast
(Despite hotel restrictions)
Our mortal enemies
That is the Law
Are we not fen?

Nice going, Monica! I'm sending you a portfolio of prints by Mike Symes. I think that effort really deserves it.

NESFA Predicts the Future

We know the average Nesfan is above average in intelligence, good looks, savoir faire - but does his/her obvious superior abilities include the power to pierce the veil of time? And, more seriously, what kind of future does a Nesfan contemplate? A series of catastrophes? Or a utopia? Please photocopy or remove these pages and send them in to Proper Boskonian, care of Box G, MIT Branch P.O., Cambridge, MA 02139. The results will be published in the next issue.

For the following events, mark one box in the appropriate column to indicate when that event may come to pass, if ever.

Event	Next 10 Years	Next 50 Years	Next 100 Years	More than 100 Years	Never
In a five year period, less than 10,000 people die of malnutrition.					
A vaccine is developed for some form(s) of cancer.					
A vaccine is developed for the common cold.					
In a five year period, no intra-species war is fought by humans.					
Fifteen or more nations possess nuclear weapons.					
A space based anti ballistic missile system is developed and deployed.					
The percentage of functionally illiterate Americans increases to 50% or more.					
Fifty percent or more of American households possess a personal computer.					
An artificial intelligence is developed that can consistently converse with humans for over an hour via a terminal without being revealed as a computer program.					
Contact is made with extra terrestrial intelligence.					
A manned landing is made on Mars.					
Faster than light travel is developed.					

Event	Next 10 Years	Next 50 Years	Next 100 Years	More than 100 Years	Never
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Telepathic communication
between humans becomes an
accepted fact by the
scientific community.

A collapse of all existing
government and economic
systems ushers in a new
Dark Age.

A world-wide government

Optional Information - mark all that applies.

You are a(n) ☐ author ☐ artist ☐ Nesfan

Your longest period of formal education is ☐ less than 12 years
☐ less than 16 years ☐ bachelors degree ☐ some graduate work
☐ masters degree ☐ a Doctorate

You work in ☐ computers ☐ some aspect of literature ☐ Other _____
(Please specify)

