

## Space Neg

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## **Deathstroid Obsession Precludes Getting Off The Rock**

**Insisting that we must move to space because of deathstroid or something precludes any chance of saving our planet.**

Dr. John E. **Brandenburg**, Ph.D., and Monica Rix **Paxson**. Dead Mars, Dying Earth, **1999**, pg. 13.

What's scary is to see how immobilized those trained in environment awareness have become. While there are also many unnecessarily resigned older adults, with so many young adults, teenagers, and children personally resigned to ecological Armageddon it's important for those of us who didn't grow up with environmental horror stories to understand the overwhelming despair that comes when you truly realize the enormity of the problem. As a young man recently put it, 'Ask me anything about the problem of disposable diapers. I know all about that. But what am I supposed to do about everything else? I think it's a lost cause here. We'll probably have to go to the Moon or to Mars.' So, for many of our children, the prospect of leaving the Earth for another heavenly body in the neighborhood seems like a viable alternative to staying here and fighting it out on behalf of life on Earth. Fortunately the assessment that our environmental situation is hopeless is not only premature, but it also ignores our capacity to courageously take on challenges. Humanity has repeatedly proven that we are fully capable of rebuilding and recovering from both devastating wars and environmental disasters. Is our situation hopeless? Probably not, but we'll never know unless we exercise the full force of our talents to make things better. Besides, we'll have to get this ecological balancing act right before we colonize space or our attempts will be very short and very deadly. The unforgiving extremes of space require complete mastery of our environment in order to survive. If we can master a healthy relationship with this planet, we will undoubtedly be able to move on to others.

## Space Is Expensive

### Any economic benefit to space is not feasible

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Some of the riches from activity in space are already in hand, and some should be attainable in the near future. Others, especially those that depend on crewed spaceflight, are beyond our reach and may remain so indefinitely. As we anticipate harvesting cheap electric power, mining valuable minerals, and establishing luxury resorts for tourists and similar ventures, we may overlook the fact that accessing these riches will be extremely difficult and expensive. In a sense, we are like a child with a tiny allowance daydreaming about expensive mountain bicycles in a store window. Under such conditions it can be very difficult to conduct an honest cost-benefit analysis or develop a realistic time line. Overpowered by the grandeur of the opportunities that glitter before us, we may lose sight of the fact that it may be quite some time before we are able to seize them.

### Space exploration decreases the economy and creates wasteful spending.

Charles P. **Cozic**, Book Editor. Space Exploration, Opposing Viewpoints, **1992**, pg. 9.

Others, however, disagree. They believe that the more than \$300 billion the United States has spent on space exploration since 1958 is extravagant and largely a waste of taxpayers money. They point out that with today's government budget constraints expensive space projects are an extravagance the U.S. can ill afford. "The government is no longer an automatic teller machine [ NASA]" said Howard Wolpe, chairman of House of Representatives subcommittee that investigated NASA in 1991. These people argue that the federal government should fund programs to solve nationwide crises such as the AIDS epidemic, homelessness, poverty, and the decay of cities. Says G Smith, editor of the Earth Island Journal environmental magazine, "We need people programs rather than a space program."

## Space Is Expensive

### Space exploration is expensive.

Alex Roland, NQA. Space exploration, Opposing Viewpoints. 1992, pg. 67, 68.

First, manned spaceflight has turned out to be more expensive and more difficult than predicted. The Apollo program made it look as if it were easy and profitable. But Apollo cost \$25 billion which would be approximately \$80 billion in today's dollars, and the mission turned out to be a dead-end. We got the international prestige we bargained for and we won the space race. But the public lost interest in the missions and the scientific payoff was less than we could have gotten by investing the same funds in unmanned activities. The story has been the same since. The space shuttle was supposed to cost \$33 million per flight (in 1991 dollars); through fiscal year 1991 it has cost \$1.5 billion per flight, a cost overrun of 5000%. The shuttle was supposed to open up space for greater exploitation by carrying payloads into orbit for \$350 a pound. It has cost \$32,000 a pound essentially closing off space activity to all but communication satellites and highly subsidized government payloads. In addition to being the world's most expensive launch vehicle, the shuttle is also the most fragile and unreliable. It suffers repeated launch delays on the pad and is more vulnerable to weather than expendable launch vehicles. It has never carried the 65,000 pounds of cargo for which it was designed. It cannot land at any 10,000-foot runway. It cannot turn around in two weeks and be ready for another launch. The cost of making it safe enough for humans to fly is to make it more expensive than it is worth. The space station already exhibits many of the same weaknesses, even before its construction begins. When President Reagan proposed the space station in 1984, he projected its cost at \$8 billion. Eighteen months later the National Academy of Engineering estimated that it would really cost \$32 billion. Since then the cost estimates have continued to rise, even while the station has been scaled back and its capabilities reduced. Like the shuttle, it now costs far more and can do far less than was initially predicted, and the worst is yet to come. The real cost overruns on the shuttle came in construction and operation. The same is likely to be true of the space station. And its only real mission, the only one that cannot be done more effectively and more economically by automated, unmanned spacecraft, is manned spaceflight as an end in itself. The primary purpose of this enterprise will be to try to solve the overwhelming problems of physiological debilitation that humans experience on long-duration spaceflights. For that dubious objective the civilian space program will be mortgaged to a white elephant in orbit for decades to come. As with the shuttle, the only thing more expensive than actually building it will be trying to operate it.

## Cultural Diversity Prevents A Successful Journey

### Culture Prevents A Successful Journey of Multiple Years

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Wise, et al. (1990), reported on a study to search for problems associated with cultural diversity in space crews. They note that problems may emerge with an increase in the diversity of crews and the increase in duration time of flights. A Mars journey could take up to three years. Data from laboratory studies, space flights, and analog settings (Arctic, submarines) indicated that in conditions of isolation and confinement, in technology dominated environments, there was a deterioration in crew relations, psychological disturbances, and losses of productivity, (Harrison and Connors 1985). What will the addition of cultural diversity bring? The interaction of cultures with environments can produce different results. Americans put a switch up for on while the United Kingdom puts it up for off. There are differences for displays and measures as well. Instrumental differences need to be dealt with. There could be different food and dietary requirements. Language can be a major source of misunderstandings. Attitudes and use of alcohol differ; clothing and decor differ. There could be conflict over music and aromatics; and friction of religious observances and how to handle calendar observances (birthdays). Possibly the biggest source of opposition can come from attitudes and values. One root cause of problems can come from stereotyping. Cultural chauvinism or ethnocentrism needs to be prevented. Such problems are best handled through training and the selection process.'

## People Are Exposed To Radiation In Space

### Space goers are exposed to radiation

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Spacefarers are exposed to radiation from three different sources. First are cosmic rays, most of which originate outside of our galaxy and form an ever-present background of highly energetic charged particles. Cosmic rays are simply atomic nuclei accelerated to very high speeds, perhaps attaining 80 percent of the speed of light. Their strength varies over time and is more concentrated in some parts of the universe than in others. Second, when our Sun flares, there are solar particle events, another source of radiation. The Sun flares continuously, but only the largest outbursts produce dangerous levels of radiation at Earth and beyond. Although quite variable in intensity, there are cyclical variations, with peaks every eleven years. We have some ability to predict these flares, but only on a short-term basis—a few hours, not days or weeks, in advance. (We can predict these storms because, while we can see the flares at the speed of light, the protons travel a little slower and take longer to reach us.) There were solar storms of lethal intensity during February 1956, November 1960, and August 1971, but fortunately nobody was on their way to the Moon at those times. Finally, there is radiation from the nuclear fuel and other substances that we bring with us into space. Despite deep-seated fears of radiation and environmentalists' protests, the fact remains that properly handled nuclear power may have great value for future operations. Nonetheless, as in all other applications, radioactive sources can be improperly stored or mishandled, and pose a hazard to human health. Cosmic rays, solar particle events, and artificially created radiation are not identical, nor do they have identical effects on the human body. Suffice it to say that we are justifiably concerned about their combined effects on spacefarers, but that it is very difficult to make precise predictions. We have to rely on mathematical models, simulations, animal studies, and clinical observations of people who were victims of rare industrial accidents or affected by atomic blasts.

## Spaceflight Is Dangerous

### Spaceflight is dangerous

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There are four conspicuous ways that spaceflight environments differ from everyday environments. First, spaceflight environments are dangerous. Spacefarers may be blown up along with their rockets, killed from the buildup of excessive force in the course of acceleration or deceleration, or perhaps even shaken to death. Spacefarers can be roasted or frozen, receive fatal doses of radiation, or run out of air. At any point in the voyage -from liftoff to touchdown -equipment failure or human error can kill.

## Extra Terrestrial Impacts

### ET encounter is horrible. 3 scenarios.

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Another writer deals with the potential encounter with extraterrestrial life under three different contingent conditions: a superior technological society, an inferior one, and an equal one, (Lasswell, 1963). His focus is on culture. The argument is that the relationship that emerges is similar to one between terrestrial nations under the same contingent conditions. The superior ones. would make others inferior and subservient with the same kind of relationship that 'exists between 'a folk society and an industrialized nation with advanced weaponry. We would become the Third World. Equal ones would engage in alliances and political jockeying for advantages as the world balance of power would simply expand to include the new civilization. The inferior ones might become targets for exploitation as certain alien groups, if physically different from terrestrials, might be domesticated for sports, pets, zoological and botanical gardens.

### Alien encounters lead to oppression and xenocide

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How the alien would be treated would depend on such factors as degree of superiority or inferiority, political considerations, identity as a human or nonhuman. If considered a non-homo sapien the alien would be subject to ownership and as property, destruction if desired. There will be laws developed to define the boundaries for treatment perhaps as an alien, or property, or as an equal human. Perhaps there will be another form of homicide-xenocide, the killing of an alien. There is obvious theological interest in the ethical aspects of space exploration and the way in which extraterrestrial life may be incorporated into present religious doctrine-doctrine that may indeed be threatened if life is discovered outside of the Earth's sphere. One Jesuit noted that the mission of the Church is with the descendants of Adam and extraterrestrial life would not have inherited his original sin", nor be redeemable by Jesus

### The impacts of discovering proof of extra terrestrial life and proof of no life are equally as devastating

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As Dubridge remarked, it does not matter whether or not there is extraterrestrial intelligence (ETI), for either condition would be devastating in its impact. Should there be an encounter, the consequences would pervade all aspects of society from the social institutions to the mental health of Earth's inhabitants. And if it is clearly established that we are truly alone, this too is mind boggling. Why us and no one else? The absence of extraterrestrial intelligence is, just as difficult to establish as their presence because the absence of the evidence is no evidence of their absence. Thoughts of orbiting or other kinds of communities like satellites and planets insinuates their establishment and habitation by Earthlings. Given extraterrestrial intelligence, a natural extension of such thoughts is the probable presence of communities founded and inhabited by extraterrestrials. Alien and terrestrial cultures may see the universe differently. A good deal of the difference may depend on how, long they have been seeing it. Someday we may converge onto the same celestial body. To understand what we ,are, it might be necessary to understand what others are; to understand what others are, it might be necessary to understand what we are.

## Space Doesn't Solve For Humans

### Whether in OTEC's or space, humans inherently bring problems to every community structure

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Shurley, et al (1977), examined the various problems associated with satellite crews, Antarctic teams, and other exotic undertakings. They noted the various potential physical, psychological, and social problems. They included anxiety, depression, hysteria, ineffectual performances, substance abuse, and others. The authors suggested that the early pioneers, though trained, could bring with them a microcosm of behavior prevalent in the home society. These behaviors (or misbehaviors) were expected to include: vandalism, substance abuse, delinquency, white collar crime, accident, fire, suicide, fights, assault, homicide, diseases that are psychosomatic and otherwise, stowaways, hijacking, terrorism, sabotage, hysteria, panic, psychoses, bigotry, scapegoating, destructive competition and jealousy, assignations, adultery, gambling, pornography, abuse and exploitation of spouses and children, and a mélange of successes and failures-in short, the gamut of behavior and misbehavior prevalent in terrestrial life. These are daily occurrences on Earth and will continue in space, probably less frequently-at least in the beginning. New forms of deviance will be invented and old ones will return as new wine in old bottles.