

Swords to spaceships by Ian Crawford

We should divert the skills and cash of the arms industry into space exploration

Ian Crawford is director of the UCL-Birkbeck centre for planetary science and astrobiology

The building of high-technology weaponry, much of it for export to parts of the world that could do without it, dominates the business of the western aerospace industry. While many of us may lament this fact, we are faced with the dilemma that these companies are mainstays of the economy, directly employing well over half a million people in the US, and over 100,000 in Britain, with many more employed in supporting industries. The aerospace industry is also strategically important, and a driver of technological innovations with wide commercial and civilian applications. No government can afford to see these industries run down as a result of hostility to arms sales, especially if the jobs would merely go elsewhere and the world would be no better off. Moreover, as we have just seen with the dropping of the Serious Fraud Office investigation into BAE Systems's dealings with Saudi Arabia, the industry seems well able to use its political influence to protect its perceived self-interest.

For both political and ethical reasons, therefore, it is desirable to identify non-military business opportunities for the aerospace sector. The armaments industry is not well adapted to diversification, largely because of its reliance on government contracts, its large investment in specialised skills organised around highly complex projects and the high unit cost of its products. However, there is an obvious alternative to military production--an expanded programme of space exploration. Space is a viable alternative for the arms industry because the technologies involved are similar, and many companies already have a significant interest in this area. Increased involvement in space exploration would reduce the aerospace industry's reliance on military production (and arms exports), while maintaining employment and innovation. For example, had Britain not opted out of the European Space Agency's contribution to the International Space Station (ISS), companies like BAE could have devoted more of their business to building ISS components and less to selling weapons. As it happens, opportunities for greater investment in space exploration will soon be upon us, stimulated by the declared intention of the US to return astronauts to the moon by 2020. This is leading to the emergence of a global strategy for space exploration in which the British scientific community is already involved, and to which, given the political will, our aerospace industry could make a real contribution. Indeed, in early January the government launched a public consultation to inform the UK Civil Space Strategy 2007-10.

The counter-argument will be that selling arms abroad brings money in, while government-sponsored space activities amount to a straight subsidy. However, this ignores not only the fact that the arms industry is itself already heavily subsidised, but also the scientific and cultural benefits of space exploration, which deserve government support in their own right. Why? First, the exploration of the solar system will add greatly to scientific knowledge. Second, space exploration is inherently

exciting, and as such is an obvious vehicle for inspiring young people to take an increased interest in science and engineering. Third, space exploration provides a natural focus for international co-operation, and may help to build a stronger sense of global solidarity. And fourth, the development of a space-based industrial infrastructure may one day contribute to the global economy by providing access to essentially unlimited supplies of energy and resources.

Thus in addition to helping the disarmament process, an expansion of space activities can be seen as an investment in the future of humanity. No comparable arguments can be made in favour of the continuing, and largely unnecessary, mass production of military hardware by industries that could just as easily be contributing to the peaceful exploration of the universe.

Swords to spaceships
http://www.prospect-magazine.co.uk/article_details.php?id=8211
Prospect Magazine
http://www.prospect-magazine.co.uk