a Need for

European Air Power

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A Messy World

In Europe, our approach to security has changed dramatically in the past ten years. The benchmarks for measuring our military needs have evaporated. Our defence needs appear less urgent to our people and their elected representatives, and the black and white division between good guys and bad guys is much less easy. Yet wars, between States and within States, continue, and large numbers of people both military and civilian continue to die earlier than necessary because of conflict.

On the world stage, we have the novelty of a single super-power. The USA is pre-eminent in terms of both economic and military strength – and yet, because of the far-sightedness of the founding fathers, is constrained from the traditional imperialism that goes with such power. Nevertheless, any examination of the utility of military power must now always consider the part that the USA will play.

The new era is messier and perhaps less predictable than those that have gone before. Air power proponents have often assumed that technological improvements would provide ever better answers to security needs, and that can still be true for particular needs. However, as the requirements become less certain and the international concerns less amenable to military solution, we need to examine carefully the most resilient ways of resourcing military capability to meet the very varied demands of the international community.

Difficult Questions

The air power planner needs to ask:

What will we need air power for in the future?

How do we live with the different scale of US air power?

Can we sustain political interest in providing the necessary resources?

Looking Back

It is always easier to see the best plan with the benefit of hindsight. A future historian writing in the year 2100 would look back to key phases of air power. He would marvel at the speed with which the different main air power roles were developed, so that virtually all had been deployed and tested in combat within fifteen years of the first heavier than air flight. Technology refined the weapon systems, sensors and control arrangements in the furnace of World War Two. Missiles and nuclear warheads then dominated air power application for nearly half a century. We are in a phase now where the advent of smart weapons and information dominance seem to be key, but we have not yet got the historical perspective to be able to say whether these technologies, and their applications, will rate a chapter or just a footnote by the year 2100.

Looking Forward

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This discipline of seeing how we view the past is sobering when we have to contemplate what provisions we should make for the future. There is a tendency to assume that lesser powers should follow the USA and look for high technology, power projection capabilities. Reduction of the risk of casualties can become a main factor. This approach appeals to the air power enthusiast as aerospace systems tend to be associated with the sexiest technologies, and are well suited to keep the butchery of war at a safe distance from one's own citizens, even when they are in uniform.

There are however many counter pressures. Throughout its brief history the provision of air power has been an expensive undertaking. Separate air forces were necessary to ensure the resources were used wisely both in procurement and in deployment. Yet without some obvious national security problem, defence resources decline. Not only is there less cash, there is also a less obvious need for the most advanced weapon systems. The security problem currently seems to be more likely to be an ethnically cleansed refugee or a starving child in Africa.

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The Unknown Future

Most defence planning tries to extrapolate the experience of the recent past. This can lead to planning for the last war instead of the next one. In the technology area extrapolations are sometimes made from small scale laboratory innovations, and assume that new techniques will be adopted world-wide in a very short time. The trouble with all such forecasting is that it fails, by definition, to take into account the unpredictable key events or applications of technology. In international affairs, we have seen the change in the Middle East that has resulted from an assassin's bullet which killed Prime Minister Rabin. Integrated circuits have changed the way that the world operates over the past thirty years. The disasters at Three Mile Island and Chernobyl have changed world views on the utility of nuclear energy. Any assumptions for the future will inevitably be proved wrong by events. Yet without assumptions planning becomes chaotic.

A Continuing World?

In any security analysis, the first question to ask is whether there is any threat, however small, that a nation might be totally annihilated. With the end of the Cold War, we have reduced the risk of extinguishing life through a massive strategic nuclear exchange. There are still more than enough nuclear weapons to put at risk the viability of the planet, but we have more confidence that they will not be used. To reduce the risk yet further means that we must continue the arms reductions in this area. Military planning must look at ways to reduce the threat of accidental nuclear use. In India and Pakistan we should be seeking to transfer technology for better control of their primitive nuclear systems. There is also merit in de-alerting our own systems.

As the worry of a nuclear winter has receded, we have seen new global concerns emerge: ozone layer depletion, global warming, over-fishing, reducing biodiversity, atmospheric pollution, reduction in fresh water sources, population growth, and epidemics. None of these are likely to threaten the survivability of the species in the next thirty years, but all of them represent key problems that will need to be addressed during the period. There is also the random possibility of a strike by an asteroid or comet, and it may be that the risk will be seen as significant enough for work to be needed. Indeed, some suggest that it is the sort of issue that air power strategists should focus on. However for the purpose of air power planning, we should assume that the world will make it to 2030, but that it will be a much more crowded, polluted and tense world.

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International relations

Any plan for the future must consider the relations between states. The power of the State appears set to decline. In one direction, many issues need to be dealt with at the supranational level. Regional groupings form for economic reasons initially, but develop into political entities. The debate over a federal Europe is all about the vision of the economic community transforming into a political entity with its own foreign and security policy. In other parts of the world parallel moves are happening, but the others are all at an earlier stage than the EU.

It is too early to say how these regional groupings will mature: they appear in some cases to look as though there are limits to the degree of integration possible at the supranational level. Yet in thirty years time, it would be surprising if some had not formed arrangements akin to superstates. One might envisage a European, an American and an Asian set of such groupings. They might by then be co-operating or competing. From a defence planning perspective one needs to make judgments about the future of the US relationship.

While many of the potential problems of today and tomorrow need a supranational approach, there is also a tendency for power to move downward from States to individuals. The widening recognition of the need to protect human rights, the wish for ethnic groups to have self determination, increasing access to information, increasing education of women, and the ability of individuals to communicate globally, are all pointers to a future where States may decline in power, and in some cases even break up into smaller parts.

United Nations

At the supranational level, the development of global organisations will also be important. The United Nations may be very different. It might have become more effective in its decision-making, have the power to implement decisions, and be an effective monitor of international behaviour. Perhaps, more likely, it will have become less effective as the membership of the Security Council is expanded, and decision making becomes more difficult. Certainly the signs are that the process of changing the membership may itself be damaging as arguments break out of which nations should represent particular regions. Many would argue for a future where the UN could act as the World's policeman with appropriate forces on hand to enforce international law.The World Trade Organisation [WTO] may have developed to be a far more important entity in moderating international behaviour. We are in the early days yet, and there are plenty of opportunities for it to lose power. However, given the universal advantage in well regulated trade arrangements, it may be that the WTO is a better horse to back as a future global coordinator.

European Union

We have a perception today that the states of Western Europe, including the UK, are stable, co-operative, rich and technologically advanced. We worry about high costs of labour, we enjoy reasonable growth, albeit with unemployment a problem for many of the countries. We look to an expansion of this sphere of stability to encompass Central and Eastern Europe. New members of the EU come on stream within five years, and we expect that process to continue. Problems may include the former Yugoslavia, Russia and the North African littoral states.

There are black scenarios which might look at today as being the peak of EU development as the strains of greater integration, and monetary union in particular, lead to a fracturing of the carefully built consensus. Or that the strains of taking on new members, without some fundamental reforms of the CAP, cause the EU to stultify. Or that the great Russian democratic experiment fails with a fall into complete lawlessness, anarchy or military coup. Or that the populous poor of North Africa repeat the Islamic invasion of the past, this time seeking food rather than conquest. All these are possible, but perhaps less likely than a progressive extension of the EU strengthening security and prosperity in Europe.

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Middle East

However, at the Eastern end of the Mediterranean there is a more intractable problem between Israel and its neighbouring states. 30 years ago Arab/Israeli wars happened, and it may be that will remain possible for many years to come. Until there is a harmonious relationship between an Israel that feels safe and a viable Palestinian state, conflict is likely to remain a future worry. For the remainder of the Middle East, and perhaps in the Caucasus as well, the availability of oil is likely to be a factor which is of increasing interest to the rest of the world.

Some fear Fundamental Islam as a unifying force which will change the political face of the globe. More likely, the differences within the factions of Islam are more than enough to prevent such a single force operating in the next 30 years. Nor do the predictions of Samuel Huntington, who has written of a clash of civilisations, seem probable. Nevertheless, a global system of individual rights and democracy will remain difficult to implement. We remain to an extent prisoners of the present when thinking of the Middle East. Thus we will worry about Iran and Iraq, but it may be that there will emerge other personalities to worry us. Egypt has a problem with fundamentalists, which it currently contains, but at the price of slowing up economic reform. Saudi Arabia is not without its potential difficulties. Recent terrorist acts in Africa have highlighted the potential reach of groups based in Afghanistan.

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Asia-Pacific

The Asia-Pacific region defies the forecaster. Here we have two questions to consider: first, and most importantly, where will China be in thirty years time; and second what of the ASEAN nations? Again we find ourselves trapped in extrapolations of what is happening at the moment. We flip-flop from overoptimistic assumptions of prolonged double digit growth to assuming that the current crisis may be the end of the Tiger economies. In thirty years, the region will be more populous and more developed. It will be consuming more resources and more energy. It may or may not be peaceful, and China will be a much more significant player in the world. All this suggests that there is much to be said for engaging China and drawing it into the global institutions such as the WTO.

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Japan is more difficult to assess. It seems to be finding great difficulty in adapting fast enough to the new global markets. Certainly the Japanese opinion-formers are acutely aware of the need for reform. Yet it may not be able to reform, and a collapse of Japan would have major security implications. Korea still has the possibility to surprise the world, and perhaps not in a pleasant way. In this look at the future, we can postulate either a unified Korea or a war devastated peninsula. Either are possible. Nor is the Indian subcontinent's future assured. There are good signs with the increase of high technology industry in India, but it has not got its population problem under control. War with Pakistan remains possible, but is perhaps less likely given that it could have a nuclear dimension.

Africa

If we look at Africa, it is difficult to envisage any rapid answer to the many problems of the continent. The triumph of the return to democracy in South Africa, and also in Mozambique and Namibia gives hope for a region of increasing stability and prosperity in the South. Yet criminality could still undermine that, and it will be many years before such potential prosperity would encompass Central Africa. It seems likely that the world will have to help the continent throughout the next thirty years. Whether the richer nations will continue to be willing to do so is another question.

The Americas

In Latin America, the move away from military dictatorships to democracies has been a good development over the past few years. There are some thriving economies with great potential. Yet crime and corruption, often drug related, remains a significant problem. Environmental issues are also likely to cause tensions between the developed world and some South American states.

However, the most important question for future security planning is how the United States of America approaches future problems. The world will be very different depending on whether the USA becomes the World's policeman or retreats into regional isolation. The implications for the sort of investment that Europe should make in security depends critically on this issue.

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Future Technology

The uncertainties of the future international political and economic scene are not the only difficulties for defence planning. Predicting the implications of technology is equally impossible. It is a common perception that we are in a time of unprecedented rate of technological change. In some respects this is true, but there are some important caveats to be made. At the end of the last century, scientists were beginning to think they were within sight of having an explanation for everything. Indeed scientific discovery and technological application to industrial processes was remarkable then. There is perhaps a need to introduce the concept of effective technology. Thus we have had heavier than air flight for just short of a century, jet engines for half that time. We have developed technology which allows us to fly at supersonic speeds, but with a few exceptions, most air travel continues to be at the same high subsonic speed that we have enjoyed for the past thirty years. If you wish to improve transit times between London and New York, a better return is achieved by speeding up the process of getting from the centre of each city to the aircraft before it takes off. Similarly the car has peaked in its effective speed. The Thrust team have demonstrated that we have the technology for a supersonic car, but the speed of traffic through cities is declining.

None of this is to suggest a Luddite view of pure and applied research. It is more to point to the disparity between the extrapolation of the laboratory experiment to full scale production in the sort of societies that we anticipate. In the 1960s, we thought about about the exciting possible future applications for lasers. While these included directed energy weapons, they have been rather slow to be realised. Yet nobody suggested that many homes would have a laser in the successor to the gramophone or every office one in its successor to the typewriter.

With all these uncertainties, what are the technologies which will affect security over the next thirty years? They will almost certainly include: materials science, nanotechnology, genetic engineering, medicine, novel manufacturing techniques, non-lethal warfare, yet more in communications and computing. The use of space will be a fruitful area as well. The trend away from defence being in the lead on R&D towards the greater exploitation of civil technologies will continue. We need to concentrate defence research resources in the few narrow fields where civil research will not help.

Military Power

We can draw a few conclusions for military power. There is sufficient uncertainty in the immediate future to make it necessary for any government to invest in providing for its citizens' security. The more responsible, and wealthier, nations should also be prepared to providing a contribution towards international stability even when not directly threatened. That agenda will give rise to an unquantifiable and potentially limitless military requirement. Against the sorts of scenarios that are discussed above, you could build up any force requirement that you wished. This has been the problem in defence planning since the end of the Cold War. In the end, the investment will be cost limited in a fairly arbitrary way. The figure for many nations is around the 2% of GDP level.

The air power enthusiast will make the case for the special contribution that air systems can make to so many of these future operations. The question is whether, for a resource constrained nation where the direct threat is low, the attractions of high cost air systems will be self evident. The combat unit numbers will inevitably be low, and the support overheads proportionately higher.

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New Possibilities in New Worlds

One could suggest two possible futures for air power. Doubtless neither will come to pass but perhaps they bound the range of possibilities. First the developed world can continue on its current path. We feel secure from major military threat, and we see our security concerns as the results of crime, poverty and environmental degradation. Military forces continue to be useful to help diplomatic effort, and do the emergency jobs that no-one else is willing to do. When conflicts or other situations which require international intervention occur, we will look to the UN for authority, and to the US for capability. Over a period of time, those who wish to participate will have to follow the US lead in air power equipment and doctrine if they are to be able to take part in integrated operations. An increasing dependence on both US presence and US defence industries will cause governments to question even more whether they are wise to invest in expensive air systems, which in any event are always just a part of a bigger and better US force. They will tend to use their defence money for the ground forces which will be needed in virtually every type of operation, and can be made interoperable with the US at lower cost.

The other end of spectrum of possibilities would require air power to be procured, trained, and operated at above the national level. Just as in World War One, air warfare became too expensive and important to be left to the army and Navy, it may be that we are coming to a stage where this is true for individual nations. The NATO AWACs force has shown that it is possible for nations to club together to deploy a very expensive, high technology, key air power asset. It is strange that the great burst towards multinational forces has been led by ground formations. While our air forces operate together routinely without any problem, that is not the answer to the problems of

economies of scale. Air forces are uniquely easy to operate on a multinational basis – the language of the air is English, the procedures are international. If medium sized nations are to field air power capabilities of significance, they will need to merge their research, development, procurement, training, and operational capability. This is quite an undertaking, but not impossible and would of course go hand in hand with a stronger European defence aerospace industry and a real European Security and Defence Identity.

A Watershed?

We do not debate the implications of the long term decline in capabilities often enough. It would be politically difficult (particularly for the UK) to make air forces operate at the supranational level, but if we are all planning to carry out military operations at the supranational level, perhaps it is time to think how we might make it come to pass. One could conceive of a European air force perhaps as a WEU owned force – this is not a possibility for the immediate future; it is, however, an alternative to the inevitable decline of European air power capability in a world where military operations are discretionary rather than compulsory. Air power has thrived on adapting to new challenges and exploiting new opportunities, and there are plenty of those in the new era. The UK air power planners of today need to be thinking about ways in which Europe can operate its air power on a more equal basis with the USA.