

Appendix 10E
Air Power – An explanation¹

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Not to have an adequate air force in the present state of the world is to compromise the very foundations of national freedom and independence.

This philosophical statement was made by Winston Churchill in the House of Commons on March 14, 1933, during a time in which the world was at apparent peace with itself. The horror and devastation of the Great War of 1914 - 1918 was still well ingrained in the minds of politicians and military strategists alike, except of course in Germany. The British Prime Minister at that time, Chamberlain, believed that there was little likelihood of a war, let alone a World War. But then again, predicting the future has never been one of mankind's strong points.

Since then, mankind has continued to take up arms against itself while natural disasters have bequeathed destitution by wreaking havoc on humanity at irregular intervals. Natural disasters have often brought destruction with effects equal to, or worse than the effects of war – one need only recall the vivid television shots of the devastation caused by the Boxing Day 2004 Tsunami. Equally, the destruction caused by the recent wars in Iraq was also vividly displayed on televisions in living rooms worldwide. The point is this: air power has two manifestations, offensive operations and humanitarian support. Considering the role of air power, both in its offensive and humanitarian role, and based on air power legacy, there is no doubt that the time is right for air power, in its current guise, to be regarded as a "Force for Peace".

An analysis of one hundred and sixty 20th century campaigns in which air power was a factor concluded that control of the air is fundamentally important to the success of a campaign. By the same token, an analysis of all natural disasters and catastrophes during the last century has demonstrated the importance of air power in its more defensive guise, viz. that of humanitarian support and disaster relief.

¹ Reproduced from SA Soldier, September 2005.

There is no doubt that the acknowledged forefathers of air power, Trenchard, Smuts, et al, if asked to comment on the progress of air power and its multifaceted contributions, would be extremely proud of the progress, development and achievements of air power to world freedom and the upliftment of society.

Today it is important to understand that air power is more than just firepower, it must be acknowledged as a Force for Peace. Over the past twenty years, the focus of air power, as a major component of military campaigns, has shifted somewhat as the world's forces have realigned following the elimination of East-West confrontational diplomacy.

Certainly the most significant transfiguration of air power's offensive role and function was recognised by scholars as NATO's forces overwhelmed Yugoslav military activity in Kosovo and thereby arguably brought about the first ever victory by the use of air power alone.

This convinced many military analysts and politicians, of the absolute utility of air power for the resolution of conflict, even though in this case it was against an adversary incapable of effective retaliation in the face of overwhelming odds. It is also perhaps self-deceiving to measure the success of air power from the outcome of one-sided conflicts such as the Balkans, the ousting of the Taliban regime in Afghanistan, or even action against Iraq, since these scenarios, although likely to be typical of some future conflicts, do not comply with the classical equally matched conflicts, such as World War II or Korea, and was last seen during the Vietnam War.

Characteristics of air power

Since Gulf War I, through the Balkans, Afghanistan and Gulf War II, air power has demonstrated its surgical accuracy to effectively change the course of war. The sophistication of modern weaponry has introduced a level of accuracy to the battlefield previously unknown to mankind.

Owing to the accuracy of modern air-to-air missiles, the pilot with the best technology will most likely emerge victorious in the air battle. Air-to-air missiles today can be launched beyond visual range in a fire-and-forget mode and smart

bombs can be dropped to accuracies within 3 metres CEP; accurate enough to put a bomb through a window over a distance of 120 nautical miles. Today, the proliferation of such smart weapons provides operational commanders with the potential to inflict severe damage in a very short period of time in an effort to achieve political objectives. Sadly, man has perfected the art of killing and destruction.

In contrast, analysis of the bombing effort of World War II, during which 2.5 million tonnes of bombs were dropped, revealed that fewer than a quarter of the bombs dropped impacted within 5 miles of the designated target. High-level bombing was extremely inaccurate and caused significant collateral damage with extensive loss of civilian lives.

Interestingly and on a point of semantics, because of the increased accuracy of weapons, delivery platforms themselves should no longer be designated strategic or tactical - it is the nature of the task being carried out that should dictate the level of warfare. Strategic bombing no longer implies the massive area bombing raids associated with the strategic offensives of World War II or Vietnam. A single weapon dropped from a tactical aircraft can now achieve a strategic effect.

Political context

The worldwide trend in modern democracies for the civilian control of the military has increased affiliation between politicians and the military, bringing new meaning to Von Clausewitz's dictum that "war is an extension of politics by other means". Air power now offers not only the military, but also indirectly the politicians the ability to attack targets with precision and with low risk of collateral damage and of losses of aircrew and aircraft. In fact, the British shadow Minister of Defence, James Gray, MP, told an air power conference in London in 2003, that: "Air power is a seductive form of military power, offering gratification without commitment".

In democratic societies illicit or unmotivated commitment to warfare or significant losses of personnel during battles can bring down any government, as the Spanish Conservative government discovered during the 2004 elections.

Although there does not seem to have been a significant effect on the voting inclination of the United States' public as a result of the Gulf War, the impact on the British Government will most certainly be analysed in detail after their elections in the coming weeks.

But the concern now, however, is that air power could be considered by politicians as a universal remedy for all future wars with the entry into service of unmanned vehicles (UAVs) and unmanned combat air vehicles (UCAVs) in which risks are even further reduced. UCAVs remove all risk to aircrew, thereby satisfying the politicians' 'CNN phobia' of "no body bags, thank you!" But politicians be warned: air power alone cannot hold ground and it is important to appreciate that ultimately there will be a need to deploy ground forces.

Paradigm shift – threat asymmetry

It is said that nothing much has changed over the past one hundred years in the principles of air power application. Not true! The single most critical change to air power principles followed the cataclysmic terrorist events of 9/11, marking a 'paradigm shift' in the military response to what would have previously been regarded as a civilian responsibility.

At a stroke, this act of transnational terrorism replaced the conventional military threats for which the US, NATO and the majority of the world's armed forces were equipped and trained, thereby rendering ineffective much of the military doctrine on which their operations were based. The new threat posed by transnational terrorism is more real than the threat of nuclear war ever was between the East and the West. It will affect the daily lives of millions of the world's population for years to come - the scary part is that it is not susceptible to resolution by the use of air power alone.

There is currently a movie on the local circuit called XXX.2. It is a thriller dealing with fundamentalist extremists as the bad guys and some Hollywood star as the super cop. At one stage in the movie, to a melodramatic musical backdrop, the President of the United States announces: "Extremists need no armies". Although just a Hollywood set-up, those prophetic words capture the real challenges facing world peace today.

Although intelligence gathering has always been the backbone of air power action, what is clear at this stage is that with the surreptitious nature of transnational terrorism, the emphasis on surveillance and detection will have to increase by orders of magnitude. In fact, surveillance and detection is certain to become the enabling component in the application of air power.

South African Air Power

Closer to home, South Africa is increasingly being called upon to participate effectively in regional security obligations. This may at short notice require the participation of its air assets in peace support missions and other diplomatic initiatives associated with regional security objectives. Such operations could range from merely showing the flag, through tactical reconnaissance, air defence and air denial missions, to include even the full spectrum of offensive counter-air operations that could be associated with peace enforcement missions.

These potential scenarios clearly highlight the need for the retention of a viable air capability to ensure effective participation in any mandated military operation that would be sanctioned by either the United Nations or, at least, by the African Union.

Despite this, South Africa has a declared defensive military posture. Diplomacy and dissuasion are therefore our first line of defence. The visible display of a credible air combat capability is thus deemed to be in direct support of regional diplomatic initiatives to dissuade any likely aggressor from offensive action against South Africa or any of its regional allies. The air system has thus had to embark on a path of rejuvenation to meet the aspirations of South Africa as a reliable partner in supporting the region in its quest for stability and growth. Given the uncertainties of today's world, we must exploit the versatility of air power to the full and justify the nations confidence in our future procurement programmes by demonstrating their relevance and cost-effectiveness.

Over time, and particularly over the last ten years of financial duress, the role of the SA Air Force has undergone a subtle change from a strategic, to a more tactical air force. But we must heed the lessons learned over 85 years of air power practice that confirmed that air superiority was not a negotiable commodity and as such, control of the air cannot be achieved by superior numbers of inferior aircraft. The SA Air Force's recapitalisation programme of the Gripen, the Hawk,

the Agusta 109, the Rooivalk, the Super Lynx and lately the A-400M, is a clear statement of intent and support for the collateral utility of air power as a Force for Peace.

Conclusion

The future of the SA Air Force is inextricably linked to developments in air power, and one of the greatest challenges facing the SA Air Force is to ensure that we respond quickly and sensibly to changes in conceptual air power thinking.

The spirit of aviation and innovation has endured, but today air mindedness has to be applied in a very different political environment from that prevailing in the early 1900s. As we move into a world era characterised by instability and unpredictability, we cannot say with certainty where and when crises will emerge, but emerge they will.

The world will continue to be an arena of clashing group interests that will, inevitably, from time to time involve collective violence, and the ability to coerce an enemy rapidly will remain an invaluable option. And if diplomacy and deterrence should fail, at whatever level of intensity, airmen must thereafter be prepared, firstly, to shape the battlespace for our ground or maritime forces and, secondly, to provide direct support for their activities within such a battlespace, whether the operation be SANDF, SADC or AU coalition forces made up of multinational groupings