

UNDERSTANDING THE ROLE OF COMBAT AIR
POWER IN BOSNIA

Russell C. Martin

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IN BOSNIA**

**Submitted By:
Russell C. Martin**

**For:
Degree of M.Phil.
University of St. Andrews**

**On:
28 June 1996**

**Supervisor:
Prof. Trevor C. Salmon**



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Abstract

Fighting began in the Socialist Federal Republic of Yugoslavia in June 1991 and in Bosnia-Herzegovina in March 1992. Combat air power was introduced to the Bosnian conflict in April 1993. Its use in the Persian Gulf War in 1991 had raised the public and policy makers' expectations of the omnipotence of this weapon in dealing with an increasingly unstable world in the aftermath of the Cold War. However, combat air power did not initially perform in the Bosnian quagmire with the success that post-Gulf war euphoric politicians anticipated and as such cast doubts on its omnicompetence.

Two phases were identified in the Bosnian conflict with specific regard to the use of combat air power. The first phase (Operation Deny Flight: April 1993-August 1995) was identified with a failure of the use of combat air power, the second (post August 1995) with its success. The fact that the technical capability of combat air power had not changed in any way, nor the physical environment, lead to the hypothesis that combat air power *per se* was not to blame for the earlier failure. Rather, the inability of policy makers' to appreciate the context within which air power needed to be applied to be successful, and to provide solid political leadership with an overall strategy and clear objectives, was.

As a result of the contemporary nature of the conflict there was very little literature on the dissertation title. Therefore, much of the research has been drawn from journals, newspapers and where possible, military documents.

Acknowledgements

This thesis owes much to Professor Trevor Salmon for his expert supervision and never ending academic guidance in the pursuit of excellence. Wing Commander Dave Wood of the Battle Management Group (Bosnia) at Royal Air Force High Wycombe for his insight and understanding of the Bosnian morass. In addition, the author is indebted to: Group Captain Lambert for a brief but enlightening interview; Tim Pierce at the Royal Air Force College, Cranwell, and Chris Hobson at Royal Air Staff College, Bracknell, for their time, patience and helpfulness at providing a wide supply of varying and up to date literature; Squadron Leader Simon Smith of the Battle Management Group (Bosnia) at Royal Air Force High Wycombe; and many Royal Air Force aircrew of 111 Squadron and 4 Squadron for their first-hand accounts of the situation in the skies over Bosnia. The author would also like to thank Dave Cohen and Vicky Chapman for proof reading what was at times an unwieldy script. Finally, the author would like to thank Sylvia Briscoe for her endless patience, understanding, guidance and advice.

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List of Abbreviations

AAA	Anti-Aircraft Ammunition
ABCCC	Airborne Battlefield C ₂ Centre
ACM	Air Chief Marshal
AEZ	Air Exclusion Zone
AEW	Airborne Early Warning
AOCC	Air Operations Co-Ordination Centre
AS	Air Strikes
AVM	Air Vice Marshal
AWACS	Airborne Warning and Control System
BiH	Army of Bosnia-Herzegovina
Bosnia	Bosnia-Herzegovina
BSA	Bosnian Serb Army
CAOC	Combined Air Operations Centre
CAP	Combat Air Patrol
CAS	Close Air Support
Col	Colonel
C ₂	Command and Control
CINCSOUTH	Commander-in-Chief Southern Europe
CIS	Commonwealth of Independent States
D Def S	Department of Defence Studies
EC	European Community
EU	European Union
FAC	Forward Air Controller
FRY	Former Republic of Yugoslavia
5ATAF	Fifth Allied Tactical Air Force
HQ	Headquarters
HVO	Croatian Defence Council
HWEZ	Heavy Weapons Exclusion Zone
IFOR	Implementation Force
IR	Infrared
JNA	Yugoslav National Army
NAC	North Atlantic Council
NATO	North Atlantic Treaty Organisation
NFZ	No-Fly Zone
NGO	Non Governmental Organisation
OAS	Offensive Air Support
ODF	Operation Deny Flight

Abbreviations/cont...

PGM	Precision Guided Munitions
RAF	Royal Air Force
ROE	Rules of Engagement
RPV	Remotely Piloted Vehicle
RSK	Republic of Serb Krajina
SACEUR	Supreme Allied Commander Europe
SAM	Surface to Air Missile
SEAD	Suppression of Enemy Air Defence
SEZ	Sarajevo Exclusion Zone
SG	Secretary General
SFRY	Socialist Federal Republic of Yugoslavia
SRSR	Special Representative of the SG
UN	United Nations
UNEF I	UN Emergency Force One
UNHCR	UN High Commissioner for Refugees
UNPA	UN Protected Area
UNPROFOR	UN Protection Force
UNSCR	UN Security Council Resolution
UNSG	UN Secretary General
USA	United States of America
USAF	United States Air Force
USSR	Soviet Union
WEU	Western European Union
WTO	Warsaw Treaty Organisation
WW II	World War Two

Introduction

Historical Background: a summary

According to Thucydides, "If you want to know why people are fighting a war, ask them and they will tell you."¹ This is probably the only way to understand the conflict that began in the Balkans in the summer of 1991. The scenario, so typical of the post Cold War environment began in what was Yugoslavia and consisted of the break up of a political state along ethnic lines.² The conflict was not unique, however, because it was in a European state, there were calls for action from the beginning.³ For example, Baroness Thatcher, the former British prime minister, made a strong and passionate plea for the use of force.⁴ The international community however failed to act decisively and was seen to hesitate to involve itself in an area which was historically regarded as overly complex, turbulent and unstable; Sarajevo for example was the location of the assassination of the Arch Duke Ferdinand by a Serb in August 1914 – a trigger for the First World War.⁵

Serious fighting in Yugoslavia began in June 1991 when Croatia and Slovenia declared themselves independent from Yugoslavia. The war spread to Bosnia-Herzegovina (Bosnia) on 2 March, 1992. The Bosnian Serbs, not wishing to breakaway from the Yugoslav Republic staged a putsch in Sarajevo, a day after the referendum in which Bosnia voted for its independence; leaving only Serbia and Montenegro as the Federal Republic of Yugoslavia.⁶ The putsch marked the beginning of a three and half year conflict which saw the international community struggle to find a peaceful solution to the crises.

1. Dougherty, J. E & Pfaltzgraff, Jr, R. L., Contending Theories of International Relations: A Comprehensive Survey, New York, Harper Collins Publishers, 1990, pp 311.

2. By September 1993, there were judged to be "33 significant armed conflicts" around the world, where all but one were ethnic or ethno-religious wars which started as civil wars, insurgencies, or wars of secession. Wilkinson, P Prof., "The New Security Environment and New Crisis?", Proceedings of a Conference on The Role of Air Power in Crisis Management, University of St. Andrews, September 1993, pp 3.

3. Owen, D., "When it is right to fight", The Times, 4 August 1992.

4. Crnobrnja, M., The Yugoslav Drama, London, I.B. Tauris Publishers, 1994, pp 218.

5. Malcolm, N., Bosnia: A Short History, London, Papermac, 1994, pp 156-173.

6. For specifics on the referendum see Chapter 1 pp 18.

After the European Community (EC)⁷ failed to mediate successfully, the United Nations (UN) attempted a number of diplomatic efforts; including, sanctions and negotiations. As the situation in Bosnia deteriorated, the UN introduced a peacekeeping force, only however, with the aim of protecting the humanitarian aid effort which was trying to relieve the plight of a starving population.⁸ Largely as a result of the continuing hostility to the UN troops on the ground and in an effort to contain the fighting, the UN introduced a ban on all military flights in the airspace above Bosnia in October 1992.⁹ In view of the fact that the ban continued to be flouted, the UN authorised the necessary use of force to enforce the ban on 31 March, 1993. The remit was expanded in June 1993 to include the authority to use "all necessary measures" to deter attacks on civilians in six UN declared safe areas. The UN Secretary General requested 34,000 troops for this operation of which only 7,600 were approved. As a result of the lack of ground troops, a large percentage of the task was left to the use of air power¹⁰ – the "weapon of choice" of policy makers in dealing with an unruly world; in the wake of the Persian Gulf War of 1991.¹¹

During this time, efforts at the diplomatic level sought to find a negotiated settlement. However, until September 1995, ceasefire after ceasefire

7. The EC was only superseded but not supplanted by the European Union on 1 November, 1993.

8. Peacekeeping, as defined by Boutros-Ghali in *Agenda for Peace*, "is the deployment of a United Nations presence in the field, hitherto with the consent of all the parties concerned, normally involving United Nations military and/or police personnel and frequently civilians as well. Peacekeeping is a technique that expands the possibilities for both the prevention of conflict and the making of peace." Boutros Boutros-Ghali, "An Agenda For Peace", *Military Technology*, *Militech*, 11/94, pp 58-67.

9. See Appendix 1 for the United Nations Resolutions relevant to the Bosnian crisis. The relevance of this and other resolutions is discussed hereafter.

10. Air power and the description of what it is, has always been the subject of much discussion. See for example the essay by Major Alexander P. de Seversky on "What is Air Power?" in Eugene M. Emme, *The Impact of Air Power*, London, D. Van Nostrand Company Ltd, 1959, pp 201-8.

Sir Winston Churchill said, air power "is the most difficult of all forms of military force to measure, or even to express in precise terms." For the purpose of this thesis, the definition now accepted by the Royal Air Force (RAF), will be used: "air power is the ability to use platforms operating in or passing through the air for military purposes." In this instance, the platform is fast jet combat aircraft. *Air Power Doctrine*, RAF, AP 3000, HMSO, pp 13.

11. Eliot A. Cohen, "The Meaning and Future of Air Power", *Orbis*, Spring, 1995, pp 189.

negotiated with the help of the international community failed. The ceasefire and subsequent peace accord in November 1995 in Dayton, Ohio, was the result of the West threatening, and using, between 30 August and 14 September 1995, force to push the belligerents to a negotiated settlement.

Hypothesis

In the period April 1993 to 30 August 1995 (Phase 1), UN authorised North Atlantic Treaty Organisation (NATO) combat fast jet air power was used to underpin the diplomatic process; deter military flights by the belligerents; deter action by the belligerents against UN troops on the ground; and deter attacks against six UN designated "safe areas". However, despite the use of this air power, the belligerents made no effort to negotiate, military flights continued, as did attacks on UN troops and attacks on the safe areas of Bihac, Gorazde, Sarajevo, Tuzla and Zepa. In effect, the belligerents had very little regard for the use of air power.

The use of air power between 30 August 1995 and 14 September 1995 (Phase 2) reflected a very different situation. Suddenly, the belligerents took heed, agreed to negotiate, stopped attacking UN troops and ceased to use force to achieve their territorial gains. The fact that the technical capability of combat air power had not changed in any way, nor the physical environment, lead to the hypothesis that *combat air power per se was not to blame for the earlier failure. Rather, the inability of policy makers' to appreciate the context within which air power needed to be applied to be successful, and to provide solid political leadership with an overall strategy and clear objectives, was.*

The thesis argues that because policy makers employed combat air power to act as the strong arm in the UN's peacekeeping effort, thereby constraining it, the same air power had no significant affect on deterring the belligerents from using force to achieve their wider objectives – territorial claims. In effect, the belligerents did not perceive the use of air power as a threat and were more than willing to achieve their objectives by force, rather than negotiation. This inability to deter, was not a failure of air power *per se*, but rather reflected a lack of a credible threat, brought about by the failure of the international

community to adopt an overall strategy, clear objectives and to develop political leadership in the conflict.

Thesis Structure

The thesis attempts to explore the hypothesis in six chapters. The first chapter expands on the history of the conflict, generating an understanding of the complexity of the situation, and giving a flavour of the seemingly impossible task that faced the international community. In addition, it considers some of the attempts by the international community to resolve the conflict. It highlights the continual failure of the negotiation process and illustrates how the belligerents were more than willing to achieve their objectives through the use of force, rather than negotiation.

Chapter 2 briefly examines the relationship between NATO and the UN in Bosnia and explains in what context combat air power was introduced to the Bosnian morass. In addition, the chapter explains why the view has been taken that the use of air power was not a success and failed to live up to policy makers' expectations: unable to prevent violations of the "No Fly Zone" (NFZ); deter attacks on the "safe areas"; deter attacks on UN troops; and underpin the diplomatic process.

The World War II writer Hoffman Nickerson wrote: "air power is a thunderbolt launched from an eggshell invisibly tethered to a base."¹² If he had to expand on this in today's environment, he may like to add the phrase: "Air power, subject to the prevailing political situation, could be a thunderbolt...." This quote would nicely capture the limitations of air power in today's peace environment; those physical and technical considerations of the "eggshell" or aircraft, and those more intangible political-situational restraints.

Chapter 3 concentrates on the physical and technical factors that limited the use of combat air power. In addition, the chapter includes some of the attributes of air power drawn from the Gulf War, with a view to giving some credence as to why policy makers' had such raised expectations of the utility

12. Hoffman Nickerson, *Arms and Policy, 1939-1944*, New York, G.P Putnam's Sons, 1945, pp 267.

of air power. In addition it makes two observations that are relevant to support the case that it was not a failure of air power *per se*, but a failure in the way it was implemented.

The first observation concerns the use of air power to protect the humanitarian aid effort and to deter the attacks on the "safe areas". The use of air power however, has rarely provided the total solution, and a substantial number of ground troops have generally been required where territory has had to be controlled or monitored for any length of time. The thesis suggests, for example, that policy makers after the Gulf War believed air power was omnipotent, and thus advocated its use in Bosnia. However, history has shown that on the whole ground troops have been required to give any permanence to territorial protection. Yet, in Bosnia, the UN adopted resolutions which in actual fact stood little chance of succeeding. For example, authorising the use of air power to protect safe areas, and then agreeing to only 7,600 ground troops when it was estimated that 34,000 were required.¹³

Chapter 3 also observes that air power is a part of military force and as such has the power to hurt. The power to hurt as Schelling argued in Arms and Influence is bargaining power. "To exploit it is diplomacy – vicious diplomacy but diplomacy."¹⁴ The second observation highlights the fact that this diplomacy of violence can be used to psychologically influence the behaviour of the belligerents; to coerce them into a desirable pattern of behaviour. The observation attempts to illustrate that if policy makers had the will to use the coercive capability of air power to underpin the diplomatic process, it could have worked, but that given the lack of will it was never given a proper opportunity to do so.

Having considered the "eggshell", Chapter 4 considers the political-situational factors that affected the effective use of combat air power in phase 1. The chapter distinguishes between action in the air (the NFZ) and action on the ground (air strikes). In both cases, the discussion highlights the convoluted and protracted decision making process that hindered the effective use of air

13. These events are covered in more detail in Chapter 2.

14. Schelling T.C., Arms and Influence, New Haven and London, Yale University Press, 1966, pp vi and 2.

power. In addition, the problems of political willpower and leadership, combined with the restrictive rules of engagement are explored to illustrate the degree of political restraint that existed pre 30 August 1995.

The discussion in Chapter 5 moves on to phase 2 and addresses the success of the use of air power. The chapter notes that the physical and technical restraints had not changed, yet the political-situational ones had. In effect, the decision process was no longer impeded by civilians and there was newfound political will to intervene. These factors, combined with a clear objective of what was to be achieved, realistic rules of engagement and the use of overwhelming force, all contributed to the success of the use of air power.

Finally, Chapter 6 attempts to draw the threads of the arguments together. The discussion explores the fact that the UN primarily hoped that deploying air power to Bosnia would in itself act as a deterrent to further belligerent action. The discussion addresses the fact that for a deterrent to operate, the threat needs to be credible, capable and clearly communicated.¹⁵ For the threat to be credible, the belligerents had to perceive UN/NATO as possessing the military capability sufficient to inflict substantial costs on them, and the will or intention to use that capability if necessary.¹⁶ The chapter, argues that while the UN and NATO had the capability between April 1993 and 30 August 1995, they failed to communicate clearly their intent, lacking the will to use the power at their disposal.

15. Stern, P.C., Perspectives on Deterrence, Oxford, Oxford University Press, 1989, pp 6.

16. Huth, P.K., Extended Deterrence and the Prevention of War, New Haven, CT, Yale University Press, 1988, pp 4.

Chapter 1

Bosnia-Herzegovina

The Balkan Quagmire

English persons, therefore, of humanitarian and reformist disposition constantly went out to the Balkan Peninsula to see who was in fact ill-treating whom, and, being by the very nature of their perfectionist faith unable to accept the horrid hypothesis that everybody was ill-treating everybody else, all came back with a pet Balkan people established in their hearts as suffering and innocent, eternally the massacree and never the massacer.

*Rebecca West
Black Lamb and Grey Falcon, 1938¹*

Introduction

Astride the main routes linking Europe and Asia, the former Yugoslavia² was at once a Central European, a Balkan and a Mediterranean state. As part of the Balkan States,³ the region below the Danube, and surrounded by the Adriatic, Aegean, Ionian and Black Seas, it covered almost exactly the same area as the UK but had a population of less than 23 million.⁴ Boasting one of the most beautiful coastlines in Europe, the former Yugoslavia used to attract many thousands of tourists each year before it was horribly torn apart by the civil war which began after Slovenia declared independence on 25 June 1991.

This chapter attempts to briefly consider how the disintegration of Yugoslavia came about, and hence analyse how events outside Bosnia set in motion uncontrollable events inside Bosnia, as it became the centre of turmoil in the

1. Boyd, C.G., "Making Peace with the Guilty: The Truth about Bosnia", Foreign Affairs, Vol. 74, No. 5, September/October 1995, pp 22.

2. The former Yugoslavia in this context refers to the Yugoslavia that was, before its disintegration in 1991.

3. These are the states occupying the Balkan Peninsula of southern Europe: Albania, Bulgaria, Greece, Rumania, the European portion of Turkey, and Yugoslavia--since 1991- Bosnia, Croatia, Macedonia, Slovenia, Serbia and Montenegro.

4. According to the 1981 census the total population numbered 22,427,585. Poulton, H., The Balkans: Minorities and States in Conflict, London, Minorities Rights Publications, 1993, pp 15

Third Balkan War.⁵ In addition the chapter tries to illustrate the significance of the conflict to Europe and moreover to international security as a whole, whilst reviewing the failed attempts of the West as it moved to contain and resolve the crisis. In so doing, it tries to set the scene for the difficult, if not impossible task air power had been asked to play, while simultaneously highlighting the points from history that may be relevant to an understanding and appreciation of the difficulties in solving the ongoing crisis.

Understanding the Past. . .

The former Yugoslavia was politically and socially shaped largely by stronger foreign powers that dominated the Balkans, and by the resistance that successive invaders met. The roots of the conflict in Bosnia itself were thoroughly documented by Noel Malcolm in his book, Bosnia: A short history.⁶ The key to the Bosnian muslims', Croats' and Serbs' tragic enmity, although it was traced back to the ancient Illyrians, was found in the splitting in two of the Roman Empire, in 395 AD, along the line of the River Drina. The middle part of the river was subsequently taken as the boundary between Bosnia and Serbia as it remains today. In the 6th and 7th centuries migrant Slav tribes settled in the region: the Slovenes to the north, the Croats to the

5. The First Balkan War (1912-13) is categorised as the time when Bulgaria and Serbia at Russian goading agreed to partition Macedonia. They were joined by Greece and Montenegro in attacking Turkey before the Great Powers intervened. The Second Balkan War (1913) was a result of Bulgaria fearing a secret deal between the other regional powers to exclude it from the partition of Macedonia. Within a few months of the First Balkan War, it launched an attack on Greece and Serbia, its recent allies. It was immediately attacked in its turn by Rumania and Turkey. Bulgaria was defeated, and forced to surrender its earlier gains. For a fuller discussion see the "Report of the International Commission to inquire into the causes and conduct of the Balkan Wars" conducted by the Division of Intercourse and Education of the Carnegie Endowment for International Peace; recently re-released by Carnegie Endowment, The Other Balkan Wars: A 1913 Carnegie Endowment Inquiry in Retrospect with a New Introduction and Reflections on the Present Conflict by George F. Kennan, A Carnegie Endowment Book, Washington, D.C, 1993.

6. Malcolm, N., Bosnia: A Short History, London, Papermac, 1994, pp 213-252. See also: Almond, M., Europe's Backyard War: The War in the Balkans, London, Manderin Paperbacks, 1994, pp 61-190.

Cohen, L.J., Broken Bonds: The Disintegration of Yugoslavia, Oxford, Westview Press, 1993, pp 195-264.

Ricciuti, E.R., War in Yugoslavia: The Breakup of a Nation, London, Evans Brothers Limited, 1993, pp 5-25.

Rieff, D., Slaughterhouse: Bosnia and the Failure of the West, London, Vintage, 1995.

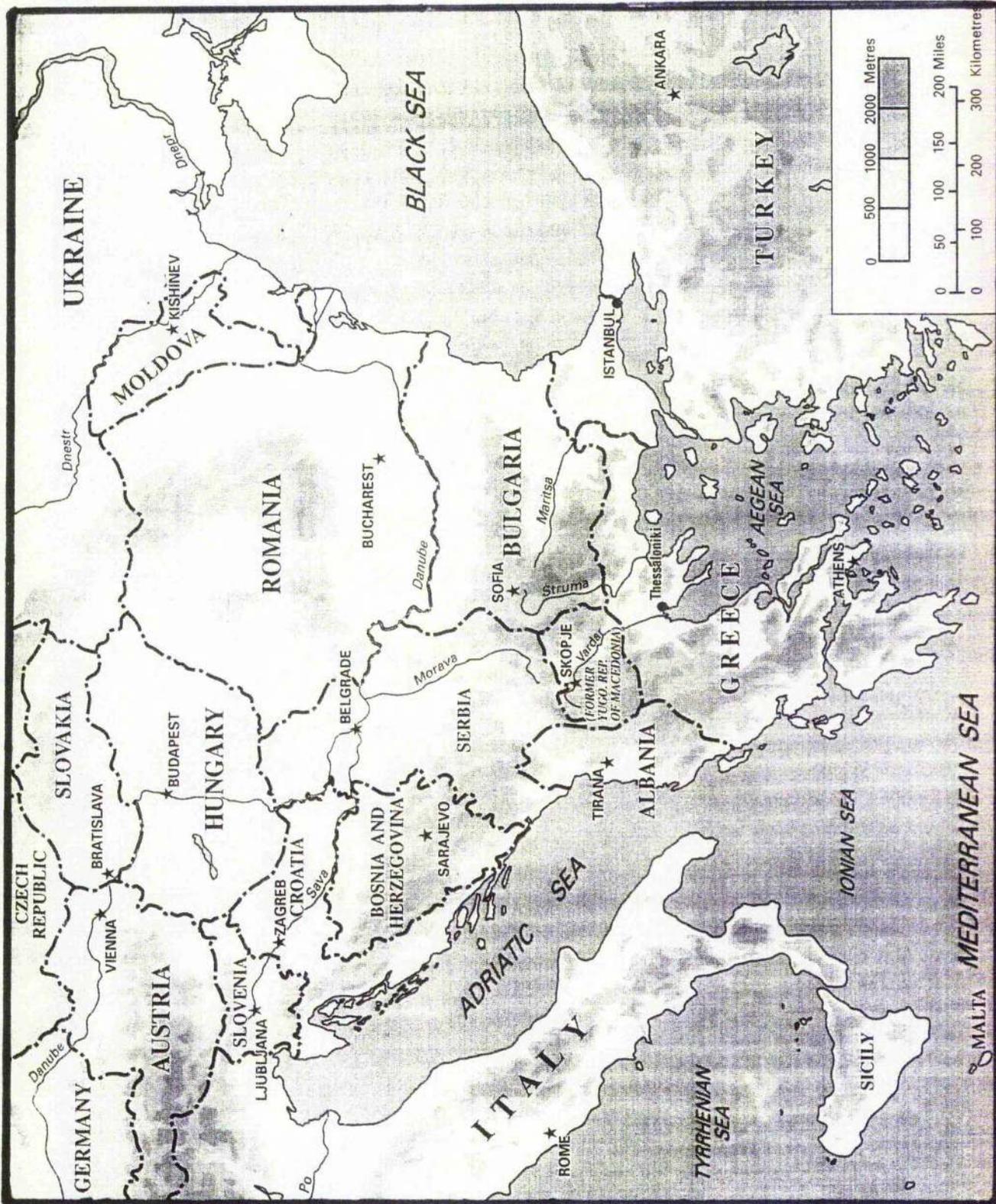


Fig. 1. The Balkans (1992)⁷

⁷ McKeown, J. H Col., "The Yugoslavs-What are they like?", *Defence Intelligence Staff*, 10 June 1993, pp 13.

west and the Serbs to the east of the line. The Croats and Serbs belonged to the same ethnic group and spoke different dialects of the same language. The key to their hostility lies in their location east and west of the imperial dividing line and in their consequent conversion to the diverging branches of Christianity Latin-speaking in the north and west, Greek-speaking Orthodox in the east. It was later during the 500 years of Turkish rule lasting until 1878, that most of the central population of Bosnians were converted to Islam.

The Balkans were split for centuries between the Austro-Hungarian and Ottoman Empires, with a military frontier: 'the Vojna Krajina' (Serb Krajina) existing between the two spheres of influence. The Krajina was not a precise line on a map, but rather a mountainous stretch of land in which the two Empires blurred into one another. The Krajina area became home to a mixed Croat, Serb and Muslim community, in which the Serbs, who had migrated north westwards in the face of the advancing Ottoman Turks, were the majority. Many of the migrating Serbian families settled in the Croatian town of Knin,⁸ which developed into their regional capital. In return for loyalty to the Austro-Hungarian Empire and defending that Empire's southern border, the Serbs there were given religious and political freedom. Since its creation the Krajina has been described as ". . . the most active and disruptive fault line in history. . .,"⁹ being the focus of a number of wars as the Ottoman Empire declined.

In 1918, Yugoslavia became a federal state following the expulsion of the Turks, the collapse of the Austro-Hungarian Empire and the end of World War I. However, the damage had been done, feelings of ethnic nationalism as a result of forced domination ran deep, and from the very beginning Yugoslavia was an unhappy marriage of differing languages, religions, cultures and creeds.

8. Knin was the town where the 1991 Yugoslav civil war was reputed to have started. Tanner for example in an article traces the actual origins of the conflict to "a hot August day in 1990 . . . [when] . . . a radio report said a disturbance had broken out in a dusty town full of Serbs called Knin [capital of Krajina] high in the mountains of Dalmatia". Although no-one seemed to know what sparked the riot it was considered to be "the beginning of the Yugoslav civil war". Tanner, M., "Riot that turned into a national bloodbath", The Independent, 4 May 1993.

9. 18 Intelligence & Security Section, "Op Grapple", The RAT, January 1995.

On 27 March 1941, a *coup d'etat* unseated the pro-Axis government in Yugoslavia, triggering the campaign by Hitler against the Yugoslav people.¹⁰ On 6 April 1941, the Germans bombarded Belgrade and, despite heroic resistance by the Third Yugoslav army, the country was rapidly occupied. However, even though the Germans had complete air superiority and overwhelming ground forces which were able to control the road networks and built-up areas (tying up half a million soldiers),¹¹ they were unable to defeat all the resistance movements. The Communist Partisans led by Tito (who had a Croat father and a Slovene mother) fought back, whilst the Royalist resistance force led by General Mihailovich buckled under the savage German reprisals. In fact, the Royalist not only surrendered to the Germans, but cooperated with them. Indeed a source of much hatred today is a result of the ethnic civil war that was waged between the German sponsored Croat ustase,¹² the Serb monarchist chetniks¹³ and Tito's communist partisans – the ustase and chetniks being much more intent on killing each other than the Germans.

Unlike Mihailovich, Tito never surrendered, despite determined attacks by the Germans in which air power played a significant part. A typical German operation for example involved "a sinister game. . . where the planes in low dives crisscrossed the wood in straight patterns, leaving on each run a neat pattern of bombs and at times, the smaller fry tossing grenades from their cockpits."¹⁴ As Maclean, a British Brigadier close to Tito noted, "enemy aircraft, against which they had no protection whatsoever, played an important part seeking [using aerial photography] out their position and pinning them

10. Van Creveld, M., Hitler's Strategy 1940-41: The Balkan Clue, Cambridge, Cambridge University Press, 1973, pp 139.

11. UNLO 5ATAF, "A Bluffer's Guide to the Former Yugoslavia (FY)", UNLO 5ATAF, 2 July 1994, pp 2.

12. The Ustase were a Croatian independence/fascist movement that collaborated with the Nazi occupation of Yugoslavia and set up a Croatian puppet state, 1941-45. The Ustase pursued genocide (or ethnic cleansing, as it is called in the 1990s) against Jews, Gypsies, Muslims and Serbs. They also massacred as many as they could of both Chetniks and members of Tito's communist partisan units (who answered tit for tat). They may have killed as many as 350,000 in all, in what amounted to a Yugoslav civil war within the confines of WW II. Nolan, C. J., The Longman Guide to World Affairs, London, Longman Group Ltd, 1995, pp 413.

13. Chetniks were Serbian nationalists who fought the Ottomans before 1918, and led by General Mihailovic, initially fought the Germans in WW II and subsequently co-operated with them. Many thousands were liquidated by Tito after the war. *Ibid.* pp 60.

14. Deakin, F.W., The Embattled Mountain, London, Oxford University Press, 1971, pp 18.

down while additional land forces were brought up to deal with them."¹⁵ A turning point came in the autumn of 1943 when allied supplies began to reach the insurgents, helping to secure a victory for Tito and the partisans at the end of World War II.

With Tito's victory, the aftermath of WWII saw thousands¹⁶ of non-Communist ustase and chetnik rounded up and massacred by the partisans, further deepening the ethnic hatred. In addition, the state was divided up into six republics: Slovenia, Croatia, Bosnia-Herzegovina, Serbia (which included the provinces of Kosovo and Vojvodina), Macedonia and Montenegro. Inevitably, with such an ethnic mix, many communities, particularly Serb, found themselves on the wrong side of the republican borders. Until his death in 1980, Tito continued to prevail over a population of divided people who had no desire to live together. Intermingling thrived at a personal, and close community level, with the result that a certain degree of intermarriage took place in which Bosnian Serbs and Croats married Muslims. Nevertheless, it could be said that only by the strength of his character and the occasional ruthless use of force did Tito manage to keep order. He himself (the only effective 20th Century leader of Yugoslavia), summed up the problems of uniting the people of the former Republic of Yugoslavia like this:

"I am the leader of...

- 1 Country.....which has
- 2 Alphabets [*Cyrillic, Latin*]
- 3 Languages [*Macedonian, Serbo-Croat, Slovene*]
- 4 Religions [*Catholic, Islam, Orthodox, 'atheism'*]
- 5 Nationalities [*Croat, Serb, Slovene, Macedonian, Muslim*]
- 6 Republics.....surrounded by
- 7 Neighbours

A country in which live...

- 8 Ethnic minorities."¹⁷

15. Towle, P.A., Pilots and Rebels: The Use of Aircraft in Unconventional Warfare 1918-1988, London, Brassey's U.K, 1989, pp 61.

16. Nolan op. cit. pp 390. During and after liberation in 1944-45, Tito had as many as 200,000 Ustase and Chetnik hunted down and killed to wreak revenge.

17. 18 th Int & Sy Sect, op. cit. pp 4.

The Yugoslavs themselves applied a very similar analysis, however they noted two differences:

- "1 Party (Communist)
- 0 Government ('There is no government, only opposition')"¹⁸

It could be argued with hindsight, that the disintegration of Yugoslavia was only a matter of time after Tito's death. He had bequeathed a collective Presidency consisting of one representative from each of the six republics and two provinces and the chairman of the League of Communists. The Presidency was led by a President who served for one year only before handing over to his successor.

. . . To Solve the Present

By 1987 Slobodan Milosevic became the Serbian leader.¹⁹ Although he continued to preach the virtues of socialism, he also espoused the cause of Serbian nationalism, speaking out on behalf of the Serbian minority in Kosovo. This struck a chord with the Serbs and his popularity grew. The Slovenes and Croats, moving towards social democracy, were horrified at the prospect of reconstructed socialism and possible Serbian attempts to achieve hegemony. On 25 June 1991 the Slovenes and Croats declared their independence with the aim of separating themselves from Yugoslavia and

18. McKeown op. cit. pp 6.

19. Slobodan Milosevic began his career as a communist apparatchik of extremely authoritarian mien, even for Serbia. He rose to the leadership of the Serbian party by betraying the man who gave him his chance in politics. Milosevic is an opportunist, not an ideologue, driven by power rather than nationalism, a man of extraordinary coldness where truth has only a relative value. His rallying cry was that all Serbs have the right to live in a single state-a doctrine that, if applied globally, would cause the disintegration of dozens of multinational states. Zimmermann, W., "The Last Ambassador", Foreign Affairs, March/April 1995, Vol. 74, No. 2, pp 6; and McKeown op. cit. pp 11.

hence Serbia, and with the hope of subsequent recognition by the West.²⁰

As a result of Slovenia's declaration of independence, fighting began between the Slovenes and the Yugoslav National Army (JNA) almost immediately. The declaration had not been preceded by even the most token effort to negotiate, and effectively put under Slovenias control all the border and customs posts between Slovenia and its two neighbours, Italy and Austria. This meant that Slovenia, the only international gateway between the West and Yugoslavia, had unilaterally appropriated the right to goods destined for other republics, as well as customs revenues estimated at some 75 percent of the Yugoslav federal budget.²¹ Even an army less primitive than the JNA would have reacted.

The Yugoslav generals, thinking they could intimidate the Slovenes, attempted to secure Slovenia's international borders. The Slovenes, trained by the JNA itself in international defence, fought back. After ten days, at Milosevic's direction or with his acquiescence, the JNA withdrew from Slovenia, leaving the republic effectively independent. It should be no surprise that Milosevic

20. The EC could not at the time agree on the best policy for recognition which would confirm formal acceptance by other states of Croatia's and Slovenia's sovereignty. Lord Carrington expressed his concerns in a letter to Hans van den Broek:

"There is also a real danger, perhaps even a probability, that Bosnia-Herzegovina would also ask for independence and recognition, which would be wholly unacceptable to the Serbs in that republic in which there are something like 100,000 JNA troops, some of which have withdrawn there from Croatia. Milosevic has hinted that military action would take place there if Croatia and Slovenia were recognised. This might well be the spark that sets Bosnia-Herzegovina alight."

Letter from Lord Carrington, Chairman of the Conference on Yugoslavia, writing from London to Mr Hans van den Broek, Minister of Foreign Affairs of the Netherlands (at that time President of the European Community Council of Ministers), 2 December 1991.

On 10 December 1991 UN Secretary-General Javier Perez de Cuellar wrote in a similar vein to Hans van den Broek. Remarkably, it was Hans-Dietrich Genscher, Vice-Chancellor and Minister for Foreign Affairs of the Federal Republic of Germany, who responded, in a short letter to Perez de Cuellar of 13 December. Perez de Cuellar, in a letter of 14 December, sent a strong and detailed response reiterating that "early selective recognitions could result in a widening of the present conflict."

Roberts, A., "Communal conflict as a challenge to international organisation: the case of former Yugoslavia", Review of International Studies, Vol. 21, No. 4, 1995, pp 405. See also Salmon, T.C., "Testing times for European political cooperation: the Gulf and Yugoslavia, 1990-92", International Affairs, Vol. 68, No. 2, 1992, pp 252-3.

21. Zimmerman op. cit. pp 12.

was willing to let Slovenia go. His policy since 1989 had provoked the Slovenes to secede by making it clear that he would not tolerate their liberal, independent ways. In addition, with Slovenia out of the game, he and the JNA were now free to take on a Croatia no longer able to count on Slovenia's support.

The fighting in Croatia began under the illusion of evenhandedness, with the Yugoslav army seemingly to step in in order to separate the Serbian and Croatian combatants.²² During the summer of 1991 however, it soon became clear that the JNA, while claiming neutrality, was in fact turning territory over to the Serbs. The war in Croatia had become a war of aggression.

The timing coincided with a delicate moment in Europe, when the collapse of bipolarity confronted all international structures on the continent with the need to redefine their role. The disintegration of the Warsaw Treaty Organisation (WTO),²³ and the Soviet Union (USSR)²⁴ and the unification of Germany created new problems, focusing international attention on the changes in Central/Eastern Europe and the former USSR. Therefore nobody wanted to touch the Balkan problem. In Washington for example, it was described as a "tar baby",²⁵ and with the American presidential election just a year away, it was seen as a loser. The US therefore did not give it priority in its strategic thinking and initially took the view that the crisis was a problem in Europe's backyard and as such should be left to Europe.²⁶ The European Commission was of course quite happy with this as Jacques Delors, its President,

22. The JNA were not initially involved in the fighting in Croatia. Initially the skirmishes took place between the Croatian National Guard (ZNG), the new symbol of Croatian independence and statehood, and the local Serb militia. Crnobrnja, M., The Yugoslav Drama, London, I.B. Tauris Publishers, 1994, pp 165-166.

23. The military alliance formed by the Soviet bloc in 1955, in response to rearmament of West Germany and its inclusion in NATO. It gave legal sanction to an already existing state of affairs: the presence of Soviet troops in several east European countries. Where NATO was essentially a guarantee of US aid to Western Europe, the WTO was a guarantee of Eastern Europe's allegiance to the Soviet Union. With the events of 1989, the WTO ceased to be an effective alliance. It was dissolved on 31 March 1991. Nolan op. cit. pp 429.

24. The USSR was replaced by the Commonwealth of Independent states (CIS) - 11 of the 15 former Soviet republics joined the CIS.

25. The term "tar baby" is taken here to mean a messy situation or issue which nobody wants to address. Zimmermann op. cit. pp 15.

26. Newhouse, J., "The Diplomatic Round", The New Yorker, 24 August 1992, pp 61.

remarked in the summer of 1991: "We do not interfere in American affairs. We hope they will have enough respect not to interfere in ours."²⁷

The European Community (EC) at that time had strong reasons to mediate in the conflict: the war in Yugoslavia threatened to destabilise the entire Southeastern Europe, two EC members - Italy and Greece - bordered on Yugoslavia, while two other neighbours - Austria and Hungary - were strong candidates for EC membership.²⁸ Moreover, all Central/Eastern European states expected the EC to assume the leading role in crisis management on the continent. After its failure in the Gulf War, the Community had to try to repair its image in the first armed conflict in Europe after more than four decades.²⁹ However, this moment in time caught the Community without proper foreign policy instruments and amidst the preparations for the Maastricht summit; a sensitive period of transformation from economic community to political union.³⁰ As a result, despite its desire to assert itself as the leading political factor on the continent, the EC lacked appropriate instruments for crisis prevention and crisis management and wildly underestimated the depth and seriousness of the crisis.³¹

As the war grew more bitter initial efforts were however made, through a joint effort by the EC and the United Nations (UN), to achieve a cease-fire and an agreement among all former Yugoslav republics in the summer of 1991.

27. Harries, O., "The Collapse of 'The West'", Foreign Affairs, Vol. 72, No. 4, September/October 1993, pp 49.

28. See for example the article by Misha Glenny, Heading of War in the Southern Balkans, Foreign Affairs, Vol. 74, No. 3, May/June 1995, pp 98-108, for an insight into the threat to Europe if the southern Balkans were allowed to erupt.

29. See Salmon op. cit. pp 233-253 for an examination of European political cooperation in the Gulf and Yugoslavia, 1990-92.

30. Jacques Delors informed the European Parliament in September 1991 that the EC had only three weapons at its disposal, namely: public opinion; the threat to recognise Slovenia and Croatia; and economic sanctions. Jacques Delors, European Parliament, The Week, Strasbourg, 9-13 September 1991, PE 152.616/rev. pp. 17-18.

31. This can in part be illustrated by the early mediating efforts which did not go beyond the offers of generous financial assistance of 4 billion ECU in an attempt to bribe the Yugoslav republics to stay in the federation. Simic, P., "Dynamics of the Yugoslav Crisis", Security Dialogue, Vol. 26(2), 1995, pp 159. Financial and economic levers appeared to the EC pertinent at the time, given the economic nature and power of the EC, and given that over 50 per cent of Yugoslavia's trade was with the EC. See Salmon op. cit. pp 248.

Special UN envoys Cyrus Vance and Lord Peter Carrington won the trust of the JNA and succeeded on 3 January 1992, in producing a cease-fire that froze both the military and political status quo in Croatia.³²

However, it was during this time that the Serbs learned an important lesson. In the fall of 1991, whilst Vance and Carrington were launching their diplomatic efforts, the JNA shelled the Croatian cities of Vukovar and Dubrovnik. Despite the attacks no Western government at the time called for the use of military force to stop the JNA shelling. The use of force at the time was obviously too big a step to take even though it may have demonstrated to the Serbs the level of Western resolve. As it was, the Serbs realised there was none, and that they could push as far as their power could take them.

In Bosnia, the Bosnian government, with its squabbling Serbian, Croatian and Muslim ministers, could not respond to the approaching catastrophe. The Bosnian president, Alija Izetbegovic³³ had already made clear, that "if Croatia goes independent, Bosnia will be destroyed."³⁴ On the one hand, Croats and Muslims opposed joining a Serbian run Yugoslavia, ruled by Mr Milosevic. The Serbs on the other hand, wishing to keep Yugoslavia together, bitterly resisted striking out with Croatia and Slovenia on the road to independence. As in Slovenia, Bosnia lurched towards independence almost by accident.

Nevertheless, anxious to avoid repeating what the Europeans and Americans insisted were the mistakes of the Croats – needlessly offending the Serbian

32. The fighting stopped, but the Serbs were left holding about a quarter of the republic. The UN freeze was unwittingly stabilised by UN peacekeepers who arrived in March 1992. Carrington's job was to get the feuding Yugoslav republics to define the relationship they were prepared to have with each other.

33. Izetbegovic is a mild-mannered Muslim who does not appear to be in the same league as Milosevic or Karadzic. He has however, spent time in prison for his Islamic views and he has published an Islamic Declaration proposing the creation of an Islamic Community stretching from Morocco to Indonesia. Maybe this is the reason behind Franjo Tudjman, the Croatian president's eruption, when he was heard to say: "They're dangerous fundamentalists...and they're using Bosnia as a beachhead to spread their ideology throughout Europe and even to the United States. The civilised nations should join together to repel this threat." He left no doubt as to his view on the fate of Bosnia by concluding: "Bosnia has never had any real existence. It should be divided between Serbia and Croatia." See McKeown op. cit pp 12 & Zimmermann op. cit pp 15.

34. Ibid. pp 10.

community, alienating the Yugoslav army and attempting to arm themselves – Izetbegovic, attempted to court the Serbs and called for a referendum on independence.

While two thirds of the potential voters turned out and endorsed independence, most of the 31% Bosnian Serb community boycotted the poll.³⁵ The Bosnian Serbs, like the Krajnians, had ideas of a Greater Serbia linking the Republic of Serb Krajina (RSK) with Serbia. As a result, a day after the referendum, the Bosnian Serbs attempted a putsch in Sarajevo.³⁶

In response to the evidence of Serbian collusion and the results of the Bosnian referendum, and in the hope that recognition might deter a Serbian attack, the United States and other NATO states recognised Bosnia on 6 and 7 April 1992, even though the Muslim-dominated government in Sarajevo did not have control over a large part of the territory.³⁷ Furthermore, there was no consensus among the three constituent ethnic communities, nor did the

35. On Saturday, 29 February 1992, more than four million Bosnians went to the polling booths. 99.7% of those who voted declared themselves in favour of autonomy. The Referendum on Independence on Bosnia-Herzegovina, February 29 - March 1, 1992, Washington, D.C, Commission on Security and Cooperation on Europe, 1992, pp 23.

The Bosnian Serbs abstained from voting, fearing that they were about to be excluded from the governance of the area that they had long regarded as an integral part of Serbia's historical patrimony. Cohen op. cit pp 237.

36. The Bosnian Serbs were well placed to take this action, having begun an arms supply relationship with the JNA a year before the Bosnian war broke out. In addition, with the JNA's help, they had established artillery positions around Sarajevo and other towns, and created a "Bosnian Serb" army (effectively a branch of the JNA, commanded by a JNA general and using JNA-supplied heavy artillery, tanks, and air power). Zimmerman op. cit. pp 18.

37. It is beyond the scope of this thesis to argue through the pros and cons of whether or not Bosnia or any other former Yugoslav state should have been recognised by the international community and what affect this would have had on avoiding the ensuing war. Needless to say there are conflicting views; Lord Carrington and Cyrus Vance for example argued against the recognition of Bosnia whilst Germany was keen to push ahead. For a fuller discussion see for example Salmon op. cit. pp 252-3; Doxey, M., "Something Old, Something New": The Politics of Recognition in Post-Cold War Europe", Diplomacy & Statecraft, Vol. 6, No. 2, July 1995, pp 303-322; and Boyd op. cit. for his argument on the view that "War in Bosnia and Croatia was not the inevitable product of centuries of ethnic hatreds. It was created from ambition, fear, and incompetence-local and *international*." (pp 26)



**Fig. 2. Bosnia-Herzegovina (1991)³⁸
Geographic and Ethnic Layout**

38. D Def S, "Crisis Management: The Application of Air Power in the former Yugoslavia", *Air Clues*, July 1993, pp 247.

Badinter Arbitration Commission agree.³⁹ Moreover, a referendum on independence was contradictory to the Yugoslav Constitution.⁴⁰ For the final touch, adding insult to injury, the recognition of Bosnia was announced on 6 April—the anniversary of the savage Nazi attack on Yugoslavia in 1941: Bosnian Serbs understood it as a clear message that they could attain their independence only by force.

As a result of Bosnia's secession, revenge followed within a few days in the form of a concerted Serbian land grab in April 1992 on eastern Bosnia. The civil war thus expanded into Bosnia, with the Bosnian Serb Army (BSA) receiving military support from the JNA – giving them a decided military advantage. In addition, the ancient rivalries practised by the ustase and chetnik were once more in evidence with ethnic cleansing to create ethnic purity by forcibly evicting all non-Serbs.⁴¹

The International Response

The escalation of the conflict provided a possible threat to international security as defined in Chapter VII of the UN Charter relating to "Action with Respect to

39. The Badinter Arbitration Commission was set up under one of President Mitterand's former ministers, Robert Badinter, to work out a constitutional and human rights test for would-be independent republics seeking EC recognition. Badinter produced a set of conditions which determined that the EC would only recognise states with a pluralistic democratic constitution which guaranteed minority rights. Almond *op. cit.* pp 245.

40. That Constitution had conferred a right to self-determination but made it dependent on mutual agreement of the nations composing Yugoslavia. "It was based, that is to say, on the notion of a concurrent majority of the constituent nations, not on simple majoritarianism; to move to secession without the consent of the Serbs was a plain violation of its terms". Tucker R.W and Hendrickson D.C., "America and Bosnia", The National Interest, Fall 1993, pp 16.

41. Ethnic cleansing refers to the forcible deportation and intimidation of the civilian population "pour encourager les autres" (to encourage the others); that is, to expel or frighten people from one ethnic group into abandoning territory coveted by another. It can include use of terror tactics, mass rape and summary execution. At its most extreme it reaches genocidal proportions. Past examples include transport of indigenous peoples in North America, and elsewhere onto reservations; the American genocide (1915); all Nazi racial policy and mass deportations of ethnic Germans from East and Central Europe after WWII - to name but a few. For further details on the horrors of 'ethnic cleansing' throughout the former Yugoslavia see Almond *op. cit.* pp 89, 147, 196-7, 226-8, 234-5; Cohen *op. cit.* pp 239, 243, 257-8; Poulton *op. cit.* pp 212-217 and Rieff *op. cit.* pp 96-116. More specifically regarding Bosnia, see the Amnesty International Report, "Bosnia-Herzegovina: Gross Abuses of Basic Human Rights", New York, Amnesty International USA, October 1992.

Threats to the Peace, Breaches of the Peace, and Acts of Aggression.”⁴² The threat to international security was of course very real if one considered the possibility of: first, the risk if the conflict overflowed across the international borders of the former Yugoslavia; second, if the war in the former Yugoslavia set a precedent for similar conflicts in Central Eastern Europe, above all in the Commonwealth of Independent States (CIS); third, if with the increased instability after the end of the Cold War bipolar structure, any local conflict in Europe were held to pose a threat to international order.⁴³ Although these fears did not materialise, the Yugoslav crisis has still been considered a threat to international security because it has jeopardised the political cohesion of the European Union (EU) and NATO, as well as relations of the West with Russia and the Islamic world.⁴⁴ In addition, by recognising Croatia and Slovenia, the international community threatened international security by changing the conflict from an intra-state to an inter-state dispute.

For the four years in Bosnia, the major powers were trapped between strong public pressure to do something about the bloodshed, and limited geopolitical interests in a region which was perceived to be a safe distance from the main areas of security concerns in Europe and the Mediterranean.⁴⁵ Despite the public demand for decisive action, politicians and diplomats were hesitant to intervene, well aware that any organisation attempting to resolve the crisis, would face an exceptionally difficult task which could easily drag the West involuntarily into a deeper Balkan war. For example, the UK, reflecting its

42. Goodrich, L.M & Hambro, E., Charter of the United Nations: Commentary and Documents, London, Stevens & Sons Ltd, 1949.

According to Article 39, The Security Council shall determine the existence of any threat to the peace, breach of the peace, or act of aggression and shall make recommendations, or decide what measures shall be taken in accordance with Articles 41 and 42, to maintain or restore international peace and security. (pp 262-272)

Measures under Article 41, exclude the use of force, however, include complete or partial interruption of economic relations and of rail, sea, air, postal, telegraphic, radio and other means of communication, and the severance of diplomatic relations. (pp 276-78)

Article 42 considers measures if those provided under Article 41 are inadequate, including action by air, sea or land forces as may be necessary to maintain or restore international peace and security. Such action may include demonstrations, blockade, and other operations by air, sea or land forces. (pp 278-81)

43. Simic op. cit. pp 153-4.

44. Brzezinski, Z., "The Plan for Europe", Foreign Affairs, Vol. 74, No. 1, 1995, pp 27.

45. Simic op. cit. pp 168.

experience in Northern Ireland since 1969, had already highlighted, with reference to Slovenia and Croatia, all the difficulties of military intervention. It warned the Western European Union (WEU)⁴⁶ that more than 30,000 troops would be required for military intervention and that a high number of casualties were likely. Furthermore, it warned of the potential dangers of a long-term anti-insurgency campaign.⁴⁷ The three years of the Bosnian conflict therefore saw the West unwilling to employ the direct use of force, preferring sanctions, negotiations and the threat of the use of force in attempts to resolve the conflict.

Despite the introduction of sanctions (May 1992), the fighting continued suggesting they had little success at bringing a solution to the conflict.⁴⁸ "The very fact that since the outbreak of the war all propositions to reach a compromise for putting an end to the conflict have originated from the activities of the international mediators, while nothing similar and/or credible has come from warring parties,"⁴⁹ suggests that sanctions provided little encouragement to the belligerents to find a solution to the conflict. This lack of will and initiative, on the part of the belligerents, to find a solution to the conflict, manifested itself in the continual failure of the negotiation process.

During the three years, a number of peace initiatives were suggested but failed every time any of the belligerents did not achieve what they wanted. Clearly, the failures could in part be attributed to negotiations being difficult due to the involvement of a large number of belligerent parties (Bosnian Muslims, Bosnian Croats, Bosnian Serbs and Serb Croat). Furthermore, the

46. The WEU lay dormant for three decades until the mid-1980s when some European states sought to revive it as a potential core of an independent EC military. It has been the subject of much controversy since then on what role it should play and how it should fit into the NATO structure, if at all. In 1992, it agreed to help enforce sanctions against Serbia, alongside NATO. See Chapter 2.

47. Salmon *op. cit.* pp 251.

48. Under UN Resolution 757 (see Appendix 1), sanctions were imposed on the new Yugoslav federation (Serbia and Montenegro) and included almost every aspect of international relations: a trade and oil embargo, a freezing of assets and bans on financial transactions and transport, even severing of cultural, sport, and scientific links. Diplomatic relations were also scaled down, with most ambassadors withdrawn from Belgrade and many Yugoslav diplomats told to leave their countries of accreditation.

49. Bianchini, S., "On the Threshold of An Epochal Transformation", Balkan Forum, 1994, pp 103-104.

widespread use of hastily assembled armed forces, often with little professional training and an uncertain command structure, made the forces involved hard to bring under control as part of a cease-fire, peace or partial disarmament agreement. While these provide some credible reasons for the failure of the negotiation process, the fact remains that the belligerents showed no real inclination to negotiate. Their continual return to the use of force suggests they preferred to achieve their objectives through the use of force, rather than negotiation.⁵⁰

The failure of the international community to have any effect at a diplomatic level, meant the calls to use force to underpin diplomacy continued throughout the conflict; its use sparking a controversial debate. For example, one school of thought saw the conflict in Bosnia as a clear case of Serb aggression versus Bosnian defence. The US in particular adopted this view and advocated what was termed "lift and strike" – that was, remove the arms embargo on the former Yugoslavia and use air power to achieve a more equal

50. Six phases of the diplomatic process have been identified; the first precedes the outbreak of armed conflict, when the EC and USA tried to quiet the conflict among the Yugoslav republics, stabilise the federal government and thus preempt the crisis. Clearly this attempt was unsuccessful starting the second phase characterised by the war in Slovenia in June 1991, during which time the Vance-Owen Plan was proffered and which ended in failure at the Lisbon conference on Bosnia (the Cutillero Plan) in March 1992. With no successful resolution of the conflict by the end of April 1993, the third phase saw the active entry of the USA into the Yugoslav scene to convince the European allies of the need for NATO air strikes on Bosnian Serbs after they refused the Vance-Owen plan; the Kinkel-Juppe Initiative and Luxembourg Plan which established the 51%:49% formula for dividing Bosnia soon followed. At the same time, Germany tried for the first time to end the war among Bosnian Croats and Muslims by calling for their federation within Bosnia (The Petersburg Initiative). Unfortunately it became just another statistic in December 1993 after the Bosnian Muslims, supported by the USA, refused to accept the Owen-Stoltenberg plan. The fifth stage (February 1994-January 1995), saw the failure of US diplomacy to persuade the Bosnian Serbs to accept the Contact Group (USA, Russia, the UK, France and Germany) Plan, with the result that the sixth stage started with the proposal put forward by French foreign minister Juppe on convoking a triple summit (Yugoslavia, Croatia, and Bosnia), involving mutual recognition of the former Yugoslav republics and making public the Z-4 (Zagreb 4) plan on UNPA's (Krajinas) in Croatia prepared by the so-called Mini Contact Group (the USA, Russia and the International Conference on Former Yugoslavia (ICFY) representatives). Arguably it ended with the Dayton, Ohio, peace accord signed in November 1995. Simic in his article identified the six phases. Simic op. cit. pp 154.

balance of power between the Serbs and Bosnian muslims.⁵¹ In contrast, the view was also taken that it was a war between states, a civil war, a secession war, and a war of ancient ethnic hatreds. Simic suggested that one possible solution for this complex scenario involved the use of sticks (threat of military intervention) and carrots (gradual lifting of UN sanctions) to encourage Belgrade⁵² to continue the isolation of the Bosnian Serbs and start the process of reforms in the country as the only way toward a predictable, manageable and, above all, stable security order in the Balkans.⁵³

Having set the scene and illustrated the complexity of the Bosnian conflict, established the key players and factions, and revealed the failure of the international community at the diplomatic level, the discussion now turns to the subject of air power and its role in the Bosnian quagmire.

51. This strategy has been developed by David Gompert in his article "How to defeat Serbia?", Foreign Affairs, vol. 73, no. 4, July/August 1994, pp 30-47.

Holger Mey suggested a more extensive use of force; the destruction of the Serbian state, the complete occupation of the respective region, the establishment of a military government, and [the] maintenance of [a] strong military presence for decades. Holger H. Mey, View from Germany: Germany, NATO, and the War in the former Yugoslavia, Bonn, Institute for Strategic Analyses, 1994, pp 241.

52. Belgrade is significant in that it is the capital of Serbia and taken here to mean the centre of support for the Bosnian Serbs from Serbia.

53. An analysis of the conflict would suggest that both strategies were in part attempted. Simic op. cit. pp 168.

Chapter 2

Air Power

The Criticism

Introduction

The UN and NATO played the key roles in the utilisation of air power in Bosnia. Given that these organisations were at the heart of the international effort to resolve the conflict, this chapter attempts to establish the background to UN involvement and the subsequent UN/NATO relationship, setting the scene for the involvement of air power. In addition, the chapter explains why the view has been taken that the use of air power failed to live up to policy makers' expectations: unable to prevent violations of the NFZ; deter attacks on the "safe areas" and UN troops; and underpin the diplomatic process.

The United Nations and Air Power in Bosnia

The UN was already involved in the Balkan conflict by the time the conflict in Bosnia-Herzegovina (Bosnia) flared up. The failure of the European Community to stop the fighting in Croatia in mid-1991, and to resolve the crisis in the framework of the Conference on Yugoslavia, had led the Security Council to establish an embargo of all weapons and military equipment on the whole of the former Yugoslavia. This was done by the unanimous adoption of UN resolution (UNSCR) 713 on 25 September, 1991.¹

By 15 February, 1992, despite certain political groups in Yugoslavia expressing their objections, the Secretary-General (UNSG) recommended the establishment of the UN Protection Force (UNPROFOR). In his view "the danger that a United Nations peace-keeping operation would fail for lack of cooperation from the parties was less grievous than the danger that delay in its dispatch would lead to a breakdown of the cease-fire and to a new conflagration."² The report was subsequently approved and UNPROFOR

1. See Appendix 1 for all the UN Resolutions applicable to the crisis in Bosnia.

2. Reference paper, The United Nations and the Situation in the Former Yugoslavia, United Nations Department of Public Information, 7 May 1993, pp 2.

was established for an initial period of 12 months by the Security Council's resolution 743 (1992). On 7 April, by resolution 749 (1992), the full deployment of UNPROFOR was authorised. In addition under resolution 749, the Security Council, alarmed by the rapid deterioration of the situation in Bosnia, appealed to all parties concerned to cooperate with the efforts of the European Community to bring about a cease-fire and a negotiated political solution.³

Although the mandate of UNPROFOR originally related only to Croatia, in the light of the deteriorating situation in Bosnia-Herzegovina, the Secretary-General decided to accelerate the deployment of 40, out of a planned 100, military observers to the Mostar region on 30 April, 1992. These were subsequently withdrawn on 14 May when risks to their lives reached an unacceptable level. In trying to prevent the escalation of the conflict in Bosnia, the Security Council adopted resolution 752 (1992), with the aim of halting outside influence.

In view of the continuing plight of the Bosnian people and disturbed by the situation prevailing in Sarajevo, resolution 770 (1992) on 13 August, under Chapter VII of the UN Charter, called on States to take "all measures necessary"⁴ to facilitate, in coordination with the UN, the delivery of humanitarian assistance to Sarajevo and wherever needed, in other parts of Bosnia. It was decided that the task should fall to UNPROFOR, resulting in resolution 776 (1991) which made no reference to Chapter VII, but approved the enlargement of UNPROFOR's mandate and strength in Bosnia. The purpose would be to support the United Nations High Commissioner for Refugees (UNHCR) in the delivery of humanitarian relief through Bosnia, and in particular to provide protection, at UNHCR's request, where and when UNHCR considered such protection necessary.

The UN took a step further on 9 October by adopting resolution 781 (1992). The resolution (adopted by a vote of 14 in favour, 0 against and 1 abstention (China)) banned all military flights in the airspace of Bosnia, except for those of UNPROFOR and other flights in support of United Nations operations,

3. See Chapter 1.

4. See Appendix 1.

including humanitarian assistance. The Council requested UNPROFOR to monitor compliance with the ban (which would certainly require air power), and to place observers where necessary.

On 10 November, 1992, the UN accepted the NATO offer of the use of its resources, through the provision of Airborne Early Warning (AEW) E3 aircraft.⁵ Although the initial plan was for the deployment of one E3 over the Adriatic, it was soon realised that it lacked the ability to look through mountains. The Serbs naturally exploited this shortcoming by flying behind mountain ridges to avoid detection. As a result, the single orbit in the Adriatic was insufficient for complete low-level coverage of the mountainous terrain. Fortunately, newfound international goodwill remained solid, and the Hungarian Government offered the UN the facility to position a second orbit over its territory (resulting in the first NATO unit ever to conduct an out-of-area operation). The Hungarian government's cooperation extended even so far as to set aside a vast area of their busy air space for the exclusive use of the E3 fleet. In addition they offered refuelling facilities and more significantly protection by their air defence assets, including surface-to-air missiles (SAMs) and Mig 21s.⁶

In the early months of 1993, the situation escalated when it was reported that three aircraft had dropped bombs on two villages east of Srebrenica on 13

5. It is important to note that although these were the precursor to the establishment of a highly publicised *enforceable* "no-fly zone", their use did not mark the first significant use of air power in the Balkans. Air power, in the form of maritime patrol aircraft (MPA), provided by 9 NATO states including Canada (CP-140 "Aurora"), France (Atlantique), Germany (Atlantique), the Netherlands (P-3C), Portugal (P-3P), Spain (P-3B), the US (P-3C) and the UK (Nimrod) had already been used under the authority of resolutions 713 and 757 in the form of operation MARITIME MONITOR. The aircraft provided maritime surveillance and support to naval task groups operating in the Adriatic Sea and its approaches in support of NATO and Western European Union (WEU) deployed task groups of warships. These two resolutions were only of limited value in imposing a blockade as they lacked the vital element of permitting the boarding of ships for inspection. On 20 November, 1992, UNSCR 787 changed this, allowing the stopping and boarding of vessels for inspection; the operation was thus renamed Operation Maritime Guard. The whole operation was renamed again on 15 June, 1993, after UNSCR 820 was adopted, to Operation Sharp Guard – incorporating the whole operation in the Adriatic Sea, replacing the separate NATO and WEU operations; Maritime Guard and Sharp Fence. Although the surveillance role of air power did not change, the forces were bolstered under UNSCR 781 through Operation Sky Monitor by the E3 NATO AEW fleet. Porter, J. L Sqn Ldr., "Nimrod Operations in the Adriatic", *Air Clues*, February 1994, pp 44.

6. Pullman, J. C Flt Lt., "A Steep Learning Curve - RAF Waddington's role in the Balkan Civil War", *RAF Yearbook*, No 6, 1994, pp 8.

March, before leaving in the direction of the Former Republic of Yugoslavia (FRY).⁷ It was the first time since the institution of the “no-fly zone” (under UNSCR 781) in Bosnia, that aircraft were used in combat activity in that country, despite the fact there had been 465 violations of the “no-fly zone” (NFZ) since monitoring began in early November 1992.⁸ As a result, on 31 March, the Security Council adopted resolution 816 (1993), by which it extended the ban on military flights from UNSCR 781, “using all necessary measures” to cover flights by all fixed-wing and rotary-wing aircraft in the airspace of Bosnia.



Fig. 3. The Bosnian No-Fly Zone⁹

Note: The situation presented was correct up to 2 June 1995 when an USAF F-16 fighter was shot down. The Combat Air Patrol (CAP) positions were then moved over the Adriatic Sea, however, the NATO AEW orbits remained.

7. The Former Republic of Yugoslavia (FRY) consists hereafter of Serbia and Montenegro.
8. Reference paper op. cit. pp 13.
9. “Flying the AEZ”, *Air Forces Monthly*, June 1993.

NATO's offer of assistance in the form of airpower was again accepted by the UN.¹⁰ The authorised operation, Operation Deny Flight, began as scheduled on 12 April, 1993, at 12.00 GMT.

The air campaign escalated again in June 1993 after continued intense fighting, particularly in eastern Bosnia in the city of Srebrenica. As a result, on 16 April 1993, UNSCR 819 (1993) was adopted, in which it was demanded that all parties treat Srebrenica and its surroundings as a "safe area", leaving it free from armed attack or any other hostile act. The apparent early success of UNSCR 819, led the Security Council to adopt resolution 824 (1993) on 6 May, in which it declared that, in addition to Srebrenica, Sarajevo and other such threatened areas, in particular the towns of Tuzla, Zepa, Gorazde, Bihac and their surroundings, should be treated as safe areas by all the parties concerned. To reinforce these areas and show their resolve, the UN adopted UNSCR 836 on 4 June 1993. This crucial resolution (or so it appeared at the time), saw the Security Council acting under Chapter VII of the UN Charter, expand UNPROFOR's mandate to, what was generally understood, include protection for the safe areas. However, the resolution merely included the authority to "deter" attacks against the safe areas,¹¹ to monitor the cease-fire, to promote the withdrawal of military or paramilitary units other than those of the Bosnian Government, to occupy some key points on the ground, and to use air power in and around the safe areas, in support of UNPROFOR.

Two significant events followed in August 1993 and February 1994, with the expansion of remits. Firstly, as a result of the wide-scale interference with humanitarian assistance throughout Bosnia, the North Atlantic Council (NAC) on 9 August, 1993, approved the military planning for air strikes and stood ready to implement them. Secondly, as a result of the siege of Sarajevo continuing, the North Atlantic Council (NAC) decided to enforce a 20 km Heavy Weapons Exclusion Zone (HWEZ), in which heavy weapons that were not

10. Resolution 816 was significant for primarily two reasons: it was the first one to authorise military force in Bosnia in circumstances other than self-defence; and, it allowed for the projection of NATO military power outside its territorial limits and beyond the principle of collective self-defence in the face of "an armed attack", according to the NATO Treaty of 1949. See North Atlantic Treaty, 24 August 1949, Articles 5 and 6, from Treaties and Alliances of the World, London, Keesing's, 1968, pp 69.

11. The significance of this distinction between "deter" and "protect" is examined later.

removed or turned over to UN control, would be subject to UN air strikes.¹²

The expansion of the UN air power remit was clearly necessary by February 1994, as the ability of the UN and its use of air power to play an effective role in the conflict was being questioned by this time. A report in January 1994, by the UN Secretary-General to the General Assembly, revealed a catalogue of failures: innumerable ceasefires had been agreed but not implemented; some 1,470 shells landed on Sarajevo in one day; of the 34,000 troops requested by the Secretary-General to monitor the "safe areas", only 7,600 were authorised, of which only 3,000 had arrived; no withdrawal of heavy weapons had taken place from Sarajevo; and only 50 per cent of humanitarian aid was reaching its destination.¹³

By February 1994, UN authorised air power, operating under Operation Deny Flight, had the capability to play a major role in the peace operation in Bosnia. Under UN authority it could, firstly; conduct aerial monitoring and enforce compliance with UNSCR 816, which banned flights by fixed-wing and rotary-wing aircraft in the airspace over Bosnia (the NFZ); secondly, provide protective air cover (CAS)¹⁴ at the request of and controlled by UNPROFOR under UNSCR 836 and 958; and finally, on order and in coordination with the UN, conduct approved air strikes (AS) against designated targets threatening

12. On 9 February, 1994, the NAC decided that 10 days after 2400 GMT, 10 February 1994, heavy weapons not removed from a 20 km exclusion zone around Sarajevo or turned over to UN control would be subject to NATO air strikes. At this stage, the Commander-in-Chief Allied Forces Southern Europe (CINCSOUTH) was given authorisation to launch air strikes, at the request of the UN and in close coordination with the UNSG, against artillery or mortar positions in and around Sarajevo (including outside the exclusion zone) which are determined by UNPROFOR to be responsible for attacks against civilian targets in that city. This arrangement led to a number of difficulties which are explained shortly. "Decisions taken at the meeting of the North Atlantic Council on 9th February 1994", Press Release (94)15, The Navy Public Affairs Library (NAVPALIB), Internet (MOAIC), 9 February 1994.

13. A. Parsons, From Cold War to Hot Peace: UN Interventions 1947-1995, London, Penguin Books, 1995, pp 238.

14. Close Air Support (CAS) for the purpose here is defined as an instant response either to a no notice call for assistance by air attack on a particularly stubborn enemy defensive position, or to a hasty plea for heavy fire power on an opponent whose strength in attack is threatening to overrun the friendly ground forces. Air Strikes (AS), as defined here, differs from this in that it is usually preplanned and possibly against the belligerents infrastructure. See Air Vice Marshall RA Mason, Air Power: An Overview of Roles, London, Brassey's Defence Publishers, 1987, pp 58-73, for a fuller explanation.

**OPERATION DENY
FLIGHT
AIR ORDER OF BATTLE**

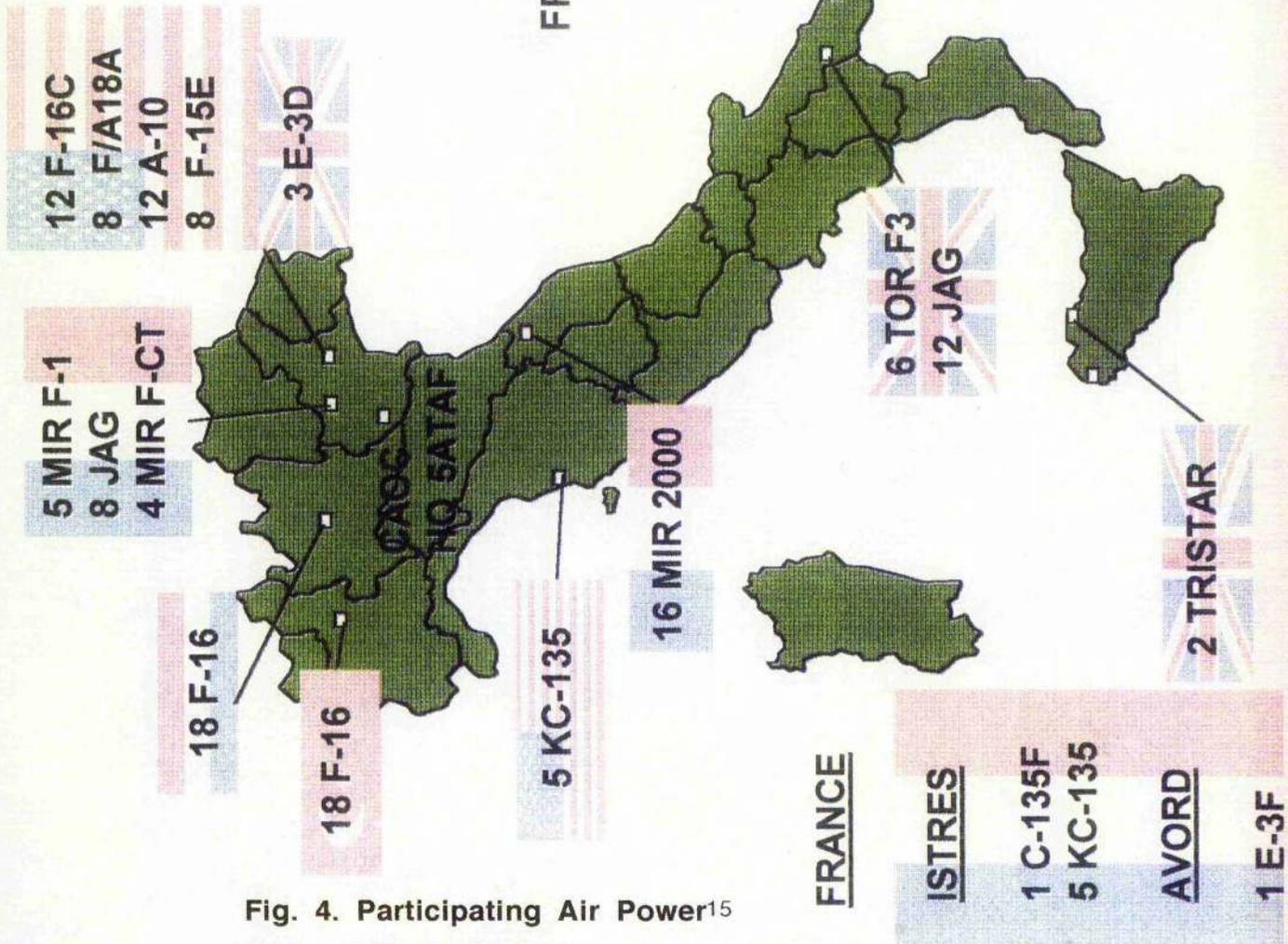


Fig. 4. Participating Air Power¹⁵

15. The UN had at its disposal nearly 4500 personnel from Belgium, Canada, Denmark, France, Germany, Italy, the Netherlands, Norway, Spain, Turkey, the UK and the US at air bases in France, Germany, Greece, Italy, the UK and on aircraft carriers in the Adriatic.

the security of the UN safe areas of Bihac, Gorazde, Sarajevo, Srebrenica, Tuzla and Zepa.¹⁶

However, an analysis of the air action¹⁷ between April 1993 and 30 August, 1995, reveals a pattern that could lead to the supposition that the use of air power was impotent and at the very worst, counterproductive.¹⁸

The Criticism?

The No-Fly Zone (NFZ)¹⁹

In the case of the NFZ, the judgment of the utility of Western combat air power depends on one's vantage point – the belligerents or the international communities.

From the international communities point of view, the establishment of Operation Deny Flight deterred the continued flights of Serb Mig-29s, which in October 1992, were reported to have strafed the Muslim held town of Gradacac, with the intention of securing a strategic land corridor.²⁰ Given that the Migs were considered to be the major threat, it would be reasonable to argue that the use of combat air power in the NFZ was a success, considering that the helicopters which continued to violate the zone were regarded to be of

16. "Operation Deny Flight", NAVPALIB, Internet (MOSAIC), 6 July 1995.

17. See Appendix 2 for a comprehensive chronology of the use of air power in the skies above Bosnia.

18. April 1993 is used as the start date as it is when combat air power was introduced into the Bosnian conflict after it was authorised by the UN in UNSCR 816. 30 August 1995 is used to mark the end of this period as it is the date that signifies the beginning of Operation Deliberate Force and with it a very different use of air power. See Chapter 5.

19. The NFZ in essence, was a relatively straightforward concept: the enforcement of a section of airspace to prevent or deter the passage of unfriendly aircraft.

20. The presence of Western combat air power could only take part of the credit for deterring the flights by the sophisticated Serb Mig-29s operating out of Serbia. Milosevic's desire to be seen not to be supporting the Bosnian Serbs in an effort to have the sanctions against Serbia lifted, was another contributing factor. James Adams, "UN set to use force in the air", The Sunday Times, 11 October 1992.

little relevance to the problems posed by the war as a whole.²¹

However, as far as the belligerents were concerned, they were still able to outwit the technologically sophisticated superiority of the enforcing air power, in open defiance of the ban imposed by UNSCR 781 and enforced by UNSCR 816.²²

All three sides, for instance, continued to carry out operations predominantly in support of their ground troops.²³ The Croat MI-8 transport helicopters believed to be flying wounded out and ammunitions into Croat-held Vitez and the regular flights of three Muslim Bosnian Army helicopters shipping men and possibly arms from Tuzla and Zenica to the outskirts of Sarajevo are examples. Ultimately the Bosnian Serbs, as prime inheritors of the arsenal of the old Federal Army, the JNA, made the most comprehensive use of air power, much of which was supported from Serbia itself.²⁴

What was significant was that even though these flights were mainly by helicopters, the inability of the UN authorised air power to deal with the problem promoted a blatant disregard on the part of the belligerents towards

21. Serbian violations of the no-fly zone posed "more of a political than a military problem...our military advisers do not tell us that these flights are having any significant effect on the fighting". See A. Bevins & A Savill, "Major wants tough, swift response if Serbs attack", The Independent, 16 December 1992.

22. For example, by August 1993, there were according to UN figures, 732 recorded violations of the NFZ since it was declared in October 1992. More specifically, a breakdown of results carried out between 25 June-28 July (gap of 5 days for which statistics were unavailable) show that the BSA forces violated the ban 22 times, the Croats twice, and the Bosnian government forces 68 times. Judah, T., "Sky proves no limit as all factions flout flying ban", The Times, 6 August 1993.

By March 1994, a year after the introduction of UNSCR 816, Robert Fox, reported that Serbs, Croats and Muslims were still flying military aircraft of some shape or size in Bosnian airspace. Fox R., "This is no time to blink", The Daily Telegraph, 1 March 1994.

23. See Ripley T., "Mission Bosnia", Defence Helicopter, June-August 1994, pp 14-17; for a detailed analysis of helicopter operations.

24. For example, helicopters were used on numerous occasions for medical evacuation and ammunition resupply in the fighting along the river boundaries of the Drina and the Sava - and it was suspected that armed Anglo-French Gazelles were used as gunships in some of the fighting along the river corridor to the Serb-occupied lands in the west of Bosnia and Croatia in the Krajinas. Fox "This is . . .", op. cit.

Western air power.²⁵ The comment made by General Ratko Mladic, commander of the BSA, whilst overseeing the Serb offensive on Mount Igman from a Gazelle helicopter, captured the general attitude. In his view he could "fly in the knowledge that threats to shoot down violators have proved to be mere Western posturing."²⁶ In fact, even after four Bosnian Serb war planes were shot down whilst violating the NFZ on 28 February, 1994, Bosnian Serb operations continued unabated from the Ubdina air base in Serb-held Croatia against the Bihac pocket.²⁷

Offensive Air Support (OAS)²⁸

The view that the use of air power was unable to deter or significantly alter the course of the conflict pre August 1995 was based partly on the fact that the belligerents had a blatant disregard for the air power the UN could wield, and carried on the war nonetheless. For example, after shelling Gorazde on 10 April, 1994, and then being attacked by NATO jets on the 10 and 11 April 1994, the Bosnian Serbs responded by capturing all key points around the "safe area", and then promptly shot down a British Sea Harrier on 16 April 1994. While it is true the Bosnian Serb's bombardment of the enclave decreased at first, rather than deter them, it would seem it only inflamed the Bosnian Serb's defiance, as they challenged UN personnel elsewhere throughout Bosnia. A Dutch officer stopped at a Bosnian Serb checkpoint and was never seen again; 200 UN troops were taken and held hostage against further air strikes; and armed with land mines and a T55 tank, the Bosnian Serbs demanded that UN troops surrender heavy weapons under their guard – the very same weapons that were given up in the preceding weeks to avoid NATO air strikes.²⁹ Arguably, the Bosnian Serbs did cease their attack and withdrew from the declared Gorazde HWEZ when ultimately AS were

25. For example the Serbian commander in Bosnia, General Mladic, once climbed aboard his military helicopter in the presence of a British brigadier who had come to negotiate with him. Fox, R, et al., "Bihac set to fall as Serbs advance on three sides", The Daily Telegraph, 24 November 1994.

26. Judah, T., op. cit.

27. See Appendix 2.

28. Offensive Air Support (OAS) includes both Close Air Support (CAS) and Air Strikes (AS).

29. For a fuller description of these incidents and more, see T. Post, J. Brand and R. Nordland, "Tightening the Noose", Newsweek, April 25, 1994, pp 13.

threatened. However, General Mladic had already neutralised the strategic value of Gorazde and terrorised its population, having mercilessly bombed the city and occupied it for two to three weeks. In addition, whilst the battle in Gorazde subsided, the threat and the use of air power did not stop the Bosnian Serbs from moving off and attacking elsewhere – the Bihac pocket later that year, for example. Clearly, the air action by the UN/NATO force, by stunting the offensive in that area, was arguably effective in itself. It had not, however, halted or dissuaded the belligerents from further courses of action, for instance the opening of a new offensive in another location.

It could be argued that this tactic of the Bosnian Serbs and the inability of the UN to deal with it decisively, reflected a defiant attitude within the belligerents and a disregard for the weapon that the UN always threatened to use – air power. Ultimately, the UN paid the price for this perceived impotency, with the successful attack and occupation of the “safe areas” of Srebrenica and Zepa in July 1995. This action by the Bosnian Serbs was in complete defiance of the UN, presenting it with a test which it promptly failed. The best it could do was come up with another resolution (UNSCR 1004), which was not only too late, but completely unreasonable in its aim to restore the status of Srebrenica as a “safe area”.

The loss of Srebrenica was significant, in that it exposed the weakness of the UN's policy in Bosnia, based as it was on declarations instead of action backed by force. In addition, it showed just how ineffective the deterrent value of the air power the UN had at its disposal had become, after all, the UN had never claimed it would “defend” the “safe areas” from attack, merely “deter” (UNSCR 836) and via air power, “protect” (UNSCR 958). As various UN officials admitted: “They were indefensible from the start”; “The safe-areas policy has been a gamble from the beginning”; “The international community thought a lightly armed presence would be enough to deter attacks”³⁰ – it obviously was not. Even when air strikes were used, the Bosnian Serbs had already entered Srebrenica and had captured nearly 400 Dutch peacekeepers, who they threatened to kill if the AS were not called off. This action by the Bosnian Serbs again cruelly exposed the limitations of air power to present any formidable threat, as the Dutch Defence Minister, Joris Voorhoeve,

30. B. Nelan, “Tears and Terror”, Time, July 24, 1995, pp 22.

subsequently asked the UN and NATO commanders to call off further AS.³¹

In addition, some of the air power used has actually proved to be counterproductive. For example; following the attack on the ammunition depot near Pale, southeast of Sarajevo, on 25 May, 1995, the Bosnian Serbs responded by shelling civilian targets in five of the six UN "safe areas",³² taking more than 370 UN peacekeepers hostage, using them as human shields, and capturing the UN weapons collection points. As a result, the HWEZ around Sarajevo ceased to exist, Sarajevo airport closed, the movement of humanitarian aid was blocked, and the fighting spread. "UNPROFOR lapsed into virtual impotence"³³ – the result of an air strike.

Therefore, the indecisive use of air power, combined with the tactic of "pinprick"³⁴ strikes since April 1993 and pre September 1995, meant the belligerents continued to: undermine the diplomatic process; violate the NFZ; shell "safe areas", capture or regain territory; take hostages and use them as human shields; shoot down aircraft; and finally, to overrun "safe areas" – not to mention the fact that the use of air power had at times proved to be completely counterproductive.

The discussion so far has focused on the failure of the use of air power to deter the fighting and bring the belligerents to the negotiating table. The introductory chapter identified the fact that the use of air power had both physical as well as political-situational considerations, and that both factors affected the performance of the use of air power. While Chapter 3 addresses the physical and technical considerations of the use of air power in Bosnia, Chapter 4 considers the political-situational limitations. The thesis argues, however, that analysis of the events from 30 August 1995 to 14 September 1995 (Operation Deliberate Force) suggests that it was not a failure of air power *per se*, more a failure of the policy makers to appreciate the context within which air power needed to be applied to be successful.

31. *Ibid.* pp 23.

32. The six safe areas according to UNSCR 824 include Srebrenica, Bihac, Gorazde, Sarajevo, Tuzla and Zepa.

33. Parsons *op. cit.* pp 268.

34. The term "pinprick" in this thesis refers to strikes by air power of a limited, contained and surgically singular nature.

Chapter 3

Air Power

The Technical Factor

"The importance of this matter [provision for the scientific study of aerial flight] entitles it to rank almost as a National obligation; for the country in which facilities are given for the proper theoretical and experimental study of flight will inevitably find itself in the best position to take the lead in its application and practical development. That this must be considered a vital question from a National point of view is beyond dispute; under the conditions of the near future the command of the air must become at least as essential to the safety of the Empire as will be our continued supremacy on the high seas."

*F.W Lanchester
Aerial Flight, 1907¹*

Introduction

"In the wake of the Persian Gulf war of 1991, it looked as though air power would become the weapon of choice of American policy makers in dealing with an unruly world."² The Bosnian experience on the other hand, between April 1993 and September 1995, may in fact make the policy makers think twice before advocating its use in the future.

In Bosnia, NATO air power was used to prevent aircraft flying in the airspace above Bosnia, protect the humanitarian aid effort, and protect the civilians in designated safe areas. In addition, whilst it performed this essential peace orientated role, the same air power was asked to act as a deterrent to the belligerents to encourage them to negotiate rather than use force.

The thesis has argued that while air power was used to fulfil these roles, between April 1993 and September 1995, the belligerents had very little regard for the use of this weapon as it failed to live up to policy makers' expectations. However, the thesis argues that combat air power *per se* was not to blame, rather the inability of policy makers' to appreciate the context within which air power needed to be applied to be successful, and to provide

1. Lanchester, F.W., Aircraft in Warfare: The Dawn of the Fourth Arm, Constable and Company Ltd, London, 1916, pp xii.

2. Eliot A. Cohen, "The Meaning and Future of Air Power", Orbis, Spring, 1995, pp 189.

solid political leadership with an overall strategy and clear objectives, was.

Chapter 3 now, highlights the response of air power in Persian Gulf War as it is the performance of air power in this war that raised the policy makers' expectations, calling for its use in Bosnia. In addition, it illustrates the technical and physical factors that impeded the use of air power in Bosnia.

According to the definition of air power given in the introductory chapter, when considering the utility of air power, the capabilities of the "eggshell" (or platform) as well as the political-situational restraints have to be borne in mind. While Chapter 3 addresses the issue of the "eggshell" and the hindrances applicable to the Bosnian scenario, Chapter 4 discusses the political-situational restraints. However, before the chapter turns to these issues, two observations are made which were taken into account in the critique of the use of air power in Bosnia: air power cannot completely control an enemy and is not a solution in itself; and air power has the potential to alter the behaviour of the belligerents and their decision makers.

The Hypothesis and Wars³

Observation 1: Air Power is not a solution in itself

Early air power theorists were keen to advocate the potential of air power, claiming it could defeat an enemy. The father of the RAF himself, Lord Trenchard, considered the potential of air power and the role of the RAF in particular, as far back as 1920, claiming: "The Army policy was to defeat the enemy Army," he told his colleagues on the Air Staff, "ours to defeat the enemy nation."⁴ Another theorist, General Giulio Douhet, made similar claims. Douhet, advocated that the bomber signified a revolution in the conduct of war, and that victory would go to the state which could dominate the skies and bring the enemy rapidly to his knees by bombarding his cities. In addition, in his book,

3. The majority of empirical observations are post 1939 and of Western involvement.

4. Brooks, S., Bomber, London, Imperial War Museum, 1983, pp 13.

The Command of the Air,⁵ Douhet argued that the aim should be to secure predominance in the air. To this end, the main function of the air force should be to annihilate the ground organisation of the enemy air force, its aerodromes and factories.⁶ With this aim in mind he advocated a programme: "A progressive decrease of land and sea forces, accompanied by a corresponding increase of aerial forces until they are strong enough to conquer the command of the air."⁷

Since 1939, with the advent of World War II, extensive use was made of air power to attempt to both destroy and if possible defeat an enemy.⁸ Air power

5. General Giulio Douhet (1869-1930) joined the Italian army as an artillery officer. Though court-martialled for criticising his superiors in 1916, he was recalled in 1918 to head Italy's Central Aeronautical Bureau. He is acclaimed for his book The Command of the Air, London, Faber and Faber Ltd, 1927 (2nd ed).

6. Although Douhet's work was significant at the time, all theories have weaknesses and his is no exception. For example, he held the view that the bomber will be the instrument *par excellence*, and that the number of fighter and reconnaissance aircraft should be limited to the smallest possible number. The Gulf undeniably showed the continuing importance of the bomber, but without advanced fighters, the air supremacy achieved to keep the potential Iraqi aircraft from harassing the land campaign would never have been possible.

7. Ibid. pp 30.

8. Clearly, 1939 did not mark the introduction of air power. For example, WW I saw its limited use and the 1920s and 30s saw air power used punitively against Arabian tribesmen to coerce them into submission. See for example Omissi, D.E., Air Power and Colonial Control, Manchester, Manchester University Press, 1990.

Arguably, the most (in)famous use of air power was in 1937 in the raids against Guernica in the Spanish civil war. G.L Steer, the special correspondent of The Times reported on 28 April 1937: "The whole town of 7,000 inhabitants plus 3,000 refugees,...was slowly and systematically pounded to pieces." "In the form of its execution and the scale of the destruction which it wrought,...the raid on Guernica is unparalleled in military history...The object of the bombardment was seemingly the demoralisation of the civil population and the destruction of the cradle of the Basque race." Cited in Spaight J.M., Air Power in the next war, London, Geoffrey Bles, 1938, pp 83. Refer also to pp 79-90.

in the Battle of Britain halted Hitler's plans to invade Britain;⁹ the "Strategic Bombing" initiative had harassed the German industrial heartland;¹⁰ Japan's attack at Pearl Harbour on 7 December 1941 had caught the Americans there by surprise and inflicted massive damages for only a few losses;¹¹ and, the dropping of nuclear bombs at Hiroshima and Nagasaki, illustrated the

9. The Battle of Britain opened with the attempt by the Luftwaffe to achieve command of the air by attacks on the RAF's bases. Fighter Command was able to husband its resources, but the attacks on its airfields had taken a heavy toll by the beginning of September 1940. On 7 September the Luftwaffe switched the main weight of its bombing to London. This was done partly as a way of drawing in what were thought to be the RAF's last fighter reserves and also as retaliation for a bombing raid on Berlin on 25 August. It proved to be a crucial mistake. Relieved of the pressure on its ground installations, Fighter Command was able to recover and continued to inflict heavy losses on the Luftwaffe. The necessary conditions for the invasion of England—Operation Sealion—had clearly not been fulfilled. On 17 September Hitler postponed Operation Sealion, and the invasion force—under constant attack by Bomber Command—was dispersed. Air power had clearly played a major role. For a fuller discussion see Len Deighton, Fighter: The true story of the Battle of Britain, London, Jonathan Cape Ltd, 1977.

10. The utility of the Strategic Bombing initiative of WW II has always been open to question. See for example the skeptical report by David Mac Isaac, Strategic Bombing in World War Two: The story of the United States Strategic Bombing Survey, New York, Garland Publishing Inc, 1976. Even at the time its utility was questioned. As Winston Churchill wrote: "It is very disputable, whether bombing by itself will be a decisive factor in the present war. On the contrary, all that we have learnt since the war began shows that its effects, both physical and moral, are greatly exaggerated. . . . The most we can say is that it will be a heavy and I trust seriously increasing annoyance." But, as the Secretary of State for Air, Sir Archibald Sinclair, told the House of Commons on 4 March 1942, the bombers were "the only force upon which we can call this year, 1942, to strike deadly blows at the heart of Germany." Strategic bombing, in some form, had to continue. Under Air Marshall Sir Arthur Harris, the initiative was revitalised and air power clearly played its role in harassing the German war effort. For a fuller discussion see MRAF Sir Arthur Harris, Bomber Offensive, London, Collins, 1947.

11. Pearl Harbour was attacked by the Japanese on a Sunday morning on 7 December, 1941. The US fleet that was recently moved there from San Diego to act as a deterrent to a Japanese assault on Southeast Asia was caught completely unaware by the naval air attack. In the attack, 19 US warships were destroyed and 2,400 Americans were killed for only 29 Japanese aircraft. See Blake Clark, Pearl Harbour, London, John Lane The Bodley Head, 1942, for an eye witness account; Roberta Wohlstetter, Pearl Harbour: Warning and Decision, Stanford, Stanford University Press, 1962; Donald Macintyre, The Battle for the Pacific, London, B T Batsford Ltd, 1966, pp 21-30.

awesome potential of air power.¹² WW II was soon followed by Korea (1950-53),¹³ Vietnam (1959-75),¹⁴ the Falkland Islands (1982),¹⁵ and the Gulf

12. Two atomic bombs were dropped: the first on Hiroshima on 6 August, 1945, codenamed "Little Boy", fell from a single US bomber, with fighter escort – killing 75,000-80,000 people outright and another 50,000-60,000 within 12 months, from radiation burns or poisoning; the second on Nagasaki on 9 August, 1945, codenamed "Fatman" – killing 40,000-60,000 outright, with perhaps 100,000 more dying lingering deaths in the years that followed. Air power had clearly proved decisive in ending a war, with the Japanese agreeing to terms only six days later. For a fuller discussion see John Hersey, Hiroshima, London, Penguin Books, 1946, and Gordon Thomas & Max Morgan-Witts, Ruin From The Air: The Atomic Mission to Hiroshima, London, Hamish Hamilton, 1977, in particular pp 317-326.

13. See Ridgway M.R., The Korean War, New York, Da Capo Press, 1967, pp 186,189, 221-2, 244. In his view no one who fought on the ground in Korea would ever be tempted to belittle the accomplishments of air power: "Not only did air power save us from disaster, but without it the mission of the United Nations Forces could not have been accomplished." (pp 244). Jackson however noted that this reputation was achieved at considerable cost: "the Americans lost the equivalent of 20 combat groups . . . roughly a quarter of the USAF's first line strength as it stood in June 1950." Jackson R., Air War Over Korea, London, Macmillan Press, 1973, pp 161. See also Callum A. MacDonald, Korea: The War Before Vietnam, London, Macmillan Press, 1986, pp 226-248.

14. The Vietnam War followed Korea and marked a significant increase in the utilisation and cost of air power – 57,000 American lives and nearly two hundred billion dollars. In the nearly fifteen years of the war, the U.S Air Force lost 2,257 aircraft and suffered 5,578 casualties, including 2,118 deaths. Carl Berger, editor, The United States Air Force in Southeast Asia, 1961-1973: An Illustrated Account, Washington, D.C.: Office of Air Force History, 1984, pp 369.

Gropman noted, for America, "the Vietnam war was a humiliating, exceptionally expensive, and probably unnecessary defeat", but interestingly concluded, "had air power been used to its fullest conventional potential, America would not have spilled its blood and squandered its treasure uselessly." From an essay by Alan L. Gropman, Lost Opportunities: The Air War in Vietnam, 1961-1973, from Grinter L.E. & Dunn P.M., The American War in Vietnam: Lessons, Legacies, and Implications for Future Conflicts, Connecticut, Greenwood Press, 1987, pp 49; for a fuller discussion see pp 49-86.

See also Cable L., Unholy Grail: The US and the wars in Vietnam, 1965-8, London, Routledge, pp 54-5, 98-99, 109.

15. The Falkland War was significant in that a purely ocean based air power defeated a shore based opponent against impressive odds. For a fuller discussion on the role of air power see Commander Ward, Sea Harrier Over The Falklands, London, Leo Cooper, 1992; and for a broader view of the conflict itself see for example: Hastings M. & Jenkins S., The Battle for The Falklands, London, Michael Joseph, 1983; Brown D., The Royal Navy and the Falklands War, London, Leo Cooper, 1987; and Freedman L. & Gamba-Stonehouse V., Signals of War, London, Faber and Faber, 1990.

War (1990-91).¹⁶ Despite the early theories however, a common trait links nearly all the conflicts – in most cases troops on the ground had to be used to capture and control the enemy's land. As Wing Commander Brookes, an aviation historian concluded: "An abiding lesson of the last 70 years is that air power does not win wars on its own."¹⁷ This fact was appreciated as far back as 1938 when Spaight argued that:

"there may in the future be circumstances in which the air arm will prove itself capable of winning a war off its own bat, and, this being so, to deny it a place among the highest in the team would be the extreme of folly. But meanwhile there are circumstances, now existing, in which it will clearly not be able to win without the support of the other arms, and so long as this remains the position it is folly to speak of those arms as obsolete."¹⁸

Even when "air power dominated the Persian Gulf War as no other conflict since World War II,"¹⁹ the use of ground forces were still required to capture and hold land. The time was clearly not yet here when air power could win the war "off its own bat." Furthermore, and more pertinent to the situation in Bosnia, Clutterbuck observed in the "hearts-and-mind"²⁰ campaign in Malaya that the use of air power²¹ was "not an end in itself in counterinsurgency. It can

16. Winnefeld J.A. et al, A League of Airmen: U.S Air Power in the Gulf War, Santa Monica, RAND: Project AIR FORCE, 1994, concluded that "air power played the decisive role in stabilising the crisis, deterring further aggression, and in the neutralisation of enemy forces" (pp 285). For a thorough analysis of the role of air power in the Gulf War see: Conduct of the Persian Gulf War report, US Department of Defense, April 1991.

17. Wg Cdr Brookes, "Above and Beyond? – Capabilities of Out-of-Area Air Power", RUSI Journal, October 1993, pp 32.

18. Spaight op. cit. pp 57.

19. Cohen, E.A., "The Mystique of US Air Power", Foreign Affairs, Vol 73, No 1, January - February 1994, pp 123-4.

20. The Malayan conflict was essentially a struggle to win "the hearts and minds" of the people – a phrase adopted by General Sir Gerald Templer, the High Commissioner and Director of Operations in Malaya during the 1950s. This was attempted in many ways; Templer for example visited schools, hospitals, and received delegations, while his wife worked eighteen hours a day starting women's institutions, new Red Cross branches and community centres. For a fuller discussion of the Malayan conflict and the role of Templer, see Noel Barber, The War of the Running Dogs: How Malaya Defeated the Communist Guerrillas, 1948-60, London, Collins, 1971, in particular pp 149-160.

21. For an analysis of the role of air power in the Malayan conflict see: Bruce Hoffman, British Air Power in Peripheral Conflict, 1919-1976, Santa Monica, RAND: Project Air Force, 1989, pp 37-57; Philip A. Towle, Pilots and Rebels: The Use of Aircraft in Unconventional Warfare, 1918-1988, London, Brassey's, 1989, pp 65-66, 81-95.

contribute only by supporting other agencies — police, army, and civil government services.”²²

Simply then, if troops were required in a war to control the land, they would surely be required in a peace operation, where the task would be overly complex: monitoring agreements, cease-fire lines, and protecting civilians and aid convoys. The recent conflict in Somalia and the attempt at a peace operation serves to illustrate the continuing need for forces on the ground. Of the 28,000 US military personnel deployed to Somalia in December 1992, fewer than 600 were air power specific.²³

Observation 2: Air Power Has The Potential To Change Behaviour

Changing behaviour, Schelling would argue, is well within the realm of the utility of military force, with his invention of the terms coercive warfare and compellance. These terms have been used to describe the use of military force for goals that are not strictly military at all, and where “the object is to make the enemy behave”²⁴ in a particular manner, rather than to weaken or defeat him. Garnett has argued for example, with respect to Japan at the end of WW II, that even though nuclear weapons were dropped on Hiroshima and Nagasaki, these two cities were not the actual target, their destruction was simply a means to an end.²⁵ In other words, the object of the exercise was not the military one of destroying the war-making capability of Japan, but the political one of inducing her leaders to surrender. In Schelling’s words, “The effect of the bombs and their purpose were not mainly the military destruction

22. Clutterbuck, Brigadier R., The Long Long War: Counterinsurgency in Malaya and Vietnam, New York and Washington, D.C., Praeger, 1966, pp 156.

This observation is of course very significant in that the two scenarios share so many similarities as Mason noted – the conflicts in Bosnia and Malaya are at one extreme of his “Air Power Pendulum”, with only Somalia separating the two. AVM Tony Mason, Air Power: A Centennial Appraisal, London, Brassey’s, 1994, pp xiii.

23. Brookes op. cit. pp 32.

24. Schelling T.C., Arms and Influence, New Haven and London, Yale University Press, 1966, pp 69 - 71 and 173.

25. For a fuller discussion see Garnett J., The Role of Military Power, An essay taken from Bayliss, J, et al., Contemporary Strategy: Theories and Concepts Vol. 1, 2nd edn, London, Croom Helm, 1987, pp 71- 90.

they accomplished but the pain and the shock and the promise of more."²⁶ Military power²⁷ as Garnett said, "the power to hurt, was being used physically to intimidate an enemy and make him behave."²⁸

The bombs themselves, however, need not even be used. As Lambert concluded in his study on the psychological effect of air power: "far more people will be affected by the psychological pressures of air power than will ever see or hear a bomb. Every man in the army has an opinion and is highly susceptible to the direct and indirect stresses that air power can exert."²⁹ Such action however, to be effective, needs to be underpinned with the intent of its use – there is no point having the capability if there is no resolve to use it. An empty threat is no threat at all.

The discussion so far has centred around two observations: one, that despite the view of early theorists, air power alone can not completely control an enemy and that it requires the use of ground forces to ensure the best chance of securing land; and two, air power has the ability to alter the behaviour of the belligerents and their decision makers. In Bosnia, whilst air power was used within the UN peacekeeping effort, deterring the belligerents from continuing their aggressive actions in defiance of UN resolutions, it also had the role of, directly and indirectly, threatening the belligerents if they did not comply with peace accords or ceasefires. The complication of this was that the implementation of air power within the peacekeeping environment, had to be seen to be impartial and void of the destruction that traditionally accompanies an air campaign. The UN realised that this was not as easy as it sounds,

26. Schelling op. cit. pp 18.

27. Note the difference between military power and military force. Although there are essays on the subject, simply put, "the difference between the exercise of military force and military power is the difference between taking what you want and persuading someone to give it to you . . . military force represents the breakdown of military power." Garnett op. cit pp 84.

28. Ibid. pp 86.

This was not the first time air power had been used to coerce. According to Air Chief Marshall Lord Portal, air power had been used in aerial policing in the 1920s and 30s against Arabian tribesmen to coerce them into submission. In a lecture on "Air Force Cooperation in Policing the Empire", he noted, the "diplomatic" nature of this tactic and stated "the law-breaking tribe must be given an alternative to being bombed and...be told in the clearest possible terms what that alternative is". RUSI Journal, London, May 1937, pp 343-58.

29. For a fuller discussion on the psychological effects of air power see, Gp Capt APN Lambert, The Psychology of Air Power, Cambridge, RUSI, 1995, passim, and pp 92.

echoing the view expressed by Colin Powell, the Chairman of the US Joint Chiefs of Staff: "Boy, was the Gulf war easy compared to this [Bosnia]!"³⁰

Even though the Gulf war was "easy", and it could be argued unique, it provides a good basis for examining the advantages of air power; essential to understanding the capability of air power and why it can contribute to a peace operation. While this may seem irrelevant, as at first it would appear the conflicts are so different, the observations made are significant for three reasons. Firstly, air power's use in the Gulf raised the policy makers' expectations, which in turn called for its use in Bosnia. Secondly, the overwhelming force used in the Gulf, had remarkable similarities to the use of air power in Bosnia in Operation Deliberate Force. Finally, the Gulf was the most recent conflict which used new technology, in the form of air power, presently available to the West.

The Advantages of Air Power – Observations of the Gulf War

The Gulf War gave air power a chance to demonstrate its unique and special ability to project power and presence, via its characteristics of speed, range, flexibility, precision and lethality.³¹ The speed with which air power was implemented illustrated its undeniable advantage of time compression; if RAF Air Vice Marshall (AVM) R A Mason could note that, air warfare is "war in the third dimension,"³² so too could Professor Hallion state, "it is war in the fourth dimension - time - as well."³³ As was seen in the Gulf, within 48 hours of the President's decision, 48 F-15C/D Eagles of the 1st Tactical Fighter Wing had arrived in Dahrhan in Saudi Arabia from Langley Air Force Base, Virginia, to attempt to deter any Iraqi escalation which was a potential threat.³⁴ In addition, when the British Secretary of State for Defence announced that its military contribution to the Gulf was to be increased, Air Chief Marshall (ACM) Sir

30. Barry, J. & Watson, R., "The Sky Above, the Mud Below", Newsweek, 17 May 1993, pp 15.

31. These are accepted characteristics of air power as defined in the RAF's Air Power Doctrine, AP 3000, op. cit. pp 14.

32. Mason, R. A., War in the Third Dimension: Essays in Contemporary Air Power, London, Brassey's Defence Publishers, 1986, *forward*.

33. Hallion, R. P., "Air Power Today and Tomorrow: A Post-Gulf War View", RUSI Journal, October 1994, pp 24.

34. Stan Morse et al, Gulf Air War Debrief, London, Aerospace Publishing, 1991, pp 12.

Patrick Hine immediately deployed a composite squadron of Tornado GR1 aircraft from RAF Germany to Muharraq air base in Bahrain on the Gulf coast. The aircraft's capability to carry out offensive counter air operations and interdiction provided an additional deterrent to any further Iraqi aggression.³⁵ In fact, while aircraft deployed in a matter of hours in non-stop journeys using air-to-air refuelling, aircraft carriers took an average of three weeks to a month to reach the Gulf region from East Coast ports of the United States, and even designated 'fast' sea lift ships took ten days.³⁶

Clearly, with the aid of air-to-air refuelling, these aircraft, surveillance platforms and supporting operations combat power, were deployed rapidly over large, almost unlimited distances, in many directions, without being restricted by obstacles at ground level. The operation, Operation Desert Shield, began the largest military airlift the world had ever seen, starting with the US 82nd Airborne Division and its equipment to Saudi Arabia. This rapid execution of operations had the added element of surprise, which helped to buy time and space for essential evaluation of events and developments before taking further actions.

In addition, aircraft showed how once in theatre³⁷ they could orient themselves in several seconds to confront a mechanised surface opponent who had taken several hours to shift position. Air power, with the freedom and speed denied to other military means, demonstrated that it could contain, isolate and influence theatre developments by penetrating hostile territory, detecting targets, and attacking with great precision and lethality – usually without causing unacceptable collateral damage. For example, on 4 February 1991, near to the Iraq-Kuwait border, US Marine Corps AV-8B Harriers caught a force of tanks and other vehicles in the open and brought it under attack, claiming the destruction of 25 of them with Rockeye cluster-bombs.³⁸ This was in part only

35. ACM Sir Patrick Hine, *The London Gazette*, 28 June 1991, pp G 39.

36. Office of the Chief of Naval Operations, The United States Navy in "Desert Shield: Desert Storm", Washington, DC, USN, 1991, A-2-14.

37. The term theatre can adopt various meanings. In this case it refers to a strategically and geographically distinct area within a larger conflict.

38. Morse op. cit. pp 108.

achievable because of the air supremacy³⁹ gained by the Coalition forces.⁴⁰

The use of air power to carry out precision attacks was probably one of the most significant contributing factors to the reputation for success that air power gained. In fact, post war analysis by the USAAF suggests that, of all the munitions used, the 10% that were of the precision variety caused 75% of the damage inflicted to Iraq's military machine.⁴¹

Finally, the Gulf War generated an overwhelming feeling that air power could dominate over other forms of warfare as never before. As one RAND report stated in 1993:

"...The results of our analysis do indicate that the calculus has changed and air power's ability to contribute to the joint battle has increased. . . .In short, the mobility, lethality and survivability of air power makes it well suited to the needs of rapidly developing regional conflicts".⁴²

In the light of Somalia and Bosnia, this conclusion may have proven to be a little premature.

The RAND conclusion of air power's capability in the Gulf, give it a very

39. It is important to understand the three basic degrees of control of the air as they are referred to at various points throughout the thesis:

Favourable Air Situation – Enemy air effort is insufficient to prejudice friendly success.

Air Superiority – Allows conduct of friendly operations to proceed at a given time and place without prohibitive enemy interference.

Air Supremacy – Enemy air force incapable of effective interference e.g. the Gulf War.

Taken from Air Power op. cit. pp 39.

40. Nearly all losses came from radar and IR SAMs and Anti-Aircraft Ammunition (AAA), not other aircraft fire. As a result, the low altitude environment was "off limits" to the Coalition from opening night onwards. The loss of Iraq's air superiority has meant that Saddam Hussein has had to live with an air occupation that has exposed the very core of Iraqi military capabilities to outside inspection and destruction. Keaney and Cohen, GWAPS Summary Volume, pp 61. See Col. Harry G. Summers, A Critical Analysis of the Gulf War, New York, Dell Publishing, 1992, pp 238, for a breakdown of the Coalition forces involved.

41. In World War II, only 7% of all bombs dropped by B-17 bombers fell within 1000 feet of their target. On the eve of the Gulf War, self-designating precision bomb-droppers such as the F-117, F-111F and F-15E were routinely placing laser-guided bombs less than 10 feet from the target. See USAAF, AAF Bombing Accuracy Report No 2 (Operational Research Section, 8th Air Force, 1945), Chart 2, "Distribution of Effort and Results"; and Hallion op. cit pp 24.

42. Bowie C, et. al., The New Calculus: Analysing Airpower's Changing Role in Joint Theater Campaigns, Santa Monica, California, RAND, 1993, pp 83-4.

favourable, almost faultless review. There were however mistakes made, two of which have been highly publicised. The first occurred on 13 February 1991 during a night attack when two laser-guided bombs, delivered by F-117As, penetrated the roof of the large concrete al-Firdo bunker, which was thought to be a command facility, and exploded inside. Although there were questions over its military use, the structure also served as a shelter and that night it housed a large number of civilians – more than 300 people were killed or wounded. Television pictures showing dead women and children being removed from the building were beamed into millions of homes – provoking public outcry and straining domestic support. As a result of the destruction of the bunker, for the “next four days air operations against Baghdad ceased, and when they resumed, politically motivated controls reduced the number of targets to the barest handful.”⁴³ The effect of a similar mistake on the peace operation in Bosnia would have been even more dramatic. The second incident, a case of “blue on blue”, took place on 26 February 1991 and accounted for the deaths of nine British soldiers as a result of a US A-10 attacking two armoured personnel carriers in error.⁴⁴ These two examples help to show that the use of air power is not always clinically clean and faultless, as with everything, it has limitations and disadvantages.

The Limitations and Disadvantages of Air Power – the “eggshell”⁴⁵

Air power's use in the Gulf raised policy makers' expectations, which in turn called for its use in Bosnia. The thesis in essence argues that between April 1993 and September 1995 air power's use failed to live up to these expectations. However, this failure was due more to factors of a political nature, rather than physical and technical. The thesis does not argue that physical and technical restraints on the use of air power did not exist, yet they were not the overriding factor. The discussion now turns to these restraints, to

43. Cohen, “Mystique...” op. cit. pp 121.

44. Morse op. cit. pp 123 & 172.

45. Thinking of an aircraft as an eggshell is probably the best way to understand many of its weaknesses. Similar to an egg, an aircraft has a lightweight construction with little or no armour protection. As such it is susceptible to catastrophic effects in the air as the result of the smallest amount of damage. As Cohen notes, a single well-directed .50 calibre bullet or carefully placed satchel charge can render a thirty-million-pound fighter useless. Cohen “The Meaning...” op. cit. pp 191.

highlight their affect on the use of air power in Bosnia. They include the threat from the ground, cost, terrain, weather and finally the problem of trying to attack a target which was inherently difficult to hit.

In Bosnia, while aircraft were not threatened from the air, the threat from the ground remained a real one, as demonstrated with the shooting down on 2 June, 1995, of a US F-16C by a surface-to-air missile (SAM).⁴⁶ This was the result of a number of systems that had remained in circulation, left over from the adequate air defence umbrella developed for the former Yugoslavia, consisting of both Soviet and Western manufactured anti-aircraft systems.⁴⁷ These included the highly mobile SA-3 Goa, SA-6 Gainful, SA-7 Grail, SA-9 Gaskin, ZSU-23-4 and both radar and non-radar controlled 20mm, 23mm and 40mm gun systems. Whilst these posed a threat to the aircraft enforcing the NFZ, they posed even more of one to the aircraft having to operate in the low-level environment. The shooting down of a Sea Harrier provided a constant reminder of the risks to aircrew from small-arms, anti-aircraft ammunition (AAA), and hand-held SAMs. The threat proved to be a continuing concern and as a

46. See Appendix 2.

The primary military goal of the leadership of the Socialist Federal Republic of Yugoslavia before 1991 was to survive, and if possible defeat a Soviet 1968 Czechoslovakian-style invasion. It recognised the need to become self-sufficient in arms production, and therefore acquired numerous co-production and licence agreements to produce military hardware. Although they imported some hardware, they were very adept at creating their own military-industrial complex. In 1990-91, the Yugoslav Air Force was reported to have 455 combat aircraft and 198 armed helicopters. See The Military Balance 1990-991, London, Brassey's, 1990, pp 95-6, for a comprehensive review.

When civil war broke out in 1991, the defence and military production facilities, which were scattered throughout the different regions, were either seized, looted and/or relocated by the various factions. Although difficult to determine – the exact distribution of these facilities, what was destroyed and who seized what – as a guide: in December 1992; the Bosnian Serbs had the upper hand in air combat capability with about 20 combat aircraft; the Croatian Air Force, operating in Bosnia, was limited to a few combat and rotary-wing aircraft they had acquired via defections from the federal air force, and those few aircraft used in police service prior to the civil war; and the Bosnian Muslims had no aerial assets to speak of. By May 1995, the BSA was credited with 20 aircraft and 12 helicopters, the Bosnian Croats with 6 helicopters and the Bosnian government troops still with no similar assets. Evans M., "West holds whip in the air but Serbs rule on land", The Times, 17 December 1992. Sheridan M and Bellamy C., "Hunkering down for a long, long war", The Independent, 2 May 1995 – a review of all warring factions troops, tanks, artillery, aircraft and helicopters.

47. For a fuller description of the adequate air defence network, see Tim Ripley, "Silence of the SAMs", Aircraft Illustrated, November 1995, pp 36.

result the Bosnian Serb missile sites at Dvor and Otoka on 23 November, 1994, were attacked.⁴⁸

The attacks were clearly necessary as the the threat of losing a thirty-million-pound fighter may well have suspended further flying operations, if the risk was deemed to be unacceptable in relation to the potential gain.⁴⁹ As it was, when the USAF F-16 was shot down on 2 June 1995, the combat air power enforcing the NFZ was moved from above Bosnia to over the Adriatic Sea; increasing the response time and degrading the deterrent value.⁵⁰ Clearly, cost was not the only consideration in the decision to move the combat air patrol out of the range of SAMs.⁵¹ However, any losses in Bosnia on top of the normal operating costs, would have made the provision of air support an

48. See Appendix 2.

49. The proliferation of sophisticated aircraft and air defence systems, and the growing capabilities of many states to exploit them, increasingly necessitates the deployment of the most modern and thus expensive aircraft.

50. See Figure 3.

In the Gulf War, following the loss of two F-16s over Baghdad on the third day of the Persian Gulf war, American commanders, called a halt to daylight manned operations over that city. For a description of these events and others see Eliot A. Cohen, ed., Operations/Effects and Effectiveness, vol. 2 of Gulf War Air Power Survey, Washington D.C., G.P.O, 1993, pp 171-77, 279-80.

51. The loss of a combat aircraft had wider implications which were best avoided. For example, the sheer action of shooting down a NATO aircraft was another indication of a lack of will or interest on the part of the belligerents to negotiate and to continue to achieve their goals by force. The action also threatened a risk of escalation or a greater level of intervention by the international community. In addition, recovering the downed pilots promoted unwanted tension between the international community and the belligerents. Finally, recovering a downed pilot put other lives at risk and involved a massive use of resources which could be better utilised.

The location of downed pilots involved the use of reconnaissance aircraft and satellite systems, with recovery, normally by helicopter requiring airborne early warning (AEW) support, fighter escort and suppression of enemy air defence (SEAD). The rescue of the F-16 fighter pilot, Captain Scott O'Grady, provides a good example. The operation to recover O'Grady, who was shot down on 2 June, 1995, involved over 40 aircraft controlled by a NATO Airborne Warning and Command System (AWACS) radar plane. The package consisted of two CH-53E Super Stallion helicopters, escorted by two Marine AH-1W Super Cobra helicopter gunships, a pair of AV-8B Harrier jump jets, which in turn were escorted by Navy EA-6B Prowler electronic warfare planes, providing a SEAD window (see below), two Marine F/A-18D Hornets to provide air cover, and a pair of tank-killing Air Force A-10 Warthogs.

(A suppression of enemy air defence (SEAD) window is a term used to describe the period during which the enemies air defence system is suppressed, allowing flying operations to take place without the risk of being fired at by surface-to-air missiles.)

Kevin Fedarko and Mark Thomson, "All For One", Time, June 19, 1995, pp 26-27.

expensive addition to the already hard pressed budgets of the providing states, and may have exacerbated a reluctance to participate in the peacekeeping operation.⁵²

To complicate the problems of the ground threat, the terrain did not help. Bosnia, the size of Wales, consists of mountainous hinterland behind the archipelago coastal strip of Croatia. To the north is the low-lying Danube basin but to the south-east the mountains run almost without interruption to Istanbul. The terrain is so rugged that railways link only the major towns, and

52. Bosnia, for example, was a UN authorised operation which was taking place at great expense to all those participating. Clearly those supporting the operation expected reimbursement for their efforts. The UN however, as at 31 December, 1993, was owed by Member States a total of US\$1,501.4 million, of which US\$1,013.2 million was related to the peacekeeping budget. To alleviate this problem, the UN borrowed to maintain its role and deferred reimbursement to Member States that contributed personnel and materiel. As a result, the UN avoided paying out US\$334.8 million to 61 Member States. While this saved the UN money, it also led to the reluctance of some Member States to participate in any further UN operations, as the likelihood of being reimbursed was minimal. B. Boutros-Ghali, "Improving the Capacity of the United Nations for Peacekeeping", *Military Technology*, MILTECH, 12/94, pp 78.

The UN's problems were compounded by the fact that it was unable to guarantee how long the deployment would last (Cyprus) or even how often the aircraft would be used. In addition, aircraft could not remain in theatre by themselves, they required manpower, supplies, spares and expensive (\$100,000-130,000 each) weapons to avoid collateral damage. The cost of such an operation can be enormous as the British government realised with its operation on Mount Pleasant on the Falkland Islands. Hewish, M; Sweetman, R; and Robinson, A; "Precision Guide Munitions Come of Age", International Defense Review, 5/1991, pp 460.

Also, the cost becomes astronomical, if the step were taken to employ air power every time the UN was asked for help. Clearly, with the UN in the financial muddle it is already, such a demand would be virtually impossible to meet. The financial state of affairs of the UN is plainly only one of its many predicaments. For this problem and others regarding the UN and peacekeeping, see:

Akashi, Y., "The limits of UN Diplomacy and the Future of Conflict Mediation", Survival, Vol. 37, No. 4, Winter 1995-96, pp 83-98.

Carlsson, I., "Roles for the UN in International Security after the Cold War", Security Dialogue, Vol. 26, No. 1, 1995, pp 7-18.

Iqbal Riza, S., "Parameters of UN Peace-keeping", RUSI Journal, June 1995, pp 17-20.

James, A., "UN Peace-keeping: Recent Developments and Current Problems", Paradigms, Vol. 8, No. 2, Winter 1994, pp 18-34.

Rudolph, J.R, Jr., "Intervention in Communal Conflicts", Orbis, Spring 1995, pp 259-73.

Tharoor, S., "United Nations Peacekeeping in Europe", Survival, Vol. 37, No. 2, Summer 1995, pp 121-34.

Tharoor, S., "Should UN Peacekeeping Go 'Back to Basics'?", Survival, Vol. 37, No. 4, Winter 1995, pp 52-64.

only a few main trunk roads are accessible all the year round, whereas minor roads are generally unsurfaced and narrow and tend to be impassable in the winter and spring months. This severely restricts cross-country mobility for tracked, as well as wheeled vehicles. As a result, there has been significant use of aircraft and helicopters since World War Two.⁵³ This presented two problems.

The first, as highlighted earlier, was that AWACS could not look through a mountain. The highly variegated terrain was not conducive to complete AWACS radar coverage. Therefore the pilots, having made extensive use of aircraft and helicopters since WWII, being both familiar with the terrain and capable of flying low in the mountainous area, were able to sneak in under and between radar coverage. The problem for the AWACS was compounded by the fact that the belligerents used small radar cross-section aircraft like An-2s and helicopters. Hungary's contribution, to allow a second orbit over its territory obviously helped, but it was essentially looking at the same terrain, albeit from the other side.

Secondly, radar target tracking time and infrared (IR) missile lock-ons were limited in this type of terrain. As one source explained, the fighters almost needed "co-operative targets - flying straight and level, at altitude - to affect a shoot down."⁵⁴ Helicopters played cat and mouse with the NATO fighters, who lacked the manoeuvrability necessary to pursue helicopters along the floors of Bosnian valleys in bad weather or at night. As Michael Evans noted, it was "difficult for a jet, flying at up to 700mph, to target a slow-moving object travelling close to the ground,"⁵⁵ especially if the potential target knew a fighter was attacking, and used the ground and gullies to break the radar lock and confuse the IR seeker. For example, on 7 January, 1992, it took a Yugoslavian Air Force MiG-21 Fishbed pilot four attempts and four AA-8 Aphid infrared air-to-air missiles to shoot down an Italian piloted EC AB-205 Huey helicopter near Zagreb, over the relatively flat Pannonian Plain, not the 9000 ft (2,743 m) Danaric Alps that run through Bosnia.⁵⁶

53. Lambert, APN, Wg Cdr., "Operation Deny Flight", *Air Clues*, December 1993.

54. Nordeen, L and Scott Barnes, C., "Denying Flight", *Air Force Monthly*, August 1993, pp 20.

55. Michael Evans, *The Times*, 12 April 1994.

56. Nordeen op. cit. pp 20.

Finally, even with a radar lock-on, potential slow moving targets were visually hard to acquire and identify by high speed supersonic jet fighters like the F-15, F-16, F/A-18 and Mirage F.1 and 2000 in use in Bosnia. This was significant in that, in such an environment, although the Rules of Engagement (ROE) were secret, it would have been highly likely in most cases, that the UN authorised NATO air power had to visually identify a target before facing the above complications of shooting it down. Misidentifying a target and shooting it down would have had profound implications, especially in "blue on blue" cases, where such a blunder does much to undercut the public's willingness – never high – to undertake foreign commitments. For example, US involvement in monitoring the northern NFZ in Iraq was questioned, after two US F15 fighter aircraft, directed by an AWACS, shot down two American helicopters, killing 15 Americans and 11 others, "nearly wiping out the command of Operation Provide Comfort, an allied program assisting the Kurds."⁵⁷

The problems of terrain were additionally complicated by adverse weather, poor light and darkness. "The world [of pilots] is divided into those who think the night can be conquered and those who don't. Same goes for low level in bad weather, where the problems amount to rather more than not being able to see."⁵⁸ The complications of poor weather (fog, low cloud, heavy precipitation or night) for example, affected reconnaissance and surveillance tasks, as well as fast jet activity at low level; particularly in hilly or mountainous areas. From the point of view of the belligerents however, the bad weather was a blessing in disguise, providing what would almost equate to a security blanket. A 100 foot cloud base for example had very little effect on the belligerents' ground campaign, whilst it had a dramatic affect on the the use of air power. Indeed aircraft still flew; but a low cloud base, with visibility reduced by heavy precipitation, made the task of acquiring targets, delivering ordnance and dealing with defences that much more difficult, if not virtually impossible. Even marginal conditions proved limiting, sometimes allowing for the acquisition of the target, but precluding the delivery of ordnance.

This situation manifested itself in Bosnia on more than one occasion. For

57. Thomas, E. et al, "Trial by Unfriendly Fire", Newsweek, April 25, 1994, pp 11.

58. From an essay by David MacIsaac in Mason, War in the Third Dimension, op. cit. pp 27.

instance, on 10 April, 1994, UN military observers in the city of Gorazde requested air support to halt a Serb T55 tank which was launching shells into the city centre from less than two miles away. Unfortunately, "the weather and ground conditions were so bad that the two American F16Cs were unable to get a clear view of the target,"⁵⁹ and were thus unable to carry out an attack. Whilst other targets were acquired, the inability to identify that specific T55, meant the delivery of ordnance could not be authorised. The tank therefore, protected by the terrain and weather continued the shelling. The UN's weapon of choice to deal with such violations was essentially impotent.

The final limitation, came from trying to attack something which was inherently difficult to hit, even with PGM. The use of artillery featured highly in the BSA tactics of warfare. A Muslim town or village was simply bombarded with 122mm and 152mm artillery pieces before the BSA moved in for "ethnic cleansing."⁶⁰ These guns gave the BSA their power. Against them the Muslims - and the Croats in Bosnia - had no recourse. The Americans themselves learnt in Vietnam how difficult it was to destroy artillery, particularly moving artillery, from the air.⁶¹ The guns themselves were robust pieces of equipment, usually only disabled permanently with demolition charges. Even with advanced radar equipment and laser-guided precision bombs, NATO aircraft that flew in at 500 to 600 mph found it difficult to make accurate hits on artillery that could be easily hidden and quickly moved, especially in wooded areas.⁶² This was complicated by the danger that the Serbs would put their guns behind schools and hospitals.⁶³ For example, in Nedarici and Bosnian Serb held parts of Dobrinja, gun positions were placed beside homes of local residents.⁶⁴ In addition there was the problem of identifying all of the artillery

59. Evans "West holds..." op. cit.

60. Keegan, J., "How to silence the guns?", The Daily Telegraph, 16 December 1992.

61. Evans, M., "West weighs risks and rewards of air strikes", The Times, 29 April 1993.

62. Similar problems of the belligerents dispersing were experienced in Malaya, "despite efficient, expeditious procedures for requesting, approving, launching, and delivering air strikes, when ground patrols called in air support, the enemy often melted away into the jungle before the support arrived." A.H. Peterson, G.C. Reinhardt, and E.E. Conger, Symposium on the Role of Air Power in Counter-Insurgency and Unconventional Warfare: A Brief Summary of Viewpoints, Santa Monica, The RAND Corporation, RM-3867, March 1964, pp 6-7.

63. Evans "West weighs..." op. cit.

64. See Judah, T. and Evans, M., "Serb firepower makes air raids high-risk choice", The Times, 8 February 1994.

pieces. As of May 1993, only a quarter of the Bosnian Serbs artillery pieces were reported to have been clearly identified, leading some air power advocates to suggest that if NATO used AS alone, the Bosnian Serbs "would just ride it out."⁶⁵

Evidently, the technical capability of the use of air power in Bosnia was impeded by the threat from the ground, cost, terrain, weather and the predicament of trying to attack artillery which was inherently difficult to hit. While these undoubtedly affected the effective use of air power, the same physical restraints existed in September 1995, yet the use of air power played a decisive role. Clearly, political-situational factors had a major affect pre September 1995, and it is to these the discussion now turns.

65. Barry, J. and Watson, R., "The Sky Above, the Mud Below", Newsweek, May 17, 1993, pp 14.

Chapter 4

Air Power

The Political Factor

Introduction

Efforts to resolve the Bosnian conflict placed demands on the international community which tested both its cohesion and its will to find a peaceful solution. Since the beginning of the conflict there were demands for the intervention of air power from the politicians and public alike. For example Paddy Ashdown, leader of Britain's Liberal Democratic Party, called for the use of air strikes:

"You cannot stop the conflict, but you can diminish its intensity by suppressing if necessary with force, the use of heavy weapons and tanks. It is nonsense to suggest that we do not have the technology to make these sorts of air strikes. This could freeze the war at a lower level so that people being attacked would have the chance to defend themselves with small arms. It should end the awful bombardments we are now seeing."¹

The discussion so far has examined how the UN, NATO and its air power became involved in the Bosnian conflict and within what context, and how, within this framework, the use of air power managed to acquire a less than impressive reputation pre-September 1995. After examining the technical aspects of air power in Chapter 3 and noting the resounding success of the use of combat air power in the Persian Gulf War, the thesis now attempts to address complications of a different nature in the Bosnian conflict. The discussion now turns to the political aspects of the use of air power, problems surrounding political willpower and leadership, the command and control process and restrictive rules of engagement.

The Politics of Air Power

The No Fly Zone

The failed use of UN authorised NATO air power to prevent flights by

1. Daily Telegraph, 4 August 1992. Cited in Mason, AVM T., Air Power: A Centennial Appraisal, London, Brassey's, 1994, pp 169-70.

belligerents in helicopters was not so much the result of the Western combat aircraft being unable or incapable to act to stop the flights, more a predetermined decision by the international community not to shoot them down. This was due to the fact that NATO and the UN decided against shooting down helicopters for fear of hitting one carrying wounded civilians. The Croat MI-8 helicopter, carrying 24 sick children to Split in February 1994, organised by Ms Sally Becker of "Operation Angel" fame, provides a good example of just such a helicopter flight. The implications of shooting down such a helicopter would have been dire for the UN or NATO as they struggled to maintain a level of transparency, proportionality and impartiality in what was essentially a peacekeeping operation.² As a spokesman at NATO southern region headquarters in Naples explained: "There's always been the fear that we would shoot down a helicopter with injured children and old women on board . . . or that the Serbs or somebody would bring in bodies to the crash site and make it look that way."³

As a result of this decision, the belligerents adopted a defiant attitude, generally ignoring threats that they would be shot down by NATO aircraft if they defied the ban. For example in one instance, "several warnings were issued and ignored."⁴ The threat in some instances seemingly had no deterrent value at all. On occasions the belligerents had been heard to say: "Go on then," or "I don't believe you."⁵ The threat was clearly perceived to be empty of commitment, and complicated by the fact that even when the belligerents did land, once the NATO fighters had left the area, the helicopters simply started up and continued their missions.⁶

This arrogant defiant attitude can be attributed to the fact that the Serbs were

2. Fox, R, et al., "Bihac set to fall as Serbs advance on three sides", *Daily Telegraph*, 24 November 1994.

3. Almond P., "Frustrated pilots allowed to fire at last", *The Daily Telegraph*, 1 March 1994.

4. Judah, T., "Sky proves no limit as all factions flout flying ban", *The Times*, 6 August 1993. NATO fighters had to warn the helicopters with the following threat:

"Unidentified aircraft heading (magnetic) at position (Lat/Long), you are in the No Fly Zone in violation of UN Resolution 816. Land or depart the area immediately or you will be engaged".

Lambert op. cit. pp 449.

5. Almond op. cit.

6. Ripley T., "Air Power Vindicated", *Flight International*, 1-7 November 1995, pp 16.

aware the West was conscious of the negative consequences to the peacekeeping operation and of the threat of retaliation. For example, the mere rumour of retaliation, (using Scud missiles against Italian bases used by NATO patrols for enforcing the NFZ), led the Italian Defence Minister, Salvo Ando, to call for a "missile defence network to cover southern Europe by the end of the decade."⁷ On a more realistic note however, action had been taken by the BSA in the form of taking hostages and retaliatory strikes. For example, within an hour of the shooting down of four Serb war planes on 28 February 1994, the Serbs took revenge and attacked Tuzla with heavy artillery.⁸ In addition, whilst the UN authorised NATO air action, had been successful at enforcing the NFZ on this occasion, UNHCR had to suspend relief operations (the very operation air power was meant to be protecting and assisting) for fear of a Serb backlash – such as the taking of hostages; the Welsh Fusiliers in June 1995⁹ and the 20 Army engineers in November 1994¹⁰ provide good examples. This threat to the established UN authorised ground troops, proved to be a vital consideration when any enforcement action was taken, or threatened; the troop contributing states not wishing to endanger their troops. At the political level, this led to a battle of wills between troop contributing and noncontributing states, and the source of much friction, particularly in the case of air strikes.¹¹

The threat of retaliatory action had even operated leverage when the release of the hostages were threatened, and linked to the issue of overflights by NATO jets enforcing the NFZ.¹² This situation developed when Dr Karadzic, the Bosnian Serb leader, delayed the release of 33 Dutch peacekeepers for this very reason. In such a predicament, a very well defined and established command chain needed to exist, so that sensible decisions were arrived at, rather than rash and ineffective decisions – subject to political pressure from all sides. However, rarely does a command and control (C₂) chain exist without problems. Nevertheless, unlike the offensive air support (OAS) C₂ structures

7. Nordeen, L & Scott Barnes, C., "Denying Flight", Air Force Monthly, August 1993, pp 20.

8. See Appendix 2.

9. Braid M., "TV news brings relief for families", The Independent, 14 June 1995.

10. Muir J., "Freed British convoy reaches Gorazde", The Daily Telegraph, 5 December 1994.

11. The case of air strikes and the problems of retaliatory action are discussed shortly.

12. Muir op. cit.

which are reviewed shortly, the C₂ structure which supported the NFZ proved to be a relative success.

The C₂ structure was set up as a result of NATO's decision to support the UN under UNSCR 816, which via the NAC, directed the Supreme Allied Commander Europe (SACEUR) to take preparatory steps to implement the proposed measures on 12 April 1993. SACEUR in turn delegated authority for the implementation of this operation to CINCSOUTH - Admiral Boorda - US Navy, with headquarters in Naples, Italy. He became responsible for the overall conduct of the operation, with operational control of day-to-day mission tasking for fighter aircraft delegated to Commander, 5th Allied Tactical Air Force (5ATAF), Lieutenant General Antonio Rosetti, Italian Air Force, at Vicenza, Italy. As a result of this delegation down to three- and four-star general or flag officer level, the C₂ structure remained relatively simple, with NATO aircraft independently responding to direct attacks by hostile aircraft or missiles.¹³ In all other circumstances, they sought permission from one of the authorised commanders before intercepting or engaging targets.¹⁴

The potential of the process was illustrated on 28 February, 1994, when four Serb jets were shot down by American F-16s. A NATO AWACS reported sighting the aircraft (six Bosnian Serb Jastreb J-1s) heading south from Banja Luka at 0631 hours. By 0650, 19 minutes later, four Jastreb aircraft had been downed, with the two remaining fleeing.¹⁵ If the C₂ process had been anymore protracted, like that of the OAS process requiring UN authorisation, the aircraft would have escaped unscathed, having successfully carried out their attacks. In fact, a reassuring sign came when Yasushi Akashi, the UN special envoy to the former Yugoslavia, told a press conference in East Mostar that, "the UN was not [even] advised of the attack beforehand."¹⁶

13. See pp 60 for an illustration of the C₂ process.

14. The diagram illustrates the process from the point contact was made with an aircraft violating the NFZ by either the AWACS or the fighter on patrol. The fighter relayed the details to AWACS, or AWACS if they already had it passed the information to the CAOC at Vicenza where the Director gave the authorisation to engage and if necessary, destroy.

15. See Craig Covault, "AWACS, Command chain key to NATO shoot down", Aviation Week & Space Technology, 7 March 1994, pp 25-6, for a complete description of the events of 28 February 1994.

16. Block R et al., "NATO's moment of truth in Bosnia", The Independent, 1 March 1994.



Fig. 5. NFZ Command and Control (July 1995)

An area of disagreement did exist initially between the Americans and Italians however, even though the C₂ chain worked well. The minor complication involved the issue that the US government wanted its aircraft under the authority of a US officer and as such, at Vicenza, the Director USAF Major General Hornberg (previously James E. Chambers), provided engagement authorisation. Initially, according to the original C₂ structure, this should have been left to the Italian, Lieutenant General Antonio Rosetti, Commander of 5ATAF. By implementing a US Director, the US had effectively taken Rosetti out of the C₂ loop, leaving him as a figurehead only. While it appeared that the C₂ arrangement worked with much unanimity at the military level, such agreement had not been mirrored at the political level.

In December 1992, the US asked NATO to enforce the NFZ. Whilst it was refused by a vote of 13-3,¹⁷ NATO voted to enforce the zone if the UNSC passed the necessary resolution. In this way, any offensive action would have remained under UN authorisation. By 20 December, the US and Britain said they favoured enforcing the NFZ and, since Britain was the last permanent member of the UNSC to oppose force in Serbia,¹⁸ this opened the door for a UN resolution to enforce the NFZ. It took the dropping of bombs by three Serbian aircraft on Muslim villages near Srebrenica on 13 March, 1993, to convince the UN to pass on 31 March, 1993, UNSCR 816 – to allow NATO planes to shoot down aircraft violating the NFZ.¹⁹ Finally, it appeared the UN had found some political resolve and in the words of Sir David Hannay, the British ambassador to the UN, "The Council's vote will send a very clear message that it will not tolerate any violations of the no-fly zone."²⁰

The only tempering of the resolution, was made at the request of the Russians, that the rules of engagement for NATO planes meant they were "confined to aerial combat in Bosnian airspace" and that they would "not fire at

17. Nordeen op. cit. pp 16.

18. See Riddell P., "Doves dominate cabinet talks on Bosnia", The Times, 15 December 1992, for further detail regarding Britains opposition.

19. The move, aimed at Serbian military aircraft, was the first step by the UNSC to try and force the Serbs to sign the UN and EC-sponsored peace plan drawn up by Lord Owen and Cyrus Vance.

20. Pringle P., "UN gives NATO right to down Serbian planes", The Independent, 1 April 1993.

targets on the ground, unless the fire" was in "self-defence."²¹ The new commitment to the conflict was tested on 28 February 1994 when "four Serb warplanes returning from a raid on a munitions factory were shot down...in NATO's first offensive action in its 45-year history."²² Despite the poor performance to date, this act thrust NATO into the Bosnian conflict heralding "a new phase in the fighting, with the West appearing to be willing for the first time to back United Nations resolutions with force."²³

Even though the Bosnian Serbs denied that any of their aircraft were involved, clear concern for the continuation of the peace process was reiterated, and the action drew political support from most sides. The British Prime Minister, John Major, on a visit to Washington, said the action by NATO on 28 February was always likely at "some stage". "What it does illustrate is that UN resolutions cannot be ignored with impunity."²⁴ Crucial support however, came from Russia: the other key international player in Bosnia. Although the rest of the Western alliance blamed the Bosnian Serbs, the Russians did not. Yet the Russian Foreign Ministry statement said, "Whoever carried out the military sortie over Bosnia in violation of the corresponding UN Security Council resolutions on a no-fly zone, it is they who bear full responsibility for what happened."²⁵ The military response came from Manfred Wornier, the NATO secretary-general, warning warring parties not to attack UN forces saying, "Better keep your hands off. It's better not to provoke NATO. Escalation can only lead to more violence on all sides."²⁶

These strong words cannot deny the fact however, that political will was lacking since the beginning of the crisis. The governments involved in the Bosnian crisis, had not entered because they had a "clear idea of their objectives, but because helpless inertia threatened their national self-respect, the European ideal for some, and bilateral relations for others."²⁷ Once

21. Ibid.

22. Riddell et al op. cit.

23. Block et al op.cit.

24. Ibid.

25. Riddell et al op. cit.

26. Ibid.

27. Foster E., NATO's Military in the Age of Crisis Management, RUSI Whitehall Paper Series, RUSI, 1994, pp 13.

involved they had not known which way to turn, trying to limit their involvement each time the crisis escalated, or the need for intervention became apparent. Political leaders, it would seem, had not taken heed of the old military axiom, that "the half-hearted employment of inadequate military forces, which is unlikely to succeed from the outset, can be far worse than not using it at all."²⁸ As Lord Callaghan said back in December 1992, "there should have been a large scale military intervention over a year ago. The situation has changed since then. If it had been done a year ago on a very large scale they could then have dealt with the situation much more easily than they could now. It should have been intervention on the ground."²⁹ Instead, politicians placed a great burden on NATO and air power, shackling the former and not understanding the latter. And, being shackled NATO was unable to maintain the credibility of air power as a viable threat. As Worner's successor, Willy Claes, expostulated, working with the UN in Bosnia, NATO had "made itself ridiculous as a military organisation. . . . If we cannot set the rules of our military operations, they will have to find other idiots to support peacekeeping."³⁰

Offensive Air Support

Already mentioned, the UN's use of combat air power through CAS, retaliatory air strikes or preplanned punitive air strikes, has drawn widespread criticism for appearing to be largely ineffective at dissuading the belligerents from aggressive courses of action. The technical difficulties relating to the aircraft themselves, weather and terrain were discussed in Chapter 3. The discussion will now consider the affect the C₂ process, political will and the ROE had at limiting the effective use of combat air power.

For both Close Air Support (CAS) and Air Strikes (AS), the "Dual Key" C₂ chain probably proved to be the major factor that directly prevented the efficient execution of OAS. The demands on air power in these two roles, as alluded to earlier, were subtly different and as such, required different C₂

28. Vincent R, Field Marshall Sir., quoted in North Atlantic Assembly report AL 221 PC (94)5, para. 11.

29. The Independent staff., "Should we intervene with arms?", The Independent, 16 December 1992.

30. Editor's column., "Each state for itself", Financial Times, 6 January 1995.

chains, worthy of separate discussion.

The CAS decision process began at the point when a warring party attacked a safe area or convoy.³¹ The forward air controller, witnessing the incident, began the decision process by contacting the Air Operations Co-Ordination Centre (AOCC)³² director in Sarajevo, reporting the incident and requesting CAS. The request was then passed on to Lieutenant General Rupert Smith who assessed the request with the aid of Combined Air Operations Centre (CAOC) Director, Major General Hornberg at HQ 5ATAF in Vicenza who was also talking to the AOCC in Sarajevo. The CAOC Director, with the aid of the AOCC, assessed, verified and then advised the UNPROFOR Commander. The AOCC was also talking to the Airborne Battlefield Command and Control Centre (ABCCC),³³ to prepare for the possibility of a CAS order to attack. If the request was still deemed necessary, it was passed on up the chain to the Force Commander, General Janvier (previously General Cot), at Zagreb and finally to the Special Representative of the Secretary General (SRSG), Yasushi Akashi, for authorisation. Once he had made a decision, the process was rather efficient, with authorisation being passed down to General Janvier, then CINCSOUTH, Admiral Leighton Smith in Naples, onto the CAOC director in Vicenza who gave the order to the ABCCC. The ABCCC then relayed the order to the predetermined CAS aircraft, already directed to the area, who finally attacked the guilty warring party with the aid of the FAC.³⁴

The process, complicated but apparently necessary, was subject to a number of problems which all attributed to the reason why air power did not respond in

31. See pp 65 for diagrammatic presentation of the C₂ process.

32. The AOCC was a multi-national organisation, fully integrated into Headquarters (HQ) Bosnia Command and hence located in Commander Bosnia's Forward HQ in Sarajevo. The focus was primarily on the application of NATO air power for CAS operations to assist UN units under attack from the warring factions. To achieve this it was equipped with a variety of communications equipment provided through NATO resources. As a consequence of its equipment and the need to follow NATO procedures, the small staff of 10 people were drawn exclusively from NATO countries. Nevertheless, it was quite definitely a UN unit and was obliged to tread a careful path between the differing priorities of NATO and UNPROFOR.

33. See Ripley, T., "Bosnia mission stretches airborne eyes and ears", International Defence Review, January 1994, pp 54-56, for a more detailed analysis of the role of the ABCCC and of the C₂ of NATO airpower during crisis management.

34. The process is simplified in diagrammatic form on pp 66.

NATO CLOSE AIR SUPPORT TO UNPROFOR - 'BLUE SWORD'

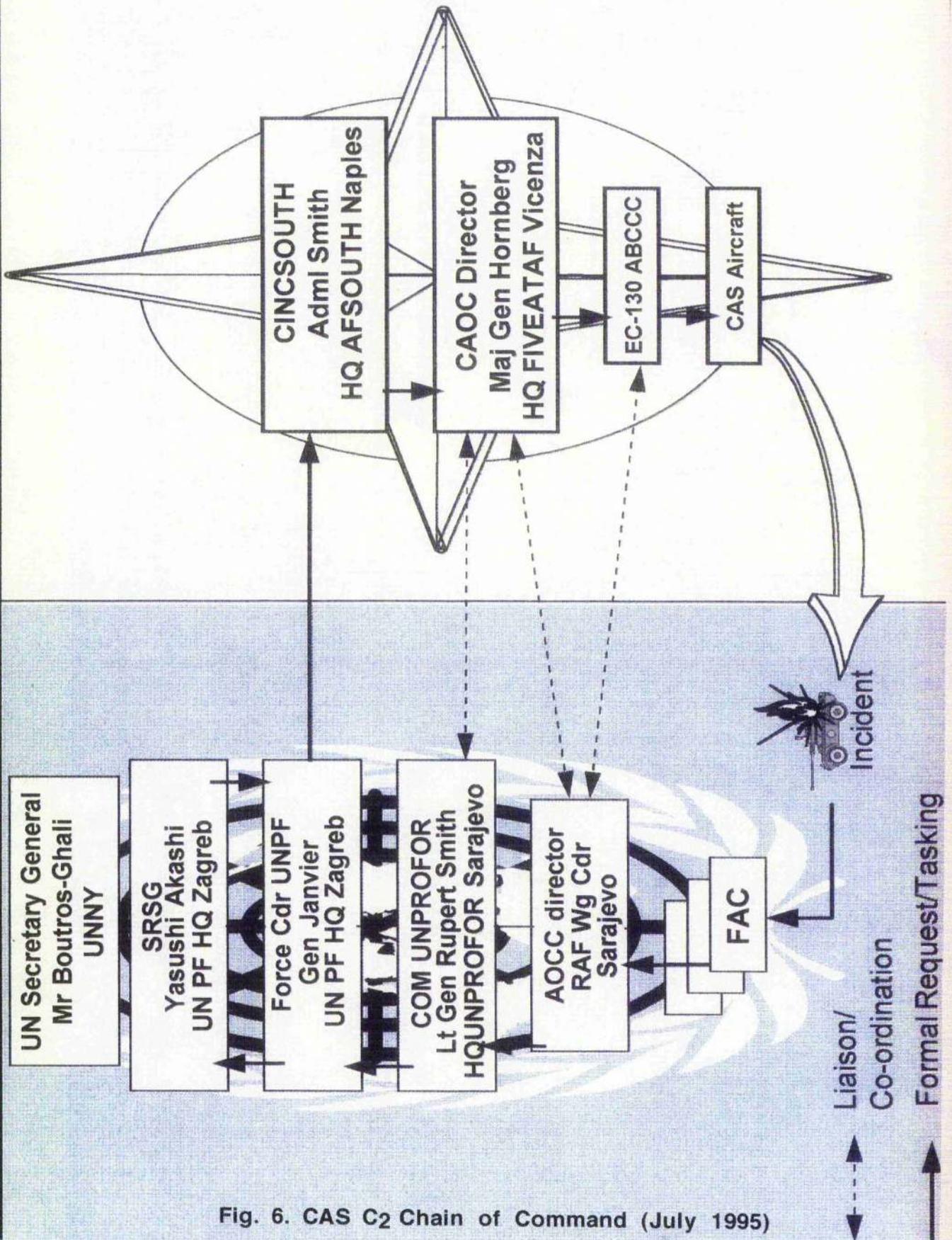


Fig. 6. CAS C2 Chain of Command (July 1995)

CLASSIFIED

**OP DENY FLIGHT CONCEPT OF
OPS FOR CLOSE AIR SUPPORT**

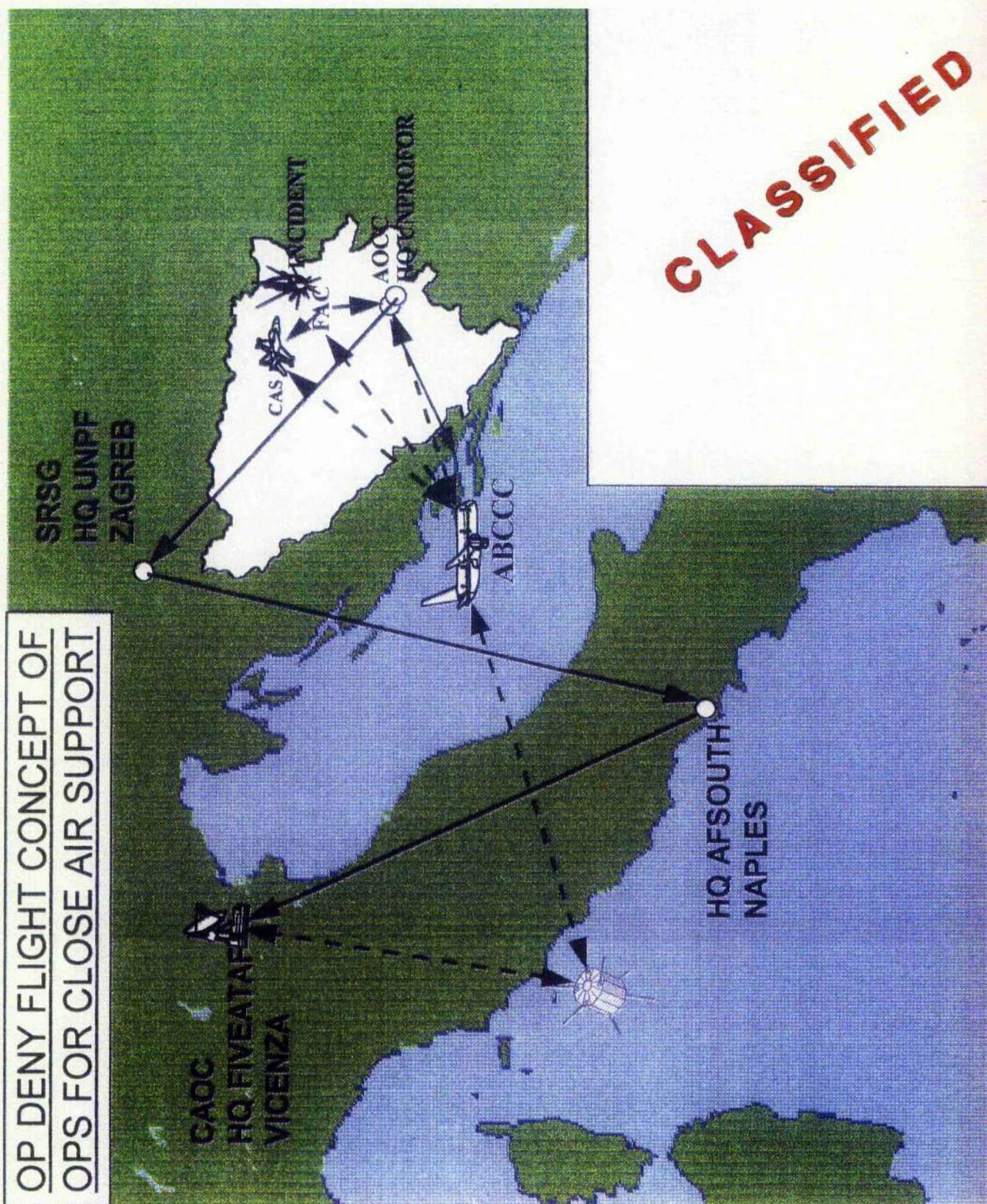


Fig. 7. CAS C2 Diagrammatic Presentation (July 1995)

the way it could have – quickly and decisively.³⁵ The first evident problem was that authority had not been delegated to a military level but had remained at SRSB level. Not only did this increase the number of levels in the decision making process, it also vested the responsibility for authorisation of an essentially military decision with a civilian.³⁶ Both these factors resulted in a request and approval procedure which was convoluted and protracted, not ideal for CAS where the response needed to be instantaneous. For example, a T55 tank was already firing into the city of Gorazde for 10 minutes on 10 April 1994 when Captain Nick Costello, General Rose's interpreter, gave a second³⁷ warning by telephone to the BSA Headquarters (HQ) at Pale to stop the shelling. At 16.30 local time, after it had been ignored, General Rose called the UNPROFOR HQ in Zagreb to ask for authorisation for CAS. Political approval was given at 16.55 by Yasushi Akashi. Although the authorisation for CAS was given in 25 minutes (normally three hours) this was still not ideal, particularly in Bosnia, where the situation on the ground was not only highly volatile, but very dynamic.³⁸ In other words, by the time the decision to provide CAS was made, under the ROE, the authorisation was no longer valid as the offending weaponry had already moved on.

In addition, the whole process required secure communication, hence the more decision levels there were, the more difficult it was to guarantee secrecy. Furthermore, in the mountainous terrain, communication between the "thinly spread UNPROFOR detachments and their FACs,"³⁹ the FACs and the AOCC, and between the pilot and the FAC, were often difficult and subject to electronic countermeasures.

The decision process as regards AS, was just as bad as that for CAS.⁴⁰ The

35. Refer to Chapter 3 for an explanation of the attributes of air power.

36. See Tony Capaccio, "The Fully Deployable Air Campaign", *Air Force Magazine*, January 1994, pp 54, where reservations were expressed that "injecting the UN into combat decisions could be a cumbersome mess."

37. The first warning was in a letter to Radovan Karadzic and General Ratko Mladic from Lieutenant Colonel Simon Shadbolt, Royal Marine Military Assistant to Lieutenant General Sir Michael Rose. Evans, M., "Bombing raids were in line with UN mandate on protecting peacekeepers", *The Times*, 12 April 1994.

38. *Idem*.

39. Ripley, "Bosnia...", *op. cit.* pp 56.

40. See pp 68 for a diagrammatic presentation of the process.

NATO AIRSTRIKES

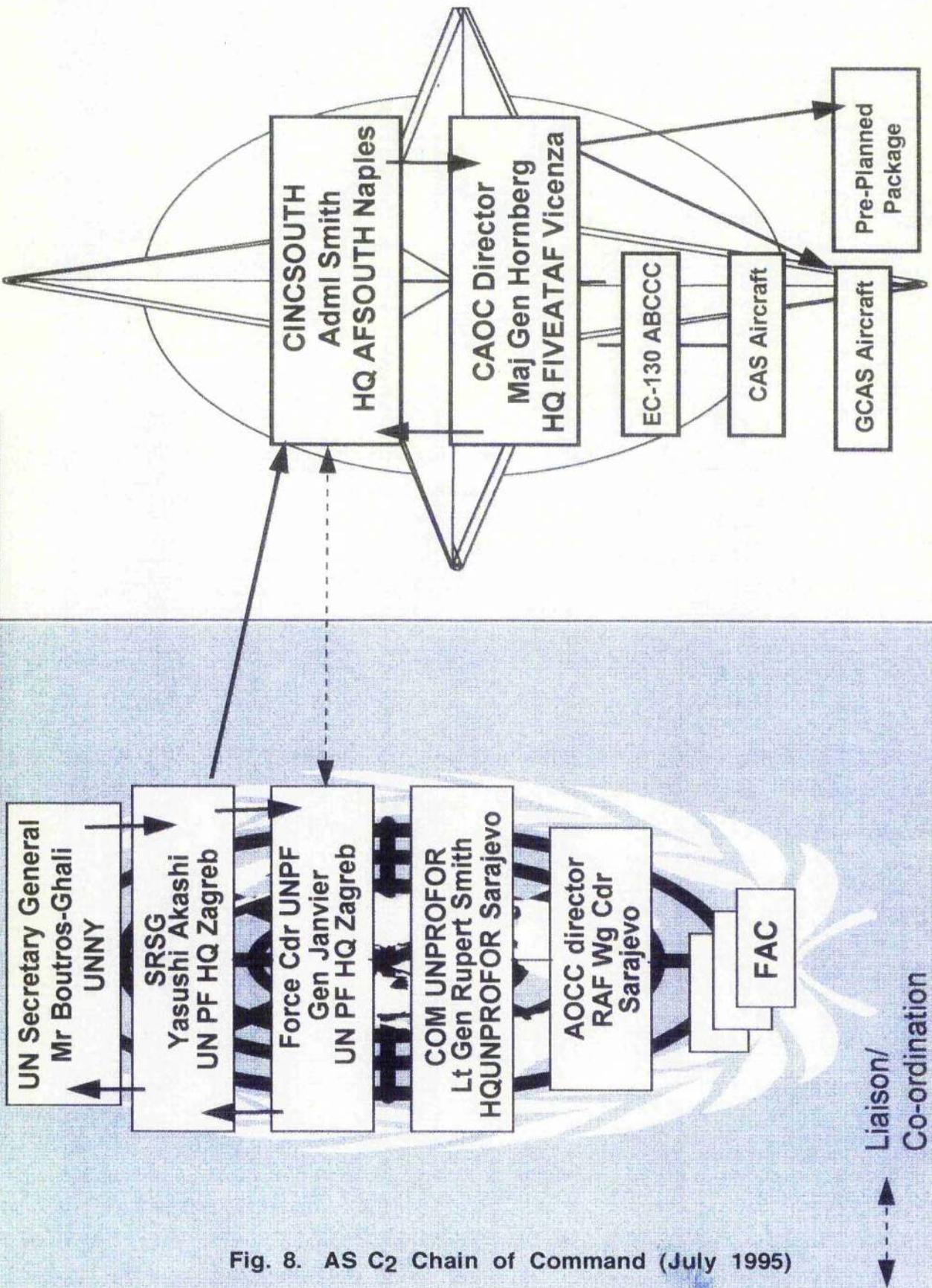


Fig. 8. AS C2 Chain of Command (July 1995)

process however, began at CAOC Director level at Vicenza, where the need for either retaliatory or preplanned punitive air strikes was realised. The request was passed onto CINCSOUTH who then liaised with General Janvier in Zagreb. The UNPROFOR Force Commander relayed the request onto Yasushi Akashi and finally, due to political sensitivity, from him onto Boutros Boutros-Ghali. If the request was granted, the UNSG via Yasushi Akashi informed both General Janvier and Admiral Smith. Admiral Smith then ordered the CAOC Director, who allocated the appropriate aircraft – either a preplanned package or merely some CAS aircraft.

Like the CAS decision process, the authorisation for AS rested with a civilian, only this time at a higher level, the UN Secretary General. This arrangement however led to decisions being made in a slow, detached fashion which was unacceptable in the highly dynamic ground environment of Bosnia. Any delay in a decision could have been fatal. As highlighted above, the decision to attack artillery shelling Gorazde in April 1994, took 25 minutes; the request was for CAS which was meant to be a swift and decisive process to assist troops in need. It must be noted that this was a substantial improvement, considering the process normally took three hours. What sort of response could however, be confidently and repeatedly expected for an AS?

The limitations of the C₂ arrangement were highlighted well by Michael Evans when he noted that the Serbs had reason to be wary of the huge amount of fire power that NATO had at its control. However, he also stated that the Serbs, “have succeeded in cocking a snook at NATO, because they know better than anyone that the alliance is not its own master.”⁴¹

The situation changed as of 26 July 1995, when the UN agreed to relinquish civilian control over the use of NATO air power and gave the UN military commanders the power to initiate a NATO air campaign; to protect the “safe area” of Gorazde or any other “safe area”. The decision came after much criticism was levelled at the UNSG and Mr Akashi for blocking more robust air strikes on the BSA. According to a UN spokesman, “In order to streamline decision taking within the United Nations chain of command...the Secretary-

41. Evans, M., “Airstrikes expose limits of West’s military options”, The Times, 24 November 1994.

General has decided to delegate the necessary authority in this respect to his military commanders in the field. . . He has accordingly delegated authority in respect of airstrikes. . . to General Bernard Janvier, the commander of UN peace forces, with immediate effect.”⁴² The step was a very necessary one, to make the threat of AS seem plausible, after all, there was no point threatening something that could not be delivered either on time, or at all.

This inability to prosecute AS in a timely manner or even at all, can also be attributed to the political wrangling that took place over what was the best policy to pursue regarding the use of AS. Ever since December 1992, there was a difference between US and European policy, particularly British, on how best to employ the air power in Bosnia, in particular, the use of AS. For example, the Bush administration, after acknowledging the deteriorating situation, and in the face of mounting criticism from a string of American leaders, advocated tougher action.⁴³ However, it took the Clinton administration, in light of the rejection by the Bosnian Serbs of the Vance-Owen plan in spring 1993 which openly challenged US policy, to adopt a more hardline approach in the form of a “lift and strike” policy. This policy advocated air strikes and the lifting of the arms embargo on the Muslims.⁴⁴

The British, although initially against the use of force in August 1992, had by December 1992 hardened their approach, but not totally in line with the US policy. The British Foreign Secretary Douglas Hurd, for example, on a Radio 4 interview in August said: “If the British government, or the UN, or any government felt that two or three days of sharp military action would bring these horrors to an end, then the argument for that would be strong. Nobody

42. Bone, J & Evans, M., “UN and NATO hammer out new framework for pre-emptive airstrikes”, The Times, 27 July 1995.

Skepticism however remained in New York as diplomats doubted the UNSG would be able to leave important decisions about AS entirely to his military commanders.

43. Fletcher, M & Evans, M., “US canvasses Europe over enforcement of air ban”, The Times, 15 December 1992.

The leaders included Ronald Reagan, Jimmy Carter, Henry Kissinger, George Schultz and president-elect, Bill Clinton.

44. After recognising Bosnia on 7 April, 1992, and urging the Bosnian Serbs to accept the secession of this republic, refusal of the Vance-Owen plan was seen in Washington as a challenge to its policy. For a review of US policy see Simic, P., “Dynamics of the Yugoslav Crisis”, Security Dialogue, Vol. 26(2), 1995, pp 163-165.

does."⁴⁵ By December, angered by the failure of diplomacy and trade sanctions to halt the fighting, Douglas Hurd was now prepared to endorse UN-sanctioned intervention, if only to enforce the NFZ.⁴⁶ However, the fighting continued and even escalated, despite the continuing threats of AS. The leaders of NATO states, in a communique issued in Brussels on 11 December 1994, reaffirmed their "readiness to carry out air strikes if necessary."⁴⁷ Unfortunately, the threat was virtually identical to the one issued in August 1993. The indecisiveness of the UN to use AS had therefore failed to convince the Bosnian Serbs, let alone deter them, as they pounded Sarajevo daily, and mercilessly. The inaction led to a stinging rebuke from President Clinton: "If you lack the determination to deliver what you have promised . . . do not make promises."⁴⁸ The US, with the "body bag" syndrome and memories of Vietnam and Somalia still exerting a strong influence in domestic politics, was able to advocate tougher action as it did not have any troops on the ground, and would not have until after a peace agreement had been signed.⁴⁹ The French and the British in contrast, the two states with the largest number of troops on the ground, were not enamoured of AS, principally because they would put their vulnerably deployed troops on the ground at undue risk. The British Army received a stark warning from the Bosnian Serbs of the consequences of using AS. Lieutenant Colonel Janko Trivic, of the Bosnian Serb 22nd Vlasic Brigade said that his guns were within range of the UN forces' base at Vitez, and that British soldiers would be targeted if a decision was taken to bomb Serbia.⁵⁰ While his threat was not necessarily taken seriously, it would have been foolish to totally have dismissed the risk of retaliatory action by the Serbs.

45. Binyon, M., "Hurd rules out air strikes on Serbian attackers' positions", The Times, 5 August 1992.

46. Wood, N and Binyon, M., "UK ready to back air strikes on Serbs", The Times, 3 December 1992.

47. Editor's column., "Rhetorical Strikes", The Times, 12 January 1994.

48. Idem.

49. The images of dead US soldiers being dragged through the streets of Mogadishu were instrumental in effecting the withdrawal of US troops from Somalia. See Evans, T, et al., "Trial by Unfriendly Fire", Newsweek, 25 April 1994, pp 14; and Furdson, E Maj-Gen., "High hopes, or unsustainable progress?", Asia-Pacific Defence Reporter, April-May 1994, pp 29.

50. Rhodes, T & Evans, M., "Serb commander says air action means world war", The Times, 26 April 1993.

Evans, M., "West weighs risks and rewards of air strikes", The Times, 29 April 1993.

The political situation was additionally complicated by continuing Russian concerns about the use of air strikes. The sway in US policy had since 1993 been toward "lift and strike" - lifting the arms embargo and using air strikes - in defence of the Bosnian government. The Europeans always countered that this would only have inflamed the situation, jeopardised peacekeeping troops and risked distancing the Russians.⁵¹ Although Russia did not rule out CAS for UN peacekeeping forces in Bosnia if they came under attack, it vehemently opposed "punitive action" against the Serbs. The feeling was expressed by the Foreign Minister, Andrei Kozyrev, in a letter to the UNSG, Boutros-Ghali in which he wrote, "It should be clearly taken into account that any strikes, even limited, within the framework of air support will lead to the gravest consequences."⁵² Sergei Shakrai, Mr Yeitsin's Nationalities Minister was a little more expressive when he said, "Any further escalation of the Bosnian conflict may lead to a situation in which the Third World War could erupt."⁵³

Russian objections stemmed firstly, from the fact they had become increasingly assertive about their desire to dominate the former Soviet republics and to exert influence over Eastern Europe. Bosnia had therefore been turned into an example, with Russian politicians and generals believing it would set a bad precedent if Moscow adapted a passive stance, while NATO acted in an area beyond the alliance's frontiers, close to Russia's borders. In addition, there was a strong belief among many Russians that the West had exploited the collapse of Communism since 1989, to expand its influence into central Europe and the Balkans, establishing a trend towards the Ukraine and the Baltic republics which required Russian opposition. Furthermore, since 1989, there had been a Russian suspicion that Western countries lacked the fear of Russia they had accorded the Soviet Union, and hence there had been the determination to be seen as a great power. As such they did not wish to be seen to be following in the West's footsteps every time an international crisis

51. Marshall, A., "Americans push for more Bosnia air raids", The Independent, 24 November 1994.

52. Barber, T., "Threat to 'Slavic allies' unites parties in Russia", The Independent, 10 February 1994.

53. Idem. The discussion on why and how the Third World War could erupt is largely irrelevant to the thesis

erupted.⁵⁴

Secondly, there had been the call from pro-Serbian Russian nationalist politicians to remember history, with the aim of portraying Russia and Serbia as Slavic allies against an alien Western world. It could be argued that this view hardly sits well with historical facts. For example, Russia did not always support Serbia in the nineteenth century and the Russian-led Soviet Union and Yugoslavia were often at odds after 1945, under Tito.⁵⁵ However, Boris Yeltsin was in April 1994 in a situation where if he hardened his position against the Serbs, a traditional ally, in favour of NATO military action, it quite possibly would have made his domestic situation untenable.⁵⁶ Already fragile, it may have given sufficient ammunition to the nationalists to drive him from

54. For a fuller discussion see:

Asmus, R.D, et al., "NATO Expansion: The Next Steps", Survival, Vol. 37, No. 1, Spring 1995, pp 7-33.

Beeston, R., "Yeltsin gives NATO warning of return to Cold War divide", The Times, 5 December 1994.

Bertram, C., "NATO on Track for the 21st Century?", Security Dialogue, Vol. 26(1), 1995, pp 65-71.

Binyon, M, and Wood, N., "Yeltsin clashes with Clinton over 'NATO at Russia's door'", The Times, 6 December 1994.

Brown, M., "The Flawed Logic of NATO Expansion", Survival, Vol. 37, No. 1, Spring 1995, pp 34-52.

Lieven, A., "Russian opposition to NATO expansion", The World Today, October 1995, pp 196-199.

Ruhle, M, and Williams, N., "NATO enlargement and the European Union", The World Today, May 1995, pp 84-88.

Sherr, J., "Doomed to Remain a Great Power", The World Today, January 1996, pp 8-12.

Sobell, V., "NATO, Russia and the Yugoslav war", The World Today, November 1995, pp 210-215.

Von Moltke, G., "Russia and NATO", RUSI Journal, February 1995, pp 8-13.

55. See Sobell op. cit pp 213-214 for the view that the only reason Russia supported Serbia at all in the 19th century was purely as part of its larger game of strengthening its position in the Balkans against the other European powers and Turkey.

Post-1945: In 1948 Joseph Stalin became enraged over Marshal Tito's maverick style and self-confidence. Stalin plotted to have the Yugoslav leader assassinated and subjected the communist political leadership in Belgrade to enormous pressure. Tito and his Communist Party of Yugoslavia (CPY) were subsequently excommunicated by Stalin from the Communist camp in 1948. See Cohen, L.J., Broken Bonds: The Disintegration of Yugoslavia, Oxford, Westview Press, 1993, pp 1-8, 26; and Crnobrnja, M., The Yugoslav Drama, London, I.B. Taurus, 1994, pp 65-78.

56. Fletcher, M et al., "Yeltsin refuses to back more NATO air strikes against Bosnia Serbs", The Times, 22 April 1994.

power.⁵⁷

Clearly, while the C₂ process and weak willed indecisive governments can be blamed for a large percentage of the impotency of air power, and hence the reputation it received, in theatre, additional constraints contributed. One of the major advantages of air power as illustrated in Chapter 3, was that it could act decisively, but this in turn required a clear directive and identification of the guilty belligerents. This situation had not prevailed in Bosnia, where there were essentially three warring factions; the Bosnian-Serb Army (BSA), the Croatian Defence Council (HVO) and the Army of Bosnia-Herzegovina (BiH). While the separation of the groups appeared relatively straightforward, the operations conducted at the field level were not. For example, in the Kiseljak Pocket when, in fear of a posting to Gorni Vakuf, the BiH troops not wishing to go, fired a rifle grenade (pin in) into the HVO lines with a note attached asking to be fired upon. The action presumably giving the impression they were still required where they were. The HVO's reply was delayed so that it gave the BiH time to take cover.⁵⁸ This highly complex ground environment therefore, made it difficult for the guilty belligerent to be identified by the UN when in some areas the HVO joined with the BiH against the Serbs, while in others they fought each other with support to one or other side from the Serbs. In addition, in some areas the BiH had been known to fire on each other with local conflicts on a family level.

This complex environment made the job of air power practitioners impossibly difficult as they were complicated by the close proximity of a wide variety of troops to each other, all trying to operate amongst the belligerents. This presented the problems of no clear front lines, urban areas and belligerents mixed with non-combatants, complicating the classic situation familiar to most ground attack crews of "blue" forces on one side and the "orange" enemy on the other. The lines between opposing forces had almost in fact, been impossible to draw in anything but very general terms. With the large number of skirmishes that had taken place at any one time across the country, it was difficult to formulate an accurate picture of a particular area for anything, but a

57. Brown op. cit. pp 41.

58. Jenkins MJM, Sqn Ldr., "There are No Air Force Personnel in Bosnia", *Air Clues*, April 1994, pp 126.

very short period.⁵⁹ Superimposed on this, was the work of the UNHCR, supported by UNPROFOR, which presented two problems: firstly, that of blue on blue mentioned already, and secondly as highlighted under the NFZ, the threat of a backlash of retaliation or the possible use of UN troops as human shields.⁶⁰ To minimise the risk of both, air crews had to operate under strict ROE.

ROE however, in trying to solve problems, somewhat limited the effective use of UN authorised NATO air power. In essence, ROE limit the level of force the armed forces are permitted to utilise. The ROE are determined by what is deemed to be the appropriate amount of force required to achieve the task at hand within the confines of the prevailing political environment in which the operation undertaken was established. The emphasis in the last statement should be placed on the words "permitted" and "political environment", as it is predominantly the political environment that shapes the ROE and thus permits the armed forces to exert differing levels of force. This link between ROE and politics leads to a major limitation on the successful use of air power. What is deemed necessary action at the military level may not be seen as such at the political level and as a result an imbalance occurs between what is required and what is allowed. A mismatch in Vietnam for example, resulted in the ROE prohibiting attacks against surface-to-air (SAM) sites under construction, enemy airfields, and even aircraft taking off from or landing at those fields.⁶¹ Clearly at the military level these were valuable targets, but at the political level the action was not allowed because of the risk of killing Russian and Chinese advisers at those locations, leading to a possible escalation of tensions between Russia, China and the US.

In the peacekeeping operation in Bosnia, the environment was arguably even more sensitive and fragile, with the need to maintain transparency, proportionality and impartiality if there was to be any hope of a successful outcome to the operation.

59. Sweetman, A. D Wg Cdr., "Deep Gioia - A Chronicle of No 6 Squadron's Involvement in Operation DENY FLIGHT", Air Clues, January 1994, pp 5.

60. Daly, E., "Serbs free last six British troops", The Independent, 14 June 1995.

61. US Senator Barry Goldwater published the declassified ROEs in three issues of the Congressional Record-Senate: 6 March 1985, pp S2632-41; 14 March pp S2982-90; and 26 March pp S3511-20.

However, with more than one side involved, maintaining transparency, proportionality and impartiality became a highly complex operation which inevitably complicated the ROE. Due to the unclassified nature of this paper, detailed analysis of the ROE is precluded. Suffice to say that the need for minimum collateral damage and positive target identification were high on the list of priorities.⁶² This in turn placed a significant burden on the pilot of the attacking aircraft to ensure beyond doubt that he had selected the right target before releasing his weapons. In addition, evident from the C₂ process, attack clearance had to be given from the highest level of authority. In Bosnia this caused immense problems in achieving rapid decisions from what was a complex and drawnout command chain, involving both senior military and civilian personnel.

In summary, with respect to the political-situational factors, the ineffectiveness of air power to deter flights in the NFZ, enforce cease-fires and protect safe areas can be attributed to: the cumbersome C₂ arrangements that involved a large number of people in the decision process, including the problems of non military personnel such as Boutros-Ghali and Yasushi Akashi providing authorisation. The leverage the Bosnian Serbs had with their threats of retaliation through targeting UN positions and taking UN troops hostage. The opposition by Russia in particular to the use of NATO forces. The overall lack of will of states to intervene, for fear of entangling themselves in the Bosnian quagmire or endangering their troops on the ground. In addition, the complex ground environment in Bosnia – no clear front lines and restrictive rules of

62. Collateral damage may outweigh the utility of an air strike, with real time images of death and destruction being beamed straight back into the homes of millions of people – challenging the UN's proportional and impartial use of force, provoking public outcry and straining domestic support. Sweetman, A. D Gp Capt., "Close Air Support over Bosnia-Herzegovina", RUSI Journal, August 1994, pp 35.

Efforts to avoid collateral damage, every bomb potentially being a "political bomb" or "media bomb" as well as a military one, has resulted in a growth in the market place of non-lethal weaponry capable of destroying an opponent's infrastructure; airborne systems that enable the exploitation of an enemy's communications network, domination of an enemy's information system, or non-nuclear electromagnetic pulse weapons. The development of such weapons have proved just as important as the traditional bomb and have represented an evolutionary step in warfare that is potentially no less significant than the invention of gunpowder itself. The US contemplated their use in Bosnia since 1992. See "US Weighs Use of Nonlethal Weapons in Serbia if UN Decides to Fight", Aviation Week & Space Technology, 17 August 1992, pp 62-63.

engagement – combined to reduce the effectiveness of air power in the already challenging environment.

The discussion so far has focused on the failure of the use of air power to deter the fighting and to bring the belligerents to the negotiating table. While this may be the case, and Chapter 3 and 4 have addressed the physical and technical as well as political-situational restraints, analysis of the events from 30 August, 1995, to 14 September, 1995, would suggest that it was not a failure of air power *per se*. In other words, even though there were technical and physical factors that impeded the use of air power, these still existed in September 1995. However, the political-situational restraints changed, which leads to the supposition that the performance of air power was affected more by an absence of the political will, the existence of a convoluted and protracted C₂ process, and the restrictive nature of the ROE.

The discussion now turns to the events of 30 August 1995 to 14 September 1995 to explain what happened and why, to address the political-situational changes, and to explain why the use of air power was successful where it was not before.

Chapter 5

Air Power

The Deciding Factor

"Death by a thousand cuts..."

*Colonel J.A Warden*¹

Introduction

Between 30 August and 14 September 1995, NATO aircraft flew some 3,500 sorties during Operation Deliberate Force, of which 750 were actually strike sorties delivering over 600 PGM.² During the strikes, supply, storage and air defence facilities throughout Bosnia were targeted with 95% of all precision munitions hitting their targets. According to the US Deputy Defence Secretary John White, "the strikes were more accurate than those during the Persian Gulf war."³

Air power advocates were quick to praise the decisive use of air power. One senior air commander said: "We opened the eyes of the warring factions to the fact that air power is a highly lethal, disciplined, military force capable of

1. Col Warden used these words with respect to the use of air power to capture its ability, demonstrated in the Gulf War, to bring strategic and other high-value targets the enemy held most dear, under rapid attack in parallel, simultaneous, or near-simultaneous fashion. He described it as, "death by a thousand cuts", for even if any one particular sortie by a strike aircraft was not of great significance in itself, the combination was deadly. A quote by Colonel J.A Warden from "Employing Air Power in the Twenty-First Century", from an essay in Schultz R. H, Jr, and Pfaltzgraff R. L, Jr, The Future of Air Power in the Aftermath of the Gulf War, Maxwell AFB, AL, Air University Press, July 1992, pp 57-82.

2. Ripley, T., "Air power vindicated", Flight International, 1-7 November 1995, pp 31.

3. Morrocco, J.D., "Bombing Compels Serb Withdrawal", Aviation Week & Space Technology, September 25, 1995, pp 36.

The difficulty of achieving this level of success, must not be underestimated against targets in Bosnia where in Tito's Yugoslavia, key installations were built with "total defence" in mind. For example, Jajce was, before Srebrenica, the last significant town to fall to the Bosnian Serbs, whose Croat and Muslim defenders had to flee when they ran out of ammunition. Although they had endured months of Serbian air strikes and helicopter gun ship attacks, two strongholds - power stations, hacked out of cliffs either side of a narrow ravine, remained untouched. Hogg, A., "No easy targets for an allied air strike", The Sunday Times, 18 April 1993.

achieving political objectives.”⁴ Reservations naturally remained, as Alan Clark, former British defence minister argued, soon after the strikes: “Don’t think for a minute that because the US Air Force has plastered the Serbs the situation has improved.”⁵ However, in the aftermath of the air strikes, the Bosnian Serbs complied with NATO demands, the specified heavy weapons were withdrawn from the Sarajevo exclusion zone, and air and ground routes into the city for relief supplies were reopened— the siege of Sarajevo was lifted.⁶ In addition, at the time of writing, the Dayton, Ohio peace accord was still largely being adhered to. Air power could therefore be argued to have been successful. As Air Chief Marshall Armitage noted: “Successful in the sense of leading to effective negotiations rather than in defeating outright the Bosnian Serb military forces in the field.”⁷

The action between 30 August and 14 September, 1995, essentially ended the fighting and brought the belligerents to the negotiating table. In doing so it raised three important questions: firstly, why did the action take place? Secondly, what changed to enable it to take place after more than three years of fighting? And third, why was it successful at bringing the belligerents to the negotiating table?

Why did the action take place?

Ultimately, the trigger for the massive use of force was the Serbian mortar attack on 28 August on a Sarajevo marketplace, that killed 37 and injured 85.⁸ However, although this proved to be the final trigger, it was more a culmination of events rather than one specific action. As alluded to earlier in the chapter, the Bosnian Serb forces, aware and inevitably encouraged by the impotency of the intervening powers, overplayed their hand from April 1995 onward. They practically stopped the aid effort, taking UN personnel hostage and

4. Ripley, “Air power . . .”, op. cit. pp 31.

5. Morrocco op. cit. pp 36.

6. Rogers, M., “NATO begins to assess air strike damage as peace in Bosnia nears”, Jane’s Defence Weekly, 11 November 1995, pp 19.

7. Air Chief Marshall Sir Michael Armitage, “NATO Air Power at War”, The Officer, November/December 1995, pp 11.

8. Lok, B.J., “Deny Flight turns to affirmative action”, Jane’s Defence Weekly, 9 September 1995, pp 53.

finally overrunning the safe areas of Srebrenica and Zepa in July 1995. This resulted in the threatening of the existence of the remaining four safe areas, and the whole credibility of the UN. Plainly the Serbs were trying to find a level of tolerance for the UN's use of force through "salami" escalation.⁹ For example, while the attack on Gorazde on 20 August, 1995, and the subsequent killing of three children was insufficient to warrant a massive use of force, the attack on Sarajevo on 28 August was not. These events give some explanation as to why force was finally used, and why the operation shifted emphasis from merely a peacekeeping operation, with enforcement action, to a peace enforcement operation.¹⁰ However, the question remains of what circumstances changed or arose that enabled air power to be used on such a large scale, so different to the "pinprick" strikes pre 30 August, 1995?

What enabled the mass use of air power?

The new environment that allowed the mass use of air power came about as the result of removing UN troops from the dangers of retaliation, streamlining the decision making process and a new level of cooperation in the international community.

The events described above led to a greater degree of political cohesion and willpower on the part of the international community, evident from the July 1995 London Conference. The Declaration made, as a result of the conference on 21 July, promised the use of air power to protect Gorazde and threatened the "disproportionate" use of this air power. According to the NATO Secretary General Willy Claes, "this for the first time allowed us to really employ our military potential to the full extent, as far as that is needed."¹¹ This new determination was reiterated and reinforced by a memorandum of understanding between the UN and NATO on 10 August, 1995. The memorandum, signed by Admiral Leighton Smith, Commander-in-Chief, NATO

9. Schelling used the term in Arms and Influence with regard to incremental levels of violence. Schelling T.C., Arms and Influence, New Haven and London, Yale University Press, 1966, pp 77.

10. Peace enforcement "dispenses with consent and is conducted, in the main, in accordance with standard military principles predicated on the identification of an enemy." Dobie, C., "A Concept for Post-Cold War Peacekeeping", Survival, Vol. 36, No. 3, Autumn 1994, pp 121.

11. Lok op. cit. pp 55.

Allied Forces Southern Europe, and Lt. Gen. Bernard Janvier, Force Commander, UN Peace Forces agreed on the execution of NATO air operations for protection of the UN-designated "Safe Areas" within Bosnia-Herzegovina. The aim of the arrangements were to "deter attacks, or threats of attack, against the safe areas, and to be ready, should deterrence fail, to conduct operations to eliminate any threat, or defeat any force engaged in an attack on a safe area."¹²

The London Conference and subsequent memorandum had the additional effect of removing one of the obstacles to the use of force – the use of non military personnel in the C₂ chain. The weak link, in that it had obstructed the use of force in previous instances, had been eliminated, subject to US pressure and by the NAC decision of 26 July, 1995.¹³ As a result, the decision making process was streamlined, with authority for the use of air power delegated to General Janvier in Zagreb, effectively removing the Secretary General and his envoy, Yasushi Akashi from the process.¹⁴

Finally, as a result of the overrunning of the safe areas of Srebrenica and neighbouring Zepa, and with the withdrawal of troops from Gorazde, leaving it to be protected from the air only, the UN had effectively given up on supporting the aid effort and withdrawn its forces to avoid the problems of retaliation. In this new environment, the Bosnian Serbs had lost their main bargaining tool to avoid the use of force, and the UN/NATO had largely removed their troops from the risks of "blue on blue".

Why was it successful where it had not been before?

The UN/NATO action was successful because in the first place, the Bosnian

12. "NATO and UN Military Commanders Sign Memorandum of Agreement on Air Operations", NAVPALIB, Internet (MOSAIC), Release Number 95-23, 10 August 1995.

13. Evidence of US pressure can be found in Andrew Marshall and Michael Sheridan's article, "US Wants Free Hand to Conquer the Skies with Massive Strikes", The Independent, 19 July 1995, pp 8.

14. The UN Secretary-General delegated to General Bernard Janvier, UN commander in the Balkans, the power to authorise uses of force in a letter on 26 July, 1995. Janvier in turn was empowered to delegate it to Lt. Gen. Rupert Smith, the Commander of UNPROFOR in Bosnia, "when operational circumstances so require". Text in UN doc. S/1995/623, 1 August 1995.

Serbs had overplayed their hand, instigating a new determination on the part of the international community at the political level to bring some form of peace to the conflict. The C₂ process had been delegated to the military level and the situation on the ground, with regard to the dispersion of UN troops, was more favourable to action than at any other time in the conflict. In essence the situation was ripe for the use of force.

However, there were three distinguishing factors between the use of force post 30 August, 1995, and the three year period that preceded it. Firstly, there now was a clear objective – the removal of the heavy weapons from around Sarajevo. Secondly, there was the open admittance of a larger political agenda – the use of force to bring the Bosnian Serbs to a peace settlement. In fact, only the day before the fatal bombing of Sarajevo, US officials had warned the Bosnian Serbs that if no progress was made on a peace accord they would be subject to the large scale use of air power.¹⁵ This provided the third reason for success, air power was used with “overwhelming force” in line with the doctrine adopted in the Gulf by chairman of the US Joint Chiefs of Staff, General Colin Powell.¹⁶ As will be recalled, this post-Vietnam doctrine was validated in the Persian Gulf War with: “demand clear objectives, amass overwhelming force, destroy the enemy by means of quick and coordinated action by the combined armed forces—from the air, sea and land. Go in, do the job, get out.”¹⁷ While this cannot be said of the overall use of force in Bosnia, the parallels with the use of force between 30 August and 14 September, 1995, cannot be ignored. Why however, was this overwhelming use of force successful at bringing the belligerents to the negotiating table, where “pinprick” strikes were not?

Firstly, the overwhelming use of air power to target the Bosnian Serb infrastructure and air defence systems, rendering the Bosnian Serb forces impotent over the long-term, combined with the Croat offensives in Western Slavonia and the Krajina in April-May and August, 1995, respectively, were

15. The threat can be found for example in a news report by Steven Greenhouse, “US Warns of Air Strikes Unless Serbs Negotiate: NATO Will Intervene ‘Heavily’ if No Progress is Made on an Accord”, International Herald Tribune, 28 August 1995, pp 1.

16. John Barry, “By Air – Or Land?”, Newsweek, May 10, 1993, pp 16.

17. *Idem*.

sufficient to tilt the "delicate balance of power in wartorn Bosnia-Herzegovina in favour of the forces of the Muslim/Croatian Federation."¹⁸ In fact, since the massive use of NATO air power and the subsequent Croat/Muslim offensive, the territory controlled by the Bosnian Serbs shrunk from 70 per cent of Bosnia to approximately 50 per cent, and threatened to shrink even further if the offensive continued.¹⁹ While in the short term this proved to be a very positive result, in that it brought all three sides to the negotiating table, it posed dilemmas for the UN. However unintentional, the action involved a form of co-belligerence with the Croat/Muslim Federation, even though no direct battlefield assistance was given. Plainly, the emphasis of the operation had changed from peacekeeping to peace enforcement, but it was still under the auspices of the UN and as such questioned the UN's impartiality. The situation effectively made the position of the UN untenable, with the result that the Secretary-General recommended the withdrawal of UN troops as, in his view, "he did not want to compromise future possible operations by having the UN, essentially a peace-keeping organisation, work alongside Nato, essentially a war-making organisation."²⁰ The recommendation it would seem was noted, with the subsequent prospective introduction of a 60,000 strong Implementation Force (IFOR) under NATO command.²¹

The second reason can be attributed to the psychological dimension of the use of air power. While the valuable contribution of the UN Rapid Reaction Force and the use of Tomahawk missiles in Operation Deliberate Force have not as yet been acknowledged in the discussion so far, their use in bringing the belligerents to the negotiating table cannot be ignored.²² Combined and skilfully interwoven with the complex air campaign, the UN Rapid Reaction Force and Tomahawk missiles intimidated the belligerents. As the Introduction

18. Tim Ripley, "Silence of the SAMs", Aircraft Illustrated, November 1995, pp 36.

19. Scott Peterson, "Croatia urges capture of Serb stronghold", The Daily Telegraph, 19 September, 1995, pp 13.

20. Tim Butcher and Robert Fox, "UN leader signals end of mission in Bosnia", The Daily Telegraph, 19 September, 1995, pp 1.

21. See the article by Barbara Starr, "NATO must solve Bosnia zone riddle before forces deploy", Jane's Defence Weekly, 21 October 1995, pp 21, for an overview of the potential complications of the deployment of IFOR under NATO.

22. See for example Headline News, "NATO uses Tomahawks on Serb Targets", Jane's Defence Weekly, 16 September, 1995, pp 3; and Tim Ripley, "A Deliberate Force on the mountain", International Defence Review, 10/95, pp 27-28.

and Chapter 3 explained through Schelling and Lambert, air power has the potential ability to influence behaviour and to compel the belligerents to respond in a desired manner.

In the campaign between 30 August and 14 September, 1995, the Bosnian Serb infrastructure was targeted, the aim being to lift the siege of Sarajevo and bring the belligerents to the negotiating table. In effect, the Bosnian Serb leadership was being coerced into signing and adhering to a peace accord. In fact this is exactly what happened, with the overwhelming use of air power, followed by a brief pause to carry out a bomb damage assessment, giving the Bosnian Serb leadership the chance, through diplomacy to bring an end to the fighting. In view of the Bosnian Serb's not meeting the demands of the UN and NATO, the air campaign was resumed. Essentially, the campaign moved on to a phase which Schelling described with respect to the use of nuclear weapons on Japan, as a time when "the effect of the bombs and their purpose were not mainly the military destruction they accomplished but the pain and the shock and the promise of more."²³

In addition, with the attacks by NATO air power switching from the tactic of "pinprick" strikes to "overwhelming" force, the expectancy theory, advanced by Quester came into play.²⁴ "Where bombing fails to live up to the dire expectations, morale rises; conversely, where an attack is far more severe than expected, morale plummets."²⁵ In effect, in accordance with Lambert's analysis on the way air power should be used to psychologically affect leadership, air power in Bosnia was executed with an intense application of power beyond the belligerents expectations, and thus undermined the Bosnian Serbs expectation of military success.²⁶

It is difficult to assess the various degrees to which the different elements contributed to the success of relieving the siege of Sarajevo, and bringing the belligerents, in particular the Bosnian Serbs to the negotiating table. The

23. Schelling op. cit. pp 18.

24. Quester, G.H., "The Psychological Effects of Bombing on Civilian Populations", in B Glad, The Psychological Dimensions of War, London, Sage Publications, 1990, pp 208.

25. An observation made and applied to the Bosnian scenario from the work of Gp Capt APN Lambert, The Psychology of Air Power, Cambridge, RUSI, 1995, pp 89.

26. Ibid. pp 71.

discussion has focused on the fact that the technical capability and environmental factors affecting the UN authorised NATO combat air power did not physically change between April 1993 and September 1995. However, what did change amongst the political leadership of the key members of both the UN and NATO was the political willpower to intervene and the emergence of an overarching strategy with clear objectives.²⁷

In other words, the decisive UN authorised NATO air action at the end of August and into early September 1995, suggests that the Bosnian Serb air defence system, terrain, weather and targeting difficulties of NATO aircraft, were not as significant as initially thought at limiting air power *per se*. Clearly, once the policy makers' appreciated the context within which air power needed to be applied to be successful, found the political will and expressed a clear objective, the ROE and C₂ process were adapted to allow the necessary air action – Operation Deliberate Force. The final chapter now attempts to draw all the threads together.

27. Similar conclusions are reached by Adam Roberts, "From San Francisco to Sarajevo: The UN and the Use of Force", *Survival*, vol. 37, no. 4, Winter, 1995-96, pp 24.

Chapter 6

Discussion and Conclusion

After the success of air power in the Persian Gulf War, "if Air Power had been floated on the Stock Exchange, the last few years would have been a good time to buy."¹ As with all stocks though, it is subject to forces beyond its control which can affect its value. In the wake of the Gulf War, the perception that air power was omnipotent, may indeed have justified the high value of its stock. However, after four years of fighting in Bosnia, if this stock were metaphorically, at the equivalent value in the immediate aftermath of the Gulf War, it would be a difficult purchase to justify. The inability of the West to deal with the Bosnian conflict, has ultimately led to the view that air power may not necessarily be the marvel policy makers' expected – the weapon of choice to deal with an unstable world.

The thesis has argued however, that air power *per se* was not automatically to blame, rather the policy makers' who advocated the use of combat air power were. After all, combat air power was essentially vindicated after its use in Operation Deliberate Force. The final chapter will attempt to draw the threads together in an effort to illustrate that because of the political-situational factors that restrained the use of air power in Bosnia, it did not perform according to expectations. Indeed, the argument suggests that these restraints did much to undermine the utility of the air power, to the degree that the threat of its use lacked credibility; something that was not restored until Operation Deliberate Force.

In an attempt to deal with the Bosnian conflict, the UN Security Council passed a number of Resolutions which authorised the use of air power. These included 781, 816, 836 and 958, on 9 October 1992, 31 March 1993, 4 June 1993, and 19 November 1994 respectively.² Two elements of these resolutions central to the thesis, merit incorporating in the concluding

1. Wg Cdr A. Brookes, "Above and Beyond?—Capabilities of Out-of-Area Air Power", BUSI Journal, October 1993, pp 27.

2. See Appendix 1.

discussion: firstly, the failure of the UN and NATO to use the air power authorised by these resolutions between April 1993 and 30 August 1995; and secondly, the failure of air power, authorised by the resolutions, to significantly deter the actions of the belligerents between April 1993 and 30 August 1995. The first element, unlike the second, places the emphasis more on containing and stopping specific belligerent actions whilst in progress. The second concentrates more on preventative measures before events have occurred. In other words, the first area of discussion, considers why, when a safe area was being shelled by artillery, the force that could be utilised was not brought to bear. In contrast, the second area of discussion, considers why the threatened air power did not, in the first place, deter the belligerents from trying to achieve their goals by military means. While it may seem to be more logical to discuss the two issues in reverse order – prevention and then stopping – the points in the discussion are highlighted more effectively using the chosen arrangement.

Discussing the first statement, warrants a further classification in that two of the resolutions apply to the NFZ, and two to the use of air power in the ground environment, and thus the problems encountered in enforcing the various resolutions were somewhat different. Although the resolutions applicable to the NFZ were relatively successful, and as a result warrant less discussion, they nevertheless deserve a mention.

The first problem with the NFZ was that UNSCR 781 contained no enforcement authorisation and it was not until UNSCR 816 was introduced on 31 March 1993, that the UN was authorised to actually use force to ensure the restrictions of the zone were adhered to. Up to the introduction of UNSCR 816, the zone was continuously violated by all types of aircraft, despite the introduction of UNSCR 781. UNSCR 816 was successful in that it deterred the majority of fixed wing violations, though helicopters continued to regularly contravene the zone. This was significant in that fixed wing aircraft, like the Mig 29,³ were considered to be the greatest threat to NATO aircraft, to UN peacekeepers on the ground and to the belligerents in the conflict. Considering it was the Serbian air force that retained this capability, the Bosnian-muslims and Croats gained the most from this action. The helicopters on the other

3. The Mig 29 is a Russian built very capable air superiority fighter.

hand, were considered to have little impact on the overall war effort, on all three sides, and were therefore judged not to be a major threat. UNSCR 816 was significant for a second reason, it marked the first agreement by the UN to the actual use of force through air power in the Bosnian conflict and as such, it set the scene for the further employment of force. In addition, it demonstrated that a dual-key decision process could function fairly efficiently, provided that engagement authority was delegated to the military level. The arrangement did prove itself when four Bosnian Serb Galeb/Jastreb aircraft were shot down by NATO USAF F-16 aircraft on 28 February 1994.⁴

Enforcing the zone did reveal a number of limitations, primarily associated with the difficulties of trying to carry out enforcement measures within what was essentially, a peacekeeping operation. The helicopter operations that continued largely unabated were mainly the result of UN reluctance to take what was deemed an unacceptable risk – the shooting down of a helicopter carrying sick women and children. All three sides plainly had the potential to smuggle troops and arms in each flight. However, with the military opinion that they were having little effect on the overall war effort, it was deemed unacceptable to shoot a helicopter down. Hence, Resolution 816 was essentially unenforceable as far as rotary aircraft were concerned, even though the declaration had been made to enforce the zone, irrespective of the type of aircraft. Essentially, a resolution had been made that could not be supported, undermining the UN's credibility. More ominously to the UN it gave the belligerents added confidence, morale and a lower opinion of the capability and credibility of Western air power. This was evident in the helicopter pilots' open challenges to NATO aircrew to shoot them down after they had been ordered to land or depart the area. Therefore, while the UN was struggling to remain impartial and to avoid the risks associated with collateral damage, to the belligerents it presented an example of an organisation making demands it was either unwilling, or unable to reinforce.

More significant were the problems surrounding the other two resolutions, concerning the use of air power in the ground environment. The UN by establishing the six safe areas in UNSCR 824 and subsequently authorising the use of force to deter attacks in UNSCR 836 and sanctioning the use of

4. See Appendix 2.

force to protect those areas in UNSCR 958, effectively placed itself in the line of fire. Consecutive successful attacks on these safe areas by the Bosnian Serbs revealed that the UN's chosen instrument, air power, was unable to do anything to substantially alter the course the belligerents had chosen.⁵ Clearly, while the authority existed to carry out the necessary air action, other factors prevented the effective use of air power.

The first significant factor warranting discussion was the decision process, or the command and control (C₂) chain. The UN was effectively the primary actor in Bosnia, with NATO acting as its strong arm. At the heart of the problem lay the fact that the UN was essentially established as a peace organisation, designed to promote peace, whereas NATO was a military organisation designed to fight a war. To accommodate both organisations in Bosnia, the C₂ process worked on the dual-key system described earlier. However, owing to the sensitivity of using air power in the ground environment, instead of delegating the use of force to highly trained military personnel, the authority to use air strikes was retained by the Secretary-General Boutros-Ghali, and for close air support, delegated to his personal envoy, Yasushi Akashi. Both individuals were civilians, and were somewhat detached from the martial significance of some of the situations on the ground in Bosnia, compared to the military commanders in theatre. In addition, they were not accustomed to making decisions regarding the use of force. As a result, the decision process was convoluted and protracted. Incidents therefore arose, where authority to use force was either delayed, given but with the proviso that it be used in a very restricted manner, or not given at all. As a result, the delay in engagement authority often meant that it was nearly impossible to apprehend the weapon guilty of firing at the UN or civilians in protected safe areas. The offending weapon by this stage, having either placed itself in such a position as to pose unacceptable risks to NATO aircrew or civilians on the ground if attacked, or having simply disappeared into its surroundings. Whilst the time delay can be attributed to the C₂ process, the restrictive rules of engagement (ROE) limited the scale of the authorised action.

5. There were tactical successes, however, the thesis has attempted to demonstrate that aggressive actions by the belligerents by and large continued unabated.

Although the ROE were officially secret, there is sufficient information to suggest that, in order to remain within the mandate of the UN and to minimise collateral damage, maintain transparency, proportionality and impartiality, the ROE that existed in Bosnia were very restrictive. For example, the use of 30 aircraft to search for one tank attacking Gorazde, suggests the target had to be the weapon that fired, that it be conclusively identified as the target in question, that the target, where necessary, be positively designated or marked, and as shown above, attack clearance be given from the highest level. Clearly, while these ROE were important for maintaining the correct emphasis on the operation, as regards the use of force, they also had the affect of signalling to the belligerents exactly what they could and could not get away with and that they had very little to fear from the UN's use of air power. For example, when the Ubdina airfield was attacked in Croatia, to prevent the Bosnian Serbs from carrying out any more raids against the Bihac pocket, it would have been difficult for the Bosnian Serbs not to notice that everything had remained untouched, apart from the runway.

The second area that warrants discussion with respect to the UN resolutions, is to do with the notion that, even though the resolutions authorised the use of air power *initially* to prevent attack and subsequently protect the safe areas, air power did not provide a significant deterrent to belligerents attacking the safe areas between April 1993 and 30 August 1995. Intrinsicly, the fact that the negotiation process continually failed, and the initiative for ceasefires and peace proposals all came from outside parties, not those involved in the conflict itself, suggests the threat of air power was insufficient to deter the belligerents from using force rather than negotiation to achieve their territorial gains. In other words, where any one party did not achieve what it wanted from any particular peace accord, it was more than willing to return to the use of force to achieve that aim, undeterred by the threat of UN air power. This problem is best explored with reference to the "battle of the safe areas".

The Bosnian Serbs, fighting for a greater Serbia and believing the Bosnian-muslims were launching offensives from within the safe areas, saw the safe areas as targets. However, the UN had established the six safe areas and had authorised the necessary use of force to deter attacks on them. An

obvious point of confrontation therefore existed. Evidently, the Bosnian Serbs did not consider the threat of air strikes to be a major deterrent, and to all intents and purposes carried on regardless. Tactical successes at using air power occurred, but only after action by the Bosnian Serbs had already been initiated. For example, compliance by the Bosnian Serbs with NATO's ultimatum to pull their forces back from the centre of Gorazde by 0001 GMT on 24 April 1994, and heavy weapons by 27 April 1994, meant the threatened air strikes, if the belligerents did not adhere to the demands, were ultimately not required. While this demand was successful, what cannot be overlooked is that the Bosnian Serbs had already blatantly disregarded the fact the UN had declared Gorazde a "safe area" in UNSCR 824 on 6 May 1993, and had declared in UNSCR 836 that all "necessary measures" be taken to deter attacks on the safe areas. Additional evidence of this disregard for UN resolutions, can be found in the continued infringements of: the Sarajevo Heavy Weapon Exclusion Zone (HWEZ) in August 1994; the NFZ, by Bosnian Serb combat aircraft with the aim of attacking the safe area of Bihac in November 1994; and ultimately the overrunning of the safe areas of Srebrenica and Zepa in July 1995. This blatant slighting of the air power the UN had at its disposal, suggests that the air power did not pose a significant threat or a credible deterrent to the belligerents, the Bosnian Serbs in particular.

The central concept of deterrence, has largely been associated with the nuclear stand-off during the Cold War. However, deterrence is not a concept exclusive to nuclear weapons, but a general means of bringing the threatened use of power to bear on the mind of an adversary. "Deterrence is the inducement of another party...to refrain from a certain action by means of a threat that this action will lead the threatener...to inflict retaliation or punishment.... In other words deterrence is persuading the deterred that his own interest compels him to desist from committing a certain act."⁶ The threat, to be successful, needs to be credible, capable, and clearly communicated.⁷ Air power in Bosnia, while it was capable, would seem neither credible as a threat and lacking in the will to use it clearly being communicated.

6. Morgan, P.M., Deterrence: A Conceptual Analysis, London, Sage Publications Ltd, 1977, pp 22.

7. Stern, P.C., Perspectives on Deterrence, Oxford, Oxford University Press, 1989, pp 6.

With respect to the capability, its performance in Operation Deliberate Force removed any doubt about its proficiency in the Bosnian environment. As Chapter 3 explained, the Bosnian Serb air defence system, terrain, poor weather and resilient targets all contributed to the poor performance of the use of air power between April 1993 and 30 August 1995. These limitations still existed in September 1995, yet NATO aircraft delivered their munitions with more precision than in the Gulf War.

Even though air power was clearly capable, it would seem it was not credible. For the threat of air power to have been credible, its threatened use should have appeared, to the belligerents, if not certain, then at least highly probable. Clearly, the belligerents would have feared the use of air power more, if the UN had successfully utilised air power in the past, if it had done so at little cost to itself, and had accepted the costs involved.⁸ The threatened use of air power as a deterrent fails, if there is not only serious doubt about the will to carry out its threat, but also acceptance of the level of cost it could inflict.⁹ Air power in Bosnia was employed by NATO with the authority of the UN. However, with the employment of air power, the UN's track record up to 30 August 1995, clearly demonstrated that it failed to set a precedent of willingness to authorise air action and was averse to accept the costs to itself in terms of its own reputation as a peace organisation. In addition the UN seemed loath to accept the costs, through retaliations and the taking of UN personnel hostage, to its manpower, and the cost of collateral damage, with respect to the civilian population, as well as the inevitable detrimental media coverage. Clearly, air strikes and close air support were authorised, before Operation Deliberate Force, however in only a very limited manner, usually too late to deter or prevent the belligerents use of force, and never very consistently.

Plainly, while it is possible to blame the UN for all the reasons behind air power's lack of credibility it would also be appropriate to consider the affect individual states have had on the use of air power, in particular, the USA,

8. Rothgeb, J.M. Jr., Defining Power: Influence and Force in the Contemporary International System, New York, St. Martin's Press, 1993, pp 150.

9. Bayliss J., Booth K., Garnett J., Williams P., Contemporary Strategy I: Theories and Concepts, London, Holmes & Meier, 1987, pp 121.

Russia, UK, France and Germany. Russia opposed UN/NATO intervention in the conflict, particularly in the form of air strikes, on the grounds that Serbia was an old ally, that it saw NATO intervention as an attempt at eastwards expansion, and that it opposed Western decisions that effectively removed Russia from the decision making process, and reduced its Cold War status as a global power. Britain in particular opposed air strikes on the grounds they would endanger their large deployment of troops. The USA, after its complete policy reversal earlier in the conflict became the greatest advocate of air strikes with its "lift and strike" policy. The US in effect approved of widespread air strikes to deter Bosnian Serb attacks and to reinforce the diplomatic effort which had, up to the Dayton peace accord, been generally unsuccessful. By all accounts, NATO itself was at odds, unable to unanimously agree on the use of air strikes.¹⁰ As a result, between April 1993 and 30 August 1995, air power delivered a few inconsequential pin-prick strikes, achieving limited tactical successes but failing to demonstrate a credible threat. This lack of a unified agreed response and the inability to agree on a clear objective, was the primary problem with regard to the third aspect of the failure of air power as a deterrent – a lack of clear communication.

As Stern argues, "deterrence is more effective when a state's commitments are clearly communicated."¹¹ Clear communication in turn, involves a state or organisation articulating exactly what it wants from the belligerent, clearly stating what will happen to the belligerent if they do not comply with its demands, and what will happen if it complies. Evidently, when the UN stated exactly what it wanted to happen – what would happen if the Bosnian Serbs did not comply with the demand and what would happen if they did – the

¹⁰. The situation regarding the use of air strikes – February 1994:

Strongly in favour: US – enthusiastic from the start; France – despite large troop presence; Germany – though could not take part; Turkey – because of ties with Muslims. Italy, Holland, Belgium, Luxembourg.

Strongly against: Greece – threatened to use veto, although doubtful whether it could have held out against demands of US and big EU countries.

Reluctant: Britain – gradually softened its disapproval after the Sarajevo massacre in February 1994; Spain – against, after losses among its own troops; Portugal – shared Britain's reservations; Canada – feared for its troops.

Ready to go along: Denmark, Iceland, Norway.

The Daily Telegraph, 9 February 1994.

¹¹. Stern op. cit. pp 6.

threatened use of air power was successful. The removal of heavy weapons from around Sarajevo and Gorazde is a case in point. However, it was not until Operation Deliberate Force and the unified threat of the disproportionate use of force if the Bosnian Serbs did not respond to the demands, they finally agreed to negotiate a settlement.

Hence, while the diplomatic effort attempted to find a political solution, NATO, which as a military alliance would have been well suited to add military clout to diplomacy, was deliberately limited to helping the UN. Clearly, this limitation prevented air power from using its deterrent capability to buttress the work of the negotiators, although air power was eventually used in Operation Deliberate Force to underpin the diplomatic process. The UN had attempted to use force in Bosnia, however it found itself in a paradox – trying to both keep the peace, and at other times, enforce the peace.¹² In attempting to support the UN mission on the ground, the use of air power was shackled by restrictive ROE, and a cumbersome C₂ process containing policy makers who were unwilling to authorise the use of force. The result was that air power was an impotent weapon, incapable of being used to effectively support the UN troop deployment throughout Bosnia. However, its decisive use in Operation Deliberate Force demonstrates that it was not a failure of air power *per se*, more a failure of the policy makers' to appreciate the context within which air power needed to be applied to be successful.

To cite just one example. History has shown that the use of air power is not a solution in itself and that ground troops are required if land is to be protected over any length of time. Yet, policy makers' advocated the use of air power to protect the "safe areas" while authorising only 7,400 ground troops when an estimated 34,000 troops were required. The occupation of Gorazde in April 1994 and the overrunning of Srebrenica and Zepa in July 1995 help to illustrate, that air power, as Chapter 3 observed, cannot take and hold ground, and that it requires a well armed force on the ground to have any chance of

12. The UN attempted peacekeeping with enforcement actions between October 1992 and August 1995, and peace enforcement from 30 August 1995. Clearly the operation did switch from UN to NATO control in the aftermath of Operation Deliberate Force, however, initial approval for the enforcement action came from the UN.

preventing determined belligerent actions.¹³

After the success in the Gulf War and the belief that air power could achieve anything, it would seem that few realised air power was situational, depending on the purpose and circumstances surrounding its use. From the start of the conflict, there was no overall clear, unified objective and even when an objective was declared, there was no agreed response on how to achieve that objective. When the emphasis switched from peacekeeper with enforcement actions in support of the UN mission, to peace enforcer with the open admission that air power would be used if the fighting did not cease and a peace accord attempted, combat air power came into its own.

Although the actual capability did not change, in that the air power used was the same as that used in the previous three years, the intention to use it and the subsequent overwhelming display of its use in Operation Deliberate Force, were sufficient to clearly communicate what the West wanted and that it was willing to use force to achieve it. The cumbersome C₂ process no longer existed, the ROE were altered to achieve the objective and the will to use it was displayed. The threat therefore, now clearly communicated and capable, also became credible after its overwhelming use in Operation Deliberate Force.

In essence, policy makers were to blame for undermining the credibility of air power, advocating and authorising its use, but failing to appreciate the context within which air power needed to be applied to be successful, and to provide solid political leadership with an overall strategy and clear objectives. In the end, however, air power was vindicated as a "highly lethal, disciplined, military force capable of achieving political objectives."¹⁴

13. The implementation of IFOR with its 60,000 strong troops reinforces the observation that air power still requires forces on the ground to have any significant hope of having a lasting affect on the situation on the ground.

14. Ripley, T., " Air power vindicated", Flight International, 1-7 November 199, pp 31.

Areas warranting further research

As of 31 January 1995, a total of some 40,000 infantry, 730 military observers, over 760 civilian police and 4,200 civilian staff were employed by the UN in three peacekeeping operations in Europe – the United Nations Peacekeeping Force in Cyprus (UNFICYP), the United Nations Protection Force (UNPROFOR) in the former Yugoslavia, and the United Nations Observation Mission in Georgia (UNOMIG). The UN planned to spend some 70% of its estimated \$ 3.3 billion global peacekeeping budget on these three operations.¹⁵ Chapter 3 however, highlighted the financial mess of the UN and a growing unwillingness among states to both settle their debts with the UN and to participate in future peacekeeping operations. The question therefore has to be asked, if the UN is not going to be the organisation to oversee the future of intervention, be that conflict prevention, peacekeeping, peace enforcement, peace building or humanitarian aid efforts, who will?

This gives rise to another issue. One of the problems identified with the effective use of air power in Bosnia was the command and control process. In Bosnia, the UN and NATO overcame the problem with a “dual-key” process which was shown to have a number of drawbacks. If future operations could not be overseen by the UN, and a *ad hoc* arrangement fulfilled the requirement, how would the C₂ arrangement be organised? Clearly, in the Gulf War an effective set up emerged. But what would happen if a dominant power did not consider it relevant in its strategic thinking or NATO did not offer its assistance? Furthermore, with the proliferation of advanced weapons throughout the world and with the need for costly high technology to combat this threat, with aircraft reaching unit prices of £30 million, who will meet the costs of future peacekeeping operations?

The thesis identified another problem, that of Russia wishing to be taken seriously as a global power and objecting to actions which it regarded not to be in its best interests. If the UN continues to act and uses NATO as its strong arm where possible, if that conflict is in Europe and closer to Russia's

15. Tharoor, S., “United Nations Peacekeeping in Europe”, *Survival*, vol. 37, no. 2, Summer 1995, pp 121.

borders than Bosnia, what will Russia's response be to the perceived eastward expansion of NATO?

Finally, the use of air power in Bosnia demonstrated a continuing ignorance on behalf of policy makers to appreciate the context within which air power needed to be applied to be successful. In a world where there is a proliferation of regional conflicts, Bosnia has shown that further research is required on the use of air power in these scenarios. Perhaps, most importantly, the issue of educating the non-air power specialist, especially those people in a position of authority who have an effect on future operations, requires the most emphasis.

Appendix 1: Key UN Resolutions¹

The following is a list of key resolutions passed by the United Nations Security Council that have redefined the organisations remit during the Yugoslav conflict.

<u>No.</u>	<u>Date</u>	<u>Country</u>	<u>Significant Content of Resolution</u>
713	25 September 1991	SFRY	Embargo of all weapons and military equipment on the whole of former Yugoslavia
743	21 February 1992	SFRY	Establishment of UNPROFOR
757	30 May 1992	BH	Ban of import/export of goods (apart from medical supplies) to and from FRY; ban on air-flights to/from FRY; reduction in levels of diplomatic staff; banning FRY from participating in international sports; no further scientific/technical co-work
761	29 June 1992	BH	With SCR 764 (13 July 1992), mandate covers security and delivery of humanitarian aid to Sarajevo and environs
770	13 August 1992	BH	Endorsing 'necessary measures' to ensure safety of personnel; commitment to provide humanitarian aid
776	14 September 1992	BH	Mandate expanded to enable UNPROFOR to assist UNHCR in the delivery of humanitarian relief throughout BH, and to protect convoys of released detainees at the request of ICRC
781	9 October 1992	BH	Military-flight ban over BH; arrangement of observers to oversee its enforcement
808	22 February 1993	FRY	Endorsement of human rights; setting up a tribunal for war crimes committed since 1991

1. From an article by Hanns W. Maull, "Germany in the Yugoslav Crisis", Survival, vol. 37, no. 4, Winter 1995, pp 131-2. The full statements and explanations of the various resolutions are contained in the Reference paper, The United Nations and the Situation in the Former Yugoslavia, The United Nations Department of Public Information, October 1995.

<u>No.</u>	<u>Date</u>	<u>Country</u>	<u>Significant Content of Resolution</u>
816	31 March 1993	BH	Taking 'all necessary measures' to enforce the no-fly zone
819	16 April 1993	BH	Establishment of safe areas (a temporary measure); condemnation of ethnic cleansing
820	17 April 1993	BH	Tightening of trans-shipments, all border and customs control; preventing the passage of all transport, bar medical supplies, into FRY; freezing all personal and commercial funds held in FRY, except postal, legal and telecommunications services
824	6 May 1993	BH	Six towns listed as safe areas: Sarajevo, Tuzla, Gorazde, Srebrenica, Zepa and Bihac
836	4 June 1993	BH	UNPROFOR to 'take all necessary measures' to deter attacks on the safe areas; monitoring of the cease-fire; use of force described as a legitimate form of self-defence
958	19 November 1994	BH	Use of air-power to protect safe areas and Croatia
1004	12 July 1995	BH	SG to use 'all resources available' to restore Srebrenica's status as a safe area; demand Serbs release all detained UN personnel
1016	21 September 1995	BH	Asks parties to refrain from violence, as 'there can be no military solution to the conflict'; promotion of overall peace settlement; intensification of efforts to help refugees and the displaced

Notes

BH: Bosnia-Herzegovina
 FRY: Former Republic of Yugoslavia (Serbia and Montenegro)
 ICRC: International Committee of the Red Cross
 SCR: Security Council Resolution
 SFRY: Socialist Federal Republic of Yugoslavia
 SG: Secretary-General
 UNHCR: United Nations High Commissioner for Refugees
 UNPROFOR: United Nations Protection Force

Appendix 2: Catalogue of Air Action¹

February 28, 1994: US F16 fighters shot down four Bosnian Serb planes violating a "no-fly" zone; first military strike by Nato in its 45-year history.²

March 8, 1994: A Spanish CASA 212 transport aircraft was forced to make an emergency (successful) landing at Rijeka Airport (Croatia) after being hit by ground fire whilst in Croatian airspace.

March 12, 1994: As a result of UNPROFOR's request, aircraft were sent to provide protection for French troops who were being fired upon near Bihac. Ultimately, the UNPROFOR Tactical Air Control Party did not request the aircraft to attack a ground target.

April 10, 1994: Two US F16s attack Bosnian Serb positions near Gorazde, a Muslim "safe area"; two armoured vehicles and up to 15 BSA soldiers were killed. The artillery and tank bombardment ceased immediately, the sniper fire dying away within the hour.³

April 11, 1994: Two US Marine FA18s attacked Serb positions near Gorazde; Serbs responded by capturing all key points around "safe area".

1. The basic summary of air action in Bosnia has been taken from The Times, August 31, 1995, pp 3, and extensively supplemented.

2. Riddel P et al., "Four Serb jets shot down by NATO", The Times, 1 March 1994, and Block R et al., "NATO's moment of truth in Bosnia", The Independent, 1 March 1994.

NAEW aircraft detected unknown tracks south of Banja Luka just after 0630 on 28 February 1994. Two NATO aircraft, USA F - 16s, were vectored to the area and intercepted 6 Galeb/Jastreb aircraft. The NATO fighters engaged the violating aircraft, shooting down 3. A second pair of NATO fighters, USAF F - 16s, arrived and shot down a fourth violator. The Serb aircraft were believed to have attacked the Muslim-held town of Bugojno and an ammunitions factory in Novi Travnik.

3. The legal justification is contained in UNSCR 836. UNPROFOR commander, Lt Gen Sir Michael Rose, called for CAS for UN liaison officers in the Muslim-controlled enclave of Gorazde after BSA tank rounds hit the suburbs. Previously, fighting had been restricted to outlying villages and heights overlooking the River Drina. A flight of F - 16C fighter bombers from the 512th Tactical Fighter Squadron, USAF based at Ramstein, Germany, detached to Aviano air base in northern Italy, were already in the air. At 18.22 local time, two F - 16Cs made two bombing runs over a BSA command post, established in a group of armoured vehicles. Two 227 kg Mk 82 free-fall bombs were released on the first run and a single bomb on the second. Despite some light anti-aircraft fire, the F - 16s were not hit and returned to base safely. Beaver P., "The Balkans news information update", Jane's Sentinel, Vol 1 No 4, Jane's Information Group, April 1994.

On April 16, a British Sea Harrier was shot down.⁴ Serbs shelled Gorazde hospital; about 38 died.⁵ As a result of the UN and NATO cooperation, effective compliance with the NATO ultimatums occurred and further air strikes were not required. The protection afforded to Gorazde was similarly applied by the NAC on 22 April to the UN safe areas of Bihac, Srebrenica, Tuzla and Zepa.

August 5, 1994: Two US A10 jets destroyed an aging anti-tank weapon near Sarajevo after Serbs seized heavy weapons from the Ilidza Weapons Collection site in the Sarajevo Exclusion Zone (SEZ)⁶; the action took place at the request of UNPROFOR and resulted in the return of the removed heavy weapons.

September 22, 1994: Nato jets attacked a Serb tank near Sarajevo after Serbs attacked a French armoured personnel carrier. Serbs shut down aid airlift.

November 21, 1994: Nato planes bombed Ubdina air base in Serb-held Croatia outside the exclusion zones under UNSCR 958⁷; in response to attacks launched from that airfield against the Bihac pocket.

4. The Sea Harrier from HMS Ark Royal was shot down over Gorazde after being hit while attempting to conduct a CAS mission. Only the day before, a French Etendard IVP reconnaissance aircraft was forced to return to the French carrier Clemenceau after being hit by ground fire in the same area. Allport D & Thouand B., "Operations Crecerelle and Balbuzard", *Air Forces Monthly*, July 1994, pp 29-32. See references for detailed accounts of French operations and aircraft losses.

5. As a result of the escalation of the conflict around the Gorazde safe area, the NAC, responding to a request from the UNSG, decided that the Bosnian Serb actions met the conditions identified by NATO on 2 August 1993 as grounds for air strikes. Generally, AS were to be authorised against those responsible for the strangulation of Sarajevo and other areas in Bosnia requiring humanitarian assistance, and against those responsible for the wide-scale interference of humanitarian assistance. More specifically, in this case, it required the BSA to immediately cease attacks against the safe area of Gorazde and to pull their forces back 3 km from the centre of the city by 0001 GMT on 24 April 1994 and from that time allow UNPROFOR and humanitarian assistance free access to the city. Additionally, it declared a 20 km military exclusion zone around Gorazde and required all BSA heavy weapons to be withdrawn by 0001 GMT on 27 April 1994. "Operation Deny Flight", The Navy Public affairs Library (NAVPALIB), Internet (MOSAIC), 6 July 1995.

6. Despite having been warned by UNPROFOR not to remove the heavy weapons, the BSA did. Despite poor weather conditions the force, made up of Dutch, French, NATO, UK and US aircraft were able to locate an M18 Tankbuster (a tracked 76 mm anti-track gun). This was attacked by two US A - 10 aircraft who strafed it with 30 mm ammunition.

7. UNSCR 958: Adopted by the Security Council on 19 November 1994, authorising Member States to use air power, in a national capacity or within regional arrangements, to support UNPROFOR in Croatia. News Summary, NS/37/94, United Nations Information Centre For the United Kingdom and Ireland, 23 November 1994.

November 23, 1994: Nato planes hit at least two Serb SAM sites at Otoka (twice in one day) and Dvor, near Bihac.⁸ Serbs took dozens of peacekeepers hostage.

December 17, 1994: A French Etendard IV P jet on a NATO reconnaissance flight over Bosnia was hit by ground fire and returned safely to an air base in Italy. The aircraft which had taken off from the French aircraft carrier Foch received tail damage. The pilot was not injured.

May 25, 1995: Nato jets struck at Bosnian Serb ammunition depot near Pale stronghold, southeast of Sarajevo, in response to Serb shelling of UN safe areas.

May 26, 1995: Nato jets again attacked Pale depot. Serbs responded by taking more than 370 UN peacekeepers hostage; released over several weeks.

June 2, 1995: US F-16 shot down.⁹

July 11, 1995: Dutch and American Nato jets attacked Serb tanks south of Srebrenica "safe area" to try to protect peacekeepers. Bosnian Serbs overran the town.

August 30, 1995: More than 60 Nato aircraft launched the biggest airstrikes against Serb targets to date.

8. Fox R et al., "Bihac set to fall as Serbs advance on three sides", The Daily Telegraph, 24 November 1994, and Marshall A., "Americans push for more Bosnia air raids", The Independent, 24 November 1994.

On 22 November 1994, Serb SA-2 missiles fired on two Royal Navy Sea Harriers in the area of Otoka on the edge of the Bosnian enclave of Bihac. The following day the missiles again "illuminated" RAF Jaguars and French and Dutch jets in the same area. As a result aircraft from France (2 Jaguar, 2 Mirage F1), the Netherlands (6 F-16), US (7-8 F/A-18) and the UK (2 Sea Harriers, 2 Jaguars) attacked the missile site at Otoka at 0930 (again at 13.45) and the sites at Dvor and Bosanska Krupa, using anti-radiation "HARM" missiles.

9. Brand J et al., "NATO tested as jet is shot down", The Times, 3 June 1995, and Press release - "NATO aircraft shot down over Bosnia", Release Number: 95-16, NAVPALIB, Internet (MOSAIC), 2 June 1995.

The US F-16C from Aviano in Italy flying an ODF patrol mission was brought down by a SAM 6 "Gainful" ten miles south of Banja Luka, the site of a major Serb air base where dozens of SAM launchers are located. Despite unconfirmed reports that the BSA had recovered the pilot, he was successfully rescued by search and rescue forces on 8 June 1995. The rescue mission was launched early on the Thursday morning after the downed pilot established voice contact with a NATO aircraft in the vicinity. All forces involved in the rescue mission returned safely to their respective bases. See Kevin Fedarko and Mark Thomson, "All For One", Time, June 19, 1995, pp 22-28, for an in depth account of the rescue.

BIBLIOGRAPHY

Books

Air Power Doctrine, RAF, AP 3000, HMSO.

Almond, M., Europe's Backyard War: The War in the Balkans, London, Mandarin Paperbacks, 1994.

Barber, N., The War of the Running Dogs: How Malaya Defeated the Communist Guerrillas, 1948-60, London, Collins, 1971, in particular pp 149-160.

Berger, C., ed, The United States Air Force in Southeast Asia, 1961-1973: An Illustrated Account, Washington, D.C.: Office of Air Force History, 1984, pp 369.

Brooks, S., Bomber, London, Imperial War Museum, 1983.

Brown D., The Royal Navy and the Falklands War, London, Leo Cooper, 1987

Cable L., Unholy Grail: The US and the wars in Vietnam, 1965-8, London, Routledge, pp 54-5, 98-99, 109.

Carnegie Endowment, The Other Balkan Wars: A 1913 Carnegie Endowment Inquiry in Retrospect with a New Introduction and Reflections on the Present Conflict by George F. Kennan, Washington D.C, A Carnegie Endowment Book, 1993.

Clark, B., Pearl Harbour, London, John Lane The Bodley Head, 1942

Bowie C, et. al., The New Calculus: Analysing Airpower's Changing Role in Joint Theater Campaigns, Santa Monica, California, RAND, 1993, pp 83-4.

Church, H, and Phinnemore, European Union and European Community: A Handbook and Commentary on the post-Maastricht Treaties, London, Harvester Wheatsheaf, 1994.

Clutterbuck, Brigadier R., The Long Long War: Counterinsurgency in Malaya and Vietnam, New York and Washington, D.C., Praeger, 1966.

Cohen, E.A., ed, Operations/Effects and Effectiveness, vol. 2 of Gulf War Air Power Survey, Washington D.C., G.P.O, 1993, pp 171-77, 279-80.

Cohen, L.J., Broken Bonds: The Disintegration of Yugoslavia, Oxford, Westview Press, 1993.

Collins, Concise English Dictionary, Glasgow, HarperCollins Publishers, 1992.

Corbett, R., The Treaty of Maastricht, Harlow, Longman, 1993

Crnobrnja, M., The Yugoslav Drama, London, I.B. Tauris Publishers, 1994, pp 175-219.

Deakin, F.W., The Embattled Mountain, London, Oxford University Press, 1971.

Deighton, L., Fighter: The true story of the Battle of Britain, London, Jonathan Cape Ltd, 1977.

Diehl, P.F., International Peacekeeping, London, The Johns Hopkins University Press, 1994, pp 62-91, 143-165, 190-195.

Dougherty, J.E. and Pfaltzgraff, R.L. Jr., Contending Theories of International Relations: A Comprehensive Survey, New York, HarperCollins Publishers, 1990, pp 311.

Douhet, Gen G., The Command of the Air, London, Faber and Faber Ltd, 1927 (2nd ed).

Emme, E.M., The Impact of Air Power, London, D. Van Nostrand Company Ltd, 1959, pp 201-8.

Eyal, J., Europe and Yugoslavia: Lessons from a Failure, London, RUSI Whitehall Paper Series, 1993.

Foster, E., Nato's Military in the age of Crisis Management, London, RUSI Whitehall Paper Series, 1994.

Freedman L. and Gamba-Stonehouse V., Signals of War, London, Faber and Faber, 1990.

Garnett J., The Role of Military Power, An essay taken from Bayliss J., Booth K., Garnett J., Williams P., Contemporary Strategy I: Theories and Concepts, London, Holmes & Meier, 1987, pp 71- 90, 121.

Glad, B., The Psychological Dimensions of War, London, Sage Publications, 1990, pp 208.

Goodrich, L.M and Hambro, E., Charter of the United Nations: Commentary and Documents, London, Stevens & Sons Ltd, 1949.

- Grinter L.E. and Dunn P.M., The American War in Vietnam: Lessons, Legacies, and Implications for Future Conflicts, Connecticut, Greenwood Press, 1987, pp 49-86.
- Harris, MRAF Sir A., Bomber Offensive, London, Collins, 1947.
- Hastings M. and Jenkins S., The Battle for The Falklands, London, Michael Joseph, 1983.
- Hersey, J., Hiroshima, London, Penguin Books, 1946.
- Hoffman, B., British Air Power in Peripheral Conflict, 1919-1976, Santa Monica, RAND: Project Air Force, 1989, pp 37-57
- Huth, P.K., Extended Deterrence and the Prevention of War, New Haven, CT, Yale University Press, 1988, pp 4.
- Jackson R., Air War Over Korea, London, Macmillan Press, 1973.
- James, A., Sovereign Statehood, London, Allen & Uwin, 1986.
- Lambert, Grp. Capt. A.P.N., The Psychology of Air Power, London, RUSI Whitehall Paper Series, 1994.
- Lanchester, F.W., Aircraft in Warfare: The Dawn of the Fourth Arm, London, Constable and Company Ltd, 1916, pp xii.
- Lloyd, S.M., Roget's Thesaurus of English words and phrases, Harlow, Longman Group Limited, 1982.
- MacDonald, C.A., Korea: The War Before Vietnam, London, Macmillan Press, 1986, pp 226-248.
- Macintyre, D., The Battle for the Pacific, London, B T Batsford Ltd, 1966, pp 21-30.
- MacIsaac, D., Strategic Bombing in World War Two: The story of the United States Strategic Bombing Survey, New York, Garland Publishing Inc, 1976.
- Malcolm, N., Bosnia: A Short History, London, Papermac, 1994, pp 156-73.
- Mason, AVM R. A., War in the Third Dimension: Essays in Contemporary Air Power, London, Brassey's Defence Publishers, 1986, *forward*, 11-31.
- Mason, AVM R.A., Air Power: An Overview of Roles, London, Brassey's Defence Publishers, 1987, pp 58-73.

Mason, AVM T., Air Power: A Centennial Appraisal, London, Brassey's, 1994, pp xiii, 168-197.

Micheletti, E. and Debay, Y., War in the Balkans: 600 Days of Conflict in War-torn Yugoslavia, Dorset, Histoire and Collections, 1993.

Morgan, P.M., Deterrence: A Conceptual Analysis, London, Sage Publications Ltd, 1977.

Morse S. et al., Gulf Air War Debrief, London, Aerospace Publishing, 1991.

Nickerson, H., Arms and Policy, 1939-1944, New York, G.P Putnam's Sons, 1945, pp 267.

Nolan, C.J., The Longman Guide to World Affairs, London, Longman Group Ltd, 1995.

Omissi, D.E., Air Power and Colonial Control, Manchester, Manchester University Press, 1990.

Parsons, A., From Cold War to Hot Peace: UN Interventions 1947-1995, London, Penguin Books, 1995, pp 220-271.

Peterson, A.H., Reinhardt, G.C. and Conger, E.E., Symposium on the Role of Air Power in Counter-Insurgency and Unconventional Warfare: A Brief Summary of Viewpoints, Santa Monica, The RAND Corporation, RM-3867, March 1964, pp 6-7.

Poulton, H., The Balkans: Minorities and States in Conflict, London, Minorities Rights Publications, 1993.

Ricciuti, E.R., War in Yugoslavia: The Breakup of a Nation, London, Evans Brothers Limited, 1993.

Rieff, D., Slaughterhouse: Bosnia and the Failure of the West, London, Vintage, 1995.

Ridgway M.R., The Korean War, New York, Da Capo Press, 1967, pp 186, 189, 221-2, 244.

Rikhye I.J., and Skjelsbaek, K., eds., The United Nations and Peacekeeping: Results, Limitations, and Prospects – The Lessons of 40 Years of Experience, New York: St. Martin's, 1991, pp 171-99.

Rothgeb, J.M. Jr., Defining Power: Influence and Force in the Contemporary International System, New York, St. Martin's Press, 1993, pp 92-160.

Schelling T.C., Arms and Influence, New Haven and London, Yale University Press, 1966.

Schultz R. H, Jr, and Pfaltzgraff R. L, Jr, The Future of Air Power in the Aftermath of the Gulf War, Maxwell AFB, AL, Air University Press, July 1992, pp 57-82.

Spaight J.M., Air Power in the next war, London, Geoffrey Bles, 1938.

Stern, P.C., Perspectives on Deterrence, Oxford, Oxford University Press, 1989.

Summers, Col H.G., A Critical Analysis of the Gulf War, New York, Dell Publishing, 1992.

Taylor, N.E., ed., The Role of Air Power in Crisis Management, Proceedings of a conference held at the University of St Andrews, 1993.

Thomas, G., and Morgan-Witts, M., Ruin From The Air: The Atomic Mission to Hiroshima, London, Hamish Hamilton, 1977, in particular pp 317-326.

Towle, P.A., Pilots and Rebels: The Use of Aircraft in Unconventional Warfare 1918-1988, London, Brassey's U.K, 1989, pp 1-8, 56-68, 81-95, 205-212.

Vallance, Gp Cpt A., Air Power: Collected Essays on Doctrine, London, HMSO, 1990, pp 46-91.

Van Creveld, M., Hitler's Strategy 1940-41: The Balkan Clue, Cambridge, Cambridge University Press, 1973.

Ward, Cdr S., Sea Harrier Over The Falklands, London, Leo Cooper, 1992.

Winnefeld J.A. et al., A League of Airmen: U.S Air Power in the Gulf War, Santa Monica, RAND: Project AIR FORCE, 1994

Wohlstetter, R.A., Pearl Harbour: Warning and Decision, Stanford, Stanford University Press, 1962

The Military Balance 1990-91, London, Brassey's, 1990, pp 95-6.

Treaties and Alliances of the World, London, Keesing's, 1968, pp 69.

Articles – Journals

Akashi, Y., "The Limits of UN Diplomacy and the Future of Conflict Mediation", Survival, Vol. 37, No. 4, Winter 1995-96, pp 83-98.

Allport D and Thouand B., "Operations Crecerelle and Balbuzard", Air Forces Monthly, July 1994, pp 29-32.

Armitage, ACM Sir M., "NATO Air Power at War", The Officer, November/December 1995, pp 10-11.

Asmus, R.D, et al., "NATO Expansion: The Next Steps", Survival, Vol. 37, No. 1, Spring 1995, pp 7-33.

Barry, J., "By Air – Or Land?", Newsweek, May 10, 1993, pp 16-20.

Barry, J. and Watson, R., "The Sky Above, the Mud Below", Newsweek, 17 May 1993, pp 14-15.

Beaver, P., "Nato close-air support in Bosnia", Jane's Sentinel The Balkans, Vol 1 No 4, Jane's Information Group, April 1994.

Beaver P., "The Balkans news information update", Jane's Sentinel, Vol 1 No 4, Jane's Information Group, April 1994.

Bertram, C., "Multilateral Diplomacy and Conflict Resolution", Survival, vol. 37, no. 4, Winter 1995-96, pp 65-82.

Bertram, C., "NATO on Track for the 21st Century?", Security Dialogue, Vol. 26(1), 1995, pp 65-71.

Bianchini, S., "On the Threshold of An Epochal Transformation", Balkan Forum, 1994, pp 103-104.

Boutros-Ghali, B., "An Agenda For Peace", Military Technology, Militech, 11/94, pp 58-67.

Boutros-Ghali, B., "Improving the Capacity of the United Nations for Peacekeeping", Military Technology, MILTECH, 12/94, pp 70-82.

Boyd, C.G., "Making Peace with the Guilty: The Truth about Bosnia", Foreign Affairs, Vol. 74, No. 5, September/October 1995, pp 22-38.

Brookes, Wg Cdr A., "Above and Beyond? – Capabilities of Out-of-Area Air Power", RUSI Journal, October 1993, pp 27-32.

Brown, M., "The Flawed Logic of NATO Expansion", Survival, Vol. 37, No. 1, Spring 1995, pp 34-52.

Brzezinski, Z., "The Plan for Europe", Foreign Affairs, Vol. 74, No. 1, 1995, pp 27.

Capaccio, T., "The Fully Deployable Air Campaign", Air Force Magazine, January 1994, pp 50-54.

Carlsson, I., "Roles for the UN in International Security after the Cold War", Security Dialogue, Vol. 26, No. 1, 1995, pp 7-18.

Cohen, E.A., "The Meaning and Future of Air Power", Orbis, Spring, 1995, pp 189-200.

Cohen, E.A., "The Mystique of US Air Power", Foreign Affairs, Vol. 73, No 1, January - February 1994, pp 109-124.

Covault, C., "AWACS, Command chain key to NATO shoot down", Aviation Week & Space Technology, 7 March 1994, pp 25-6

Delors, J., European Parliament, The Week, Strasbourg, 9-13 September 1991, PE 152.61/rev, pp 17-18.

D Def S, "Crisis Management: The Application of Air Power in the former Yugoslavia", Air Clues, July 1993, pp 244-247.

Dobie, C., "A Concept for Post-Cold War Peacekeeping", Survival, Vol. 36, no. 3, Autumn 1994, pp 121-48.

Doxey, M., "Something Old, Something New": The Politics of Recognition in Post-Cold War Europe, Diplomacy & Statecraft, Vol. 6, No. 2, July 1995, pp 303-322.

Editor's column., "Flying the AEZ", Air Force Monthly, June 1993.

Evans, T, et al., "Trial by Unfriendly Fire", Newsweek, 25 April 1994, pp 14.

Fedarko, K., and Thomson, M., "All For One", Time, June 19, 1995, pp 22-28.

Fulghum, D.A., "US Weighs Use of Nonlethal Weapons in Serbia if UN Decides to Fight", Aviation Week & Space Technology, 17 August 1992, pp 62-63.

Furdson, E. Maj-Gen., "Bosnia: High hopes, or unsustainable progress?", Asia-Pacific Defence Reporter, April-May 1994, pp 29-30.

- Glenny, M., "Heading of War in the Southern Balkans", Foreign Affairs, Vol. 74, No. 3, May/June 1995, pp 98-108.
- Gompert D., "How to defeat Serbia?", Foreign Affairs, vol. 73, no. 4, July/August 1994, pp 30-47.
- Hallion, P.R., "Air Power Today and Tomorrow: A Post-Gulf War Review", RUSI Journal, October 1994, pp 23-29.
- Harries, O., "The Collapse of "The West"", Foreign Affairs, Vol. 72, No. 4, September/ October 1993, pp 49.
- Hewish, M., Sweetman, R., & Robinson, A; "Precision Guide Munitions Come of Age", International Defense Review, 5/1991, pp 460.
- Hinton, P.N. Sqn Ldr, "An air war without front lines: Air Operations in Bosnia", Air Clues, June 1995, pp 208-211.
- Houghton, Air Cdr J., "Nato/Unprofor co-operation in peacekeeping", Air Clues, February 1995.
- Iqbal Riza, S., "Parameters of UN Peace-keeping", RUSI Journal, June 1995, pp 17-20.
- James, A., "UN Peace-keeping: Recent Developments and Current Problems", Paradigms, Vol. 8, No. 2, Winter 1994, pp 18-34.
- Jenkins, M.D.M. Sqn Ldr, "There are no air force personnel in Bosnia or so you may think if you read the press", Air Clues, April 1994, pp 124-131.
- Lambert, A.P.N., "Operation Deny Flight", Air Clues, December 1993, pp 444-449.
- Lieven, A., "Russian opposition to NATO expansion", The World Today, October 1995, pp 196-199.
- Lok, B.J., "Deny Flight turns to affirmative action", Jane's Defence Weekly, 9 September 1995, pp 53-57.
- Mey, H.M., View from Germany: Germany, NATO, and the War in the former Yugoslavia, Bonn, Institute for Strategic Analyses, 1994, pp 241.
- Morrocco, J.D., "Bombing Compels Serb Withdrawal", Aviation Week & Space Technology, September 25, 1995, pp 36.

Maul, H.W., "Germany in the Yugoslav Crisis", Survival, Vol. 37, no. 4, Winter 1995, pp 99-132.

Nelan, B., "Tears and Terror", Time, July 24, 1995, pp 16-23.

Newhouse, J., "The Diplomatic Round", The New Yorker, 24 August 1992, pp 61.

Nordeen, L.O. and ScottBarnes, C., "Denying Flight", Air Forces Monthly, August 1993, pp 14-21.

Portal, ACM Lord, "Air Force Cooperation in Policing the Empire", London, RUSI Journal, May 1937, pp 343-58.

Porter, J.L., "Nimrod operations in the Adriatic", Air Clues, February 1994, pp 44-49.

Post, T., Brand, J., & Nordland, R., "Tightening the Noose", Newsweek, April 25, 1994, pp 13.

Pullman, Flt Lt. J.C., "A Steep learning Curve - RAF Waddington's role in the Balkan Civil War", RAF Yearbook No 6, 1994, pp 7-11.

Ripley, T., "Bosnia mission stretches airborne eyes and ears", International Defence Review, January 1994, pp 54-56.

Ripley, T., "Bosnia Patrol", Aircraft Illustrated, January 1994, pp 38-40.

Ripley, T., "Mission Bosnia", Defence Helicopter, June-August 1994, pp 14-17.

Ripley, T., "A Deliberate Force on the mountain", International Defence Review, 10/95, pp 27-28.

Ripley, T., "Air Power Vindicated", Flight International, 1-7 November 1995, pp 31-33.

Ripley, T., "Silence of the SAMS", Aircraft Illustrated, November 1995, pp 36-39.

Roberts, A., "The Crisis in UN Peacekeeping", Survival, Vol. 36, no. 3, Autumn 1994, pp 100-101.

Roberts, A., "Communal conflict as a challenge to international organisation: the case of former Yugoslavia", Review of International Studies, Vol. 21, no. 4, 1995, pp 389-410.

Roberts, A., "From San Francisco to Sarajevo: The UN and the Use of Force", Survival, Vol. 37, no. 4, Winter, 1995-96, pp 7-28.

- Rogers, M., "NATO begins to assess air strike damage as peace in Bosnia nears", Jane's Defence Weekly, 11 November 1995, pp 19.
- Rose, Lt Gen M., "A Year in Bosnia: What has been achieved", RUSI Journal, June 1995, pp 22-25.
- Rudolph, J.R, Jr., "Intervention in Communal Conflicts", Orbis, Spring 1995, pp 259-73.
- Ruhle, M, and Williams, N., "NATO enlargement and the European Union", The World Today, May 1995, pp 84-88.
- Salmon, T.C., "Testing times for European political cooperation: the Gulf and Yugoslavia, 1990-92", International Affairs, Vol. 68, no. 2, 1992, pp 233-253.
- Sherr, J., "Doomed to Remain a Great Power", The World Today, January 1996, pp 8-12.
- Simic, P., "Dynamics of the Yugoslav Crisis", Security Dialogue, Vol. 26(2), 1995, pp 153-172.
- Sobell, V., "NATO, Russia and the Yugoslav war", The World Today, November 1995, pp 210-215.
- Starr, B., "'Deny Flight' shutdown may put USAF on the offensive", Jane's Defence Weekly, 24 June 1995.
- Starr, B., "NATO must solve Bosnia zone riddle before forces deploy", Jane's Defence Weekly, 21 October 1995, pp 21
- Stenhouse, M., "Nato: reconciling ideals with realities", Jane's World of Defence, 1995.
- Sweetman, Wg Cdr A.D., "Deep Gioia - A Chronicle of No 6 Squadron's Involvement in Operation DENY FLIGHT", Air Clues, January 1994, pp 4-8.
- Sweetman, Grp Capt A.D., "Close Air Support over Bosnia-Herzegovina", RUSI Journal, August 1994, pp 34-36.
- Taylor, Grp Capt N.E., Air Power Journal, Summer, 1993, pp 69-70.
- Tharoor, S., "United Nations Peacekeeping in Europe", Survival, Vol. 37, no. 2, Summer 1995, pp 121-134.

Tharoor, S., "Should UN Peacekeeping Go 'Back to Basics'?", Survival, Vol. 37, No. 4, Winter 1995, pp 52-64.

Thomas, E. et al, "Trial by Unfriendly Fire", Newsweek, April 25, 1994, pp 11-14.

Tucker R.W & Hendrickson D.C., "America and Bosnia", The National Interest, Fall 1993, pp 16.

Von Moltke, G., "Russia and NATO", RUSI Journal, February 1995, pp 8-13.

Vujovic, V., "Serbian Air Defence", Air Forces Monthly, December 1993, pp 39-42.

Woolley, Grp Capt G.A., "Peace support Operations: Part 2", Air Clues, May 1995, pp 169-173.

Zimmermann, W., "The Last Ambassador", Foreign Affairs, March/April 1995, Vol. 74, No. 2, pp 2-20.

Articles – Newspapers

Adams, J., "UN set to use force in the air", The Sunday Times, 11 October 1992.

Almond, P., "Frustrated pilots allowed to fire at last", The Daily Telegraph, 1 March 1994.

Barber, T., "Threat to 'Slavic allies' unites parties in Russia", The Independent, 10 February 1994.

Barber, T., "Five steps into the quagmire", The Independent on Sunday, 4 June 1995.

Beeston, R., "Yeltsin gives NATO warning of return to Cold War divide", The Times, 5 December 1994.

Bellamy, C., "Nato jets would be ready in minutes", The Independent, 10 February 1994.

Bellamy, C., "The US flies a lone flag in sight of the Balkans", The Independent, 5 July 1995.

Bevins, A and Savill, A., "Major wants tough, swift response if Serbs attack", The Independent, 16 December 1992.

Binyon, M., "Hurd rules out air strikes on Serbian attackers' positions", The Times, 5 August 1992.

Binyon, M. et al., "Britain ready to pull troops out of Bosnia", The Times, 5 December 1994.

Binyon, M. and Wood, N., "Yeltsin clashes with Clinton over 'NATO at Russia's door'", The Times, 6 December 1994.

Bishop, P., "Hopes rise as the victims bite back", The Sunday Telegraph, 6 November 1994.

Bishop, P., "Peace plan for Bosnia backed by Milosevic", The Daily Telegraph, 5 December 1994.

Bishop, P. et al., "We won't abandon Bosnia, says Major", The Daily Telegraph, 6 December 1994.

Block, R., "Serbs write another 'deal' in the sand", The Independent, 10 February 1994.

Block, R. et al., "Nato's moment of truth in Bosnia", The Independent, 1 March 1994.

Bone, J. et al., "UN and Nato hammer out new framework for pre-emptive airstrikes", The Times, 27 July 1995.

Braid, M., "TV news brings relief for families", The Independent, 14 June 1995.

Brand, J., Prentice, E., and Evans, M., "Nato tested as jet is shot down", The Times, 3 June 1995.

Butcher, T and Fox, R., "UN leader signals end of mission in Bosnia", The Daily Telegraph, 19 September, 1995.

Campbell, C., "D-day for chiefs over Bosnian air strike option", The Sunday Telegraph, 25 April 1993.

Campbell, C., "Ground forces hold key to US air strikes", The Sunday Telegraph, 2 May 1993.

Cowan, E., "Betrayed Bosnians await their fate", The Sunday Times, 8 August 1993.

Daly, E., "Nato jets sent into action over Bihac", The Independent, 26 November 1994.

Daly, E. et al., "West steps up military challenge to Serbs", The Independent on Sunday, 4 June 1995.

Daly, E., "Serbs free last six British troops", The Independent, 14 June 1995.

Dowden, R., "Another nail in the coffin of peace-keeping", The Independent, 24 November 1994.

Editors column, "Staking all on Nato air power", The Independent, 24 November 1994.

Editor's column, "Rhetorical Strikes: More wind from Nato will only fan Bosnia's fire", The Times, 12 January 1994.

Editor's column, "Each state for itself", Financial Times, 6 January 1995.

Evans, M., "Air strike may help Sarajevo but success is not guaranteed", The Times, 6 August 1992.

Evans, M., "West holds whip hand in the air but Serbs rule on land", The Times, 17 December 1992.

Evans, M. et al., "Serb commander says air action means world war", The Times, 26 April 1993.

Evans, M., "Bombing raids were in line with UN mandate on protecting peacekeepers", The Times, 12 April 1994.

Evans, M., "West weighs risks and rewards of air strikes", The Times, 29 April 1994.

Evans, M., "Air strikes expose limits of West's military options", The Times, 24 November 1994.

Evans, M., "West prepares to send 10,000 more troops to Bosnia", The Times, 3 June 1995.

Eyal, J., "Which way will Europe go?", The Independent, 5 December 1994.

Fairhall, D. et al., "PM warns troops may quit Bosnia", The Guardian, 6 December 1994.

Fletcher, M. et al., "US canvasses Europe over enforcement of air ban", The Times, 15 December 1992.

Fletcher, M. et al., "Yeltsin refuses to back more NATO air strikes against Bosnia Serbs", The Times, 21 April 1994.

Fox, R., "Air strikes carry threat for UN", The Daily Telegraph, 13 January 1994.

Fox, R., "This is no time to blink", The Daily Telegraph, 1 March 1994.

Fox, R., "Nato split looms over US end to arms embargo", The Daily Telegraph, 12 November 1994.

Fox, R., "Bihac is about to fall, says mayor", The Daily Telegraph, 24 November 1994.

Fox, R. et al., "Bihac set to fall as Serbs advance on three sides", The Daily Telegraph, 24 November 1994.

Glenny, M., "150,000 Serbs flee Croat conquerors", The Times, 8 August 1995.

Greenhouse, S., "US Warns of Air Strikes Unless Serbs Negotiate: NATO Will Intervene 'Heavily' if No Progress is Made on an Accord", International Herald Tribune, 28 August 1995.

Hine, ACM Sir P., The London Gazette, 28 June 1991.

Hogg, A., "No easy targets for an allied air strike", The Sunday Times, 18 April 1993.

Judah, T., "West shies away from 'no fly' zone over Bosnia", The Times, 14 September 1992.

Judah, T., "Sky proves no limit as all factions flout flying ban", The Times, 6 August 1993.

Judah, T. and Evans, M., "Serb firepower makes air raids high-risk choice", The Times, 8 February 1994.

Keane, J. et al., "Should we intervene with arms?", The Independent, 16 December 1992.

Keegan, J., "How to silence the guns?", The Daily Telegraph, 16 December 1992.

Keegan, J., "Against Air Strikes", The Daily Telegraph, 8 February 1994.

Keegan, J., "NATO air strikes against artillery pounding Sarajevo are unlikely to achieve their desired effect", The Daily Telegraph, 8 February 1994.

Lieven, A., "Don't bait the Bear", The Times, 6 December 1994.

Lockwood, C. et al., "US presses for tougher air strikes on Serbs", The Daily Telegraph, 22 April 1994.

Lockwood, C. et al., "Stop the shelling or we'll bomb you, warns Nato", The Daily Telegraph, 23 April 1994.

Marshall, A., "Air strikes reveal strategic vacuum in Europe and US", The Independent, 17 April 1994.

Marshall, A., "Americans push for more Bosnia air raids", The Independent, 24 November 1994.

Marshall, A. et al., "Nato steps up attacks on Serbs", The Independent, 24 November 1994.

Marshall, A. et al., "Bosnia peacemakers fall out again", The Independent on Sunday, 4 December 1994.

Marshall, A., "Milosevic supports peace moves", The Independent, 5 December 1994.

Marshall, A and Sheridan M., "US Wants Free Hand to Conquer the Skies with Massive Strikes", The Independent, 19 July 1995.

Muir, J. et al., "Hurd peace proposals scorned by Bosnians", The Sunday Telegraph, 4 December 1994.

Muir, J., "Freed British convoy reaches Gorazde", The Daily Telegraph, 5 December 1994.

Nundy, J., "French deplore Serbian attack", The Independent, 24 November 1994.

Oulten, C., "Political Guru urges Balkan air attacks", The Independent, 18 March 1993.

Owen, D., "When it is right to fight", The Times, 4 August 1992.

Palmer, J., "Milosevic backs Hurd peace plan", The Guardian, 5 December 1994.

Peterson, S., "Croatia urges capture of Serb stronghold", The Daily Telegraph, 19 September ,1995, pp 13.

Prentice, E., "Rose letter informs Serbs he wants to avoid air strikes", The Times, 2 November 1994.

Pringle, P., "UN gives Nato right to down Serbian planes", The Independent, 1 April 1993.

Rhodes, T and Evans, M., "Serb commander says air action means world war", The Times, 26 April 1993.

Rhodes, T. et al., "US seeks allied backing for more attacks", The Times, 24 November 1994.

Riddell, P., "Doves dominate cabinet talks on Bosnia", The Times, 15 December 1992.

Riddell, P. et al, "Four Serb jets shot down by Nato", The Times, 1 March 1994.

Robinson, S., "Clinton overrules top brass on air raids", The Daily Telegraph, 11 April 1994.

Robinson, S., "Clinton lifts blockade on Bosnia arms", The Daily Telegraph, 12 November 1994.

Seely, R. and Elliot, H., "Serb rocket attack shows vulnerability of Sarajevo flights", The Times, 20 August 1992.

Sheridan, M. and Bellamy, C., "Hunkering down for a long, long war", The Independent, 2 May 1995.

Sheridan, M. and Bellamy, C., "UN denies dropping 'robust' Bosnian line", The Independent, 14 June 1995.

Tanner, M., "Riot that turned into a national bloodbath", The Independent, 4 May 1993.

The Independent staff., "Should we intervene with arms?", The Independent, 16 December 1992.

Warren, M. et al., "British general will fly to warn Mladic", The Sunday Telegraph, 23 July 1995.

Wood, N. et al., "UK ready to back air strikes on Serbs", The Times, 3 December 1992.

Wood, N. et al., "Nato prepares for air attack against Serbia", The Times, 16 December 1992.

Young, H., "Three goals in Bosnia for the West's puny leaders", The Guardian, 6 December 1994.

Miscellaneous

Amnesty International Report, "Bosnia-Herzegovina: Gross Abuses of Basic Human Rights", New York, Amnesty International USA, October 1992.

Allied Joint Operations Doctrine, NATO, AJP-1(A), pp 18.1-18.8, 22.1-22.18

Conduct of the Persian Gulf War report, US Department of Defense, April 1991.

18 Intelligence and Security Section, "Op Grapple", The RAT, January 1995.

Mako, D.P. TSgt., "Air strikes in Bosnia", Air Force News Service (AFNS), The Navy Public Affairs Library (NAVPALIB), Internet (MOSAIC), 11 April 1994.

McKeown, J. H Col., "The Yugoslavs-What are they like?", Defence Intelligence Staff, 10 June 1993.

"NATO and UN Military Commanders Sign Memorandum of Agreement on Air Operations", NAVPALIB, Internet (MOSAIC), Release Number 95-23, 10 August 1995.

"NATO aircraft shot down over Bosnia", Release Number: 95-16, NAVPALIB, Internet (MOSAIC), 2 June 1995.

News Summary, NS/37/94, United Nations Information Centre For the United Kingdom and Ireland, 23 November 1994.

Office of the Chief of Naval Operations, The United States Navy in "Desert Shield: Desert Storm", Washington, DC, USN, 1991, A-2-14.

"Operation Deny Flight" Factsheet, NAVPALIB, Internet (MOSAIC), 6 July 1995.

Perry W.J., "US Policy on Bosnia Remains Consistent", Prepared statement by Secretary of Defence to the Senate Armed Services National Security Committee, Internet (MOSAIC), 7 June 1995.

Reference paper, The United Nations and the Situation in the Former Yugoslavia, United Nations Department of Public Information, 7 May 1993.

The Referendum on Independence on Bosnia-Herzegovina. February 29 - March 1, 1992, Washington, D.C, Commission on Security and Cooperation on Europe, 1992, pp 23.

UNLO 5ATAF, "A Bluffer's Guide to the Former Yugoslavia (FY)", UNLO 5ATAF, 2 July 1994.

Van der Laan, L., "The Role of Air Power in Peace and Humanitarian Operations", Nato Air Defence Committee (NADC), Panel on Air Defence Philosophy, NADC-D/153(Revised), pp 20-41.

Vincent R, Field Marshall Sir., quoted in North Atlantic Assembly report AL 221 PC (94)5, para. 11, Internet(MOSAIC).