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# Air Power in Swiss Security

This talk was given to the participants of "General Staff Course I – 2003" at the Armed Forces Staff College at Lucerne on 21 November, 2003. All references to current affairs refer to this date.

Ladies and gentleman it is a very great privilege to be invited to come to this college. It is also in some humility that I come to Switzerland with its very different political traditions from those of my own country.

Tony Mason\*

This is the ground that I wish to cover this afternoon.

## Outline

### Shaping the New Environment 1990–2003

- The Issues
- The Fighting
- The Features

### The implications for Swiss Air Power

- Coalition Cooperation
- Force Structure
- Procurement Priorities

## Shaping the New Environment 1990–2003

First, I will recall the New Environment from 1990 to 2003. I will remind you of the issues that we fought over, how the fighting took place and what the major features were. I will then look at the implications for Swiss Air Power in terms of coalition cooperation, force structure and procurement priorities. The sub-text is Swiss Air Power in its political and strategic context.

First of all "Shaping the New Environment", with three sub-headings: the issues, the fighting and the features. I don't expect you to hear anything new initially as I look at the same things in three different ways. I know that the majority of you are soldiers, some militia and some regulars, and I know that you come from a country with a very different tradition from mine.

Most people who talk about Air Power really mean American Air Power. But how do we look at Air Power from the position of a smaller country? How do we take into account Swiss traditional neutrality, Swiss territorial integrity, and a defence ministry which incorporates three very different strands?

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## Trends in Warfare:

### The Issues

- 1989 Cold War: survival, territorial integrity, ideology
- 1990–1 Gulf War: territory, law, interests
- 1992–6 Bosnia: humanitarian, ethnic, interests
- 1994– Chechnya: ethnic, national, imperial
- 1999 Kosovo: ethnic, humanitarian, interests
- 2001 Twin Towers: ideological, revenge, survival
- 2001–2 Afghanistan: anti-terrorist, revenge
- 2003 Iraq: pre-emptive, anti-terrorist
- Today Iraq: national, ideological, nihilist

### The Issues

First, a chronology with which you are all familiar.

The issues in the Cold War were survival and territorial integrity but ideology played a part. In the Gulf War, you have traditional interests, territory, aggression and international law, as well as the interests of those powers that formed the coalition. In Bosnia, you have the introduction of two new elements: humanitarian and ethnic considerations as well as traditional interests in Balkan security. In Chechnya we have ethnic and nationalist interests clashing

with those of an imperialist Russia. Again in Kosovo we see the clash of ethnic interests combined with humanitarian motivation, complicated by different international interests.

In the tragedy of the Twin Towers, we have a war of a very different kind with three factors new to the decade. We have a fierce ideological confrontation, we have an element of revenge and we have a consequent perception by the United States of a threat to its very survival. In Afghanistan we see these new elements again. They are different from those we left in 1989.

We have moved now to issues which are not so easy to define or to resolve, nor easy to find compromises: It is difficult to sit down at the conference table and resolve revenge. It is difficult to imagine sitting round a table with al-Qaida. Now we have a revised concept of pre-emptive anti-terrorist attack. Finally, we see in Iraq a resurgent nationalism as well as latter-day nihilism.

In sum, since 1991, humanitarian, ethnic and new ideological issues have tended to complicate or replace traditional sources of conflict such as nationality, territorial disputes, access to resources, etc. which could be negotiable. Until 9/11/01, the US and friends tended to regard participation in conflict as a debatable option. The US now has a very different perspective which we see not only in the practise of foreign policy, but the way it is fighting its wars and, until now, the way in which it has been prepared to accept casualties.

**Ethnic strife:**  
In this case the Serbian saying «a village a day keeps NATO away» did not work – Racak was the trigger for NATO's reluctant intervention in Kosovo.

Photo: Archiv



## The Fighting

Now let us look at that same chronology and ask how those wars were fought? Again we can see a pattern emerging.

### Trends in Warfare:

#### The Fighting

- 1989 Cold War: conventional/nuclear; battlefield, homelands
- 1990-1 Gulf War: conventional, battlefield, theatre
- 1992-6 Bosnia: conventional, skirmishes, sieges, non-linear, terror
- 1994- Chechnya: conventional, irregular, urban, non-linear, terror
- 1999 Kosovo: skirmishes, irregular, non-linear, terror
- 2001 Twin Towers: irregular, non-linear, terror
- 2001-2 Afghanistan: small battles, irregular, non-linear, terror
- 2003 Iraq: conventional, small battles, irregular, non-linear
- Today Iraq: irregular, urban, non-linear, terror

The Cold War was planned to be conventional but would have almost certainly gone nuclear, fought primarily in Central Europe in more flexible but nonetheless traditional battlefields. In the Gulf War you still had a domination of conventional forces facing each other on a battlefield but now in a specific theatre, not across the globe.

Bosnia was a conflict which had conventional forces on either side but with skirmishes, sieges and non-linear confrontations. It was not a war of set piece battlefields and was also marked by the widespread use of terrorism between ethnic enemies.

Since 1991, humanitarian, ethnic and new ideological issues have tended to complicate or replace traditional sources of conflict, such as nationality, territorial disputes, access to resources, etc. which could be negotiable.

We did not pay much attention to Chechnya. We didn't notice that Bin Laden contributed 30 million dollars to the Chechens in 1994; or that while Dudayev was the nominal leader of Chechnya, the real leader was Emir Khatta, known as the black Arab – from Saudi Arabia; or that among his lieutenants were Iraqis. Here we do see Russian conventional forces, and a small proportion of Chechen conventional forces, but primarily the combat is irregular, it is urban for the first time, it is non-linear



**High-Low Tech Synergy:** USAF Forward Air Controller with Northern Alliance Forces in Afghanistan designated targets for precision guided weapons. Photo: USAF

and again terror is playing an important part.

In Kosovo there were skirmishes, irregular forces on the Albanian side and to a certain extent among the Serbian forces also. Again it is non-linear, with scarcely any set-piece conventional battles and again terror is pervasive. In Twin Towers, the terrorists dispensed with conventional warfare completely, using terror on an unprecedented scale, employing civilian "weapons" against civilian targets deep in the "enemy's" heartland. In Afghanistan: there are some conventional American forces, but the bulk of the fighting was done on the ground between the irregular forces of the Taliban and the war lords in small battles.

Iraq is interesting, because here we initially had conventional forces on both sides: the coalition, largely British and American with some others, facing Iraqi regular troops but also an increasing number of irregulars. Now we are seeing conventional forces being exposed to guerrilla and terrorist attacks by opponents who avoid formal confrontations at all costs.

Despite the different issues which we have examined, there is a very clear trend in those conflicts, away from encounters between regular and conventional forces to mobile, smaller scale engagements involving irregular forces unconstrained by existing international laws of war without discrimination between soldier and civilian.

### The Features

I now wish to identify a number of features, which I think are going to be with us for quite some time. As we look at them, I would like you to ask yourselves what are their implications for Switzerland, the Swiss Armed Forces and particularly for the Swiss Air Force? We can examine each in isolation but it is their interaction which

provides the context in which Swiss Air Power is likely to be called upon to operate.

### The Impact of Air Power

The first and most obvious feature of warfare in the last decade has been the impact of air power. What has it actually done in the last decade? Why has it been so attractive politically? Why has it been used so often? What challenges remain?

### The Impact of Air Power:

#### (1) Track record:

- |              |   |
|--------------|---|
| Gulf War:    | imposed strategy, prepared battlefield, enabled low casualty victory            |
| Bosnia:      | neutralised Serbian ground forces, minimised casualties, leverage on combatants |
| Chechnya:    | indiscriminate, ineffective, counter-productive                                 |
| Kosovo:      | the only available military force   |
| Twin Towers: | terrorist air power? new air defence  |
| Afghanistan: | ground force synergy against Taliban  |
| Iraq:        | latter day blitzkrieg against conventional forces                               |
| Iraq today:  | anti-terrorist or counter productive?   |

In the Gulf War, it imposed coalition strategy on Saddam, denying him his "mother of all battles"; it prepared the battlefield for exploitation by the Army and it generated a war with casualties on both sides infinitely fewer than if armies had fought their way through Kuwait and across Southern Iraq in pitched battles.

In Bosnia, it neutralised Serbian forces, it minimised casualties, and it put leverage on all the combatants to come to agreement at Dayton, Ohio. In Chechnya, Air Power

achieved nothing. It was indiscriminate, and it still is; it was ineffective and counter-productive.

In Kosovo, there are still debates about why Milosevic gave in. The incontrovertible fact is, there was only one military instrument used, and that was Air Power. You have studied Kosovo, and you know there were arguments about whether we put the Apaches in, or ground forces; how far we should help the Albanian Kosovars and so on. But the relevant point is that the only available military force in Kosovo was Air Power.

In Twin Towers we saw terrorist air power. There is a terrible, tragic irony that the weapons used against the United States were civilian aircraft. Air Power is not just about combat aircraft. Air Power has been about exploiting the third dimension above the earth for military purposes; transport, reconnaissance, surveillance, in-flight refuelling etc. The hijacked aircraft also posed new questions for air defence. As we speak Tornado F.3s are on combat air patrol over London. They are not looking out for military aircraft. Those military pilots are all briefed that under extreme circumstances they may have to shoot down a civilian airliner. How would the Swiss Air Force respond?

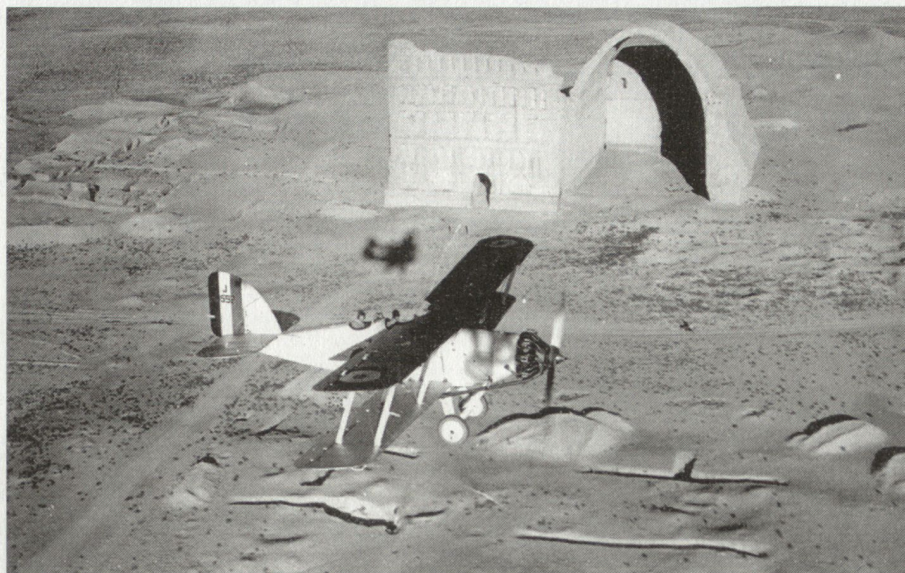
In Afghanistan "strategic" B-52s dropped precise guided weapons on call from forward air controllers. You had an air-ground

### Air power is politically attractive for several reasons.

force synergy which paid handsome dividends, just as you had in Iraq, where any European would recognise a good blitzkrieg when he saw it: the dynamic interaction of air and ground forces at high speed to sweep aside an opposition.

This last weekend you have seen the return of US aircraft to the Iraqi battlespace in an anti-terrorist role. I hope this is a product of good intelligence, that it has been precise and that it will not be counter-productive.

Air power is politically attractive for several reasons.



**Been there, done that: Royal Air Force, Westland Wapiti Air Policing in Iraq – Limited commitment in the Thirties.**  
Photo: Royal Air Force, Crown Copyright

### The Impact of Air Power:

#### (2) Political attraction:

- Diplomatically responsive
- Limited commitment
- Cost effective
- Widely applicable
- Asymmetric advantage
- Casualty sensitive

It is diplomatically responsive. You can move a squadron from a base in the United States to the Middle East in twelve hours. If you wish to end the commitment, you can recall it equally swiftly, with airlift for the supporting ground elements. If on the other hand you have to insert ground forces, you have considerations of deployment time, logistic support and protection, with difficulties in reverse when you wish to disengage.

Air power permits a limited commitment, reducing the need in many circumstances for large numbers of troops. It is applicable in a wide variety of circumstances from presence in an impending cri-

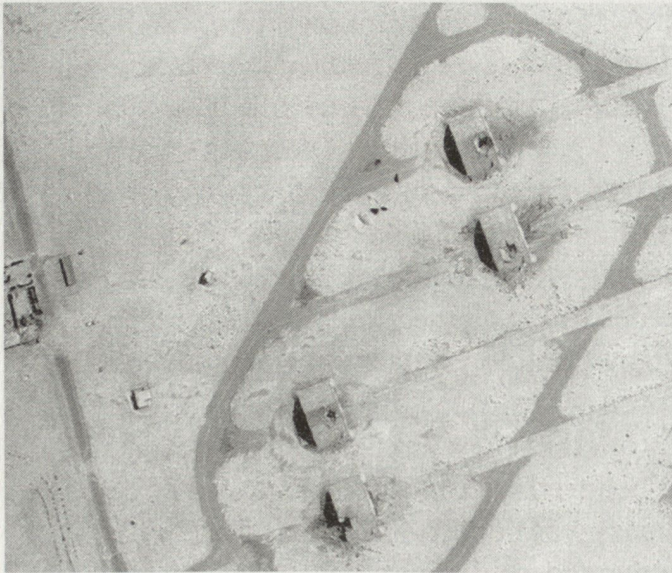
sis to surveillance of potential threats to attacks on targets ranging from individual tanks to critical communication or industrial nodes. Moreover, the advent of precision guided munitions allows a very small number of aircraft to carry out many different missions simultaneously.

It gives an asymmetric advantage as the US capitalises on its technology, on its high levels of training, on its international experience, and its overwhelming superiority in the air. No static target anywhere in the world is invulnerable to air attack. Deep caves and underground bunkers may provide temporary shelter, but only until new generations of PGM are deployed by the USAF. The protection afforded by night and bad weather has already been stripped away. The ability to identify, track and attack mobile targets is advancing with the introduction of network centric warfare.

**The US C-17 strategic airlifter is capable of operating from unprepared strips almost anywhere in the world.**

Photo: Boeing





**The embodiment of precise and clean warfare: bunker busting in Gulf War I Ali As-Salim Air Base, 1 March, 1991.**

Photo: USAF

Air campaigns of the last decade have been punctuated by highly publicised civilian casualties from air attack, from the Al Firdos bunker in the Gulf War of 1991, through the misidentified refugee convoy in Kosovo to most recent losses of life among Iraqi civilians. Tragic as these casualties are, their numbers are infinitesimal when compared with losses which inevitably ensue when ground forces are engaged in populated areas. Unfortunately, images of "smart" weapons dropped in Desert Storm seem to have encouraged the general pub-

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**No strategic target anywhere in the world is invulnerable to air attack.**

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lic to believe that wars can be waged without bloodshed or innocent deaths. Comparisons are therefore made with "zero" rather than with other military alternatives. The added attraction of air power is of course the fact that if an aircraft should be lost, one's own casualties are small. If on the other hand ground forces are deployed, the numerical risk of casualties is much greater. Quite apart from any moral considerations, politicians do not like to see large numbers of body bags returning from a politically sensitive commitment.

### **The Impact of Air Power:**

#### **(3) The challenges:**

- Increase responsiveness
- Improve air/ground synergy
- Extend presence
- Adapt to counter terrorism
  - Air defences
  - Surveillance
  - Mini weapons

Challenges remain to air power effectiveness. We must increase responsiveness and improve air-ground synergy, which is very much your concern. Earlier this week, at a conference in the Netherlands, General

Tommy Franks was very proud of the way that such synergy had developed in Afghanistan and Iraq, because as he said, "When I am in command, there's no such thing as an air campaign and a ground campaign. There is just one campaign with the Army and the Air Force working together." That does not happen over night but it is very important and there is a lot of work to be done by air forces and armies to bring it about.

We also must extend "presence", without impairing any desired level of commitment. We must build on the example of the B-52s over Afghanistan, flying in from distant bases and using their endurance to stay in the battlespace for five or six hours. In one aircraft you have the equivalent of the "cab rank" of World War II, when you had large numbers of ground attack Typhoons constantly on call over the battlefield. Now you just have one B-52.

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**Images of "smart" weapons dropped in Desert Storm seem to have encouraged the general public to believe that wars can be waged without bloodshed or innocent deaths. Comparisons are therefore made with "zero" rather than with other military alternatives.**

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Above all we must contribute to counter-terrorism operations. Our air defences must be prepared to react to threats from civilian aircraft. Our surveillance may have to concentrate on activities in our own country. Offensive operations against terrorists or other irregular forces may be required in urban or other locations where innocent people may be close by. Smaller, even more precise and possibly non-lethal weapons will be necessary to restrict civilian casualties and destruction.

### **Asymmetric Confrontation**

Since the Gulf War of 1991, confrontation between the US and friends on the one hand, and a variety of opponents on the other, has been politically, strategically and operationally asymmetric, culminating in the Twin Towers attack of September 2001. Asymmetry is likely to remain a dominant feature in international security for the foreseeable future.

### **Asymmetric Confrontation**

#### **(1) Political:**

Gulf War:	voluntary UN coalition vs totally committed Saddam
Bosnia:	voluntary, temporary coalition vs ethnic groups fighting for survival or domination
Chechnya:	Issues critical to both sides: no compromise
Kosovo:	uncertain NATO coalition vs totally committed Milosovic
Twin Towers:	US vs international terrorists: no compromise
Afghanistan:	US and partners vs Taliban and al-Qaida
Iraq:	US and partners vs Saddam Hussein regime
Iraq today:	US and partners vs irregular coalition. What compromise?

At the political level, in the Gulf War, Bosnia and Kosovo, voluntary coalitions pursued limited interests against opponents with a much greater stake in the outcome of the conflicts. In Chechnya, on the other hand, both sides still consider their interests too vital to compromise. After the Twin Towers tragedy, the United States perceives a fundamental threat to its security from international terrorists who themselves are totally uncompromising.

Subsequently, in Afghanistan and Iraq, regional issues have become caught up in the wider conflict. The Taliban and Saddam Hussein's regime were overthrown, but terrorist activities persist.

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**Asymmetry is likely to remain a dominant feature in international security for the foreseeable future.**

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One can now see that the attack on the Twin Towers changed the asymmetric political basis of conflict in the last decade, with both sides perceiving vital interests to be at stake. Nonetheless, the strategies and tactics remain very different on each side.

## Asymmetric Confrontation

### (2) Strategic:

*Despite very different circumstances, there has also been a consistent asymmetry between the strategies of the US led coalitions and their opponents.*

Gulf War:	Air vs mother of all battles
Bosnia:	Air vs conventional ground
Chechnya:	Combined arms vs attrition and guerrilla
Kosovo:	Air vs dispersed, repressive ground forces
Afghanistan:	Air-ground synergy vs un-coordinated ground forces
Iraq:	Blitzkrieg vs conventional and irregular ground forces
Iraq today:	Conventional ground and air vs terror and guerrilla

Despite changing political circumstances there has been a consistent asymmetry between the strategies of the US led coalitions and their opponents. In the Gulf War, in Bosnia, in Kosovo and in Afghanistan, air power was either the sole or the major enabling force used against ground troops. In Chechnya air power and all other Russian armed forces failed in the face of guerrilla opposition drawing upon popular support. In Iraq in 2003, the synergy developed in Afghanistan was increased to cre-

In each case there were different strategies on each side. Opponents of the US and its friends were trying first to reduce the effectiveness of air power and then finding ways of striking back avoiding superior conventional forces altogether by using irregular forces and terror.

## Asymmetric Confrontation

### (3) Operational: opposing the superpower

Gulf War:	SCUD, SAM, deception, concealment, diversion, media
Bosnia:	SAM, deception, concealment, mobility, media, terror
Chechnya:	media, irregular, SAM, evasion, ambush, terror
Kosovo:	media, SAM, concealment, mobility, dispersal, terror
Twin Towers:	strategic terrorist attack, media
Afghanistan:	dispersal, irregular, concealment, mobility, terror
Iraq:	media, irregular, SAM, evasion, ambush, terror
Iraq today:	terror, media



**Ethnic Terror – the evidence: Mass graves near Izbica, 17 April, 1999.** Photo: NATO

ate the blitzkrieg against conventional and irregular ground forces.

The evolution of the asymmetric operations which flowed from the two prevailing strategies can be clearly traced. In the Gulf War Saddam sought to reduce the impact of coalition air power by conventional means: SAMs, deception, mobility, concealment and dispersal. But he also took asymmetry a stage further by using SCUDS against Israel and by attempting, not very successfully, to manipulate the media.

In Bosnia, coalition forces were met with similar but more sophisticated tactics from the Serbs, but with the addition of inter-ethnic terror. The Chechens are very quick to provide media access. In the first two years of the campaign virtually the only stories coming out of Chechnya were of terror and brutality by the Russian, and nobody believed the Russians at all. The Chechens used traditional guerrilla tactics of ambush and evasion, reinforced by SAM and electronic deception. They also struck by terrorist attacks on civilian and military targets in Russia itself. Unfortunately, no attention was paid to events in Chechnya in US planning for Afghanistan and Iraq 2003.

In Kosovo, the US improved its bombing effectiveness while the Serbs perfected their conventional and irregular responses, including careful control of radar and other vulnerable electronic emissions. Swift Serb media access frequently wrong footed NATO HQ, while ethnic terrorism was again present.

In the Twin Towers attack there is total asymmetry. A strategic terrorist attack publicised round the world by our own media. In Afghanistan, dispersal, concealment, and mobility were present, but little media access, largely because of American control. In Iraq we have seen combined coalition arms met by both conventional responses (dispersal, concealment, mobility), and

irregular forces. Now there is a mixture of guerrilla attack and indiscriminate terror very reminiscent of the Chechen response to the Russian occupying forces.

And so we have a transformation of war which was not just brought about by American Air Power but by responses to it, thereby creating a totally different kind of confrontation.

### Humanitarian Concerns

The transformation has been complicated by humanitarian considerations. They have arisen partly from reasons for intervention, partly from association with the United Nations, partly because of the presence of civilian agencies and partly because of international publicity which increases sensitivity to casualties of all kinds. If intervention in a country is designed to improve the lot of the civilians who are there, it is not good to have images of dead civilians, or flattened towns and villages.

### The International Media

The days are long gone when a dispatch from a 19<sup>th</sup> Century war could take six weeks to get back to London, and then would appear in one or two newspapers which few people would read. Yesterday at seven o'clock in the morning, two bombs exploded in Istanbul. Three hours later the Bush-Blair conference was dominated by those two bombs. Nor does the West any longer have an international media monopoly. Populations in the Middle East for example are more likely to rely on local networks such as Al Ghezeira. The media presence is exceptionally important in conflicts where governments have to enlist and sustain public support. Then, the difference



**The media campaign: Clark, Solana and Holbrooke trying to get NATO's story across.**

Photo: NATO

between success and failure, even on a daily basis, becomes very politically sensitive.

Collateral damage and civilian casualties make good copy. You may seek to control your own media but unless you control the territory you will not control anyone else's. I would call this instant reporting. By the time the combat report from the company commander has got back to headquarters, the incident may have already appeared on the international world's screens, which makes it difficult for military authorities to respond. Such circumstances will continue, with the added complication that TV images lend themselves particularly well to traditional skills of manipulative propaganda.

#### ***Coalitions of the Willing***

The US has built coalitions in all the wars of the last decade. If the Swiss armed forces, including the Air Force, were to join a coalition, their equipment and procedures would need to be interoperable or compatible. More important however would be the need to ensure compatibility in imperatives: objectives, values and strategies. It was in this area that the NATO operation in Kosovo came under the greatest strain. Preparation for coalition cooperation in war must begin in peacetime, with joint training, exchange tours of duty at all rank levels, frequent attendance at international

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**In conflicts where governments have to enlist and sustain public support, the difference between success and failure, even on a daily basis, becomes very sensitive politically.**

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seminars and conferences, study of the armed forces of the potential partners and frequent visits. These peacetime activities are not optional extras but essential to enhance coalition cooperation in war.

But I did say and I reminded you that we are talking about equipment and procedures but more important is that we identify common values, common objectives, and common strategies. They are based on joint training, joint experience and particularly on study.

How compatible are those activities with traditional Swiss positions on international security and national defence?

#### ***The Pacification of Europe***

Swiss neutrality since 1815 has been based on assumptions of hostility and turbulence around its frontiers. The position has been one of self-reliance and non-involvement. But what has happened to Europe in the last decade? NATO has expanded from an organisation primarily

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**Swiss neutrality since 1815 has been based on assumptions of hostility and turbulence around your frontiers. The position has been one of self-reliance and non-involvement.**

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designed for war fighting to one which is regarded even by Russia as a contributor to peace and stability in the region around Switzerland. The Serbian Defence Minister has announced his intention of taking Serbia into the Partnership for Peace and ultimately into NATO.

The enlarged EU is seeking to align security and economic co-operation, thereby reducing further the likelihood of war. The presence of the OSCE, the eclipse of Russia plus containment in the Balkans are additional factors which, I suggest, could perhaps stimulate a reevaluation of potential threat, risk, insecurity and interests in Switzerland.

And that brings me to a conclusion. I find it very difficult now to envisage a traditional conventional conflict in Europe which would threaten the territorial security and integrity of Switzerland. Now that is a controversial statement, which I hope you will pick up in the discussion. But that is what that aggregate of features leaves me to conclude.

The last feature, common to everybody, is government reluctance on defence expenditure. In all European countries, expenditure on defence has been reduced in the last decade as previous perceived threats have dissolved. Yet participation in conflicts consumes resources and shortens the life of

surviving equipment and systems. So much so that after a total defence policy reappraisal just two years ago the UK is going to have another defence white paper policy statement before the end of this year. [2003, available through [www.mod.uk.gov](http://www.mod.uk.gov)] Funding for re-equipment and restructuring to meet changed circumstances is likely to be drawn from existing or even reduced budgets. So, if we are going to rethink we are not going to have any more resources to do it with.

## **The Implications for Swiss Air Power**

### **Coalition Cooperation**

I am suggesting that enduring features of early twenty-first century conflict, in which Swiss interests and Swiss Air Power may be involved, are already clearly recognisable. They stimulate three questions:

(1) How far would Switzerland ever consider joining a coalition? I noticed that in the roles of your Armed Forces and the statement of defence policy the interests of Switzerland are broad and are obviously of great importance. While I was preparing this presentation, there was the tragedy of the destruction of the Red Cross building in Iraq. I wondered what the response was in Switzerland?

(2) Why should you consider coalition cooperation? Switzerland is far too small to defend her own airspace. A modern bomber could launch a weapon from one side of your country to hit a target at the other. It could hit your territory from anywhere

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**The presence of the OSCE and the eclipse of Russia plus containment in the Balkans are factors which could stimulate a reevaluation of potential threat, risk, insecurity and interests in Switzerland.**

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from long distances outside. For a long time Swiss airspace has been difficult to control and patrol properly and totally from within Switzerland. We have already seen that international terrorism is constrained neither by frontiers nor by innocence.

(3) How to contribute to international peace and stability? There are three obvious possibilities: by providing complementary specialist units; interoperable support forces (I know that you have volunteers e.g. in Kosovo, who are providing interoperable logistics support services); and by interoperable combat forces. For example, in the most likely scenarios prompting Swiss forces to join a coalition, even a small number of aircraft could make a significant contri-



Chemical Ali's trade: Gasing Kurdish women and children at Halabja, 1988.

Photos: Archive

bution by providing air cover for humanitarian activities, for UN detachments or for any other coalition ground forces. At a later stage, offensive support operations might be feasible.

### Force Structure

Finally, those considerations suggest that a number of issues are worthy of study by the Swiss Air Force itself.

For example, is it timely to have an overall review of air defence assets consistent with retaining command of Swiss air space? Should combat air patrols be extended? I know that the Tornado F.3s which are currently patrolling over London are not landing and taking off every fifty minutes. They are getting airborne and they are staying airborne for up to four, five, or even eight hours sometimes, re-fuelled by tankers from their base at Brize Norton. So instead of needing eight, ten or twelve fighters you are using the same two, with the same aircrew and reducing the maintenance requirements from landings and take offs.

Traditionally surface to air defence units have been deployed around military targets, but targets may no longer be just military. We are now thinking about how to protect locations such as nuclear power stations from terrorist attacks. Haphazard and unpredictable deployment of air defence assets introduces uncertainty into terrorist planning and increases public confidence.

Could air defence squadrons become multi-role? This is obviously much more contentious, but if at some time in the future your F-18s were to become multi-role, perhaps first of all it could be for reconnaissance, which is a very scarce asset in Europe. Then perhaps at a later stage deliver air-to-ground missile.

If there is no longer an external conventional threat, could you perhaps risk putting more units on fewer bases, close others and save money and manpower?

Could you, or indeed must you, co-locate ground and air headquarters? Joint service operations require unified headquarters. Britain has learned this lesson slowly but finally we now have joint combat head-

quarters which mastermind all operations whether they are air-lead, sea-lead or ground-lead.

If you do consider playing a larger role in coalition operations, could external commitments no longer be voluntary? I understand that your external commitments are at present discharged by volunteers. Would that ever change?

Would it be consistent with the Swiss cultural military tradition to change the proportions of conscripts and regulars?

I find it very difficult now to envisage  
a traditional conventional conflict  
in Europe which would threaten  
the territorial security and integrity  
of Switzerland.

And finally, many of the world's air forces are examining the utility of UAV, especially for surveillance and reconnaissance. As with manned aircraft, long range can be adapted to long endurance over shorter distances. They are widely used for both military and civilian tasks.

### Procurement Priorities

If you ask those questions, I would suggest that the combination of political sensitivities, options and constraints suggests a need for procurement priorities which confer the greatest operational flexibility and operational cost effectiveness. No more money, but perhaps more complex responsibilities.

Secure networked communications, air transport for internal and external mobility, air-to-air re-fuelling for extended air defence and external range and UAV would enhance internal security against terrorist threats and coalition contributions. Priority to be afforded to the addition of air-to-ground capability to air defence fighters with all-weather precision guided munitions would however be determined solely by policy on external commitments.

In sum, the challenge facing the Swiss Air Force is to respond to the changed circumstances of 21<sup>st</sup> century warfare while preserving its historical responsibility to Swiss national integrity. Such procurement priorities would exploit the flexibility inherent in Air Power, in synergy with ground forces, to offer a Swiss government options of refraining from or making a valuable contribution to international security operations.

May I leave you with one final thought? In a democracy, your armed services, my armed services, the American armed services; the Dutch, the Belgian, the Canadians: in all those democratic societies, armed forces depend on three things for their continued existence:

(1) the understanding by the democratic general public of our contribution to its security,

(2) the support of the democratic general public, otherwise no politician is going to give us the resources we need,

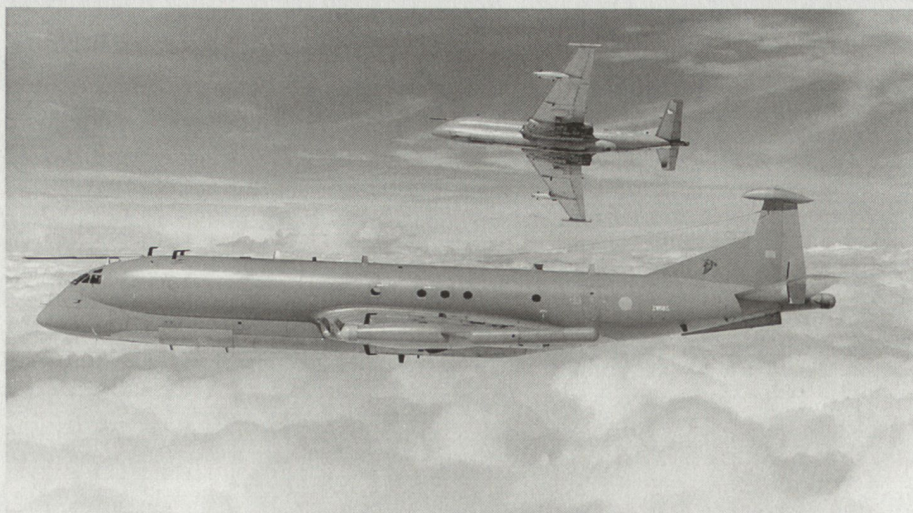
(3) above all, the respect of the general public. Without that respect, we will not recruit and retain the men and women of the calibre whom we need both now and in the future.

So we must ensure that any recommendation, changes in force structure and roles are fully understood, supported and respected by our people. In some cases, that may be a delicate task.

I look forward to our discussion.

### Question and Answer Session with Prof. Tony Mason

We [Switzerland] joined the UN two years ago, and with this intervention [Operation IRAQI FREEDOM/Telic] about 50 years of UN history has been thrown away. We've been trying to explain to the public for a long time that the UN is the solution to international crisis and disputes. The present intervention of the American and British Coalition forces has thrown down all multi-lateral



**Listening for you! The still secrecy-shrouded Nimrod R.1 SIGINT platform.**

Photo: Royal Air Force, Crown Copyright

### **forward going international diplomacy. What do you think of the ongoing intervention in Iraq?**

I never had the slightest qualm or doubt about the correctness, legality, and objectivity of British defence policy. Whether it was the Gulf, whether it was Bosnia, whether it was Kosovo, until March this year [2003]. Some of you may be very familiar with a famous saying by an American general, Omar Bradley, from the time of the Korean War: This is the wrong war at the wrong time against the wrong people for the wrong reason. Because he knew that the real enemy was Russia, not North Korea.

### **This is the wrong war at the wrong time against the wrong people for the wrong reason.**

My views, and they are held by a very large number of retired senior officers, all of us Cold War warriors, were exactly the same. We were sceptical about the immediate presence of weapons of mass destruction, we were sceptical about the link between al-Qaida and Iraq, we felt that Saddam Hussein was a really bad guy and the world would be a better place without him if you could get rid of him. We felt that the reasons given by George Bush senior in 1991 and interestingly then Secretary of Defence Dick Cheney that if we were going to go to Baghdad we were going to be involved in a quagmire, were just as valid. We felt that our already over-stretched intelligence resources, trying to catch the real enemy al-Qaida were being even more stretched if we focus on Iraq. Al-Qaida as an international – as it appeared to be – Muslim-grounded organisation had to be dealt with like any terrorist organisation whether it is international or in Northern Ireland. On one hand you get your intelligence and go and kill the real bad guys at the same time as you are working to take away the reasons for popular support and

bring the population on your side. You don't need a textbook, you don't need a staff college to see that; it is basic common sense. And therefore you need to have very very good reasons for going after Saddam at this time.

My own view was that he was going to continue to duck, dodge, and weave, and create nasty things for the Iraqi people. And if you have the evidence – show it! If you know where the weapons are, send in the United Nations inspectors to find them! And you're seeing now the way I'm thinking. I have confidence that with a fair amount of blood on the carpet the United Nations will re-emerge, probably even stronger as a result of this because I think we've seen the first steps these first few weeks with President Bush bringing forward the date of Iraqi elections. He has got his face to lose, he has got all the political votes to lose, somehow or other he has got to bring the UN back on board. So I hope your faith in the United Nations will be justified. Having said that, the United Nations is only as strong, as the big powers who support it. And some members, particularly France and Germany, did not exactly cover themselves in glory this last year

### **I hope the eclipse of the UN will not be permanent.**

at the time of the United Nations debate. They did not make it really very easy: 'We are not going to war on any circumstances' said Germany. France just disagrees with everything because it is American. I'm being cynical now, but your fundamental point is an important one; my bottom line is that I hope the eclipse of the UN will not permanent.

### **Do you think that Air Power is the best way to fight against terrorism?**

No, Air Power is not the best way to fight against terrorism. But Air Power has made and must make a major contribution to the

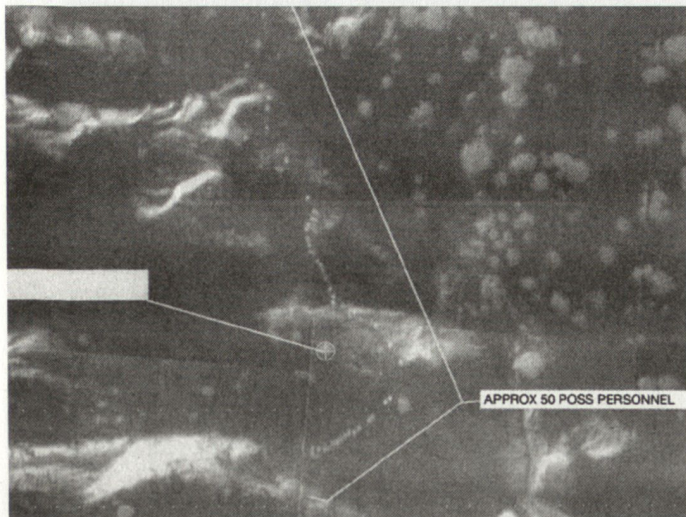
fight against terrorism. E.g. a few months ago now [November 2003] the RAF put one of its few hitherto highly secret electronic intelligence aircraft (Nimrod R.1) over London. This sent a very clear message to the bad guys: if you use your mobiles sometime, you are in trouble, because we'll fix [locate] you. So the serious answer is: you go after the fanatics who what ever agreements are reached will continue to bomb. They must be removed, one way or the other. Just as in Ireland, even now, there is still a handful of fanatics who will – or would if they could – bomb. We have reached a situation, albeit on a much smaller scale, where the vast majority of the population now understand the policy, they know we [the UK] are trying to get out and they know that we want to help them live their own lives. You have got the emer-

### **The first contribution of Air Power is to provide intelligence, it is to sow uncertainty in the minds of the terrorists.**

gence of two prime time terrorists in Gerry Adams and Martin McGuinness as political leaders. And this is a problem of political process and very careful military ground force handling. You have very skilful British troops right down to the level of the private and corporal who are trying their best not to repeat the tragic circumstances we had in 1969, when untrained paratroops were not as clever as they would have been thirty years later. The first contribution of Air Power is to provide intelligence, it is to sow uncertainty in the minds of the terrorists.

Let us just assume that until six months ago, the terrorists were planning to hijack an airliner and bring it into London as a present to President Bush [on his November state visit to the UK]. They now know, that our radars are looking for them, they now know that we have got armed F3s [Tornado F3 interceptor variant] either on stand-by or on combat air patrol and they would be very unlikely to succeed. That is the element of uncertainty. So Air Power is contributing to the military uncertainty.

Terrorists look for a soft target, but there may be mobile air defences. They were not there last week, but they are there this week. They cannot anticipate where those air defences will be in six weeks time. They cannot plan without uncertainty. And then of course, you have the development of rapid, rapid intelligence back to sensors and shooters. At the moment, I think two weeks ago, the United States pulled out the GLOBAL HAWK UAV from Iraq. Why? Because the GLOBAL HAWK cannot detect small details like whether some con-



**Big Brother is watching you: GLOBAL HAWKS infrared view of a US Marine Corps platoon on patrol in Afghanistan.**

Photo: USAF

crete or roadway has just been disturbed, which is what you are looking for if you wish to send a convoy down that road in half an hour's time. You do not want to know where the enemy were at ten o'clock when you go there at twenty past ten, you want to know whether they are at that road side or not. At the moment an Army would tend to use its own UAVs for its reconnaissance because reconnaissance patrols on the ground themselves can be ambushed.

So the next stage in Air Power reconnaissance is extended reconnaissance, manned or unmanned, which can be used much more closely with units. And then, of course, the final thing, is when the bad guys are seen to be assembling, perhaps in an urban ambush, you want an instant call for firepower. You may not have time to realign

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**The challenge there is to develop this kind of small precise munition, this kind of reconnaissance, this kind of instant reaction.**

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artillery: you may not have artillery there. You may in fact have a group of people in ambush fifty yards or even twenty yards away. You then need an air-launched weapon, a small mini-weapon, to take out perhaps five or six terrorists and leave the rest of the village untouched. So that is what I meant when I said the challenge there is to develop this kind of small precise munition, this kind of reconnaissance, this kind of instant reaction. That Air Power can generate synergy with ground forces, synergy with security forces, synergy with air defence forces.

**(LtCol Paddy Bangham, British Defence Attaché, Berne)**

**Sir, can I challenge your views on the advent of terrorism. On one of your slides, when you showed the fighting chronology, starting with the Cold War, there is a gradual escalation to the situation where terror comes**

**into it half way down. Can I suggest, that Northern Ireland which kicked off in the Sixties taught us all a lesson that terror was seen to be an effective weapon thirty years prior to the end of the Cold War.**

Thank you, Paddy. Now that is a very valid point but there are many differences between the circumstances of Northern Ireland and Iraq. Comparative size; the fact that we all speak the same language; the fact that right from the start a large part of the population really wanted to see political settlement. We changed our policy. We have ultimately made a very efficient response, and you heard my tribute to our army. The policies which we are seeing either in Iraq now originated in the back streets of Londonderry. We developed them in Bosnia and Kosovo. We know that fighting, humanitarian activity and politics are parts of the same thing. And that seems to me to be the essential requirement for a war on terror. And indeed it is not new. I studied terrorism in the Philippines and Che Guevara in Latin America a generation ago. Terror has been there for a long time. What I was plotting this afternoon were simply the events of the last decade.

**(LtCol Paddy Bangham, British Defence Attaché, Berne)**

**Can I follow up with a related question, one which is relevant to the Swiss defence policy? At the moment, membership of a multilateral defence organisation is not a proposition for Switzerland for many reasons. And it is pursuing the policy of unilateral accords with its neighbours and other countries as well. Can this be as effective in the long run?**

Thank you for that. That is a topic that came up last night over supper and again this lunchtime. My first point is a negative one: ideally you go into a war in an alliance, where everybody agrees about the objective, the strategy and the tactics. Unfortunately, life is not like that. An expression which has been used increasingly in the last decade is the expression "coalition of the willing". That is fine, but you never know

who is going to turn up on the day. And if you have to rely on country x's maritime aircraft and its prime ministers says: "Sorry, we are not participating," suddenly there is a gap. But what has been happening – and what I think has been an enormous advantage to Switzerland – is that there have been good cooperative activities, e.g. in Evian, where French aircraft came to Swiss bases, where as a matter of course, Swiss aircraft fly backwards and forwards across the borders in peacetime exercises with the French Air Force. When the Swiss Air Force wishes to conduct large scale air to air exercises, which are very costly and simply impossible to conduct in Swiss air space,

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**Without any kind of formal relationship the Swiss Air Force is already building up a degree of interoperability.**

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they come across to one of my old bases, to RAF Waddington, and they fly in a British environment. They fly with or against British and other NATO aircrews. So, without any kind of formal relationship the Swiss Air Force is already building up a degree of interoperability which – if at any time the Swiss government would decide that there was a problem, which would in the interest of Switzerland to participate for humanitarian reasons, I could for example envisage co-operative air defence providing air cover to protect humanitarian operations. Now in one sense this is in the finest Swiss tradition of protecting humanitarian interests, isn't it? Now you are doing that sort of activity without any kind of formal alliance but by day to day interoperability you are

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**The problems in coalitions this last decade have not been between armed forces, they have been between politicians and the choice of strategy...**

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creating circumstances in which you can participate if the government wishes to do so.

The problems in coalitions this last decade have not been between armed forces, they have been between politicians and the choice of strategy, because the American way of war was not necessarily the way of war other people would join in. If the armed services, by study, by exchanges, by visits, could come to understand what makes other countries tick, why they do what they do, then any degree of interoperability is actually eased.

We come back time and time again to public support for that kind of position, in a situation where there are some humanitarian circumstances, perhaps, on the edge of Europe or elsewhere, in which the Swiss government perceives a possibility and indeed an interest in helping. And the Swiss prime minister of the day calls the Chief of the Defence Staff and asks him: is there anything the military can do? And the purple three star says: Yes, we can provide air cover, we have got some specialist units which are no longer volunteers, they are ready and prepared to go and help, we have got some special forces, who can provide protection on the ground or in a humanitarian cause which do not infringe upon Swiss neutrality at all but actions which are consistent with traditional Swiss positions and in no way involve joining any international organisation.

**I have a question on interoperability. We hear a lot about the topic in this building. My question is: In what direction is NATO's interoperability going since we are reading more and more about a technology gap and the extension of NATO to ten new countries.**

This is a very difficult question to answer diplomatically. I can do no better than to paraphrase the words of Lord Robertson, the currently retiring NATO secretary general, a few months ago when he outlined and emphasised the increasing technological gap between the different members of NATO, i.e. the United States and the rest; and the need for greater interoperability. I have lived with interoperability and associated problems for over 30 years in the Royal Air Force. We have been talking about interoperability in NATO since at least 1960. What has happened since then, is

that the technology gap between the United States and everybody else has widened. Partly because of the United States' reformation since 1990, and partly because of the declining defence expenditure and the failure to realign force structures within NATO itself. That was what led me to use those examples I put on the screen. Can we talk to each other securely? In terms of capital expenditure that is comparatively small. But you can actually do things differently with different weapons if you know

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Secure network communications  
would be my prime concentration in  
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who is doing what, where and when. Secure network communications would be my prime concentration in interoperability. In flight refuelling tankers which refuelled Swiss aircraft, could refuel French or even United States aircraft. The United States Navy could not have participated in Afghanistan as it did, without Royal Air Force tankers. And then you could consider transport, which could not only lift Swiss special forces, but British or other nations' special forces.

You are looking for interfaces, rather than for actually dovetailing of systems. Can these existing systems be put together? And if you start looking at interoperability like that then you don't have the same industrial problems in for example buying identical aircraft.

The short answer: Interoperability is still a serious problem in NATO; there may be

a glimmer of hope in that people are now looking at cheaper ways of interconnectivity rather than insisting as in the past we all bought the same equipment.

**I would like to go back to one point you made about Chechnya. You said that the Russian Air Force was quite ineffective in Chechnya. Is there any lesson for the Swiss Air Force in that?**

None! The view from the West about the Chechnyan campaign was accurate but it was totally incomplete. The Russian Air Force went into Chechnya badly trained. A NATO pilot would usually fly about 180 combat related hours of training a year, the Russian Air Force pilots would log 10 or 15 hours a year when they went into Chechnya. They only had a handful of precision weapons, the aircrew who were used initially were largely instructor pilots from the Operational Conversion Units with little experience of flying together and no experience of working with ground troops. They were ill disciplined, ill trained and they had further problems since both sides were using the same tanks and other equipment. There were some hilarious exchanges, where e.g. a Russian says: "Hey guys, there are 10 T-72 tanks down in that market square, go and get them!" The conscript Russian tank commander with no means of communication was just sitting there and being blown apart by his own aircraft. There was no air-ground synergy, poor communications, bad training. The Chechens, who do not care how many civilians are killed, would occupy the third or fourth floor of an occupied apartment block in Grozny and wait for the Russian tanks to come down the street. Hit the first one, hit the last one and take out the others with RPGs from upper storey windows. The tanks could not elevate their guns that far. They knew where they were fired at from and fired into the ground and first floors, where the civilians were.

There was a total breakdown of co-ordination, failure of communications. It was very difficult in the first two or three years to see, what exactly was happening. The Chechens made absolutely sure that the unauthorised Western media were taken everywhere and shown all the battle damage and all the casualties. So, what could the Russians do? They couldn't begin again. They didn't even try to discriminate, they would simply tell civilians to leave a particular area. If they did, fine, but if they didn't the village or town was destroyed anyway.

So are there any lessons in that for the Swiss Air Force at all? If you are going to use Air Power in any kind of urban surroundings, or in any area where a large part of the population is undecided whether they support you or the opposition, you must make very sure that the people you



Grosny [the terrible in Russian] honours its name these days.

Photo: Archive



European dreams on the drawingboard: The A400 heavy transport set in an Afghan scene.

Photo: Airbus

are killing are the bad guys and avoid both innocent casualties and collateral damage; because otherwise you will be counter-productive.

Unfortunately the West did not look at Chechnya. I thought about this the other night when I had the opportunity to ask General Franks if the coalition in Iraq had studied Chechnya at all? The answer was "No". It should have been no surprise that the Fedayeen in Iraq used the same weapons – RPGs – the same tactics – hit and run – the same terrorist attacks, even to the extent of launching attacks like the IRA: waiting for the rescue forces to come and then using secondary explosions and secondary attacks. Sadly, there are many lessons to be learned from Chechnya.

#### **In which direction will the security policy in Europe and the UK develop in the next 20 years?**

If I could answer that, Captain, I would lay heavy bets on all the races in Europe tomorrow. I think we are in an extremely critical period in the movement of European security, even if there were not the al-Qaida threat. We obviously have forces

**European states have got to be serious about interoperability and funding modern armed forces which can cope with and respond to the new circumstances.**

moving in different directions in search for the European identity. Then you have on the one hand the United States' wish for a greater contribution to NATO under American leadership, which inevitably is influenced by American security policy or

American interpretations. I think a lot depends on what is going to happen in the next twelve months. If the American programme of transferring power to Iraq does go reasonably well, and if the United Nations do in fact come back and play a greater part, then it is not impossible that Bush can argue that he was right all along and that while there were some losses, he is back on track. That would obviously strengthen the United States' influence, particularly in Eastern Europe, where – as you know – the new members of NATO are much more pro-American because they know where their support comes from.

What I am saying is that first of all, I don't know. The second thing I am saying is that we will probably have a clearer idea in twelve months time. If Iraq does turn really badly and seriously sour, in that we have a failed state in twelve months time, then the mood in the UK which at the moment is uneasily divided between looking at the American relationship and Western Europe, will probably swing towards Western Europe and away from the United States. That in turn would strengthen the creation of a European defence identity. But for that to occur, European states have got to be serious about interoperability and funding modern armed forces which can cope with and respond to the new circumstances. I would like to finish on a positive note: I am quite sure that those features I have put up there (asymmetry, etc.) are going to stay with us. And those are the ones and the response to them where any future power centre lies, whether it is divided across the Atlantic or not. What I intend to do is to keep an eye on those features and watch US and European responses to them.

**Do you believe that a Swiss Air Force with militia elements would ever**

**be capable to serve in a Combined operation as you described before or would they have to be professionals?**

I have no doubt whatever, that the militia can make a massive contribution, particularly to lower intensity operations. I sought to explain why it is far less likely in the foreseeable future that either your country or mine will face large scale conflicts. There are significant roles for the US National Guard or the USAF Reserves or even the Royal Air Force Reserves – and there is a very large number of British reserves in Iraq as we speak. The UK reserves

**I have no doubt whatever, that the militia can make a massive contribution, particularly to lower intensity operations.**

are like your militia who have a limited commitment and are only trained for a limited amount of time each year, but they are aware of what the regular forces are doing, they train with the regular forces and they possess the individual skills to come into niche slots and contribute every day. Obviously, militia aircrew would need to sustain a currency which could swiftly be brought up to combat readiness, but in that requirement they would be little different from staff officers who had to refresh before returning to flying units.

Yes. I would argue that the combined impact of the features mentioned previously, would reinforce the value of militia to the Swiss Air Force, provided that terms of service made overseas service compulsory under clearly defined constitutional provisions.

*Thank you very much for your attention. ●*