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EXERCISE/EXERCICE NEW HORIZON

**Restructuring the
German Air Force**

By /par Major Andy Vogler (GAF)

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Restructuring the Luftwaffe



By
Major Andy Vogler
CSC 27
19. April 2001

“I swear to serve with loyalty to the Federal Republic of Germany and to defend the rights and the freedom of the German people.”

The German Armed Forces Oath

INTRODUCTION

Since the collapse of the Warsaw Pact a remarkable paradigm shift has occurred in Europe. Undoubtedly, the possibility of an attack from the East nowadays can be considered remote. Despite the unlikely threat of an East-West conflict¹ the operations tempo within the military forces has increased significantly. More conflicts have emerged since the end of the Cold War. But these conflicts have a different quality of threat. Instead of being tasked with pure home defense a whole variety of tasks are connected to these conflicts. One of such new tasks that have to be fulfilled by the armed forces in Europe are Peace Support Operations (PSOs) which require a higher amount of flexibility compared to the rigid defense of the home country.

Most armed forces in Europe have been designed to fit a conflict between the two super powers, which would have found its fighting grounds in the center of the European continent. Forces were optimized for such a large-scale conflict leaving only little room for flexible operations, which today present the operations of the future. To comply with the new security situation in and around Europe the armed forces have to be restructured.

In contrast to these required changes in structure and equipment of the forces there are some aspects that make the adjustments difficult, if not impossible at all.

After the Cold War the necessity of armed forces was hardly recognized by the public opinion. Nations worldwide have been reducing their military capabilities in

¹ COS German Armed Forces, “Eckwerte fuer die konzeptionelle und planerische Weiterentwicklung der Streitkraefte”, Bonn, May 2000, p. 4

Faced with a further significant reduction in financial resources, the *Luftwaffe* should specialize in a small number of roles if it is to make an effective contribution to future coalition operations.

GERMANY'S NATIONAL SECURITY CONSIDERATIONS

The armed forces of a nation find their origin in the nation's will to protect its sovereignty. Even with a significant change of the threat there will be a minimum requirement for the ability to defend the home country against any outside threat. However, to determine the required self-defense capability this threat has to be analyzed. Once the requirements are determined the forces can be adjusted in strength and capability.

The German Air Force has developed over the years of evolution of the European security situation. This development was not merely based on the predicted threat but also on public support and funding available for the Armed Forces.

The *Luftwaffe* pre and post Cold War. The task and objective of the German Armed Forces and therefore for the German Air Force during the Cold War was, together with NATO allies, to defend its own and allied countries in compliance with article 5 of the NATO Treaty and article V of the treaty of Brussels.² The threat was clearly recognized in the Warsaw Pact and the force's capabilities were oriented to the expected course of action taken by the potential opponent. The German Air Force's strength in personnel in 1998 was 101,394 men. Today the defense situation of Germany has changed remarkably. Germany is surrounded by friendly countries or even allies. After the reunification of Germany and the integration of East German Forces into the German

² Ibid, p. 6

Armed Forces the strength increased to more than 110,000 men but decreased thereafter again to 83,200 in 1994 and even further to 77,400 in 2000.³ This decrease in personnel accustomed Germany's military power to the current defense situation.⁴ The recently published directives of the Minister of Defense and the Chief of Air Staff indicate an even further reduction to 51,850 personnel within the next years.⁵

Like in almost every country in Europe or even world wide the funds available for military power are constantly decreased as well, leaving only little potential to satisfy the needs for modernization that would be required to comply with the newly developed security situation.

In order to adjust to this new situation an independent commission was founded to reform the German Armed Forces. In 2000 this commission suggested a complete restructuring of the forces, including the Command and Control Structure. The equipment of the forces was identified as out-of-date and inadequate for the upcoming tasks facing the military. The maintenance and the sustainment of this equipment were identified as too costly and therefore a renewal of equipment was suggested.⁶ The commission has indicated that the necessary restructuring of the forces will require an average investment of additional 1.5 to 2 billion Can \$ annually.⁷ The COS German Armed Forces suggested that even the amount of 3.4 billion Can \$ investment annually

³ 77,400 soldiers comply with the Air Force Structure 4, which limited the overall strength of the German Armed Forces to 340,000 men. This reduction was a result of the German reunification and was agreed on in the 2+4 negotiations. Air Staff Division I 4, "Air Force Structure 4", Bonn, 1999, p. 8

⁴ Data published by German MOD, Air Force Staff I, Bonn, 2000

⁵ Bundeswehr Website, www.bundeswehr.de, Luftwaffe, "Reform: Kuenftige Struktur der Luftwaffe", 12. December 2000. This number however, might be misleading. The reduction is in part a shift of resources from the Air Force to the "Base of the Armed Forces". Therefore the manpower is not completely disconnected from the Air Force.

⁶ Kommission fuer gemeinsame Sicherheit und Zukunft der Bundeswehr, "Erneuerung von Grund auf", Bonn, 2000, p. 2

⁷ Ibid, p. 6

would be required to re-equip the forces with the necessary systems for future operations.⁸ These would be additional cost and would therefore require an increase of funds, which is unlikely to happen. The only way to reform the Armed Forces without increasing the military budget is in the drastic reduction of the present operating costs.

The expected tasks for the military such as participation in PSOs and Peace Enforcement Operations (PEOs), home and alliance defense and compliance with international obligations and the expected requirements in material were listed. An Air Force of 90 – 100 new generation aircraft, 10 squadrons Ground Based Air Defense (GBAD) and Strategic Air Transport and Air-to-Air-refueling was indicated as sufficient to comply with the mentioned tasks.⁹

The main task of the German Armed Forces still remains primarily the safety of its homeland and the German people, secondarily the defense of Germany and its allies and the contribution to peace and stability in the Euro-Atlantic area, thirdly international security and world peace and fourthly humanitarian missions and disaster relief. These main tasks are subdivided into national and international tasks.

National military requirements. Even though an imminent threat to the own territory of Germany is highly unlikely a variety of military capabilities remains necessary to ensure sovereign operations. These capabilities are developed from the European security situation, which is influenced by proliferation of nuclear, chemical and biological weapon arsenal. Especially in the periphery of Europe the political tensions could lead into military conflicts, which may have a direct impact upon the German

⁸ COS German Armed Forces, “Eckwerte fuer die konzeptionelle und planerische Weiterentwicklung der Streitkraefte”, Bonn, May 2000, p. 45

⁹ Kommission fuer gemeinsame Sicherheit und Zukunft der Bundeswehr, “Erneuerung von Grund auf”, Bonn, 2000, p. 3

defense situation.¹⁰ However, apart from the abilities to approach such challenges a military core capability would be the evacuation of civilian and military personnel, CSAR, Air policing and national, territorial tasks (i.e. military support of other national organizations in catastrophes).¹¹ Aside from sovereignty tasks within national territory and air space a nation has also to be able to extract their personnel from a high threat area like a combat zone or a foreign country during a crisis situation. Since such operations are time critical they can't be left to allied countries. Access to such capabilities has to be possible at all times without relying on other nation's support. Since national defense is still necessary as well certain capabilities have to be kept but they have to be adjusted to the prevailing threat, internal and external.

GERMANY'S INTERNATIONAL SECURITY CONSIDERATIONS

Military conflicts of the future will differ from the predicted threat during the Cold War. The recent conflicts tended to require Peace Support or Peace Enforcement Operation under an international mandate. The Gulf War was a direct result of a given UN mandate and was fought by a coalition. The war in former Yugoslavia was a multilateral operation of NATO forces, although the use of military power was not based on a UN mandate this time.

A military conflict between two belligerents within the western community or a direct attack on a western country can be considered unlikely and the stabilizing effect of NATO and EU is constantly expanded to the East. National defense therefore becomes a more abstract way of defending national interests and projecting values instead of

¹⁰ COS German Armed Forces, "Eckwerte fuer die konzeptionelle und planerische Weiterentwicklung der Streitkraefte", Bonn, May 2000, p. 5

¹¹ Ibid, p. 9

defending ones own soil. Military operations will therefore be a more flexible use of power, within a coalition in a PSO of some kind.¹²

International military commitments. Germany's main effort according to its doctrine still remains national defense. It therefore enforces its commitments to NATO and an article 5 situation. However, NATO was oriented to an East-West conflict. Its foremost endeavor is to defend its members against an outside threat. Although NATO has a remarkable military strength at its disposal it is not optimized for PSOs. Furthermore, the biggest contributor in NATO is the USA. It can be considered unlikely that USA is willing to lead and participate in European scenarios such as former Yugoslavia again due to the significant financial obligation. The political directive indicated by USA is a concept of burden sharing in which more responsibilities have to be taken by other members of the alliance. According to this concept, obligations within Europe have to be solved under European leadership using its own military forces at hand. As the last remaining superpower, it is unlikely for the USA to take over the role of a world police.

Present threat analysis for Europe identifies the Near East, the Balkan and Africa as the most unstable conditions with the highest potential for a military conflict. These conflicts are influenced by factors such as religious, economic and ethnical tensions, emigration and proliferation of Weapons of Mass Destruction (WMD).¹³ Such scenarios would not invoke article V of the NATO treaty since they do not constitute a direct defense situation. It therefore has to be solved within a different coalition. The proximity of such high risk areas to Europe and their distance from the USA makes the

¹² Bruno Thoss, "Vom Kalten Krieg zur deutschen Einheit", Muenchen, 1995, p. 639

¹³ Bundesministerium der Verteidigung, "Die Bundeswehr auf der Schwelle zum 21. Jahrhundert", Bonn, 1999, p. 13

requirement to face a possible crisis situation under European leadership using its own military capabilities. It can also be considered highly unlikely that a country has to solve a crisis unilaterally, like it occurred during the Falkland War.

The European community could either use one of the existing coalitions such as WEU or EU or form an ad hoc coalition from countries with equal interest in a possible crisis area. UN would be able to provide legitimization but doesn't have assigned forces to enforce any mandate it has agreed on. Obligations in terms of military forces are strictly voluntarily.¹⁴ Future conflicts will therefore require a newly defined European identity within a military coalition.¹⁵

ESDI is a new initiative to create a pan European security identity. Common foreign policy appears as the highest challenge in such an undertaking.¹⁶ A scenario that involves competitive interests among allies could make an operation within a coalition difficult. The escalating situation in former Yugoslavia during the ethnic cleansing seemed to oppose NATO's common interests but in fact the coalition did not have the inner strength that might be necessary to overcome conflicting foreign policies.

LUFTWAFFE OF THE FUTURE

Since the *Luftwaffe* was initially tailored to the threat during the Cold War it becomes obvious that its present structure is not customized to the present security situation.

Reforming a structure that has existed since Germany joined the NATO in 1956 presents a demanding challenge that will require a considerable amount of time and resources.

¹⁴ Ibid, p. 17

¹⁵ Volker Ruehe, "Deutschlands Verantwortung", Berlin, 1994, p. 71

¹⁶ Lennart Souchon, "Die Renaissance Europas", Berlin, 1994, p. 246

The new structure of the *Luftwaffe*. In 2000 the German Ministry of Defense has published the intended structure of the German Armed forces and therefore the new structure of the *Luftwaffe*.¹⁷

The most obvious change is the reduction in personnel that has already been previously mentioned.¹⁸ But with the reduction in manpower within the *Luftwaffe* the MOD foresees a more efficient air force by renewing its equipment, which still exists in large numbers but is severely out-dated. Therefore the *Luftwaffe* has to become a smaller but technically highly developed force.

Together with these changes the German Armed Forces will be re-orientated in tasks. The former subdivision of the forces into three categories¹⁹, which allocated only a small part of the Armed Forces as reaction forces, will be obsolete. According to the Ministry of Defense the forces will be structured more flexibly to be able to react faster, to defend German interests worldwide, in coalition together with other allies.²⁰ This new structure will be oriented to the requirements of the new military operations with a main focus on mobility, fast reaction times and force projection. The rigid and inflexible home

¹⁷ The suggested new structure of the German Armed Forces was published by the COS German Armed Forces, "Eckwerte fuer die konzeptionelle und planerische Weiterentwicklung der Streitkraefte", Bonn, May 2000. The reform was granted by the Bundeskabinett 14. June 2000, the Minister of Defense has then indicated his intent of reforming the armed Forces in his speech on 12. October 2000 in Berlin. 29. January 2001 a detailed plan of the future Armed Forces was published by MOD.

¹⁸ The reduction to 51,850 soldiers as part of 285,000 men peace strength was announced by MOD in the detailed plan from 29. January 2001. However, an intended further reduction to 255,000 men was already published in the news. Hans-Juergen Leersch, "Nur noch 255000 Soldaten und neun Monate Wehrdienst", Die Welt, 12. Okt. 2000

¹⁹ The German Armed Forces were divided into three different categories. Military Basic Organization (MBO), Main Defense Forces (MDF) and Reaction Forces. In his speech in Berlin MOD announced that this categorization will change to only two categories. Combat Forces, which will be increased in manpower to 150,000 personnel (almost three times the present strength of the RF) and about 100,000 personnel MBO. The subdivision into RF and MDF will be obsolete in the future.

²⁰ Bundesministerium der Verteidigung, "Die Bundeswehr auf der Schwelle zum 21. Jahrhundert", Bonn, 1999, p. 73. For new structure of German Air Force see Annex

defense will be replaced by a military force that is interoperable with allies and able to operate well outside German territory.

Germany recognizes her obligations to contribute to NATO, EU/WEU, OSCE and UN with its main focus on NATO.²¹ Germany also realizes the necessity to enforce the European Defence Capabilities Initiative (DCI) with its requirements to provide a lead-nation function together with an operations- and a force HQ.

However, the changes in tasks that come along with the newly defined threat analysis is seen as an additional capability that has to be added to the existing tasks.²² Some of these additional tasks that arise from “out of area” operations, such as PSOs, and therefore define the requirements for mobility and force projection are identified as satellite-based reconnaissance and communication, airborne reconnaissance, extended air defense, maritime policing and improvement of transportation capabilities (with emphasis on strategic airlift). Intelligence gathering, C2 and logistics have to be oriented to a wider theater than they were during the Cold War.

The *Luftwaffe* must be able to participate in and sustain two scenarios at once.²³ Personnel and equipment have to be modified to ensure interoperability with allies and to assist task fulfillment.²⁴ According to the MOD personnel reductions will take place until 2006 whilst the major equipment deficits are to be rectified by in 2010.

MOD realizes that conflicts will not be solved on a unilateral basis. Germany therefore underlines the necessity to employ forces within a coalition. Identified key

²¹ COS German Armed Forces, “Eckwerte fuer die konzeptionelle und planerische Weiterentwicklung der Streitkraefte”, Bonn, May 2000, p. 12

²² LtGen Rolf Portz, Chief of the German Air Force, “The Luftwaffe on the Way to the 21st Century”, MILTECH, Bonn 1998, p. 3

²³ COS German Armed Forces, “Eckwerte fuer die konzeptionelle und planerische Weiterentwicklung der Streitkraefte”, Bonn, May 2000, p. 47

²⁴ see additional tasks that arise from “out of area” operations

mission components for the German Air Force hereby are Intelligence Collection and Reconnaissance, Command and Control, Enforcement of Air Sovereignty, Defensive and Offensive Air Operations, Operations against Enemy Ground Forces, Mission Support such as Air Transport, SAR and Air Refueling and Participation in Nuclear Roles.²⁵ For these key mission components additional capabilities are identified, including interoperable Command and Control of combined air power; all-weather, long-range, stand off reconnaissance; extended Air Defense; precision- stand off weaponry; self defense capabilities of aircraft; strategic air transport, including air refueling, and Combat Search and Rescue.²⁶

However, these mission components cover the full spectrum of air operations and do not bear any potential for reduction of costs that would be necessary to re-equip the *Luftwaffe*. Although it is indicated that capabilities, that require an extensive financial effort to sustain, will be shared between allies. For example, one initiative that has been launched by Germany and France is a European air transport command. Other areas identified, where upcoming costs could be split, are reconnaissance (satellite based), Command and Control and cooperation in future arms developments.²⁷ Specialized capabilities would be shared in a way similar to the multinational operation of AWACS.²⁸ MOD does not mention any reduction in the wide variety of military capabilities as an adjustment to the present threat level. Instead of focusing upon the new threat related capability requirements, the CAS has announced that the German Air Force has to “be

²⁵ BMVg FueL I4, “The German Air Force”, Bonn, 2000

²⁶ BMVg FueL II 2, “Aktuelle Aspekte des Haushalts und der Luftwaffenplanung”, Bonn, 2000, p. 5

²⁷ MOD, Speech in Berlin, 12. October 2000

²⁸ Multi-nationalization as burden sharing was suggested by the independent commission for collective security and future of the German Armed Forces. Kommission fuer gemeinsame Sicherheit und Zukunft der Bundeswehr, “Erneuerung von Grund auf”, Bonn, 2000, p. 5

capable of reacting across the entire mission spectrum, from humanitarian assistance and peace-keeping operations to conducting national and alliance defence.”²⁹ To reduce costs the MOD announced a modernization of management, responsible cost-awareness and a “high potential for innovations”.³⁰ This will include a reduction in leadership manpower, a “tight structure in management”, the privatization of some services and the combination of joint capabilities; however, these initiatives appear not to have any significant impact upon the Air Force itself. That said, privatization of services could have a negative impact on the Air Force. Services, when provided by a civilian contractor, bear the danger that military requirements often do not fit civilian contracts. For example, personnel are unlikely available to the same extent like military personnel would be. Especially in times of crisis when personnel-intensive operations will be probably required. In addition, cost of civilian services tends to increase once the monopoly is with the private bidder.

Optimization of the *Luftwaffe* can only be achieved with a broader view of its potential and a closer analysis of capabilities required for task fulfillment.

OPTIMIZATION OF THE LUFTWAFFE

The *Luftwaffe* of the future will have to operate with even more limited financial resources. A careful analysis of security requirements is essential to define military necessities. The fact that military forces will be employed within a coalition, aside from the previously mentioned national considerations, will have to be put into this calculation as well. The security situation in Europe requires a minimum effort for national home defense. Further reductions in funds will make it impossible to preserve proficiency in

²⁹ Deutsche Luftwaffe, “Mission and Tasks of the Luftwaffe”, MILTECH, Bonn 1998, p. 6

³⁰ MOD, speech in Berlin, 12. October 2000

all military roles. Furthermore, no European country would be financially strong enough to conduct a PSO unilaterally.³¹ Since threat analysis, defense effort, structure and operation of the Armed Forces will differ even more between USA and Europe in the future³² it can also be excluded that the USA will take on the lead role or participate at all in a future European scenario. The technological gap between the remaining super power and the rest of the world makes interoperability almost impossible. Aside of this fact the internal political pressure in the USA makes military operations without a clear and precise national interest more unlikely.

Given then that operations will be conducted by European coalitions, their military capabilities would have to be adequate to solve any upcoming conflict with European interests. However, most nations have the same military capabilities, which usually are customized for home defense and could be identified as military core capabilities. These capabilities would probably not sufficiently suit the tasks, which can be expected during PSOs. These operations require different, mostly special capabilities like “out of area” force projection, Intelligence–Surveillance-Reconnaissance (ISR), air transport, EW, which only very few countries worldwide are able to afford in the required extent. However, if the forces available in Europe were specialized, the different capabilities of contributing nations could be put together to meet the requirements of specific operations.

Such specialized aspects, including Electronic Warfare (EW) or Tactical Air Reconnaissance (TAR) can presently only be covered by few countries. Other force

³¹ Kommission fuer gemeinsame Sicherheit und Zukunft der Bundeswehr, “Erneuerung von Grund auf”, Bonn, 2000, p. 6

³² Michael Stuermer, “Die Grenzen der NATO”, Die Welt, 05. February 2001, Forum

multipliers, such as Air-to-Air-tankers, Strategic Airlift and AWACS, are available but remain critical resources. These capabilities are costly, often require expensive equipment and/or specialized training and therefore can't be afforded by most countries.

The need for restructuring forces does not apply to Germany alone. Most of the European countries are currently reforming their military forces. If this effort could be coordinated a maximum effect could be achieved.³³ The new security situation in Europe offers an opportunity for an optimized and coordinated effort for restructuring the Armed Forces all over Europe. This extraordinary potential, however, has to be recognized, political barriers have to be overcome, and a unified security identity has to be achieved.

Political alliances have to be attained first to encourage countries to participate in the "collective security" concept. The European security identity will have to be strongly developed to persuade member nations to give up some military capabilities in order to specialize in others.

United Nations of Europe. A collective security policy can only grow from collective interests, and collective military capabilities will in turn require a common foreign policy. Within the European continent, national interests seem to develop into broader definitions of interests. Conflict potential in East Europe, external economic competition, nuclear proliferation, and international terrorism and crime binds European countries of equal interests. The European Union (EU) is a major step into this direction. Initiated primarily as an economic alliance, it also provides a foundation for further cooperation. At the present time the military potential of the EU has yet to come to fruition. It may be argued that other organizations created during the Cold War, such as the WEU, may not

³³ Kommission fuer gemeinsame Sicherheit und Zukunft der Bundeswehr, "Erneuerung von Grund auf", Bonn, 2000, p. 6

embody the potential to develop a common defense policy. However, the end of the Cold War has left NATO successful but without a future task. With its main focus on Europe and its security requirements, a European Defense Organization could be complementary to NATO. The EU, as the strongest of all the European alliances, is the beginning of this development. The economic potential of this organization has proven to be attractive to other nations, who are trying to join. Peace, security, protection of human rights are values that are increasingly adopted by other nations in East Europe as well. Success makes the idea of the United Nations of Europe a “self-fulfilling prophecy”³⁴

Part of the Team. National defense considerations will require attainment of core capabilities for a variety of military tasks. To the German Air Force this means the capability to ensure sovereignty of national airspace. Although the invasion of this space is unlikely, it is a question of national will to remain capable of protecting one’s own sovereignty. Other capabilities that have to be incorporated into the future Air Force are Search and Rescue (unarmed and armed) and Evacuation and Extraction of personnel in a crisis situation. These tasks have a purely defensive nature and offer very little potential for reduction. Offensive tasks, however, bear more potential.

Germany puts special emphasis on its Air Force, since it allows concentration of firepower, flexibility, quick reaction times, and day and night operations.³⁵ However, in order to achieve a complete coverage of military tasks within a coalition, existing niches in military capabilities European-wide have to be analyzed. In seeking to establish roles in which the *Luftwaffe* might specialize, it is worth noting that the main contribution of

³⁴ Lennart Souchon, “Die Renaissance Europas”, Berlin, 1994, p. 255

³⁵ Bundeswehr Website, www.bundeswehr.de, Luftwaffe, “Reform: Kuenftige Struktur der Luftwaffe”, 10. April 2000

the German Air Force during the Kosovo operation was in Suppression of Enemy Air Defense (SEAD) and TAR. Another specialized capability that will be available to the German Air Force with the modernization of the GBAD is Theatre Missile Defense (TMD), which will increase in value as proliferation of weapons of mass-destruction continues.

To maximize savings and so free funds for the fastest possible re-equipping of the German Air Force, present capabilities have to be analyzed and coordinated with other European nations. Future specialized capabilities could be developed from existing foundations. Is a capability already acquired by a country, like SEAD and TAR for Germany, it can be refined and further developed. Other capabilities, which do not exist in the European coalition yet, have to be newly developed.

Aside from SEAD and TAR other tasks are of equal importance when conducting PSOs. The operation in the Gulf War and in the former Yugoslavia have underlined the essential value of Precision Guided Weapons (PGM), Electronic Warfare (EW) and Air-to-Air Refueling (AAR). Using PGM as an example, this capability already exists in the Royal Air Force, making the RAF preferably responsible for this capability rather than introducing this task to the German Air Force. Precision strike could therefore be contributed to a European operation by the Royal Air Force. The *Luftwaffe* could undergo a substantial reduction in Air-to-Ground tasks and contribute SEAD and TAR. The German TORNADO fleet could be reduced in numbers and specialized in TAR and EW, which would allow substantial cost reduction in a short period of time. Cost reduction in turn would free resources to renew the *Luftwaffe's* equipment to optimize for the contributions that are within German responsibility. The TAR and EW tasks could be

later taken over by the 20 dual seat Eurofighters making a costly replacement for the TORNADO as Ground-attack aircraft unnecessary, which again would reduce consumption of funds significantly.

CONCLUSION

Analyzing the European threat situation the force structure of Europe bears potential for optimization. Since a direct attack upon one of these countries seems to be highly unlikely, the German Armed Forces, which were developed during the Cold War, need to be reformed. Taking the German Air Force, which was optimized for a conflict between NATO and the Warsaw Pact, as example, how it could be adjusted to fit the new defense situation, this essay has proven that a coordinated effort within the European community bears the potential of optimizing resources by specializing the military forces. The financial situation in Europe stands in direct competition to the necessity of an expensive restructuring of the forces. In order to optimize the German Air Force for future operations several factors have to be considered.

The most significant impact upon the future structure of the German Air Force is the planned reduction in personnel. This will have an immediate and direct impact upon the costs of the Air Force but will limit its capabilities.

Recent history has indicated that PSOs will replace the attrition warfare anticipated in Cold War days. These operations will be conducted by utilizing defense coalitions.

Taken these facts into consideration, the forces that remain after the impending restructuring will have to be optimized. The German MOD plans to reform the Forces and he has announced that the newly defined tasks that are related to PSOs will be

incremental to existing military missions. This will force the Air Force to widen its capabilities with even fewer personnel, which in turn will have an effect on proficiency.

Furthermore, these reformation plans seek to reduce operating by privatization of some services, such as in support and logistics. The potential for cost-reduction, however, seems exaggerated, and the likely negative impact on the Air Force has not been considered. The need for lower costs bears the danger of accepting low quality services, which doubtless incur penalties in the long run.

The MOD has suggested that some new and potentially costly acquisitions, such as satellite reconnaissance, Strategic Airlift and Air-to-Air Refueling ifh even f

Although this could be seen as a new and daring idea; it merely requires politicians to take a broader perspective, placing less emphasis on national concerns and more on the larger European picture.

Current efforts by individual European nations to maintain the whole spectrum of military capabilities with fewer personnel and less resources will eventually leave forces with no significant capability as depth of capability increasingly diminishes.

The EU offers the opportunity not only to coordinate economic strength by utilizing the contributions of its members but also offers an opportunity to coordinate security and defense. Investment by all EU nations in the same military core capabilities is unnecessary and costly. If this political potential can be recognized the German Air Force could restructure along role specialization lines to make a significant contribution to future coalition operations. National military costs could be held at a minimum while ensuring the maximum

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The new German Armed Forces

Pers Cat	Army	Air Force	Navy	Armed Forces
Regs / TCVs	112,000	47,000	19,000	178,000
Short-Service Volunteers (SSVs)	21,000	3,200	2,800	27,000
W 9 Conscripts	17,700	6,300	1,000	25,000
W 6WÜ Conscripts	21,300	3,500	200	25,000
SSVs/Conscripts	60,000	13,000	4,000	77,000
Standing Forces	172,000	60,000	23,000	255,000

Strengths of Armed Forces and Bundeswehr

Readiness forces:	150,000
+	
Basic Military Organisation:	105,000
=	
Strength of Standing armed forces:	255,000

+

Students/Vocational trg posts:	22,000
+	
Civilian personnel	80-90,000

=

Peacetime strength of Bundeswehr:	around 360,000
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Standing forces:	255,000
+	
Augmentation forces:	approx. 250,000
=	
Wartime strength:	approx. 500,000

German Armed Forces missions since reunification

Missions during Peace time – Missions with UN				
Name	Time	Country	Mission	Size
UNTAC	1992 - 1993	Cambodia	Hospital for UN-Contingent	448 Med. personnel
UNAMIR	1994	Ruanda	Air bridge for refugees	288 flights TRANSALL/b-707
UNOSOM	1992 – 1994	Somalia	Air bridge for disaster relief, Logistical support of UN- personnel	~ 1.800 personnel 655 flights TRANSALL
Air bridge Sarajewo	1992 – 1996	Bosnia and Herzegowina	disaster relief for civilian population	1.400 flights TRANSALL 10.800 t Cargo
UNSCOM	1991 – 1996	Bahrain, Iraq	Transportation support for UN-Arms control experts	~ 4.000 Flying hrs. each, TRANSALL and helicopter CH 53
UNOMIG	since 1994	Abchasia, Georgia	Med. Support of UN-Contingent, cease fire controlling	12 personnel
Air drop of cargo	1993 – 1995	Bosnia and Herzegowina	Disaster relief for civilian population	320 flights TRANSALL ~ 2.100 t Cargo
Operation “Life Line”	9/1998 – 11/1998	Sudan	Disaster relief for civilian population	84 flights 2 TRANSALL about 600 t Cargo

Missions during Peace time – Missions with NATO

Name	Time	Country	Mission	Size
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Important rescue missions

Name	Time	Country	Mission	Size
Evacuation-Operation	14.03.1997	Albania	Evacuation of German and foreign civilians	6 helicopter, 3 TRANSALL, 1 Frigate
Evacuation-Operation	06./07.06. 1998	Eritrea	Evacuation of German and foreign civilians	Transport aircraft TRANSALL/AIRBUS
Snow-Catastrophe in Galtuer	23. – 27.02. 1999	Austria	Evacuation of civilians after avalanche	13 helicopter CH 53: 170 flight hrs 5.400 personnel 38 t food
Humanitarian Help Kosovo	Since 30.March.99	Albania, Mazedonia	Transport/ and distribution of food, temporary shelter for civilians	More than 90 flights, Mainly TRANSALL More than 1.000 t Cargo