

2013

STRATEGIC

OPERATIONAL

annual REPORT



Joint Air Power Competence Centre

www.japcc.org



**Joint Air Power
Competence Centre**

introduction

For the Joint Air Power Competence Centre (JAPCC), 2013 can be characterized as a year of convergence. Many factors came together to shape the organization's strategic direction. Fiscal constraints, reduced manning, evolving focus of effort, operational misalignment, fleeting relevance, and a challenging strategic environment are just a few of the significant forces which united and demanded JAPCC to rethink, refocus and regroup. One of the catalytic events which started the process took place under the leadership of our former Director, General Welsh, who in early 2012 stated that the organization's relevance and thus utility to NATO was in serious question. The JAPCC had allowed itself to become a disconnected (from NATO and the Sponsoring Nations (SNs)) and self-focused organization who was failing to meet the needs of NATO. This especially showed in the imbalance towards long term and strategically focused projects without sponsors external to the JAPCC. The Director stated that a shift needed to occur with more focus and effort directed towards support to Allied Command Operations elements with shorter time horizons and more operationally and upper tactically focused projects and activities.

As a result, a series of internal strategic reviews were performed to examine the JAPCC's leadership, manning, Programme of Work (PoW), internal processes, Information Technology (IT) systems, JAPCC member training, planning/engagement strategies, and organizational structure. The following are the highlights of the most significant findings:

- 1. Lack of leadership oversight allowed projects to lose momentum resulting in late-to-need deliverables.**
- 2. The JAPCC lost significant capability and capacity due to Subject Matter Expert (SME) losses in the past three years.**
- 3. Lack of mechanisms to ensure correct commitment of resources, both manpower and money.**
- 4. Lack of a formal process to validate, add/delete, or prioritize JAPCC projects and/or activities.**
- 5. Organizational structure was restricting the required flexibility, internal planning and control requirements, external engagement capability and overall adequate mission execution.**

Subsequently, the JAPCC reorganized and shifted the PoW towards a more operational/upper tactical focus and away from primarily strategic initiatives. The organizational change consolidated four capabilities based branches into three, established the functional Assessment, Coordination and Engagement (ACE) Branch, established the Planning and Control Section, and established the Chief of Staff position while deleting one General Officer position, thus creating 'less chiefs and more indians'. These substantial, fundamental organizational changes support the leadership's intent to move toward a more proactive, results-based, relevant, and thus value-added to NATO, PoW. To accomplish this, JAPCC has developed a planning and control process which is guided by monthly PoW and quarterly Personnel and Budget meetings; at which, priorities are determined, resources are allocated to the respective projects and activities, and engagement opportunities are identified. The JAPCC is NATO's team of multinational experts contributing to the improvement and transformation of Joint Air and Space Power (A&SP). This can only be facilitated when the 'thinking' is underpinned by thorough research and analysis, rigorous planning, and through frequent engagement with the targeted key decision-makers and stakeholders.

Sponsoring Nations' resources have recently been, and will continue to be, constrained. This resource challenge requires innovative solutions where operational effectiveness is delivered ever-more efficiently whilst remaining aware of the risks. The JAPCC is committed to redefining its organizational objectives in order to deliver relevant and valuable A&SP solutions to the key decision-makers across the Alliance and the Nations.



Frank Gorenc
General, USA AF
Director, JAPCC

guiding principles

- **Contribute Air and Space expertise to Alliance decision-making processes through active leadership of, and participation in, NATO committees, Working Groups and fora.**
- **Promote and showcase the effectiveness and relevance of Air and Space Power as the critical elements in Air, Land and Maritime operations.**
- **Partner with relevant NATO entities and nations to promote and synchronize output and products.**

Joint Air & Space Power

RELEVANCE RIGOUR
REPUTATION

who we are

The JAPCC is the first NATO-accredited Centre of Excellence and was established in 2005. We provide subject matter expertise across a broad range of Joint A&SP topics including the development of Concepts and Doctrine, Capability Development, Education and Training, and Lessons Learned in accordance with NATO MC(M) 236.

The JAPCC has the ambition to maximize its contribution to the improvement and transformation of Joint A&SP through a well-formulated engagement strategy within NATO and the Sponsoring Nations in addition to contemporary organizations and academia.

Director's Vision

The JAPCC is to act as NATO's catalyst for the improvement and transformation of Joint A&SP, delivering effective solutions through independent thought and analysis.

Our Mission

The JAPCC, as a team of multinational experts, is to provide key decision-makers with effective solutions to A&SP challenges, in order to safeguard NATO's and the Nations' interests.

Leadership

The JAPCC is headed by a Director who also serves as the Allied Air Command Commander at Ramstein, the Commander, United States Air Forces Europe (USAFE), and the Commander, United States Air Forces Africa. This year we were honoured to see our Director, General Philip M. Breedlove, assume the position of Supreme Allied Commander Europe. JAPCC welcomed our new Director, Frank Gorenc (USA AF) in August. The JAPCC's Executive Director, Lieutenant General Joachim Wundrak (DEU AF), also serves as the Combined Air Operations Centre Commander, German Air Operations Commander and German Joint Force Air Component Commander.

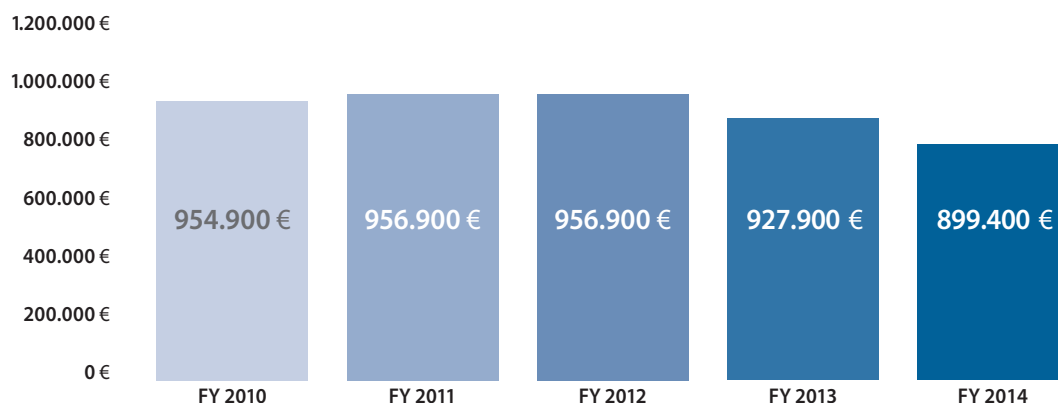
On-site senior leadership remained the same as 2012 and consisted of the Assistant Director Capabilities (ADC), Brigadier General Alessio Cecchetti (ITA AF) and



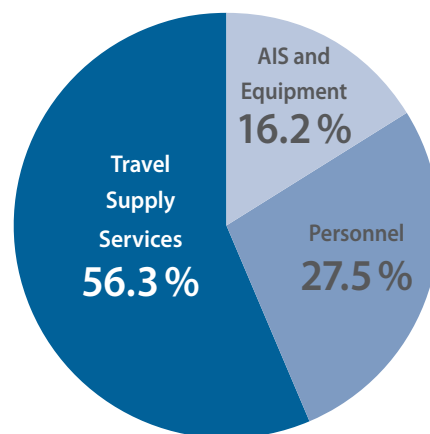
Director (USA AF)
Gen Frank Gorenc



Executive Director (DEU AF)
Lt Gen Joachim Wundrak



Air Commodore A.A.H. (Tom) de Bok (NLD AF) as the Assistant Director Transformation (ADT). However, in August 2013, the JAPCC underwent a structural reorganization in order to streamline the organization to meet current and future realities, enhance engagement capabilities, and improve internal planning and control capabilities. This measure consolidated four capabilities based branches into three, established the functional ACE Branch, established the Planning and Control Section, and established the position of Chief of Staff. The new leadership structure is as follows: Chief of Staff: Col Luke Grossman (USA AF); Assistant Chief of Staff, Executive Officer, and Chief, Planning and Control Section: Lt Col Reiner Jantos (DEU AF); Branch Head, Assessment, Coordination and Engagement: Col Konrad Wassmann



JAPCC Budget for FY 2013



Assistant Director for Capabilities (ITA AF)
Brig Gen Alessio Cecchetti



Assistant Director for Transformation (NLD AF)
Air Cdre A.A.H. (Tom) de Bok MA

(DEU AF); Branch Head, Air Operation Support: Col Gustavo Cicconardi (ITA AF); Branch Head, Command, Control, Communications and Computers, Intelligence Surveillance and Reconnaissance (C4ISR) + Space, Col Uwe Heilmann (DEU AF), and Branch Head, Combat Air: Col Bernard Willi (USA AF).

Personnel

The JAPCC has lost significant capability and capacity due to manpower losses in the past three years. This trend continued with JAPCC ending 2013 with 72 % of the posts bid but with only 60 % of the manning in place. In November 2010, 86 of 97 posts were filled (89 % fill rate). In three years the JAPCC has lost more than 25 % in overall manpower. Most significantly, in the same period, the number of SMEs available has fallen by 21; from 53 (of 58 SME positions) to 32 (of 58 SME positions) available. Due to the new organizational structure, the JAPCC will go from 97 to 88 total posts with 32 of 58 SME billets filled, for a 55 % availability rate. In addition, not all SMEs met the requirements of their job description, resulting in reduced effectiveness for the JAPCC. The main issues are lack of English languages skills and inexperience in staff work at the operational level. At the years close, the JAPCC's critical capability shortfalls were:

1. ISR (0 of 3 ISR SMEs)
2. Unmanned Air System (UAS) (No SMEs with actual Unmanned Aerial Vehicle (UAV)/UAS experience)
3. Air to Air Refuelling (0 of 3 SMEs)
4. Support personnel fill rate is 69%; however the Admin/Personnel position fill rate is only 53 %

Budgeting and Finance

Based on the Medium Term Finance Plan and taking into account the actual number of staff officers, the JAPCC Budget for 2013 was 927,900 Euros. Our Senior Resource Committee (SRC) continued to provide full support to our budget on the basis of 'minimum-military-requirements'. As stated in the JAPCC Operational Memorandum of Understanding, the sponsoring nations contribute to the budget according to the total number of staff officers they have bid upon; the corresponding annual cost per staff officer is approximately 14,290 Euros. For Fiscal Year

2013, the approved budget of 927,900 Euros mainly consisted of travel, supplies & services (56.3 %), personnel related expenditures (27.5 %) and replacement of furniture as well as hardware and software upgrades for automated information systems (16.2 %).

Since the SRC authorized budget transfers between budget chapters up to 10 % for FY 2013, JAPCC was able to implement a very flexible budget execution, which allowed a cost effective realization of unanticipated projects on short notice.

What We Do

Key decision-makers require innovative solutions to address the improvement and transformation of NATO Joint A&SP, with ever decreasing resources. Rather than focusing purely on force structures, the JAPCC advocates the development of existing capabilities and generation of new capabilities to support the concepts of force effectiveness and force efficiency.

The JAPCC Provides Solutions to Address Air & Space Power Challenges

Our PoW is comprised of Projects, Activities and Tasks which drive the organization's battle rhythm and delivers the output. The PoW is dynamic in nature and can be adjusted monthly based upon the receipt and acceptance of a Request for Support (RfS). In addition, the JAPCC hosts a number of major events that drive the internal battle rhythm. These include an Annual Air & Space Power Conference, the biannual meeting of the Air Operations Working Group (AOWG), the Maritime Air Coordination Conference (MACC), the JAPCC Steering Committee (SC), the biannual meeting of the SRC and the production of a biannual Air Power Journal.

The PoW is broken down based on the following:

Projects. A JAPCC project provides solutions to an A&SP challenge received from a NATO or SN key decision-maker through a RfS. A project can also be internally generated based on Lessons Identified, or through other engagement avenues. These internally generated projects normally will not commence until a sponsor is identified.

Activities. Activities form the bulk of the JAPCC's PoW and consist of recurring or enduring tasks in support of a key decision-maker. Activities are normally pre-planned within the JAPCC annual calendar. Examples of activities are the custodianship of NATO doctrine (Allied Joint/Tactical Publications) and the chairmanship/co-chairmanship of a NATO working group.

Tasks. A task differs from an activity in its periodicity, usually comprising a single non-recurrent event (e.g. speaking or presenting to a conference at which JAPCC expertise is sought and can contribute). The (sometimes) random nature of a task often precludes scheduled planning within the PoW.

JAPCC Focus Areas – 2013

Air Power Development

NATO has been engaged in continuous transformation for many years to ensure that it has the policies, capabilities and structures required to deal with current and future challenges, including the collective defence of its members. With Allied forces militarily engaged across several continents, the Alliance needs to ensure that its armed forces remain modern, deployable and sustainable. Air Power has been of utmost importance to the NATO Alliance since its inception. The Alliance's ability to rapidly project power are underpinned by the strength, flexibility and high quality of its air forces and naval and army air services. These Air Power characteristics are reliant upon our ability to continue the advancement of equipment, superior training, high levels of interoperability, and seasoned experience.

Education and Training

Education and training are key agents for transformation. They are complementary activities which reinforce each other. Education focuses on the function of explaining concepts, doctrines, practices and teaching procedures, for example; English language classes and history. Training focuses on practicing and applying that knowledge, which helps to assimilate the subject matter completely. Exercises take training a step further by testing acquired knowledge during real life or computer-assisted exercises with a scenario involving large numbers of participants from a broad range of countries.

Future of Air Warfare

Since the end of the Cold War, NATO and NATO Nations independently have made massive efforts to transform their military outlook away from a defensive of territory posture and towards the expeditionary capability required to meet the military needs of today's changing strategic environment. Technological advances in communications and weapons capabilities continue to profoundly affect the way military forces do their business. It is essential that military forces not only keep pace with these changes but also look forward to ensure our strategic advantage is preserved with the limited available military resources. NATO has set out its purposes and tasks, as well as the means that are to be used to achieve Alliance objectives. To keep pace, there is an urgent need to examine what part NATO A&SP will play in the accomplishment of those objectives and identify how that future might become reality.

Space

Space has been described as the ultimate high ground and the people of the world are becoming more and more dependent on products and services delivered by space capabilities. Military operations are even more dependent on space capabilities. It is imperative that Alliance members understand the inherent opportunities and vulnerabilities that the Space domain presents.

Support to Current Operations

Since its first major peace support operation in the Balkans in the early 1990s, the tempo and diversity of NATO operations have increased. NATO has been engaged in missions that cover the full spectrum of crisis management operations – from combat and peace-keeping, to training and logistics support, to surveillance and humanitarian relief. Air power is an essential element in virtually all military operations. It can be employed over the full spectrum of military operations, at any level, in support of national, joint, or multinational operations and objectives.

Unique Air Enablers

Enablers are an integral part of airpower employment. They foster airpower's ability to achieve even greater levels of mass, surprise, economy of force, flexibility and versatility, manoeuvrability, and to persistently concentrate assets during operations.

key developments

Air Power Development

Air Power characteristics are reliant upon our ability to continue the advancement of equipment, superior training, high levels of interoperability, and seasoned experience.

Unmanned Aircraft Systems (UAS) Operations in a Contested Environment

Since the first serious UAS engagements in support of Operations ENDURING FREEDOM and IRAQI FREEDOM their role in the military has grown at unprecedented rates. Over the last decade, the United States UAS fleet alone accomplished more than 2,000,000 flight hours. This enormous amount of UAS mission flight hours impressively shows how important unmanned assets have become. UAS have significantly altered the way the Alliance conducts operations. They are currently unmatched in their ability to provide persistent capability in the uncontested airspace above Afghanistan. Unfortunately, the above mentioned advantages may be significantly diminished in a future contested operational environment.

Contribute Air and Space expertise to Alliance decision-making processes through active leadership of, and participation in, NATO committees, Working Groups and fora.

This raises the question, what effect will a lack of air superiority have on future UAS operations? The future role of new UAS systems must be analysed. The JAPCC's UAS SME has spent much of 2013 researching, analysing and preparing a product which delivers an assessment of current UAS capabilities, identifies essential priority actions, and recommends future NATO UAS requirements to preserve unmanned aircraft system operations in contested environments. Planned deliverables can be expected in early 2014.

NATO Defence Planning Process (NDPP)

NDPP provides a framework within which national and Alliance defence planning activities can be harmonized to prosecute agreed targets in the most effective way. It facilitates the timely identification, development and delivery of the necessary range of forces that are interoperable and adequately prepared, equipped, trained and supported as well as the associated military and non-military capabilities to undertake the Alliance's full spectrum of missions.

During 2013, JAPCC SMEs supported Allied Command Transformation's (ACT) Staff Element Europe Capability Requirements Branch. They were involved in out-of-cycle work which dealt with the issues of Air Basing Requirements, Weapon Requirements and Stockpile Planning, Joint Personal Recovery, Combat Search and Rescue, as well as Deployable Airbase Activation Module.

NATO Airborne Early Warning & Control (NAEW&C) Capability Requirements

The NAEW&C Programme is often cited as one of the most successful collaborative ventures ever undertaken by the Alliance. The fleet of 17 E-3A aircraft represents the world's first multinational, fully integrated Air Force and is one of the few military assets that is actually owned and operated by NATO.

The JAPCC supported the Commander NAEW&C Force Command in his work to define the future capability requirements of Air Command and Control (C2) and Battle Management in the NE-3A via an initial analysis and is now heavily engaged in the associated Working Group to advance the study of NAEW&C capability requirements.

Space

It is imperative that Alliance members understand the inherent opportunities and vulnerabilities of the Space domain.

Enhancing NATO's Approach to Space Operations

Moving NATO's Space capabilities forward, especially in the realms of education, exercises and interoperability, was the focus of the JAPCC's space SMEs during 2013. JAPCC experts continued the pursuit of facilitating NATO's ability to comprehend the criticality and complexity of Space Operations. Education is fundamental to this pursuit. Our Space SMEs not only directly educated officers across NATO, but were also part of the process of evaluating the potential for the JAPCC to assume the role of the Space Education Department Head for NATO. Additionally, our experts helped NATO infuse Space Operations scenarios into exercises STEADFAST JAZZ and ALLIED REACH in order to enhance NATO's capability to improve mission assurance. Lastly, our SMEs supported the Multi-Sensor Aerospace-Ground Joint ISR interoperability coalition (MAJIC) project and dramatically enhanced Space Operations interoperability by establishing Tactics, Techniques and Procedures (TTPs) and toolsets which facilitate integrating space imagery into the ISR coalition shared data base.

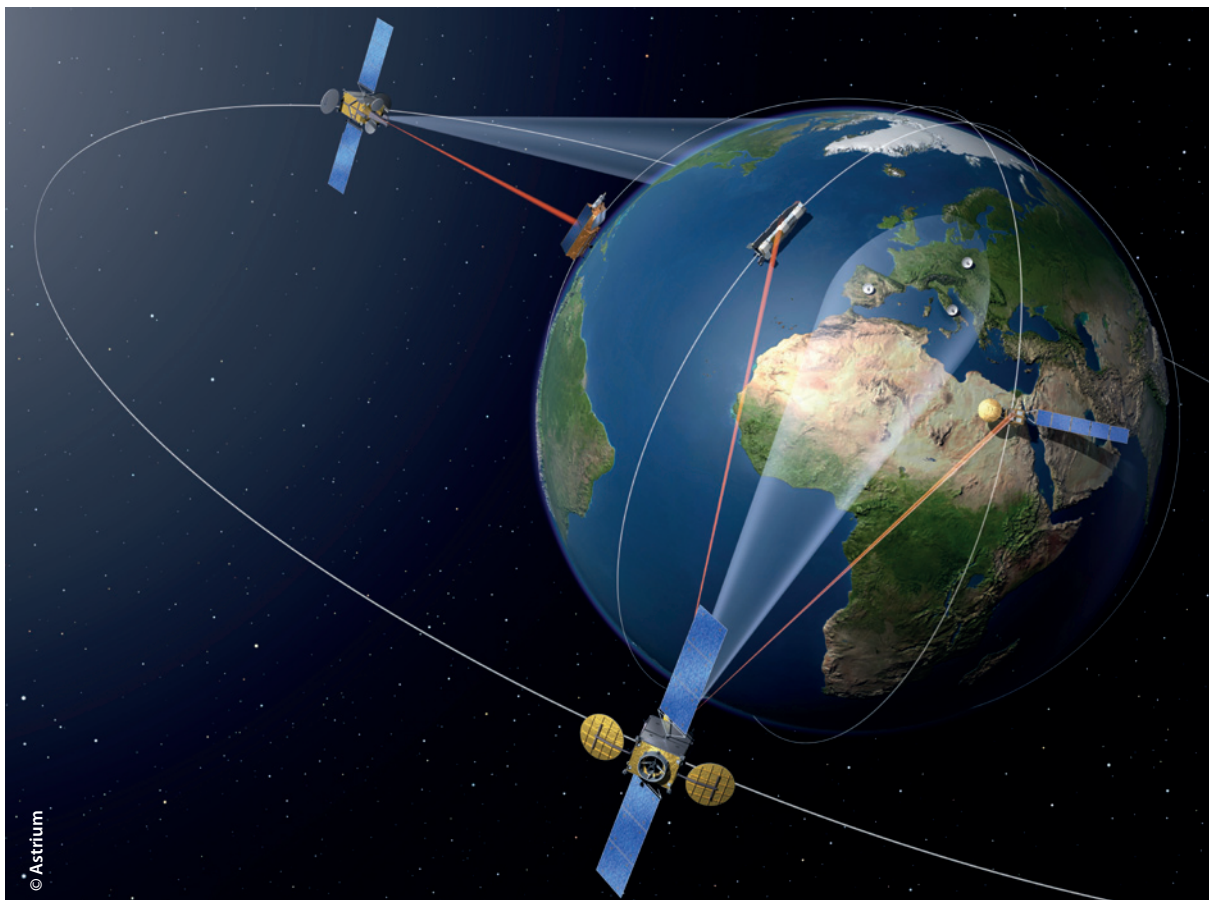
The JAPCC also continued its critical role as the Secretary of the NATO Bi-Strategic Command Space Working Group (WG). The JAPCC specifically worked to coordinate and record WG progress. We were fully engaged in this NATO Military Committee sponsored and mandated WG. Most significantly was the completion of the NATO Space Operations Handbook which will be a tremendous tool to guide Space Operations integration across the Alliance and our participation in SCI-238 SM – NATO Space Capability Preservation.

Education & Training (E&T)

E&T are key agents for transformation.

JAPCC Support to Joint Warfare Centre

The JAPCC provided the Joint Warfare Centre (JWC) in Stavanger, Norway with SME support on A&SP in order to enhance training and exercise activities. This includes contributing to scenario development, providing trainer/observer teams, exercise controllers, and conducting



post exercise analysis/lessons learned. JAPCC additionally signed a Letter of Agreement with JWC defining the two organizations future cooperation.

As a direct result from this agreement with the JWC, a JAPCC delegation deployed to Stavanger in September and November 2013 to assist exercise STEADFAST JAZZ 2013 and provide manning for the Exercise Control organization. The JAPCC team played the role of opposing force (OPFOR) Air and supported scenario development, exercise scripting and exercise execution. Also, Joint Force Air Component (JFAC) Ramstein was supported with a dynamic flying scenario and Intel injects in order to support the NATO Response Force 2014 certification of the JFAC.

C2/Leadership Improvement

Nothing is more important for the successful execution of military operations than effective leadership. The JAPCC has developed a practical E&T model which provides powerful, flexible, and inexpensive tools to cultivate leadership competence of individuals. This model employs commercial, off the shelf, non-computer based manual Conflict Simulation (CoSim) games as the decisive tool supporting military officers in their

effort to become better leaders. These CoSim provide a dynamic C2 and Leadership cognitive challenge within any combination of competence areas. The CoSim shows participants their achievements quite plainly as they move closer to victory or defeat. The participants' thinking and action in the CoSim arena reflects their efforts in the realm of C2 and Leadership.

The JAPCC continued to engage SN military leadership, as well as academia, throughout 2013. The model and concept were presented and/or executed, to King's College, London United Kingdom (UK), the Defence Capability Centre, Shrivenham UK, the Royal Air Force War College, Cranwell UK, and the Turkish Military Academy, Istanbul, Turkey. Additionally, we supported a leadership seminar at the Führungsunterstützungsschule der Bundeswehr (C2 Support School, German Armed Forces), Landsberg, Germany. This project has been underway since 2011 and is projected to be completed in 2014.

Enhancing Joint Personnel Recovery (JPR) Capability, E&T

While NATO requires JPR capabilities to enable operations, the planning, implementation and operation/execution of those capabilities is severely hampered by



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the lack of strategic direction and guidance which ultimately leads to a non-understanding of JPR as a system. During 2013, the JAPCC analysed the shortfalls in NATO's JPR Policy and Doctrine and began production of a roadmap for improved capability and E&T of JPR forces. The roadmap will:

- Provide recommendations to overcome the deficiencies;
- Address and analyse the E&T of JPR-qualified planning personnel at Joint, Component, NATO and National levels;
- Provide recommendations for the development of an appropriate E&T environment;
- Attempt to raise the profile of JPR within the NATO Training, Exercise and Evaluation cycle.

The principal customers for this project are ACT and Allied Air Command. The expected delivery is early 2014.

Future of Air Warfare

There is an urgent need to examine what part NATO Air Power will play in achieving future Alliance objectives, and to identify how that future might become reality.

Framework for Future Alliance Operations (FFAO)

JAPCC participated in the series of ACT sponsored FFAO workshops. The results were based on the ACT 2012 Strategic Foresight Analysis trends. These events and the follow on FFAO workshops established a broader community of interest and leverage its immense expertise in this area of study.

Air and Space Power in NATO – Future Vector Project

A comprehensive Air Power study is required to identify viable options and solutions to guarantee Air Power continues to be a key enabler for the security and success of NATO and its Allies. The study should provide solutions for Air Power in support of NATO and its Allies' senior leadership, by articulating effective solutions for capabilities rather than force structure recommendations. The study will seek input from well known and accredited contributors across NATO and beyond. JAPCC views the study to be a critical piece of NATO's Smart Defence and Connected Forces Initiative, which

have been adopted to prepare the Alliance to cope with future challenges and contingencies.

The JAPCC started the project in mid-2nd Quarter 2013 and completed the Start Paper in August entitled 'Air Power Making the Difference for NATO'. This paper frames the current problem and provides considerations and recommendations. This document is the launching point for the follow on work of the project and informs the core team of the current and near term state of affairs with regard to Air Power in NATO. The aim of the follow on work is to identify viable options and effective solutions to the existing Air Power challenges in order to meet NATO's short and longer term interests. The short-term perspective focuses on 'NATO Forces 2020' and provides options to enable force effectiveness (Connected Forces Initiative) while supporting the idea of force efficiency (Smart Defence). The longer term perspective focuses on providing inputs to an Air Power strategy/security concept which underlines the preservation of A&SP as the cornerstone for executing the Alliance's three core tasks.

Unfortunately, one issue that has slowed the progress of this project was a lack of funding. However, in the past few months, JAPCC has secured partial funding (approximately 125,000 Euros of the needed 153,000), a project leader, and members for the core team. The follow on work commenced in December of 2013. The establishment of the Advisory Team was in progress at the end of the year. The aim is to finish the project by November 2014.

Support to Current Operations

Air power is an essential element in virtually all military operations. It can be employed over the full spectrum of military operations, at any level, in support of national, joint, or multinational operations and objectives.

Force Protection (FP) Capability Development

During the Cold War it was the Air Component that developed the concept of FP because, whilst other components could use 'Manoeuvre' as their primary means of self-protection, the Air Component was

predominantly 'fixed' to operating from large static locations known to the enemy. NATO Air has continually championed the cause of FP and its methodology primarily developed to counter the Soviet threat has proved its worth in contemporary operations. The 'Air' approach to FP is now viewed by many as the most effective and efficient way to protect large, complex installations. However, weaknesses in NATO FP capability continue to be identified in both the operational and exercise environments.

The JAPCC actively engaged in the evolution of NATO FP and much of 2013 was spent designing a product that will analyse current threats to FP, identify capability gaps, and recommend remedial courses of action. The NATO Joint Force Protection Capability Development Project continues to progress. The most recent significant progress was the delivery to the NATO Standardization Agency (NSA) of a Ratification Draft of ATP-3.3.6, NATO Force Protection Doctrine for Air Operations.

The desired end state is the development of an effective, scalable and resource efficient NATO FP capability to which nations are able to contribute either a complete capability package or provide components to a multinational package. Enhancing interoperability is a core component of this project.

NATO Air Advisor Project

The NATO Summit in Chicago held in May 2012 stated in a declaration that 'NATO is ready to work towards establishing, at the request of the Government of the Islamic Republic of Afghanistan, a new post-2014 mission of a different nature in Afghanistan, to train, advise and assist the Afghan National Security Forces (ANSF), including the Afghan Special Operations Forces. This will not be a combat mission. We task the Council to begin work immediately on the military planning process for the post-ISAF mission.' The requirement to provide training, advice and assistance to potential partners is not unique to Afghanistan. It is one that is becoming more common as NATO extends its reach outside of Europe and North America. The ability to provide training, advice and assistance in the post conflict phase to bring nations back into the world community is an important capability.

Partnership building has been, and will continue to be, an important component of NATO's overall strategic approach. In fact, the NATO 2010 Strategic Concept specifically stated that partnership building will be a key element of NATO's future strategic requirement. Despite this, it currently lacks a unified concept to meet this strategic requirement. As a result of this identified shortfall, ACT was directed to conduct a study to develop a Security Force Assistance (SFA) concept for NATO. Developing the unique competencies of an Aviation SFA (AvSFA) capability should be an integral subset of NATO's overall SFA strategy. This project will deliver an assessment of the current capabilities within NATO to support the AvSFA mission and identify the essential actions and requirements to guide NATO in optimizing support for this mission. The scope of this project focuses directly on the challenges associated with coordinating NATO support to the air advisor mission across the alliance and participating nations. It reviews current and previous NATO and SN led air advisor operations and their concepts of operations (CONOPS), lessons identified and lessons learned in the last decade's conflicts, i.e. Iraq and Afghanistan. It also identifies organisations within NATO that could potentially support, currently support or previously supported air advisor operations and determines anticipated air advisor requirements. The project commenced in January 2013 should be completed in the first quarter of 2014.

Unique Air Enablers

Enablers are an integral part of airpower employment.

Air-to-Air Refuelling (AAR) Consolidation

It cannot be ignored that AAR is a critical enabler for achieving the effects necessary to support NATO's stated level of ambition. For this reason, a clear understanding of AAR capability gaps and interoperability limitations is necessary before key NATO decision-makers can develop a strategy to provide the Alliance with the required AAR capability.

This project aims to enhance and optimize levels of interoperability in the field of AAR in order to support the requirements of the strategic commands (ACT and



ACO) and the operational (Joint Force Commanders) level. The JAPCC 'Air-to-Air Refuelling Flight Plan' was first published in February, 2011. This document has been superseded by events and required total revision. This project seeks to build upon the existing AAR Flight Plan with an update and review of NATO AAR capability following the Doctrine, Organization, Training, Materiel, Leadership, Personnel, Facilities, Interoperability (DOTMLPFI) capability development methodology. At year's end, the rewrite was completed and publication is expected in early 2014.

Optimizing NATO's Air Surveillance Capability

The growing diversity of air and missile threats requires the Alliance to be more responsive, flexible, and integrated in order to effectively counter them. The 'Lisbon Summit' of November 2010, identified missile defence as a major area of interest for NATO. This project will assist Allied Air Command in their preparation to assume responsibility as the sole Air Component Command for NATO. It will provide a single source of visualization of existing radar coverage, allowing the impact of scheduled and unscheduled outages to be assessed both statistically and geographically. This project will also help inform Capability Requirements Review 2016 as air surveillance was barely addressed in

the last round of the NATO Defence Planning Process. Furthermore the review of sensor placement will support the 'Smart Defence' initiative and may result in options for cost saving within the Alliance.

The Project will deliver a report which assesses the current requirements for air surveillance, the extent to which this requirement is being met and the opportunities for rationalisation. A thorough review of the project objectives is planned with the sponsor and other interested NATO entities. This project commenced in mid 2012 should finally be completed by the summer of 2014.

Cyber Integration

Freedom of action in the cyberspace domain enables our command, control, communication, computers, intelligence, surveillance, and reconnaissance capabilities. Furthermore, cyberspace is a force enabler for actions or activities in the other domains and therefore we must consider its implications across A&SP. The JAPCC is taking an active approach towards increasing NATO's integration of cyber defence and awareness by engaging the Cooperative Cyber Defence Centre in Estonia. JAPCC SMEs participated in the Spanish Air Force sponsored Kindelan International Seminar on Cyber and discussions regarding cyber implications to air

operations and doctrine. Elements of those discussions were incorporated into the Allied Joint Publication (AJP) 3.3 study draft, and look to mutually support NATO senior air leadership operator awareness and education. The JAPCC assumed custodianship of the Air Power doctrine manual, AJP 3.3, in January 2013 and immediately initiated a rewrite cycle. That effort is nearing completion with a study draft expected out for ratification in April 2014, post-AOWG assessment.

Enduring Activities

The JAPCC Annual Conference 2013

The 2013 JAPCC Conference was held from 08–10 October 2013, themed 'Air Power Post-Afghanistan'. It was tailored to discuss and explore challenges, lessons learned, and to explore Air Power in the wake of operations in Afghanistan and the geopolitical setting of the second decade of the 21st Century. This year's conference brought together not only Air Power experts, advocates and enthusiasts but members of the other Armed Services, key political advisors, academics and representatives from industry as well.

A distinguished audience of 235, including 40 flag officers, from 26 nations, received the keynote address by General (ret.) Camporini, Former Chief of Italian Defence General Staff, and four more insightful presentations by Major General Strimbeanu, Chief of Training and Doctrine, Romanian Air Force Staff, General Godderij (ret.), Netherlands Air Force, Former Director General of the International Military Staff at NATO HQ, Mr Dube, Regional Director South-Asia and Southeast-Asia of the German Organisation for International Cooperation, and Air Marshall Stacey, Royal Air Force, Deputy Commander Joint Force Command, Brunssum.

It was a common understanding that NATO finds itself once again at a crossroads. As combat operations come to an end in Afghanistan, NATO will shift its focus from operational engagement to operational vigilance. The Euro-Atlantic area is currently at peace and the threat of a conventional attack against NATO territory is low. However, future threats are emerging and time and time again, NATO has turned to Air Power as the first, and in some cases only, military response option.

The need for NATO to maintain its proven air assets has not diminished. Thus, the need for responsive and flexible forces remains crystal clear. NATO must retain and improve its Air Power if it is to successfully meet future challenges.

The next annual conference is planned for 18–20 November 2014, under the theme 'Air and Space Power in NATO – Future Vector Project'. NATO nations have, and continue to, drastically reduce Air Power capabilities. The near-term cessation of Afghanistan operations combined with ongoing financial crisis makes it certain that investment in the required future Air Power capabilities will be under heavy scrutiny and will most likely be further reduced. The 2014 conference will examine this paradoxical situation.

The JAPCC Journal

The JAPCC Journal continued to be used as a platform which encourages debate and showcases ideas related to all aspects of A&SP improvement and transformation within NATO and the global arena. Two editions were produced in 2013 which included articles aimed at educating and informing its international readership on a variety of Joint A&SP issues. The JAPCC Journal is considered to be a reputable information beacon which embraces the 3'R's, Relevance, Rigour & Reputation and is JAPCC's flagship product.



NATO Bodies, Doctrine, Exercise and Training

JAPCC personnel fill chairmen, co-chairman, and panel positions on numerous NATO steering bodies as well as providing custodianship to a number of NATO Doctrine documents, as highlighted below.

Chairmanship:

- Aerial Refuelling Systems Advisory Group (ARSAG) Interoperability Panel
- NATO Air-to-Air Refuelling Working Group (AAR WG)
- Air Operations Working Group (AOWG)
- Maritime Air Coordination Conference (MACC Co-Chair)

Secretary:

- NATO Bi-Strategic Command Space Working Group (NBISCSWG)

Panel Member/Working Group:

- Air & Missile Defence Committee (AMDC)
- Panel on Air & Missile Defence (PAMD)
- Ballistic Missile Defence Operational User Group (BMD PO)
- NLD BMD Policy Group
- NLD Knowledge Network on BMD
- Future Technologies for Aerial Refuelling (FTAR)
- FTAR/ARSAG Participation to Develop UAS AAR Procedures
- Force Protection (FP) Task Force

- Helicopter Inter Service Working Group (HISWG)
- NATO Search and Rescue (SAR) Panel
- Space Systems Concepts and Integration (SCI) 238 Working Group
- NATO Single European Sky ATM (Air Traffic Management) Research (SESAR) Integrated Project Team
- Maritime Operations (MAROPS) Working Group

NATO Policy/Doctrine/TTP Support:

- ATP-3.3.4 (VOL II) Custodian
- ATP-3.3.4.2 (ATP-56) Custodian
- ATP-3.3.4.3 Custodian
- AJP 3.3 Custodian
- ATP-49G Custodian
- MC FP Policy for NATO-Led Operations (MC-0610)
- ATP-3.3.6 NATO FP Doctrine for Air Operations
- AJP-3.14 Allied Joint Doctrine for FP
- AJP-3.3.3 Air-Maritime Coordination (Part of AMCWG)
- ATP-3.3.3.1 Air-Maritime Coordination Procedures

Participation in the Air Defence

Committee and Subordinate Bodies

The JAPCC remains an active participant in the Air Defence Committee, the PAMD and its subordinate Drafting Groups. Through continuous participation in these various bodies, the JAPCC exercises considerable influence over the development of Integrated Air and Missile Defence policy.



2014 outlook

Air-to-Air Refuelling Consolidation

The JAPCC AAR Flight Plan was first published in February, 2011. This document has been superseded by events and required total revision. The project seeks to build upon the existing AAR Flight Plan with an update and review of NATO AAR capability following the Doctrine, Organization, Training, Materiel, Leadership, Personnel, Facilities, Interoperability (DOTMLPFI) capability development methodology.

The rewrite is nearing completion. The expected date of delivery will be February 2014, with the primary goal of using the results to shape the Air-to-Air Refuelling Conference discussions in March, 2014.

NATO Air Advisors Project

'NATO Air Advisors: Improving NATO's Ability to Fulfil Future Air Advisory Requirements' is this project's full title. The JAPCC received a request for support from the NATO Air Training Command-Afghanistan (NATC-A) to perform a 'study to determine if NATO can develop a capability to assess, train, advise and assist foreign aviation forces in airpower employment, sustainment and force integration.'

ATC-A provides the NATO Training Mission – Afghanistan with 'Air Advisors' to assist Afghans with building their nascent Air Force with a capability to meet their unique requirements. This study will give inputs and ideas to identify the essential actions and requirements to guide NATO in supporting this mission. This project is in the final stages of review and is expected to be released in the first quarter of 2014.

Air and Space Power in NATO – Future Vector Project and Annual Conference

A comprehensive Air Power study is required to identify viable options and solutions to guarantee that air power continues to be a key enabler for the security and success of NATO and its Allies. The study should provide solutions for Air Power in support of NATO and its Allies senior leadership, by articulating effective solutions for capabilities rather than a force structure. The study will seek input from well-known and accredited contributors across NATO and beyond. We view the study to be a critical piece of NATO's Smart Defence and Connected Forces Initiative which has been adopted to prepare the Alliance to cope with future challenges and contingencies.



One of the major challenges of this project is acquiring sufficient funding to complete the execution. However, good progress has been made and JAPCC hopes to reach the required funding level. The final product from the project's Core Team will be a 'Compendium of Essays' which will present a potential future Air Power framework to help guide NATO's approach to emerging security challenges. Additionally, the 'Compendium of Essays' will provide the central topics for the JAPCC's 2014 Annual Conference.

Enhancing Joint Personnel Recovery (JPR) Capability, Education and Training

This project, previously described, will analyse the shortfalls in NATO's JPR Policy and Doctrine and is producing a roadmap for improved capability, education



and training of JPR forces. The principal customers for this project are ACT, AIRCOM, Italy and France. The expected delivery of the study is the first quarter of 2014.

NATO's UAS Operations in a Contested Environment Project

Recent operations lead us to believe that the current success of UAS employment is highly dependent on airspace domination. There is concern about the fate of current UAS in future contested environments and the impact of manned aircraft operating alongside a new generation of unmanned systems. Therefore, the future role of new UAS systems must be analysed.

The JAPCC will deliver an assessment of the current capabilities of UAS and will give inputs and ideas to identify the essential priority actions and future UAS requirements to guide NATO to facilitate unmanned aircraft system operations in contested environments. This project is progressing well and is expected to be released in the second quarter of 2014.

JAPCC Support to the Joint Warfare Centre

The NATO Response Force remains NATO's first responder and its primary mean of providing rapid military response. It will become the most visible flagship of NATO's cohesion and credibility and a key driver for multinational cooperation and interoperability. In 2014, the JAPCC is aiming to increase our support to the JWC in Stavanger with subject matter expertise on A&SP in order to enhance training and exercise activities for the NATO Command Structure and NATO Force Structure headquarters. This includes contributing to scenario development, providing trainer/observer teams, exercise controllers, and conducting post exercise analysis/lessons learned.

Promote and showcase the effectiveness and relevance of Air and Space Power A&SP as the critical elements in Air, Land and Maritime operations.

Single European Sky

The European aviation sector is a major driver of economic growth for the European Union (EU). To support the expected growth in a safe and sustainable manner, a seamless and modern air transport system is required for Europe. This is the aim of the Single European Sky (SES) initiative. Late in the year, the JAPCC received a RfS from the European Air Chiefs to study the implications of the SES initiative on military aviation regulations and provide recommendations for action by September 2014. At the close of 2013, the study's Project Definition Report was under development. Once the scope of the study is specifically defined, the JAPCC will execute the study by leading a combined team consisting of a broad range of subject matter experts.

Partner with relevant NATO entities and nations to promote and synchronize output and products.

JAPCC Support to LANDCOM

On request of LANDCOM, JAPCC agreed to support LANDCOM in their development of its C2 concept for deployment and provide advise on the air-ground coordination in the context where LANDCOM is placed between the joint level and three corps HQs. Furthermore, JAPCC will support LANDCOM in the preparation of TRIDENT LANCE 2014.



Joint Air Power Competence Centre

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Joint Air & Space Power Conference

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