

Joint Air Power Competence Centre



introduction

2012 could well be entitled 'The Year of Challenges' for the Joint Air Power Competence Centre (JAPCC). The JAPCC faced some difficulties in accomplishing its mission to be the Air and Space Power Transformation Agent for the Alliance and its Sponsoring Nations. Despite these challenges, the Centre of Excellence (CoE) finalised a number of projects and continued its strong Air and Space (A&S) Power Subject Matter Expert (SME) representation across NATO as members of committees, panels and working groups.

The two major challenges that faced the JAPCC during 2012 were manning and mission accomplishment. On the manning front, JAPCC lost nearly 10% of its personnel, as well as sustaining months-long gaps in key SME and leadership positions. The organisation also experienced significant turbulence as it changed 75% of its leadership (nine of its twelve key positions) during the course of the year. A third of the SMEs were also exchanged during 2012. Significant and damaging to JAPCC's capability were the withdrawal of manpower and money from several Sponsoring Nations, a trend that began in 2010 and continued throughout 2012.

The second major challenge was my predecessor's task to the JAPCC in March 2012, to take a critical look at itself and assess whether the organisation was truly relevant and successfully accomplishing its mission. Much work was conducted first to understand the state of the organisation and then to take concrete actions to move the organisation back onto the correct vector. The JAPCC began the hard task of transforming

itself into an organisation that is aware, responsive and capable of adapting to meet the ever-changing needs of NATO and the Alliance.

In spite of these and other challenges, the JAPCC continued to provide work of high quality in several areas. Of note were JAPCC SMEs' work in the areas of Force Protection, Space, Joint Intelligence Surveillance and Reconnaissance, Leadership Development, Operational Level Air Planning and Helicopter Operations. The JAPCC produced and delivered eight major projects including the 2012 JAPCC Annual Conference. JAPCC SMEs actively participated in over 70 NATO committees, panels and working groups as well as serving as Chairmen of three NATO Working Groups. This 2012 Annual Report provides much more detail on JAPCC projects and activities over the course of the year.

This brief overview cannot do justice to the hard work and dedicated efforts of the men and women of the Joint Air Power Competence Centre. Therefore, I strongly encourage you to read the report more closely in order to gain a fuller and deeper understanding and appreciation of the contributions made by the JAPCC to NATO and the Alliance during 2012.

Philip M. Breedlove General, USA AF Director, JAPCC

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Joint Air Power Competence Centre

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mission priorities

- Provide high-quality and timely customer support with
 Joint Air & Space expertise to inform and enable decision-makers.
- Contribute Joint Air & Space expertise to Alliance decision making processes through active leadership and participation in NATO committees, working groups, and fora.
- Develop and champion innovative visions, concepts and solutions for the transformation of Joint Air & Space Power.
- Promote and showcase the effectiveness and relevance of Joint Air & Space Power as a critical element in Air, Land, and Maritime integrated operations.
- Partner with relevant NATO entities and Nations to synchronise work and products.



who we are

As the North Atlantic Treaty Organization's (NATO) first Centre of Excellence (CoE), the JAPCC was established in 2005 to contribute to the transformation of NATO's Joint Air & Space (A&S) Power.

JAPCC strives to remain responsive to its customers. A shifting focus away from support to our previous primary customer, HQ Allied Command Transformation (ACT), JAPCC actively sought in 2012 to increases support to Allied Command Operations (ACO), other NATO entities, as well as its Sponsoring Nations.

Director's Vision

The Director's vision for the JAPCC is to be NATO's recognised champion for the advocacy and transformation of Joint Air & Space Power.

Our Mission

Be the Air and Space Power Transformation Agent for the Alliance and its Participating Nations, providing innovative, timely advice and subject matter expertise, both proactively and responsively. As a CoE, with a strategic and operational level focus, we offer independent thought, analysis and solutions. To accomplish this mission, the JAPCC identified mission priorities listed on the previous page.

Leadership

The JAPCC is headed by a Director who also serves as the Allied Air Component Commander at Ramstein, and the Commander, United States Air Forces Europe (USAFE). General Mark Welsh III (USAF) served as Director until 31 July 2012, at which time he handed the Directorship to General Philip M. Breedlove (USAF). JAPCC's Executive Director also serves as the German Air Operations Commander and German Joint Force Air Component Commander. Lieutenant General Dieter Naskrent held this position until 24 April 2012, when Lieutenant General Joachim Wundrak (DEU AF) succeeded him.

On-site leadership comprised the Assistant Director Capabilities (ADC), who throughout 2012 was Brigadier General Alessio Cecchetti (ITA AF). On 3 September 2012, Air Commodore A.A.H. (Tom) de Bok (NLD AF) assumed the position of Assistant Director Transformation (ADT). The Netherlands responded to the call to fill this



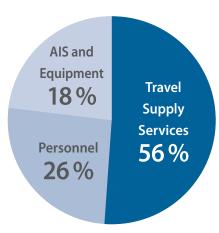




year and a half vacant position by providing the Air Commodore as a Voluntary National Contribution (VNC) until April 2014. However, the ADT post remains without a permanent national bid.

Also a member of the Directorate, the Director of Staff position changed hands in March 2013. Colonel Jim Sturgeon (USA AF) left after only nine months to assume a group command. Colonel Luke Grossman (USA AF) replaced him. JAPCC also received a new Executive Officer, Maj Karsten Olf (DEU AF) at the beginning of 2012.

2012 also saw a significant change at the OF-5/Colonel Branch Head level. Three new Branch Heads joined the JAPCC: Policy and Doctrine (PD), Colonel Henk Bank (NLD AF); Combat Air (CA), Colonel Bernard Willi (USA AF);



JAPCC Budget for FY 2012





and Combat Support (CS), Colonel Gustavo Cicconardi. Jeremy Parkinson received promotion to Group Captain and was elevated to Combat Service Support (CSS) Branch Head. Thus, only Colonel Thomas Theuerkauf (DEU AF) and Colonel Uwe Heilmann (DEU AF) remained unchanged as the Branch Heads of Concept Development (CD) and Command, Control, Communications, Computers, Intelligence, Surveillance, Target Acquisition and Reconnaissance (C4ISTAR) respectively.

Of significant note, only three of the twelve members of the leadership team began and ended 2012 in their positions. Of the remaining nine senior leaders, eight assumed their JAPCC positions from outside the CoE.

Organisational Structure and Personnel

The heart of the JAPCC is the group of subject matter experts provided by the Sponsoring Nations. These SMEs are administratively assigned to one of JAPCC's two divisions: Capabilities and Transformation. The Capabilities Division has four subordinate branches: CA, C4ISTAR, CS and CSS. The Transformation Division has two subordinate branches: CA and PD. JAPCC is further manned by officers, non-commissioned officers and civilians in three support sections: Administration, Computer Information Systems and Financial Control.

The JAPCC employs a responsive manning construct to achieve maximum productivity from the available manpower. This construct enables flexibility as SMEs operate within functional branches but are available for assignment to one of multiple project and activity groups as directed by the Assistant Directors.

JAPCC's manpower for positions filled declined from a high of 80% early in the year to 70% during the 2nd Quarter, partially recovering earlier losses to stand at 73% manned by year's end. The major withdrawal of manpower, in particular by three nations, GBR, GRC and FRA, over the last several years continued through 2012. This SME reduction has significantly decreased JAPCC's ability in key A&S Power areas such as Unmanned Aerial Vehicles, Joint Intelligence and Surveillance, Command and Control and Electronic Warfare/Suppression of Enemy Air Defences. Also adversely impacted were

JAPCC's support sections; in particular Administration which has been 50% manned for the last six months of 2012. Manpower forecasts for 2013 do not look promising for regaining either SME or support personnel; continued manpower declines are likely.

Budgeting and Finance

JAPCC annual budget for 2012 remained just below one million Euros. This was based on a five-year average. Sponsoring nations contributed to the budget according to the number of bid Staff Officer posts. The 2012 cost of each Staff Officer post in JAPCC was approximately € 14.200. For Fiscal Year (FY) 2012, the JAPCC budget of € 956.900 supported travel, supplies & services (56%), personnel related expenditures (26%) and equipment for Automated Information Systems (AIS) upgrades (18%). JAPCC achieved a 99.57% budget execution rate.

2013 will see the first time that the Sponsoring Nations, through the Senior Resource Committee (SRC), did not provide full support for the five year budgeting level of € 956.900, as established in 2010 for FYs 2010 through 2015. A € 29.000 reduction was directed for 2013 to offset the cessation of contributions by Greece, who as of the end of 2012 stopped contributing both manpower and money to the CoE.

Mission Priority Supported:

Provide high-quality and timely customer support with Joint Air & Space expertise to inform and enable decision-makers

What We Do

The JAPCC focuses its efforts on four areas: Projects, Activities, Tasks and Initiatives. JAPCC's SMEs, at the request of NATO and Sponsoring Nations or from internal assessments, conduct research, analysis and problem solving to develop timely, relevant solutions in support of the requestor. These projects, normally taking four to eighteen months to complete, most often terminate in printed products distributed to both the requestor and

others in the community of interest. They are also available on the JAPCC website www.japcc.org. JAPCC Activities see SMEs leading and participating in panels, working groups, workshops and other forums across NATO as well custodianships of several NATO publications and chairmanships of relevant NATO Air & Space power working groups. Combined, Projects and Activities form JAPCC's Annual Program of Work. The third area of effort again focuses externally as JAPCC members actively participate at one time events such as conferences and symposiums. Finally, JAPCC continually strives to improve the organisation through Initiatives aimed at improving internal processes, procedures and communications.

JAPCC Focus Areas - 2012

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 both the ubiquity and the inherent opportunities and vulnerabilities that the Space domain represents.

Missile Defence

In 2010, NATO identified missile defence as a major area of interest. Since that time, ACT and ACO have been working to integrate national air and missile defence systems into a comprehensive NATO missile defence system. With the proliferation of missile and nuclear weapons technology, the Alliance desires the ability to protect its territory and citizens from potential attacks. Likewise, NATO desires the capability to protect its fielded forces regardless of where they may be deployed.

Air C2 in the New NATO Command Structure (NCS)

Command structures and relationships form the foundation for effective joint operations and it is imperative that NATO adjusts its command structure to be more agile and responsive to emerging threats. NATO has outlined proposed changes to the command and control structure of the Alliance and advocacy for organisations that support is required for the effective application of Air Power across the full spectrum of warfare.



Air and Space Global Commons

SACT outlined four different mediums that make up the Global Commons. They are: Cyber, Space, Maritime, and Air. Air Power is connected, in one way or another, to each of these global commons. The ubiquitous nature of space capability supports air power while linked networks inextricably intertwine air power with the Cyber domain. Air and maritime forces must cooperate to secure access and unfettered use of air and maritime commons for commerce and if necessary, military operations. As NATO's pre-eminent advocate for the utility and transformation of Alliance Air Power, the JAPCC will focus its attention on the Air Common.

Pursuing Cooperation in the Air Domain

Within the Alliance, downward pressure on national defence budgets will increasingly act as an incentive to explore new and innovative opportunities for cooperation, collaboration and partnering arrangements between nations. The JAPCC will advocate the pursuit of such initiatives with respect to the development and delivery of Air Power capability throughout the Alliance.

key developments

Space

Enhancing NATO's Space Capabilities

Moving NATO's Space capabilities forward especially in the education, exercise and policy areas was the focus of JAPCC's space SMEs during 2012. JAPCC's experts provided informational briefings at the NATO School Oberammergau, as well as at Belgian, Dutch and Italian staff colleges. A key educational effort was the creation and teaching of a space curriculum which prepared the first Italian space officer to assume duties with the International Security Assistance Forces, Afghanistan. JAPCC further contributed to NATO's Space initiatives by leading the drafting of NATO's first Space Operations Handbook. The Project 'Enhancing NATO's Space Capabilities';

a study designed to provide a space education and training roadmap for NATO initiated in 2011 remained uncompleted due to the responsible SME end of duty at the JAPCC. Furthermore, it was necessary to reassess the objective and scope of the project. The JAPCC Project will be finished before 1 June 2013 and will be offered to the NATO Bi-SC Space WG who has been identified as the primary customer.

Previous JAPCC efforts helped shape the Schriever 2012 International Wargame and saw the successful inclusion of North Atlantic Treaty Organization warfighters and member nations. This was truly ground-breaking international participation in the United States' premier space wargame. Months of pre-wargame planning workshops



and preparation saw JAPCC's SMEs lead significant parts of the effort. April 2012 saw the culmination of over a year's worth of effort when seven members of the JAPCC participated in the execution phase of the wargame. The event met and exceeded many goals and expectations; – "A world-class event!" in General Mark Welsh III's words.

JAPCC published a timely, hard-hitting White Paper entitled 'Filling the Vacuum: A Framework for a NATO Space Policy.' The publication was sent to senior leaders across the Alliance where it has spurred a continuation of North Atlantic Treaty Organization Space Policy discussion, something the JAPCC advocates.

The year concluded by JAPCC accepting the responsibility of the Secretary of the NATO Space Bi-SC Working Group (NSBi-SCWG) and then hosting the first NSBi-SCWG meeting at the Centre.



Missile Defence

Joint Integrated Air & Missile Defence (JIAMD)

After 'Optimising NATO's Air Surveillance Capability' Project Definition Report (PDR) approval, the project lead coordinated the project analysis with the Boeing Portal, which began the process of developing a NATOwide model of air surveillance coverage. Boeing Portal has completed a constructive simulation model in support of this study which was compared against the stated objectives in mid-December. Security issues between JAPCC and the Boeing Portal resulted in a six to eight week delay in this work being completed. However, the project lead has maintained relations with the sponsor (Air Command Ramstein) to both inform them of the project's progress and to ensure that a usable product is delivered. A project review will be conducted in 1st Quarter 2013 to ensure the project remains on target. Expected project completion is 4th Quarter 2013.

Mission Priority Supported:

Contribute Joint Air & Space expertise to Alliance decision making processes through active leadership and participation in NATO committees, working groups, and forums

Missile defence was identified at the 'Lisbon Summit', November 2010, as a major area of interest for NATO North Atlantic Council (NAC) meeting in Chicago on 20 May 2012, only confirmed continued concern at the increasing threats posed to the Alliance by the proliferation of ballistic missiles. Developing a NATO Ballistic Missile Defence (BMD) capability is the core task of collective defence and the aim of this capability is to provide full coverage and protection for all NATO European populations, territory and forces against the increasing threats posed by the proliferation of ballistic missiles. NATO's BMD capability will strengthen the collective defence commitments against 21st century threats. The declaration of an interim missile defence capability at the Chicago Summit is a first step in building a NATO capability involving a continued effort spread over the remaining years of the decade. To this end, the JAPCC remains an active participant in the Air Defence Committee, the Panel on Air Defence and its subordinate Drafting Groups. Work continued in 2012 with participation of JAPCC's SMEs in the Panel on Air Defence Drafting Group 1 and Group 2 (PAMD DG1 and DG2).

The main effort of the DG1 was to develop the document 'NATO Air and Missile Defence Required Capabilities and Planning Guidance'. The document will identify the generic required capabilities for NATO Integrated Air and Missile Defence (IAMD) and additional supporting capabilities. The document will also provide planning guidance for NATO IAMD to enable those generic requirements to be fulfilled through the NDPP, in order to ensure that NATO IAMD can operate efficiently and effectively across the full spectrum of its missions wherever and whenever required. Finally, the cooperation with the Extended Air Defence Task Force has been revived.

Air C2 in the New NATO Command Structure (NCS)

The CoE provided support to NATO Air C2 with two projects and participation in a number of working groups. At the request of Air Command Ramstein (AC-R), JAPCC developed a Functional Planning Guide (FPG) specifically tailored for air planners. The FPG aimed to improve NATO Air Operations Planning by providing information that assists and standardises the Air Campaign planning process for Air Component level HQs, adheres to the seven phases of the Comprehensive Operations Planning Directive (COPD), supports the use of the Tool for Operational Planning and Functional Area Services (TOPFAS) and supports the work of the Air Operations Planning Group (AOPG). The FPG was handed over to Air Command and validated in an AC-R operational level exercise. Additionally at AC-R's request, the JAPCC produced a Joint Force Air Component Commander's Seminar Training Concept. JAPCC further supported the training initiatives of AC-R and NATO's Combined Air Operations Centres (CAOC) through participation in several training working and coordination groups.

JAPCC was requested by AC-R to serve as the secretariat for the Air Force Support Task Group (AFSTG). AC-R holds the chairmanship as required by the Terms of Reference (TOR) with JAPCC providing the manpower for the group. Additionally, AC-R requested that JAPCC establish a NATO Air Training Coordination Cell (NATCC). Again, AC-R holds the leadership of this proposed entity. At the close of the year, JAPCC was in discussion with AC-R as to the TOR and concept development of the NATCC.

Command and Control/ Leadership Competence Improvement

2012 saw JAPCC continue to develop and refine this model for training and educating leaders. The model is based on three pillars: the theory and exertion of constructivism, the commitment of instructors (teachers, faculty members) as observers and moderators, and the use of so-called Conflict Simulation (CoSim) Games. CoSim games are commercial board games, offering a wide variety of scenarios, largely historical battles, operations, and campaigns. The model in using these games enables a dynamic C2/Leadership competence experience to be gained. It further provides a cognitive challenge within a number of competence areas, such as communications, crisis action planning, team building, etc. The cost of this model is extremely low, especially when compared with computer assisted staff exercises.

JAPCC engaged a number of Sponsoring Nations' military leadership as well as academic institutions during the year. The model and concept were presented to the Royal Air Force College, Cranwell, UK; U.S. National Defense University, Washington D.C.; representatives from the German Air Operations Command at Kalkar; the Führungsunterstützungsschule der Bundeswehr, Landsberg (C2 Support School, German Armed Forces); and JAPCC made initial contact with a Dutch management consulting company. JAPCC SMEs already have meetings arranged at King's College, UK; CASSIDIAN/EADS Germany; and the Turkish Air War College among others for 2013. The project will move to an enduring activity with the publication of a handbook early in 2013.

Mission Priority Supported:

Develop and champion innovative visions, concepts and solutions for the transformation of Joint Air & Space Power

Air & Space Global Commons

Joint Intelligence Surveillance and Reconnaissance (JISR)

The first half of 2012 saw significant JAPCC activity in this area. JAPCC SMEs supported United States Air Force in Europe (USAFE) Headquarters staff, to organise and run the ISTAR symposium for NATO's JISR staff. The outcome of this symposium was positive and will help drive NATO's JISR efforts.

Additionally, JAPCC continued to chair NATO's JISR Panel and monitored NATO's JISR efforts by attending a number of the other JISR Working Groups (WG) and Panels. In doing so, the JAPCC JISR SME provided coherence across these Panels and WG to ensure NATO JISR efforts remain focused. Furthermore, JAPCC was very active in Trial Unified Vision 2012. The JAPCC ISR SME was deeply involved in this multi-intelligence, live-fly, trial which tested JISR interoperability and processes and procedures for JISR Tasking, Collection, Processing, Exploitation and Dissemination. As part of the trial, the JAPCC JISR SME attended, and heavily contributed to, the Scenario and Vignette writing workshop. Thereafter, the SME briefed the All-Source Intelligence Interoperability Sub Group (ASIISG) on the outcome. JAPCC's involvement with and leadership in NATO's JISR community of interest ended in mid-year with the reassignment of the JISR SME without replacement.

JAPCC Support to the NATO Defence Planning Process (NDPP)

JAPCC supported SACT SEE DPST in NDPP Step 2 – Determine Requirements, as well as in the first phase of the Step 3 – Apportion Requirements and Set Targets. The main arena of JAPCC support remained the various CAGs and Focus Groups Meetings which were related to the different issues within the planning domains. The JAPCC provides advice and subject matter expertise with focus on the strategic and operational level for Air and Space Power. Through membership of the CAGs, the JAPCC provided expertise to advise NDPP planners on the development of: Capability Codes; Capability Statements; Capability Hierarchy; Capability Assignment Logic and Reference Capabilities Development. During 2012, the JAPCC's SMEs were also involved

in Focus Groups which dealt with issues such as Air Basing Requirements; Evolving Employment of Air Power; and Air Defence Stock Pile.

Joint Personnel Recovery (JPR)

JAPCC SMEs contributed in a number of areas with regard to JPR. SMEs provided expertise in several venues including education and training courses as well as during meetings and working groups focused on improving NATO as well as Nations' JPR capability. The JPR project 'Enhancing Joint Personnel Recovery (JPR) Capability, Education and Training' was approved for execution. The development of NATO JPR Policy, Doctrine and Tactics, Techniques and Procedures (TTPs) started in 2004 and produced MC, AJP 3.3.9 and ATP 3.7. However, these documents wait ratification and promulgation. While NATO required JPR capabilities as an enabler for recent and on-going operations (OUP, KFOR, ISAF), the planning, implementation and operation/execution of these capabilities was/is severely hampered by the lack of strategic direction and guidance. This leads to a non-understanding of JPR as a system. The aims of the project are: 1) Address and analyse the shortfalls in NATO JPR Policy and Doctrine and provide recommendation to overcome the deficiencies; 2) Address and analyse the E&T of JPR-qualified planning personnel at Joint, Component, NATO and National levels and provide recommendation to realise an appropriate E&T environment; and 3) Attempt to raise the profile of JPR within the NATO Training, Exercise and Evaluation cycle. The principal customers for this project are SACT, Joint Force Commands Brunssum and Naples, AC Ramstein (with associated CAOCs), and national military organisations within Italy and France. The prime deliverable will be a roadmap for improved capability, education and training of JPR forces. The project is scheduled for completion by mid-2nd Quarter 2013.

Air and Space Power 2035+

This project initiated in 2011, was cancelled by the ExDir in mid-March 2012. With the prioritisation of projects, it was decided to cancel the project A&S 2035+. The main reasons were that there was no identified sponsor for the project and that the required resources to accomplish this project were not available. JAPCC continued to support ACT by attending numerous meetings and working groups.



Pursuing Cooperation in the Air Domain

Enhancing NATO Helicopter Capabilities

This project, begun in March 2011 was completed, printed and distributed in September 2012. The project's aim was to research, analyse and describe the factors currently limiting the optimisation of NATO's helicopter capabilities. The outcome of this research led to recommendations addressing those factors and thus enhancing the available capabilities. These were included in the final white paper. The project was forwarded to key leaders and organisations with responsibility for helicopter doctrine, TTP development, training, and operations. Feedback indicates that the project was well received and many agree with its findings and recommendations.

Mission Priority Supported:

Promote and showcase the effectiveness and relevance of Joint Air & Space Power as a critical element in Air, Land, and Maritime integrated operations

Air & Space Support to Counter-Piracy (CP) off the Horn of Africa (HoA)

The final deliverable of this project was originally expected by the end of March 2012. However, this slipped until November 2012. The White Paper was finalised and published at the end of the 4th Quarter. The study provided a general understanding of the principle means whereby A&S Power could support the NATO Counter-Piracy mission. It strived to define the best composition of capabilities for the most efficient and effective Intelligence, Surveillance and Reconnaissance support to maritime force in combating piracy. The project was internally generated with no external sponsor but was distributed to MC Northwood, SN, interested organisations and individuals.

NATO Force Protection (FP)

During 2012, demand for FP and C-IED support remained extremely high and this area of JAPCC is operated at if not beyond its realistic, sustainable capacity. It should be emphasised that Air is leading NATO Joint FP development and in turn JAPCC is leading Air. The 'NATO Joint Force Protection Capability Development' Project continued to progress well. A revised and comprehensively updated Project Definition Report (PDR)

was signed in July. Engagement through JFCBS with International Security Assistance Force (ISAF), Afghanistan continued, where the JAPCC regularly provided guidance on a range of FP matters including advice on dealing with emerging threats. In March 2012, the JAPCC SME led the Force Protection Advisory Team (FPAT) visit to Kandahar Airfield (KAF). The report from this visit produced by the JAPCC was delivered to SHAPE. Additionally, the JAPCC FP SME was directly involved in securing € 1.5 m in funding for enhancement of surveillance capability at KAF.

The JAPCC has delivered the final draft of Military Committee (MC) Policy for FP (MC-0610 – MC Policy on Force Protection for NATO-Led Operations). At the end of the year it still awaits ratification. In mid-year, JAPCC participated in the AJP-3.14 Custodian's Meeting and made considerable input into the review of the document. The input made following the AJP-3.14 Custodian's Meeting was accepted as written and incorporated into Study Draft (SD) 2 of the AJP and continued the trend of shaping Joint doctrine in-line with Air thinking on FP. SD2 was presented at the Custodian's Meeting in October. Unfortunately, the number of comments/criticisms that the SD attracted drove the need to produce a third SD.

Finally in the arena of FP Training, the JAPCC-authored NATO School Oberammergau (NSO) FP Course remained one of the best received courses at the NSO with student satisfaction consistently exceeding 85%; clearly demonstrating the reputation that this course has developed since being redesigned by the JAPCC. This is remarkable considering that the course regularly attracts in excess of 45 students from a significant number of nations (the 18–22 Jun 12 iteration of the course was attended by 25 different NATO and partner nations) and across the broad rank-range of OR-5 to OF-5. The course was completely re-written and updated. This activity was conducted at the NSO in November and represents the completion of yet another project deliverable.

NATO/Russian Federation (RF) JAPCC Cooperation

JAPCC received a request from the NATO-Russia Council to engage with the Russian Federation on CoE specific topics. A Russian Federation (RF) Delegation participated in the JAPCC Conference 2012 and provided a key-note speech. JAPCC and the RF agreed for JAPCC

to visit the RF Lipetsk Air base for several days in February 2013. The cooperation network has been enhanced and stabilised with direct working relationships to the RF Air Force Staff, the IMS Special Partnership Division, ACO Military Cooperation Division Russian Representative and the RF Representative to NATO.

Enduring Activities

JAPCC Annual Conference 2012

The JAPCC conducted its 8th Annual Conference from 09 to 11 October 2012, in Kleve, Germany, under the theme 'Warfare in the 21st Century – Decline or Rise of Air Power?' The conference goal was to address how Air and Space Power could best contribute to the challenges in a rapidly changing world. This topic was designed to appeal not only to those who wear a military uniform but also to governmental and non-governmental senior officials, as well as industry and academia.

In line with the conference objectives, the JAPCC conducted four panel discussions with the themes:

Panel 1: The Lessons of History on the Development of Air and Space Power;

Panel 2: Air and Space Power Future Concepts – A Comprehensive Approach;

Panel 3: Leading Air and Space Power Technologies – Industry as Force Multiplier?;

Panel 4: Air and Space Power in an Era of Austerity – The Dilemma of Requirements and Challenges!

A distinguished audience of 224, including 51 flag officers, from 24 nations, received the keynote address by Supreme Allied Commander Transformation (SACT), General Jean Paul Palomeros, and five more insightful presentations by General (Ret) Vincenzo Camporini, former ITA Chief of Defence; Mr Diego Ruiz Palmer, Special Advisor to NATO Secretary General for Economics & Security; Air Commodore Paddy Teakle, Head Doctrine, Air and Space, Development Concepts and Doctrine Centre UK; Brigadier General Pascal Roux, Director of Concepts and Capability Directorate from the European Union Military Staff; and Colonel Dmitry Kostyunin, Chief of Staff Long Range Aviation from the Russian Federation (RF). In his closing remarks, Lieutenant General Joachim Wundrak summarised that Air Power is and will

remain relevant and that an easy solution to overcome the dilemma of budget restraints cannot be found. Nevertheless, strategic communication of Air Power is essential and research activities on future challenges, risks and opportunities that NATO will face after International Security Assistance Force (ISAF), require JAPCC's contribution as facilitator for Air and Space Power.

In summary, the conference displayed innovative thought from the perspective of the community of European Airmen, and our partners from the sister services, industry, and academia. But unfortunately the goal of attracting a significant number of non-Air Force governmental and non-governmental senior officials, as well as industry and academia was not realised.

JAPCC leadership undertook a detailed review of the conference and identified a number of areas for improvement at next year's conference. It was agreed that the conference should both reach out to a wider audience and avoid attracting only air power enthusiasts. Additionally, it was identified that the conference should also act as a showcase for the JAPCC by the inclusion of JAPCC members within the panels or by presenting important JAPCC projects as part of the event. 2013 Conference preparation are on-going. The topic that was selected is 'Air Power Post-Afghanistan' and will take place from 8–10 October 2013.

The JAPCC Journal

The Journal aims to serve as a forum for the presentation and stimulation of innovative thinking on NATO Air and Space Power-related issues. Published twice per year, the Journal highlights JAPCC work as well as that of international experts from military and academic backgrounds. The quality of the Journal is widely recognised throughout NATO for its thought provoking articles on relevant issues. Thirty-two articles authored by both internal and external A&S Power experts were published in the two JAPCC Journals for 2012.

NATO Bodies¹, 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. Of note, JAPCC Assistant Director Transformation took over as Chairman, Air Operations Working Group from the JAPCC Liaison Officer at SACT raising the chairmanship to flag officer level and demonstrating JAPCC's intention to raise the impact of this WG.

Chairmanship

- Air Operations Working Group
- Joint ISR Panel (until Summer 2012)
- NATO Air-to-Air Refuelling Panel

Co-Chairmanship

• Maritime Air Coordination Conference

Panel Member/Working Group

- Aerial Refuelling System Advisory Group (ARSAG)
- Movement and Transportation Forum
- Air Operations Support Working Group
- Bi-SC Force Protection Working Group
- Bi-SC Space Working Group
- ACT Joint ISR Integrated Capability Development Team
- NATO Air Transport Panel
- NATO Search and Rescue Panel
- Helicopter Inter-Service Working Group
- NATO Counter-IED Task Force
- Joint Capability Group on Unmanned Aerial Vehicles & Joint UAV Panel
- Combat Service Support Working Group
- Logistics Planning Advisory Committee
- ATA (Airlift Tanker Association) permanent member
- NATO Force Protection Task Force Member
- NATO Counter-Improvised Explosive Device Task Force Member

NATO Policy/Doctrine/TTP Support

- Custodian: ATP-56 AAR Procedures
- STANAG Custodian: ATP 3.3.4 VOL II NATO AAR procedures
- Custodian: ATP-3.3.6 NATO Force Protection Doctrine for Air Operations
- Custodian: ATP 3.3.4 VOL I
 NATO Air Transport procedures
- Custodian: ATP 3.3.4.3(B), ST 3998 TTPs for NATO Air Transport Operations
- Drafting Team: ATP-49 Use of Helicopters in Land Operations

- Study Draft: Allied Joint Publication for Force Protection
- EAG Joint Personnel Recovery Standardisation Course permanent Advisor

Participation in the Air and Missile Defence Committee and Subordinate Bodies

The JAPCC remains an active participant in the Air and Missile Defence Committee, the Panel on Air Defence and its subordinate Drafting Groups. The main focus of work this year has been the finalisation of the Air and Missile Defence Capstone document and the review of the Air and Missile Defence Policy paper. Through continuous participation in these various bodies, JAPCC exercises considerable influence over the development of Integrated Air and Missile Defence policy.

JAPCC Support to NATO Training and Exercises

JAPCC revitalised its working relationship with NATO's Joint Warfare Centre (JWC) through the drafting and co-signing of a Letter of Agreement. JAPCC supported JWC's Programme of Work for 2012 with SME support for the development of exercises as well as participation in two JWC Training Teams during the NATO Response Force (NRF) certification exercise of the Joint Head-quarters and Component Command level, NRF 2013. 2013 will see a significant increase in JAPCC support to JWC with the aim of strengthening the quality of air power and space related exercise scripting and injects in support of NRF certification exercises.

Mission Priority Supported:

Partner with relevant NATO entities and Nations to synchronise work and products

Internal Initiatives

JAPCC Internal Review

During the March 2012 Executive Working Group meeting, the JAPCC Director posed the question of "How relevant is the JAPCC?" The Director while praising JAPCC's work over the previous year also asked the question of "What impact JAPCC's work was having?" These two questions initiated an internal JAPCC review

aimed at understanding the state of JAPCC with regard to its mission as the Air and Space Power Transformation Agent for NATO. Two months later, JAPCC Leadership briefed the Director on the review's findings. Key findings were that JAPCC had lost touch with many NATO organisations and its Sponsoring Nations, had shortfalls in organisational requirements and internal processes and needed to conduct a holistic strategic review of its mission, vision, focus areas and key guidance documents.

During the second half of 2012, JAPCC Leadership conducted two sets of Strategic Planning Meetings (SPM) with the goal of conducting the needed strategic review. The first outcome of the SPMs was the initiation of an Engagement Campaign during which JAPCC Leadership, SNRs and SMEs would visit each Sponsoring Nation and all of the NATO Headquarters at and above the component level. Visits commenced in October. The second outcome of the SPMs was a new JAPCC Mission Statement and Director's Vision. These were approved by General Breedlove and go into effect 1 January 2013. The third major outcome was the identification that a Capstone Document aimed at providing overarching direction to the JAPCC as well as a more clearly defined set of policy and guidance on mission accomplishment and organisational objectives and principles was needed. Work on drafting this document began during the summer. A fourth outcome was the identification by the JAPCC leadership of six new and narrower, more defined Focus Areas to guide JAPCC's work for 2013. The fifth major outcome was the identification of the requirement to development a Strategic Three-Year Plan. At year's end this Strategic Plan was under development.

JAPCC Leadership clearly understood the need and began the process to transform the JAPCC into an organisation that is aware, responsive and capable of adapting to meet the ever-changing needs of NATO and the Alliance. The groundwork for this revitalisation of the JAPCC began this past year. However, the major change initiatives will begin in 2013 when the details of the Strategic Plan are more fully developed.

^{1.} NATO Bodies encompass all permanent staff, IS, IMS, NATO commands and agencies.

2013 outlook

NATO Air Advisors Project

'NATO Air Advisors: Improving NATO's Ability to Fulfil Future Air Advisory Requirements': 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." NATC-A currently provides the NATO Training Mission-Afghanistan with 'Air Advisors' to assist them with building their nascent Air Force with a capability to meet their unique requirements. This study will give inputs and guidance to identify the essential actions and requirements to guide NATO in supporting this mission. A Project Definition Report (PDR) was drafted and should be delivered to the Project Board for consideration in early January 2013. The sponsoring organisation of this project is NATO Training Mission-Afghanistan.

NATO Air Power – Future Vector

The aim of this study would be to provide effective solutions to Senior NATO military commanders, NATO civilian leadership and makers of Alliance Nations' defence policy that are required to holistically strengthen NATO's Air Power in the near and intermediate term if it is to remain a viable part of military power; either in deterrence or response.

Air Power has been of utmost importance to the Alliance since NATO's inception. A key pillar of NATO's Cold War deterrence was the strength, flexibility and high quality of its Air Forces and Naval Air services. This Air Power capability was based on superb equipment, superior training, very high levels of interoperability, and seasoned experience; all enabled by strong air leadership exercised through a well-developed Air Command and Control capability.

Time and time again, NATO and the Alliance nations have turned to Air Power as their first, and in some cases only, military response option. Air Forces of NATO

nations were first on the scene in the Gulf Wars, Balkans, Afghanistan and Libya. Air Power now coupled with Space Power continues to demonstrate its unprecedented value through its inherent attributes of speed, flexibility, precision, reach and low risk. These combined qualities provide NATO and national civilian leaders with a tool of unmatched responsiveness and flexibility. Repeatedly, NATO Air Power has employed and sustained, both hard and soft, military power to safeguard populations and enable NATO operations.

In JAPCC's opinion, a focused Air and Space Power study is required to identify the policy and strategic vector that will ensure that NATO maintains its Air and Space Power superiority. The study should focus on realistic and executable options for implementation of NATO's Smart Defence Initiative which has been adopted to cope with the future challenges.

JAPCC believes it is critical that NATO actively investigate, develop and adopt a comprehensive Air and Space Power strategy out to 2040. Failure to proactively plan NATO's Air and Space Power future will most likely condemn NATO's Air and Space Power to failing in the future ... an outcome that NATO and our nations cannot accept.

Smart Defence Project

'How smart Defence could be!' This potential project will analyse the different understandings of 'Smart Defence' and 'Pooling and Sharing' in a comprehensive air related approach and analyse common interests, as well as deviations from the course of employment. The project will investigate the effects for Air and Space Power Capability Development and will address recommendations on the required changes of mind sets into activities. In addition to the final White Paper, a Flyer is planned to be delivered in 2nd Quarter 2014.

Unmanned Aerial Systems (UAS)

'NATO's UAS Operations in a Contested Environment': The project will deliver an assessment of the current capabilities of unmanned aircraft systems and will give inputs and guidance to identify the essential priority actions and future UAS requirements to guide NATO to facilitate unmanned aircraft system operations in contested environments.

Over the last decade, the military role of UAS has grown, and continues to grow at unprecedented rates. Although the unmanned aircraft's original purpose was reconnaissance, its design has shifted to reflect an emphasis on attack and it's capability to operate as sensor, designator and as shooter simultaneously. Today, UAS play a very important role in military and non-military engagements and have been used more in Iraq and Afghanistan than any other air weapons system. But the immense growth of UAS employment in the current areas of operations was mainly fostered

by the absence of enemy air assets or air defence systems. The risk of losing an unmanned aircraft (UA) due to enemy fire was hardly present and almost all crashes of UA were caused by mechanical failure, pilot errors or communication link losses. Recent operations lead us to believe that the current success of UAS employment is highly dependent on airspace domination. There is a question on what the impact of a lack of air superiority will have on future UAS operations. There is concern about the fate of current UAS in contested environments and the impact of manned aircraft operating alongside a new generation of unmanned systems. Therefore the future role of new UAS systems has to be analysed. Sponsor of this project is JFC-B and the following nations have indicated they are willing to contribute: Germany, Netherlands and Turkey.



NATO/RF/JAPCC Cooperation

In January 2013, a JAPCC contingent is scheduled to visit the Russian Federation training base of Lipetsk. Discussions on the following topics have been requested:

- 1. The future structure, role and missions of the Russian Federation Air Force and the current status of any transformation process.
- 2. The impact of (future) Defence Policy upon Air and Space Power strategy.
- 3. The Russian Federation's policies on Counter-Terrorism and Counter-Piracy.
- 4. Air and Space Power Education and Training in the Russian Federation.
- 5. The Russian Federation's concept of, and policy toward, NATO Centres of Excellence and Think Tanks.

JAPCC remains prepared to engage with the RF when it furthers the mission of the CoE and produces substantive results for NATO.

Annual Conference 2013

'Air Power Post-Afghanistan' has been selected as the topic for the 2013 annual conference. The objective of the 2013 Conference is bringing together not only air power experts and enthusiasts but members from other services, politicians, academics and representatives from industry. A primary goal will be to include topics that have a wide appeal to non-air power individuals. Taking away a key point from the 2012 Conference; Airmen need to better educate themselves in order to better educate others on Air and Space Power. The 2013 conference will strive to support this goal. The Conference promises to deliver quality speakers and panellists resulting in robust debate on important and potentially controversial Air and Space topics that have a wider appeal and are of significance to those outside the Air and Space Power community.

Allied Joint Publication 3.3

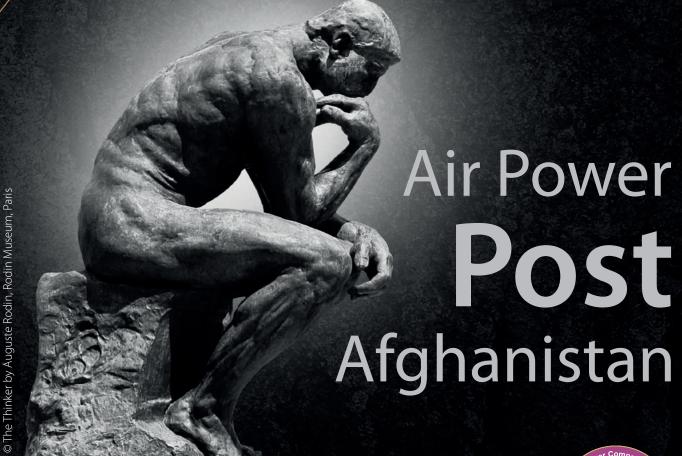
JAPCC successfully bid for and gained the custodianship of Allied Joint Publication (AJP) 3.3, Joint Air & Space Operations Doctrine during the final months of 2012. Official custodianship of the AJP will begin in January 2013 at which time the JAPCC will conduct an analysis of the status of the document and then enter into the appropriate sequence of review, rewrite, coordination and approval of this key NATO air and space power doctrine document.

JAPCC Strategic Review and Transformation Initiatives

Continuing the initiative of Strategic Review begun in 2012, JAPCC will focus significant effort in 2013 on the continued development, refinement and execution of its Strategic Three-Year Plan. JAPCC members will undertake: a review of JAPCC's organisational structure and make recommendations for change, an update SME Job Descriptions to ensure the most accurate information is provided to the Sponsoring Nations as they look to fill their bid positions, finalising the Capstone Document, a Memorandum of Understanding (MoU) rewrite initiative; as well as continue the Engagement Campaign to ensure a closer relationship between JAPCC, NATO organisations and JAPCC's Sponsoring Nations.

Joint Air & Space Power Conference

08th-10th October 2013



Interested? Contact and reserve your seat: conference2013@japcc.org



Joint Air Power Competence Centre





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