

Joint Air Power Competence Centre

JAPCC

Annual Report 2007



JOINT AIR POWER COMPETENCE CENTRE



Introduction

In 2007, JAPCC continued to play a leading role in advocacy for transformation of NATO's Joint Air and Space Power. We provided support to Allied Command Transformation as our primary customer in numerous joint key projects and fora, also taking the chair in many key working groups and sub-groups, along with custodianship of multiple Air Power related standards. In keeping with our transformational mandate, some of these leadership and custodianship positions will be highlighted in different areas of our new Annual Report format. Highlights of the year included the publishing of both a NATO Air C4ISR Roadmap and a Flight Plan for Unmanned Aircraft Systems in NATO. This latter document helped the JAPCC earn nomination and subsequent award, by one of the most prestigious consulting firms, as The Outstanding NATO Centre of Excellence in Europe. We intend to continue at the forefront of Allied Command Transformation's Centre of Excellence effort; we have co-located our OF-5 liaison in its Transformation Net cell and are working with it on a daily basis to assist and consolidate its work with all CoEs.

The level of sponsoring nation support continued to be sufficient to accomplish our mission, with our nations ensuring a reasonably stable manning level around 85%, with all major leadership positions filled. The financial support provided through our Senior Resource Committee continued to provide nearly full funding of our operations, travel, and support needs to accomplish our mandates. However, continued emphasis is needed for all the sponsoring nations to fully fund the travel requirements of their bid positions. In addition, we completed renovation and acceptance of the state of the art Joint Air Power Conference Centre which has proven invaluable in hosting critical symposia and working group meetings. Nevertheless, it was with regret that we formally received Hungary's notice of withdrawal from the JAPCC MOU; whilst this should not affect on-going JAPCC plans, we intend to revisit the potential for membership with those NATO nations outside the MOU in the coming year.

Our recurring projects, namely the Annual Air and Space Power Conference and the bi-annual publication of the JAPCC Journal, continued to grow in prominence with distribution of our Journal and attendance at our Conference growing both in numbers and level of senior interest and participation. Copies of past Journals and information on our Conference are always available on our website, (<http://www.japcc.org>).



We are very proud to support the transformational priorities of Allied Command Transformation and all of our customers. In concert with our sponsoring Nations and partner organizations, 2007 was a very successful year, albeit in December we said goodbye to one of the driving forces behind our success over the last two years, our Director, Gen Hobbins. In 2008, we welcome a transformation in our leadership team, with our new Director Gen Brady, and a new Assistant Director for Capabilities, Cmdre van Hoof, who replaces Brig Gen Baldazzi after a very successful three year tenure. I hope you will enjoy reading this annual report giving you a summary of our key activities in 2007 and an outlook on our 2008 program. If you have any questions or remarks, please do not hesitate to contact me or my staff.

A handwritten signature in blue ink that reads "Friedrich W. Ploeger".

FRIEDRICH WILHELM PLOEGER
Lieutenant General, DEU AF
Executive Director JAPCC

JAPCC Mission Priorities in 2007

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

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

Partner with relevant NATO entities and nations to synchronise work and products.

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

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



Farewell to Gen Hobbins

Who we are...

JAPCC is a Centre of Excellence (CoE) established in 2005 to contribute to the transformation of NATO's Joint Air and Space Power. Allied Command Transformation (ACT) HQ and other NATO HQs along with sponsoring nations are the primary customers of JAPCC.

Director's Vision.

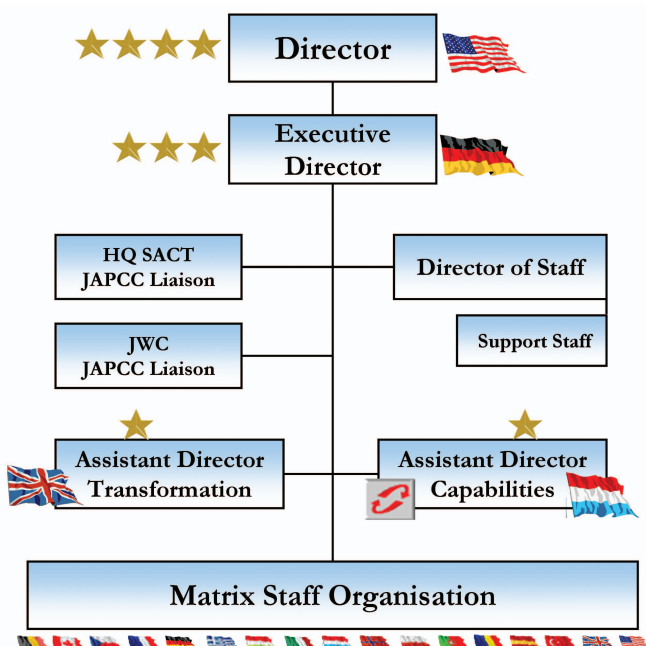
Be NATO's recognised champion for the advocacy and transformation of Joint Air and Space Power.

Our Mission.

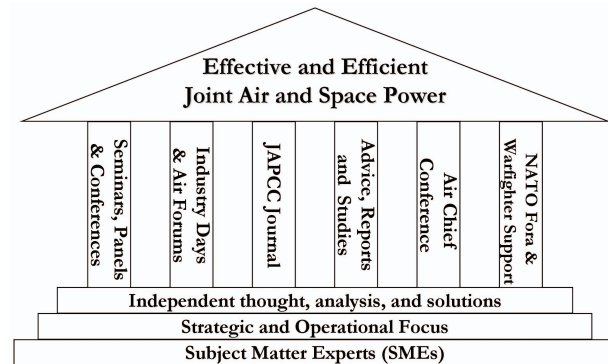
Be the Air and Space Power Transformation Agent for the Alliance and its Participating Nations, providing innovative, timely advice and subject matter expertise, both proactively and responsively. As a CoE, with a strategic and operational level focus, we offer independent thought, analysis and solutions. The core mission is to enable NATO's effective and efficient use of Joint Air and Space Power.

Organization Structure.

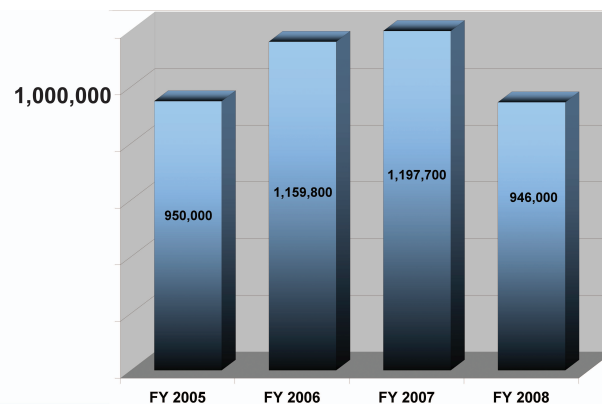
JAPCC is headed by Gen Roger Brady, USAF, as Director, and Lt Gen Friedrich Ploeger as Executive Director. Our Assistant Director for Transformation (ADT) is Air Cmdre Garfield Porter, RAF, while our Assistant Director for Capabilities (ADC) is Cmdre Jan van Hoof, RNLAf, who has just relieved Brig Gen Baldazzi, IT AF. In order to get the most out of available manpower and to remain flexible, JAPCC employs a matrix organization structure. Although Subject Matter Experts (SMEs) are placed under specific branches, they may be aligned to one of several project groups directed by either ADT or ADC. Project Leaders are selected from our Branch Heads.



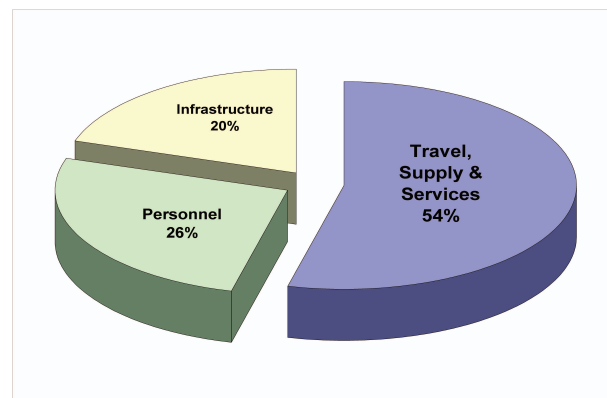
How we accomplish our mission. SME knowledge brought into the JAPCC organisation is funnelled through a strategic and operational focus. The resulting independent thought, analysis and solutions manifest in reports, advice, NATO fora, journals, industry days, seminars, panels and conferences in order to achieve the objective of “Effective and Efficient Joint Air and Space Power for NATO”.



Budgeting and Finance. Based on the 3 year averages, JAPCC yearly budget is around 1 million euros. Due to the need for refurbishment of the conference facilities in Building 26, budget expenditures for 2006 and 2007 were higher than the average. Starting from 2008, we forecast a lower budgetary need.



Sponsoring nations contribute to the budget according to the number of posts in their bid. The annual cost of each post in JAPCC is approximately 15.000 euros. For 2008, JAPCC budget mainly consists of travel, supplies & services (54%), personnel expenditures (26%) and investments for infrastructure (20%).



Key Activities in 2007

Mission Priority Supported:
Develop and champion innovative visions, concepts, and solutions for the transformation of Air and Space Power

NATO Air C4ISR Roadmap. C4ISR within NATO is recognised as a patchwork quilt thrown together through operational and political necessity rather than design. Consequently, it has been shaped by good intent and cooperation rather than through strategic direction. The background to this situation is complex, historical, and mostly understandable; nevertheless, C4ISR enlightenment, at the highest levels, is essential if NATO is to meet contemporary security challenges. The vision for the Roadmap is a fully interoperable and interdependent net-centric Joint C4ISR capability, which enables a commander, through Decision Superiority, to achieve the desired effect. To achieve this, the JAPCC Air C4ISR Roadmap builds a picture to show where NATO is today and, based on the current plans and programmes, how the Alliance is going to meet the demands of tomorrow. The Roadmap describes the landscape and highlights the opportunities presented by the challenges. By taking our findings as a starting point for change, NATO can identify the areas of alignment that work effectively, along with those that demand urgent, near-term and increasingly long-term attention.



NATO Air C4ISR Roadmap

The document and briefing were approved by General Hobbins in November for publishing and public presentation. The project's goal was to establish the C4ISR baseline for individual countries within the Alliance and NATO as a whole, then identify the gaps along with the appropriate corrective measures. Production for release of the document is in progress and we began a series of high profile presentations on the product in January 2008.

We have already received feedback from an early release to ACT indicating they are poised to use the gap analysis presented in the Roadmap to solidly justify requirements to the NATO nations in the Defence Requirements Review and Long Term Capability Requirements process.

Unmanned Aircraft Systems (UAS) Flight Plan for NATO. While the bulk of this effort was completed and reported in the 2006 Report, the UAS Flight Plan was signed by Gen Hobbins on 15 March 2007 and submitted to ACT for concurrence and action. The 26 significant issues highlighted and their associated recommendations were accepted for action and are now being addressed through a Bi-SC agreement with Allied Command Operations. JAPCC will continue to contribute fully to this process and will incorporate progress into the Flight Plan updates in 2008 and beyond.



(UAS) Flight Plan for NATO

Air-to-Air Refueling Interoperability. JAPCC led the drafting and coordination of Allied Joint Publication 3.3.4.2, Air-to-Air Refuelling Procedures, which was ratified from a fixed-wing perspective in April 2007. In addition, Gen Hobbins approved the report on "Future Air-to-Air Refuelling in NATO" in August, which included as key findings the need to re-energize the Prague Capability Commitments as they relate to refuelling, the need for NATO to change refuelling planning procedures, and the need for an overarching NATO Aerial Refuelling Doctrine.

Our Aerial Refuelling Cell has instituted a "one stop" Aerial Refuelling website for mission clearance support and has already submitted a validation proposal to the Nations for future doctrine development as follow-on to that report (www.aarclearances.blogspot.com).

Force Protection Doctrine for NATO Air Operations. The operational requirement for force protection of airfields in NATO-led ISAF operations and the reliance on those few nations with specialist and deployable airfield defence capabilities, evidenced by the UK at Kandahar, has highlighted a NATO doctrine gap.

In February 2007, the JAPCC hosted an Air Forum with 30 representatives from 16 nations and 5 NATO HQs. They agreed with the requirement and endorsed a first study draft doctrine, which was then submitted to NATO HQ, and circulated to the Nations.

The Nations that NATO HQ now lists as having endorsed this proposal at the time of print are BEL, CAN, CZE, DNK, HUN, ITA, NLD, PRT, TUR, GBR, and SHAPE.



Force Protection Doctrine for NATO Air Ops

Airbase Activation. The JAPCC has continued to use its Deployable Airbase Activation Wing concept to inform NATO Defence Planning. Through engagement in the Defence Requirements Review, the Combined Joint Statement of Requirements for NRF and other NATO programmes, we continue to ensure NATO has a credible capability in this essential area.



Airbase Activation

Air Defence 2020. The genesis of this task was to provide a vector for NATO with regard to Air Defence. This evolved in support to the Conference of NATO Armament Directors (CNAD) and the primary policy advisory body for Air Defence matters in NATO, the NATO Air Defence Committee (NADC). The JAPCC chaired the Holistic Air Defence Exploratory Study Working Group, which produced a report presented to both the CNAD and the NADC, recommending ways forward to deal with Air Defence and Air Power matters in NATO in a more efficient way. The report was noted in both bodies and the NADC took action to implement most of the recommendations.

JAPCC is actively supporting the NADC Drafting Groups that are producing NATO's Vision for Air Defence.



Air Defence

Mission Priority Supported:
Promote and showcase the effectiveness and relevance of Air and Space Power as the critical element in Air, Land, and Maritime integrated operations

JAPCC Conference 2007. The purpose of the annual JAPCC Conference is to provide an opportunity to focus on Air and Space issues, normally held on an area of specific and timely interest. Each year a different Capstone project is selected and studied. Papers, reports and articles prepared on that subject are publicized.

The purpose of the Conference in 2007, as General Hobbins explained in his opening remarks, was to consider how to best exploit the attributes of Air Power in Expeditionary Security and Stability Operations as characterised by NATO-led operations in ISAF and coalition operations in Iraq. The 2007 Conference was JAPCC's most successful to date.

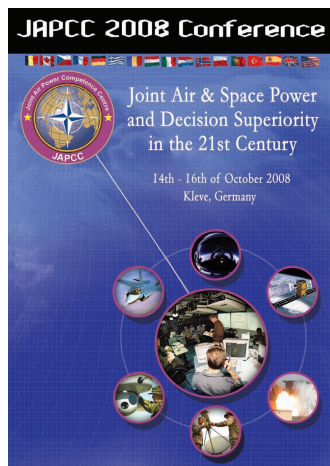


Gen Hobbins--2007 Conference

More than 50 general officers and over 200 total attendees participated in two days of panel discussions and informal gatherings. General Egon Ramms, Commander Allied Joint Force Command Brunssum, gave the keynote address and spoke openly about the challenges for NATO with respect to operations, and in particular air operations, in Afghanistan.

Next, Lt Gen Soligan, Deputy Chief of Staff for Transformation at ACT spoke about his Command's role in the Transformational process. Air Commodore Porter, JAPCC ADT, then gave a presentation based on a JAPCC paper outlining the enduring nature of Air and Space Power, its potential contribution and the implications for Air and Space Power in security and stability type operations. The panel topics of "The Comprehensive Approach," "Air C4ISR," "Kinetic and Non-Kinetic Activity and Cognitive and Physical Effects," and "The Role of Air Power in Reconstruction and Development," provided lively interaction. The Conference proceedings and subsequent comments have been used to develop a JAPCC paper, which in short will inform NATO air doctrine development.

The 2008 Conference is set for 14-16 October 2008 at the same venue, focusing on Decision Superiority and Battlespace Management. SACT, Gen Mattis, has been invited as keynote speaker.



2008 Conference

JAPCC Journal. We consolidated, wrote and published the Fifth and Sixth Editions of the Journal this year, focusing on The Transformation of C4ISR in the spring and The Role of Air Power in Security and Stability Operations in the fall. Both editions, along with the archived previous editions are available for review or download at <http://www.japcc.org>.



JAPCC Journal Editions 5 and 6

Industry Visits and Non-Member National Visits.

This year, the JAPCC pursued a stronger relationship with the Network Centric Operations Industry Consortium (NCOIC) and hosted the NATO IPT lead to discuss JAPCC and NCOIC ongoing projects and possible future cooperative efforts between the two organisations. Since NCOIC represents over 100 member organisations, including most of the west's prominent aerospace companies, in advancing Network Centric concepts and products, we're confident that expanding our interaction will be beneficial to the MOU Nations. The JAPCC was invited to, and presented short UAS and C4ISR briefings at the NCOIC Plenary Conference in St. Petersburg, Florida; the resulting feedback was most positive. Full membership as an NCOIC partner is the likely next step. The C4ISR branch hosted a Swedish delegation to discuss possible areas of cooperation in command and control issues. We also hosted the EADS Vice President of Military and Defence Customer Relations and the Boeing Regional President for Northern and Western Europe.

The JAPCC Air Power Conference Centre. Recognising the need for a focal point for Air Power discussions, JAPCC initiated the refurbishment of Building 26 at Kalkar to create the JAPCC Air Power Conference Centre. With a large and small conference room, syndicate rooms and a library, the Conference Centre was officially opened on 5 March 2007. Soon after the opening, the centre hosted the Panel on Air Defence DG 1/2. This was the first of many gatherings in the new JAPCC Conference Facility throughout the remainder of the year and into the future.



Conference Centre

Mission Priority Supported:
Partner with relevant NATO entities and nations to synchronise work and products

Cooperative Agreements with NATO and Non-NATO Organisations. JAPCC coordinated and finalised letters of agreement with the Centre for Analysis & Simulation for the Preparation of Air Operations (CASPOA) Centre of Excellence and the European Air Group (EAG) this year. By identifying common areas of interest and defining specific focus priorities in those areas, we've reduced significantly the chance of duplication of effort and increased full spectrum support for common themes. In addition, we continue to use bilateral meetings, most notably our meetings with the UK Doctrine and Concepts Development Centre and the Netherlands Defence Academy (among others), to develop areas of common interest.

Education/Cooperation of NATO and Partner Nations. The JAPCC supported the NATO School in several ways. Besides making presentations at several courses throughout the year, the JAPCC is also the OPR for the Force Protection Course and the Space Operations course. Other educational support was provided to the NATO CAOC2 staff, the NATO Staff Officer Orientation Course, the US National Defense University, the German Bundeswehr University Munich, the Dutch Royal Military Academy, and the Dutch School for Ground and Air Cooperation.



2007 Conference

Mission Priority Supported:
Provide high-quality and timely customer support with Air and Space expertise to inform and enable decision-makers

European Union Military Staff Support. At the request of the Netherlands, and in accordance with the MOU, the JAPCC supported the EU Military Staff in developing its Rapid Response Air Initiative (RRAI), in particular with regard to airfield activation. Also, together with the German Air Force Air Operations Command, the JAPCC hosted and organised a Workshop on RRAI in Kalkar.

Conference and Exercise Participation. In addition to hosting our Conference, the JAPCC participated in numerous working groups, conferences and exercises in 2007. On the UAS topic, we briefed the UAV World Conference in Frankfurt, the Unmanned Vehicle Systems International North American Conference, and at the Royal Aeronautical Society's UAV Conference in London. We also supported Gen Hobbins in the keynote briefing to the Unmanned Vehicle Conference, Washington, D.C. and delivered a separate briefing at that venue on the future of UAS. We provided senior officer participation as a keynote speaker in the Spanish Air Force Alfredo Kindelan International Seminar on the topic of C4ISR. The Assistant Director for Transformation briefed on our Roadmap work and a thought piece on future operational command support through network enabled means. We supported multiple CAOC Commanders' Conferences with Air Power briefings throughout the year. We also supported the Joint Warfare Centre in Exercises Steadfast Jackpot and Steadfast Jaw with our members and provided instructors and evaluation support to the EAG's Combat Search and Rescue Course, hosted by Tactical Leadership Program at Florennes. We also reviewed the Dutch Air Power Doctrine on request from the Dutch MoD.

Mission Priority Supported:

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

External Responsibilities. JAPCC personnel hold chairmanship positions on numerous NATO steering bodies, including the Air Operations Working Group, the Time Sensitive Targeting Working Group, the Joint Unmanned Air Vehicle Panel, the NATO Air Refuelling Panel, the Air Refuelling Advisory Group, the NATO Search and Rescue Panel, and a co-chair of the Maritime Air Coordination Cell. We also serve as custodians of NATO Aerial Refuelling Procedures Manual, the Air Logistics Doctrine, and have offered to act as custodian for the Force Protection Doctrine for Air Operations.

JAPCC Program of Work 2008

(Capstone) Air Contribution to Battlespace Management (BSM) (See 2008 Outlook in the next section for more details on this project)

NATO's Future Joint Air and Space Power Concept

Air to Ground Operations Improvement

AAR Interoperability

JAPCC Journal 8

UAS Air Forum 2008

NATO FP Doctrine for Air Operations

JAPCC support to the NATO Special Operation Forces Aviation (SOF AVN) development

JAPCC activities in support of the enhancement of the NATO Joint Personnel Recovery (JPR) capability

Military Aircraft in the Modern Air Traffic Management Environment

Human Dimension of Joint Air Power Transformation

Support to DRR 11 process (2008-2011)

Ongoing Projects and 2008 Outlook

NATO's Future Joint Air and Space Power. Although NATO declined to endorse the Concept for Alliance Future Joint Operation (CAFJO), we remain convinced that there is a need for a Future Air and Space environmental piece. We have decided, however, to decouple the work from CAFJO and will aim to publish a "non-Paper" with the same focus of expanding the AJP 3.3 transformational goals and objectives into the Future Air and Space regime. A draft non-paper is targeted for April 2008.

Close Air Support / Fratricide Prevention.

JAPCC hosted a 2nd and 3rd STANAG custodial meeting in August and December 2007 to review standardization agreements governing close air support (CAS) and forward air controllers (FACs). While progress was made, there are still areas of disagreement, primarily in the training requirements and on some operational message formats. The 4th STANAG meeting will be held in February 2008 to attempt timely resolution of these outstanding issues while the primary SMEs are still available and engaged. JAPCC also co-hosted with CC-Air Ramstein a FAC-JTAC Symposium in October 2007 bringing together ISAF CAS-FAC leaders and the various NATO FAC schools for the first time in more than 13 years. The symposium addressed ISAF lessons learned and the Bi-SC Analysis and Lessons Learned (BALL) report findings to incorporate into FAC school curricula. An interim report on actions related to all BALL Report action items was signed out to ACT DCOS-T in December 07.

Force Protection Doctrine for NATO Air Operations. We are working with the NATO Standardisation Agency to endorse the project proposal.

Unmanned Aircraft Systems Flightplan and Concept of Employment (CONEMP). The update of 2007 Flightplan is well underway and we also fielded a request from the Romanian National Defence University to study UAS employment in border security. In order to move out quickly within our already established mission framework, we intend to incorporate work in this direction into our already approved project for a UAS CONEMP as an operational vignette. We have begun coordination with the requestor to clarify and move forward in this requested study.

SME Support to Defence Requirements Review-2011 Process. The JAPCC was asked to collaborate on specific DRR 11 Aerospace Work Packages that were identified as relevant by both JAPCC and ACT's Staff Element Europe, which has primary responsibility for heading the task. JAPCC provides SME support to ten of the Aerospace Work Packages. SMEs took part in the Aerospace Capability Area Group meetings as well as Planning Harmonization Group meetings. Apart from traditional topics, some new topics such as NATO Space Capabilities were established in which JAPCC can apply its SME unique expertise.

Air Contribution to Battlespace Management Capstone Focus. JAPCC's 2008 Programme of Work has been approved and a large number of the projects focused on Battlespace Management (BSM); in particular, the spring journal will follow a BSM theme, as will the annual JAPCC Conference, entitled Joint Air & Space Power and Decision Superiority in the 21st Century, to be held at Kleve, Germany, 14-16 October 2008. Other topics within the BSM focus area will include a CONEMP for the NATO Airborne Early Warning and Control Mid-Term E-3 upgrade, along with specific tactics, techniques and procedures (TTPs) for that platform. We've also identified to ACT the need for NATO to formulate a coherent space strategy, which was returned as a directed task to begin the process.

The following activities will be conducted to support the Capstone Project of 2008:

- Air BSM Allied Joint Publication /Allied Tactical Publication (AJP/ATP)
- Air BSM Concepts
- NAEW&C Concept for Employment
- NAEW&C ATP/ TTP
- NATO Space Operations Assessment
- UAS Flightplan 2008 - Update
- UAS Concept of Employment
- Intelligence Fusion and Dissemination
- JAPCC Journal 7
- JAPCC Conference 14-16 October 2008
- Air Forum 2008/2

We look forward to another fruitful year supporting NATO and our sponsoring Nations' joint air power transformation and truly blazing the trail in that endeavour. For further and updated information throughout the year, please visit our JAPCC websites on CRONOS at <http://www.rfas.nato.int/JAPCC> or on the worldwide web (unclas) at <http://www.japcc.org>.



Joint Air Power Competence Centre
Römerstraße 140
D-47546 Kalkar
Germany

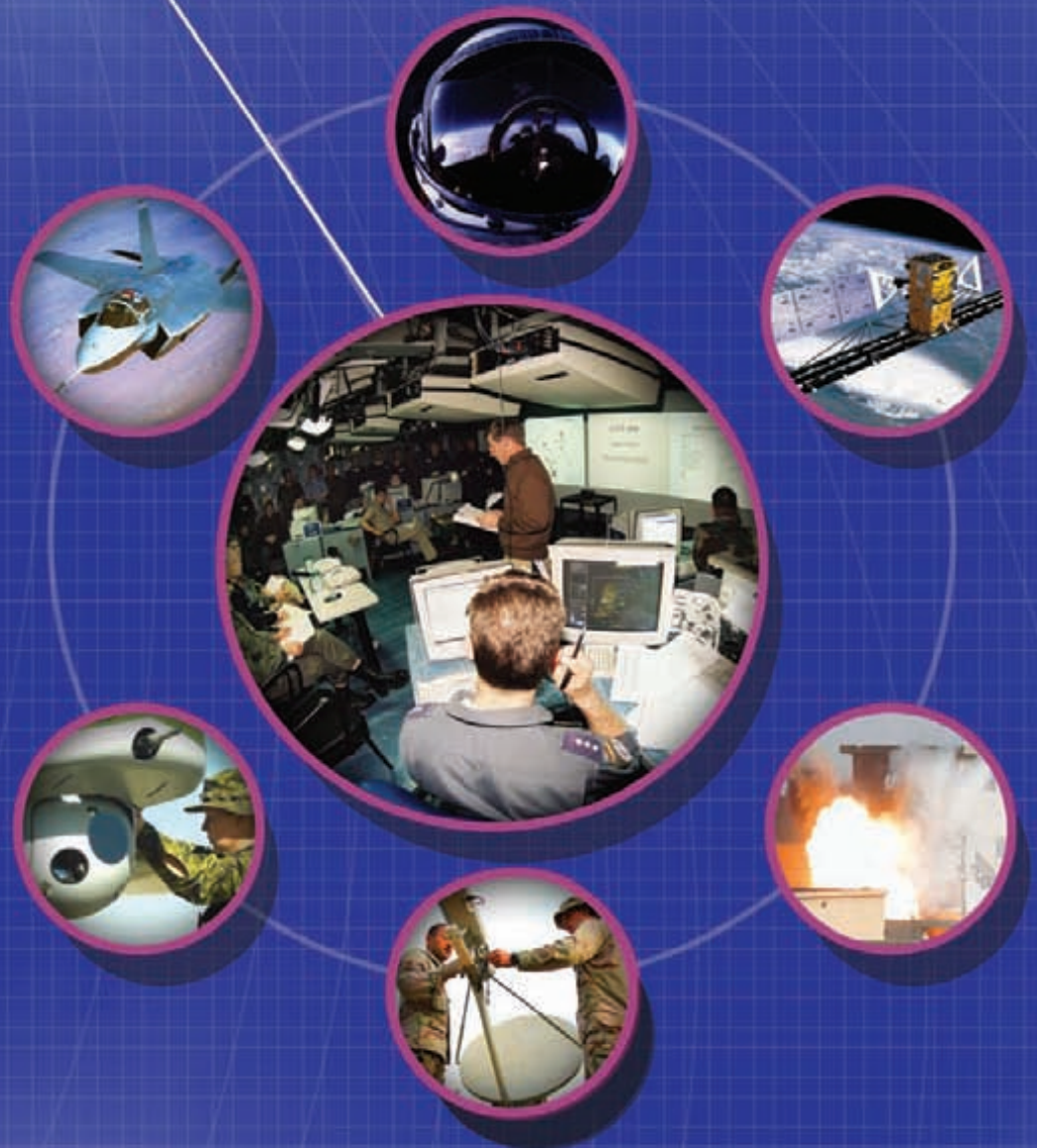
Tel: +49 (0) 2824 90 2209
Fax: +49 (0) 2824 90 2274
NU mail: dos@japcc.de
NU web : www.japcc.org
NS mail : JAPCC DIR DOS
NS web : www.rfas.nato.int/JAPCC

JAPCC 2008 Conference



Joint Air & Space Power and Decision Superiority in the 21st Century

14th - 16th of October 2008
Kleve, Germany



Air and Space Power Conference

NATO Air C4ISR Roadmap

Unmanned Aircraft Systems
(UAS) Flight Plan for NATO

Air to Air Refueling Interoperability

JAPCC Air and Space Power Journal

Force Protection Doctrine for Air and Space

Industry Cooperation