



The Joint Air Power Competence Centre (JAPCC)

A new day ahead. A new way ahead.



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TO: DIRECTOR

SUBJECT: 2005 Annual Report

Overview: JAPCC inaugural year has been very successful. It has been characterized by drawing and building expertise, establishing internal processes, developing working relationships external to the organization and demonstrating the organization's ability to be responsive to customers by providing them needed air and space power expertise in a timely manner to enable decisions. We have already provided wide-ranging air and space expertise from the strategic level all the way down to the tactical level.

The key to our success is our subject matter experts. This expertise and manpower is growing. We are currently at 78% manning and should achieve 85% manning by late spring to early summer. On 1 Jan 2006 we pick up a new Sponsoring Nation, with Romania joining the JAPCC and providing one officer.

In terms of infrastructure, our recent Senior Resource Committee (SRC) meeting was very successful. Our Sponsoring Nations agreed to plus-up our normal operating budget by 210,000 Euros to enable us to commence expansion of our office spaces into the adjacent and soon to be vacant CAOC 2 building. This move will be conducted and financed in stages taking just over one year to complete. At its completion, we will have a first class library, journal publication office, auditorium and several project working areas, adaptable to work with industry, academia and other priorities. At the same time we will improve our computer information systems (CIS) infrastructure which will allow for better access, coordination, and cooperation between JAPCC and its external partners.

2005 Priorities: *Status in achieving your declared priorities for 2005.***Priority 1.** *Actively participate in and stimulate the development of simulation and experimentation capabilities in NATO.*

JAPCC has resurrected and assumed Allied Command Transformation's (ACT's) Project Lead for Simulated Mission and Rehearsal Training (SMART). Working with NATO's Research and Technology Organisation, amongst others, we have set an aggressive schedule to demonstrate this technology to NATO Nations, and prove it's effectiveness in training, exercises and NRF preparation. JAPCC hosted a SMART requirements conference with operators from Alliance nations and NATO organisations to lay the foundation to build the distributed mission system. Although there was enthusiastic support and participation from various NATO organizations, national participation was thin. One reason for national lack of enthusiasm is a previous lack of fiscal commitment from SACT to fund portions of the program. Although SACT has committed in writing to support SMART, little actual money has been put on the table. By Feb 2006, the nations will have clear proof if SACT will actually expend the resources they said they would.

Priority 2. *Contribute to the improvement of Air Command and Control against the background of Network Centric Operations.*

Throughout the year, JAPCC has been actively involved in improving NRF command and control (C2). Earlier this year, a JAPCC team observed the operational employment of the IDCAOC and CAOC 2 personnel at a deployed location as part of Exercise CLEAN HUNTER 05. The results of the study revealed numerous shortfalls in equipment, training, procedures and employment assumptions. These were compiled into a report, which was delivered to CC-Air Ramstein, together with our recommendations on how best to take these lessons learned forward. During the fall Air Forum, participants looked at issues facing NRF joint air and space forces. JAPCC brought forth the need to study NRF Air Component C2 CONOPS. Although, there was general agreement on the need for such a study, JAPCC was unable to secure a sponsor. To further address what JAPCC sees as a serious problem, we have taken remaining consultancy funds to outline and demonstrate to SACT the need complete this important work.

Additionally, we have recently established a working relationship with the USAF Air Combat Command's C2ISR Center. They have participated in our fall Air Forum and Conference and are looking forward to working with JAPCC to help improve interoperability between NATO and the US.

Priority 3. *Develop innovative visions and concepts for the transformation of Air Power.*

JAPCC conducted an airlift study in support of NRF deployments. JAPCC studied the full range of NRF scenarios and identified the airlift requirements necessary to support them. JAPCC compared these airlift requirements with current NATO airlift assets, identified shortfalls, and made recommendations to improve the availability of assets and their management. We provided these findings to SACT for consideration as part of the Defense Requirements Review (DRR).

JAPCC also developed a concept, known as the Deployable Airfield Activation Wing (DAAW), to provide the NRF the capability to conduct expeditionary operations from austere airfields. The DAAW Concept would provide a permanent standing capability to stand-up a 7-day, self-sustaining airfield with air portable assets able to conduct operations for up to 60 days. The force proposal for this concept has been forwarded to SACT for inclusion as part of the DRR.

JAPCC initiated a concept to revise NATO Future Air Exercises. It is clear that traditional “blue versus red, force-on-force” is no longer in line with NATO’s NRF ambitions, therefore requiring a review and revision of the NATO Air Exercise Program. The reassessment must address NRF applicability, enhanced jointness and the utilisation of emerging technologies in order to develop an exercise template which will be both challenging and realistic given the range of missions the NRF is expected to handle. CC-Air Izmir has recently agreed to sponsor this study starting from a blank piece of paper.

At SACT’s request, JAPCC, due to its air expertise, is undertaking a project entitled “NATO Air Defense 2020” which will address the capabilities required to meet the challenges of 2020 including the necessary CONOPS, doctrine, and equipment. Additionally, JAPCC has been tasked by ACT to study Force Protection requirements and air logistic requirements for the next DRR.

Priority 4: *Develop initial and ongoing staff training to build and maintain first class Air Power Transformational capabilities.*

To insure new members to the JAPCC understand the Centre’s mission, priorities, processes and systems, JAPCC developed, taught, and continuously updated a one-week staff-training course to teach every staff officer what he should know to be successful in the organisation. We continue to conduct twice-weekly sessions where our subject matter experts (SMEs) and leadership instruct the staff, as a whole, on topics relevant to Joint Air and Space Power Transformation.

Our goal is to not only build subject matter expertise, but to also expand the overall knowledge of relevant issues throughout our staff. Finally, we continuously build subject matter expertise though liaison with outside organisations and attending professional conferences. Our goal is: whenever an officer from JAPCC attends a conference, staff meeting, or any other external forum, he will not only be a recognised authority in his particular field, he will also be thoroughly familiar with a wide range of transformation issues facing the Alliance, and thus be able to contribute more effectively.

Priority 5: *Seek collaboration with relevant entities in ACT, ACO and the JAPCC Sponsoring Nations.*

JAPCC has established a good working relationship with ACT’s Integrated Capability Teams through our project leaders and our JAPCC Liaison Officer to ACT. In an effort to complete the requirements of the Program of Work established by ACT’s Deputy Chief of Staff for Transformation, project leaders aggressively engaged their ACT counterparts to refine project requirements and products. Additionally, our Liaison Officer has established himself as the focal point for all issues relating to Air and Space transformation. He not only waits for

requests, he is proactively engaged in SACT workload establishing him and, by extension, JAPCC as a very useful asset.

We have also taken on work from operational commanders at CC-Air Ramstein and CC-Air Izmir on matters that are of importance in carrying out their responsibilities to the NRF.

We have established relationships and collaboration with various entities within NATO command structure and outside as well. To list just a few in the C2 arena: NATO Consultation Command and Control Agency (NC3A), NATO Airborne Early Warning Force Command (NAEW (FC)), NATO AEW&C Program Management Agency (NAPMA), NATO Research and Technology Organisation, U.S. Battle Labs, and Air Combat Command's C2ISR Center.

Additionally, we were contacted by and met representatives of the Netherlands Air Force to provide them advice on how to construct and run a Centre of Excellence. As one of our Senior Resource Committee delegates put it very succinctly, "the JAPCC has become the template for how to construct and run a true Centre of Excellence."

Priority 6: *Develop relationships with industry and scientific institutes.*

Over the past year we have established relationships and hosted visits with industry and academia. Meetings with industry include European Aeronautic Defence and Space Company (EADS), Lockheed Martin and SAAB. We visited and then hosted a visit from the Fraunhofer Institute, which provided presentations on advances in nanotechnology and uses of Space-based technologies. Our Journal and Conference sparked interest from military academia and lead to speaking invitations from the Belgian Staff College. The Commandant of the Air War College attended our conference and has energized his staff to become more engaged in contributing to JAPCC projects.

Priority 7: *Conduct a high-level Joint Air and Space Power Conference, 29-30 November 2005, Kleve, Germany.*

The JAPCC Air Chief Conference centred on the theme "How does NATO Joint Air and Space Power remain relevant?" There were 180 attendees from 19 different nations. Most attendees were OF-5 and above. NATO HQ, the Military Committee, National HQs, Joint and Air Component HQ's, CAOCs, NC3A, academia and industry were all represented and many provided contributions as presenters, panellists, or inquisitors from the audience. Gen Henault, Chairman of the Military Committee, provided the opening Keynote Address. There was frank and earnest discussion/debate on such topics as interoperability, need for a NATO Strategic Concept to which nations will commit, NATO's exercise and training program, continued NATO command structure reform, development of soft/non-kinetic air power effects, and reform of NATO doctrine.

The Conference did provide steering to JAPCC from the NATO Air Chiefs by means of sponsorship for various projects of interest to them. For example, CC-Air Izmir will sponsor a study for a Concept for Future NATO Training and Exercises.

Overall, we view the Conference as a success and plan to conduct it again next year.

Priority 8: *Man posts with highly qualified and motivated officers from all services.*

As mentioned earlier, manning currently stands at 78%. Our Sponsoring Nations are sending their very best and brightest. It is JAPCC's challenge to continue their growth in expertise and contribution to the organization. One of the benchmarks for full operational capability (FOC) is 85% SME manning. We forecast that we will achieve that level in the May-Jun 2006 timeframe.

Priority 9: *Conduct Joint Air Fora to facilitate inter-agency functional collaboration and coordination.*

The JAPCC conducted two Air Fora this past year. The first was broad in scope aimed to promote functional and personal interrelationships as well as to discuss and develop topics of mutual interest. The initial Air Forum did provide direction for JAPCC work for the remainder of the year and focus for the fall Air Forum. The main topics discussed were NRF-related C2 and logistics issues. This provided direction for JAPCC to continue work on NRF C2 concepts and continued pursuit of the Deployable Airfield Activation Wing (DAAW) concept.

The fall Air Forum was focused more directly at NRF C2 requirements. CC-Air Ramstein requested JAPCC support in planning for NRF 7 and 8. JAPCC also proposed a NRF Generic Reach-Back Architecture for a combined and joint C2 environment. Finally, there was discussion on the need to study and improve NATO Exercise and Training. JAPCC agreed to look at the requirements for such a study. During the JAPCC Conference, CC-Air Izmir agreed to sponsor JAPCC work on this issue.

Priority 10: *Aggressively pursue Automated Information System solutions to promote worldwide capability and optimise the JAPCC.*

JAPCC faced frustrations and limited access to JAPCC work due to its reliance on the NATO Secret system. To improve access, coordination, and cooperation with entities outside of the classified NATO world, we have moved to establish an internet-based unclassified system for project management, email, circulation of unclassified findings, online collaboration, forums, and discussion. It is our goal to carefully migrate all unclassified material residing on the classified system to our unclassified web-based system as it is established.

Additionally, we had a vendor provide a market survey of a professional management tool to help JAPCC manage its projects as a matrix organization with limited financial and SME resources. We are in final negotiations with the vendor to provide a beta-version of the management software for trial.

Outlook for 2006 and Beyond.

The JAPCC has established itself and is ready to start producing significant results. Our initial outputs have been well received across NATO. 2006 will be the year we need to establish or excellence and ability to produce results.

This year we will begin our expansion of our office space into Building 26, and begin our transformation of our CIS architecture and use. While these physical changes are proceeding

around us, we will be busy tackling major projects in support of the Defense Requirements Review and our Operational Commanders.

In addition to SACT and Operational support, JAPCC will focus efforts on studying the topic of UAVs/UCAVs. Specifically, How will UAVs and UCAVs affect the future of Air Power and what are their implications? To support this task JAPCC will host an Industry Day and Air Forum in March preferably at the Ramstein Conference Facility to have discussions between industry and operations personnel. JAPCC personnel will present on-going work and findings at various conferences and air shows, like the Berlin Air Show. This topic will also be the theme of the May edition of the JAPCC Air Power Journal. Finally, it will be included as a major theme of our JAPCC Air Chief Conference next fall.

JAPCC continues to grow in personnel, size, and reputation. We are well resourced and our manning continues to improve. We look forward to a busy and productive year ahead.

(Original Signed)
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