



1528.10/RFMOB/04

20 August 2004

PROJECT DEFINITION REPORT
for Transformational Project No 4
A 10-YEAR VISION FOR ENHANCING NATO AAR INTEROPERABILITY

AIM

1. The aim of this project is to develop and implement a 10 Year Vision to enhance Alliance Air-to-Air Refuelling (AAR) interoperability through improved formal guidance, including updated and accurate documentation. The estimated Completion Date is Jun 07.

SCOPE

2. This project will produce NATO AAR procedures to perfect NATO AAR interoperability encompassing the strategic, operational, and tactical levels.

CONCEPTUAL FRAMEWORK

3. Historically, the vast majority of AAR capability rested in the hands of only a few nations. Several NATO nations are looking to obtain or improve AAR capabilities while industry is developing new platforms and leading edge equipment. A number of European nations are even considering a multinational consortium to procure tanker platforms as a solution to AAR shortfalls. These changes make interoperability and standardisation even more critical to ensure effective Alliance AAR operations.

4. In order to effectively employ such a broad variety of tanker assets, a transformational approach to AAR operations is required. Current AAR operations lack solid doctrinal guidance and generally consist of disjointed components. The diagram below describes the current AAR process for providing direction and guidance (D&G) for NATO AAR operations. As the diagram shows (See FIG. 1), there is little or no input from a Strategic context or in regards to AAR Tactics.

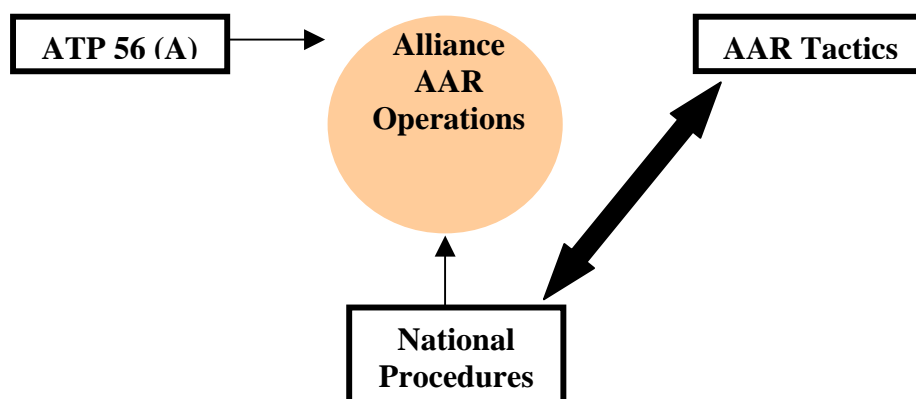


FIG. 1

Current AAR Process for providing Direction and Guide (D&G) for NATO AAR Operations

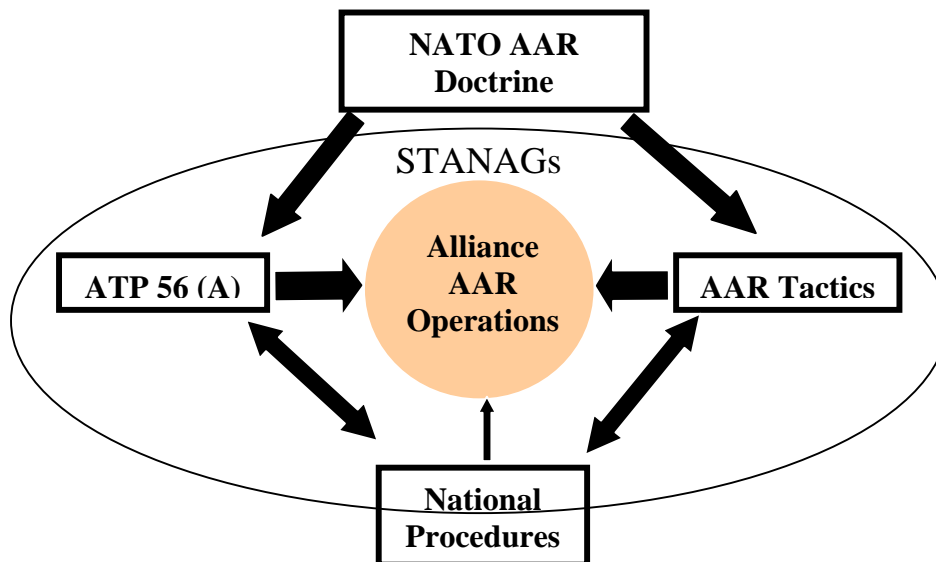


FIG. 2

Proposed AAR Process for providing Direction and Guide (D&G) for NATO AAR Operations

4. The current AAR process is constrained in several ways. As an isolated entity, the Alliance AAR Operations Concept lacks true doctrinal guidance and must be made more effective and more accessible. Doctrine should be developed which gives guidance on the integration of AAR Procedures (through ATP-56 (ATP 3.3.4.2)) and tanker employment (through development of a tactics/employment program). ATP-56 procedures must be modernised and reaffirmed as the Alliance standard for all AAR operations. The current AAR NATO Standardisation Agreement (STANAG) program must be re-invigorated to develop and update AAR STANAGs to support better standardisation of equipment and procedures. Throughout this process, NATO personnel must be effectively trained to be able to receive national assets and effectively employ them in training, exercises or combat operations. As these modifications are being made to the information process, AAR expertise must be utilized to the greatest extent possible in the Force Planning process and the development of more accurate Capability Plans.

ASSUMPTIONS

5. The project will be based on the assumptions in MCM-217-98 "Alliance AAR Concept". MCM-217-98 assumptions are:

- a. Tanker Aircraft are national AAR assets, under national command and control.
- b. NATO has no AAR assets of its own, but national assets can be provided for the benefit of NATO upon national approval.
- c. During crises and conflicts, Transfer of Authority (TOA) of AAR assets will follow the generation of forces procedure.
- d. Agreements between providers and receivers are driven by bilateral Memorandums of Understanding (MOUs) using ATP-56 established procedures.
- e. Although NATO funding principles provide general guidance, detailed financial agreements will normally be outlined in a MOU.

6. This Alliance AAR Concept assumes only national AAR tanker assets will be available and that the development of the PCC AAR strategy could change the concept of paragraphs 5a, b, and c.

CONSTRAINTS AND RISK

7. This work plan must remain dynamic and continual reassessment must be made to determine the best approach to achieve improved AAR documentation to carry out AAR Operations for NATO. Each of the key tasks involves many outside agencies that can have tremendous influence on the outcome of each initiative. The most significant risk to this project, therefore, will be a lack of timely support from NCS staffs and nations to meet the deadlines for producing the coordinated drafts ready for ratification.

OBJECTIVES

8. The objective of this project is to produce AAR interoperability doctrine giving Direction and Guidance (D&G) for NATO AAR Operations (See FIG. 2).

METHODOLOGY

9. The project will serve the transformation of joint air power and meet the strategic-level requirements of HQ SACT. The RFAS AAR Co-ordination Cell is the focal point for Alliance air-to-air refuelling strategic issues and is the best suited to develop this vision. No other entity in the NCS/NFS is working on any of these products. The following methodology will be applied:

- a. Pursue the full co-operation of the impacted nations in development of a modernised NATO AAR Manual.
- b. Draft and seek ratification of a NATO Tanker Tactics/Employment Manual.
- c. Draft and seek ratification of NATO AAR Doctrine.
- d. Assess, develop and update AAR STANAGs.
- e. Ensure the Force Planning Process incorporates accurate and relevant AAR information and the DRR AAR Methodology is continually improved for greater accuracy.
- f. Continually assess the status of Alliance AAR interoperability and standardisation, and incorporate lessons learnt into products.
- g. Develop a tanker planner training program for Alliance tanker planners.
- h. Develop and maintain relationships to maintain the highest level of expertise within the AAR Coordination Cell.

WORKPLAN

10. To fulfil this 10-year vision for AAR, four key tasks and four additional/ supporting tasks must be accomplished. These tasks are follows:

- a. Key tasks:
 - (1) Development of NATO AAR Doctrine.
 - (2) Modernisation of ATP 56 (ATP-3.3.4.2), NATO AAR.
 - (3) Development of a NATO Tanker Employment manual.
 - (4) Improvement of AAR STANAGs.
- b. Additional Tasks:
 - (1) Develop a Tanker Planning Training Program for NATO AAR Ops/ Planning Officers.
 - (2) Incorporate accurate and relevant AAR information into the Force Planning process in order to apply the correct DRR Methodology through Capability Package development.
 - (3) Continually assess Alliance AAR Interoperability and Standardisation, and incorporate lessons learnt into products.
 - (4) Maintain relationships to ensure NATO maintains the most current operations, employment, and planning techniques; industrial information on current and future AAR equipment; and national AAR program information.

DETAILED ASSESSMENT

11. Detailed assessment of work required to achieve desired 10-year vision with the estimated completion date (ECD):

- a. **Development of NATO AAR Doctrine ECD: Sep 06.**
 - (1) In coordination with ACT, MCM-217-98 should be re-examined and doctrine developed for the command and control, and employment related to Alliance AAR Operations. This doctrine should clearly explain the aim and expectations of other NATO AAR publications such as ATP-56 and an Alliance Tanker Employment manual. This new document should be written at a NATO UNCLASSIFIED level so the document can be distributed to the maximum extent possible. A draft document should be completed with the support of RFAS/POL section if required. ECD: May 05
 - (2) The draft NATO AAR Doctrine proposal should be developed and discussed in a working group. This working group should discuss content and potential location of the document within the NATO documentation system. ECD: Sep 05
 - (3) The new AAR Doctrine document will need to be ratified. ECD: Jun 06
- b. **Update of ATP 3.3.4.2 (ATP-56), NATO AAR: ECD Apr 07**
 - (1) In order to modernise ATP-56, close coordination is required with NATO nations to minimise the complexity of a potentially controversial ratification process. Ongoing.
 - (2) The ATP-56 Custodian (post held within RFAS/JAPCC) is working with HQAMC USAF to produce a draft updated ATP-56. ECD Jun 05.
 - (3) A working group should be formed with interested NATO nations to discuss incorporating the revised ATP-56. ECD: Sep 05. Close coordination should be maintained with non-NATO nations using ATP-56 as their AAR Manual. The use

- of ATP-56 by non-NATO nations has proven itself to be critical to ensure procedural interoperability during coalition AAR operations. Ongoing.
- (4) The revised ATP-56 will need to begin the ratification process by NATO nations. Hopefully most of the potential challenges of ratification will be minimised during the previous meetings with all interested parties. ECD: Sep 06
- c. Development of a NATO Tanker Employment manual: ECD Dec 06**
- (1) Close coordination with NATO nations needs to be maintained during the development of a NATO tanker employment manual to ensure the most current employment techniques are considered. Ongoing.
- (2) A draft tanker employment manual must be produced using the latest inputs from NATO nations. ECD: Jan 05
- (3) A working group of interested NATO and non-NATO nations should be formed to discuss the development and refine the draft tanker employment manual. ECD: Mar 05
- (4) The revised NATO Tanker Employment Manual will need to begin the ratification process by NATO nations. Hopefully most of the potential challenges of ratification will be minimised during the previous meetings with all interested parties. ECD: Sep 06
- d. Development of AAR STANAGs: Jun 2007**
- (1) Close coordination with NATO nations through the NATO Standardisation Agency (NSA) AAR Panel is required for proper assessment of the AAR STANAGs. This work will mostly occur during the annual AAR Panel meeting. Ongoing.
- (2) Working closely with the Air Refuelling Systems Advisory Group for technical expertise and STANAG requirements is critical to maintain proficiency on the most current challenges in this area. Ongoing.
- e. Develop Tanker Planning Training Program for NATO AAR Ops/ Planning Officers: ECD Jun 07**
- (1) Close coordination with the USAF Tanker Planning Staff, Hurlburt Field should be maintained for assistance on development of a long-term solution for training NATO and NATO nation personnel on AAR Tanker Planning. ECD Jun 07.
- f. NATO Defence AAR Planning: Ongoing.**
- (1) Close liaison must be maintained between the AAR Coordination Cell and the NC3A in developing more accurate Defence Requirements Review AAR Methodology. The AAR Coordination Cell is the expertise to ensure accuracy in this critical process. ECD In alignment with the NATO Defence Planning Cycle.
- (2) Close liaison must be maintained with ACT SEE on NATO Resources planning related to AAR infrastructure. The AAR Capability package and other capability packages related to AAR must be supported by the AAR Coordination Cell. Ongoing.
- g. Continually Assess Alliance AAR Interoperability and Standardisation**
- (1) The AAR Coordination Cell should assess the use of tankers during exercises and operations to determine the status of AAR interoperability and standardisation. As the tanker employment manual and revised ATP-56 are completed, there should be updated guidance for nations to follow to ensure interoperability and standardisation. Ongoing via Annual Assessments/reports

DELIVERABLES

12. The following deliverables will be provided under this project:
 - a. First draft NATO AAR Doctrine by May 05.
 - b. Coordinated draft NATO AAR Doctrine ready for ratification by nations by Jun 06.
 - c. Draft revised ATP 3.3.4.2 (ATP-56) by Jun 05.
 - d. Coordinated draft revised ATP 3.3.4.2 (ATP 56) ready for ratification by nations by Sep 06.
 - e. Draft NATO Tanker Employment Manual ready for ratification by nations by 31 Mar 05.
 - f. Coordinated draft NATO Tanker Employment Manual ready for ratification by nations by Sep 06.
 - g. Syllabus for a NATO Tanker Planning Training Programme by Jun 07.

RESOURCES

13. This project will require full time commitment from the RFAS/JAPCC AAR Coordination Cell, together with support from RFAS POL Section. A number of TDY trips will be required to support the planned working group activities.

CONCLUSION

14. This work plan describes the key areas needed for forward progress in the area of NATO AAR interoperability. Each of these tasks is important and forms building blocks for solid NATO AAR documentation and guidance.

PETER L. TARTER
Colonel, USAF
Chief, RFAS Mob
Chairman TWG-4