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Intratheater Airlift Functional Area Analysis (FAA)

David T. Orletsky, Anthony D. Rosello, John Stillion

Prepared for the United States Air Force

Approved for public release; distribution unlimited



PROJECT AIR FORCE

The research described in this report was sponsored by the United States Air Force under Contract FA7014-06-C-0001. Further information may be obtained from the Strategic Planning Division, Directorate of Plans, Hq USAF.

Library of Congress Cataloging-in-Publication Data

Orletsky, David T., 1963-

Intratheater airlift functional area analysis (FAA) / David T. Orletsky,
Anthony D. Rosello, John Stillion.

p. cm.

Includes bibliographical references.

ISBN 978-0-8330-4417-4 (pbk. : alk. paper)

1. Airlift, Military—United States—Planning. 2. Transportation, Military—
United States. 3. United States. Air Force—Transportation. I. Rosello, Anthony D.
II. Stillion, John. III. Title.

UC333.O75 2011

358.4'11—dc22

2009026697

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Published 2011 by the RAND Corporation

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Summary

JCIDS implements a CBA and establishes a set of procedures for it to identify, assess, and prioritize joint military capability needs.¹

The system requires a series of analyses to identify capabilities gaps and to evaluate materiel and nonmateriel approaches to closing the gap. The FAA is the first in this series; it

identifies the operational tasks, conditions, and standards needed to achieve military objectives.²

The second in the series, the FNA,

assesses the ability of the current and programmed warfighting systems to deliver the capabilities the FAA identified under the full range of operating conditions and to the designated measures of effectiveness.³

The last item is the FSA. It

is an operationally based assessment of all potential [doctrine, organization, training, materiel, leadership and education, per-

¹ Department of Defense Instruction 5000.2, *Operation of the Defense Acquisition System*, May 12, 2003; CJCSI 3170.01E, 2005, p. 1.

² CJCSI 3170.01E, 2005, p. A-4.

³ CJCSI 3170.01E, 2005, p. A-4.

sonnel, and facilities] and policy approaches to solving (or mitigating) one or more of the capability gaps identified in the FNA.⁴

The broad objective of these three documents is to determine whether specific shortfalls in military capabilities require materiel solutions or whether modifying other aspects of the system could resolve the shortfall.

This CBA was initiated to analyze a potential deficiency in intratheater airlift capability. The Air Force identified three broad operational mission areas relating to the intratheater airlift system for this evaluation,⁵ centering it on the system's ability to provide

1. *routine sustainment*, defined as the steady-state delivery of required supplies and personnel to units
2. *time-sensitive, mission-critical resupply*, defined as the delivery of supplies and personnel on short notice, outside the steady-state demands
3. *maneuver* to U.S. and allied forces across all operating environments, defined as the transport of combat teams around the battlefield using the intratheater airlift system.⁶

The JCIDS process requires the CBA to start with high-level guidance from the National Security Strategy and the National Defense Strategy. Individual service concepts of operation and the Family of Joint Future Concepts, both developed from the national strategies, also inform the process. We used these documents for input and guidance so that we could “identify tasks, conditions, and standards” required for the intratheater airlift fleet.⁷ We also considered recent experience in Afghanistan and Iraq for insight into the current operational environment. (See pp. 32–33.)

⁴ CJCSI 3170.01E, 2005, p. A-4.

⁵ Meeting at Air Mobility Command, December 8, 2005, and subsequent discussions with Air Force personnel.

⁶ Meeting at Air Mobility Command, December 8, 2005, and subsequent discussions with Air Force personnel.

⁷ CJCSI 3170.01E, 2005, p. A-4.

We developed sets of tasks, conditions, and standards considered important for this CBA. Table S.1 presents the tasks derived during the FAA and identifies their applicability to each of the three mission areas discussed.

Although the guidance documents do not specify a set of conditions under which these tasks *must* be accomplished, attributes and conditions are discussed throughout the guidance documents. Some of these attributes and/or conditions occur in multiple guidance documents. The following conditions were deemed important (see p. 17):⁸

- adverse weather
- multiple, simultaneous, distributed decentralized battles and campaigns
- antiaccess environment

Table S.1
Tasks and Mission Areas Applicable to This CBA

Task	Routine Sustainment	Time-Sensitive, Mission-Critical Resupply	Small-Unit Maneuver
Transport supplies and equipment to points of need	X	X	X
Conduct retrograde of supplies and equipment	X	X	X
Transport forces and accompanying supplies to points of need ^a			X
Conduct recovery of personnel and supplies ^b			X
Transport replacement and augmentation personnel	X	X	X
Evacuate casualties	X	X	X

^a Deployment, redeployment, and retrograde.

^b Including evacuation of hostages, evacuees, enemy personnel, and high-value items.

⁸ This and the following lists were compiled from multiple guidance documents. Much of the language derives directly from them.

- in support of forces operating in and from austere or unimproved locations
- degraded environment (weapons of mass destruction or effect; chemical, biological, radiological, nuclear, and explosive weapons; natural disasters)
- multinational environment
- absence of preexisting arrangement
- consistent with sea basing.

The guidance documents describe the following attributes and conditions as positive (see pp. 18–20):

- smallest logistical footprint
- speed, accuracy, and efficiency
- distribution to the point of requirement
- basing flexibility—the ability to operate across strategic and operational distances.

The documents also specify standards for evaluating potential gaps in capabilities. The tasks identified above should be accomplished with the following standards in mind (see pp. 14–15):

- ability to meet force and materiel movement demand
- ability to deliver optimized movement of forces and materiel throughout theater from a cycle time perspective
- capability to provide materiel support for the current and planned operations.

The results of the analysis will be sensitive to variables describing the operational environment and operational tasks. Some of the more-important variables are the number of delivery points; the terrain; air base accessibility; the total amount, size, and weight of each supply class to be delivered by air; the number of personnel to be delivered by air; the required response time; and the threat level.