5. Theater Battle Management Core System

a. **Purpose**

(1) The TBMCS is a force level integrated air C2 system. TBMCS provides hardware, software, and communications interfaces to support the preparation, modification, and dissemination of the force-level air battle plan (ABP). The ABP includes the ATO and airspace coordination order. TBMCS unit-level operations and intelligence applications provide Air Force Wings the capability to receive the ABP, parse it, and manage wing operations and intelligence to support execution of the ABP.

(2) TBMCS supports the development and sharing of a common relevant operational picture of theater air and surface activity. Common TBMCS applications and interfaces provide a network for joint force data sharing. The TBMCS intelligence and targeting applications at the theater JFACC level, at the ASOC, and the DASC supports the coordination of precision engagement fires, safe passage zones, and near real-time warnings of impending air attack. The air and surface surveillance and weapons coordination engagement options enable synchronized operations and employment of the correct weapons for each target to generate the desired results. Engagement intentions and results assessments are shared by all TBMCS network participants, contributing to improved decision making by commanders. (See Figure C-3).

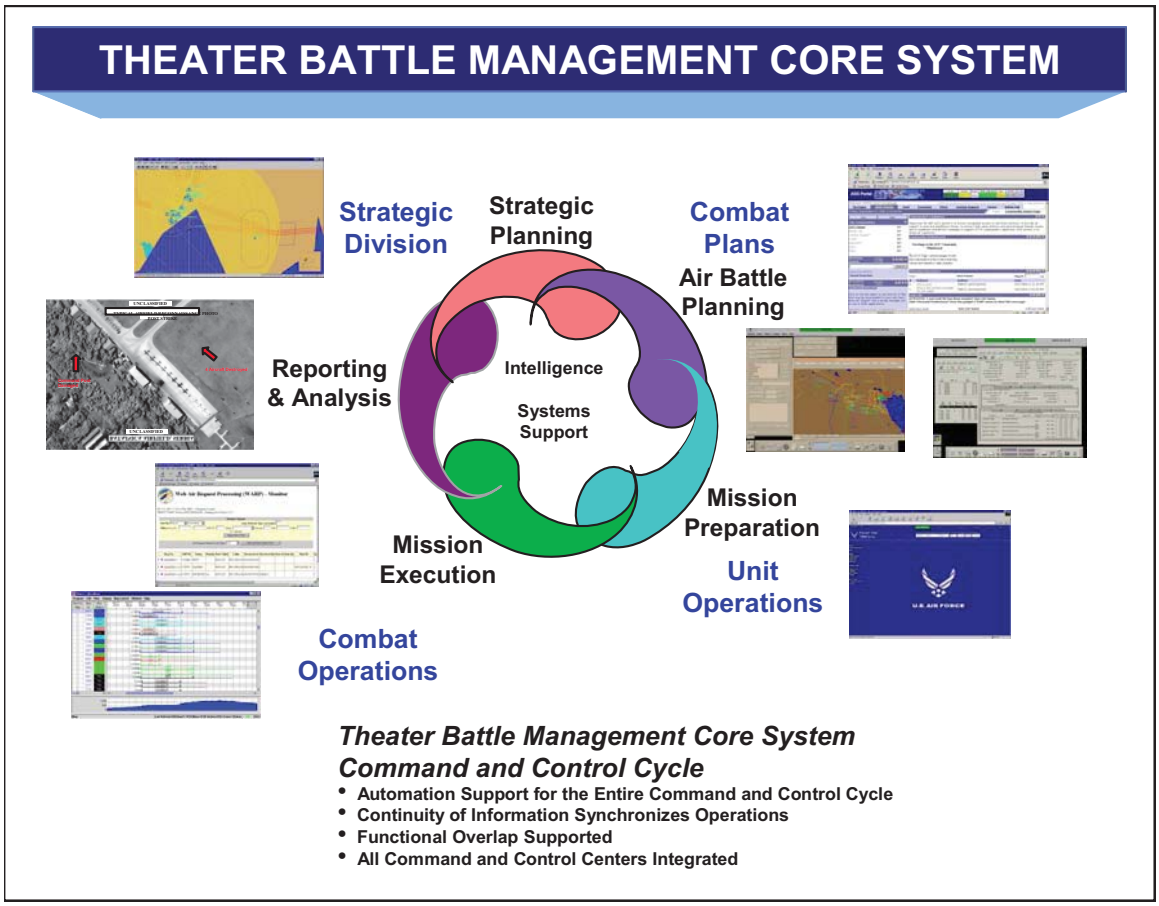

Figure C-3. Theater Battle Management Core System

(3) TBMCS links tactical aviation and related units to the JFACC (see Figure C-4). When properly employed, TBMCS is a tool enabling linkage from the CJTF operational objectives, through the JFACC, to the tactical activity of individual units. It also facilitates air battle planning, intelligence, operations, and execution functions for theater air operations; and enables coordination among higher, adjacent, and subordinate units and across service boundaries.

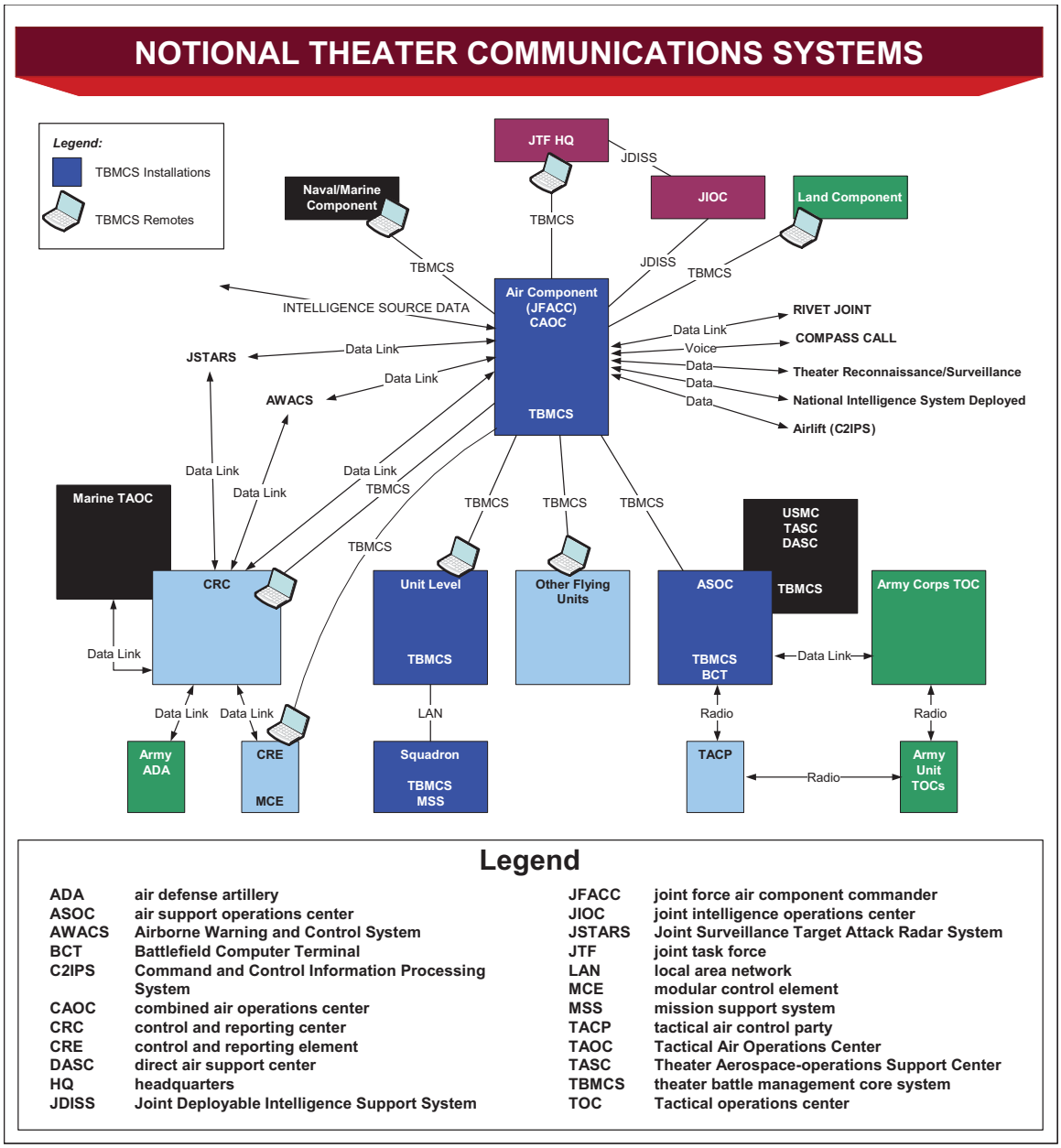

Figure C-4. Notional Theater Communications Systems

b. **Users**. TBMCS fielding includes every theater air component, all Navy aircraft carriers, and command ships, all Marine air wings, and all Air Force flying wings and ASOC squadrons. Army BCDs also interface with TBMCS.

c. **Products**. TBMCS uses two primary databases: the air operations database (AODB) and MIDB.

(1) AODB contains the following data:

(a) Friendly order of battle.

(b) Friendly units.

(c) Friendly bases.

(d) Components.

(e) Standard conventional load / configurations.

(f) Base inventory.

(g) Mission type and aircraft type mappings.

(h) Airspace.

(2) MIDB contains the following data:

(a) Target data.

(b) EOB.

(3) TBMCS contains a combination of processes and tools to support ATO production, which is the primary product:

(a) Theater air planning (TAP) is the primary tool used in Combat Plans for producing the ATO and Special Instructions.

(b) Target weaponeering module, JTT, and interim targeting solution are the applications used to produce the TNL.

(c) Airspace deconfliction is the tool used to produce the airspace control order (ACO).

(d) Airlift import manager imports airlift missions from C2 Information Processing System into TAP.

(e) MAAP toolkit is an automated means of developing the MAAP, which can be imported into TAP.

(f) The remote access mission planner is a web based planning tool used by components to plan and send mission to TAP.

(g) The ATO/ACO tool is a browser.

(h) Execution management replanner is nearly identical to TAP. However, it is used in combat operations to adjust the ATO.

(i) Image recognition integrated systems is the message services incorporated in TBMCS.

(4) All these applications are part of the ATO Production process:

(a) Air battle planning.

(b) Air battle execution management.

(c) Situation and target analysis.

(d) Enemy course of action prediction.

(e) Collection management support.

(f) Maintains local order of battle and threat databases.

(g) Air defense artillery and friendly unit aircraft reports.

(h) Surface C2 reports.

(i) Missiles, mission, base reports.

(j) Verify effective utilization of offensive, defensive and support assets.

(k) Verify that mission support needs are satisfied.

(l) Manage and deconflict airspace.

(m) Generate, change, and monitor the ACO.

(n) Verify the consistency and completeness of the ABP.

(o) ATO and ACO production.

d. **Network Interfaces and Communications**. Figure C-5 depicts the TBMCS Interfaces.

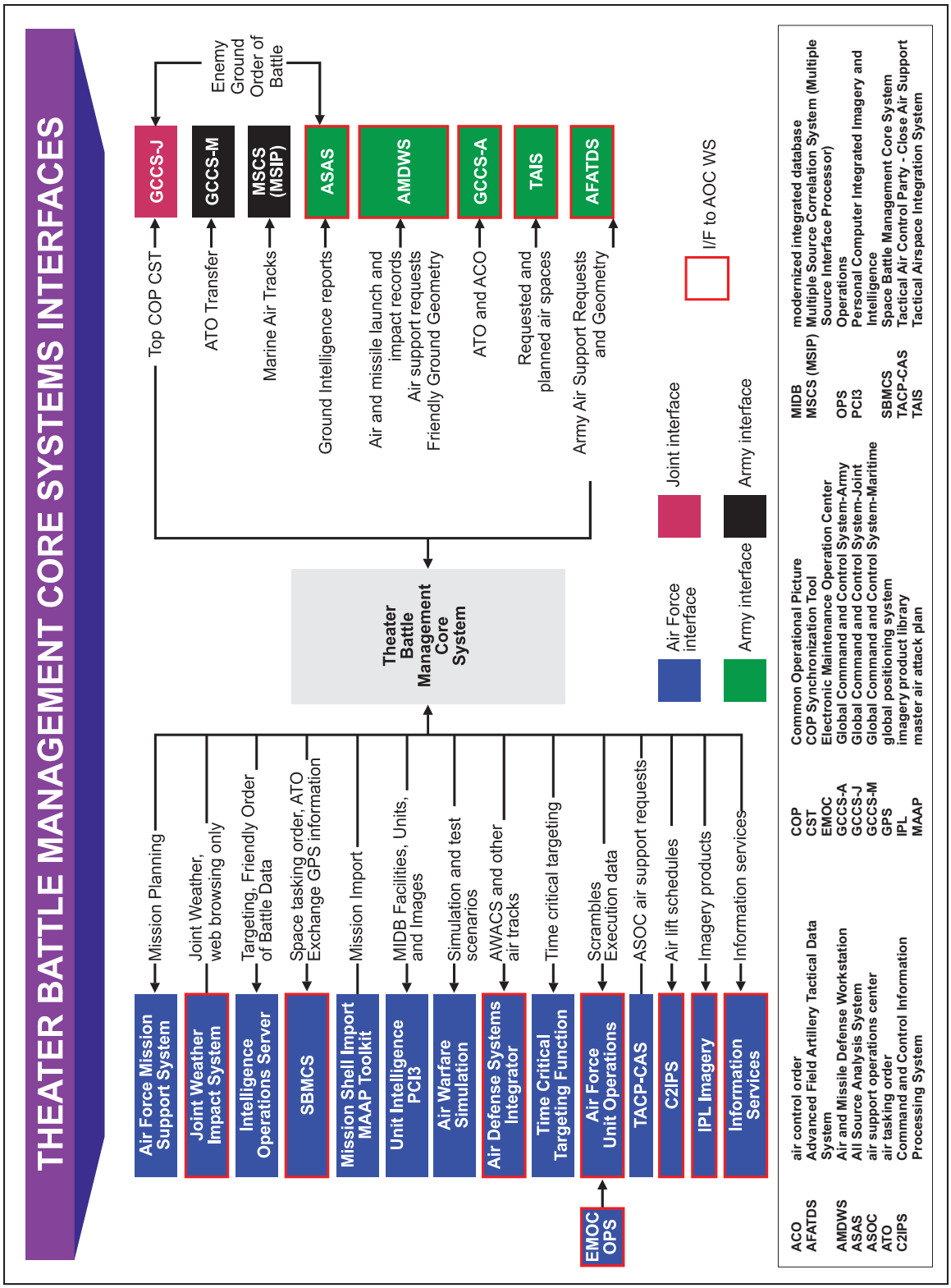

Figure C-5. Theater Battle Management Core Systems Interfaces