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**Transportation**

**MILITARY AIRLIFT AMC AERIAL PORT  
IN-TRANSIT VISIBILITY**



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This volume of AMCI 24-101 implements AMCPD 24-1, *Military Airlift Policy for Aerial Port Operations*. This volume provides ITV policy guidance to AMC Aerial Port Squadrons and AMC deployed units, and supplements DoD guidance found in the United States Transportation Command (USTRANSCOM) Defense In-transit Visibility (ITV) Integration Plan-Revised 2000 available at: <https://business.transcom.mil/j5/j5p/itv-2000.pdf>. This volume also applies to the Air National Guard (ANG) and the Air Force Reserve Command (AFRC).

**SUMMARY OF REVISIONS**

**This document is substantially revised and must be completely reviewed.**

It redefines, replaces, modifies, and deletes terminology of transportation system Remote Consolidated Aerial Port System and Super Remote Consolidated Aerial Port System with Global Air Transportation Execution System (GATES), Remote Global Air Transportation Execution System (RGATES), and Deployed Global Air Transportation Execution System (DGATES). It further defines ITV processes and procedures, Automated Information Systems (AIS), Automatic Identification Technology (AIT), and HQ AMC ITV Cell procedures.

**NOTE:** This volume will be reviewed and updated as the integration of systems is developed and ITV goals and objectives evolve.

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## *Section A—General Instruction*

### **1. General.**

1.1. This volume provides guidance for ITV. Oversight of all defense movements during both peace and war contributes to cost-effective and responsive worldwide logistical support to United States forces worldwide as mandated by the Office of the Secretary of Defense (OSD). Visibility over units, cargo, and personnel entering, moving within, and departing a theater of operations is clearly an essential element of the Department of Defense (DoD) war fighting capability and, as such, is a capability required by supported Combatant Commander (COCOMs). ITV is an integral and invaluable element of defense logistics oversight and plays a large role in providing updated information to enhance the logistics support during war, contingency, and peacetime operations.

1.2. ITV defined, is the ability to track the identity, status, and location of DoD unit and non-unit cargo, passengers, patients, forces, military and commercial airlift, sealift, surface assets, and personal property from origin to consignee or destination during peace, contingencies, and war. To obtain ITV information, customers query the Global Transportation Network (GTN) using aircraft mission numbers and other key GTN query components. Drillable data is cargo and/or passenger data received by GTN to provide a complete picture of assets at the logistics node or assets that are moving when linked to a mission. DoD has assigned GTN as the system of record for ITV and is the transportation domain for the Global Combat Support System (GCSS).

1.3. The basic ITV operating concept is for GTN to receive cargo and passenger movement data from AIS. The primary Service (unit) level systems are: Transportation Coordinator's Automated Command and Control Information System (TC-ACCIS), CMOS, and Logistics Automated Information System (LOGAIS). Upon fielding and implementation, Transportation Coordinator's Automated Command and Control Information System (TC-AIMS II) will function as the source system for unit movement data supporting the US Army and the US Navy. Additionally, the Army will use TC-AIMS II for supporting theatre Reception, Staging, Onward Movement, and Integration (RSO&I). LOGAIS and CMOS are the source systems supporting unit movement data for the US Marine Corp and the US Air Force. The port (aerial and sea) systems are the Worldwide Port System (WPS) for sealift movements and GATES for airlift. For airlift missions, GATES and CMOS are the only two systems that can provide shipment receipt, cargo, and passenger manifesting data feeds to GTN. Complete system descriptions are listed in [Attachment 2](#).

**NOTE:** For additional system descriptions refer to the following URL:

<https://214.3.17.154/cris/irc/index.html>

1.4. One of the tenets of ITV is all shipment information will be captured at the source and updated at each transient node if changes are made to the source shipment information. Primary contributors to ITV data are activities generating initial (source) passenger, cargo, and equipment movement data.

1.5. Joint Operation Planning and Execution System (JOPES) is used to plan, monitor, and execute mobilization, deployment, employment, sustainment, and redeployment activities associated with joint operations. JOPES contains Time-Phased Force and Deployment Data (TPFDD). When TPFDD flows from JOPES the respective cargo and passenger movement characteristics are displayed at six distinct levels of detail. The assigned level of detail contained within a TPFDD will be commensurate with the availability of detailed movement requirements and the time available for deliberate and crisis action planning. These levels of detail are defined in the Chairman of the Joint Chiefs of Staff

Manual (CJCSM) 3122.01, *Joint Operation Planning and Execution System (JOPES), Volume I (Planning Policies and Procedures)* as follows:

**A. Level I.** Aggregated level. Expressed as total number of passengers and total short tons, total measurement tons, total square feet and/or total thousands of barrels by unit line number (ULN), cargo increment number (CIN), and personnel increment number (PIN).

**B. Level II.** Summary level. Expressed as total number of passengers by ULN and cargo summarized as follows: Bulk, oversized, outsized and non-air transportable short tons (STONS). Vehicular, non-self deployable aircraft and boats, and other measurement tons (MTONS) in square feet (SQFT). Thousands of barrels of POL.

**C. Level III.** Total passengers and cargo STONS, MTONS, SQFT, and thousands of barrels broken down by cargo category.

**D. Level IV.** Detail expressed as number of passengers and individual dimensional data (expressed in length, width, and height in number of inches) of cargo by equipment type by ULN.

**E. Level V.** Detail by priority of shipment. Expressed as total number of passengers by Service specialty code in deployment sequence by ULN individual weight (in pounds) and dimensional data (expressed in length, width, and height in number of inches) of equipment in deployment sequence by ULN.

**F. Level VI.** Detail expressed for passengers by name and SSAN or for coalition forces and civilians by country national identification number; and for cargo by Transportation Control Number (TCN). Non-Unit cargo includes FSN/NSN detail. Cargo can be nested. Cargo with TCNs that are nested are referred to as "secondary load". Example: 11 vehicles of the same type would be represented by 11 level VI records. These records would be summed to I in level IV record.

**NOTE:** Joint Staff officials are currently working with Service and COCOM representatives to change Level VI to Content Level Detail.

1.6. The importance of ITV can not be overstated. Aerial port personnel must be thoroughly knowledgeable on AIS, AIT, and transportation related guidance as specified in approved policy and written guidance to truly capitalize on ITV goals and objectives. Compliance with approved policy and written guidance coupled with appropriate use of AIS and AIT should result in complete, accurate and timely ITV.

1.7. For additional ITV guidance and information refer to the HQ AMC/A4 web page at:

<https://amclg.scott.af.mil/cgi-bin/index.pl?dd=/don/lgti&ti=HO+AMC/LGT+-+Transportation>

## 2. Roles and Responsibility.

2.1. USTRANSCOM is the DoD proponent for the development, implementation and oversight of ITV initiatives and capability. Ultimately, GTN is the principle tool for providing this through interfaces with other AISs. USTRANSCOM will continue to oversee the progress of defense transportation ITV initiatives such as functional process improvements, data quality, system enhancements, and system interfaces. USTRANSCOM system owners will maintain interface and milestone schedules and lead efforts to staff changes to the DoD 4500.9-R, *Defense Transportation Regulation (DTR)*. Specific USTRANSCOM ITV responsibilities are outlined in USTRANSCOM Instruction 20-2, *Tactics, Techniques, and Procedures for In-Transit Visibility* and the USTRANSCOM Radio Frequency Identification Business Process Plan.

2.2. HQ USAF establishes and implements Air Force ITV policy and guidance and coordinates with Joint Staff, AMC, and other Service agencies to achieve ITV. Specific HQ USAF ITV policy and procedures are outlined in AFI 24-238, *In-Transit Visibility*.

### 2.3. HQ AMC

#### 2.3.1. HQ AMC/A43

2.3.1.1. Functional proponent for GATES and the common-user aerial port ITV business processes.

### 2.4. HQ AMC/A43I

2.4.1. Deploys and maintains GATES (including RGATES and DGATES) sites as outlined in USTRANSCOM and HQ AMC AIT integration and implementation plans.

2.4.2. Establishes requirements and ensures capability exists for linear bar code (LBC), two-dimensional (2D) bar code, and RFID write capability at fixed and deployed aerial ports.

2.4.3. Builds and maintains a RF data communication (RFDC) in GATES for use at fixed, high volume ports with GATES capabilities to support LBC, 2D bar code, and RFID use.

2.4.4. Installs integrated handheld terminals (HHT) to provide capability IAW DoD standard technologies.

2.4.5. Assists in development of deployable LBC and 2D bar code read and write capability to support operational contingencies.

2.4.6. Establishes requirements and ensures capability exists in GATES to create RFID tags.

2.4.7. Incorporates a smart card (common access card – CAC) capability in GATES for the timely and accurate capture of air passenger accountability and manifest documentation for force tracking.

2.4.8. Maintains existing ITV capabilities at fixed aerial ports.

2.4.9. Oversees HQ AMC ITV Cell operations.

2.4.10. Develops and maintains command ITV instructions and concept of operations (CONOPS).

2.4.11. Coordinates and manages ITV metrics IAW USTRANSCOM Instruction 20-2.

2.4.12. Serves as command ITV Functional Manager.

## 2.5. HQ AMC/A43R.

2.5.1. Manages and coordinates Unit Type Codes (UTC) training requirements and mission capability (MISCAP) standards in conjunction with the designated pilot units.

2.5.2. Maintains and equips UTCs with deployable AIT packages for use at temporary ports. Currently, there are four distinct UTCs to aid in the evolution of fully functional ITV. Once AIS and AIT technologies are fully integrated ITV will be a natural result of established business processes. Therefore, these UTCs may be temporary.

2.5.2.1. UTC UFBVP (APO ITV MOG-SHIFT 4/1) (PERSONNEL ONLY). UTC augments the UFBBS and UFBBI core UTCs at locations without existing in-place computer manifesting systems. This UTC is capable of supporting a 24-hour, Maximum Operating on the Ground (MOG) of 4 operations. Provides personnel to setup and manage deployable AMC computer systems to enable remote passenger and cargo data transfer to GTN. Personnel will setup and trouble shoot UFBVE and UFBVA equipment packages ensuring timely data transfer to GTN. UTC can augment other UFB(xx) UTCs when warranted. Refer to the Manpower Force Requirement (MANFOR) for personnel requirements.

2.5.2.2. UTC UFBVE (APO ITV EQUIP MOG 4) (EQUIPMENT ONLY). UTC provides initial DGATES equipment permitting remote file transfers. UTC can support operations up to a MOG of 4 for 24 hours. Requires dedicated access to commercial phone, DSN, Non-Secure Internet Protocol Router Network (NIPRNET), or INMARSAT for communications connectivity; communication mode must have a minimum data rate of 9600 bits per second (bps). UTC may require UFBVA for austere area operations and/or building UTC capability for MOG of 4 or greater. UTC may require communication support UTC with dedicated transmission system. Unit may substitute non-ruggedized laptop for computer, laptop, with hard case. Refer to the Logistics Force Packaging Subsystem (LOGFOR) Wing Material List Report for equipment nomenclature.

2.5.2.3. UTC UFBVA (APO ITV EQUIP AUGMENT) (EQUIPMENT ONLY). UTC provides augmentation and spares to be used with UFBVE. Equipment is operated as additional client workstations augmenting the UFBVE when handling MOG of 5 or greater. UTC contains spares for deployment into austere areas where local support is not feasible. Refer to LOGFOR Wing Material List Report for equipment nomenclature.

2.5.2.4. UFBL1 APO INMARSAT (EQUIPMENT ONLY). Provides communications capability, voice and data, where no DSN, commercial, or cellular links exist. Refer to LOGFOR Wing Material List Report for equipment nomenclature.

## 2.6. HQ AMC Tanker Airlift Control Center (TACC).

2.6.1. HQ AMC TACC/XOPM is the sole tasking agency for aerial port UTCs and will determine the adequate type and number of UTCs required for a specific operation.

2.6.2. HQ AMC TACC/XONF provides senior decision makers with accurate situational awareness concerning the movement of air mobility assets.

2.6.2.1. TACC/XONF will check AMC mission departure legs one hour after departure and provide a data quality grade. In addition, TACC/XONF will call Aerial Ports of Embarkation (APOE) and Aerial Ports of Debarkation (APOD) as required to determine and verify actual movement of cargo and passengers. ATOCs will provide movement information and verifica-

tion as requested by TACC/XONF or HQ AMC ITV Cell.

2.6.2.2. By examining data quality one hour after aircraft departure, TACC/XONF initiates the data quality process and ensures time sensitive situation awareness. This process is vital to validating force movements in order to present meaningful reports and analysis to senior AMC and USTRANSCOM leadership.

**NOTE:** Throughout this publication the term ITV team refers to aerial port personnel at a fixed location and/or a combination of aerial port deployed UTCs responsible for GATES connectivity, database management, input of movement data to create electronic cargo and passenger manifests, and updates to GTN.

### ***Section B—ITV Information Technology***

#### **3. GATES and GATES Diskette Interfaces.**

3.1. GATES (includes RGATES and DGATES). GATES is used at large, fixed aerial ports both in the CONUS and OCONUS. It requires a large fixed computer and communication infrastructure and is designed to support a large number of users. RGATES is used primarily at smaller en-route locations, supporting a smaller client base and operates off either a personal or laptop computer. Both GATES and RGATES provide near real-time data to GTN. DGATES is used at remote deployed locations to provide initial manifesting, receipting and ITV capabilities until a more stable infrastructure is in-place to support either GATES or RGATES. GATES updates movement data in GTN once the mission is departed. GATES will continue to develop electronic interfaces with other transportation systems to pass cargo and passenger data and improve and streamline the aerial port and ITV process.

3.2. There are six diskette system interfaces associated with GATES. These interfaces provide an avenue to electronically capture cargo and passenger movement data and eliminate manual entry of subject data which facilitates expeditious movement of forces through APOE and APOD. HQ AMC facilitates ITV data transfer utilizing these diskette interfaces through fixed aerial ports, deployment of an ITV team, or using the HQ AMC ITV Cell.

3.3. The following paragraphs describe the process for each diskette interface.

3.4. For cargo, there is TC-ACCIS, TC-AIMS II, Marine Air-Ground Task Force War Planning System II (MAGTF II)/LOGAIS and Logistics Module (LOGMOD) diskette interfaces.

3.4.1. TC-ACCIS. TC-ACCIS diskettes are a US Army unique product. TC-ACCIS must use GATES as a feeder system to populate GTN because it lacks the capability to directly transfer data to GTN. Utilizing the cargo advance function in GATES, users are able to import TC-ACCIS diskette information directly into GATES utilizing American Standard Code for Information Interchange (ASCII) technology. This process mimics the current channel air cargo process by having the cargo in an advance status. Users then proceed to inbound shipment unit processing and in-check all pieces associated with the applicable movement. The user only has to enter the Transportation Control Number (TCN) for a particular shipment. The rest of the data associated with that particular TCN will auto-populate based on the information that was previously imported into GATES.

3.4.2. TC-AIMS II. TC-AIMS II diskettes are currently a US Army and US Navy unique product. GATES users import movement data via the inbound shipment unit processing, new surface conveyance, and disk input function.

3.4.3. MAGTF II/LOGAIS. MAGTF II/LOGAIS diskettes are a US Marine Corps unique product. GATES users import movement data via the inbound shipment unit processing, new surface conveyance, and disk input function.

3.4.4. Logistics Module (LOGMOD). LOGMOD diskettes are a USAF unique product. GATES users import movement data via the cargo processing, LOGMOD disk input function.

3.5. For passengers, there is Manpower and Personnel Module-Base Level (MANPER-B) and X-MAN diskette interfaces.

3.5.1. Manpower and Personnel Module-Base. (MANPER-B). MANPER-B diskettes are a USAF unique product. GATES users import movement data via the passenger/mission ops, interfaces, MANPER disk input function.

3.5.2. X-MAN. X-MAN is a utility developed within GATES software to accept passenger data via diskette with a tab or comma delimited ASCII file. These files can be created with Microsoft Excel and/or Notepad. GATES users import this data via the passenger/mission ops, interfaces, disk input function.

3.6. Deploying units must download the latest version of applicable software before deploying. Fixed Aerial Ports should update software versions on a regular basis. The latest software version is available for download from the GATES web page at: <https://gates.scott.af.mil>

#### 4. CMOS.

4.1. CMOS is a combat support system that provides automated base level processing for cargo movement during peacetime and both deployment cargo and passenger movement during contingencies for the Air Expeditionary Forces. CMOS is the Air Force's designated deployment system. CMOS will update movement data in GTN once the mission is departed and released in CMOS.

4.2. CMOS interfaces with GATES for cargo manifest data. This interface allows sites with GATES to receive movement data from sites with CMOS.

#### 5. IDS.

5.1. HQ USAF has mandated the use of the IDS for all Air Force wing-level deployments, regardless of size and scope, real-world or exercise. The IDS is designed to automate the deployment process and eliminate manual data entry through the use of standard electronic interfaces between IDS components and the updating of GTN with ITV data. IDS components include the following systems: LOGMOD, LOGMOD Stand-Alone (LSA), MANPER-B, CMOS, GATES, Computer Aided Load Management (CALM), and Automated Air load Planning System (AALPS). CALM and AALPS are interchangeable in the IDS process to support air load planning. CMOS and GATES are interchangeable in the IDS process to support cargo and passenger manifesting and ITV data pushes to GTN. Host/tenant units will refer to their Installation Deployment Plan for specific details on what systems will be used to support deployments.

#### 6. AIT (ITV enabler).

6.1. AIT is a suite of technologies used to enhance and enable ITV. AIT integration with other AIS is key to the DoDs ITV efforts. The objective of AIT is to facilitate source data collection, reduce logistics processing times, and improve data accuracy. AIT includes a variety of media and devices.

## 6.2. Bar codes (LBC and 2D bar codes).

6.2.1. Bar codes are printed on a variety of labels and materials including paper, plastic, ceramic, and metal. Scanning, decoding, and transferring the bar coded data to a host computer is an efficient and inexpensive way to look-up up data in a database or enter data into a system. The user is relieved of the error-prone task of having to read an alphanumeric label and then transcribing the label contents onto a paper form or re-keying it into a database. Bar codes are the least expensive AIT device, are disposable, and are central to many of the current DoD business practices. Unfortunately, bar codes have several weaknesses: a short line-of-sight read range, can not be updated, and require human involvement in most applications.

6.2.1.1. LBCs can store 17-20 alphanumeric characters and are traditionally used to represent a key data element. This data element, such as a TCN, is then used as a point of reference to data in a central database. LBCs are widely used in the DoD for inventory control, transportation tracking, receiving, manifesting, and maintenance data collection.

6.2.1.2. 2D bar codes have a greater data capacity than LBCs (approximately 1850 characters). Because a 2D bar code contains several layers of data redundancy, it can still be read after sustaining considerable damage. The quantity of data available in the 2D bar code format allows the shipper to include the “data base on the box” and eliminates the need to access the data through a computer system. This durability and data quantity make 2D bar codes a logical replacement for LBCs. The Portable Data File (PDF) 2D bar code is the standard for use in DoD logistics applications. Other versions of 2D bar codes, such as Datamatrix and Maxicode, are used for tracking documents and business accounts, high velocity sorting operations, and ID markings on parts. Within the DoD, 2D bar codes are used on individual items, multipacks, air pallets, seavans, ammunition, and items to be accompanied by detailed historical repair data. The information on the 2D bar code may be used to update local information systems for such internal business processes as receipt, inventory management, shipment consolidation, maintenance, and sorting.

**NOTE:** All shipments entering the DTS are required to be marked with acceptable variations of bar codes. Specific formatting and data exceptions are referenced in DoD 4500.9-R (DTR Part II) and MIL-STD-129P, *DoD Standard Practice for Military Marking for Shipment and Storage*.

## 6.3. RFID (Active and Passive).

6.3.1. RFID is a relatively new approach to automatically identifying, categorizing, and locating people and assets. Data is normally written to an RFID tag (read and write device) via a docking station, but may also be written via radio signals. RFID tags may contain varying amounts of information ranging from a simple ID number to 128K bytes of data. Capturing data from the tag is usually performed by a handheld or permanently mounted interrogator.

6.3.2. Active RFID technology offers long range (300 feet or more), read/write devices (tags) with large memory capacities. RFID tags are being used to identify and track vehicles and railcar movements and to provide real-time location service, contents of vehicles or sealed containers, and automatic toll collection. RFID tags are also capable of being used in depots, factories, and warehouses to provide automated inventory of assets with no human involvement.

6.3.3. Passive RFID technology is usually less expensive, with shorter range (a few inches to a few feet) and smaller (stamp size) tags. The passive RFID tags are easily used in lieu of bar codes

for identifying objects in harsh environments. Additionally, these tags may be used for personal identification and access control operations.

6.3.4. Basic RFID systems have three parts: an RFID tag (sometimes called a transponder), interrogators, and data servers.

6.3.4.1. The RFID tags used within the DoD are made by Savi Technology. SaviTag Model 410 contains a microchip, a long life battery, a RF transceiver, and an antenna. The microchip carries the tag identification number and also can be loaded with item descriptive transportation and supply data resulting in content level detail. Loading the data to the tag is commonly called “writing” or “burning” the tag. When one “writes” the tag, the writing software application also sends the write event information to an ITV data server.

6.3.4.2. An interrogator is a piece of equipment which sends signals to “wake-up” and receive data from RFID tags within the RF range of the interrogator. Interrogators are usually set up at transportation nodes and choke points (e.g., the truck gate to the aerial port). When an RFID tag passes through the interrogator’s electromagnetic zone, it detects the interrogator activation signal. The data from each interrogation event is sent to an ITV data server for processing. RFID interrogation equipment has been installed at over 730 sites worldwide.

6.3.4.3. Data servers provide local database storage of RFID tag data and transmission of that data to other networks. In the DoD RFID network, these servers are called Radio Frequency In-Transit Visibility (RF-ITV) servers. There are four regional RF-ITV servers located in Germany, Kuwait, Korea, and the US. The US, or National RF-ITV server, passes data from the other regional ITV servers to GTN.

6.3.4.3.1. Anyone with an RF-ITV server account can query the server and find transportation and supply data corresponding to a tag ID number. After logging in to the server, the user can find where the tag was written, through which transportation nodes (interrogators) it passed, and where the tag was last “seen.” The server matches the tag identification number to the write/read event files, and displays all data by tag number, TCN, requisition number, or interrogator location.

#### 6.4. RFID (Aerial Port Methodology).

6.4.1. RFID tag process at the aerial port. When aerial ports Close and Process a pallet (CAP), they “write” RFID tags and attach those tags to the 463L pallet. To do this, a tag docking station must first be attached to, and configured to work with a GATES client PC. At pallet CAP, the user is asked if a tag should be written. If the answer is “yes,” GATES writes a transportation data text file to a floppy drive in the Client PC. A program called Total Asset Visibility In-transit Processing Station (TIPS) reads the file, assigns the file to a RFID tag, and writes the transportation data to the RFID tag. All the data processes are transparent and the computer programs take care of the rest. The TIPS program also forwards the tag-write event to the Defense Automatic Addressing System (DAAS). DAAS accepts the transportation data file, searches its data base for requisitions that match the TCN in the data file, adds any available supply data to the file, and then sends the combined transportation and supply data file to the RF-ITV server for display.

6.4.2. GATES Version 2.07.13 internalized the RFID tag “write” process by eliminating use of the TIPS program. GATES Version 2.07.13 receives the Advance Transportation Control and Movement Document (ATCMD) data from the Air Clearance Authority (ACA), and subsequently queries DAAS and pulls any available supply data from DAAS for those shipments, by TCN, with

associated requisition data. For shipments with no ATCMD data, GATES will pull any available supply data from DAAS at the time of cargo in-check. With pallet CAP events, GATES will write the transportation and supply data to the RFID tag. GATES will then push the data directly to the RF-ITV server for display. In-turn, the RF-ITV server will replicate both transportation and supply data to GTN for display.

6.4.3. For additional RFID guidance and information refer to the following URLs:

[https://amclg.scott.af.mil/don/lgtc/data/rfid\\_msg.pdf](https://amclg.scott.af.mil/don/lgtc/data/rfid_msg.pdf)

<https://amclg.scott.af.mil/a4/a43/a43a/a43e/equipment/rfid/docs/amc-rfid-tag-management-plan.pdf>

**NOTE:** HQ AMC is working with agencies to equip and instrument active RFID write and interrogate capability into aerial port UFBxx UTCs.

## 6.5. Portable Data Terminal (PDT).

6.5.1. PDTs are sometimes referred to as handheld terminals and/or barcode scanners. The PDTs used in the aerial ports are PDT 8146 from Symbol Technologies. Symbol PDT 8146 allows aerial port personnel to process cargo in the proximity of arrival points, departure points, and cargo build-up areas by using the PDTs laser beam technology to scan LBC and/or 2D barcodes contained within the Military Shipping Label (MSL). Software within the PDT decodes information captured by the laser beam and passes that data to GATES through use of wireless technology.

6.5.2. The primary differences between the new Symbol PDT 8146 and the previous Janus 2020 version are size and user interface. The new Symbol 8146 HHT is smaller, lighter, provides a touch screen and a graphical user interface that provides a look and feel similar to GATES. The Symbol PDT 8146 provides access to 13 GATES cargo processing applications and greatly reduces aerial port reliance on manual keyboard entry of cargo movement data to update the GATES database. Use of PDT technology is generally faster and greatly reduces the chance for operator input errors by allowing hands-off processing of cargo.

6.5.3. HQ AMC/A43 will instrument select aerial ports with RFID and PDT technologies on a phased approach based on terminal classification and operations tempo.

6.5.4. For additional AIT guidance and information refer to the following URL:

<https://amclg.scott.af.mil/cgi-bin/index.pl?dd=/don/lgti&hello=autoidtech.html&ti=A43P+Passenger+Policy>

## 7. INMARSAT.

7.1. HQ AMC/A43 and A66 has procured and commissioned 41 INMARSAT terminals to aid in GATES communication capability where no NIPRNET, DSN, commercial or cellular communication links exist. For these 41 INMARSAT terminals HQ AMC will pay for the airtime using a funding line HQ AMC/A6PT has negotiated. Any misuse of airtime will be billed to the owning/using unit by HQ AMC A43I and A6PT. Airtime for additional unit procured INMARSATs supporting tasked UTC requirements will be reimbursed by the owning unit.

7.2. At least two INMARSAT terminals will be pre-positioned at HQ AMC controlled locations to support possible GATES communication outages.

7.3. TACC/XOPM makes the initial determination if a unit needs to deploy with INMARSAT capability based on evaluation of initial communication capability at the deployed location.

7.4. For additional INMARSAT guidance units will refer to AMCI 33-109, *International Maritime Satellite Management*.

### ***Section C—ITV Pre-conditions.***

#### **8. General.**

8.1. AMC units will ensure their personnel are trained on the requirements and processes to ensure successful ITV data capture.

8.2. AMC units will accept electronic cargo data from TC-ACCIS, LOGAIS, TC-AIMS II or other Service automated systems. Electronic passenger data may be provided in ASCII format, generated from SMART cards or spreadsheets such as Microsoft Excel and/or Notepad. Cargo and passengers will be manifested to their ultimate destination, not the termination point of the current mission or the next stop in the mission itinerary.

8.3. AMC units will refer to AMCI 24-101, Vol. 11, *Military Airlift-Cargo and Mail* for specific procedures for handling and processing intransit cargo.

8.4. The Global Decision Support System (GDSS) has an interface with GATES that automatically feeds mission information to GATES. AMC personnel will monitor mission schedules in GATES and compare them to GDSS when available.

8.5. ITV teams will have GTN accounts and passwords to check validity of movement data passed to GTN. To access ITV information, query GTN referencing the mission number. GTN links mission data from GDSS with the transportation data from GATES.

**NOTE:** The GATES Instruction Booklet provides detailed procedures to accept and process electronic movement data.

#### **9. Planning Assumptions.**

9.1. TACC/XOPM will plan and coordinate the placement of all ITV teams to maximize available resources and minimize duplication of data collection. ITV teams will not be sent to installations with CMOS capability. ITV teams may deploy as part of a Tanker Airlift Control Element (TALCE) or Mission Support Team (MST).

9.2. ITV teams require at least one of the following types of communication media: commercial phone, DSN, NIPRNET, or INMARSAT. Use of commercial phone lines is authorized.

9.3. The COCOM will ensure sufficient theater communications to allow access to GTN in support of AMC operations in theater and will work in close coordination with HQ AMC and TACC during theater communication outages to restore GATES connectivity.

#### **10. Execution.**

10.1. GATES and/or RGATES will be employed at all fixed, permanent installations to capture 100% of deploying cargo and passenger information.

10.2. For remote and deployed operations, ITV teams with DGATES capability will deploy with a TALCE or MST to theater locations. ITV teams will not be employed to locations just to receipt for cargo arriving at home station.

10.3. GDSS and Command and Control Information Processing System (C2IPS) will be employed with TALCE and/or MST. GDSS or C2IPS will be used for C2 messaging and to monitor other C2 information. Specific systems will be tailored depending on available bandwidth and MOG. GTN must be available to monitor ITV data.

10.4. Unless under the direction of the TALCE or TACC, missions will not be delayed to capture ITV.

## **11. Deployment.**

11.1. ITV teams will be deployed to APOEs and APODs and/or a combination of both only for the duration of movement from that location. Upon arrival at deployed location, ITV teams will integrate with AMC command element (e.g. TALCE) and report their arrival to TACC/XOPM. ITV teams will contact the transported force POC and Arrival/Departure Airfield Control Group (A/DACG) representatives. Cargo and passenger manifesting and receipt capability will be in-place at APOEs for the duration of the contingency.

## **12. Sustainment.**

12.1. AMC will usually support sustainment airlift of cargo and passengers through established aerial ports or commercial gateways. Airlift support will be established via AMC channels and/or newly established contingency channels validated through USTRANSCOM and scheduled by TACC/XOG.

12.2. Sustainment cargo and passenger movements must be manifested in GATES to ensure ITV and Transportation Working Capital Fund (TWCF) reimbursement.

## **13. Re-deployment.**

13.1. Re-deployment of combat forces and cargo may return to home station or to another deployed location.

13.2. Cargo and passenger manifesting will be in-place at APOEs for the duration of re-deployment operations.

**NOTE:** ITV teams may be required to support deployment, sustainment, and re-deployment operations simultaneously.

## **14. Administration and Logistics.**

14.1. ITV teams experiencing GATES communication problems will be supported via the AMC Communications Help Desk at DSN 576-4949. The AMC Communications Help Desk will log all problems and forward calls to the appropriate office for resolution. If the AMC Communications Help Desk cannot immediately answer questions or render technical assistance, GATES, RGATES and DGATES programmers are available on-call 24/7 through the AMC Communications Help Desk for problem elevation and resolution.

14.2. ITV teams experiencing communication problems should first contact the communications support element at the deployed location to work possible resolution. However, report all GATES and communication problems to the AMC Communications Help Desk.

14.3. To facilitate rapid establishment and support communication outages, HQ AMC has strategically positioned DGATES and INMARSAT terminals at key locations. Through coordination with HQ

AMC/A6 and the COCOMs Air Component staff, HQ AMC/A43I will determine when to utilize these assets. Assets will remain under AMC control.

### ***Section D—Deploying Unit***

#### **15. General.**

15.1. Each military service has its own deployment process and systems for unit moves and deployments, but as stated, the Air Force is the only service presently capable of populating GTN with air movement data.

15.2. Deploying Air Force units will follow the guidance in AFI 10-403, *Deployment Planning and Execution* and applicable Installation Deployment Plan (IDP) and non-Air Force units will follow their service related directives. All deploying units (Services) are required to prepare cargo and passengers IAW guidance contained in the DTR.

15.3. IAW DoD 4500.9-R (DTR Part III) electronic and hard copy data is required to initiate, monitor, and determine billing requirements for passenger, cargo, and equipment during unit movements and deployments. Shippers, users, and port operators must provide accurate transportation data to enhance effectiveness and efficiency of the Defense Transportation System (DTS), provide ITV, and ensure proper billing.

15.4. Deploying units will provide a diskette containing outbound cargo information to Aircraft Services/Cargo Processing Section and a diskette containing outbound passenger information to the Passenger Service Section. Diskettes will be provided in advance of mission departure to facilitate ITV timeliness criteria, expedite processing of cargo and passengers into the airlift system, and ensure proper manifesting of cargo and passengers.

15.5. Aerial port personnel will not manipulate data to ensure full DTR compliance. If data is incorrect, or assistance is needed, the military shipping activity will contact their service's MAJCOM, system administrator, or appropriate help desk for assistance. Unit movement officers, transportation officers and/or service representatives are responsible for timely, accurate and complete cargo and passenger movement data IAW DTR guidance.

### ***Section E—Aerial Port Squadrons/Units (Fixed Ports with GATES/RGATES)***

#### **16. Aircraft Services/Cargo Processing Section.**

16.1. Air cargo functions will ensure all cargo accepted into the DTS is documented IAW DoD 4500.9-R (DTR Part II and III).

16.2. Air cargo functions will process cargo (e.g., truck inbound, air inbound, and truck outbound cargo) IAW AMCI 24-101 Vol. 11.

#### **17. Load Planning.**

17.1. Personnel assigned to the load planning section must possess extensive job knowledge and completely understand the requirements for manifesting cargo IAW AMCI 24-101 Vol. 9, *Air Terminal Operations Center*.

17.2. Load Planners must meet the minimum training requirements IAW AMCI 24-101 Vol. 22, *Training Requirements for Aerial Port Operations*.

17.3. Load Planning will ensure GDSS/C2IPS mission data matches manifest header data prior to the Air Terminal Operations Center (ATOC) departing missions.

## **18. Passenger Service.**

18.1. Passenger service function will ensure passengers meet the eligibility requirements IAW DoD 4515.13-R, *Air Transportation Eligibility* prior to acceptance in the DTS.

18.2. Passenger service function will collect the minimum passenger data elements to support proper manifesting IAW DoD 4500.9-R (DTR Part I).

18.3. Passenger processing function will process passengers IAW AMCI 24-101 Vol.14, *Military Airlift Passenger Service*.

## **19. ATOC.**

19.1. Capability Forecasters and/or Information Controllers will ensure that GATES mission data matches C2IPS/GDSS data.

19.2. Information Controllers will depart any GATES created missions that are not in GDSS NLT 30 minutes after actual time of mission departure.

19.3. Information Controllers will query GTN to ensure ITV timeliness criteria IAW DoD 4500.9-R (DTR Part 1, II, and III). Timeliness is measured from lift (mission departure) to availability of data in GTN. Movement data must be available in GTN as follows: Two hours for all intra-theater and CONUS air movements, one hour for all sustainment airlift and unit/non-unit strategic air movements.

19.4. If movement data is not drillable in GTN IAW prescribed timeliness criteria, Information Controllers will contact the AMC Communications Help Desk at Scott AFB, IL at DSN 576-4949. If the help desk is unable to resolve the problem contact the HQ AMC ITV Cell at DSN 779-7652 or 618-229-7652 or the GTN Help Desk at (800) 486-7001 or (618) 256-6836.

19.5. Information Controllers will have GTN, GDSS and C2IPS accounts and passwords to verify and support ITV data.

## ***Section F—Deployed Aerial Port Units (Units with DGATES)***

### **20. DGATES System Setup.**

20.1. In-garrison AMC units will have DGATES servers built, registered and on the network replicating with GATES Central. Having DGATES servers built and replicating will speed up the actual system deployment when the unit receives a tasking. The GATES Installation and Operations Document (GIOD), Appendix V, and deployable GATES installation, registration, and notification, provides procedures for accomplishing DGATES system setups.

20.2. Upon receiving a tasking from TACC/XOPM for ITV teams, deploying units will follow the notification of deployment procedures outlined in the GIOD, appendix V, prior to departing home station.

20.3. ITV teams deploying with DGATES will ensure personnel are trained on INMARSAT set-up and operations.

20.4. ITV teams will decommission DGATES sites when no longer required. ITV teams will reference AMCI 24-101, Volume 4, *Military Airlift/Air Transportation Systems Management* and the GIOD, Appendix V for specific decommissioning procedures.

## **21. Aircraft Services/Cargo Processing Section.**

21.1. Air cargo functions including Joint Inspectors will ensure all cargo accepted into the AMC air-lift system is documented IAW DoD 4500.9-R, (DTR Part II and III).

21.2. Air cargo functions will process cargo (e.g., truck inbound, air inbound, and truck outbound cargo) IAW AMCI 24-101 Vol. 11 and Vol. 18, *Military Airlift-AMC Aerial Port Mobility Units and Aerial Delivery Flights*.

## **22. Load Planning.**

22.1. Personnel assigned to the load planning section must have extensive job knowledge and completely understand the requirements for manifesting cargo IAW AMCI 24-101 Vol. 9.

22.2. Load Planners must meet the minimum training requirements IAW AMCI 24-101 Vol. 22.

22.3. Load Planners must be thoroughly knowledgeable on CALM and AALPS requirements.

22.4. Load Planning will review the accuracy of all movement ready (processed) cargo/mail documentation IAW DoD 4500.9-R (DTR Part II and III).

22.5. Load Planning will manifest outbound air cargo IAW AMCI 24-101 Vol. 9 and Vol. 18

22.6. Load Planning will ensure GDSS/C2IPS mission data matches manifest header data prior to ATOC departing missions.

## **23. Passenger Services.**

23.1. Passenger service function will ensure passengers meet the eligibility requirements IAW DoD 4515.13-R, *Air Transportation Eligibility* prior to acceptance in the DTS.

23.2. Passenger service function will collect the minimum passenger data elements to support proper manifesting IAW DoD 4500.9-R (DTR Part I).

23.3. Passenger service function will process passengers IAW DoD 4500.9-R (DTR Part I and III) and AMCI 24-101 Vol.14.

## **24. ATOC.**

24.1. Information Controllers will ensure mission data matches applicable C2IPS/GDSS data.

24.2. Information Controllers will depart any GATES created missions that are not in GDSS NLT 30 minutes after actual time of mission departure. Missions passed via GDSS will have departure times automatically updated.

24.3. Information Controllers will query GTN to ensure ITV timeliness criteria IAW DoD 4500.9-R (DTR Part III). Timeliness is measured from lift (mission departure) to availability of data in GTN.

Movement data must be available in GTN as follows: Two hours for all intra-theater and CONUS air movements, one hour for all sustainment airlift and unit/non-unit strategic air movements.

24.4. If movement data is not drillable in GTN IAW prescribed timeliness criteria, information controllers will contact the AMC Communications Help Desk at Scott AFB, IL at DSN 576-4949. If the help desk is unable to resolve the problem contact HQ AMC ITV Cell at DSN 779-7652 or 618-229-7652 or the GTN Help Desk at (800) 486-7001 or (618) 256-6836.

24.5. Information Controllers will have GTN, GDSS, and C2IPS accounts and passwords to verify and support ITV data.

### ***Section G—HQ AMC ITV Cell***

#### **25. General.**

25.1. USTRANSCOM identified a requirement for 100% ITV on all missions associated with the Global War on Terrorism (GWOT), in particular, airlift missions associated with OEF and OIF.

25.2. In an effort to achieve 100% ITV for all Services, HQ AMC established the HQ AMC ITV Cell operating 24 hours a day, seven days a week to track AMC airlift missions. This office identifies and monitors obstacles in achieving ITV and provides updates to senior leadership.

25.3. The HQ AMC ITV Cell embodies AMCs unique capability to support ITV by ensuring cargo and personnel are visible while in the airlift portion of the DTS.

#### **26. Objective.**

26.1. The ITV Cell provides a control function that manages passenger and cargo movement data collection requirements and information required to receive, document, plan, prepare measurement statistics, and data analysis. The ITV Cell will:

26.1.1. Gather, process, and disseminate all mission data and information documentation IAW AMCI 24-101, Vol. 9.

26.1.2. Assess each AMC mission, as required, to ensure ITV is available within one hour of mission departure for accurate passenger and cargo data by utilizing the required AIS.

26.1.3. Comply with all mandatory and applicable DoD, USAF, AMC instructions, regulations, and manuals which provide guidance, policy, and direction for ITV.

26.1.4. Provide data entry input of E-mail and manual input capabilities of passenger/cargo data and act as a liaison where field support teams and/or ITV systems are not deployed or are unavailable, inaccessible, or disengaged.

26.1.5. Act as an ITV functional area support command and control element and coordinates with USTRANSCOM, AMC, TACC, deployed and non-deployed aerial port ITV teams, individual units, and air terminal operators for data retrieval, processing, and reclamation and recovery of lost, missing, or incomplete ITV data.

26.1.6. Determine and document AIS problems and causes, identify information inaccuracies, perform system troubleshooting, coordinate system problems with command and base-level agencies and provide problem resolutions, corrections and timelines to minimize system downtimes.

26.1.7. Perform AIS queries to determine ITV and data quality input acceptance and researches command and base level support information requests.

26.1.8. Monitors operational system integration status of AIS, identify field data entries, system connectivity, and other concerns interfering with achieving ITV and provides recommendations and solutions to enhance ITV capabilities.

26.1.9. Investigates, analyzes, and evaluates ITV data inaccuracies and provides short and long term recommendations to resolve ITV field related issues to improve increased support for AMC operations.

26.1.10. Creates Data Quality and E-mail ITV activity reports. Reports will identify specific data quality issues that impede 100% ITV by aircraft mission number and APOE. Reports will be utilized for corrective action and trend analysis.

## **27. E-mail ITV.**

27.1. For instances when AMC cannot support a location with an ITV team and/or the location doesn't have the capability to provide ITV, the HQ AMC ITV Cell will establish E-mail ITV capability for cargo and passenger movements from those locations IAW the following:

27.1.1. The HQ AMC ITV Cell will consider performing E-mail ITV when ITV is the only reason AMC is sending personnel to a deployment location. The ITV cell will provide E-mail ITV capability to the greatest extent possible.

27.1.2. When TACC/XOPM sends any aerial port support to a location, (e.g. Joint Inspection or load team) they will also task ITV teams unless ITV is captured through use of AIT, e.g., RFID tags.

27.1.3. TACC/XOPM identifies a location with an E-mail ITV requirement to the HQ AMC ITV Cell. TACC/XOPM will provide the number of missions expected and a point of contact at the departure location.

27.1.4. HQ AMC ITV Cell will commission DGATES aerial port code (APC) for the applicable site and contact departure location's POC to establish timelines and data requirements.

27.1.5. ITV Cell will contact designated unit POCs via telephonic coordination for each and every mission that they are tasked to support immediately upon tasking notification until POC is reached.

27.1.6. ITV Cell will ensure designated unit POCs understand what is required from them and how they can make contact with the HQ AMC ITV Cell.

27.1.7. ITV Cell will ensure units providing E-mail ITV files include their location (home unit and APOE), mission number, branch of service and unit being airlifted. This is imperative to keep files organized for multiple locations and missions.

27.1.8. ITV Cell will maintain periodic telephonic communication with unit POCs until compliant passenger and/or cargo data files are received.

27.1.9. ITV Cell will ensure unit POCs review and sign the GATES created manifest; verifying actual load manifested, then fax back to the AMC ITV Cell.

27.1.10. Once data is transmitted in DGATES the ITV Cell will monitor GTN to ensure data is successfully posted.

27.1.11. ITV Cell will de-commission DGATES APCs when there is no longer a requirement to provide E-mail ITV for subject site.

## **28. Post Mission Activities.**

28.1. Perform TWCF post processing for all passenger manifests.

28.2. Monitor cargo and passenger manifest registers.

28.3. Create a mission folder for each departure including cargo and passenger manifests (signed by departure location), CALM and/or AALPS load plan, TWCF passenger manifest, and other pertinent transportation data. Documentation will be maintained IAW AMCI 24-101, Volume 6, *Transportation Documentation, Data, Records, and Reports*.

## ***Section H—Training.***

### **29. General.**

29.1. AMC units will teach ITV awareness during pallet build up classes or other mobility training.

29.2. ITV training will be prioritized based on the unit deployment order in the COCOMs operational plan (OPLAN) and/or time-phased force deployment listing (TPFDL). Appropriate unit personnel should be fully knowledgeable of ITV requirements well before deployment orders are levied.

29.3. Recommended training topics will include RFID processes, DTR documentation requirements, correct electronic data formats, GATES user handbook items, etc.

## ***Section I—TALCE***

### **30. General.**

30.1. TALCE is a mobile command and control organization deployed to support inter-theater and intra-theater air mobility operations at fixed, en route, and deployed locations where air mobility operational support is nonexistent or insufficient. TALCEs provide on-site management of air mobility air-field operations to include command and control, communications, aerial port services, maintenance, security, transportation, weather, intelligence, and other support functions, as necessary. The TALCE is composed of mission support elements (MSE) from various units and deploys in support of peacetime, contingency, and emergency relief operations on both planned and "no notice" basis.

30.2. Air Mobility Operations Group (AMOG) Air Mobility Squadron (AMS) TALCE Units. AMOG AMSs have TALCE units with aerial port personnel assigned as part of an MSE.

## ***Section J—ITV Feedback***

### **31. General.**

31.1. If a deploying unit fails to provide accurate, timely, and complete movement data IAW DoD 4500.9-R (DTR Part I, II and III) the deployed ITV team will contact the HQ AMC ITV Cell via e-mail at <mailto:itv.amc.team@scott.af.mil> or telephone at DSN 779-7652/618-229-7652. ITV

teams will provide timely feedback to ensure HQ AMC can take appropriate action to correct movement data anomalies during execution as well as facilitate long term ITV process improvement.

31.2. HQ AMC ITV Cell personnel will document those discrepancies via an ITV feedback worksheet and forward to USTRANSCOM/J3-DQ for resolution.

31.3. USTRANSCOM/J3-DQ will forward the ITV feedback worksheet to the applicable service representatives responsible for movement data discrepancies causing ITV failures for corrective action and proposed course of action.

LOREN M. RENO, Brigadier General, USAF  
Director of Logistics

**Attachment 1****GLOSSARY OF REFERENCE AND SUPPORTING INFORMATION*****References***

DoD 4500.9-R, *Defense Transportation Regulation*

DoD 4515.13-R, *Air Transportation Eligibility*

CJCSM 3122.01, *Joint Operation Planning and Execution System (JOPES) Volume I (Planning Policies and Procedures)*

AFI 10-403, *Deployment Planning and Execution*

AFI 24-238, *In-Transit Visibility*

AMCPD 24-1, *Military Policy for Aerial Port Operations*

AMCI 24-101V4, *Military Airlift-Air Transportation Systems Management*

AMCI 24-101V9, *Air Terminal Operations Center*

AMCI 24-101V11, *Military Airlift-Cargo and Mail*

AMCI 24-101V14, *Military Airlift-Passenger Service*

AMCI 24-101V18, *Military Airlift-AMC Aerial Port Mobility Units and Aerial Delivery Flights*

AMCI 33-109, *International Maritime Satellite Management*

Defense In-transit Visibility (ITV) Integration Plan-Revised 2000

USTCI 20-2, *Tactics, Techniques, and Procedures for In-Transit Visibility*

MIL-STD-129P, *DoD Standard Practice for Military Marking for Shipment and Storage*

USTRANSCOM Radio Frequency Identification Business Process Plan.

GATES *Installation and Operations Document*

GATES *Instruction Booklet*

***Abbreviations and Acronyms***

**A/DACG**—Arrival/Departure Airfield Control Group

**AALPS**—Automated Air Load Planning System

**ACA**—Airlift Clearance Authority

**AIS**—Automated Information System

**AMC**—Air Mobility Command

**AME**—Air Mobility Element

**AMS**—Air Mobility Squadron

**AMOG**—Air Mobility Operations Group

**AMWC**—Air Mobility Warfare Center

**ANG**—Air National Guard  
**APC**—Aerial Port Code  
**APOD**—Aerial Port of Debarkation  
**APOE**—Aerial Port of Embarkation  
**APS**—Aerial Port Squadron  
**ASCII**—American Standard Code II  
**ATCMD**—Advance Transportation Control & Movement Document  
**ATOC**—Air Terminal Operations Center  
**C2IPS**—Command and Control Information Processing System  
**CAC**—Common Access Card  
**CALM**—Computer Aided Load Management  
**CIN**—Cargo Increment Number  
**CMOS**—Cargo Movement Operations System  
**COCOM**—Combatant Command/Commander  
**CONOPS**—Concept of Operations  
**CONUS**—Continental United States  
**CPU**—Central Processing Unit  
**DAAS**—Defense Automatic Addressing System  
**DGATES**—Deployed Global Air Transportation Execution System  
**DLA**—Defense Logistics Agency  
**DoD**—Department of Defense  
**DSS**—Distribution Standard System  
**DTR**—Defense Transportation Regulation  
**DTS**—Defense Transportation System  
**ETADS**—Enhanced Transportation Automated Data System  
**FSN**—Federal Stock Number  
**GATES**—Global Air Transportation Execution System  
**GCCS**—Global Command and Control System  
**GCSS**—Global Combat Support System  
**GDSS**—Global Decision Support System  
**GIOD**—GATES Installation and Operating Document  
**GTN**—Global Transportation Network

**GWOT**—Global War on Terrorism

**HOST**—Headquarters On-line System for Transportation

**HQ AMC/A4**—Logistics

**HQ AMC/A43**—Air Transportation Division

**HQ AMC/A43R**—Transportation Resources Branch, Air Transportation Division

**IBS**—Integrated Booking System

**IDS**—Integrated Deployment System

**ILGS**—Integrated Logistics System

**INMARSAT**—International Marine/ Maritime Satellite

**ITV**—In-transit Visibility

**JA/ATT**—Joint Airborne/Air Transportability Training

**JOPEs**—Joint Operations Planning and Execution System

**LBC**—Linear Bar Code

**LOGFOR**—Logistics Force Packaging Subsystem

**LOGMOD**—Logistics Module

**LSA**—Logistics Module Stand Alone

**MAGTF II**—Marine Air-Ground Task Force War Planning System II

**MAGTF II/LOGAIS**—Marine Air-Ground Task Force War Planning System II/Logistics Automated Information System

**MANFOR**—Manpower Force Requirement

**MANPER-B**—Manpower and Personnel Module

**MDSS II/MAGTF**—Deployment Support System II

**MOG**—Maximum Operating on the Ground

**MSE**—Mission Support Element

**MST**—Mission Support Team

**NSN**—National Stock Number

**OEF**—Operation Enduring Freedom

**OIF**—Operation Iraqi Freedom

**OMC**—Optical Memory Card

**OSD**—Office of the Secretary of Defense

**PDF**—Portable Data File

**PDT**—Portable Data Terminal

**PIN**—Personal/Personnel Identification Number

**POD**—Port of Debarkation  
**POE**—Port of Embarkation  
**RF**—Radio Frequency  
**RFDC**—Radio Frequency Data Communications  
**RFID**—Radio Frequency Identification  
**RF-ITV**—Radio Frequency In-transit Visibility  
**RGATES**—Remote Global Air Transportation Execution System  
**RSO&I**—Reception, Staging, Onward Movement, and Integration  
**2D**—Two Dimensional  
**TACC**—Tanker Airlift Control Center  
**TALCE**—Tanker Airlift Control Element  
**TC-ACCIS**—Transportation Coordinator's Automated Command and Control Information System  
**TC-AIMS**—Transportation Coordinator's Automated Information for Movement System  
**TCAIMS II**—Transportation Coordinator's Automated Information for Movement System II  
**TCN**—Transportation Control Number  
**TCMD**—Transportation Control and Movement Document  
**TIPS**—Total Asset Visibility In-transit Processing Station  
**TWCF**—Transportation Working Capital Fund  
**ULN**—Unit line number  
**USCENTCOM**—United States Central Command  
**USSOUTHCOM**—United States Southern Command  
**USTRANSCOM**—United States Transportation Command  
**USAFR**—United States Air Force Reserve  
**UTC**—Unit Type Code  
**WPS**—Worldwide Port System  
**XMAN**—Exchange Manifest

### *Terms*

**Cargo**—Any items or supplies in transit.

**Deployment**—The relocation of forces to areas of operation

**Destination**—The location to which units, materiel, or individuals are traveling. The COCOMs, Military Services, or Defense agencies designate it.

**Drillable**—Drillable cargo data displays TCN(s), P/W/C, etc. Drillable passenger data displays the passengers names, SSAN, etc. Drillable means going to a deeper level of detail.

**In-Transit Visibility**—The ability to track the identity, status, and location of DoD unit and non-unit cargo and passengers, patients, and personal property from origin to consignee or destination during peace, contingencies, and war.

**Legacy Systems**—A term used to describe automated information systems that perform the same function as those performed by selected migration systems. Legacy systems have a finite life, with all further system development and modernization resources applied to the selected migration system.

**Manifest**—A document listing in detail the passengers, cargo, or mail carried aboard.

**Migration Systems**—Existing or planned and approved automated information systems officially designated to support standard processes.

**Movement Control**—The planning, routing, scheduling, and control of personnel and freight movements over lines of communication. It includes the reception and onward movement of personnel, equipment, and supplies.

**Non-Unit Cargo**—Supplies in transit that are not part of a unit or its equipment. Synonymous with sustainment cargo.

**Non-Unit Personnel**—All personnel requiring transportation to or from an area of operations other than those traveling with a specific unit.

**Origin**—The location from which personnel or material commence movement to a destination.

**Port of Debarkation (POD)**—A station that serves as an authorized port to process and clear aircraft, ships, and traffic for entrance to the country in which it is located.

**Port of Embarkation (POE)**—A station that serves as an authorized port to process and clear aircraft, ships, and traffic for departure from a particular country.

**Shipment Identification Number**—The unique number that identifies a shipment. (Includes GBL, TCMD, lead TCN, air manifest, etc.)

**Sustainment Cargo**—Supplies in transit that are not part of a unit or its equipment and therefore not documented with a unit movement transportation control number. Synonymous with non-unit cargo.

**Theater**—A geographical area outside CONUS for which a commander of a unified command has been assigned military responsibility.

**Total Asset Visibility (TAV)**—The capability that permits operation and logistics managers to determine and act on timely and accurate information about the location, quantity, condition, movement, and status of Defense materiel. It includes assets that are in storage, in process, and in transit.

**Transportation Control Number (TCN)**—A unique 17-position alphanumeric data element assigned to control a shipment unit throughout the transportation pipeline.

**Transportation Control and Movement Document (TCMD)**—The shipment information document (DD Form 1384, **Transportation Control and Movement Document**). It provides advance notice of shipments and the information necessary to process the shipments through the Defense Transportation System. The TCMD is the basis for preparation of air and surface manifests and for compiling logistics reports.

**Unit**—Any military element whose structure is prescribed by an authority, such as a Table of Organization and Equipment.

**Unit Equipment**—The equipment prescribed to be in a unit's possession by an authority such as a Table of Organization and Equipment. The transportation of unit equipment is documented with a unit movement transportation control number.

**Unit Line Number (ULN)**—Two alphanumeric characters (the fragmentation and insert codes) added to a force requirement number to identify military units for a particular operational plan.

**Unit Personnel**—All personnel assigned or attached to a specific unit and requiring movement as a unit to or from a theater or area of operations.

## Attachment 2

### SYSTEM DESCRIPTIONS

**A2.1.** This attachment describes a number of systems that contribute to the DoD ITV system. The office or organization identified in brackets is the system developer.

**AALPS** - Automated Air Load Planning System [USA]. AALPS is a knowledge-based expert system that assists users in the complex task of planning and execution of aircraft loads for all types of deployments. It has been selected as the aircraft load planning system for the Department of Defense. It creates and edits load plans used in actual deployments, as well as allowing planners to build force packages that are used to determine airlift requirements. It has become the Air Load Module of TC-ACCIS and will interface with GATES/RGATES and TC-AIMS II to perform the same function.

**C2IPS** - Command and Control Information Processing System [AMC]. A Migration system that will interface with GTN. It enables AMC organizations to exchange information between the operation, logistics, transportation, and intelligence functional areas. It is a single, integrated computer system to aid the command and control activities in theater.

**CALM** - Computer-Aided Load Management [AMC]. A system that provides AMC-approved aircraft load plans and reports. It also serves as a component system of the Marine Corps' MAGTF II/LOGAIS.

**CAMPS** - Consolidated Air Mobility Planning System [AMC]. The new name for the GTN migration system known as ADANS that captures airlift-planning requirements. It will interface with GTN.

**CMOS** - Cargo Movement Operations System [USAF]. The Air Force's automated base-level cargo movement processes and provides transportation movement officers with current unit movement data. TC AIMS II is the planned replacement for this system.

**DAAS** - Defense Automatic Addressing System [DLA]. A GTN interface system that record, MILSTRIP and other transactions and routes them among DoD activities.

**DSS** - Distribution Standard System [DLA]. An information source system of GTN. The migration system that will replace many existing distribution legacy systems. Those legacy systems include DLAs Defense Warehousing and Shipping Procedures (DWASP), Army's Supply Depot System (SDS), Navy Automated Transportation and Documentation System (NAVADS), and the Air Force's Stock Control and Distribution (SC&D) system.

**FACTS** - Financial and Air Clearance Transportation System [USN]. An automated transportation system of the Navy that will replace NATDS and provide data visibility through interface with GTN, WPS, and GATES. It is designated the migration air clearance authority system for all Services. It was formally known as the Navy Material Transportation Office Operations and Management Information System (NAOMIS).

**GATES** - Global Air Transportation Execution System [AMC]. The current real-time system that will support fixed, deployed, and mobile sites. It will process and track cargo and passengers; support resource management and provide command and control support information. It will also generate cargo, passenger, and resource reports at headquarters and unit level, and will provide message routing and delivery for all AMC transportation airlift operators regardless of size, workload volume, configuration, or location.

**GCCS** - Global Command and Control System [JCS]. A future replacement system for the JOPES. It will provide time-phased force deployment data and movement requirements to GTN.

**GCSS** - Global Combat Support System [USAF]. GCSS is an initiative for enhancing combat support effectiveness through system interoperability by interfacing and integrating corporate-wide, service/agency sponsored combat support systems. GCSS provides integration across the combat support functional areas of the Department of Defense and from the sustaining base to the combat area. GCSS plans to obtain from GDSS correlated AMC mission position for their Common Operating Picture (COP).

**GDSS** - Global Decision Support System [AMC]. A GTN interface system that provides aircraft scheduling and execution information. An AMC migration system that records and displays airlift schedules, aircraft arrivals and departures, and limited aircraft status. It provides executive level decision support. An original GTN prototype interface system, it will be part of GTNs initial operating capability.

**GTN** - Global Transportation Network [USTRANSCOM]. A system that provides the automated support that USTRANSCOM and its components need to carryout their global transportation management responsibilities. It provides the integrated transportation data necessary to accomplish transportation planning, command and control, and patient movement. It also provides DoD wide ITV of units, passengers, and cargo during peace and war.

**JOPES** - Joint Operations Planning and Execution System [JCS]. The foundation of DoDs conventional command and control system, which comprises policies, procedures, and reporting systems supported by automation. It is used to monitor, plan, and execute mobilization, deployment, employment, and sustainment activities in peace, exercises, crises, and war. It will be replaced by GCCS, which will provide Time Phased Force Deployment Data and movement requirements to GTN.

**LOGMOD** - Logistics Module [USAF]. A system that provides AF, MAJCOMs, base-level logistics planners, and base-level unit deployment managers (UDMs) with the capability for mobility and/or reception planning and execution to support worldwide deployment of forces. It provides a responsive, user-friendly system for mobility planning in an on-line mode. LOGMOD is a subsystem of the Contingency Operation/Mobility Planning and Execution System (COMPES). LOGMOD is crucial for logistics planners and unit deployment managers to plan for worldwide deployment of personnel, supplies, and equipment to meet various exercises, real-world contingencies, and wartime tasking. Its standard input, editing, and storage capabilities produce the materiel lists, packing and load lists, and the manpower interface products for Unit Type Code (UTC) packages formatted for base mobility plans. LOGMOD helps maintain combat units and their materiel support in constant deployment readiness.

**MANPER-B** - Manpower and Personnel Module [USAF]. This system is a PC-based system that is used to track and account for personnel deploying, and provides manpower and personnel data support to field commanders (e.g., force requirements and projections, strength accountability and replacement requirements). The personnel data system is designed to achieve and maintain up-to-date strength accountability for all Air Force personnel deployed or employed in support of contingency operations. The system provides the manpower and personnel planners with the capability to maintain Manpower Force Elements (MFE); build source Deployment Manning Documents (DMD); generate standard planning products; support the annual wartime Manpower Planning Exercise (MANREQ); communicate Unit Type Code (UTC) packages to all levels of command; and monitor, account for, and manage personnel resources deployed in support of Air Force missions.

**MAGTF II** - Marine Air Ground Task Force War Planning System II [USMC]. A component system of MAGTF II/LOGAIS that supports planning a wide variety of high-intensity operational requirements. It accelerates the development, sourcing, analysis, and refinement of plans resulting in executable JOPES Time Phased Force Deployment Data Bases.

**MAGTF II/LOGAIS** - Marine Air-Ground Task Force War Planning System II/Logistics Automated Information System [USMC]. A family of microcomputer-based systems designed to provide operational forces with a tool kit of capabilities for rapid planning, sourcing, and tracking of logistics resources during all operational stages to include deployment and redeployment. It is composed of MAGTF II, TC-AIMS, MDSS II, CALM, and CAEMS, which are further defined in the appendix.

**MDSS II** - MAGTF Deployment Support System II [USMC]. A component system of MAGTF II/LOGAIS that aids in planning for and supporting rapid military deployments anywhere in the world. It builds and maintains a database of force and equipment data for various MAGTF configurations.

**TC-ACCIS** - Transportation Coordinator's Automated Command and Control Information System [USA]. The Army TC-AIMS that is used to plan and execute unit deployments and redeployments worldwide, communicate data to the US Forces Command for updating JOPES, and communicate data to SDDC for port operations and load planning. It generates air load plans, air cargo manifests, unit movement data, convoy march tables and clearance requests, rail load plans, bills of lading, and bar-code labels. TC AIMS II is the planned replacement for this system.

**TC-AIMS** - Transportation Coordinator's Automated Information for Movement System [USA/USMC/USAF]. A generic term for a family of Military Service systems that automate the planning, organizing, coordinating, and controlling of unit-related deployment activities supporting the overall deployment process. These systems TC- ACCIS [USA}, TC-AIMS [USMC], and CMOS [USAF] -will be replaced by TC-AIMS II. Also, the component system of the Marine Corps MAGTF II/LOGAIS that supports the overall deployment process. TC-AIMS II is the planned replacement for this system.

**TC-AIMS II** - Transportation Coordinator's Automated Information for Movement System II. A joint system is being developed by the Army to replace the Military Services' TC-AIMS family of systems. It automates the planning, organizing, coordinating, and controlling of unit-related deployment activities. It also permits transportation offices to maintain an automated database of current unit movement data. It will also provide the theater of operations with a joint theater transportation system capability.

**WPS** - Worldwide Port System [SDDC]. The port operating system being fielded for military ocean terminal, Navy port activities, Army terminal units, and automated cargo documentation detachments. A GTN interface system.