TECHNICAL REPORT

For The

Cargo Movement Operations System (CMOS)

MAC Merger Functional Description

6 April 1990

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Prepared for

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SECTION I.

INTRODUCTION. The purpose of this Technical Report is to comment on the MAC Merger Functional Description.

SUMMARY. The document is accurate and valid with the exceptions noted in Section II of this report. However, to ensure completeness, Headquarters Military Airlift Command needs to identify their upward and lateral reporting requirements.

CONCLUSION. Not Used.
SECTION II.

RESULTS.

Changes to the document, indicated by underlining, are suggested. Those underlined comments which we consider to be substantive are discussed in Paragraph A. In addition, other suggested improvements to the document are presented in Paragraph B.

A. Substantive changes:

1. Page 2, paragraphs 1.1.5.1 - 1.1.5.3. Paragraph headings were added for consistency.

2. Page 4, paragraph 1.1.9. This paragraph was moved from Reports Processing to System Functions. This paragraph appears to be more appropriately located here.

3. Page 6, paragraphs 1.3.3.1 - 1.3.3.2. These two paragraphs were moved from Reports Processing to System Functions. These paragraphs appear to be more appropriately located here.

4. Page 13. Paragraph 1.6.4 was added by moving paragraph 1.6.6 to this point. It appears a more logical placement of this paragraph. Paragraphs on this page and the next four pages were renumbered. This included replacing alpha designations with numeric to add consistency.

5. Page 21, paragraph 1.10. This remaining Shall Statement did not have a logical fit elsewhere so the paragraph was retitled to more accurately describe its contents.

B. Other suggested changes:

1. Page 1, paragraph 1.1.1 - In the first sentence, suggest adding explanation of the meaning of each color code, for instance, red to indicate critical status.

2. Page 5, paragraph 1.2.6. Add appropriate Shall Statements to complete this paragraph.

3. Page 8, paragraph 1.5.2. In the last sentence, suggest changing to the following to conform with MILSTAMP, Figure 2-B-6: "ATCMDs are required for all air shipments except MAC FSS cargo. MAC FSS is cleared on the basis of a formal agreement between MAC and the ACA. The TCMD forwarded with the FSS shipment contains a significant identifier indicating advance documentation is required."

The MAC Merger Functional Description with recommended changes underlined follows.

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1.0 REQUIREMENTS: The capabilities described below shall be added to the CMOS software developed for Increments I and II. Unless specifically identified as applying only at an aerial port, the capabilities shall be available to all CMOS users.

1.1 System Functions.

1.1.1 Port hold time. At aerial port locations, CMOS shall track and color code (red/yellow/green) air freight cargo status based on port hold time. Port hold time begins with the actual arrival time for the aircraft or truck and ends with actual time of aircraft departure or when inbound cargo is inchecked and identified for outbound surface movement. Port hold time is not accrued for cargo while it is frustrated.

1.1.2 Cargo tracking. CMOS shall track the status of loose cargo and containers (pallets, MILVANS, other containerized shipments) for all airlift cargo using the status codes contained in attachment 1.

1.1.3 Frustrated cargo tracking. CMOS shall track the status of frustrated loose cargo and containers using the codes in attachment 2.

1.1.4 Edit bay location and mode code. CMOS shall provide the capability to change cargo bay locations and MILSTAMP mode codes.
for cargo and containers in backlog status using a PC workstation or hand-held terminal.

1.1.5 TCN edit check. During incheck or inventory, CMOS shall conduct edit checks for TCNs keyed into the PC workstation or hand-held terminal. The edit checks shall provide information that will enable the operator to isolate three possible causes for any discrepancies: entry error, adding missing TCNs, and editing erroneous TCNs.

1.1.5.1 Entry Error. CMOS shall advise if there are no matching TCNs on-hand but all the characters are identical to another TCN(s) except two. CMOS shall require the operator to verify the TCN. (common entry errors are 0 for 0, L for 1, S for 5, and D for 0).

1.1.5.2 Add TCN. CMOS shall advise if there are no matching TCNs on-hand and more than 2 characters are different. CMOS shall require the operator to enter the TCN.

1.1.5.3 Edit TCN. If the operator determines that the TCN was entered in error at the originator station, the operator will be able to correct the TCN.

1.1.6 Inventory. CMOS shall provide the capability to inventory
cargo using two methods: manual inventory and hand-held terminal inventory. For both methods, cargo shall be sorted and inventory accomplished by bay location.

1.1.6.1 Manual inventory. In the first method, CMOS shall produce a hard copy list of on-hand cargo sorted by bay location. This list will be compared with actual cargo in the terminal and discrepancies will be keyed into the PC workstation.

1.1.6.2 Hand-held terminal inventory. In the second method, hand-held terminals shall record actual cargo in the terminal by bay location, compare it with cargo on-hand, and identify the discrepancies. If cargo is found in the wrong bay location, CMOS shall notify the appropriate work center to move the cargo.

1.1.6.3 Inventory over/short procedures. Overages identified during inventory shall be checked against the short shipment register and, if found, shall clear that entry from the register. If not found, the Air Terminal Support Activity (ATSA) at aerial ports or the work center conducting the inventory at non-aerial ports, shall be notified and provided the capability to create TCMD data for the shipment. Shortages shall be identified to the system manager for resolution.

1.1.6.4 Inventory timing and documentation. The system shall prompt the operator to perform the inventory based on a user
defined time criteria. CMOS shall document the date, time, and
results for each inventory performed.

1.1.7 Forms production. CMOS shall provide the capability to
produce bar-coded Military Shipping Labels and Pallet Placards,
and Special Handling Data/Certification.

1.1.8 Consignee information. CMOS shall provide the capability
to support validation of shipper authenticity, determination of
probable bay location and mode for onward movement, and
reorigination of intransit cargo. This capability shall be
maintained and updated by the system manager and, in special
cases, updated by the Air Terminal Support Activity (ATSA).

1.1.9 Workload reporting. At aerial port locations, CMOS shall
not report T-WRAPS workload data for inbound/outbound air freight.
Instead, CMOS shall capture and report aerial port workload data
necessary to complete blocks II, III B,C,D,E, IV, and V of the
RCS:MAC-TRX(M&Q)7107 report. The aerial port workload data shall
be provided in monthly and/or quarterly reports. It shall be
generated automatically at user defined intervals or as an option
of the Reports Processing Menu.

1.2 External Interfaces.

1.2.1 CMOS to MAC Host; cargo status update. As airlift cargo is
received and processed, CMOS shall electronically transmit all the
400 series transactions required to update the status of TCMDs and/or pallets to the HQ MAC Host computer. The 400 series transactions are defined in attachment 3.

1.2.2 CMOS to MAC Host; database validation. At times specified by HQ MAC, CMOS shall electronically transmit detailed data on all TCNs, TCMDs, and pallets in the port to the HQ MAC Host. This data will be used to validate/update the HQ MAC Host.

1.2.3 MAC MACA to CMOS; ATCMD. At CONUS aerial ports, CMOS shall accept ATCMD data from the HQ MAC MACA. These records shall be maintained for 30 days. If the cargo has not been received by that time, they shall be deleted.

1.2.4 CMOS to MAC Host; intermittent reports. Upon request from HQ MAC Host, the aerial port CMOS shall automatically prepare and electronically transmit reports to the Host.

1.2.5 CMOS to MAC MACA; no ATCMD on file. At CONUS aerial ports, CMOS shall electronically notify MAC MACA of each piece of cargo arriving at the port with no ATCMD data on file. MAC MACA will respond back to the reporting CMOS if ATCMD data is available.

1.2.6 MAC Host to CMOS; initialization.
1.3 **Numbered Air Force/Airlift Division** (NAF/ALD). The capabilities described in this section shall be added to the LRC capability described in CMOS Increment II specification.

1.3.1 **NAF/ALD terminals.** CMOS terminals will be provided for each MAC NAF and ALD. These terminals will be connected to the CMOS CPU at the location. MAC NAFs are located at McGuire AFB and Travis AFB. MAC ALDs are located at Ramstein AB, and Hickam AFB.

1.3.2 **NAF/ALD data.** The NAF/ALD shall receive data from their subordinate aerial ports. They shall be able to display and print the data using system and user defined parameters.

1.3.3 **NAF/ALD reports.** The NAF/ALD shall have the capability to electronically request reports (to be defined by HQ MAC) from subordinate aerial ports.

1.3.3.1 **Regular reports.** At times specified by HQ MAC, the aerial port shall automatically produce and electronically transmit reports to designated NAF/ALD.

1.3.3.2 **Intermittent reports.** Upon requests from CMOS NAF or ALD PC workstations, the aerial port CMOS shall automatically prepare and electronically transmit reports to the requestor.

1.4 **Air Terminal Support Activity (ATSA).** The term ATSA is being used to describe CMOS functional support requirements for the
activities of the overseas Airlift Clearance Authorities (ACA) and the CONUS Military Air Traffic Coordinating Unit (MATCU). The capabilities described in this section shall be added to the Overseas ACA function described in the CMOS Increment I specification.

1.4.1 ATSA terminals. CMOS terminals will be provided for each ATSA collocated with a MAC aerial port. These terminals will be connected to the CMOS CPU at that location.

1.4.2 Cargo visibility. The ATSA shall have read only visibility of all cargo in the aerial port and outbound surface freight area. In addition it shall have read only visibility of advanced manifest data for inbound air shipments and advanced movement data for intransit cargo on inbound surface shipments.

1.4.3 Edit TCMD. The ATSA shall have the capability to review, add, change, and delete ATCMD prime and trailer data for cargo inbound to the aerial port. This shall include the capability to modify "approved" ATCMDs received from HQ MAC MACA (CONUS) or from CMOS and DAMMS-R (overseas), or to build ATCMDs for cargo that arrives at the port with no ATCMD on file. The capability to build ATCMDs shall allow the ATSA to receive updates from HQ MAC MACA or use TCMD information that was on the inbound shipping document. The ATSA shall not be able to create an ATCMD with a non-significant TAC code.
1.4.4 Change movement priority/mode. The ATSA shall have the capability to initiate action to upgrade movement priority (greensheet), downgrade movement priority, or change modes for cargo in the aerial port. CMOS shall create an audit trail for each of these actions, capturing the reason/initiator of the action. For upgrade action, a T_9 trailer TCMD shall be generated and appended to the prime TCMD for the item being upgraded.

1.4.5 Edit consignee DODAAC. The ATSA shall have the capability to modify the consignee DODAACs associated with Navy vessels. Modification of the APOD associated with the DODAAC shall automatically adjust the POD data for all TCMDs with that DODAAC. It shall also notify air freight to change the bay location of cargo in the aerial port.

1.4.6 Onward movement by Organic Air. The overseas ATSAs shall have the capability to identify outbound surface cargo or inbound air cargo for onward movement by organic air. For cargo scheduled to move by outbound surface, the ATSA action shall modify the mode code and send a notice to surface freight directing the cargo be moved to a new bay location. For cargo scheduled to arrive by air, the ATSA action shall modify the probable mode code and bay location for that individual item.

1.4.7 Validate ATCMD. The overseas ATSAs shall validate ATCMD data received from shippers (CMOS and DAMMS-R) and immediately make the information available to the aerial port. This shall
eliminate the CMOS to ADAM III interface developed in CMOS Increment I to pass this data.

1.5 Inbound Surface. The capabilities described in this section shall be added to the Surface Freight capability defined in the Specifications for CMOS Increments I and II.

1.5.1 Truck receipt time. CMOS shall provide the capability to enter the truck arrival time for surface shipments. This shall establish receipt time.

1.5.2 Verify air clearance. At aerial ports, CMOS incheck procedures shall include the capability to verify ATCMD data has been received for a shipment. This capability shall be available to both the PC workstation and hand-held terminal operator, and support incheck whether or not prepositioned shipment data is available. ATCMDs are required for all shipments except mail, 999, MAC MICAP (Project code 196 and 480), and Code J baggage.

1.5.2.1 No ATCMD on file. If no ATCMD is on file, the inchecker shall be capable of building a prime TCMD for the item with a nonsignificant TAC. This data shall be passed to the ATSA for further completion. Until the TCMD data is complete, the cargo will be stored in the ATSA bay location and the status shall be "INC." After the ATSA has completed the TCMD information, the cargo status shall be changed to "PR0."
1.5.2.2 **Notify MACA.** At CONUS locations, CMOS shall electronically notify the MAC MACA that no ATCMD data is on hand. If an ATCMD is available at the MAC MACA, it will forward the ATCMD to the notifying CMOS.

1.5.2.3 **Nonsignificant TAC.** If an ATCMD is on file but has a nonsignificant TAC, the TCMD data shall be passed to the ATSA for validation and assignment of a proper TAC. Until the TCMD data is corrected, the cargo status shall be "INC." After the ATSA has corrected the TCMD information, the cargo status shall be changed to "PRO."

1.5.2.4 **Visibility to load planner.** Cargo in the "INC" status shall not be visible to the load planner.

1.5.3 **Incheck information.** CMOS shall provide the capability to validate shipper authenticity, determine probable bay location and mode for onward movement, and reoriginate intransit cargo.

1.5.3.1 **Validate shipper authenticity.** For advanced shipment information, CMOS shall determine if the consignee DODAAC for each arriving shipment is valid. If not, CMOS shall notify the system manager of the discrepancy and provided the capability to update the CMOS consignee information. If a shipment is found without a valid consignee DODAAC during incheck by either a PC workstation or hand-held terminal, CMOS shall frustrate the shipment (status code "FRU") and notify the ATSA to either modify...
1.5.3.2 Probable bay location. During incheck by either a PC workstation or hand-held terminal, CMOS shall display a probable bay location for each item inchecked. A separate bay location for each destination shall be maintained for general, MICAP, 999, personal baggage, household goods, and special handling shipments. The inchecker shall be able to accept or override the probable bay location.

1.5.3.3 Probable onward movement mode. During incheck by either a PC workstation or hand-held terminal, CMOS shall display the probable onward movement mode for the shipment. This capability shall support all mode codes in DOD 4500.32-R. The inchecker shall be able to accept or override the probable mode code. Either of these actions shall update the TCMD information for the shipment. For originating cargo, the probable onward movement mode shall appear on the input screen for mode selection in Shipment Planning. The PC workstation operator shall be able to confirm or override the probable mode code.

1.5.3.4 Reoriginate cargo. Based on the onward movement mode code, CMOS shall reoriginate intransit cargo in the surface or air freight terminal, as appropriate.
1.5.4 Cargo release procedures. CMOS shall provide the capability to release material to the consignee during the incheck procedure using either the PC workstation or hand-held terminal. The name and organization of the recipient shall be recorded for each shipment released. If a signature is required, CMOS shall provide the capability to identify all or selected items on a manifest, and produce a listing for the cargo recipient to sign. Upon entry into CMOS of the recipient’s name and organization, all records on this list shall be updated and annotated that a signed transfer document is on file.

1.6 Inbound Air. The capabilities described in this section shall be added to the Air Freight capability defined in the Specifications for CMOS Increments I and II.

1.6.1 Aircraft receipt time. CMOS shall provide the capability to enter the mission arrival time for airlift missions. This shall establish the receipt time.

1.6.2 Manifest incheck procedures. CMOS shall provide the capability to incheck a manifest by line item, pallet, or by accepting all loose cargo or an entire manifest. The cargo shall automatically be frustrated (status code "FRE") when incheck is done and an item is found with no DODAAC/APOD in the consignee file. The system manager or ATSA shall be notified to establish a record for the DODAAC/APOD in the consignee file.
1.6.3 Incheck information. CMOS shall provide the capability to validate shipper authenticity, determine probable bay location and mode for onward movement, and reoriginate intransit cargo.

1.6.3.1 Validate shipper authenticity. For advanced shipment information, CMOS shall determine if the consignee DODAAC for each arriving shipment is valid. If not, CMOS shall notify the system manager of the discrepancy and provide the capability to update the CMOS consignee information. If a shipment is found without a valid consignee DODAAC during incheck by either a PC workstation or hand-held terminal, CMOS shall frustrate the shipment (status code "FRE") and notify the ATSA to either modify the shipment consignee DODAAC or update the CMOS consignee information.

1.6.3.2 Probable bay location. During incheck by either a PC workstation or hand-held terminal, CMOS shall display a probable bay location for each item inchecked. A separate bay location for each destination shall be maintained for general, MICAP, 999, personal baggage, household goods, and special handling shipments. The inchecker shall be able to accept or override the probable bay location.

1.6.3.3 Probable onward movement mode. During incheck by either a PC workstation or hand-held terminal, CMOS shall display the probable onward movement mode for the shipment. This capability shall support all mode codes in DOD 7600.32-R. The inchecker
shall be able to accept or override the probable mode code. Either of these actions shall update the TCMD information for the shipment. For originating cargo, the probable onward movement mode shall appear on the input screen for mode selection in Shipment Planning. The PC workstation operator shall be able to confirm or override the probable mode code.

1.6.3.4 Reoriginate cargo. Based on the onward movement mode code, CMOS shall reoriginate intransit cargo in the surface or air freight terminal, as appropriate.

1.6.4 Cargo release procedures. CMOS shall provide the capability to release material to the consignee during the incheck procedure using either the PC workstation or hand-held terminal. The name and organization of the recipient shall be recorded for each piece released. If a signature is required, CMOS shall provide the capability to identify all or selected items on a manifest, and produce a listing for the cargo recipient to sign. Upon entry into CMOS of the recipient’s name and organization, all records on this list shall be updated and annotated that a signed transfer document is on file.

1.6.5 MAC host update for outbound surface. At aerial ports, CMOS shall automatically prepare and electronically transmit a lifted manifest transaction to the HQ MAC Host when the aerial port releases the cargo for onward surface movement.
1.6.6 Over/short shipments. At aerial port locations, CMOS shall manage over/short shipments for MILSTAMP mode code "F" cargo in the following manner:

1.6.6.1 Over shipments received at intended destination.

1.6.6.1.1 Over shipment on-hand. At the receiving station, an over shipment shall be checked against the over/short register to see if the shipment was identified earlier as a short shipment. If not, the shipment shall be added to the over shipment register. The system manager shall be notified of the over shipment and the identity of the origin station, and provided the capability to identify other stations that could have been responsible for the overage. CMOS shall generate an over shipment message to each of these stations.

1.6.6.1.2 Over shipment message response. Upon receipt of an over shipment message, the origin and enroute station(s) CMOS shall automatically determine if the shipment was ever at that station.

1.6.6.1.2.1 Over shipment not handled. If no record exists, the origin or enroute station CMOS shall electronically advise the requesting CMOS that the shipment was not handled.

1.6.6.1.2.2 Over shipment handled; onward movement unrecorded. If a record exists with no outbound mission data, the origin of
enroute station(s) CMOS shall automatically generate a "dummy" manifest using the mission number from the over shipment message and the next available manifest number. This "dummy" manifest shall be automatically sent to the MAC Host and destination station. At the destination, it shall clear the item from the over/short shipment register.

1.6.6.1.2.3 Over shipment handled; onward movement recorded. If a record exits with outbound mission data, the origin or enroute station(s) CMOS shall automatically send a message containing the outbound mission information to the CMOS generating the over shipment message. Upon receipt, this message shall cause the over shipment to be flagged pending arrival of the mission.

1.6.6.2 Over shipments received at other than the intended destination.

1.6.6.2.1 Over shipment on-hand. At the receiving station, an over shipment shall be checked against the over/short register to see if the shipment was identified earlier as a short shipment. If not, the shipment shall be added to the over shipment register. The system manager shall be notified of the over shipment and the identity of the origin station, and provided the capability to identify other stations that could have been responsible for the overage. CMOS shall generate an over shipment message to each of these stations.
1.6.6.2.2 Over shipment message response. Upon receipt of an over shipment message, the origin and enroute origin station(s) CMOS shall automatically determine if the shipment was ever at that station.

1.6.6.2.2.1 Over shipment not handled. If no record exists, the origin or enroute station(s) CMOS shall electronically advise the requesting CMOS that the shipment was not handled.

1.6.6.2.2.2 Over shipment handled; onward movement unrecorded. If a record exists with no outbound mission data, the origin or enroute station(s) CMOS shall automatically generate a "dummy" manifest using the mission number from the over shipment message and the next available manifest number. This "dummy" manifest shall be automatically sent to the MAC Host and destination station. At the destination, it shall clear the item from the over/short shipment register and reoriginate the shipment for onward movement.

1.6.6.2.2.3 Over shipment handled; onward movement recorded. If a record exists with outbound mission data, the origin or enroute station(s) CMOS shall automatically send a message containing the outbound mission information to the CMOS generating the over shipment message. Upon receipt, this message shall cause the TAC for the over shipped item to be modified ("S" in the 2nd position)
and the item to be reoriginated for shipment to the intended destination. Upon arrival at the intended destination, the TAC shall be returned to its original (premodification) composition.

1.6.6.3 Short shipments.

1.6.6.3.1 Short shipment record on-hand without cargo. At the intended destination, a short shipment shall be checked against the over/short register to see if the shipment was identified earlier as an over shipment. If not, the shipment shall be added to the short shipment register. The system manager shall be notified of the short shipment and the identity of the origin station, and provided the capability to identify other stations that could have been responsible for the shortage. CMOS shall generate a short shipment message to each of these stations.

1.6.6.3.2 Short shipment message response. Upon receipt of an short shipment message, the origin and enroute station(s) CMOS shall automatically determine if the shipment was ever at that station.

1.6.6.3.2.1 Short shipment not handled. If no record exists, the origin or enroute station(s) CMOS shall electronically advise the requesting CMOS that the shipment was not handled.

1.6.6.3.2.2 Short shipment located; on-hand. If the cargo is at a station, that station shall reoriginiate the shipment and modify
the TAC ("S" in the 2nd position) for the item. In addition, it shall electronically notify the CMOS generating the short shipment message that it has the cargo. Upon receipt, this message shall cause the short shipment to be flagged pending receipt of the cargo. Upon arrival of the cargo at the intended destination, the TAC shall be returned to its original (pre-modification) composition. For shipments not received within 72 hours of being flagged, CMOS shall automatically transmit a follow-up message to the station that reported the cargo on hand.

1.6.6.3.2.3 Short shipment handled; onward movement recorded. If the cargo has been shipped, the origin or enroute station CMOS shall send a message with mission information to the CMOS generating the short shipment message. Upon receipt, this message shall cause the over shipment to be flagged pending arrival of the mission. If the cargo is not received within manifest ETA plus 24 hours, CMOS shall automatically transmit a follow-up message to the station that reported the cargo on hand. If an abort manifest transaction is received for the mission on which the previously shorted piece was scheduled to arrive, CMOS shall retransmit a short shipment message to the station which reported the mission information.

1.6.6.4 Unresolved short shipments. If the short shipment is not resolved in 21 days CMOS shall notify the system manager to manually prepare an SF 361. CMOS shall provide a history of system messages (outbound and inbound) associated with locating
the short shipment. CMOS shall not remove items from the short shipment register unless the short shipment has been resolved or SF 361 data is entered.

1.6.6.5 System manager review. CMOS shall provide the system manager the capability to review the over/short shipment register, the status of items in the register, and the inbound over/short messages received with associated responses.

1.7 Special Handling. At an aerial port, the special handling section has unique requirements because it is responsible for the incheck, storage, and onward movement of all cargo having selected air commodity and special handling codes and MAC MICAP. CMOS shall provide special handling section the capability to perform all the functions of inbound air and surface freight and the incheck, palletization/containerization, inventory, and TCMD modification capabilities of outbound air and surface freight. This capability shall include only cargo with the selected air commodity and special handling codes and MAC MICAP.

1.8 Outbound Air. The capabilities described in this section shall be added to the Air Freight capability defined in the Specifications for CMOS Increments I and II.

1.8.1 Identify palletization requirements. CMOS shall provide the load planner with the capability to identify cargo requiring palletization by air freight.
1.8.1 **Identify palletization requirements.** CMOS shall provide the load planner with the capability to identify cargo requiring palletization by air freight.

1.8.2 **Pallet buildup.** CMOS shall provide the capability to build a pallet. This shall be done in three stages: creation of a pallet header shell, adding of items to the pallet, and capping the pallet. When the pallet is capped, CMOS shall compute the document weight for the pallet. No record changes can be accomplished on a capped pallet. The operator shall be able to assign a grid location for the "capped" pallet.

1.8.3 **Pallet weight verification.** CMOS shall provide the capability to enter the actual weight of a capped pallet, and automatically compare the scale weight with the document weight. If the differential between the weights is out of the range identified in MACR 76-1, the system shall change the status of the pallet to not movement ready, notify the PC operator of the status change, and provide the capability to review the pallet contents.

1.8.4 **Load planning schematic.** CMOS shall support load planning by providing the capability to produce a "pull sheet" and "load sequence" or a load planning schematic for a mission. After approval by the load planner, the schematic shall be made available to air freight.
1.8.5 **Management Action Indicator (MAI).** CMOS shall use MAIs to display cargo backlogs and load planning lists. MAIs shall be established and maintained by outbound air freight. MAIs identify the intransit destination for cargo moving to selected final destinations via selected channels. (e.g. Dover AFB would have an MAI (Travis AFB) for all cargo moving to consignees in the Far East. When the load planner looked at his cargo backlog for Travis, he would see not only cargo with Travis as the ultimate consignee, but any cargo having to go to Travis for onward movement to its ultimate destination.)

1.8.6 **Multiple manifests.** CMOS shall provide the capability to prepare multiple air manifests for the same mission.

1.9 **Outbound Surface.** The capabilities described in this section shall be added to the Surface Freight capability defined in the Specifications for CMOS Increments I and II.

1.9.1 **Bay location changes for organic military air.** At the aerial port, CMOS shall provide the capability to notify the outbound surface freight operator that the ATSA has selected surface outbound cargo for onward movement via organic military air. This notification shall direct the cargo be moved to a new bay location.
1.9.2 Multiple military truck destinations. CMOS shall provide the capability to manifest trucks to multiple destinations. Manifest reference numbers shall be assigned for each destination.

1.10 Miscellaneous reports. HQ MAC shall identify pre-formatted reports and standard queries that shall be required.